

Ordinary Meeting of the Council **MINUTES**

Date:	Tuesday, 26 September 2017
Time:	7:00pm
Location:	Council Chamber, Civic Centre 699 Doncaster Road, Doncaster

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MANNINGHAM CITY COUNCIL MINUTES OF THE ORDINARY MEETING OF THE COUNCIL HELD ON 26 SEPTEMBER 2017 AT 7:00PM IN COUNCIL CHAMBER, CIVIC CENTRE 699 DONCASTER ROAD, DONCASTER

The meeting commenced at 7:03pm.

- PRESENT: Mayor Michelle Kleinert (Mayor) Councillor Mike Zafiropoulos (Deputy Mayor) Councillor Anna Chen Councillor Andrew Conlon Councillor Sophy Galbally Councillor Geoff Gough Councillor Dot Haynes Councillor Paul McLeish Councillor Paula Piccinini
- OFFICERS PRESENT: Chief Executive Officer, Mr Warwick Winn Acting Director Assets & Engineering, Mr Dario Bolzonello Director Planning & Environment, Ms Teresa Dominik Acting Director Community Programs, Ms Lee Robson Acting Director Shared Services, Mr Kevin Ayre Acting Executive Manager People & Governance, Ms Kerryn Paterson

1 OPENING PRAYER AND STATEMENTS OF ACKNOWLEDGEMENT

The Mayor read the Opening Prayer & Statements of Acknowledgement.

2 APOLOGIES AND REQUESTS FOR LEAVE OF ABSENCE

There were no apologies.

Motion of Condolence - Jack Scott

The Mayor advised Councillors that it was with deep regret that she must inform Council of the recent passing of former Mayor and Councillor Jack Scott.

Jack served as a Councillor for the City of Doncaster and Templestowe from 1973 to 1983 including one term as Mayor in 1976-77.

An active Councillor and community advocate, Jack was passionate about his local community and the environment in which he lived. His most enduring legacy will no doubt be the significant role he played in preserving the 100 Acre Reserve in Park Orchards. As Mayor, Jack was instrumental in securing substantial funding from both the State and Federal governments to assist Council in purchasing this land to be maintained as a natural reserve for the local community. Jack was a valued and outstanding member of the community.

The Mayor sought a motion to suspend standing orders for Council to pass a motion of condolence.

COUNCIL RESOLUTION	
MOVED: SECONDED:	CR SOPHY GALBALLY CR PAUL MCLEISH
That Standing Order 10	6.1 be suspended to enable a motion of condolence
	CARRIED
MOVED: SECONDED:	CR SOPHY GALBALLY CR PAUL MCLEISH
 and Councillor Ja record its apprecision community advo community; and 	its sadness at the recent passing of former Mayor ack Scott; ciation for the contribution of Mr Scott as an active cate who worked tirelessly in support of his local athy and condolences to Mr Scott's family at this CARRIED
MOVED: SECONDED:	CR PAUL MCLEISH CR SOPHY GALBALLY
That Standing Orders	be resumed.

3 PRIOR NOTIFICATION OF CONFLICT OF INTEREST

The Chairman asked if there were any written disclosures of a conflict of interest submitted prior to the meeting and invited Councillors to disclose any conflict of interest in any item listed on the Council Agenda.

There were two written disclosures of conflict of interest, these being from:-

- Cr Paula Piccinini for Item 10.7 concerning Ruffey Creek Linear Park Management Plan - Consideration of Submissions and Endorsement, the interest being an indirect interest due to residential amenity.
- Cr Andrew Conlon for Item 11.2 concerning North East Link Proposal -Council's Response, the interest being an indirect interest due to close association.

4 CONFIRMATION OF MINUTES

COUNCIL RESOLUTION

SECONDED:

MOVED:

CR ANDREW CONLON CR PAULA PICCININI

That the Minutes of the Ordinary Meeting of Council held on 29 August 2017 and the Special Meeting of the Council held on 12 September 2017 be confirmed.

CARRIED

5 VERBAL QUESTIONS FROM THE PUBLIC

There were no verbal questions from the public.

6 PRESENTATIONS

6.1 Presentation of Gift

The Mayor presented to Council a gift received from His Holiness Pope Tawadros II, Pope of Alexandria and Patriarch of the See of St Mark on his recent visit to Melbourne.

7 PETITIONS

There were no Petitions.

8 ADMISSION OF URGENT BUSINESS

There were no items of Urgent Business.

9 PLANNING PERMIT APPLICATIONS

9.1 Planning Application PL16/026965 at 666 Doncaster Road, Doncaster for the use and development of the land for the construction of a 13-storey building comprising 161 dwellings, a restaurant and 3 retail premises, associated basement car parking, a reduction to the standard car parking requirements, variation to the carriageway easement E-2 on Title Plan 322585J, variation to the standard loading and unloading requirements and alteration of access to a road in a Road Zone, Category 1

File Number:	IN17/482	
Responsible Director:	Director Planning and Environment	
Applicant:	Brabian Investments Pty Ltd	
Planning Controls:	Activity Centre Zone, Schedule 1 (ACZ1); Development Contributions Plan Overlay, Schedule 1 (DCPO1); Parking Overlay, Schedule 1 (PO1)	
Ward:	Koonung	
Attachments:	1 Decision Plans 👢 🖬	
	2 Legislative Requirements <u>U</u>	

EXECUTIVE SUMMARY

Purpose

 This report provides Council with an assessment of a planning permit application submitted for land at 666 Doncaster Road, Doncaster and recommends approval of the submitted proposal subject to amendments that will be addressed by way of permit conditions. The application is being reported to Council given that it is a Major Application (more than 15 dwellings and a development cost of more than \$5 million).

Proposal

- 2. The proposal is for the use and development of the land at 666 Doncaster Road, Doncaster for a 13-storey, mixed-use building providing 161 dwellings, a restaurant and three retail premises at ground level and basement car parking. The applications seeks a reduction to the standard car parking requirements and loading and unloading requirements in the Manningham Planning Scheme, a variation to the carriageway easement E-2 on Title Plan 322585J, and alteration of access to a road in a Road Zone Category 1.
- 3. The land has a total area of 3,257 square metres. The proposal has a site coverage of 58%, a site permeability of 8% and a maximum building height of 45.38 metres (inclusive of a 39.23 metre high tower and a 6.15 metre high design element). A total of 227 car parking spaces are provided over four basement levels, providing 179 car parking spaces for residents, 41 shared car parking spaces for visitors of the residential component of the development and the customers of the retail and restaurant component, and 7 car parking spaces for retail and restaurant staff.

Key issues in considering the application

- 4. The key issues for Council in considering the proposal relate to:
 - policy (consistency with state and local planning policy);
 - design and built form;
 - guidelines for higher density residential development;
 - parking, access, traffic, loading bay and bicycle parking; and
 - objector concerns.

Objector concerns

- 5. Twenty-eight (28) objections have been received for the application to date, raising issues which are summarised as:
 - overdevelopment;
 - traffic, lack of on-street and off-street car parking, pedestrian safety, and loading and unloading of vehicles;
 - design and built form (building height, setbacks and opportunity for landscaping); and
 - off-site amenity impacts (including overshadowing, loss of daylight and sunlight, overlooking and loss of privacy, noise and safety, loss of views and outlook, and loss of property value).

Assessment

- 6. Development of the land with a mixed-use building is consistent with the relevant objectives of state and local planning policies of the Manningham Planning Scheme (the Scheme), including the requirements of the Activity Centre Zone 1 (ACZ1) and supporting policy relating to the Doncaster Hill Principal Activity Centre.
- 7. The proposed development features a contemporary design, which meets the maximum building heights prescribed for the zone and presents a scale and design that complements other high density developments that have been approved and developed in the vicinity. Whilst the proposed building incorporates a setback from the rear site boundary that does not comply with the 5 metre set back requirement prescribed by policy, the proposed setback is considered to be acceptable for the site context (which has an angled rear boundary) and a minimum 9 metre separation between the proposed building and the adjoining building at 20-24 Hepburn Road is achieved. The proposed building areasonable level of amenity for nearby properties (that are located within the ACZ1) and a reasonable level of on-site (internal) amenity for the future occupants of the building.

Conclusion

- 8. The relevant planning controls seek an intensive residential or mixed use development for the subject site. The proposed development, which includes a contemporary designed, high-density, mixed-use building in Doncaster Hill, complies with the various requirements of the ACZ1 as they relate to siting, height and building presentation which scales appropriately to surrounding development. This report concludes that the proposal complies with the relevant planning policy in the Scheme and should be supported, subject to conditions requiring design changes to the building and the submission of management plans for Council approval.
- 9. It is recommended that the application be supported, subject to conditions.

1. COUNCIL RESOLUTION

MOVED:	CR DOT HAYNES
SECONDED:	CR PAUL MCLEISH

That Council:

- A. Having considered all objections issue a NOTICE OF DECISION TO GRANT A PERMIT in relation to Planning Application PL16/026965 at 666 Doncaster Road, Doncaster for the use and development of the land for the construction of a 13-storey building comprising 161 dwellings, a restaurant and 3 retail premises, associated basement car parking, a reduction to the standard car parking requirements, variation to the carriageway easement E-2 on Title Plan 322585J, variation to the standard loading and unloading requirements and alteration of access to a road in a Road Zone, Category 1 subject to the following conditions:
 - 1. Before the development starts, two copies of amended plans drawn to scale and dimensioned, must be submitted to the satisfaction of and approved by the Responsible Authority. When approved the plans will then form part of the permit. The plans must be generally in accordance with the decision plans prepared by Plus Architecture, dated 8 June 2017 (received by Council on 9 June 2017), but modified to show the following:
 - 1.1 Modification of the basement levels (and reconfiguration where necessary) to provide for in-ground planted canopy trees in accordance with the Doncaster Road boulevard treatment provisions, with the provision of deep soil areas below and around the canopy trees. Details (including cross-sections) must be submitted to show the deep soil and in-ground planting of these canopy trees together with a report prepared pursuant to Condition 13 of this permit. There must be no change to the setback of any basement level from site boundaries, and no reduction in the number of car parking spaces, bicycle parking spaces or storage cages approved under this permit.
 - **1.2** Trees in the north-western corner of the site clearly shown as retained.
 - **1.3** Deletion of landscaping located directly outside the ground level retail and restaurant tenancies.
 - 1.4 Details of the boulevard treatment (including paving materials) along Doncaster Road, in accordance with the Doncaster Hill Strategy.
 - 1.5 A minimum 2.1 metre headroom beneath overhead obstructions throughout the development and to the basement vehicle entrance.
 - 1.6 Screening details for balconies and habitable room windows of dwellings at level 3 of the building and below, to demonstrate how overlooking will be limited within a 9m radius of the development, including to the south adjoining dwellings and dwelling to the south-east, with cross-sections/details to demonstrate compliance.

	1.7	A car parking allocation schedule (including for each residential car parking space).
	1.8	Allocation of storage to each dwelling.
	1.9	Details (type, materials, dimensions and cubic volume) for each storage area enclosure and confirmation that each will be secure.
	1.10	Any relevant changes as a result of the endorsed Sustainability Management Plan prepared under Condition 4 of this permit including (but not limited to) the size and location of the raingardens and the solar photovoltaic system.
	1.11	Details of screening measures to all plant equipment and services on the roof (level 13).
	1.12	External clothes drying facilities (with any clothes-drying racks or line systems located on a balcony or terrace designed to be lower than the height of the balustrade and not visible from off the site).
	1.13	A schedule of materials and finishes with colour samples of all external walls, roofs, fascias, window frames, paving (including terraces, balconies, roof terraces, stairs), fencing, privacy screens, roof top plant screens and retaining walls.
	1.14	A schedule listing all sustainability features / commitments applicable to the approved development, as described in the approved Sustainability Management Plan, and including the provision of third pipe.
	1.15	All recommendations and design changes as required by the SMP, the WMP, DA report, and acoustic report and any other report approved under conditions of this permit.
Endo	orsed	Plans
2.		development and use as shown on the approved plans must not tered without the written consent of the Responsible Authority.
Cons	structi	ion Management Plan
3.	Mana Resp planı	re the development starts, two copies of a Construction agement Plan must be submitted to and approved by the bonsible Authority. When approved, the Plan will form part of the ning permit. The Plan must address, but not be limited to the wing:
	3.1	A liaison officer for contact by residents and the Responsible Authority in the event of relevant queries or problems experienced;
	3.2	Hours of construction;
	3.3	The point of ingress/egress to the site for construction vehicles and machinery in accordance with any specific requirements of VicRoads;
	3.4	Asset protection procedures for the public footpath in front of the site;

	3.5	Security fencing/measures to ensure that each building site is secure when not attended;
	3.6	Security fencing around areas of the site that are not being developed to prevent the dumping of rubbish;
	3.7	Delivery and unloading points and expected frequency;
	3.8	Any on-site facilities for vehicle washing;
	3.9	The location of parking and site facilities for construction workers;
	3.10	Measures to minimise the impact of construction vehicles arriving at and departing from the land;
	3.11	Measures to manage environmental issues on site in accordance with "Environmental guidelines for major construction sites, EPA 1996" or other relevant guidelines, particularly in relation to sediment and erosion controls and dust suppression;
	3.12	Measures to ensure the regular cleaning of any mud/dirt or other material which may be transferred onto Reynolds Road, including the road's drainage channel/pits;
	3.13	Measures for prevention of the unintended movement of building waste and other hazardous materials and pollutants on or off the site, whether by air, water or other means;
	3.14	An outline of requests to occupy the front nature strip and any anticipated disruptions to local services;
	3.15	Measures to minimise noise and other amenity impacts from mechanical equipment/construction activities, especially outside of daytime hours;
	3.16	Measures to ensure that the positioning/operation of any tower crane does not allow the crane's hoisting jib to extend over residential properties to the south of the site;
	3.17	Recognition of the required tree/root zone protection measures of this permit;
	3.18	Adequate environmental awareness training for all on-site contractors and sub-contractors, particularly in relation to retained tree protection requirements.
Susta	ainabi	ility Management Plan
	the d Susta appro form incor be in befor acco	re the development starts, or the issue of a building permit for evelopment, whichever is the sooner, two copies of an amended anability Management Plan (SMP) must be submitted to and oved by the Responsible Authority. When approved the Plan will part of the permit. The recommendations of the Plan must be porated into the design and layout of the development and must aplemented to the satisfaction of the Responsible Authority re the occupation of any dwelling. The Plan must be generally in rdance with the plan prepared by prepared by jba Consulting neers, dated 1 December 2016 but modified to show the wing:

4.1	Commercial Areas
	4.1.1 The commercial areas in the development need to be entered into BESS and assessed in the management plan.
4.2	Thermal Fabric Non-residential
	4.2.1 A commitment to achieving a 10% improvement on section J requirements of the National Construction Code (NCC);
	4.2.2 Provide a preliminary National Construction Code (NCC) Section J Deemed-to-satisfy or JV3 assessment or provide information on how energy efficiency requirements will be achieved.
4.3	Heating & Cooling System
	4.3.1 The report indicates a 3-star minimum commitment while 4-stars has been entered into BESS. This is required to correspond.
4.4	Energy 3.6 Internal Lighting – Residential Multiple Dwellings
	 4.4.1 Provide further information in the report that a commitment for maximum power density (w/m²) will be 20% more efficient than minimum standards. Alternatively, the BESS entry must be amended to NO;
	4.4.2 Fluorescent lamps should not be used as they contain toxic mercury, complicating their disposal.
4.5	Water 4.1 Fire Test System Water
	4.5.1 Provide further information on measures being taken to reduce water consumption when testing fire safety systems. Alternatively, the BESS entry must be amended to NO.
4.6	IEQ 1.1 Daylight Access - Living Areas
	4.6.1 DTS Daylight requires all living areas and bedrooms less than 8m deep (5m if south facing). There are a number of south facing living areas more than 5m deep. Amend the design or alternatively, the BESS entry must be amended to NO.
4.7	IEQ 1.2 Daylight Access – Bedrooms
	4.7.1 Battle axe access ways should be at least 1.2m wide and no deeper than 1.5m from the window to the leading corner. Amend design or alternatively, provide daylight modelling that proves all battle-axe bedrooms meet SDAPP Daylight requirements.

4.8	8 Trans	port 1.1-2 Bicycle parking – residential and visitor
	4.8.1	Numbers do not correspond between the report, BESS entry and plan details. This is required to correspond.
4.9	9 Indoo	r Environment Quality
	4.9.1	Ensure that top floor apartments exposed glazing has sufficient shading/overhangs to avoid overheating and glare;
	4.9.2	Provide adjustable external blinds/shutters on west facade to control glare and summer solar gains;
	4.9.3	Ensure north glazing has adequate overhangs to control summer glare while allowing winter solar gains.
Waste N	lanagem	ent Plan
th Ma of of su De wa us wa de	e develop anagement the Resp the perm lobmitted of esign (dat aste stora aste stora aste stora aste bins evelopment	development starts, or the issue of a building permit for oment, whichever is the sooner, two copies of the Waste int Plan must be submitted and approved to the satisfaction bonsible Authority. When approved, the plan will form part it. The plan must be generally in accordance with the draft Waste Management Plan (WMP) prepared by Leigh ted 14 December 2016) but be modified to include details of age and collection for the restaurant and non-residential in the building. The developer must ensure that the private ractor can access the basement garage to access the and no waste contractor bins can be left outside the int boundary or left unattended at any time on any street it any reason.
Acousti	c Report	
th Re Re re re Ma an	e develop eport mus esponsibl ermit. The port prep arch 2017 by change	development starts, or the issue of a building permit for oment, whichever is the sooner, two copies of an Acoustic st be submitted and approved to the satisfaction of the le Authority. When approved, the plan will form part of the plan must be generally in accordance with the acoustic ared by Vipac Engineers and Scientists Limited dated 15 ' submitted with the application but be modified to reflect es shown on plans endorsed under this permit or other of this permit.
Disabili	ty Access	5
th Ac Ac de ac th pla	e develop ccess Pla ccess Auc emonstrat ccess, inc e satisfac	development starts, or the issue of a building permit for oment, whichever is the sooner, two copies of a Disability n that implements the recommendations of a Disability dit, prepared by a suitably qualified person that tes compliance with the relevant Australian Standards for luding AS1428 Part 2, must be submitted and approved to etion of the Responsible Authority. When approved, the rm part of the permit. The plan must include but is not

7.1 Vehicular and pedestrian access into the building; 7.2 Access to the lifts; 7.3 The provision of tactile indicators; 7.4 The provision of braille indicators for the lifts; 7.5 The use of contrasting paving materials to assist the vision impaired; 7.6 All emergency exits; and 7.7 Basement car parking. **Management Plan Compliance** 8. The Management Plans approved under Conditions 3, 4 and 5 of this permit must be implemented and complied with at all times to the satisfaction of the Responsible Authority, unless with the further written approval of the Responsible Authority. Before the approved uses start, a report from the author of the 9. Sustainability Management Plan approved pursuant to this permit, or similar qualified person or company, must be submitted to the Responsible Authority. The report must be to the satisfaction of the Responsible Authority and must confirm that all measures / commitments in the Sustainability Management Plan approved under Condition 4 of this permit, and the third pipe requirements, have been implemented in accordance with the approved plans and the planning permit. Completion Before the occupation of any approved dwelling, landscaped areas 10. must be fully planted and mulched or grassed generally in accordance with the approved plan and to the satisfaction of the **Responsible Authority.**

- 11. Privacy screens and obscure glazing as required in accordance with the approved plans must be installed prior to occupation of the building to the satisfaction of the Responsible Authority and maintained thereafter to the satisfaction of the Responsible Authority. The use of obscure film fixed to transparent windows is not considered to be 'obscure glazing' or an appropriate response to screen overlooking.
- 12. Driveway gradients and transitions as shown on the plan approved under Condition 1 of this permit must be generally achieved through the driveway construction process to the satisfaction of the **Responsible Authority.**

 Landscape Plan 13. Prior to the endorsement of plans under Condition 1 of the permit, a report prepared by a suitably qualified person to confirm that the trees to be planted within the tithe boundary to the Doncaster Road frontage can grow and survive within the specified deep soil areas. 14. Any dead, diseased or damaged plants must be replaced as soon as practicable, to the satisfaction of the Responsible Authority. 15. Before the development starts, two copies of an amended landscaping plan must be submitted to the Responsible Authority for approval. The plan must be generally in accordance with the approved site layout plan and the decision plans prepared by GbLA Landscape Architects, dated 17 November 2016, but modified to show: 15.1 Species, locations, approximate height and spread of proposed planting; 15.2 Details of soil preparation and mulch depth for garden beds and surface preparation for grassed areas; 15.3 Fixed edge strips for separation between grassed and garden areas and/or to contain mulch on batters; 15.4 A sectional detail of the canopy tree planting method which includes support staking and the use of durable ties; 15.5 Details of soil preparation to grassed and floor materials, to demonstrate how this area will function and be maintained to ensure a purposeful interaction with the public realm; 15.6 Continuation of the canopy tree planting along the southern boundary, adjacent to Townhouses 3 and 4; 15.7 All canopy trees and screen planting to be at least 1.5 metres in height at the time of planting; 15.8 The irrigation of the lightweight planter boxes controlled by sensors; 15.9 Details of the raingarden located on the southern side of the building, including maintenace details; 15.10 Tree Protection Zones and recommendations notated on plan for trees on adjoining properties and the road reserve in proximity to the site, as derived from the Arborist report requir						
 report prepared by a suitably qualified person to confirm that the trees to be planted within the title boundary to the Doncaster Road frontage can grow and survive within the specified deep soil areas. 14. Any dead, diseased or damaged plants must be replaced as soon as practicable, to the satisfaction of the Responsible Authority. 15. Before the development starts, two copies of an amended landscaping plan must be submitted to the Responsible Authority for approval. The plan must be generally in accordance with the approved site layout plan and the decision plans prepared by GbLA Landscape Architects, dated 17 November 2016, but modified to show: 15.1 Species, locations, approximate height and spread of proposed planting; 15.2 Details of soil preparation and mulch depth for garden beds and surface preparation for grassed areas; 15.3 Fixed edge strips for separation between grassed and garden areas and/or to contain mulch on batters; 15.4 A sectional detail of the canopy tree planting method which includes support staking and the use of durable ties; 15.5 Details of the site frontage to Doncaster Road, including the location of bic/cle parking, ramps, planter bed and floor materials, to demonstrate how this area will function and be maintained to ensure a purposeful interaction with the public realm; 15.6 Continuation of the canopy tree planting along the southern boundary, adjacent to Townhouses 3 and 4; 15.7 All canopy trees and screen planting to be at least 1.5 metres in height at the time of planting; 15.9 Details of the raingarden located on the southern side of the building, including maintenance details; 15.10 Tree Protection Zones and recommendations notated on plan for trees on adjoining properties and the road reserve in proximity to the site, as derived from the Arborist report required by Condition 17 of this permit. Landscape Bond 16. Before the release of the approved pla	Landscape Plan					
 practicable, to the satisfaction of the Responsible Authority. 15. Before the development starts, two copies of an amended landscaping plan must be submitted to the Responsible Authority for approval. The plan must be generally in accordance with the approved site layout plan and the decision plans prepared by GbLA Landscape Architects, dated 17 November 2016, but modified to show: 15.1 Species, locations, approximate height and spread of proposed planting; 15.2 Details of soil preparation and mulch depth for garden beds and surface preparation for grassed areas; 15.3 Fixed edge strips for separation between grassed and garden areas and/or to contain mulch on batters; 15.4 A sectional detail of the canopy tree planting method which includes support staking and the use of durable ties; 15.5 Details of the site frontage to Doncaster Road, including the location of bicycle parking, ramps, planter bed and floor materials, to demonstrate how this area will function and be maintained to ensure a purposeful interaction with the public realm; 15.6 Continuation of the canopy tree planting along the southern boundary, adjacent to Townhouses 3 and 4; 15.7 All canopy trees and screen planting to be at least 1.5 metres in height at the time of planting; 15.8 The irrigation of the lightweight planter boxes controlled by sensors; 15.9 Details of the raingarden located on the southern side of the building, including maintenance details; 15.10 Tree Protection Zones and recommendations notated on plan for trees on adjoining properties and the road reserve in proximity to the site, as derived from the Arborist report required by Condition 17 of this permit. Landscape Bond 16. Before the release of the approved plan for the development, a \$10,000 cash bond or bank guarantee must be lodged with the Responsible Authority to ensure the completion and maintenance of landscaped areas and such bond or bank guaran	13.	report prepared by a suitably qualified person to confirm that the trees to be planted within the title boundary to the Doncaster Road				
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Tree Protection

17.	An Arboricultural Report prepared by a qualified arborist on the trees to be retained in the north-western corner of the site, providing an assessment on their health, structure, form and significance. The report must include construction techniques and recommendations to protect the trees during construction, having specific regard to the proposed development and construction works.
18.	All trees shown as retained on the endorsed Site Plan must be protected by Tree Protection Fencing (TPF) to form an appropriate and effective Tree Protection Zone (TPZ) or Vegetation Protection Zone (VPZ), to the satisfaction of the Responsible Authority.
19.	All Tree Protection Zones on the subject land must be:
	19.1 Established and defined prior to the commencement of any construction works and associated fencing/signage must not be removed until works in the affected area have been fully completed to the satisfaction of the Responsible Authority;
	19.2 Constructed in accordance with Australian Standard (4970-2009) titled "Protection of trees on development sites", and clearly marked "no-go zone/vegetation protection zone".
20.	The following actions must not be undertaken in any Vegetation Protection Zone as identified on the approved plan, to the satisfaction of the Responsible Authority:
	20.1 The storage of materials or equipment;
	20.2 The disposal of any contaminated waste water;
	20.3 The use of a tree for temporary attachment of wiring or such like;
	20.4 Open cut trenching, or excavation works (whether or not for the laying of services);
	20.5 Changes to the soil grade level.
Stor	mwater – On-site detention (OSD)
21.	The owner must provide on-site storm water detention storage or other suitable system (which may include but is not limited to the re- use of stormwater using rainwater tanks), to limit the Permissible Site Discharge (PSD) to that applicable to the site coverage of 35 percent of hard surface or the pre-existing hard surface if it is greater than 35 percent. The PSD must meet the following requirements:
	21.1 Be designed for a 1 in 5 year storm; and
	21.2 Storage must be designed for 1 in 10 year storm.

Construction Plan (OSD) Before the development starts, a construction plan for the system 22. required by Condition 21 of this permit must be submitted to and approved by the Responsible Authority. The system must be maintained by the Owner thereafter in accordance with the approved construction plan to the satisfaction of the Responsible Authority. Drainage 23. Stormwater must not be discharged from the subject land other than by means of drainage to the legal point of discharge. The drainage system within the development must be designed and constructed to the requirements and satisfaction of the relevant Building Surveyor. A connection to Council maintained assets must not be constructed unless a Miscellaneous Works Permit is first obtained from the **Responsible Authority.** The whole of the land, including landscaped and paved areas must be 24. graded and drained to the satisfaction of the Responsible Authority, to prevent ponding and to minimise overland flows onto adjoining properties. On-site car parking and bicycle parking 25. The areas set aside for the parking of vehicles, together with the aisles and access lanes as delineated on the endorsed plans must: 25.1 be completed and line-marked to the satisfaction of the Responsible Authority prior to the commencement of the development hereby permitted; 25.2 be used for no other purpose and maintained at all times to the satisfaction of the Responsible Authority; 25.3 be drained and sealed with an all-weather seal coat where appropriate. 26. Staff car parking spaces (for the commercial uses within the building) must be clearly lined marked and signed and must not be used for any other purpose, to the satisfaction of the Responsible Authority. 27. All bicycle parking must be maintained and not be used for any other purpose, to the satisfaction of the Responsible Authority. **Commercial Uses (Restaurant and Retail)** 28. The uses must accord with the endorsed plans. Any alterations must be approved by the Responsible Authority. Except with the prior written consent of the Responsible Authority, 29. the hours of operation for the restaurant are: Monday to Sunday between 7.00am and 12 midnight

30. Except with the prior written consent of the Responsible Authority,

the hours of operation for the retail (shop) tenancies are:

Monday to Sunday between 7.00am and 12 midnight

- 31. Except with the prior written consent of the Responsible Authority, no more than 80 seats may be provided in the food and drink (restaurant) premises. This includes seats located inside and outside the premises.
- 32. All delivery and collection of goods associated with the restaurant and retail (shops) must be conducted within the subject land and within the operating hours approved under this permit.
- 33. All noise emanating from commercial premises within the building must comply with the State Environment Protection Policy N-1 (Noise from commerce industry and trade) and in the event of the Responsible Authority receiving justifiable complaints regarding noise from such sources, the onus will be on the owner of the development site to prove compliance with the relevant policy to the satisfaction of the Responsible Authority.
- 34. The shop fronts for the retail and restaurant tenancies (which face Doncaster Road) must not be covered by promotional or other film or signage that reduces transparency of the interface, to the satisfaction of the Responsible Authority.
- 35. The operators of the commercial premises must ensure that all on-site activities are conducted in an orderly manner and must endeavour to ensure that patrons / customers who depart the premises late at night, do so in a manner not likely to cause noise disturbances to nearby residents and residents in the building, and in accordance with any approved car parking operation (should they be parked within the basement car parks) approved under another condition of this permit.
- 36. The exhaust system to the food and drink (restaurant) premises must be fitted with filter devices capable of minimizing the external emission of odours and airborne fat particles and be maintained to the satisfaction of the Responsible Authority.
- 37. All retail and restaurant patrons must enter and exit the tenancies via the Doncaster Road frontage only.
- 38. The use of the land must not adversely affect the amenity of the neighbourhood, including through:
 - 38.1 the transport of materials, goods or commodities to or from the land;
 - 38.2 the appearance of any buildings, works or materials; and
 - 38.3 the emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, or the presence of vermin;

to the satisfaction of the Responsible Authority.

Rubbish, including bottles and packaging material, must at all times 39. be stored within the building and screened from external view. All waste collection and recycling collection to be undertaken in accordance with Council requirements and the approved waste management plan. **Development Contribution 40**. Prior to the completion of the development, a Development Contribution as agreed by the Responsible Authority in accordance with Clause 45.06 Development Contributions Plan Overlay Schedule 1 – Doncaster Hill Development Contributions Plan must be paid to the Responsible Authority. Lighting 41. External lighting must be designed so as to minimise loss of amenity to residents of adjoining properties to the satisfaction of the **Responsible Authority.** 42. The development must be provided with external lighting capable of illuminating access to each car parking space, storage, rubbish bin, recycling bin, pedestrian walkways, stairwells, lift, dwelling entrances and entry foyer. Lighting must be located, directed, shielded and of limited intensity so that no nuisance or loss of amenity is caused to any person within and beyond the site, to the satisfaction of the **Responsible Authority.** General 43. All services, including water, electricity, gas, sewerage and telephone, must be installed underground and located to the satisfaction of the **Responsible Authority.** 44. A centralised TV antenna must be installed and connections made to each dwelling to the satisfaction of the Responsible Authority. 45. No individual dish antennae may be installed on the overall building to the satisfaction of the Responsible Authority. 46. If allowed by the relevant fire authority, external fire services must be enclosed in a neatly constructed, durable cabinet finished to complement the overall development, or in the event that enclosure is not allowed, associated installations must be located, finished and landscaped to minimise visual impacts from the public footpath in front of the site to the satisfaction of the Responsible Authority. 47. Once the permitted development has commenced it must be continued and completed to the satisfaction of the Responsible Authority. Buildings, engineering works, fences and landscaped areas must be 48. maintained to the satisfaction of the Responsible Authority.

49.	Privacy screens as required in accordance with the endorsed plans must be installed prior to occupation of the building to the satisfaction of the Responsible Authority and maintained to the satisfaction of the Responsible Authority thereafter.
50.	Any external clothes drying facilities must be appropriately designed and must not be visible from the street.
Depa	artment of Transport (condition 51)
51.	The permit holder must take all reasonable steps to ensure that disruption to bus operation along Doncaster Road is kept to a minimum during the construction of the development. Foreseen disruptions to bus operations and mitigation measures must be communicated to Public Transport Victoria fourteen days (14) prior. Any alterations including temporary works or damage during construction must be rectified to the satisfaction of Public Transport Victoria and at the cost of the permit holder.
Perm	nit Expiry
52. T	his permit will expire if one of the following circumstances applies:
	52.1 The development is not started within two (2) years of the date of this permit; and
	52.2 The development is not completed within four (4) years of the date of this permit.
	52.3 The uses are not commenced within two (2) years of the development being completed.
	The Responsible Authority may extend the periods referred to if a request is made in writing by the owner or occupier either before the permit expires or in accordance with Section 69 of the Planning & Environment Act 1987.

CARRIED

2. BACKGROUND

- 2.1 A pre-application advice request was submitted to Council on 4 September 2015.
- 2.2 The proposal was presented to the Sustainable Design Taskforce meeting on 22 October 2015.
- 2.3 The application was submitted to Council on 16 December 2016.
- 2.4 A request for further information was sent on 11 January 2017 and raised preliminary concerns with the submitted proposal relating to the boulevard treatment along Doncaster Road, the size of the design element, building setbacks, access to bicycle spaces and amenity.
- 2.5 All requested further information was received by Council on 9 June 2017.

- 2.6 Notice of the application was given over a three-week period which concluded on 11 July 2017.
- 2.7 The statutory time for considering a planning application is 60 days, which lapsed on 22 August 2017.
- 2.8 The land title is not affected by any covenants or restrictions.

3. THE SITE AND SURROUNDS

The Site

- 3.1 The site is situated on the southern side of Doncaster Road, at the intersection with Short Street, Doncaster.
- 3.2 The site has a consolidated frontage width of 64.07 metres, an 8.26 metre long splay at the corner of Short Street, a 32.91 metre side road frontage width, an angled southern rear boundary with a total length of 72.54 metres and a western side boundary length of 49 metres. The site has a total area of 3,257 square metres.
- 3.3 A two-storey commercial building presently occupies the site with access via a signalised intersection at the western end of the northern frontage to Doncaster Road. The building increases to three storeys in height as it presents to the rear due to the slope of the land. A road extends through the site providing vehicle access to the commercial building at 660 Doncaster Road via a carriageway easement. The carriageway easement is located on the western side of the site with a minimum width of 6.11 metres and splays to Doncaster Road.
- 3.4 The site is affected by a 2.44 metre wide drainage and sewerage easement along the southern boundary, terminating 22.82 metres short of the eastern site boundary.
- 3.5 The topography falls approximately 4 metres from the Doncaster Road frontage to the rear southern boundary of the site.
- 3.6 There are no significant trees on the site, with the exception of three mature Eucalypt trees at the site frontage on the western side of the internal road. There are no fences fronting Doncaster Road or Short Street. The southern boundary is enclosed by a paling fence and the western boundary is open to the adjoining commercial building due to the existing carriageway easement layout.

The Surrounds

- 3.7 The site directly abuts two properties, to the west and to the south.
- 3.8 The property to the west at 660 Doncaster Road comprises a two-storey commercial building, which presents as three storeys to the rear due to the slope of the land. The building presents to the subject site as a continuous sheer wall with extensive glazing. The building benefits from access via two separate points over the carriageway easement on the subject site, along the western and southern boundaries of the subject site. Landscaping provides a buffer from the building on the western side of the internal road.

- 3.9 The property to the south at 20-24 Hepburn Road comprises a 14-storey apartment building 'Magnolia' (comprising 181 dwellings) and associated basement car parking on a 3,126 square metre lot. The building forms a 'U' shape with an open light court facing north towards the subject site and is setback approximately 4.5 metres from the common boundary with the subject site. Rooftop communal facilities are provided on the western side of the building, which is directly south of the midpoint of the southern boundary of the subject site.
- 3.10 To the south-west, approximately 14 metres distance from the subject site and separated by the driveway to 660 Doncaster Road, is an eight-storey office and residential building at 8 Clay Drive that was approved by planning permit PL01/012766 on 9 April 2002.
- 3.11 To the east, on the other side of Short Street, is 674 Doncaster Road, which is used and developed with a place of worship, and is affected by Heritage Overlay Schedule 46.
- 3.12 To the north of the site is Doncaster Road, an arterial road with three lanes of traffic in both directions. Directly opposite the internal road is a signalised intersection with Council Street. On-street car parking is restricted with a 'No Standing and Clearway' sign.
- 3.13 The character of the broader area is mixed, with a number of high rise developments to the west ('Nest', which is under construction at 642 Doncaster Road, and 'Pinnacle' at 632 Doncaster Road), existing housing stock to the south and east (both within and outside of the ACZ), some medium density housing south of Doncaster Road, and commercial uses along Doncaster Road.
- 3.14 The subject site is located within the Doncaster Hill Principal Activity Centre. The Activity Centre spans along the main arterial roads (Doncaster Road, Tram, Elgar and Williamsons Road corridors) and forms a central hub of residential, commercial, retail and recreational facilities. It is apparent that the area is changing in line with Council's vision, evidenced by the construction of several residential apartment towers within the precinct. The subject site is located in the south-eastern section of the ACZ, with all surrounding land also zoned ACZ.
- 3.15 In terms of public transport, the subject site is well service by bus routes operating along Doncaster Road, connecting activity centres and residential areas within the municipality to Melbourne's Central Activity District. A major bus interchange is situated within the Westfield Doncaster complex within 730 metres walking distance to the north-west. In addition to having access to the numerous retail, restaurant and entertainment venues within the Shopping Centre, which itself is within 270 metres walking distance, the site is well serviced by other community and local facilities including Schramms Reserve and the proposed Hepburn Reserve, MC Square, Doncaster Primary and Doncaster Secondary College.

4. THE PROPOSAL

4.1 It is proposed to use and develop the land with a 13-storey, mixed-use building providing 161 dwellings, a restaurant and three retail premises and associated basement car parking. To facilitate this, the proposal requires a reduction to the standard car parking, loading and unloading requirements of the Scheme, a variation to the carriageway easement E-2 on Title Plan 322585J by allowing the building to encroach into the easement and simultaneously providing a minimum

3.5 metre vertical clearance, a alteration of access to a road in a Road Zone, Category 1.

Submitted plans and documents

- 4.2 The proposal is outlined on the plans prepared by Plus Architecture, dated 8 June 2017 (received by Council on 9 June 2017) and landscape plans prepared by GbLA Landscape Architects, dated 17 November 2016. A plan of easement variation was prepared by M. J. Parsons and Associates Land Surveyors, Version No. 02. Refer to Attachment 1.
- 4.3 The following reports were submitted to support the application:
 - planning report prepared by proUrban, dated 15 December 2016, updated on 30 March 2017;
 - waste management plan prepared by Leigh Design, dated 14 December 2016;
 - traffic report prepared by mga traffic Pty Ltd, dated 14 December 2016, supplemented by a letter dated 8 March 2017;
 - sustainability management report prepared by jba Consulting Engineers, dated 1 December 2016;
 - acoustic report prepared by Vipac Engineers and Scientists Limited dated 15 March 2017; and
 - wind impact assessment prepared by Vipac Engineers and Scientists Limited dated 30 November 2016.

Development summary

4.4 A summary of the development is provided as follow	4.4	A summary	/ of the develo	pment is pro	ovided as follows
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Land Size:	3,257m ²	Tower Height:	39.23m, complies with mandatory 40m
Site Coverage:	58%	Design Element Height:	6.15m, complies with mandatory 8m
Permeability:	8%	Maximum Building Height:	45.38m
Number of Dwellings:	161	Street setback to Doncaster Road (north)	Basement – 0m Ground floor – 7m Podium (1-3) – 6.3m Tower (4-11) – 11.9m Design element (12-13) – 14.5m
1 bedroom:	43	Side road setback to Short Street (east)	Basement – 0m Ground floor – 3.735m Podium (1-3) – 5.4m Tower (4-11) – 3.778m Design element (12-13) – 27.2m

2 bedrooms:	102	Setback to southern boundary	Basement – 5.5m Ground floor – 3.12m Podium (1-3) – 3.565m Tower (4-11) – 3.565m Design element (12-13) – 12.75m
3 bedrooms:	16	Setback to western boundary	Basement – 4.1m Ground floor – 13.217m Podium (1-3) – 16m Tower (4-11) – 4.504m Design element (12-13) – 9.9m
Dwelling Density:	One per 20.23m ² Ranging from 50m ² to 270m ²	Total car parking spaces:	227
Total retail floor area:	350m ²	Resident spaces:	179
Restaurant floor area:	224m ² (80 seats)	 Dwelling visitors, retail customers and restaurant patron spaces: 	41
		 Retail and restaurant staff spaces: 	7

Design layout

- 4.5 The ground level consists of three retail premises, varying from 101 square metres to 142 square metres in size and a restaurant with an area of 224 square metres, each with a frontage to Doncaster Road. Seven dwellings are provided at ground floor, four of these being duplex townhouses provided at ground and lower ground levels.
- 4.6 Podium levels 1 to 3 consist of 44 dwellings, with an indoor communal area provided at level 1 and storage cages enclosed in a central location on each level.
- 4.7 Tower levels 3 to 11 consist of 107 dwellings, and the design element levels 12 and 13 consist of three penthouse dwellings.
- 4.8 The dwellings incorporate a mix of layouts, consisting of one to three bedrooms which vary from 50 square metres to 110 square metres, and penthouses between 118 square metres and 237 square metres. Floor plates also vary from floor to floor, with unique layouts and balcony sizes provided that creates variety in order to achieve the desired external architectural form.

Pedestrian and vehicle access and layout

- 4.9 The pedestrian entry to the building is provided via a ramped footpath from Short Street. It leads to an airlock and lift lobby at ground floor.
- 4.10 Vehicle access is provided via the existing internal roadway within the carriageway easement. It leads to a 5.5 metre wide basement entry at lower ground floor that provides access to the basement car park. Lower ground floor consists of three spaces opposite the basement entry and three spaces within the basement car park, which are all allocated to visitors and customers. A retail waste room is provided as well as a narrow loading zone opposite the basement entry.
- 4.10 The development consists of four basement levels. The first basement level consists of car parking spaces available to visitors, customers and restaurant and retail staff, together with bicycle spaces for residents and retail use. Resident storage facilities are provided, together with a retail store, resident waste room and a fire pump room. The remaining three basement levels consist of resident car parking and storage facilities.

Landscaping

4.11 The three Eucalypts in the north-western corner of the site are proposed to be retained. Canopy trees are proposed within the frontage to Doncaster Road to realise a boulevard treatment and also to part of the side road frontage to Short Street. Screen planting is proposed at the rear of the site. Communal areas are to be landscaped and provided with seating areas at levels 1 and 12.

Design detail

4.12 The proposed building features a contemporary architectural design, which is described in the submitted town planning report as "the west end of the tower spans over the easement, resting gently on an expressed heel. The edges of the tower have been sculpted to echo this dramatic sweep, with ribbon-style balconies pushing and pulling at the edges. From afar, the black tile patterning provides a strong geometric pattern to the façade by presenting a ribboning and dynamic movement to the building. These elements respond at the pedestrian scale and provide an intimate perception of detail up-close. Timber cladding is introduced onto the townhouses to differentiate their relationship to the rest of the form, and respond to the finer grain of Short Street".

5. LEGISLATIVE REQUIREMENTS

5.1 Refer to Attachment 2.

6. **REFERRALS**

External

6.1 Given the proposal involves the alteration of access to Doncaster Road, it is a statutory requirement to refer the application to VicRoads as a determining referral authority.

- 6.2 VicRoads have requested further information relating to the queuing of right turn traffic into the subject site, justification of traffic generation rates for the restaurant and retail tenancies and an analysis of the impact of the proposed development on the operation of the signalised intersection between Council Street, Doncaster Road and the site access (Condition 1.16). VicRoads conditions are anticipated to be provided during the week of Monday 18 September, and will be supplemented to the report as Condition 54 as an addendum.
- 6.3 As the proposal involves a residential development comprising 60 or more dwellings, it is a statutory requirement to refer the application to Public Transport Victoria as a determining referral authority.
- 6.4 Public Transport Victoria has no objection subject to a condition on any permit issued requiring the permit holder take all reasonable steps to ensure that disruption to bus operation along Doncaster Road is minimised during construction.

Internal

6.5 The application was referred to a number of Service Units within Council. The following table summarises the responses:

Service Unit	Comments
Engineering & Technical Services Unit – Drainage	 There is adequate point of discharge for the site. All runoff is to be directed to the point of discharge (Condition 23). Provide an on-site stormwater detention system (Condition 21).
Engineering & Technical Services Unit – Vehicle Crossing	 A "Vehicle Crossing Permit" is required.
Engineering & Technical Services Unit – Access and Driveway	 The development will increase the queue length at the intersection of Doncaster Road and Council Street, the right turn lane needs to be increased to 75 metres with approval from VicRoads. Adequate sight lines are available from the exit lane. The width and internal radius of the driveway allow sufficient turning areas for all vehicles to reverse and exit the site in a forward direction. At least 2.1 metres headroom beneath overhead obstructions is required (Condition 1.5).
Engineering & Technical Services Unit – Traffic and Car Parking	 The number of car parking spaces provided requires a reduction to the car parking requirements. The findings of the submitted traffic report are supported. The dimensions of the car parking spaces comply. There are no traffic issues in the context of the traffic and the surrounding street network.

Service Unit	Comments
Engineering & Technical Services Unit – Car Parking Layout	 The car parking layout is satisfactory.
Engineering & Technical Services Unit – Construction Management	 A construction management plan is required (Condition 3).
Engineering & Technical Services Unit – Waste Engineering & Technical Services Unit – Easements	 Private waste collection will be required within the development. No private waste contractor bins can be left outside the property boundary for any reason. A final Waste Management Plan needs to be approved as part of the permit (Condition 5). Build over easement approval is not required.
Strategic Projects Unit – Sustainability	The following amendments to the submitted Sustainability Management Plan are required before approval (Conditions 1.10 and 4):
	 <u>Commercial Areas</u> The commercial areas in the development need to be entered into BESS and assessed in the management plan.
	 Thermal Fabric Non-residential For a development of this size, a commitment to achieving a 10% improvement on section J requirements of the National Construction Code (NCC) is required. Provide a preliminary National Construction Code (NCC) Section J Deemed-to-satisfy or JV3 assessment or provide information on how energy efficiency requirements will be achieved.
	 <u>Heating & Cooling System</u> The report indicates a 3-star minimum commitment while 4-stars has been entered into BESS. This is required to correspond.
	 <u>Energy 3.6 Internal Lighting – Residential Multiple</u> <u>Dwellings</u> Current commitment to efficient fittings does not necessarily result in lower energy use. Provide further information in the report that a commitment for maximum power density (w/m²) will be 20% more efficient than minimum standards. Alternatively, the BESS entry must be amended to NO. Fluorescent lamps should not be used as they contain toxic mercury, complicating their

Service Unit	Comments
	disposal.
	 <u>Energy 4.2 Renewable energy systems – Solar</u> Detail on plans the size (7kW) of the solar photovoltaic system.
	 Water 4.1 Fire Test System Water Provide further information on measures being taken to reduce water consumption when testing fire safety systems. Alternatively, the BESS entry must be amended to NO.
	 <u>Stormwater 1.1 Stormwater Treatment</u> Provide notations on plans to indicate size and location of proposed 55m² raingardens.
	 IEQ 1.1 Daylight Access - Living Areas DTS Daylight requires all living areas and bedrooms less than 8m deep (5m if south facing). There are a number of south facing living areas more than 5m deep. Amend the design or alternatively, the BESS entry must be amended to NO.
	 IEQ 1.2 Daylight Access – Bedrooms A significant number of the bedrooms within the design are a battle axe configuration which restricts daylight access to the main area of the room. Battle axe access ways should be at least 1.2m wide and no deeper than 1.5m from the window to the leading corner. Amend design or alternatively, provide daylight modelling that proves all battle-axe bedrooms meet SDAPP Daylight requirements.
	 <u>Transport 1.1-2 Bicycle parking – residential &</u> <u>Visitor</u> Numbers do not correspond between the report, BESS entry and what is on plans. This is required to correspond.
	 Indoor Environment Quality Ensure that top floor apartments exposed glazing has sufficient shading/overhangs to avoid overheating and glare; Provide adjustable external blinds/shutters on west facade to control glare and summer solar gains. Ensure north glazing has adequate overhangs to control summer glare while allowing winter solar gains.

Service Unit	Comments
City Strategy Unit – Urban Design	 With its ribbon-like facades, recessed and overhanging balconies, the building is attractive and will provide a positive contribution to the Doncaster Road view corridor. There is insufficient space provided for the Doncaster Hill boulevard along the Doncaster Road frontage of the development. Plans and sections show the basement carpark extending to the front site boundary, effectively occupying 100% of the 5 metre zone that should be reserved for deep root planting. It is recommended that the basement carpark be redesigned to accommodate the two 'deep planting tree(s)' shown on TP100. Raised planters will not be acceptable (Condition 1.1). There appears to be some level difference between the paved spaces on the Doncaster Road frontage of the development and the boulevard, as well as the incorporation of planting zone against the ground-level retail spaces. Unimpeded views and physical access from the Doncaster boulevard into the ground level retail spaces is essential to ensuring that this edge of the building is highly visible and activated. It is recommended that planting zones against the building be deleted and steps and ramps from the boulevard to the retail spaces be minimised (Condition 1.3). The design element includes two levels of dwellings and is set back from the tower edge. Its location and design are in line with the requirements of the Doncaster Hill Strategy.

7. CONSULTATION / NOTIFICATION

- 7.1 Notice of the application was given over a three-week period which concluded on 11 July 2017, by sending letters to nearby properties and displaying two large signs on site.
- 7.2 28 objections have been received from the following properties:
 - 101/20 Hepburn Road Doncaster;
 - 204/20 Hepburn Road Doncaster;
 - 312/20 Hepburn Road Doncaster;
 - 404/20 Hepburn Road Doncaster;
 - 406/20 Hepburn Road Doncaster;
 - 502/20 Hepburn Road Doncaster (two separate objections);
 - 513/20 Hepburn Road Doncaster;
 - 514/20 Hepburn Road Doncaster;

- 614/20 Hepburn Road Doncaster;
- 801/20 Hepburn Road Doncaster;
- 813/20 Hepburn Road Doncaster;
- 814/20 Hepburn Road Doncaster;
- 1012/20 Hepburn Road Doncaster;
- 1106/20 Hepburn Road Doncaster;
- 1108/20 Hepburn Road, Doncaster;
- 1112/20 Hepburn Road Doncaster;
- 1205/20 Hepburn Road Doncaster;
- 1206/20 Hepburn Road Doncaster;
- 1304/20 Hepburn Road Doncaster;
- 1305/20 Hepburn Road, Doncaster;
- 1307/20 Hepburn Road Doncaster;
- 1309/20 Hepburn Road, Doncaster;
- 301/8 Clay Drive Doncaster;
- 601/8 Clay Drive Doncaster;
- 13 Elm Tree Road Doncaster;
- 58 Lawanna Drive Templestowe;
- 3 Irung Avenue Box Hill.
- 7.3 The grounds of objection are summarised as follows:
 - Overdevelopment;
 - Traffic, lack of on-street and off-street car parking, pedestrian safety, and loading and unloading of vehicles;
 - Design and built form (building height, setbacks and opportunity for more landscaping); and
 - Off-site amenity impacts (overshadowing, loss of daylight and sunlight, overlooking and loss of privacy, noise and safety, loss of views and outlook, and loss of property value).
- 7.4 A response to the grounds of objection are included in the assessment section of this report (sections 8.77 to 8.89).

8. ASSESSMENT

- 8.1 The proposal has been assessed against the relevant state and local planning policies, the zone and overlay and the relevant particular provisions and general provisions of the Scheme.
- 8.2 The following assessment is made under the headings:
 - State and Local Planning Policy Frameworks (SPPF and LPPF);
 - Design and built form;

- Guidelines for higher density residential development;
- Car parking, access and easement variation, bicycle facilities and loading and unloading of vehicles; and
- Objector concerns.

State and Local Planning Policy Frameworks (SPPF and LPPF)

- 8.3 Key objectives of the SPPF and LPPF seek to intensify activity centres as a focus for high-quality development and encourage increased activity and density as a way to achieve broader urban consolidation objectives.
- 8.4 At both the SPPF and LPPF levels, policy emphasises the need for mixed use development with a focus on high density residential development in the Doncaster Hill Activity Centre, in which the site is located. The use of the site for the purpose of a dwellings, retail and a restaurant is appropriate within the zoning of the land and the strategic context of the site. The site's location places it within very good proximity to access to public transport and existing services.
- 8.5 Council has, through its policy statements throughout the Planning Scheme, sought to implement this policy as it relates to Doncaster Hill at Clause 21.09 through Schedule 1 to the Activity Centre Zone.
- 8.6 Within the Doncaster Hill Principal Activity Centre there are various precincts delineated in accordance with their topographic orientation and aspect on Doncaster Hill, their relationship to main roads, and their present and future uses. The site, together with all land within the ACZ on the south side of Doncaster Road east of Tram Road, is within Precinct 2.
- 8.7 Under the ACZ1, the subject site is located in Precinct 2C. The relevant objectives for Precinct 2C (Clause 5.2-2) are:
 - To encourage an appropriate mix of residential and commercial uses in the precinct.
 - To encourage the greatest area of high-density development to locate along the Doncaster Road ridgeline.
 - To encourage the provision of cafes, restaurants and outdoor eating within the precinct.
 - To support and connect with the pedestrian link proposed for the Doncaster Road, Williamsons and Tram Roads intersection at the western end of the precinct.
 - To create a public urban space/plaza with good solar access abutting the south side of Doncaster Road, with convenient access to the north side.
- 8.8 The land uses proposed are supported under the ACZ1 and the subject site is located within the Doncaster Hill Principal Activity Centre which supports a mixed-use development within the activity centre. The proposal provides appropriate uses within a building in a location that is highly accessible to the community and the proposal is consistent with the vision for the Doncaster Hill area. In particular, it supports the key vision objectives, which encourage high density, high-rise mixed-use development and innovative contemporary design.

8.9 The non-residential uses are located at ground level and front Doncaster Road. These uses also takes advantage of the sites northern aspect, and are therefore well located to activate the public realm. The commercial uses are consistent with the objective of the ACZ1 which seeks to encourage commercial and small-scale retail uses at the lower level of buildings, with high-density apartment style residential development on upper levels.

Design and built form

- 8.10 The ACZ1 sets a number of mandatory and preferred maximums/minimums for buildings within the Activity Centre. These mainly relate to the scale of the development, such as height and setback distances. The requirements establish a three dimensional building envelope for each site.
- 8.11 The following assessment identifies and considers these mandatory and preferred requirements from the ACZ1, as outlined at Clause 4.4 (Design and Development), as well as the decision guidelines at Clause 8.0:

Building Height

- 8.12 In relation to building height, the maximum building height is a mandatory requirement. The maximum building height permitted for this site under the ACZ1 is 40 metres and there is a further height allowance of 8 metres (maximum) attributed to a design element.
- 8.13 Acknowledging the slope of the site, the proposed building reaches a height of 39.23 metres. This is within the prescribed maximum building height. The design element, which comprises three penthouses over two levels, adds a further height of 6.15 metres. This is within the mandatory maximum 8 metres. The overall maximum building height is therefore 45.38 metres. The proposal is fully compliant with prescribed building heights.
- 8.14 In relation to the percentage of the roof area of which the design element covers, the design element does not achieve the requirement which requires that *it occupies an area less than 15% of the overall roof area.* The proposed design element occupies 17.4% of the overall roof area.
- 8.15 The following calculations have been submitted for the design element area:
 - Total roof area = 1,895sqm
 - Total floor area of levels 12/13 = 330sqm
 - Areas of levels 12 or 13 not included within design element are services cupboards / stairwells / waste rooms and supply shafts.
 - Areas of levels 12 or 13 which are included within the design element are the dwellings, lift core, circulation area and the level 12 change rooms and bathroom.
 - Design element % = 330sqm / 1,895sqm x 100 = 17.41%
- 8.16 The rationale for the scale of the proposed design element is the same as that used by the applicant for the approved development at 682-686 Doncaster Road. The same approach to calculating the percentage of the design elements has been adopted. The calculation excludes internal space used for service cupboards, stairwells, waste rooms and supply shafts (64sqm) and external balconies and communal courtyard.

- 8.17 The architectural design of the design element is supported. It includes two (2) levels of dwellings within a curved shape upper level, set back from the lower levels at each elevation. The positioning of the design element is significant as it adds a degree of strength and weight to the building, with a design that provides continuity with the tower form.
- 8.18 The submitted size for the design element is 17.41% and policy supports 15%. The difference of 2.41% from the prescribed size is a reasonable concession given the high quality design and materials proposed for the building and because a significant portion of the design element includes a lift and servicing areas.
- 8.19 Overall, the location and design of the design element continues the theme of those in neighbouring developments within Doncaster Hill (along Tram Road and Doncaster Road) and is in line with the vision statement in the Doncaster Hill Strategy 2002 which seeks to emphasise the existing dramatic landform of Doncaster Hill through built form that steps down the hill.
- 8.20 An area of plant is shown above the design element, which include solar panels. The ACZ1 makes allowances for plant rooms, plant, screens and lift-overruns above the maximum building height if certain criteria are met (including occupying no more than 50% of the roof area, located in a position on the roof to minimise additional overshadowing of neighbouring properties and public spaces, not extend higher than 3.6m above the maximum building height and be designed and screened to the satisfaction of the responsible authority).
- 8.21 The plant has been integrated into the development and will be required to be screened to reduce its visual appearance (Condition 1.11).

Podium and Front Setbacks

- 8.22 A permit cannot be granted to vary the front setbacks for properties that abut Doncaster Road, including the front podium and front tower setbacks. As such, the requirement to achieve a 5 metre setback at the podium level and an 11 metre setback to the tower are both mandatory requirements. Both the podium and tower front setbacks exceed these mandatory setbacks, enabling greater opportunities for retail and restaurant uses to integrate with the public realm. The podium has a minimum setback of 6.3 metres and the tower has a minimum setback of 11.9 metres. The mandatory requirements are met.
- 8.23 The ACZ allows for minor buildings and works within the setbacks (such as verandas, architectural features, balconies, sunshades, screens, artworks and street furniture setbacks) provided they are designed and located appropriately. The base of the tower at Level 4 incorporates extensive balconies to dwellings fronting Doncaster Road. These balconies encroach into the prescribed 11 metre setback by a maximum of 2.5 metres, across Dwellings 0406 to 0411. While this is an encroachment, the balconies are setback a further 3.5 metres from the edge of the podium, ensuring that the balcony balustrades will only be visible from the eastern and western sides, as they are located at the edge of the podium to these interfaces. The balconies are therefore considered to be designed and located appropriately.

Side and Rear Building Setbacks

- 8.24 Policy includes preferred minimum requirements relating to side and rear setbacks (i.e. they can be varied by a permit). The minimum setback from a side boundary is 4.5 metres and the minimum setback from a rear boundary is 5 metres.
- 8.25 Building setbacks from the western boundary are compliant with the 4.5 metre side setback requirement at all levels.
- 8.26 Similarly, the north-eastern component of the tower is compliant with the 4.5 metre side setback requirement at all levels, however at its closest point, the south-eastern corner of the podium and tower maintain a consistent 3.778 metre side setback to all podium and tower levels. This variation to the preferred 4.5 metre side setback is considered acceptable as it has an interface to the side road boundary to Short Street and minimises any off-site amenity impacts to the adjoining property to the south by providing a minimum 6.044 metre rear setback to this wall, which exceeds the 5 metre rear setback requirement.
- 8.27 The rear setback varies the 5 metre setback requirement from the lower ground level to Level 10 at a central point along the southern boundary, maintaining a consistent 3.1 metre setback to the balcony. This is due to the angled return of the southern property boundary. While this is a reasonably significant setback reduction to the preferred 5 metre setback requirement in the context of the property's abuttal to the existing ACZ development at 20 Hepburn Road, this is clearly a deliberate design decision based on the existing built context. The 3.1 metre setback at this location has actually achieved a 9.462 metre setback to the adjoining development, which demonstrates a sensitivity to the existing setback of 20-24 Hepburn Road. Importantly, the remainder of the development complies with the 5 metre rear setback, and in the case of the section of the building east of this pinch point, the setback quickly increases to create a large void that assists to reduce the impact of the wall.
- 8.28 The level of visual bulk is considered to be reasonable for the site context and the massing of the proposed building is considered to be acceptable within the emerging dense urban environment. The proposal in its submitted form is appropriately site responsive and has adequately taken into account the expectations of residential amenity. Occupants within the development at 20 Hepburn Road located to the south of the site should be aware that they live in an Activity Centre Zone and within an area identified for high density growth and that the status quo of two and three-storey commercial buildings is unlikely to remain in the medium to long term. The setback of the building from the boundary common with 20 Hepburn Road is considered acceptable and reasonably manages off-site amenity impacts to 20 Hepburn Road by maintaining a minimum 9 metre building separation.

Overshadowing

8.29 The development is located on the southern side of Doncaster Road and will therefore not cast shadows on properties outside the activity centre, meeting the overshadowing requirements of the ACZ. An assessment of overshadowing within the ACZ will follow at section 8.38 to 8.41 of this report.

Boulevard Character

8.30 The proposed development provides a minimum 5 metre podium setback, a 3.6 metre wide paved promenade across the site frontage to replace the existing footpath and a landscaped boulevard in front of the building on Doncaster Road, as required by policy. The development contributes positively to the local urban character and enhances the public realm by providing an active frontage to Doncaster Road and creates a boulevard along Doncaster Road by providing a designated area for landscaping at the frontage of the site. It is unclear how canopy tree planting within the title boundary to achieve the required boulevard treatment can be accommodated due to the basement below and the lack of deep soil and inability to plant in-ground. To address this concern, a condition will require modifications to the basement to provide deep soil areas for the canopy trees along the boulevard. This is likely to require some internal reconfiguration to the basement layout, perhaps just on one level, however the condition will state that this should be achieved with no reduction to car parking spaces, bicycle parking spaces or basement setbacks (Condition 1.1). Subject to this condition, the provision of deep soil canopy trees along the boulevard will achieve the streetscape character and public realm appearance supported under the ACZ1.

Landscape Design

8.31 The ground level and roof level landscaped areas appear to be commensurate with other high density developments within Doncaster Hill. Ground level screen planting is provided giving a buffer between built form. Minimum 1.5 metre wide landscape buffers are provided to the south, incorporating numerous canopy trees and large to medium size shrubs. A well-landscaped frontage has also been achieved, however landscaping immediately outside the ground level tenancies, as shown on plans, impede views and physical access from the boulevard to the building. To address this, a condition will require these landscape areas to be deleted (Condition 1.3). A landscaping treatment has also been incorporated at the rear of the site within the communal area of Level 1, which will provide an appropriate level of visual interest and soften the built form environment, as viewed from the south.

Access and Mobility

8.32 A condition will require the submission of a Disability Access Plan that implements the recommendations of a Disability Access Audit (prepared by a suitably qualified person) that demonstrates compliance with the relevant Australian Standards for vehicle and pedestrian access into the building, to the satisfaction of the Responsible Authority (Condition 7). Disabled ramps are proposed at the Doncaster Road frontage and it is considered that any further external changes to the building recommended by the Plan and Audit will be designed appropriately so as not to have any unreasonable impact on the public realm.

Requirement of built form policy in the Scheme

8.33 The scale of the proposed building is generally consistent with the expectation of development outlined in the ACZ1. Notwithstanding the policy support for the site's redevelopment, urban consolidation is not the only relevant planning consideration. Good design, neighbourhood character and amenity considerations must also be considered (as outlined at clauses 15.01 of the Scheme) as well as supplementary guidance within the *Guidelines for Higher Density Residential Development* 2004.

- 8.34 These guidelines have been removed from the Scheme under Planning Scheme Amendment VC 139 which was gazetted on 29 August 2017, and were replaced by the *Urban Design Guidelines for Victoria* 2017, which focus on the design of public spaces and building design in relation to a building's interface with public spaces. These new guidelines are to be assessed in conjunction with the *Apartment Design Guidelines for Victoria* 2017, which focus on internal and external amenity.
- 8.35 However, the Apartment Design Guidelines do not apply to this application, as the application benefits from the transitional provisions where Clause 58 does not apply to application lodged before the introduction of Amendment VC136 gazetted on 13 April 2017. Given the responsibility to assess amenity and due to the Urban Design Guidelines 2017 not providing assessment criteria for amenity, and the Apartment Guidelines being not applicable to this application, this report will use the *Guidelines for Higher Density Residential Development* 2004 to assess the proposal.

Off-site amenity

- 8.36 The Design Guidelines for Higher Density Residential Development 2004 provide design criteria for assessing amenity impacts.
- 8.37 All land immediately abutting the site is located within the Activity Centre Zone, and residents living within this zone would expect to see mixed-use buildings with a commercial appearance. Primarily, it must be recognised that there is a strategic need to redevelop the subject site to the density proposed. The impact of the proposed development on the adjoining apartment building at 20 Hepburn Road will be discussed in the following paragraphs.

Overshadowing and loss of light to surrounding properties

- 8.38 The ACZ1 considers overshadowing on dwellings outside the activity centre only and the State Guidelines reference clause 55 of ResCode for consideration of the overshadowing impact (namely Standard B21) which seeks to ensure buildings do not significantly overshadow existing secluded private open spaces, regardless of the zone.
- 8.39 When constructed, the proposed development would impact on light to habitable room windows and overshadow secluded private open space areas of all north-facing dwellings within the new development at 20-24 Hepburn Road. This is due to the building height rather than the distance that the building is setback from the common boundary. In light of policy controls for the subject site and the south adjoining land and the slope of the land, it is considered likely that any built form on the subject site would substantially overshadow development on the south adjoining land.
- 8.40 Shadow diagrams submitted with the application demonstrate that overshadowing will occur throughout the day, with the eastern component of 20-24 Hepburn Road most affected in the morning and the western side most affected in the afternoon. This will mean that apartments will not be in complete shade throughout the day. Given the height of the building at 20-24 Hepburn Road, its roof level communal space will not be overshadowed, given the setback of the proposed tower and the substantial setback to the design element.

8.41 As the subject site and the adjoining property to the south are located within an activity centre, some degree of overshadowing from taller buildings within an activity centre is inevitable. The extent of overshadowing is considered reasonable for the site context.

Overlooking (and loss of privacy)

- 8.42 Although ResCode does not apply to this application, the overlooking standard is an accepted planning principle to assess the impact on adjoining properties. Standard B22 of Clause 55 of the Scheme applies to views within a horizontal distance of 9 metres and a 45 degree arc and seeks to avoid direct views within this distance. This is reflected in the State Guidelines (objective 2.9), which states that existing dwellings should be protected from potential overlooking in accordance with the requirements of Clause 55 of Planning Schemes.
- 8.43 The proposal comprises balconies and windows orientated south to face the building at 20-24 Hepburn Road. All of these windows and balconies maintain a minimum 9 metre separation from the adjoining building, with the exception of ground level private open space areas at 20-24 Hepburn Road which are less than 9 metres in distance.
- 8.44 A condition will require details to be submitted to demonstrate that south-facing balconies and habitable room windows limit overlooking within a 9 metre radius, to the south adjoining development at 20-24 Hepburn Road, in line with planning requirements (Condition 1.6).

<u>Noise</u>

- 8.45 In interface areas where there are often points of conflict between different uses, there is a need to maintain the viability of existing commercial areas.
- 8.46 Future occupants of the proposed building would be aware of the subject site's proximity to potential noise sources including existing businesses located along Doncaster Road and its location on an arterial road as well as commercial uses proposed within the ground level of the building. The submitted acoustic report recommends glazing treatment for Levels 1 to 5, with no acoustic treatments required above Level 5. Noise from the restaurant at ground floor will be contained within the building and limited to background music, which is unlikely to exceed the prescribed limits. A condition will require the recommendations of the acoustic report to be adopted into the design of the building to limit the potential for noise disturbance to new residents as far as practicable (Condition 6).

Wind

8.47 A wind assessment was submitted with the application and considered wind tunnelling, wind generated by the building to pedestrians using the footpaths, wind within private balconies and to the Level 12 communal terrace. The report makes no recommendations for modifications to the building design with findings that demonstrate that wind levels for all parts of the proposed building are within the recommended criteria.

On-site (internal) amenity

8.48 The State Guidelines provides useful guidance with regard to on-site amenity. The following is provided in response to each element.

Building layout and design

- 8.49 An objective of the State's guidelines is to ensure that a good standard of natural light and ventilation is provided to internal building spaces. The guidelines encourage the provision of direct light and air to all rooms wherever possible and encourages direct natural light and ventilation to all habitable rooms in the form of operable windows. The 'borrowing' of light and air should be avoided, particularly in ventilating. It is recognised that this may not always be possible for bedrooms.
- 8.50 The proposal includes a mix of dwelling sizes, which vary from 50 square metres to 110 square metres, not including the four lower level townhouses and three upper level penthouses. The building layout ensures that only two dwellings on each level have a single-aspect to the south, except at ground level where there are five dwellings with a single-aspect to the south. No rooms within the development have borrowed-light.
- 8.51 In relation to outdoor space, the recommended minimum area for a secluded private open space in a multi-unit development of 8sqm has been achieved in the proposed development. Communal areas are provided at Level 1 and on the roof terrace to be accessed by all residents in the building. This is a good amenity outcome especially for single-aspect southern dwellings. In addition to this, the development will have other benefits such as being centrally located to Doncaster Hill and close to services and facilities, and the subject site is within easy access to public open spaces, including Schramms Reserve.
- 8.52 Communal areas have been well located and designed to be easily recognisable and easily accessible for all residents. The width of the main entrance foyer from Short Street is adequate to accommodate pushchairs and wheelchairs. Lift access to all levels is provided from the basement car parks and from the main entrance foyer. All dwellings will have a single-floor layout, with the exception of four dwellings at lower and ground levels, and given that the building is serviced with lifts, all other dwellings will be adequately accessed by people with limited mobility.
- 8.53 Not all dwellings are large enough to provide adequate storage internally. Storage areas for dwellings are provided at basement level, each with a minimum volume of 6m³ within designated storage cages, with the remainder provided across Levels 1, 2 and 3. An allocation schedule has not been submitted. A condition will require an allocation schedule to demonstrate 1 to each dwelling and that all storage cages are properly secured (Condition 1.8 and 1.9).
- 8.54 There are no internal views due to the design and layout of the levels.
- 8.55 Overall, the dwellings are of acceptable sizes ranging from 50 square metres to 270 square metres, with limited instances of reduced amenity to single-aspect south facing dwellings, and reasonable private open space areas. Overall there is an acceptable level of amenity for future residents within the proposed development.

Circulation and services

8.56 In relation to corridor widths, State Guidelines recommend a width of 1.8 metres. All corridor widths vary from 1.5 metres to 2 metres. East-facing and south-facing windows are provided at the end of corridors at each level of the building to provide some natural daylight at the end of each corridor and a good amenity outcome for some residents. 8.57 Vehicle access to the car parking is provided on Doncaster Road. The proposed car parking and services provided (including bin storage) will be hidden from public view. Site services are located to allow for ease of service and maintenance by private contractors.

Car parking, access and easement variation, traffic, Land Adjacent to a Road Zone Category 1, bicycle facilities and loading and unloading of vehicles

Car parking, access and easement variation

- 8.58 Prior to a new use commencing or a new building being occupied, Clause 52.06-2 requires that the number of car parking spaces outlined in Table 1 at Clause 52.06-5 to be provided on the land or as approved under Clause 52.06-3 to the satisfaction of the Responsible Authority.
- 8.59 The Scheme requires a total of 236 car parking spaces for the proposed development. The 227 car parking spaces proposed does not meet this requirement (by 9 car parking spaces) and a permit is therefore being sought to reduce the car parking requirement. The car parking requirement and number of spaces provided is detailed and summarised in the table below.
- 8.60 For the ACZ1 resident car parking are required at a rate of one space for each dwelling with one or two bedrooms and two spaces for each dwelling with three or more bedrooms. The proposal generates a requirement of **177** car parking spaces, which is exceeded by two spaces, and is allocated for within the basement levels.
- 8.61 Resident visitor car parking is required at a rate of one car parking space for every ten dwellings. For 161 dwellings this equates to the provision of 16 car parking spaces. Retail car parking is required at a rate of 4 spaces per 100 square metres. The 350 square metres of floor area equates to a need for 14 spaces. Restaurant car parking is required at a rate of 0.36 spaces per seat. For the 80 seat restaurant proposed this equates to 29 spaces.

Purpose	Scheme car parking requirement	Car parking provided
Dwelling	177 spaces	179 spaces
Dwelling visitors	16 spaces	41 shared spaces, plus 7 spaces for
Retail shops	14 spaces	retail and restaurant staff
Restaurant	29 spaces	
Total	236 spaces	227 spaces

8.62 The car parking layout adopts a shared approach to the provision of parking for short-stay uses including residential visitors, retail customers and restaurant patrons. Retail and restaurant staff are allocated separately. The rationale for shared use car parking is provided in the submitted traffic report. It is based on anticipated demand for the uses, which is summarised as a 50% demand for the required restaurant and residential visitor spaces during the day and no demand for required retail spaces in the evening. The maximum anticipated demand is for 41 shared spaces, which is provided. It provides a number of spaces across the three uses that will provide for the reasonable demand. This rationale is supported by Council's Engineering department and it is not unusual for mixed-use buildings within the municipality.

- 8.63 To assess whether the on-site parking provision and a reduction to the Scheme's car parking requirement is appropriate, Clause 52.06 provides a series of decision guidelines. A full assessment of the proposal against the decision guidelines is provided as follows:
 - There is an in-principle agreement of the Doncaster Hill modal shift plan to the sharing of visitor and commercial car parking spaces and the priority to public transport usage.
 - It is more beneficial for all dwellings to be allocated their full complement of on-site parking rather than visitors which are only sporadically users in comparison.
 - The lack of visitor parking within the basements of multi-unit residential developments of this nature with close proximity to public transport is not unusual. The location of the subject site lends itself well to the use of public transport.
 - Providing high-density housing close to public transport links is consistent with urban consolidation objectives which require planning to assist in the implementation of feasible non-car based transport options.
 - Prospective property owners will be made aware of the lack of on-site visitor car parking provision and be made aware that they will not be eligible to apply for on-street visitor parking permits.
 - Restaurant patrons and customers of the retail units will be made aware of the on-site visitor car parking provision and will utilise alternative methods of transport, and it is reasonable to assume many of the patrons will be locals arriving on foot.
- 8.64 An assessment against the car parking design standards at Clause 52.06-9 of the Scheme is provided in the table below:

Design Standard	Assessment
1 – Accessways	 The accessway to the basement car park meets the minimum width and height clearance requirements. A minimum 5 metre by 7 metre passing area is provided at the entrance to the basement. All vehicles are able to exit the site in a forwards direction. An adequate visibility splay area is provided along the exit lane. Within the basement, a 4 metre internal radius is provided at changes of direction.
2 – Car Parking Spaces	 Car parking spaces are provided in accordance with the requirements, with minimum dimensions of 2.6 metres wide, a length of 4.9 metres and accessed from an aisle width of at least 6.4 metres. There are no tandem spaces proposed.
3 – Gradients	• The existing access road provides appropriate driveway gradients. All other driveway gradients have been assessed as compliant with the standard.

Design Standard	Assessment
4 – Mechanical Parking	No mechanical parking is proposed.
5 – Urban Design	 The development utilises existing access road infrastructure, which will not dominate the landscape. Parking areas and the entrance to the basement are nestled at the rear of the building and will not be visible from the street.
6 – Safety	 Access to the residential basement levels is secured by a security gate. Pedestrian access from the site frontage is clearly separated from the roadway.
7 – Landscaping	Landscaping is well-placed around ground level car parking.

- 8.65 Easement E-2 on Title Plan 322585J is a carriageway easement providing vehicle access from Doncaster Road, through the subject site, to adjoining properties. A variation of this easement would allow buildings to be constructed above the carriageway, providing a minimum 3.5 metre vertical clearance above grade. The development actually provides for a 7.1 metre vertical clearance above grade. In deciding on the application for the variation of easement, the interests of affected people must be considered.
- 8.66 The variation to the easement will allow access to be maintained along the carriageway, and will enable the utilisation of land on the western side of the site for development purposes. Given that the west adjoining property is commercial, development of this portion of the site should not be unreasonably limited.

<u>Traffic</u>

- 8.67 The submitted traffic impact assessment identifies that the proposed development is expected to generate 47 vehicle movements per peak hour and up to 470 vehicles per day for the residential component. The retail and restaurant uses are expected to general 3 to 4 vehicle movements in any peak hour. Therefore, the proposal is expected to generate up to 51 vehicle movements in any peak hour and 510 vehicle movements over an entire day.
- 8.68 The submitted traffic report submits that taking into account the existing uses operating on the access road and the anticipated direction of traffic of residential uses generally being opposite to the direction of traffic for retail and commercial uses, the traffic generated by the proposal is commensurate with the use of the existing use when fully tenanted.
- 8.69 Council's Engineering Services Unit raise no concern in relation to the expected traffic generated by the proposed development as confirmed in the submitted report.
- 8.70 Overall, the traffic generated as a result of the proposed use and development, is considered to be generally compliant with the broader policy objectives of encouraging sustainable transport modes.

Land Adjacent to a Road Zone Category 1

- 8.71 A permit is required under Clause 52.29 of the Scheme as the proposal involves the alteration of access to Doncaster Road, which is zoned Road Zone Category 1.
- 8.72 The decision guidelines of this clause include the views of the relevant road authority.
- 8.73 VicRoads are anticipated to provide conditional consent to the proposal, and will be supplemented to the permit as an addendum.

Bicycle Facilities

8.74 In developments for a residential building of four or more storeys, the Scheme requires 1 resident bicycle parking space to be provided for every 5 dwellings and 1 visitor space for every 10 dwellings. For the proposal this equates to 32 resident bicycle spaces and 16 residential visitor spaces, and a total of 48 spaces. The proposal does not generate a statutory bicycle parking requirement for retail or restaurant uses. The proposal provides on-site 58 bicycle spaces, which exceeds the requirements of the Scheme.

Loading and unloading of vehicles

8.75 The development has a statutory requirement for a loading area of 27.4 square metres (with a length of 7.6 metres, a width of 3.6 metres and a height clearance of 4 metres). The minimum width requirement has not been met, with the proposed loading area having a length of 12.8 metres, a width of 2.3 metres and a height clearance of 4.81 metres. The loading bay is located within the lower ground basement level, adjacent to the lift core and nearby the retail bin room. The extensive length of the loading area will enable adequate space for vehicles to align close to the adjacent wall, and will enable sufficient space for other vehicles to circulate around a loading or unloading vehicle. While the design of the loading bay area does not meet the requirements of the Scheme, and a reduction in the requirement is therefore being sought, the proposed layout is considered to be satisfactory and Council's Engineering Services Unit raise no concern as the functionality of the loading area can operate simultaneously with the movement of vehicles in the basement.

Objector concerns

8.76 A response to the grounds of objection is provided in the below paragraphs:

<u>Overdevelopment</u>

8.77 The *Doncaster Hill Activity Centre Strategy October 2002*, the policy framework for the implementation of the Activity Centre Zone within the Scheme plans for the provision of more than 5,000 new apartments over the next 20 years within the municipality's only Principal Activity Centre. As such, Council officers do not see the proposal as an overdevelopment or an oversupply of accommodation.

Traffic, lack of on-street and off-street car parking, pedestrian safety, and loading and unloading of vehicle

- 8.78 The potential traffic impacts have been assessed by the permit applicant's traffic consultant and Council's Engineering Services Unit who both conclude that, on considering the proposal in the context of the traffic and the surrounding street network, the proposal can be accommodated on the adjacent road network without creating any adverse traffic safety or capacity problems.
- 8.79 The number of car parking spaces provided, including having regard to the lack of on-street parking available, is satisfactorily contained on site. The proposal provides residential parking that is compliant with the statutory car parking requirements and provides a reasonable rationalisation of shared short-stay uses that is anticipated to meet the level of demand throughout the day. A suitable loading and unloading area is provided within the basement car park.
- 8.80 Pedestrian safety is managed by the existing signalised pedestrian lights at the site frontage, that crosses the access road and by providing separate pedestrian access to the building, from the front of the building for the retail and restaurant uses, and entry via Short Street for residential apartments.

Design and built form (building height, setbacks and opportunity for landscaping

- 8.81 The building height meets the mandatory maximum 40 metre requirement stipulated in the Activity Centre Zone, with a design element that is within the 8 metre height requirement and is distributed to the front of the building, where its off-site amenity impacts will be reduced.
- 8.82 The proposed setbacks generally satisfy the setback provisions of the Activity Centre Zone, with the exception of a pinch point in a central location to the southern boundary, where there is a 3.12 metre setback to the southern boundary. While this falls short of the 5 metre rear setback requirement, this reduction is acceptable in the context of its interface to a high density development within the same zone, and particularly as a minimum 9 metre separation will be provided between both of the buildings, which minimises offsite amenity impacts.
- 8.83 The level of landscaping is generally acceptable, with a landscape buffer provided along the southern boundary. Additional landscaping is provided to the communal space at Level 1 to the southern edge of the building, which will also help to soften the built form appearance. The landscaping proposed in these areas, including the planting of advanced canopy trees within the southern boundary, meets the expectation of landscaping anticipated for development within this zone.

Overshadowing and loss of daylight

8.84 The extent of shadows cast will impact the amenity of adjoining properties within the ACZ. Given the expectations for development on this site in its location in the ACZ and along a main road, it is not possible for overshadowing to adjoining properties to be avoided in its entirety. However, the design of the development is able to distribute shadows across the adjoining building to the south to minimise the level of shadows where possible. 8.85 Loss of daylight is not a matter that is contemplated within the Activity Centre Zone beyond setback provisions. Given that the tower of the development provides a minimum 9 metre separation to the adjoining building at 20-24 Hepburn Road, it is considered that the level of daylight afforded to adjoining properties will not be unreasonably reduced.

Overlooking and loss of privacy

8.86 The proposal will not result in any unreasonable overlooking or loss of privacy to adjoining properties. A minimum 9 metre separation between buildings is achieved for the most part and a condition will require plans to demonstrate that overlooking will be limited from the proposed building to the ground level secluded private open spaces at 20-24 Hepburn Road.

Noise and safety

8.87 Pedestrians will generally congregate at the front of the site when visiting the restaurant or retail spaces. It is unlikely that any unreasonable noise or safety concerns will arise given that the design encourages a strong link with the public realm.

Loss of views and outlook

8.88 Side and rear setbacks are generally designed to retain view lines. There is no specific controls within the Scheme that protects residents' rights to a view, particularly any existing views maintained over the site, which cannot be expected to be maintained in perpetuity, particular in the context of anticipated development within an ACZ.

Loss of property value

8.89 Any possible impact to the value of the objector's property is considered a subjective claim and not a ground which should be given any relevancy in the consideration of the planning permit application.

9. CONCLUSION

9.1 It is recommended that the application be supported, subject to conditions.

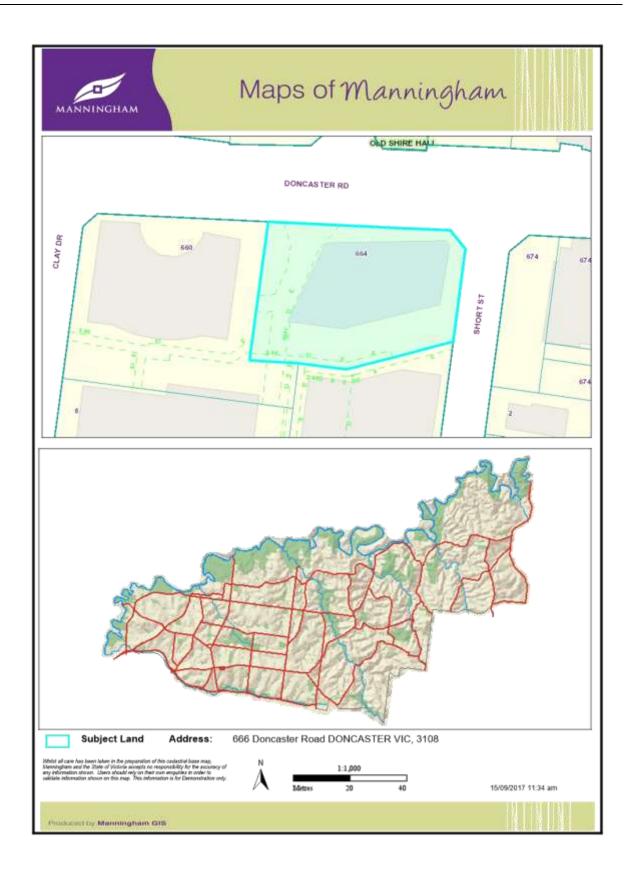
10. DECLARATION OF CONFLICT OF INTEREST

10.1 No officers involved in the preparation of this report have any direct or indirect conflict of interest in this matter.

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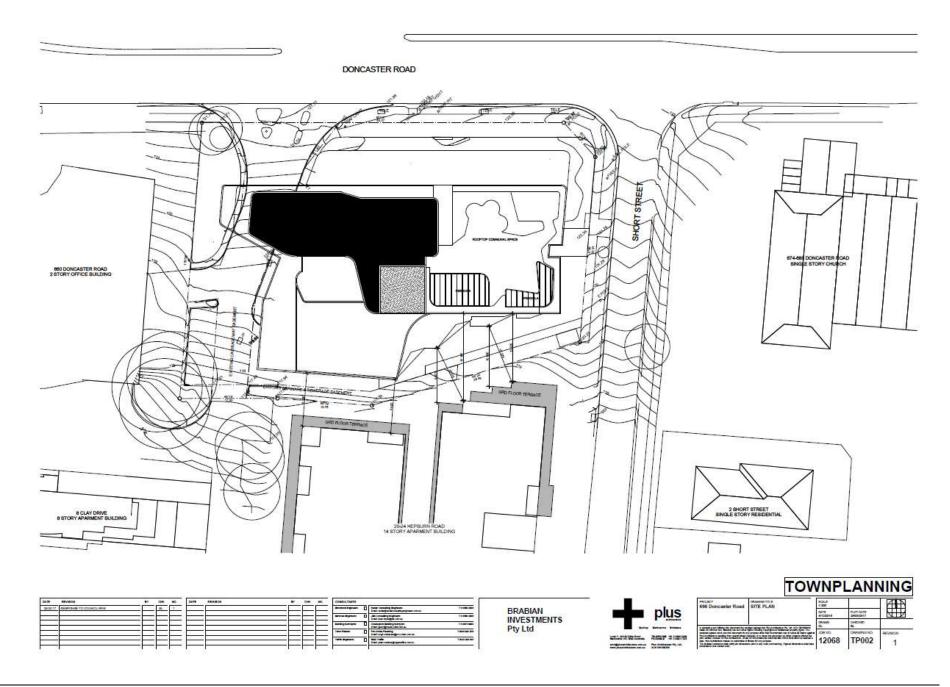
That the order of business be amended to consider Item 11.2 North East Link Proposal – Council's Response prior to consideration of Item 10.1.

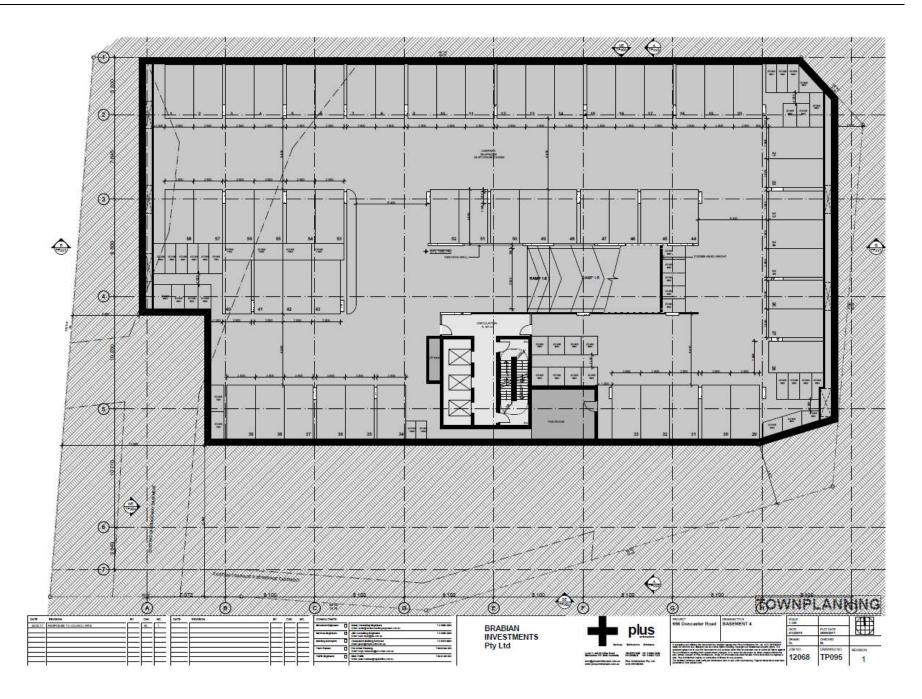
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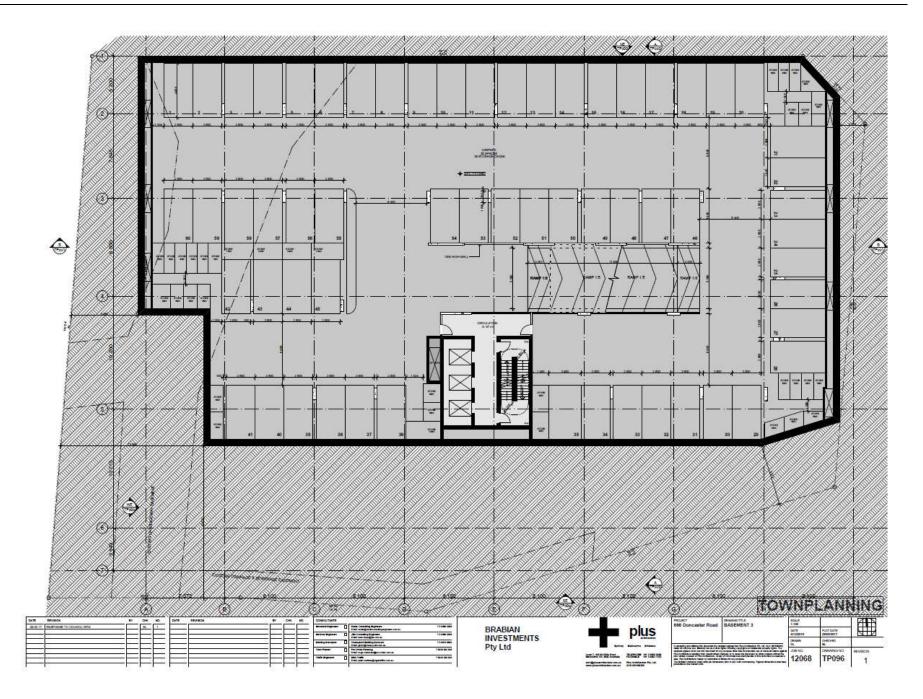


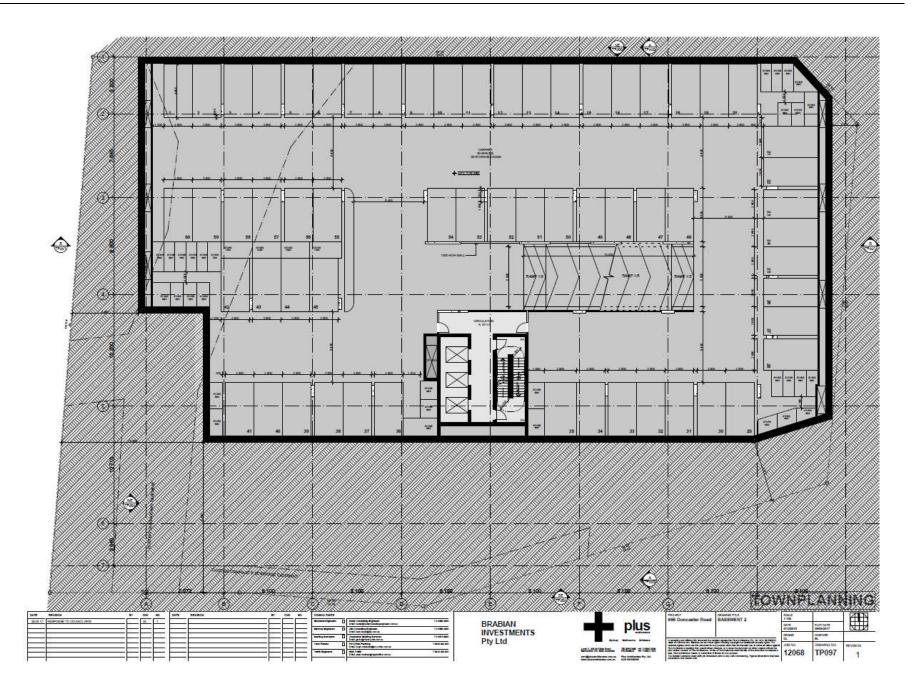
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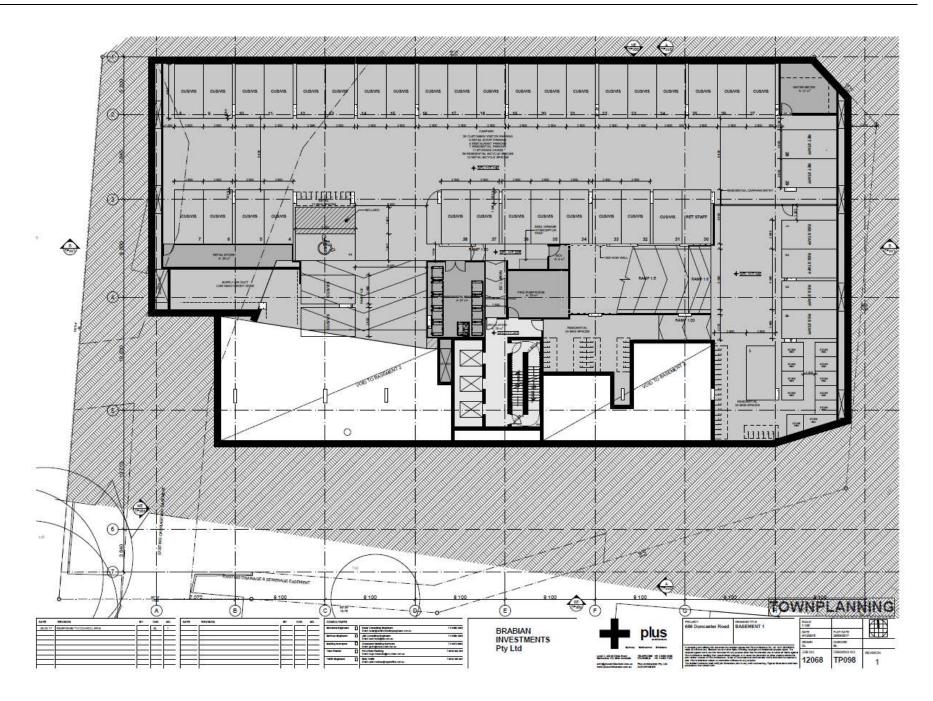
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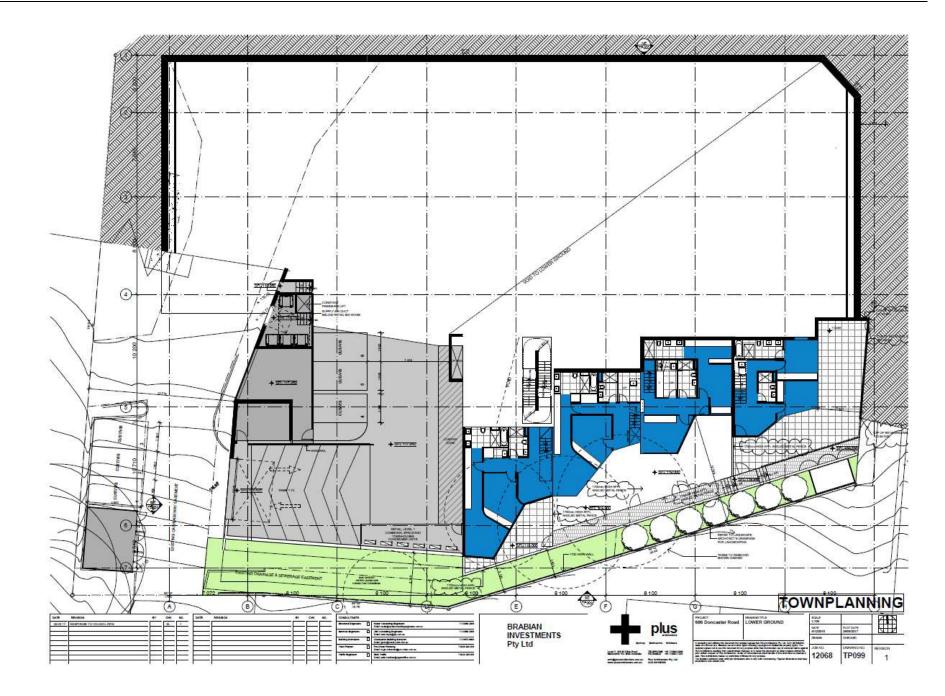


























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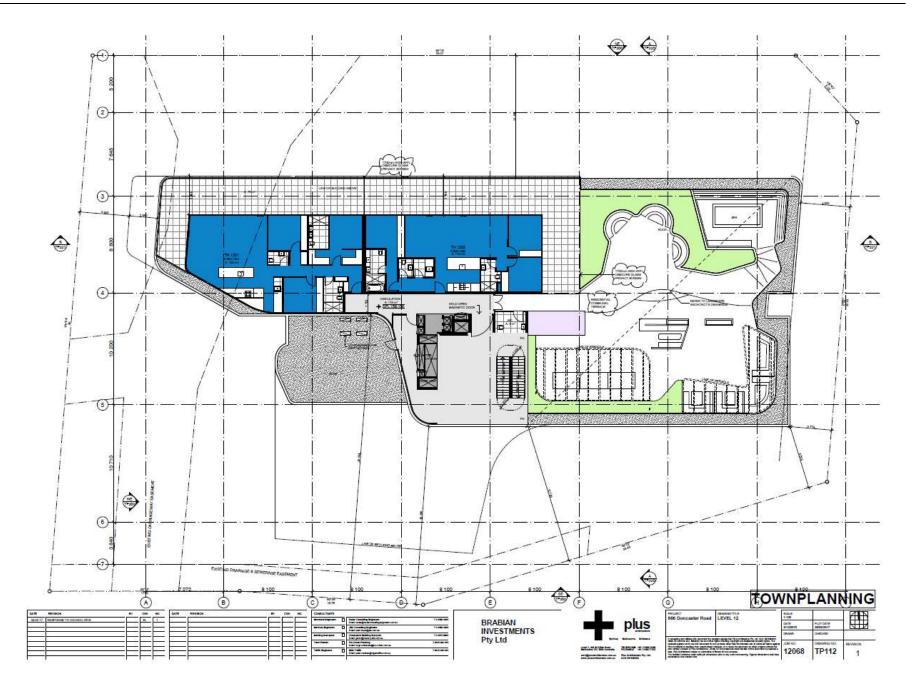


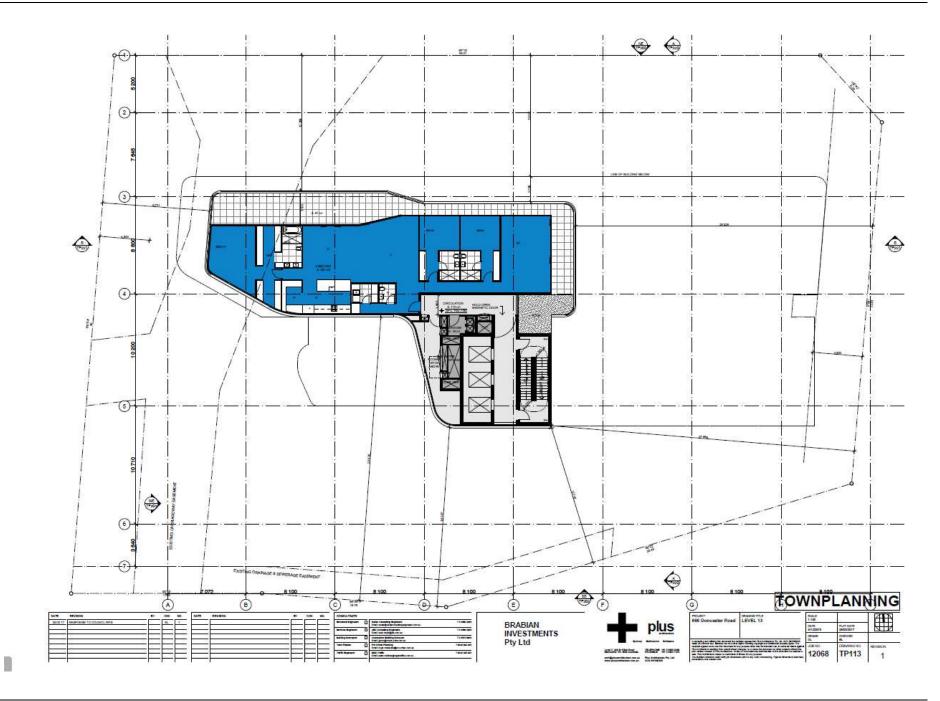


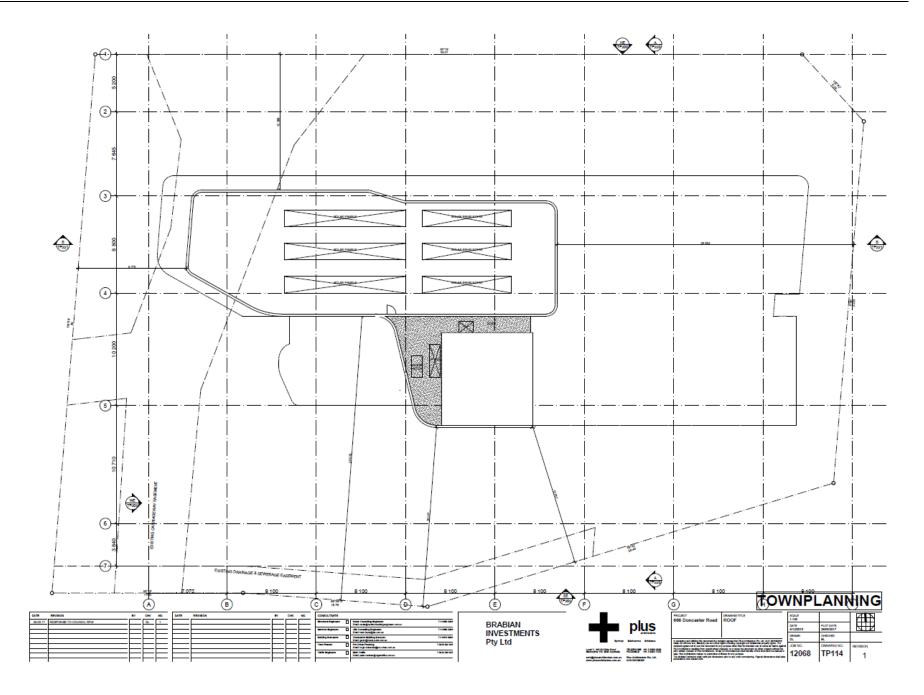




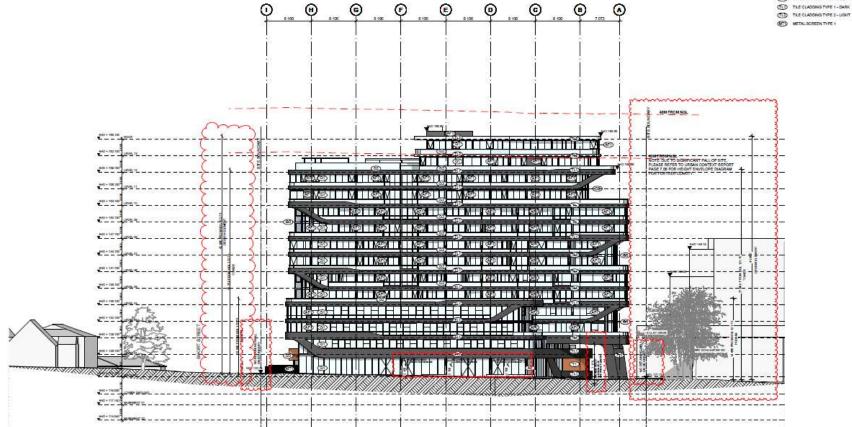






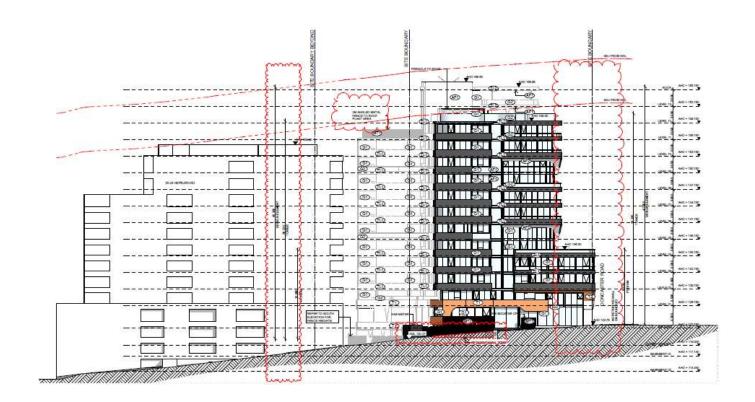


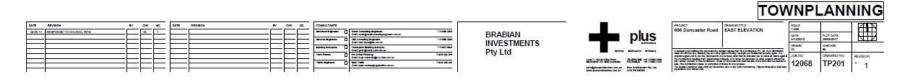


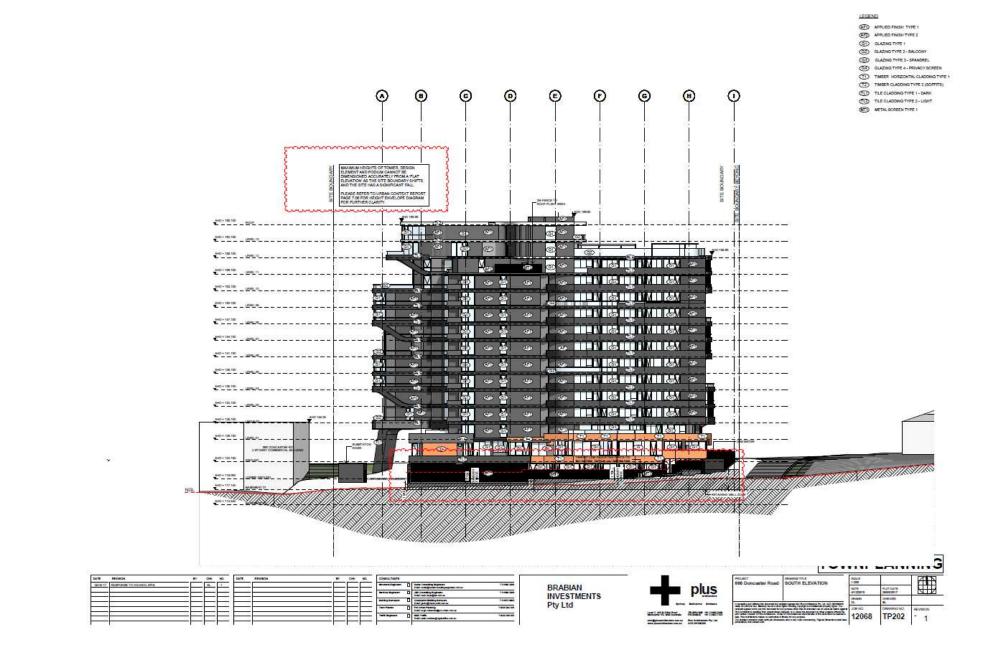




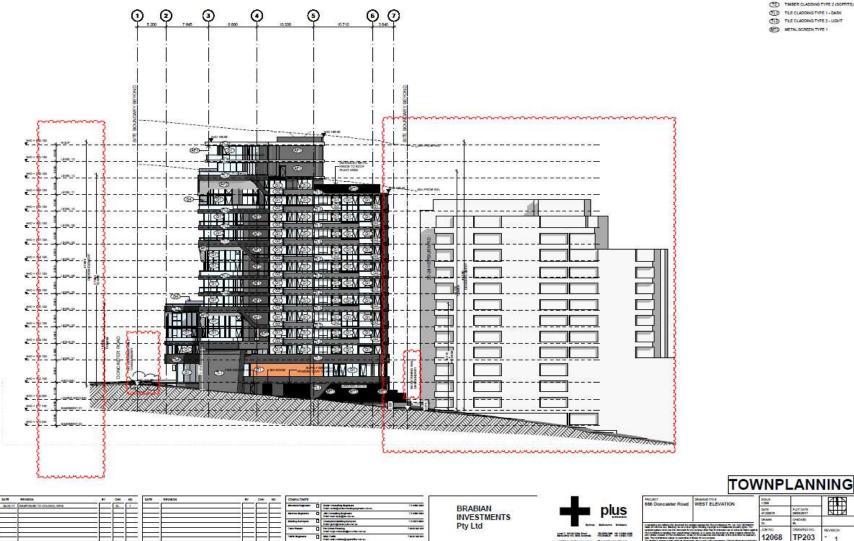
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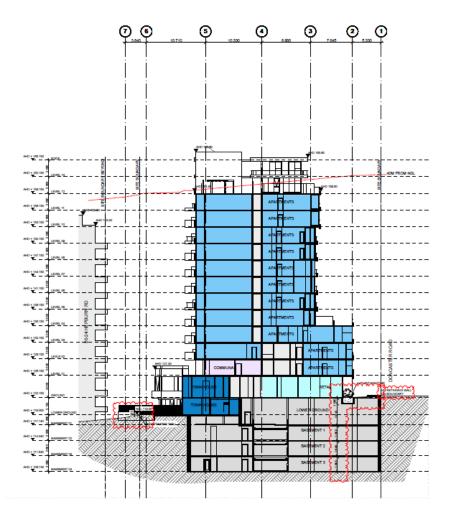
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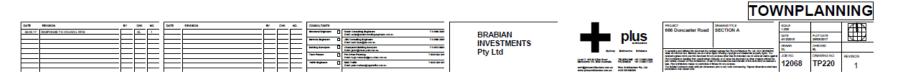
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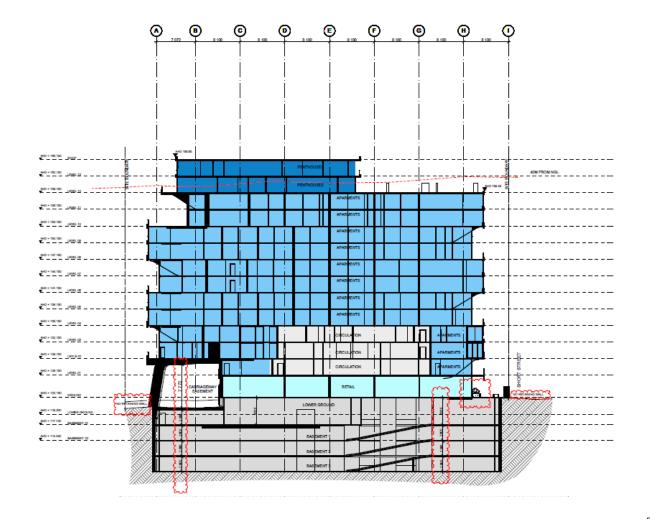
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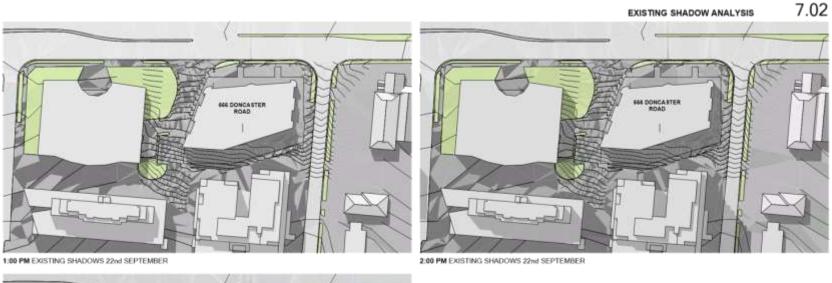


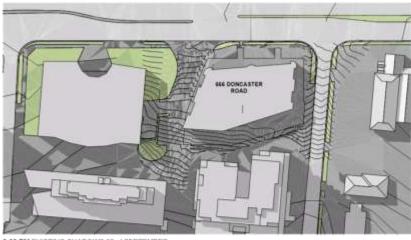
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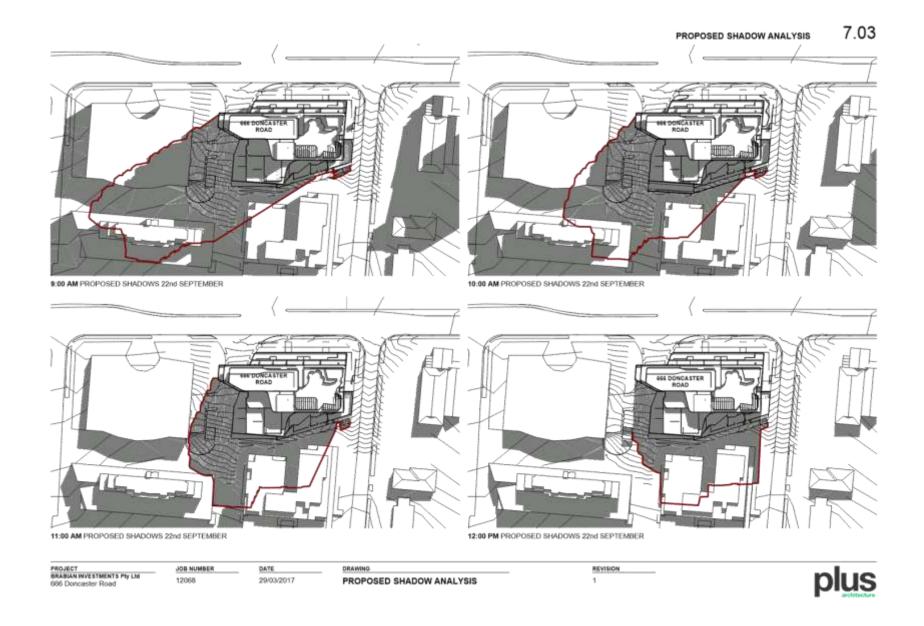
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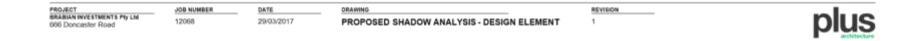






PROPOSED SHADOW ANALYSIS - DESIGN ELEMENT 7.05











Town Planning Landscape Documentation







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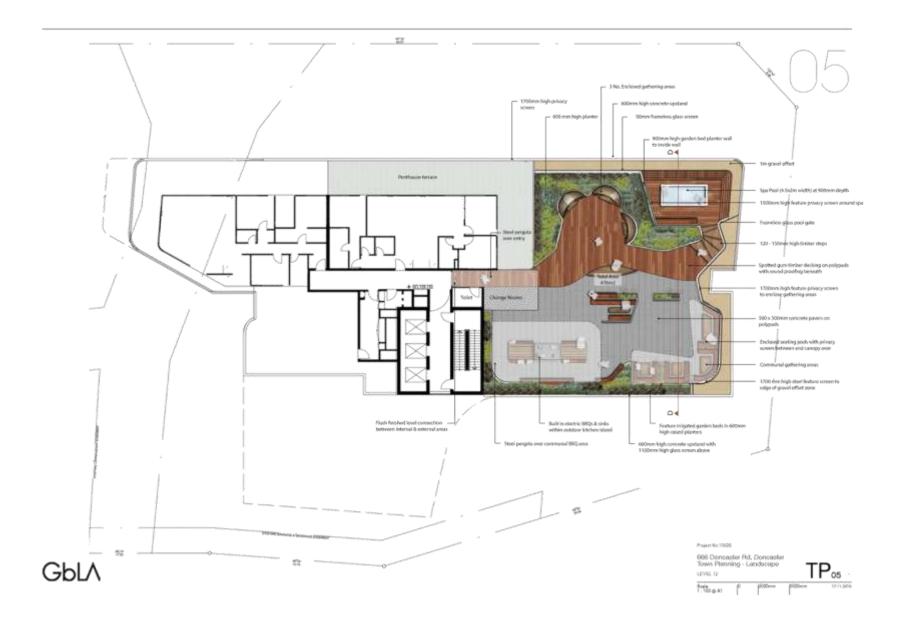
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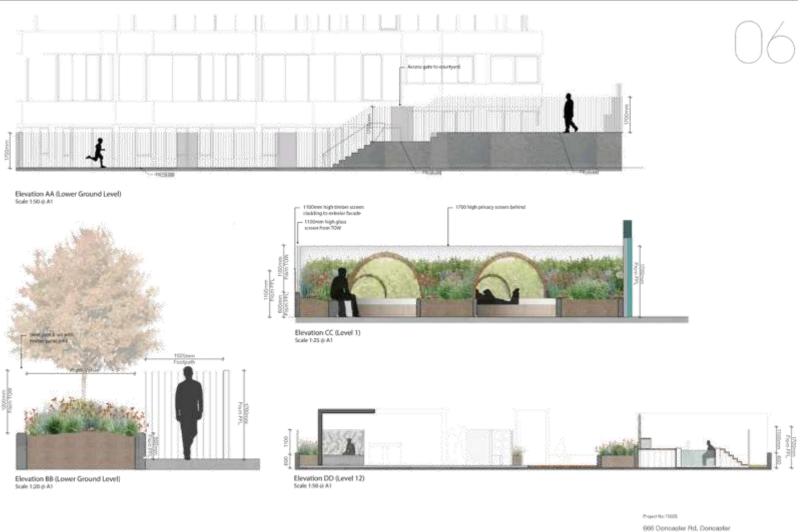
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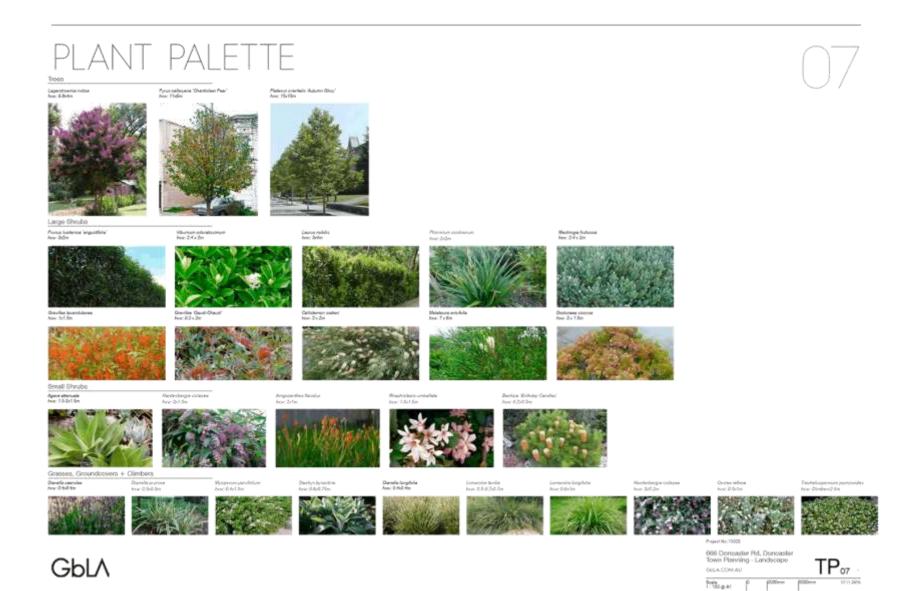












Item 9.1 Attachment 1



M. J. PARSONS & ASSOCIATES

Land Surveyors Subdivision / Planning Consultants

A Division of : Bundacree Valley Pty. Ltd. A.B.N. 20 006 499 743 A.C.N. 006 499 743 125 Garden Hill Court Kangaroo Ground, Vic., 3097 CORRESPONDENCE:

P.O. Box 932, ELTHAM, 3095 Telephone: 03 9712 0692 Facsimile : 03 9712 0728 Email: m.j.parsons@optusnet.com.au

FORM 1 Regulation 6 Subdivision (Procedures) Regulations 2011 SUBDIVISION ACT 1988 APPLICATION FOR CERTIFICATION OF PLAN

PART A PLAN No:

Surveyors Ref: 5915B

TO: Manningham City Council

I, Maxwell James Parsons of 125 Garden Hill Court, Kangaroo Ground, Vic., 3097 Tel: 03 9712 0692

apply to have the attached

- PLAN OF SUBDIVISION PLAN OF CONSOLIDATION PLAN FOR GREATION / REMOVAL / VARIATION OF EASEMENT / RESTRICTION

certified under the Subdivision Act 1988 and advice of street numbers allocated.

- 1. Situation of land: 666 Doncaster Road, Doncaster, Vic., 3108
- Name and address of the Registered Proprietor of land or owner: Brablan Pty. Ltd., 817 Old Calder Hwy., Kellor, Vic., 3036
- 3. Name and address of applicant:

M. J. PARSONS & ASSOCIATES P. O. Box 932, Eltham, Vic., 3095

Does the attached plan do anything requiring the unanimous resolution of the members of the owners corporation under Division 3 of Part 5 of the Subdivision Act 1988 or an order of the Victorian Civil and Administrative Tribunal under section 34D of the Subdivision Act 1988?

YES * [provide details]/*NO If 'YES', have the members of the affected owners corporation passed a unanimous resolution to proceed with the alterations shown on the attached plan?

*¥ES/*NO

If 'NO', has the Victorian Civil and Administrative Tribunal made an order under section 34D of the Subdivision Act 1988?

*YES/*NO

Signed: M

Name: Maxwell James Parsons

*Delete if not applicable.

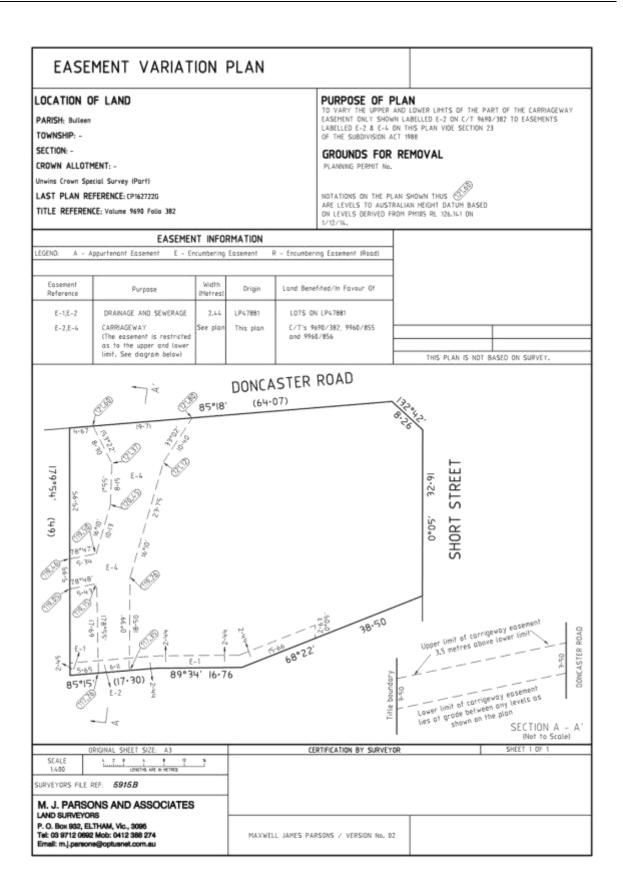
IF THE APPLICANT IS NOT THE OWNER, the owner must provide written consent under section 5(5) of the Subdivision Act 1988— (a) if the application is made in paper form by signing the following—

Page 1 of 2

I/We consent to the applicant submitting this plan to the Council for certification. Signed: Name: Director: Brabian Pty. Ltd. (b) if the application is made in a form other than paper the owner's written consent (in the form set out under paragraph (a)) must be provided in a separate document. Note 1: The applicant must sign this application whether or not the applicant is the owner (a) if the applicant is not the owner, the owner must either----(a) if the application is to be lodged in paper, co-sign this application; or application; or (b) if the application is to be lodged in a form other than paper, give the applicant the written consent required under section 5(5) of the Subdivision Act 1988 in a separate document. Note 3: Where there is more than one owner, all owners that are not the applicant must co-sign the application or give written consent as set out in Note 2. out in Note 2. Note 4: Where there is more than one owner and where an agent is not acting on behalf of all owners, then the owners who are not represented by the agent must co-sign the application or give written consent as set out in Note 2. PART B. Only applicants having "Old Law" land complete this Section (acquiring authorities are not required to complete this section— see section 35(6)(g) of the Subdivision Act 1988). I/We certify that steps have been taken to bring this land under the Transfer of Land Act 1958. Signed: n/a Name: n/a PART C. [Only acquiring authorities complete this section] This Part relates to the acquisition of land by n/a [insert name of acquiring authority] Note 5: The following should be attached to this application-(a) a copy of any planning permit applicable to the land or any application for a planning permit made concurrently with this application; or

-application; or (b) an extract of the planning scheme indicating any conditions or exemptions which may support your application; or (c) evidence of referral authorities' consent within the previous 3 months (see section 8 of the Subdivision Act 1988). Note 6: If the attached plan does anything requiring either the unanimous resolution of the members of the owners corporation under Division 3 of Part 5 of the Subdivision Act 1988 or an order of the Victorian Civil and Administrative Tribunal under section 34D of the Subdivision Act 1988, a copy of the resolution or the order must be attached to this application.

2 of 2



5. LEGISLATIVE REQUIREMENTS

5.1 PLANNING AND ENVIRONMENT ACT 1987 (THE ACT)

The *Planning and Environment Act* 1987 is the relevant legislation governing planning in Victoria. The Act identifies subordinate legislation in the form of Planning Schemes to guide future land use and development.

Section 60 of The *Planning and Environment Act*, requires the Responsible Authority to consider the following before deciding on an application:

- The relevant planning scheme;
- The objectives of planning in Victoria;
- All objections and other submissions which it has received;
- Any decision and comments of a referral authority which it has received; and
- Any significant effects which the responsible authority considers the use or development may have on the environment or which the responsible authority considers the environment may have on the use or development.

Section 61(4) of the Act makes specific reference to covenants. Under Section 61(4) of the *Planning & Environment Act 1987* the Responsible Authority must not issue a planning permit that would result in a breach of a registered restrictive covenant.

5.2 MANNINGHAM PLANNING SCHEME

Clauses of the Manningham Planning Scheme the Responsible Authority must consider:

- State Planning Policy Framework
- Local Planning Policy Framework
- Clause 37.08 Activity Centre Zone, Schedule 1
- Clause 45.06 Development Contributions Plan Overlay, Schedule 1
- Clause 45.09 Parking Overlay, Schedule 1
- Clause 52.02 Easements, Restrictions and Reserves
- Clause 52.06 Car Parking
- Clause 52.29 Land Adjacent to a Road Zone, Category 1, or a Public Acquisition Overlay for a Category 1 Road
- Clause 65 Decision Guidelines

Zone

Clause 37.08 Activity Centre Zone, Schedule 1

The purpose of the Activity Centre Zone is:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To encourage a mixture of uses and the intensive development of the activity centre:
 - As a focus for business, shopping, working, housing, leisure, transport and community facilities.
 - To support sustainable urban outcomes that maximise the use of infrastructure and public transport.
- To deliver a diversity of housing at higher densities to make optimum use of the facilities and services.
- To create through good urban design an attractive, pleasant, walkable, safe and stimulating environment.

 To facilitate use and development of land in accordance with the Development Framework for the activity centre.

A permit is required to construct a building or construct or carry out works unless the schedule to this zone specifies otherwise.

An apartment development must meet the requirements of Clause 58.

Clause 58 does not apply to an application for a planning permit lodged before the approval date of Amendment VC136.

Schedule 1, relevant to Doncaster Hill Principal Activity Centre outlines the following objectives:

Land use and development objectives to be achieved

- To advance Doncaster Hill as a sustainable and vibrant mixed-use activity centre with a strong sense of place and civic identity.
- To develop the centre as a focus for contemporary high density residential development incorporating a mix of complementary retail, social, commercial and entertainment uses.
- To ensure the activity centre enhances the social, environmental, economic and cultural elements of the municipality and region, advancing Doncaster Hill as a destination in Melbourne's East.

Land use

- To provide for a vibrant range of mixed uses that support the strategic role of the Doncaster Hill Principal Activity Centre.
- To provide for a high level of activity that attracts people, provides a focal point for the community, creates an attractive and safe urban environment, increasing opportunities for social interaction.
- To ensure mixed use development comprises flexible floor spaces for a range of uses.
- To substantially increase the provision, intensity and diversity of housing (especially
 affordable housing), that allows for all sectors of the community to live in the centre.
- To provide for high-density residential development on individual sites in conjunction with a diversity of other uses including a mix of retail, commercial, social, community and entertainment uses.
- To encourage commercial and small-scale retail uses at the lower level of buildings, with high-density style residential development on upper levels.

Built form

- To create treed boulevards framed by podiums, consistent front setbacks and a high quality landscape along Doncaster, Williamsons and Tram Roads.
- To encourage innovative, contemporary architecture that provides a distinctive sense of identity for the Doncaster Hill Principal Activity Centre.
- To emphasise the existing dramatic landform of Doncaster Hill through built form that steps down the hill.
- To ensure an appropriate transition in height both within the activity centre and to surrounding neighbourhoods.
- To encourage built form that capitalises on key views and vistas including to the middleground and distant features including Dandenongs, the Kinglake Ranges and the central Melbourne skyline.
- To encourage the provision of urban art within built form or in adjacent public areas.
- To encourage the built form at gateway locations identified in the Framework Plan to be designed to act as markers with distinguishing architectural or urban design treatments

Environmental sustainability

 To ensure Australian Best Practice environmentally sustainable design is met in relation to building energy management, water sensitive urban design, construction materials, indoor environment quality, waste management and transport.

Public realm

- To encourage active street frontages and pedestrian generating activities to be located along main roads.
- To ensure public spaces are minimally impacted by overshadowing, including preserving solar access in mid-winter to the key boulevards of Doncaster Road and Williamsons Road.
- To facilitate the enjoyment of public urban spaces/plazas, streetscapes, pedestrian and bicycle paths by ensuring that these areas are not excessively overshadowed or affected by wind tunnelling.
- To encourage artwork in suitable locations to contribute to creating a distinctive sense of identity.

Open space and landscaping

- To achieve development that provides accessible, safe, attractive and functional private and public open space opportunities, which are well connected and integrated within a permeable urban environment.
- To create a healthy and consistently landscaped environment that is dominated by native and indigenous planting.
- To maximise opportunities for landscaping in the public and private realm.
- To ensure each precinct has ready access to well designed public open space.

Transport and access

- To achieve development of circulation networks that focus on providing strong linkages within the Doncaster Hill Principal Activity Centre, and enhance public transport, pedestrian and bicycle users' amenity.
- To provide for well-defined vehicular, bicycle and pedestrian access both within and external to all precincts, with strong pedestrian crossing points to be established between the north and south sides of Doncaster Road.
- To encourage the integration of car parking areas into buildings and the unique sloping landform, including providing under-croft and basement as opposed to open-lot parking.

Under the ACZ1, the subject site is located in **Precinct 2C**. The objectives for Precinct 2C (clause 5.2-3) are as follows:

- To encourage an appropriate mix of residential and commercial uses in the precinct.
- To encourage the greatest area of high-density development to locate along the Doncaster Road ridgeline.
- To encourage the provision of cafes, restaurants and outdoor eating within the precinct.
- To retain and enhance the historic elements within the precinct and develop a link with the historic and arts enclave in Precinct 1.
- To support and connect with the pedestrian link proposed for the Doncaster Road, Williamsons and Tram Roads intersection at the western end of the precinct.
- To create a landmark gateway building at the eastern and western ends of the precinct.
- To create a public urban space/plaza with good solar access abutting the south side of Doncaster Road, with convenient access to the north side.
- To develop an area of open space as a passive green park, with urban play
 opportunities, and located in an area convenient to the precinct with well defined
 pedestrian links.

Table 5.2-3 of the Scheme sets out the following precinct requi

Maximum height (excluding basement)	Design Element Height:	Setbacks
40m	8.0m above maximum height	5m to front podium edge from front boundary 11m to front tower edge from front boundary 4.5m from side boundaries 5m from rear boundary

Overlays

Clause 45.06 Development Contributions Plan Overlay

A permit must not be granted to subdivide land, construct a building or construct or carry out works until a development contributions plan has been incorporated into this scheme.

This does not apply to the construction of a building, the construction or carrying out of works or a subdivision specifically excluded by a schedule to this overlay.

A permit granted must:

- Be consistent with the provisions of the relevant development contributions plan.
- Include any conditions required to give effect to any contributions or levies imposed, conditions or requirements set out in the relevant schedule to this overlay.

Clause 45.09 Parking Overlay

This overlay operates in conjunction with Clause 52.06. A schedule to this overlay may:

- Vary the requirements of Clause 52.06 as allowed by this overlay.
- Specify additional requirements to the requirements of Clause 52.06 as allowed by this overlay.
- Specify requirements for the provision of a financial contribution as a way of meeting the car parking requirements of Clause 52.06 or this overlay.

State Planning Policy Framework

The relevant sections of the state planning policy framework are as follows:

Clause 11.01-1 (Activity Centres) includes the objective to build up activity centres as a focus for high-quality development, activity and living for the whole community by developing a network of activity centres.

Clause 11.01-2 (Activity Centre Planning) includes the objective to encourage the concentration of major retail, residential, commercial, administrative, entertainment and cultural developments into activity centres which provide a variety of land uses and are highly accessible to the community.

Clause 15.01-1 (Urban Design) seeks to create urban environments that are safe, functional and provide good quality environments with a sense of place and cultural identity. Strategies towards achieving this are identified as follows:

- Promote good urban design to make the environment more liveable and attractive.
- Ensure new development or redevelopment contributes to community and cultural life by improving safety, diversity and choice, the quality of living and working environments, accessibility and inclusiveness and environmental sustainability.
- Require development to respond to its context in terms of urban character, cultural heritage, natural features, surrounding landscape and climate.
- Ensure transport corridors integrate land use planning, urban design and transport
 planning and are developed and managed with particular attention to urban design
 aspects.
- Encourage retention of existing vegetation or revegetation as part of subdivision and development proposals.

Clause 15.01-2 (Urban Design Principle) policy objective is:

 To achieve architectural and urban design outcomes that contribute positively to local urban character and enhance the public realm while minimising detrimental impact on neighbouring properties.

The strategy to achieve this is to apply the listed strategies to development proposals for nonresidential development or residential development not covered by Clause 54, Clause 55 or Clause 56.

Responsible Authorities are also required to have regard to the State's Design Guidelines for Higher Density Housing, which is referenced at Clause 15.01 of the Scheme.

The strategies include the application of design principles to the proposed development relating to context, public realm, safety, pedestrian spaces, energy and resource efficiency, architectural quality and landscape quality.

Clause 15.01-4 (Design for Safety) policy objective is:

 To improve community safety and encourage neighbourhood design that makes people feel safe.

The policy seeks to improve community safety and encourage neighbourhood design that makes people feel safe. The strategy identified to achieve this objective is to ensure the design of buildings, public spaces and the mix of activities contribute to safety and perceptions of safety.

Clause 15.01-5 (Cultural Identity and Neighbourhood Character) policy objective is:

To recognise and protect cultural identity, neighbourhood character and sense of place.

The clause includes several strategies to achieve this objective, including to:

- Ensure development responds and contributes to existing sense of place and cultural identity.
- Ensure development recognises distinctive urban forms and layout and their relationship to landscape and vegetation.
- Ensure development responds to its context and reinforces special characteristics of local environment and place by emphasising:
- The underlying natural landscape character.
- The heritage values and built form that reflect community identity.
- The values, needs and aspirations of the community.

Clause 15.02-1 Sustainable development: Energy and resource efficiency The policy objective is: To encourage land use and development that is consistent with the efficient use of energy and the minimisation of greenhouse gas emissions.

The clause has the following strategies:

- Ensure that buildings and subdivision design improves efficiency in energy use.
- Promote consolidation of urban development and integration of land use and transport.
- Improve efficiency in energy use through greater use of renewable energy.
- Support low energy forms of transport such as walking and cycling.

Clause 16.01-1 Residential development: Integrated housing

- The policy objective is:
 - To promote a housing market that meets community needs.

The clause has the following strategies:

- Increase the supply of housing in existing urban areas by facilitating increased housing yield in appropriate locations, including under-utilised urban land.
- Ensure that the planning system supports the appropriate quantity, quality and type of housing, including the provision of aged care facilities.
- Ensure housing developments are integrated with infrastructure and services, whether they are located in existing suburbs, growth areas or regional towns.
- Encourage housing that is both water efficient and energy efficient.

Clause 16.01-2 Residential development: Location of residential development The policy objective is:

To locate new housing in or close to activity centres and employment corridors and at
other strategic redevelopment sites that offer good access to services and transport.

The clause includes several strategies to achieve this objective, they include:

- Increase the proportion of housing in Metropolitan Melbourne to be developed within the established urban area, particularly at activity centres, employment corridors and at other strategic sites, and reduce the share of new dwellings in greenfield and dispersed development areas.
- Encourage higher density housing development on sites that are well located in relation to activity centres, employment corridors and public transport.
- Ensure an adequate supply of redevelopment opportunities within the established urban area to reduce the pressure for fringe development.
- Facilitate residential development that is cost-effective in infrastructure provision and use, energy efficient, incorporates water efficient design principles and encourages public transport use.
- Identify opportunities for increased residential densities to help consolidate urban areas.

Clause 16.01-3 Strategic redevelopment sites The policy objective is:

 To identify strategic redevelopment sites for large residential development in Metropolitan Melbourne.

Specific reference is made at clause 16.01-3 to "strategic redevelopment sites" which are described as:

- in and around Central Activity Centres;
- in or within easy walking distance of Principal or Major Activity Centres;
- in or beside Neighbourhood Activity Centres that are well served by public transport;

- on or abutting tram, train, light rail and bus routes that are part of the Principal Public Transport Network and close to employment corridors, Central Activities Districts, Principal or Major Activity Centres;
- in or near major modal public transport interchanges that are not in Principal or Major Activity Centres;
- able to provide ten or more dwellings, close to activity centres and well served by public transport.

Clause 16.01-4 Housing diversity

The policy objective is:

To provide for a range of housing types to meet increasingly diverse needs.

Clause 18.01-1 integrated Transport: Land use and transport planning

- The policy objective is:
 - To create a safe and sustainable transport system by integrating land-use and transport.

Clause 18.02-1 Movement networks: Sustainable personal transport

- The policy objective is:
 - To promote the use of sustainable personal transport.

Clause 18.02-2 Cycling

The policy objective is:

 To integrate planning for cycling with land use and development planning and encourage as alternative modes of travel.

The clause includes several strategies to achieve this objective including to: Require the provision of adequate bicycle parking and related facilities to meet demand at education, recreation, shopping and community facilities and other major attractions when issuing planning approvals.

Clause 18.02-4 Management of the road system

The policy objective is:

 To manage the road system to achieve integration, choice and balance by developing and efficient and safe network and making the most of existing infrastructure.

Clause 18.02-5 Car parking

The policy objective is:

To ensure an adequate supply of car parking that is appropriately designed and located.

The policy is relevant to the proposal because the application seeks a reduction in the standard car parking requirement of the Scheme. The objective is to ensure an adequate supply of car parking that is appropriately designed and located. It is also required to allocate or require land to be set aside for car parking subject to the existing and potential modes of access including public transport, the demand for off-street car parking, road capacity and the potential for demand management of car parking. Proposals are also encouraged to facilitate the use of public transport.

Local Planning Policy Framework (LPPF)

Municipal Strategic Statement

Clause 21.03 Key Influences

This clause identifies that future housing need and residential amenity are critical land-use issues that will challenge Manningham's future growth and sustainable development. The MSS acknowledges that there is a general trend towards smaller household size as a result of an aging population and smaller family structure which will lead to an imbalance between the housing needs of the population and the actual housing stock that is available.

This increasing pressure for re-development raises issues about how these changes affect the character and amenity of our local neighbourhoods. In meeting future housing needs, the challenge is to provide for residential re-development in appropriate locations, to reduce pressure for development in more sensitive areas, and in a manner that respects the residential character and amenity valued by existing residents.

Clause 21.09 (Activity Centre and Commercial Areas) outlines that principal, major and identified neighbourhood activity centres will be the focus of increased residential growth and development. In particular, Doncaster Hill Principal Activity Centre will:

- Challenges mainstream community planning and building design to achieve desired environmental outcomes.
- Provides more local jobs to reduce journey to work trips.
- Provides housing where residents may walk to facilities and services.
- Encourages reduced levels of car ownership and increased public transport usage.

The vision for Doncaster Hill Principal Activity Centre is outlined in Council's Doncaster Hill Strategy (2002) and includes:

- To implement the objectives of Melbourne 2030 in respect of Principal Activity Centres as a focus for retail, social, commercial, entertainment, civic and residential uses.
- To integrate ecologically sustainable development principles and techniques into every facet of the design, construction and operation/occupancy stages of new development to raise the aspirations of all users, appropriate for a city looking towards a long-term, responsible and sustainable future.
- To ensure that built form outcomes demonstrate the use of contemporary architecture combined with innovative urban design and building techniques that incorporate ecologically sustainable design principles.
- To emphasise the existing dramatic landform of Doncaster Hill through built form that steps down the hill.
- · To encourage high density, high rise residential development.
- To provide a greater diversity of dwelling types.
- To alleviate pressure for more intense residential development in established urban areas.
- To reduce travel demand and change travel behaviour.
- To promote the development of sustainable transport options.
- To meet the future infrastructure requirements of Doncaster Hill in a comprehensive, timely and equitable way.
- To develop an integrated mixed-use precinct for Doncaster Hill Activity Centre which
 provides for an appropriate mix of uses and functions on a location specific level,
 including the provision of:
 - mixed uses within buildings, particularly along boulevard locations
 - small scale retail opportunities at ground floor level in conjunction with other mixed use developments
 - additional commercial/office floor space
 - flexible floor spaces within buildings to ensure life cycle adaptability.

Within Doncaster Hill Principal Activity Centre there are various precincts delineated in accordance with their topographic orientation and aspect on Doncaster Hill, their relationship to main roads, and their present and future uses.

Clause 21.10 (Ecologically Sustainable Development) highlights Council's commitment to ESD and outlines a number of ESD principles to which regard must be given. These include building energy management, water sensitive design, external environmental amenity, waste management, quality of public and private realm and transport.

In relation to sustainability, the ACZ1 requires applicants to submit a Sustainability Management Plan that demonstrates the application of Australian best practice rating tools and design principles, use of emerging technology, and a commitment to 'beyond compliance' throughout the construction period and subsequent operation of the development.

Local Planning Policy

Clause 22.08 Safety through urban design

This policy applies to all land in Manningham. It endeavours to provide and maintain a safer physical environment for those who live in, work in or visit the City of Manningham. The policy seeks attractive, vibrant and walkable public spaces where crime, graffiti and vandalism in minimised.

Clause 22.09 Access for disabled people

This policy also applies to all land in Manningham. It seeks to ensure that people with a disability have the same level of access to buildings, services and facilities as any other person. The policy requires the needs of people with a disability to be taken into account in the design of all proposed developments.

Particular Provisions

Clause 52.02 Easements, Restrictions and Reserves

A permit is required before a person proceeds:

 Under Section 23 of the Subdivision Act 1988 to create, vary or remove an easement or restriction or vary or remove a condition in the nature of an easement in a Crown grant.

Before deciding on an application, in addition to the decision guidelines in clause 65, the responsible authority must consider the interests of affected people.

Clause 52.06 Car Parking

Pursuant to Clause 52.06-5, car parking is required to be provided at the following rate:

- 1 space for 1 and 2 bedroom dwellings.
- 2 spaces for 3 or more bedroom dwellings.
- 1 visitor space to every 10 dwellings (varied by the Parking Overlay, Schedule 1).

Clause 52.06-9 outlines various design standards for parking areas that should be achieved.

Clause 52.29 Land Adjacent to a Road Zone, Category 1, or a Public Acquisition Overlay for a Category 1 Road

The purpose of this clause is:

- To ensure appropriate access to identified roads.
- To ensure appropriate subdivision of land adjacent to identified roads.

A permit is required to create or alter access to a road in a Road Zone, Category 1. A permit is required to create or alter access to land in a Public Acquisition Overlay if the purpose of acquisition is for a Category 1 road.

Clause 52.34 Bicycle Facilities Pursuant to Clause 52.34-3, the following number of bicycle spaces are required in development of four or more storeys:

- 1 space for every 5 dwellings for residents. •
- 1 space for every 10 dwellings for visitors. ٠

General Provisions

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<u>Clause 65 Decision Guidelines</u> This clause outlines that before deciding on an application, the responsible authority must consider, as appropriate:

- The State Planning Policy Framework and the Local Planning Policy Framework, ٠ including the Municipal Strategic Statement and local planning policies.
 - The purpose of the zone, overlay or other provision.
- The orderly planning of the area. .
- The effect on the amenity of the area. ٠

10 PLANNING & ENVIRONMENT

10.1 Amendment C109 Manningham Planning Scheme - Land Subject to Inundation Overlay and Special Building Overlay - Consideration of Submissions and Request for a Panel Hearing

File Number:	IN17/488			
Responsible Director:	Dire	ector Planning and Environment		
Attachments:	1	Flood Mapping Catchments, 2015 😃 🛣		
	2	Development of the Special Building Overlay Technical Report, Cardno September 2015 🕂 🖬		
	3	Planning Scheme Amendment C109 Amendment Documentation 🕂 🖬		
	4	Consultation Report and Summary of Issues in Submissions <u>J</u>		
	5	Officer Response to Issues Raised in Submissions 投 🖼		
	6	Template and Criteria 投 🛣		
	7	Peer Review, Water Technology July 2016 🕂 🔞		
	8	Summary of Submissions, Officer response and Recommendation J. 🔞		
	9	Table of Recommended Changes to Submitter Properties		
	10	Value Impact Assessment, Charter Keck Cramer, November 2016 <u>J</u> 🔞		
	11	Table of Recommended Changes to Non-submitter Properties 😃 🔞		

EXECUTIVE SUMMARY

The purpose of this report is to consider all submissions received to Amendment C109 to the Manningham Planning Scheme.

Amendment C109 to the Manningham Planning Scheme as exhibited, proposes to introduce and/or revise the application of the Land Subject to Inundation Overlay (LSIO) and the Special Building Overlays (SBO) in relation to 10,300 properties in Manningham. These overlays are proposed to apply to land that has been identified by Melbourne Water and Council as being liable to inundation from an open watercourse or subject to overland flows exceeding the capacity of the underground drainage system, during a severe storm event (1 in 100 year Average Recurrence Interval (ARI)). The overlay relating to the open watercourses is the LSIO. The overlays relating to the drainage system (Melbourne Water main drains and Council local drains) are the SBOs. The proposed overlays are well aligned with the Australian Rainfall and Runoff flood hazard categories, with LSIO presenting the highest and SBO3 presenting the lowest flood risk.

The key strategic drivers for Council to undertake the flood mapping of its local drainage catchments and to introduce or revise Planning Scheme overlays include State Government and Melbourne Water strategies, recommendations of the State Auditor General in relation to flood risk, Council's own Drainage and Residential Strategies and the most recent Planning Scheme review.

The Amendment was exhibited for six weeks from 12 November 2015 to 24 December 2015. Submissions have continued to be received up until the time of preparation of this report and a total of 558 have been received (including 6 now withdrawn).

In relation to its consideration of submissions to Amendment C109, at its meeting of 21 February 2017, Council resolved, "that this matter be deferred for three months to enable further consultation with councillors." In response to that resolution, Council officers wrote to all 523 submitters (the number of submitters at the time) offering the opportunity to meet with officers to further discuss the officers' response to their individual submissions. The meetings resulted in a number of follow up actions which have resulted in additional changes.

Fourteen key issues have been identified in relation to the submissions received and a response has been prepared for each submission. 1,094 changes affecting 1,231 properties are recommended to the exhibited amendment in relation to such matters as changes to the flood shape, changes to the overlay designation; and removal of the exhibited overlay. 656 of these changes are associated with minor incursions in respect of properties proactively identified but where no submissions have been received. A minor text change to the controls is also recommended, as well as a further change to remove the UFZ from properties in Carbine Street, Donvale.

As changes to the Amendment as requested in submissions are not proposed in relation to <u>all</u> submissions, Council can either abandon the Amendment or refer the submissions to an Independent Planning Panel for review. This report recommends that Council requests the Minister for Planning to appoint an Independent Planning Panel to review all submissions received.

It is also noted that pursuant to section 30(1)(a) of the Planning and Environment Act 1987 (the Act), an amendment lapses or part of an amendment lapses at the end of two years after the date of publication of the notice in the Government gazette under section 19(3). As the notice of exhibition was published in the Government gazette on 12 November 2015, it will be necessary to request the Minister for Planning for an extension of time in which to adopt the amendment.

Cr Haynes declared that she owns a property affected by Amendment C109 and therefore has an interest in the matter. The interest is not a conflict of interest as the interest is one in common with a large class of persons and as such is exempted by S77A(5) of the Local Government Act 1989.

1. COUNCIL RESOLUTION

MOVED:	CR MIKE ZAFIROPOULOS
SECONDED:	CR GEOFF GOUGH

That Council:

- A. Receives and considers all written submissions made to Amendment C109 to the Manningham Planning Scheme.
- B. Pursuant to section 23 of the Planning and Environment Act 1987, Council abandon those parts of Amendment C109 shown exhibited as SBO2 and SBO3.

C.	Panel to review relating to LSIO	he Minister for Planning appoint an Independen v only those submissions received to Amendr and SBO1 (Melbourne Water controls), in accord anning and Environment Act 1987.	nent C109				
D.	late submissio	those submissions relating to LSIO and SBO1, including any ssions received, to the Independent Planning Panel to be y the Minister for Planning. The Minister for Planning for an extension of time for a further which to consider and adopt the amendment.					
E.							
F.	Writes to all sub	omitters, informing them of Council's decision.					
SUSP	END STANDING	ORDERS					
MOVE SECO	D: NDED:	CR PAUL MCLEISH CR SOPHY GALBALLY					
That s	tanding orders be	suspended to allow speakers to be taken out of orde	er. CARRIED				
		THE SUBSTANTIVE MOTION WAS PUT AND	CARRIED				
SUBS		N					
MOVE SECO	D: NDED:	CR PAUL MCLEISH CR MIKE ZAFIROPOULOS					
That C	Council:						
b.	through the C10 drainage mainter proceeds with t the next 4 years that investment completes the u	dge of drainage network improvements needed g 99 amendment process to inform the prioritisatio enance and upgrades in the next 4 years; he investment of at least \$10.8M in drainage wor in our current budget, and prepares a plan to in for the next budget; and upgrade to the Asset Management system to bett ng and management of drainage assets.	n of ks over crease				
			CARRIED				
RESU	ME STANDING O	RDERS	CARRIED				
MOVE		RDERS CR PAUL MCLEISH CR GEOFF GOUGH	CARRIED				

1. BACKGROUND

- 1.1 Over the past few years Council has undertaken flood modelling in several of its drainage catchments which has culminated in the preparation of Amendment C109 to the Manningham Planning Scheme to introduce or make changes to those overlays which relate to managing risk of flooding in the municipality.
- 1.2 The key strategic drivers for the modelling and Planning Scheme amendment are described more fully in Section 3 of this report and include State Government and Melbourne Water strategies, recommendations of the State Auditor General in relation to flood risk, Council's own Drainage and Residential Strategies and the most recent Planning Scheme review.

Flood modelling

- 1.3 In 2011, Council engaged consultants to undertake flood modelling for local catchments for the municipality. The purposes of that work included to:
 - review the extent of the SBO (and by implication, in part the LSIO); and
 - assess the flooding impacts of climate change.
- 1.4 Flood mapping was completed for the following catchments (Refer map at **Attachment 1**):
 - Bulleen North
 - Ruffey Creek
 - Koonung Creek
 - Mullum Mullum Creek
 - Andersons Creek
- 1.5 Three smaller urban catchments abutting the Bulleen North catchment and the Jumping Creek and Brushy Creek catchments are yet to be mapped.
- 1.6 The flood mapping was undertaken in accordance with Melbourne Water's specifications and Melbourne Water was either engaged in the flood model calibration or, in the case of Bulleen North and Ruffey Creek, managed the consultancy contracts, to ensure robust and consistent results.
- 1.7 The mapped flood extents were filtered in accordance with best industry practice to generally delete flooding which is less than 50mm in depth and where the flood velocities are low. The data filtering process removed areas of the flood extent considered as low risk as set out in the '*Development of the Special Building Overlay Technical Report for Manningham City Council (Cardno) September 2015* report, included at **Attachment 2**. This filtering process included modification of the extent of areas displaying flooding which are isolated from the flood extent and remote from underground drainage assets, which were less than 500 square metres in area.
- 1.8 A total of 10,300 properties (approximately) are affected by the modelling of the flood extent for the 1 in 100 year ARI flood event, and in turn by the proposed amendment to the Manningham Planning Scheme.
- 1.9 The flood mapping data generated in the study was used by Council and Melbourne Water to develop and agree on a revised flood extent to be covered by the LSIO and SBO. The mapping also has implications for the Melbourne Water main drains, hence the need for Melbourne Water to also amend its existing LSIO and SBO.

Planning Scheme Amendment C109

1.10 At the Council meeting on 29 September 2015 it was resolved:

"That Council:

- A. Resolves to prepare Amendment C109 to the Manningham Planning Scheme to implement the review of the Special Building Overlay and Land Subject to Inundation Overlay, thereby better informing the community of flood risk and protecting proposed development from inundation, by:
 - 1. Updating the planning scheme maps to reflect the revised floodshape generally in accordance with the Maps at Attachment 4.
 - 2. Introducing new schedules to the Special Building Overlay (Clause 44.05) generally in accordance with Attachment 3.
 - 3. Amending the MSS at Clause 21.12 and 21.16 to include reference to the 'Flood Management Plan for Manningham Council and Melbourne Water June 2011' and the 'Development of the Special Building Overlay Technical Report for Manningham City Council (Cardno) September 2015'.
- B. Requests the Minister for Planning's authorisation under section 8A of the Planning and Environment Act 1987 to prepare and exhibit Amendment C109 to the Manningham Planning Scheme which proposes to revise the existing Special Building Overlay (SBO) and Land Subject to Inundation Overlay (LSIO), include additional properties in the SBO and LSIO and amend the MSS, generally in accordance with Attachment 3.
- C. Advises the Minister for Planning that:
 - Pursuant to Section 19 (1A) of the Planning and Environment Act, 1987, Council considers it impractical to notify all owners and occupiers individually of Amendment C109 and will limit direct notification to property owners.
 - Council will give notice of the amendment in accordance with Section 19(1B) of the Act (including giving notice in a paper circulating within the affected areas inviting submissions to be made) and will also undertake a range of non-statutory consultation measures to ensure awareness of the proposed amendment amongst occupiers of affected properties.
- D. Subject to authorisation being granted by the Minister for Planning, resolves to place Amendment C109 on public exhibition for a period of six weeks."
- 1.11 The request for authorisation to prepare the amendment was submitted to the Department of Environment, Land, Water and Planning (DELWP) on 1 October 2015. The Amendment was deemed to be authorised on 15 October 2015.
- 1.12 The exhibited amendment documentation is included as **Attachment 3**. The exhibited Planning Scheme maps are available for viewing in the Council Chamber.
- 1.13 In general, the following changes to the Manningham Planning Scheme are proposed by Amendment C109 to implement the outcomes of the flood modelling work:

- Modification of the existing LSIO and SBO boundaries and introduction of new LSIO and SBO areas on planning scheme maps to reflect the revised and new flood shapes agreed by Melbourne Water and Council.
- Changes to the Municipal Strategic Statement (MSS) at Clause 21.12 Infrastructure and 21.16 Key References to include reference to:
 - The 'Flood Management Plan for Manningham Council and Melbourne Water June 2011' which provides the strategic framework for establishing the appropriate Planning Scheme overlays in respect of the results of the flood mapping project and;
 - The 'Development of the Special Building Overlay Technical Report for Manningham City Council (Cardno) September 2015', which provides an overview of the methodology used in the flood mapping of the five local catchments.

Land Subject to Inundation Overlay and Special Building Overlays

- 1.14 Inclusion of Planning Scheme overlays relating to flooding, ensure that drainage issues are addressed at the start of the development process and that buildings and works are properly designed.
- 1.15 One of the key aims of the overlays is to minimise the effects of overland flows and mainstream flooding on new buildings. It is also to ensure that new development does not adversely redirect the flow paths into neighbouring properties.
- 1.16 These overlays are based upon the extent of flooding that would result from a 1 in 100 year ARI flood event. The 1 in 100 year flood relates to a storm event of such intensity that, based upon historical rainfall data, it has a probability of occurring once in every one hundred years or a 1% chance of occurring in any given year.
- 1.17 The Land Subject to Inundation Overlay (LSIO) applies to land affected by mainstream flooding associated with waterways and open drainage systems. Such areas are commonly known as floodplains. Mainstream flooding is caused by heavy rainfall which produces surface run-off which flows into streams and rivers. When there is a large amount of run-off, water overflows the river banks on to adjacent low-lying land causing flooding. Under this overlay, a planning permit is generally required for buildings and works.
- 1.18 The <u>Special Building Overlay (SBO)</u> identifies areas prone to overland flooding and overland flow from the urban drainage system. The purpose of this overlay is to set appropriate conditions and floor levels to address any flood risk to developments; to ensure that new development is designed to maintain the free passage and temporary storage of floodwaters; to minimise flood damage and not cause any significant rise in flood level or flow velocity that may adversely affect existing properties. Under this overlay a planning permit may be required for buildings and works if permit exemption criteria are not met.
- 1.19 The effect of the LSIO and SBO is not to prevent new development. Implementation of the LSIO and SBO can however, influence the siting of buildings and set appropriate conditions, such as raised floor levels, in order to address any flood risk to new development.

- 1.20 The LSIO was first introduced into the Manningham Planning Scheme by Melbourne Water in June 2000 when the 'new format planning schemes' were first introduced.
- 1.21 The SBO was first introduced into the Manningham Planning Scheme in 2003 (Amendment C13) to cater for main drains (Melbourne Water). Melbourne Water is the responsible drainage authority for relevant development applications within the existing SBO.
- 1.22 The LSIO in the Victoria Planning Provisions (VPP) includes fewer exemptions than the SBO, and they relate to works such as flood mitigation works and the laying of underground sewerage, water and gas mains.
- 1.23 The SBO in the VPPs includes standard exemptions for planning permits for common urban developments, such as minor extensions to dwellings, replacement fencing, carports, pergolas and in-ground swimming pools, unless a 'schedule' applies which proposes to refine these exemptions.
- 1.24 Apart from the standard exemptions for buildings and works in the overlays, the schedules to the overlays can be used to exempt certain buildings and works from the need for a permit. Exemptions in schedules are used to respond to local conditions, taking into account specific types of development and local needs, and can be used to streamline the planning permit application process.
- 1.25 The existing Melbourne Water LSIO and SBO provisions in the Manningham Planning Scheme do not include a local schedule specifying additional permit exemptions.
- 1.26 Amendment C109 proposes to introduce three local schedules to the SBO which distinguish between areas subject to inundation in relation to the 'main' drainage system (Melbourne Water drains) and the 'local' drainage system (Council drains).
- 1.27 The Schedules will be referred to as SBO1, SBO2 and SBO3 respectively. The SBO maps define the area/properties to which each schedule applies. The Schedules define permit exemptions and nominate the authority responsible for drainage. **Table 1** explains the delineation between the three SBO schedules and the LSIO.
- 1.28 SBO1, SBO2 and SBO3 are proposed to replace and expand the existing Special Building Overlay (SBO) in the Manningham Planning Scheme which currently relates to overland flooding from Melbourne Water's main drains only.
- 1.29 More specifically, Amendment C109 as exhibited proposes to:
 - Remove the existing LSIO and SBO from approximately 230 properties (2% of total properties affected) which are no longer expected to be at risk of flooding;
 - Make minor changes to the extent of the LSIO and SBO (and change to SBO1, 2 or 3) in relation to approximately 900 properties (9%) which remain subject to inundation.
 - Apply the LSIO and SBO1 to an additional 380 additional properties (4%) which have a potential risk of being flooded as a result of Melbourne Water assets (natural watercourses and main drains);

- Apply the SBO2 to approximately 3,860 properties (37%) which are potentially at risk of being flooded as a result of flows in excess of the capacity of City of Manningham assets (local drains) in a major storm event; and
- Apply the SBO3 to approximately 4,930 properties (48%) which are at risk of being affected by small and shallow areas of flooding (up to 100mm in depth) as a result of flows in excess of the capacity of City of Manningham assets (local drains) in a major storm event.

Drainage Network	Planning Permit Exemptions	Responsible / Referral Authority	
LSIO Approx. 500 properties (5% of all properties affected)			
Land adjacent to a creek or river that is known to be subject to nundation i.e. a natural watercourse.	The State-wide LSIO control includes a number of exemptions to allow for minor buildings and works by Council and other authorities (e.g. the laying of underground sewerage, water and gas mains) that can occur without the need for a planning permit. No schedule to the LSIO is proposed as part of this amendment.	Melbourne Water would be the Determining Referral Authority. All applications for development would be referred to Melbourne Water for assessment and for appropriate conditions and floor levels.	
SBO1 (7% of properties	affected by the SBO)	-	
Melbourne Water main drains.	The SBO triggers the need for a planning permit for buildings and works in most instances. The State-wide SBO provisions include a number of exemptions to allow for minor buildings and works that can occur without the need for a planning permit. No additional exemptions over those specified in the State-wide provisions are proposed to be included in the schedule.	Melbourne Water would be the Determining Referral Authority. All applications for development would be referred to Melbourne Water to determine if a planning permit should be issued and provide the appropriate conditions and floor levels.	
SBO2 (41% of propertie	es affected by the SBO)		
Manningham City Council local drains (maintained by Council). The schedule would apply from the upstream most point where flow depths exceed 100mm in depth, to the junction between the Council and Melbourne Water drainage system.	The SBO triggers the need for a planning permit for buildings and works in most instances. The State-wide SBO provisions include a number of exemptions to allow for minor buildings and works that can occur without the need for a planning permit. No additional exemptions over those specified in the State-wide provisions are proposed to be included in the schedule.	Council would be the Responsible Authority Council would assess all applications for development and provide appropriate permit conditions and floor levels.	

Table 1: Amendment C109 - LSIO and SBO Schedules 1, 2 and 3

Drainage Network	Planning Permit Exemptions	Responsible / Referral Authority
Manningham City Council local drains (maintained by Council). The schedule would apply in areas upstream of the SBO2 where the flow depth is less than 100mm.	Council is the Responsible Authority. Council assesses all applications for development and provides appropriate permit conditions and floor levels.	A more extensive range of exemptions would be included in SBO3 because of the reduce depth of flooding, for example, a permit will not be required where proposed new dwelling floor levels are at least 400mm above the natural surface level.

1.30 As outlined in **Table 1**, it is anticipated that permit exemptions would apply to 59% of the properties where the SBO 1, 2 or 3 is proposed to apply if certain conditions are met, such as a minimum building floor level height above the ground.

Exhibition of the Amendment

- 1.31 Amendment C109 was placed on public exhibition for six weeks between 12 November and 24 December 2015 using the following combination of statutory and non-statutory notification:
 - Direct notification (letters) to affected property owners (approximately 10,000), prescribed authorities and key stakeholder groups/agencies;
 - Public notices in the Manningham Leader on 9 November 2015 and the Government Gazette on 12 November 2015 and again on the 26 November 2015;
 - The Amendment documents made available for viewing and download (website/offices and libraries and DELWP website);
 - An 'Interactive Map' which was searchable via property address was available on Council's web site showing the application of the proposed amendment;
 - Article in Manningham Matters November 2015 edition;
 - Fact Sheet and FAQs pamphlet made available on Council's website, information was further provided in response to the need for additional clarification;
 - Six drop in Information sessions (appointment based) for each of the affected catchments, where specific individual property information was made available;
 - Melbourne Water webpage (in addition to MCC web page) included information; and
 - Telephone enquiry numbers (at both Melbourne Water and MCC) were advertised

1.32 The exhibition of the Amendment resulted in the following responses:

Webpage hits	4,220
Interactive map hits	2,788
Phone calls	1,000
Counter enquiries	120
Attendees at Info sessions	150
Written submissions	558 (incl. 6 since withdrawn)

- 1.33 At the request of Council, a follow up letter was sent to all submitters on 12 May 2016, explaining the process for the review of submissions and the type of information that would be considered in the review. That correspondence also offered the opportunity for addendums to original submissions to be submitted.
- 1.34 In addition, at the request of Council, letters were also sent on 23 May 2016, to those properties affected by an identified communication ambiguity (58 private properties and 50 government properties), clarifying that the existing LSIO along the Yarra River would continue to apply in addition to the proposed controls. Those property owners were given an opportunity to lodge a submission or to submit addenda to existing submissions over a further period of six weeks.
- 1.35 The web based communication tool was also amended to include the existing LSIO in the 'Proposed Overlay' view.
- 1.36 For the wider community, a separate dedicated advertisement was included in the Manningham Leader in the week beginning 16 May 2016 advising that Council officers were still considering submissions in relation to Amendment C109 and that further updates were being provided on the Your Say Manningham webpage.

Further Consultation

- 1.37 In relation to its consideration of submissions to Amendment C109, at its meeting of 21 February 2017, Council resolved "*that this matter be deferred for three months to enable further consultation with councillors*".
- 1.38 In response to that resolution:
 - Council officers wrote to all 523 submitters on 1 March February 2017, (the number of submitters at that time) advising them of the Council resolution and inviting them to make an appointment for a one on one information session to discuss the officers' response to their submissions;
 - This letter also anticipated that a submitters meeting and Council meeting would be held towards the end of May 2017; and
 - Your Say Manningham consultation portal and the FAQS (frequently asked questions) were updated.

- 1.39 Officers met with approximately 220 submitters at the one on one meetings, which resulted in a number of follow up actions including additional requests for site inspections; investigating new issues and information raised through the meetings in addition to the original submissions; further review of the flood shape based on topographical information submitted by several submitters; and responding to requests for further information.
- 1.40 Approximately 70 follow-up site inspections were requested at the one-on-one meetings. A desktop review was undertaken for each of these properties and where considered necessary, a site inspection was then undertaken by Cardno (or Council officers), who was engaged to review most of these properties. Whilst a site inspection was generally undertaken where requested, in some instances a site inspection was not considered necessary where sufficient information was available as part of the desktop review to assess the submitter's concerns and the outcome of the desktop review was the removal of the overlay from the property.
- 1.41 Additional information requested by submitters has generally been provided where this information has been readily available e.g. hard copies of the Value Impact Assessment by Charter Keck Cramer, although in some instances this has not been possible. Information which would only be available if the submitter had access to the relevant software or cases where the information would be costly to provide was not provided.
- 1.42 The one on one sessions also resulted in a significant amount of follow up actions requiring further review by the Engineering and Technical Services Unit and/or Cardno e.g. review of the flood shape on properties, location of existing drainage assets and whether these have been included in the model. This information has generally been addressed in the technical review report which has been provided to submitters.
- 1.43 Due to the significant amount of additional work required to be undertaken resulting from the individual sessions, Council at its meeting on 30 May 2017, resolved to further defer consideration of submissions until September 2017. Submitters were advised in writing that the earliest possible date for a Council meeting to consider submissions and request an independent panel was likely to be September 2017.
- 1.44 A further thirty five (35) submissions have been received since the 21 February Council meeting, requiring further technical review. Reviews have been completed for 34 of the new submissions. Due to timing constraints, technical reviews have been unable to be completed for two of the late submissions, which were only received in early September.
- 1.45 It is further noted that thirty (30) of the late submitters were originally advised that upon the technical reviews being completed, that they would be afforded the same opportunity as the previous submitters, to attend an individual information session with officers to discuss the officer's proposed recommendation. As the technical reviews for these submissions have only recently been completed, it was not possible to meet with these submitters prior to the Council meeting. It is proposed that technical reports be completed for the remaining two late submissions and that an invitation be extended to all of these 35 submitters to attend an individual meeting with officers prior to any Panel Hearing.

- 1.46 On 23 August 2017, Council officers wrote to all submitters (excluding one late submitter) extending an invitation for them to attend a submitters' meeting, where they would be given the opportunity to raise concerns with the officer recommendations to Councillors on these matters. Given the large number of submissions received, it was decided to conduct the meeting over three nights to facilitate the large number of submitters that may attend these meetings. The meetings are by invitation only as follows (based on the exhibited overlay controls):
 - Thursday 14 September Meeting 1 being properties affected by the Land Subject to Inundation Overlay (LSIO) and Special Building Overlay Schedule 1 (SBO1) (land affected by Melbourne Water's controls). (13% of submissions).
 - Monday 18 September Meeting 2 being properties affected by the Special Building Overlay Schedule 2 (SBO2). (38% of submissions).
 - Thursday 21 September Meeting 3 being properties affected by the Special Building Overlay Schedule 3 (SBO3). (44% of submissions).
 It should be noted that 5% of submissions have dual controls.
- 1.47 A second letter was subsequently sent out to submitters, which included an updated (where necessary) technical review report and Council officer recommendation in relation to their individual submission(s). Where possible the second letter was sent via email. Due to timing constraints the letters sent to those proposed to be affected by LSIO and SBO1 were not emailed but were instead sent by Express Post.

2. DISCUSSION / ISSUE

Submissions Received

- 2.1 A total of 558 submissions have been received, including 198 submissions which were received after the initially advertised exhibition period. A total of 6 submissions have since been withdrawn.
- 2.2 The specific overlays and catchment areas to which those submissions relate are identified in **Table 2** below, together with the position of the submission in relation to the Amendment.

Table 2: Amendment C109 – Summary of Submissions

Summary of Submissions	%
Catchments	
Andersons Creek	7%
Bulleen	5%
Koonung Creek	18%
Mullum Mullum Creek	29%
Ruffey Creek	41%
Overlays	
Melbourne Water's drainage areas - LSIO & SBO1	13%
Council's drainage areas – SBO2	38%
Council's drainage areas – SBO3	44%
Dual controls	5%

Nature of Submissions		
Objections seeking removal of property from the Amendment	92%	
Objections seeking modification to the Amendment	1%	
Objections but no reasons given	1%	
Requesting other changes not directly related to the Amendment	3%	
No position(despite a follow up letter) to the Amendment	3%	
Submissions in support of the Amendment	<1%	
No objection (Parks Victoria & Eastlink 1)	<1%	
Property not affected	<1%	

2.3 The 'Consultation Report and Summary of Issues in Submissions' at **Attachment 4** outlines the consultation process undertaken in detail, provides statistics on the location and number of submissions received and summarises the main issues raised in the submissions. The issues raised will also be discussed later in this report.

Review of Submissions

- 2.4 A rigorous review of the submissions received for Amendment C109 has been undertaken by officers from both Melbourne Water and Council.
- 2.5 Officers undertook a Further Technical Review (FTR) where submitters have questioned the inclusion of their property in the LSIO and SBO due to:
 - the accuracy of the modelling;
 - where flooding has not been experienced in the past; and
 - where the extent of coverage over the subject land is minimal.
- 2.6 The objective of that review was to determine if the exhibited flood shape is accurate, and if any changes to flood shapes should be considered.
- 2.7 The FTR included:
 - a review of the site (either via desktop analysis, or if considered necessary, a site visit); and
 - a review of existing drainage infrastructure, terrain and contours and existing flow paths, against Council's information.
- 2.8 **Attachment 6** includes a more detailed explanation of the criteria applied to review the submissions and a copy of the template used for the FTR which has been completed for every submission where the accuracy of the modelling has been questioned.
- 2.9 As noted in Section 1 of this report, further assessment and investigation has been undertaken for a significant number of properties in response to the one on one meetings conducted in March and April 2017. An updated Further Technical Review has been prepared for all of those where further review was undertaken (even if no change to the recommendation is proposed).

- 2.10 The FTR has resulted in a large number of recommended changes, including refinements to the flood shapes that have been modelled, changes to the overlay applying to the property (e.g. changing from SBO1 to SBO3) and in some instances, the removal of proposed overlays from properties and therefore removal from the Amendment. The final FTR have been forwarded to all affected submitters.
- 2.11 A number of submissions relate to proposed overlays under the control of Melbourne Water (LSIO and SBO1). Melbourne Water has reviewed these submissions and 86 changes are also recommended to the exhibited Amendment.
- 2.12 All the recommended changes to submitters' properties are included in **Attachment 9**. This Attachment also incorporates maps showing those properties where the flood shape is proposed to be amended. It should be noted that the maps do not show all those properties proposed to be deleted or where the designation of the overlay is proposed to change. As noted previously, all submitters have been provided with a copy of the FTR relating to their submission incorporating updated information as appropriate.
- 2.13 In addition, a peer review has been undertaken by an independent consultant (Water Technology) who considered the methodology used for the catchment mapping and translation to the planning overlays. The peer review report is attached at **Attachment 7**.
- 2.14 This type of peer review is common in processes such as these as part of due diligence and transparency.
- 2.15 The Water Technology review concluded that:
 - "The methods and outputs for the 5 catchment areas comprising the Amendment are appropriate for urban flood mapping.
 - Appropriate checks and validation have been made in each study such that the design flow estimates are considered robust.
 - A consistent and appropriate method has been applied to the processing of model results to produce mapping outputs that are relatively consistent across the Municipality.
 - It is considered that a number of small, isolated areas of inundation that are not expected to represent any significant threat to life or property could be removed from the SBO3 layer without compromising the appropriate management of flood risk within the area".

Key issues Raised in Submissions

- 2.16 Fourteen key issues have been identified in relation to the 558 submissions received, the categorisation of which has assisted the review and analysis of the submissions. A summary of these issues and a general officer response is provided in **Table 3** below. Note that many submissions raised more than one issue.
- 2.17 A more detailed officer response to each of these issues is provided in **Attachment 5**: 'Officer Response to Issues Raised in Submissions'. The attachment also includes relevant commentary from previous Independent Planning Panel reports where the issue has been previously considered.

Table 3: Summary of submissions by issue with general response

GENERAL RESPONSE	% OF SUBMISSIONS
1. Individual properties have not experienced flooding in the past	
The lack of historical evidence about flooding on a particular site does not mean the property may not be inundated by overland or riverine flooding in the future.	34%
The SBO and LSIO maps are based on the forecasted overland stormwater flows associated with a 1 in 100 year ARI storm event, meaning that there is a 1 per cent chance that such an event could occur in any given year.	
In many cases, the 1 in 100 year ARI storm event may only result in in inundation for a short period of time, but it is capable of causing damage.	
2. The modelling is inaccurate	
The proposed changes to the SBO and LSIO are based on the best available information, best practice modelling and techniques, developed over many years by experts in this field.	68%
The use of computer modelling is acknowledged as the only practical method to reliably map the extent of changes to the flood shape across the municipality.	
Where the accuracy of the modelling has been questioned, a further technical review (peer review) has been undertaken to check the accuracy of the modelling against agreed criteria.	
3. Council and/or Melbourne Water drainage works have already address flooding impacts	sed any potential
Drainage pipe upgrades that occurred prior to the undertaking of the modelling were generally considered as part of the flood mapping exercise.	15%
The further technical review process involved a review of the drainage pipe GIS data in the surrounding area to the submitters' properties, to ascertain if an upgrade had taken place recently which may not have been reflected in the data underpinning the flood model.	
The capital works records from the last few years were also reviewed to identify possible upgrades that may not have been reflected in the GIS data and model.	
Possible scenarios are:	
 The drainage upgrade has been included in the modelling but the upgraded drains will not have the capacity to remove surface runoff entirely during a 1 in 100 year ARI event; or 	
The upgrade was modelled but the submission property is upstream and does not benefit; or	
 The upgrade was not modelled because it was undertaken after the modelling was done; Where the upgrade was not modelled as it was completed after the modelling 	
was undertaken, it is expected that there will need to be some adjustments to the flood mapping in the future.	
A few isolated cases have been identified where drainage upgrades had been completed prior to the flood modelling work but not incorporated into the GIS data. In these cases, Council will arrange for remodelling of the flood extents prior to any future Panel hearing.	

ENERAL RESPONSE	% OF SUBMISSIONS
Council/Melbourne Water drains have not been properly maintained inadequate	and/or are
The modelling was based on the assumption that the drainage network is clea and working at 100%. In reality, however, this is not always the case.	8%
Submissions that have raised specific issues about drains not being properly naintained and blocked with leaves and other litter, or specific problems with he design of the local drainage network, have been logged in Council's sustomer request system. Actions taken will include cleaning out the relevant Irain and/or marking it for future special attention.	
Maintenance issues do not have any direct bearing on the proposed Amendment C109 noting, however, the organisation's broader obligation to espond to these matters.	
Council and Melbourne Water should review and upgrade the draina with overland flow and flooding from the one in 100 year ARI flood e	
The majority of the public drainage system in Manningham was constructed vell before consideration of overland flows from 1 in 100 year ARI flood events which became the minimum requirement in 1975).	23%
The drainage system in Manningham has been generally constructed and naintained to a 1 in 5 year ARI standard.	
Jpgrading the entirety of the drainage system in Manningham to a 1 in 100 rear standard is not economically feasible and in some areas the prevention o looding from 1 in 100 year flood events may not even be practically achieved without substantial changes to the layout of streets and blocks.	f
Council has over the last fifteen years committed up to \$2 million annually to he upgrade of its underground drainage system where dwellings are subject o inundation in a 1 in 100 year ARI storm event.	
t is also important to note, that even with an extensive upgrade to all nfrastructure, this does not mean that all flooding will be eradicated, as some treas will still be subject to overland flows.	
Council has a Strategic Resource Plan Item for 2017/2018 to complete the eview of the current Drainage Strategy. This will use detailed flood mapping is a key input to understand the magnitude of and risk posed by flooding. This will enable a systematic approach to develop and prioritise management esponses and interventions.	
New development and the increase in density across Manningham h level of overland flow and flooding.	as increased the
Vith increased urban consolidation, drainage services are being placed under increased pressure, affecting the quality, quantity and rate of flow of water manating from new or intensified development and potentially causing ooding.	10%
Planning controls can address drainage issues resulting from increased ensities by requiring a multi-unit development, for example, to provide a rainage system that promotes the on-site retention and re-use of stormwater un-off and regulates overland flow to better manage flooding. These neasures aim to avoid intensifying the impacts of flooding through nappropriately located uses and developments.	

GENERAL RESPONSE	% OF SUBMISSIONS
7. Property values and property resale will be impacted, accordingly, C should decrease or may increase as a result of the overlays and con be payable.	
The flood prone nature of some land is an existing fact. Application of the SBC and LSIO ensures that existing owners and prospective purchasers are aware of affected properties and can make informed decisions about the property and about planning for future flood events.	
Property values are also influenced by many factors.	
Past planning panels have not found evidence that the LSIO and SBO impacts on property values and have also determined this would not be reason to avoid application of the control.	
In November 2016, Council appointed Charter Keck Cramer ('Charter') to provide advice on what, if any impact the SBO will have on the values of those properties affected in the short and long term. The report is found at Attachment 11 .	
The report concluded the following:	
A) "In undertaking this assessment Charter has not been able to establish that the application of the SBO will negatively impact the values of those properties to be affected. This is consistent with the findings of the study undertaken by Charter for the City of Stonnington in 2004. B)	
Though concern over value impacts is regularly expressed in submissions to amendments to introduce the SBO, there has been no evidence provided through the Independent Panel process to establish this. This outcome is reinforced through numerous studies that have found that while actual floor events can impact property values, flood related policies and controls have no noticeable effect. This is further reaffirmed in the analysis of sales in the City of Manningham, undertaken by Charter, which shows there is no evidence that the Special Building Overlay has had an adverse impact on property values.	d s d o f
For the reasons outlined, it is Charter's opinion that the SBO will not negativel impact property values in the City of Manningham."	У
Council rates are relative to property value, which as noted above, is influenced by many factors.	
With respect to whether compensation will be payable, Melbourne Water has advised that the <i>Planning and Environment Act 1987</i> clearly sets out the circumstances where compensation is payable and is essentially limited to where land is reserved or required for a public purpose or where access is to be denied by the closure of a public road. It does not cover situations where controls such as the LSIO/SBO are imposed.	
8. Insurance costs/premiums will be impacted	·
Previous planning panels have consistently determined that the potential impact on insurance premiums is not a matter that should have a bearing on the application of the LSIO or SBO.	33%
The application of the LSIO and SBO does not cause or change the likelihood of flooding but recognises the existing condition of land.	
The Insurance Council of Australia has advised Melbourne Water that most insurance policies provide coverage for storm damage, including cover for damages resulting from overland flows (noting that this needs to be confirmed by the property owner's individual insurer).	

GENERAL RESPONSE	% OF SUBMISSIONS
The Insurance Council of Australia's Property Risk and Exposure Program (PREP) allows risks to be further considered at an individual address level. Developed as an affordability initiative the PREP was developed to allow th calculation of premiums to take into account depth of flooding and where it able to be demonstrated that on-site controls were in place to reduce flood	ie was
9. Buildings or structures on a property are unaffected by the propo therefore the overlay will impact the site unnecessarily	osed overlays, and
It is important to note that future buildings or development may not necessable in the same location as existing buildings or structures.	arily 2%
The function of the LSIO and SBO is therefore to ensure that any future development within an affected portion of the site is designed appropriately response to the identified flood potential.	rin
The removal of the LSIO or SBO could result in inappropriate development increases flood risk to adjoining properties, or has an insufficient floor level basement entrance that would be at risk of flooding.	
10. There will be a financial or administrative burden for future devel additional costs associated with seeking planning permission an	
A planning permit is only triggered if the proposed buildings and/or works fa within the area of land covered by the LSIO or SBO. In a significant amoun cases (45% of affected properties), a planning permit would already be required under other provisions of the Planning Scheme.	
Costs associated with redevelopment in LSIO and SBO areas will vary depending on the site context, how the overlay affects the site and the proposed design of the development.	
Any additional costs of increasing floor levels should be considered as a safeguard against the cost incurred as a result of potential flood damage to new buildings.	,
Having access to relevant data early in the building planning phase of a development allows designers to consider the most cost effective manner in which to respond to site constraints.	n
11. The proposed overlay will only have a minor impact on the proper incursion or the overlay falling over an existing easement or drive therefore be removed.	•
The extent of the proposed flood shapes affects properties differently. Som properties may only have 0.01% of their area affected by the flood shape, whereas other properties may be 100% affected. People will also have different opinions about what is considered to be a minor impact.	ne 13%
Due to the flood mapping methodology, the flood extents generated from the flood model results may encroach slightly onto properties. As part of the development of the overlays, in cases where the modelled inundated area of property was entirely within 5 metres of a roadway and the percentage of the property affected was less than 10%, those areas were removed from the proposed overlay flood shape, prior to exhibition. Those adjustments were considered appropriate given the low level of benefit associated with retent of those encumbrances in controlling future development.	of a ne

GENERAL RESPONSE	% OF
Several submitters have objected to the Amendment on the basis that their properties are only impacted by minor incursions. The City of Port Phillip Planning Scheme amendment proposed that in cases where incursions of 6% and 15m2 or less of the property area applied, the proposed planning extents be removed from affected properties. Similar criteria has been developed as part of the Further Technical Review of submissions made to Amendment C109. In the case of Manningham, as the properties are generally significantly larger than the properties in Port Phillip (700sqm versus 300sqm), where the incursion is less than 30m2 and represents less than 6% of the property area and is not considered to be significant, a recommendation may have been made to delete the overlay in the subject location.	SUBMISSIONS
The further technical review of submissions undertook further assessment of whether an incursion was minor and whether it could be removed without creating a disconnect or a significant impact on the connectivity of the flood shape.	
Consideration was also given to whether the minor flood shape incursion was associated with flow into or out of the property, based on the topography of the land. If the flood shape is associated with flow into the property, the flood shape is recommended to be retained.	
Finally, consideration was given to the length of the incursion into the property. Incursions greater than 5 metres into properties are recommended to be retained.	
These requirements are in keeping with the adopted criteria for removal of minor incursions along the frontages of properties as part of the original filtering process, precedent associated with prior Independent Planning Panel processes and flood risk management principles.	
Even small incursions onto property may become significant after a site is re- developed. For example, significant flood impact could occur if a basement was proposed and the driveway entrance connected with a substantial flooded area.	
 12. Built features (such as existing floor levels, on site drainage, retaining landscaping etc.) on the subject property and adjoining properties may divert water away or prevent water from entering a property. Therefore of the overlay is questioned. It is correct that built features on adjoining properties, or on the property itself, may currently divert water away or prevent water from entering a property. These built features, however, are private assets and can be removed at any time. 	y currently
The overland flow path projected in the model is based on a terrain that contains no structural barriers such as fences, houses and brick walls and is based on 'Lidar*' data which is an accepted approach for understanding the contours of the land. Using the general contours as the basis for the modelling means that, at any point in the future, Council can make sure new buildings, wherever they are built, will be appropriate for the flood shapes and overland flow depths.	
It has been found that there is generally very good agreement between the LiDAR data and the fall of land within the municipality. Where submitters have raised concerns regarding the proposed overlay shape, the site has been inspected and the model has been interrogated. Cases have arisen where there have been isolated issues with the LiDAR data and in these cases the proposed overlay shape has been reviewed and recommendations made to amend the overlay shape as necessary.	

GENERAL RESPONSE	% OF SUBMISSIONS
The modelling relies on 'roughness factors' to account for such obstructions as houses, walls and soft and hard landscaping features. More substantial landscaping works, such as retaining walls, are picked up in the topographical information as a change of level. However, lesser landscape changes are not permanent and can be changed over time, therefore, they are not a legitimate consideration when undertaking flood modelling. Having said this, the modelling does make more indirect allowance for landscaping, both from the perspective of the ability of vegetated areas to absorb more water than paved areas and the increase in overland flow depths which result from water flow being impeded on rougher surfaces. The ability of stormwater in a major storm event to percolate into clay soils is, however, very limited. The treatment of landscaped areas has been applied consistently to all areas through the modelling. It should also be noted that the flood modelling methodology adopted for this project follows Melbourne Waters specifications.	
*LiDAR (Light Detection and Ranging) is a remote sensing technique similar to radar where the time taken for reflected laser to return from a surface is used to measure terrain elevation.	
13. Consultation process and information provided was inadequate	
Exhibition of the Amendment exceeded the statutory requirements specified under section19 of the <i>Planning and Environment Act, 1987</i> .	3%
Exhibition of the Amendment also included non-statutory communication measures including:	
Interactive web tool	
Information sessions	
• FAQs	
Information on Council's web site	
The Amendment was exhibited for six weeks compared to the statutory requirement of four weeks under the <i>Planning and Environment Act, 1987</i> .	
Council received over 1000 phone calls during exhibition; attended to over 120 counter enquiries and every person who wished to speak to a Council officer directly had the chance to do so.	
Submissions were still being submitted after the closing date and can be received up until the Independent Planning Panel hearing to consider submissions.	
14. Other issues	•
A range of other site specific issues were raised in addition to the issues and responses provided above. Responses to the site specific issues raised can be found in Attachment 8 .	14%

Response to Submissions

2.18 A summary of each individual submission received based on the 14 identified issues, an officer response to each submission (based predominantly on the FTR) and an officer recommendation to retain, modify or delete the exhibited overlay as appropriate, is provided at **Attachment 8**: 'Summary of Individual Submissions and Officer Response'.

Proposed changes

- 2.19 As described below changes are recommended on the basis of the review of submissions including the further technical reviews undertaken by Council, Cardno and Melbourne Water. These changes are listed in the table at the Attachment 9.
- 2.20 If Council resolves to endorse these recommended changes, they will form the basis of the Council submission to the Independent Planning Panel.
- 2.21 The recommended changes to the exhibited amendment at this stage include:
 - A total of 157 changes to the exhibited flood shape and/or the overlay designation;
 - Removal of a <u>total</u> of 856 LSIO and SBO shapes (proposed overlay) (noting that shapes may relate to multiple properties) relating to properties;
 - 1 change to remove the UFZ from properties in Carbine Street, Donvale; and
 - 1 minor text change to controls.
- 2.22 A breakdown of the proposed changes by overlay designation is provided in **Table 4** below.

OVERLAY	REMOVAL OF OVERLAY		OVER (Chan desigr	
	No. of changes	Submitters' properties affected	No. of changes	Submitters' properties affected
LSIO (Melbourne Water)	6	13	45	36
SBO1 (Melbourne Water)	11		52	
SBO2	69	50	67	45
SBO2 (Minor incursions)	228		8	
SBO3	149	93	31	16
SBO3 (Minor incursions)	428]	0	
TOTALS	891	156	203	97

Table 4: Summary of Proposed Changes by Overlay

- 2.23 In total, the 1,094 changes/deletions will affect 1,231 properties.
- 2.24 The majority of recommended changes are in response to situations where the flood extent incursion into the property is considered to be minor in nature and will not result in a break or discontinuity of the flood shape.
- 2.25 A minor text change to the Schedule to SBO3 is also recommended, in response to several submissions, to address some potential ambiguity with the controls.
- 2.26 Specifically, in Schedule 3 to the Special Building Overlay, it is recommended to change the last dot point under Clause 1.0 Permit requirement as follows:
 - "New fencing with at least 25% openings or with a plinth at least 400mm above the natural surface level".
- 2.27 Two additional changes are recommended to the exhibited Amendment which are not directly related to submissions.
- 2.28 Consideration has been given to the impacts of the minor incursion criteria as set out under Item 11 in Table 3 above, if applied to all properties. A total of 2,224 properties, including submitter properties, were identified as potentially being subject to minor incursions. Each was assessed against the criteria and a determination made as to whether the flood extent should be modified. Properties which were not submitters but where changes to the proposed controls are recommended based on the minor incursion criteria are listed in Attachment 11.
- 2.29 The recommended changes to the flood shape include 664 minor incursions, including 3 boundary issues.
- 2.30 It is recognised that the proposed changes based on this assessment impact a significant number of properties, however, the total impact in terms of area is less than 0.5% of the total land area affected by the exhibited LSIO/SBO overlays.
- 2.31 A total of 10,300 (approx.) properties were affected as part of the original exhibition of Amendment C109. Submissions were received from approximately 5% of the affected properties. Of the 557 submissions assessed, 253 changes have been proposed to the exhibited overlays.
- 2.32 From the foregoing and based on the total number of properties affected, the following statistics are provided. A total of 1,094 changes have been identified in respect of the proposed overlays (10.6% of the total number of affected properties). A breakdown of these changes follows:
 - 6.5% (664) of all affected properties are proposed to have overlays removed (or changed in 8 cases) entirely in response to the minor incursion criteria. These changes primarily relate to the removal of overlays impacting less than 30sqm of the subject properties. These changes are largely proposed as a proactive and consistent response to resident concerns.
 - 1.6% (168) of all affected properties in addition to properties removed as a result of the minor incursion criteria and where no submission has been lodged are proposed to have overlays removed entirely

- 1.5% (156) of all affected properties where a submission has been made which are in excess of the minor incursion criteria are proposed to have overlays removed entirely.
- 0.9% (97) of all affected properties are recommended to have changes to the overlay, primarily in relation to the overlay designation (eg. LSIO to SBO1) or minor trimming of the overlay.
- 2.33 Aside from adjustments proposed in response to the minor incursion criteria (which represent less than 0.5% of the total land area encumbered by the overlays), the proposed changes to overlays impact only 4.1% of all properties affected by the exhibited overlays.
- 2.34 From the preceding, 76% of the changes are being proposed proactively, in the absence of a submission. Based on the foregoing and as determined through the peer review of the flood mapping for the five catchments (Items 2.13 to 2.15 of this report), the modelling undertaken is still considered robust and appropriate for urban flood mapping.
- 2.35 The proposed changes to the flood shape will appropriately manage the risk associated with major flood events for the control of future development. The proposed amendments to the flood shape based on the minor incursion criteria do not undermine the integrity of the flood maps for the subject catchments but respond to community concerns that the filtered results appropriately manage the risk associated with major flood events for the control of future development.

Rezoning of Urban Floodway Zone in Donvale

2.36 Removal of the Urban Floodway Zone from five properties (Nos 13, 15, 19, 20 and 25) in Carbine Street, Donvale, with a rezoning to General Residential Zone 3. Following discussions with Melbourne Water, it has been ascertained that, with the introduction of the SBO1, these properties no longer need to be included within the Urban Floodway Zone. Melbourne Water therefore, has no objection to the removal of the Urban Floodway Zone and its replacement with the General Residential 3 Zone, which is the prevailing zone in this area.

Flood Risk and Overlay Designation

- 2.37 Flood risk encompasses public safety and building / property damage risk. Risks associated with development in areas conveying overland flows include the risk of ponding or displacement of overland flows through the inappropriate siting of buildings and building flooding as a result of setting building floor levels below anticipated overland flow depths. These risks increase with overland flow depths and velocities.
- 2.38 The proposed Amendment C109 overlay designations are aligned with Australian Rainfall and Runoff flood hazard categories with the overlay presenting the highest level of risk being the LSIO and the lowest level of risk presented by SBO3. Overlay SBO3 aligns with the lowest flood hazard class with flow depths less than 100mm. Flows in these areas are generally safe for people, vehicles and buildings from a structural stability perspective, although there remains a risk of nuisance habitable floor inundation

- 2.39 Submitters have raised concerns regarding the designation of SBO3 areas, particularly in steeper terrain. On steeper terrain, due to the filtering criteria, higher velocity shallow flows (less than 50mm in depth) can be mapped and included in the SBO3 overlay. Melbourne Water is considering potential new flood mapping data filtering criteria which, if adopted, could result in reduction of the order of 10 to 15% in the numbers of properties affected, with the greatest impact being in respect of SBO3 areas. Cardno ran a trial of these amended filtering criteria but found that the application resulted in excessive creation of isolated SBO shapes.
- 2.40 The independent review of the flood mapping undertaken by Water Technology supported the mapping undertaken but commented that '.. a number of small, isolated areas of inundation that are not expected to represent any significant threat to life or property could be removed from the SBO3 layer without compromising the appropriate management of flood risk within the area'

Council's obligations under the Planning and Environment Act, 1987

- 2.41 Once Council has considered all written submissions received in respect to Amendment C109, it must determine whether to:
 - make changes to the Amendment as requested in the submissions;
 - refer the submissions to an Independent Planning Panel (to be established by the Minister for Planning) for further review; or
 - abandon the Amendment or part of the Amendment.
- 2.42 Making every change to the Amendment as requested in the submissions is not supported for the reasons set out in **Attachment 8** to this report. A number of changes, however, are recommended to be made to the Amendment, where it can be clearly shown that the criteria for removing or changing an overlay have been met.
- 2.43 Resolving to abandon the amendment is not recommended and would likely expose Council and the community to unnecessary risk in relation to flooding.
- 2.44 In addition, a failure to implement appropriate flood mapping (based on Planning Practice Note 12), could give rise to a finding that Council has failed to adequately perform its statutory functions and duties as a planning authority.
- 2.45 Inclusion of flood information in the Planning Scheme will enable landowners, developers and purchasers to have immediate access to this critical information in the early stages of the development approval process, thereby ensuring that new development is designed with flood mitigation in mind.
- 2.46 It is therefore recommended that the Amendment (together with the suggested changes as set out in **Attachment 9**) be progressed to the next step in the planning scheme amendment process and that the submissions be referred to an Independent Planning Panel for further review.

Lapsing of Amendment C109

- 2.47 Section 30 of the *Planning & Environment Act 1987* states that an amendment lapses at the end of two years after the date of publication of the notice in the Government Gazette under section 19(3), unless the planning authority adopts it within that period; or the Minister allows a longer period for the adoption of the amendment. The notice of exhibition for Amendment C109 was published in the Government Gazette on 12 November 2015. To comply with the requirements of the *Planning & Environment Act 1987*, Council would be required to adopt the amendment by 12 November 2017.
- 2.48 It is therefore necessary to request the Minister for Planning for an extension of time within which to adopt the amendment. Requests for an extension of time should be made at least one month prior to the lapse date. As part of seeking the extension of time, Council: must demonstrate what has delayed the progression of the amendment; and outline the key timelines for progressing the amendment to adopt the amendment.
- 2.49 It is anticipated that if Council supports referring submissions to an independent panel for consideration, a panel hearing would be likely to commence in early 2018. This would be due to the number of submissions and complexity of the issue and in order to give Council and other submitters time to prepare submissions to the Panel. Council is then required to consider the panel's recommendations and decide whether or not to adopt the amendment.
- 2.50 It is proposed that Council seek an extension of 18 months within which to adopt Amendment C109.

3. COUNCIL PLAN / STRATEGY

Council Plan and Strategies

- 3.1 Under the Council Plan 2013-2017 Strategic Objective 4 Planning for Where We Live, the Annual Initiatives for 2014-2015 included, "*Identify further land subject to flooding in the Manningham Planning Scheme to improve management of future catchment flood levels.*"
- 3.2 In addition, there have been a number of other strategies which have necessitated that Council undertake flood mapping of its local catchments and support the implementation of flood mapping through the introduction of planning scheme overlays.

State Government Strategy

- 3.3 Most recently, the Victorian Government has developed the Victorian Floodplain Management Strategy (2016) to help communities be better prepared for future floods. The strategy clarifies the roles and responsibilities of government agencies and authorities involved in flood management. It aims to improve the evaluation and communication of flood risks so communities and relevant agencies can take better-informed action to manage floods.
- 3.4 That Strategy also states that in order to avoid or minimise future risks, the use of planning controls to manage the potential growth in flood risk should be endorsed. It also sets accountabilities in land use planning to avoid increased stormwater runoff from new developments.

Auditor General's Report

- 3.5 The Auditor General released the '*Managing Storm Water Flooding Risks in Melbourne*' report (2005), following widespread flooding of the Melbourne metropolitan area between December 2004 and January 2005. The Auditor General formed the view that Victorian Councils were not effectively managing flooding risks associated with significant storm events and recommended that Councils provide a higher level of flood protection, carry out reliable flood mapping and include the results in their planning schemes.
- 3.6 In 2007, Melbourne Water released its '*Port Phillip and Westernport Region Flood Management and Drainage Strategy*', in response to the Auditor General's report. One of the key themes of that strategy was improved collaboration and communication between Councils and Melbourne Water. A key action involved the joint development of Flood Management Plans to improve the flood knowledge base and for the organisations to work collaboratively to better address flood risk. Accurate flood mapping is considered to be a critical foundation for the development of sound drainage and flood management activities.
- 3.7 In June 2011, Council and Melbourne Water adopted a joint Flood Management Plan for the municipality which aims to facilitate a coordinated approach to flood management within Manningham. Section 11 of the Flood Management Plan sets out a list of actions for Council and Melbourne Water to reduce flood risk and flood impact severity for Manningham. One of the actions identified in the improvement plan includes completion of flood mapping for Manningham Council's local catchments.

Council Strategies

- 3.8 Council's Drainage Strategy 2004-2014 recognised the need for buildings and other vulnerable assets to be above flood levels and not to be surrounded or isolated by deep or fast flowing waters and recommended 'a municipal wide study be carried out and an overlay be introduced for overland flow path areas which prevents any development which may occur in the flow path'.
- 3.9 The Manningham Residential Strategy (2012) includes an action (Action 4.4 short term) to "complete floodway mapping and progress appropriate planning controls on the affected properties"
- 3.10 Recommendation 6 of the *Manningham Planning Scheme Review (2014)* is to amend the Planning Scheme to apply the Special Building Overlay or Land Subject to Inundation Overlay where mapping of local drainage catchments has confirmed that land is subject to flooding.

State and Local Planning Policy Frameworks

- 3.11 The proposal to apply the LSIO and SBO is consistent with the following Clauses of the State Planning Policy Framework:
 - Clause 11 Settlement seeks to anticipate and respond to the needs of existing and future communities through the provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure.

- Clause 13 Environmental Risks Planning should adopt a best practice environmental management and risk management approach which aims to avoid or minimise environmental degradation and hazards. Planning should identify and manage the potential for the environment, and environmental changes, to impact upon the economic, environmental or social well-being of society.
- 3.12 In particular Amendment C109 will implement the following objectives of Clause 13.02-1 Floodplain management:

To assist the protection of:

- Life, property and community infrastructure from flood hazard.
- The natural flood carrying capacity of rivers, streams and floodways.
- The flood storage function of floodplains and waterways.
- 3.13 The relevant strategies in Clause 13.02-1 are to:

'Identify land affected by flooding, including floodway areas, as verified by the relevant floodplain management authority, in planning scheme maps. Land affected by flooding is land inundated by the 1 in 100 year flood event or as determined by the floodplain management authority'

and

'Avoid intensifying the impacts of flooding through inappropriately located uses and developments.'

- 3.14 The Amendment is also consistent with the following clauses of the Local Planning Policy Framework incorporating the Municipal Strategic Statement and Local Planning Policies:
 - Clause 21.05 Residential, Clause 21.06 Low Density and Clause 21.07 Green Wedge and Yarra River Corridor all recognise that areas within the municipality are susceptible to flooding and that any proposals to subdivide or develop land need to have regard and respond to identified land constraints including flooding.
 - Clause 21.12 Infrastructure recognises that Council is responsible for providing drainage for the local street network and local catchment areas. Council also encourages developments to design and upgrade drainage infrastructure to reduce the occurrence of inundation and flooding, and improve safety and enhance the amenity of the municipality. Further, it recognises that Council will continue to identify land which has drainage and flood constraints.

Planning Practice Note 12

3.15 Practice Note 12 (PN12): Applying the flood provisions in planning schemes (revised June 2015) provides guidance about applying the flood provisions in planning schemes and identifying which flood overlay should apply.

3.16 PN12 states, relevantly:

"In general, it is not practical or economical to provide land use planning or flood protection up to the 'probable maximum flood (PMF). A lesser flood standard, known as the 'design flood event' (DFE), is adopted for land use planning purposes and is the area applicable for planning schemes. The area defined by the DFE will be referred to as 'land subject to inundation' and can be divided into its relevant UFZ, FO, LSIO and SBO components as the case requires. In Victoria, the DFE for land use planning and building purposes is the 100-year ARI (average recurrence interval) flood, which occurs on average once every 100 years. This is the basis for declaring flood levels and flood areas under the Water Act 1989 and for setting minimum building floor levels under the Building Act 1993."

4. IMPACTS & IMPLICATIONS

Community

- 4.1 Approximately 10,300 properties across five urban catchments of Manningham are liable to inundation by overland flows from the urban drainage system and mainstream flooding, which are proposed to be included in the SBO and LSIO.
- 4.2 Approximately 45% of the affected properties already have other planning scheme controls that trigger the requirement for a planning permit.
- 4.3 As noted earlier in this report, the majority (59%) of properties will have minimal impacts from the proposed amendment, as they will either have their existing flooding overlay removed completely, they will have minor changes made to the boundary of their existing flooding overlay, or permit exemptions will ensure that planning permit approval is not required if certain conditions are met (such as minimum height of proposed building floor level above the ground).
- 4.4 Existing houses or buildings will not retrospectively be required to obtain planning permit approval (only new development will require a planning permit where planning permit exemptions are not met).
- 4.5 The proposed flooding overlays only affect small parts or sections of properties in most instances, and therefore new development will only need a planning permit if it is located within the overlay itself (where planning permit exemptions are not met).
- 4.6 Flood mapping within Manningham's local catchments supports an integrated approach to managing the impacts of stormwater runoff. The key function of the application of the SBO and LSIO to identified land is to ensure that drainage issues are considered at an early stage of the development approvals process. Consideration of flooding also seeks to ensure that detrimental impacts to life and new buildings are minimised.
- 4.7 The identification of properties within overland flow paths can also enable community education and communications to be better directed, to enable residents to best prepare for flood events. The flood mapping will also inform the prioritisation of future drainage improvement works, to protect habitable floor areas and address community safety risks.

Sustainability

- 4.8 The proposed amendment is likely to have positive social and economic effects. Benefits include better management of land liable to flooding and reduced incidence of flood damage to habitable floor areas over time.
- 4.9 By more accurately identifying land within the SBO and LSIO, the amendment will assist council to provide timely and more accurate advice when new development is proposed on land that is potentially subject to inundation.
- 4.10 Increasing the awareness of flood potential and thereby minimising the potential impacts of flooding will also have public safety benefits.
- 4.11 The economic impact of flooding on individuals and communities will be minimised through reduced flood risk. Design requirements arising from the application of the SBO and LSIO may result in some increase in development costs. However, having access to information early in the planning phase will allow appropriate, cost effective strategies to be implemented by developers.
- 4.12 After re-development of a site, costs associated with future flood damage should be reduced. This benefit would be specific to individual properties.

5. IMPLEMENTATION

Finances and Resources

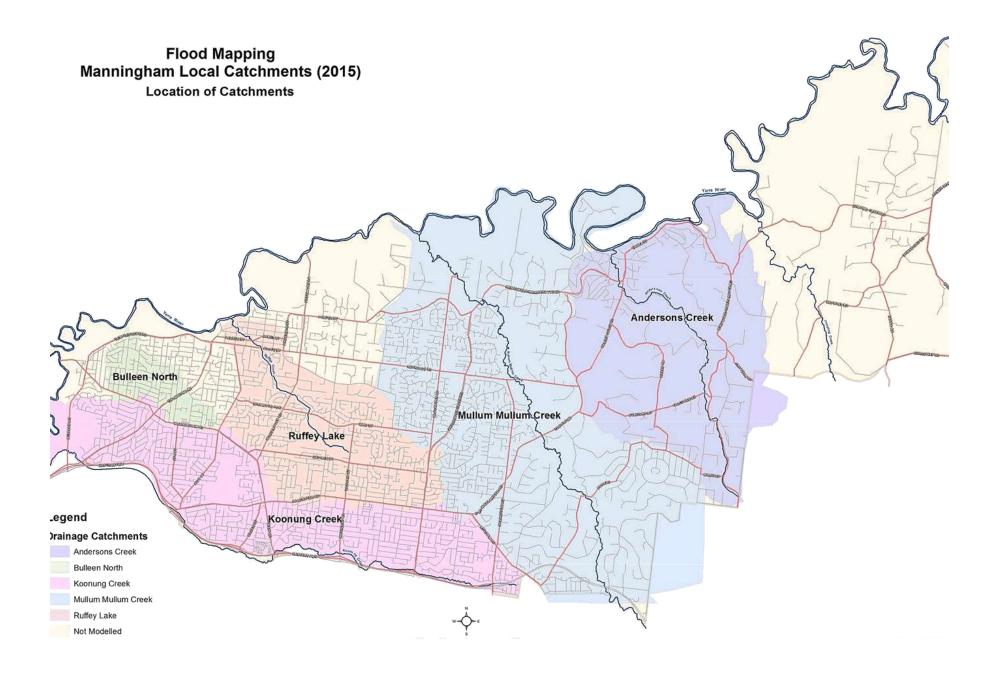
- 5.1 Melbourne Water has shared the costs associated with exhibition of the amendment and would also share the costs associated with a panel hearing.
- 5.2 In order to reduce the number of planning permit applications to Council, and the related costs of considering those applications, Amendment C109 has been structured to include additional planning permit exemptions in SBO3, which cover 57% of properties within the SBO. If the application complies with a number of conditions (e.g. the proposed floor level is set a minimum of 400mm above the existing ground surface level at the building and the proposed building does not exacerbate overland flows), then a planning permit will not be triggered.

Timelines

- 5.3 Ministerial Direction No. 15 sets the timeframe for completing the various steps in the Planning Scheme amendment process.
- 5.4 Pursuant to Clause 4(3) of the Ministerial Direction, Council must request the appointment of an Independent Planning Panel within 40 business days of the closing date for submissions unless a Panel is not required.
- 5.5 As submissions closed on 24 December 2015, it was necessary to seek a Ministerial exemption with respect to requesting the appointment of a Panel.
- 5.6 This exemption was granted by the Minister on 3 March 2016.
- 5.7 Should Council decide to refer the submissions to an Independent Planning Panel, a formal request to appoint a Panel will be made.

6. DECLARATIONS OF CONFLICT OF INTEREST

No Officers involved in the preparation of this report have any direct or indirect conflict of interest in this matter.



Development of the Special Building Overlay

Technical Report

NA49913512

Prepared for Manningham City Council







Contact Information

Document Information

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21 September 2015

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1 Background

1.1 Introduction

This document has been prepared at the request of the City of Manningham to provide the background information and methodology used to amend the existing Special Building Overlay (SBO) for the Manningham Planning Scheme and to identify properties flooded within areas under Council's jurisdiction (i.e. local catchment flooding). The review of the overlay is a key aspect of floodplain management in the City and enables the appropriate control of development in areas subject to overland flow.

The amended overlays build on hydraulic modelling undertaken on behalf of Council and Melbourne Water by various consultants over the last five years.

1.2 Flood Modelling Studies

1.2.1 Overview

Flood mapping seeks to identify areas at risk of flooding from various storm event and reduce those risks. It is a vital component of land use planning in the development of the SBO. The flood extents determined from engineering investigations are used to amend the SBO.

The areas included in the amended SBO have been generated as a result of engineering investigations undertaken by Council and Melbourne Water. The flood extents used to amend the SBO have been developed for flooding that is in excess of 50mm flood depth. The projects identified flood prone areas in the City of Manningham and included consideration of all local and Melbourne Water main drainage lines and major creeks within the five subject catchments.

Separate consideration of the Yarra River and Koonung Creek were outside the scope of the flood mapping projects. Flooding associated with the Yarra River and Koonung Creek would normally be designated under the Flood Zone, Floodway Overlay or Land subject to Inundation Overlay provisions of the Manningham Planning Scheme. The specific areas covered by the overlays are discussed below.

1.2.2 Bulleen North

This project was undertaken as a collaboration project between the City of Manningham and Melbourne Water.

The Bulleen North drainage network is a branched and highly modified network that commences near the corner of High Street and Manningham Road and discharges at the Yarra River near the corner of Templestowe Road and Sheahans Road. It services the suburb of Bulleen. The total catchment area of the highly urbanised catchment is approximately 225 hectares, consisting of medium and high density residential and commercial developments.

The drainage system consists primarily of reinforced concrete pipes that ultimately discharge into the Yarra River. Throughout the entire catchment, a council maintained drainage network exists that flows into the Melbourne Water Main Drain at various locations. The Melbourne Water Drain commences at Rose Avenue and traverses the catchment in a north-west direction, discharging near the Yarra River at Templestowe Road.

1.2.2.1 Properties and Buildings Flooded

In a large storm event, significant flooding occurs throughout the catchment. Numerous properties are inundated and many floors are potentially flooded. Table 1-1 provides an indication of the number of properties affected and floors flooded in the 1% Annual Exceedance Probability (AEP) storm event. These are the combined totals from flooding associated with Council and Melbourne Water drainage systems.

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Table 1-1 Properties Flooded, Bulleen North Catchment

Flood Event	Number of Properties Affected	Number of Floors Flooded*
100 year	659	86

* Note 1: the floors flooded have only been counted where surveyed floor level data is available.

* Note 2: figures in table are taken directly from the flood modelling results. Not all properties will be included in the planning layers.

1.2.3 Ruffey Creek

This project was undertaken as a collaboration project between the City of Manningham and Melbourne Water. The Ruffey Creek Flood Mapping results were originally developed by AECOM and were reviewed as part of this project to ensure consistency of modelling parameters across the five catchments.

The Ruffey Creek catchment spans areas of Templestowe and Doncaster and consists almost entirely of residential development with some commercial and public land scattered throughout. The catchment boundary extends just east of Blackburn Road, south of Doncaster Road, along Williamsons Road, Manningham Road, High Street and Serpells Road and discharges to the Yarra River at Finns Reserve. The total catchment area of the highly urbanised catchment is approximately 1,049 hectares. Ruffey Lake sits in the centre of the catchment. The average grade of the catchment is 2% with the upper reaches approaching grades of 7%. The dominant flow direction is from south-east to north-west toward the Yarra River.

The drainage system consists primarily of reinforced concrete pipes that ultimately discharge into the Yarra River. Throughout the entire catchment, a council maintained drainage network exists that flows into the Melbourne Water Main Drainage network at various locations. The Melbourne Water drainage network includes the George Street, Roseland Grove, Bonview Road, Greenridge Avenue and Montpellier Crescent main drains, as well as the Lynnwood Parade Retarding Basin. From a flood mitigation perspective, Ruffey Lake is by far the most important infrastructure component, also functioning as a retarding basin.

1.2.3.1 Properties Flooded

Table 1-2 below shows the number of properties that are considered to be flood affected. The total below indicates where a property is intersected by the expected extent of flooding in the 1% AEP flood event.

Table 1-2 Properties Affected by flooding (Ruffey Creek catchment)

Catchment	Land Use	1% AEP Event - Properties Affected*
	Residential	3754
Ruffey	Business	29
Creek	Public	124
	Total	3907

* Note 1: figures in table are taken directly from the flood modelling results. Not all properties will be included in the planning layers

1.2.4 Mullum Mullum Creek, Koonung Creek, Andersons Creek

This project was undertaken by the City of Manningham, with technical review and comment provided by Melbourne Water. The aim of the project was to identify flooding from council owned or controlled assets, however due to the nature of the drainage networks, some areas that are considered Melbourne Water controlled were included.

The Koonung Creek catchment is primarily zoned as 'general residential zone' with an existing extensive underground stormwater pipe network throughout the catchment area. The land has not generally been developed with consideration of major overland flows, which is representative of the development controls at the time the land was urbanised generally in the 1950's and 1960's. There are many examples of overland flow paths traversing private properties.

The Mullum Mullum and Andersons Creek catchments are a mixture of urban and peri urban (large lot) land. Peri urban type uses are more commonly found along the main creek lines of the Mullum Mullum and Andersons Creek catchments. Predominantly, underground drainage is focused in the urban areas, with

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rural and occasional urban areas (such as Warrandyte) not as effectively serviced. Most of the flows are carried in open streams and their associated floodplains. Across the catchment the tributary overland flow paths follow the natural drainage lines through properties; however, there are relatively few areas where flood extents appear to encroach on built infrastructure.

1.2.4.1 Properties and Buildings Flooded

Table 1-3 and Table 1-4 below show the number of properties and buildings that are considered to be flood affected in each catchment. The total below indicates where a property or building is intersected by the expected extent of flooding in the 1% AEP flood event.

Table 1-3 Properties Affected by flooding (Mullum, Andersons and Koonung catchments)

		1% AEP Event		t
		F	tesponsible Auth	ority
Catchment	Land Use*	MW	Council	Total
	Residential	143	1939	2082
Koonung	Business	3	36	39
Creek	Public	48	150	198
	Total	194	2125	2319
	Residential	245	2219	2464
Mullum	Business	0	17	17
Mullum Creek	Public	103	203	306
	Total	348	2439	2787
	Residential	54	460	514
Andersons	Business	0	21	21
Creek	Public	49	301	350
	Total	103	782	885

* Note 1: figures in table are taken directly from the flood modelling results. Not all properties will be included in the planning layers

Table 1-4 Buildings Affected by flooding (Mullum, Andersons and Koonung catchments)

			1% AEP Event	
			Responsible Author	rity
Catchment	Land Use*	MW	Council	Total
	Residential	39	926	965
Kaamuna Craati	Business	3	22	25
Koonung Creek	Public	4	39	43
	Total	46	987	1033
	Residential	50	791	841
Mullum Mullum	Business	0	11	11
Creek	Public	11	16	27
	Total	61	818	879
	Residential	10	113	123
Andersons	Business	0	20	20
Creek	Public	6	26	32
	Total	16	159	175

The number of buildings which will be inundated in a major storm event will be a subset of the building numbers shown in Table 1-4. This data is not currently available as floor level surveys have not been undertaken to date for these catchments.

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2 Applicable Flood Planning Controls

There are three main planning overlay controls for flooding, the Floodway Overlay (FO), the Land Subject to Inundation Overlay (LSIO) and the Special Building Overlay (SBO). Of these controls, the SBO has been adopted to represent flooding in council areas, noting that this is related to a drainage network that may include pipes and open channels and provides ease of implementation.

2.1 Land Subject to Inundation (LSIO)

The LSIO applies to areas subject to mainstream flooding in both rural and urban areas. These are generally areas surrounding major overland flow paths that become inundated during full flood flows in the 1% AEP flood event (also referred to as the 1 in 100 year ARI event).

The current flood planning controls will remain unchanged for LSIO areas and will continue to adopt the standard planning permit requirements found in Clause 44-04 of the Manningham Planning Scheme.

2.2 Special Building Overlay (SBO)

The SBO applies to areas that are subject to stormwater flooding in urban areas. These are generally areas which are inundated due to the inability of the stormwater infrastructure to convey the full flood flows in the 1% AEP flood event (also referred to as the 1 in 100 year ARI event). This overlay is suitable for areas where stormwater systems were implemented prior to current design standards and there has been substantial development since the infrastructure was completed.

The flood planning controls proposed for the City of Manningham include three control types, designated as SBO1, SBO2 and SBO3. SBO1 and SBO2 are for areas of greater flooding where stricter planning controls are required. These areas adopt the standard planning permit requirements found in Clause 44-05 of the Manningham planning scheme. The 1 and 2 represent the break-up between the area of responsibility for management by Melbourne Water (SBO1) and Council (SBO2) respectively.

The proposed SBO3 is for areas managed by Council that have a known flood issue which requires control, but could be managed without a planning permit. The flood depth in the SBO3 area is usually less than 100 mm. It is proposed to adopt a schedule to the SBO that provides for appropriate flood sensitive development in these areas, without a permit, provided certain conditions are met. This approach should significantly lessen the impact of implementing appropriate flood management controls on both council staff and the wider community.

2.3 Schedule to the SBO (SBO1)

SCHEDULE 1 TO THE SPECIAL BUILDING OVERLAY

Shown on the planning scheme map as SBO1

MELBOURNE WATER MAIN DRAINS

1.0 Referral of applications

An application must be referred to Melbourne Water in accordance with Section 55 of the act unless in the opinion of the responsible authority, the proposal satisfies requirements or conditions previously agreed to in writing between the responsible authority and the floodplain management authority

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2.4 Schedule to the SBO (SBO2)

The following schedule is proposed for the areas designated as SBO2.

SCHEDULE 2 TO THE SPECIAL BUILDING OVERLAY

Shown on the planning scheme map as SBO2

MANNINGHAM COUNCIL DRAINS

1.0 Referral of applications\

- No referral authority specified
- An application will be considered by the City of Manningham as the authority responsible for local drains.

2.5 Schedule to the SBO (SBO3)

The following schedule is proposed for the areas designated as SBO3

SCHEDULE 3 TO THE SPECIAL BUILDING OVERLAY

Shown on the planning scheme map as SBO3

MANNINGHAM COUNCIL DRAINS

1.0 Permit requirement

A permit is not required to construct or carry out the following buildings or works:

- a new dwelling where the floor level is at least 400 mm above the natural surface level and the sub floor does not obstruct the overland flow path.
- a replacement dwelling where the floor level is at least 400 mm above the natural surface level, the sub floor does not obstruct the overland flow path and the original building footprint remains the same. The responsible authority may require evidence of the existing building envelope.
- a single or multiple dwelling extension where:
 - the sub floor level does not obstruct the overland flow path; and
 - the floor level of the proposed dwelling extension/s is at least 400 mm above the natural surface level.
- an alteration to an existing building where the original building footprint remains the same and floor levels are constructed to at least 400mm above natural surface level.
- a replacement building (not including an out-building) where the floor level is at least 400 mm above the natural surface level, the original building footprint remains the same and the sub floor does not obstruct the overland flow path. The responsible authority may require evidence of the existing building envelope.
- new fencing with at least 25% openings and with the plinth at least 400 mm above the natural surface level.

2.0 Referral of applications

- No referral authority specified
- An application will be considered by the City of Manningham as the authority responsible for local drains.

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3 Planning Extent Development

3.1 Overview

Proposed planning extents have been developed for Bulleen North, Ruffey Creek, Mullum Mullum Creek, Andersons Creek and Koonung Creek Catchments. The proposed planning extents have been developed based on the hydraulic modelling outputs for the 100yr ARI storm event.

The extent of the overlay includes areas of flooding relevant to Melbourne Water's assets. Melbourne Water has a number of existing overlays in place as part of the scheme. As agreed with MW, these overlays have been replaced with the results of this study as they have been developed using more up to date modelling outputs.

The aim of the proposed planning extents are to identify areas that require planning controls to ensure appropriate responses to flooding. It is not necessary to have a flood related control in all areas where overland flows occur or are predicted by a flood model. The following section discusses the process used to develop the proposed planning extents.

3.2 Inclusion / Exclusion Criteria

Flood extents from the flood mapping projects for each catchment were used to provide the basis for the proposed planning extents. Four criteria have been adopted to assess if an area should be included in the planning extent. These inclusion and exclusion criteria are explained below.

3.2.1 Criteria 1: Properties adjacent to flooded roads

There are many areas in Manningham where flooding is generally contained within the road reserve, however, due to the flood mapping methodology, the flood extents generated from the flood model results may encroach slightly onto properties. This criteria identifies where this may occur and removes areas from the proposed planning extent on properties where this occurs, as shown in Figure 3-1. The guidelines adopted for this criteria were:

Removed from SBO: If the flooded area of a property was entirely within 5 m of a roadway and the percentage of the property affected was less than 10%.

Retained as part of SBO: If other areas of the property, not within 5m of the roadway, were flood affected.



Figure 3-1 Trimming of Flood Extent along Roads

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3.2.2 Criteria 2: Isolated ponding

The flood modelling approach used identifies all potential flowpaths in a catchment, including those that may be unrelated to drainage infrastructure. These could be on larger properties, upstream of the drainage network or isolated low points within individual properties. Guidelines were adopted to account for these areas:

Removed from the SBO: If flooded area was less than 500 m², fully disconnected from the flood extent and situated away from the underground drainage network.

Removed from the SBO: Either if:

- a) The flooded area was disconnected from the flood extent, the drainage network, had a maximum flood depth less than 200 mm <u>and</u> the raw (unfiltered) data did not suggest connection to the neighbouring flood extent. These areas were usually isolated local depressions on the land surface
- b) The area was less than 500 m², the maximum flood depth was less than 200 mm and the raw (unfiltered) data did not suggest connection to the neighbouring flood extent.

Removed from the SBO: If the flooded area was determined to be a body of water such as a swimming pool, but not an online dam or similar water storage.

As an example, Figure 3-2 shows the areas that were removed for the Bulleen North Catchment.

3.2.3 Criteria 3: Connecting Disconnected Extents

The flood extents produced by the flood mapping projects have been filtered to remove areas that do not meet specified criteria. In some cases this can lead to a visual disconnection in the planning extent that can appear to show flooded areas with no logical connections. This result can be due to the connected flows being less than 50mm in depth such that the connection is not fully mapped. The proposed planning extents have been amended to provide a more continuous flood extent in these cases.

Connections Made: If the flood extent in the raw (unfiltered) model outputs suggested a connection could occur, and no additional properties are impacted by the change.

As an example, Figure 3-3 shows the areas that were connected for the Bulleen North Area

3.2.4 Criteria 4: Differentiating between LSIO and SBO 1

Areas designated as LSIO and SBO 1 are both Melbourne Water controlled. This delineation is applied at a catchment scale so as not to interchange between each scheme along the same flow path. The guidelines for delineation are:

LSIO: If flooding is present along a mainstream flow path (e.g. creek, river, etc.).

SBO 1: If flooding is present along a Melbourne Water underground asset.

3.2.5 Criteria 5: Differentiating between SBO 2 and SBO 3

Council has adopted a floodplain management approach that enables both council and the wider community to easily understand the floodplain risk associated with each property. It is considered that flow paths where the depth of water is generally greater than 100 mm will require detailed assessment by council officers and these areas are designated as SBO2. All other areas that are managed by council are considered SBO3, and may be developed without a permit, subject to certain conditions being met. The guidelines for delineation are:

SBO 2: if a large proportion of the flow path experienced depths of more than 100 mm.

SBO 3: If the flow path was predominantly less than 100 mm in depth.

The method used to identify these areas is shown in Figure 3-4 for the Bulleen North catchment. Once an area became designated as SBO2, it remained SBO2 until meeting the Melbourne Water controlled area (SBO1/LSIO), even if the flow depths became less than 100 mm. This retains continuity in the SBO shapes and indicates that these downstream flowpaths need greater control as

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they may be more sensitive to change. The divide between these areas will generally be at the property boundary such that any property will be affected by SBO2 or SBO3.

3.2.6 Smoothing

An automatic smoothing process was performed on the proposed planning extents in order to remove unrealistically sharp edges and provide a pleasing visual presentation. Careful consideration was made as to ensure that no additional properties were included in the extent due to the smoothing process.

3.2.7 Other Minor Amendments

In some instances minor amendments to the edges of the proposed planning extents have been made. This has been done where the proposed planning extent only covers a small area of a property and the flood risk on that property was considered to be negligible. This commonly occurs along drainage reserves where there is a minor overlap of the flood extent into private property. The removal of this small overlap aims to avoid unnecessary queries from properties with negligible flood risk.

3.3 Separating MW and Council Flood Extents

The following guidelines were followed when undertaking the final derivation of the proposed planning extents. The split between SBO 2 and SBO 3 has been determined as part of this analysis. The guidelines are:

- The breaks between proposed planning extents should be along land parcel boundaries unless otherwise advised;
- To avoid ambiguity, a parcel is classified as being within Melbourne Water's (MW) flood extent or Council's. This ensures that when a request for a flood level for a particular parcel is made, only one authority provides the level.
- The Melbourne Water Areas (LSIO and SBO 1) occur where the flood extent is directly associated with a MW asset, including where it breaks away from the asset.
- Council controlled areas (SBO 2 and SBO 3) begin at the top of the catchment and end once they
 intersect with the MW flood extent.
- Where the flood extent traverses a group of units, the entire extent will be classified as one authority's flood extent based on the downstream control, unless a suitable other delineation exists.
- For large parcels (schools, reserves, golf courses, etc.), the entire extent will be classified as one
 authority's flood extent. In the event that the parcel is subdivided in the future, both authorities will rearrange the flood extents if necessary.

3.4 Eastern Golf Course – Doncaster

The site of the former Eastern golf course is currently being developed into residential housing. The development process ensures that flood and overland flow paths must be provided by the developer to ensure that no new properties are effected by flooding. As such, it is reasonable to exclude this land from the proposed planning extent.

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Development of the Special Building Overlay Technical Report

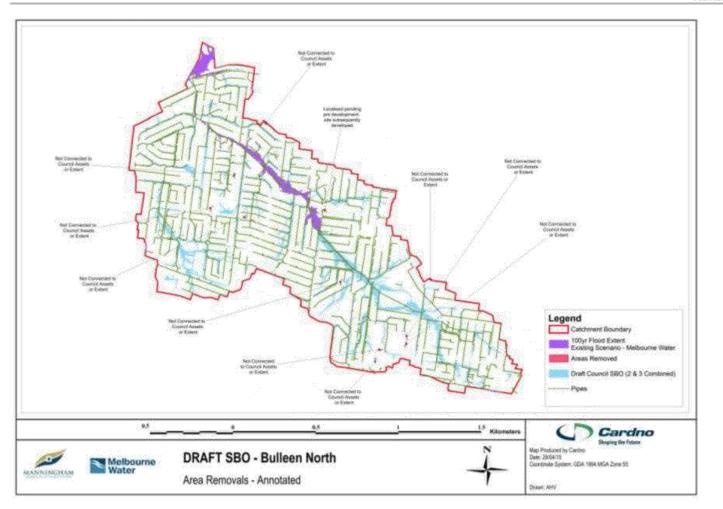


Figure 3-2 SBO Extent Development, Areas Removed

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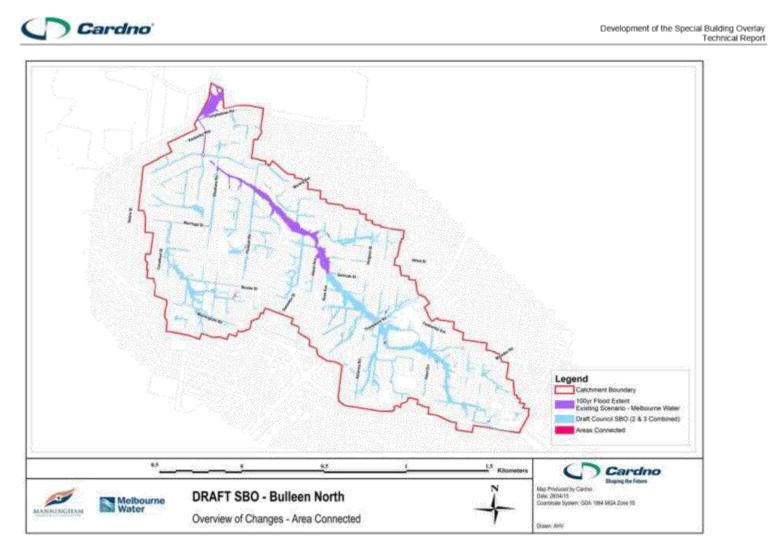


Figure 3-3 SBO Extent Development, Areas Connected

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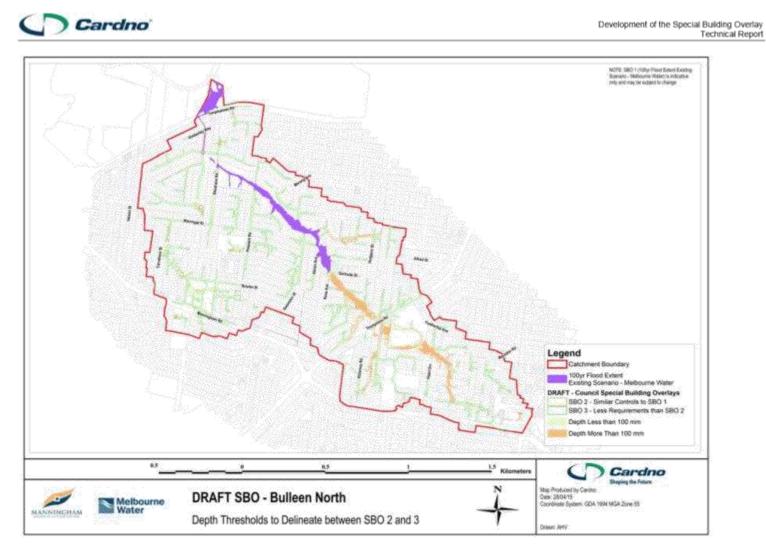


Figure 3-4 SBO Extent Development, SBO2 and SBO3 Delineation

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Development of the Special Building Overlay Technical Report

4 Proposed Amendments to Planning Overlays

4.1 Overlays Supplied

Proposed Land Subject to Inundation and Special Building Overlays for each area have been supplied in both map and GIS form.

The draft overlays are provided in the figures attached for:

- > Bulleen North Catchment
- > Ruffey Creek Catchment
- > Andersons Creek Catchment
- > Mullum Mullum Creek Catchment
- > Koonung Creek Catchment

4.2 Properties included in the Proposed Planning Extents

The number of properties that are included in each of the proposed planning overlays are shown in Table 4-1. This includes consideration of land parcels that have multiple property titles, such as strata developments and shopping centres.

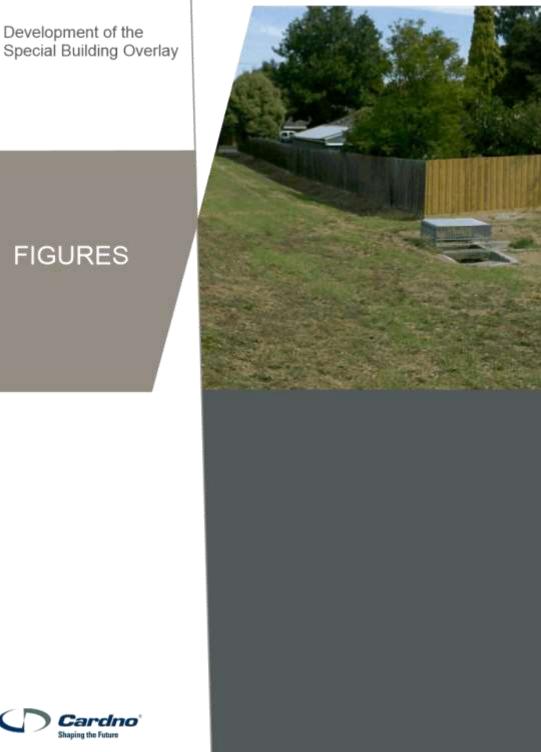
Table 4-1 Properties affected by the flood overlays

		Óverla	у Туре	
Catchment Area	LSIO	SBO 1	SBO 2	SBO 3
Bulleen North	0	46	132	379
Ruffey Creek	96	247	1324	1884
Koonung Creek	24	120	989	1474
Mullum Mullum Creek	247	280	1048	1049
Andersons Creek	123	0	456	192

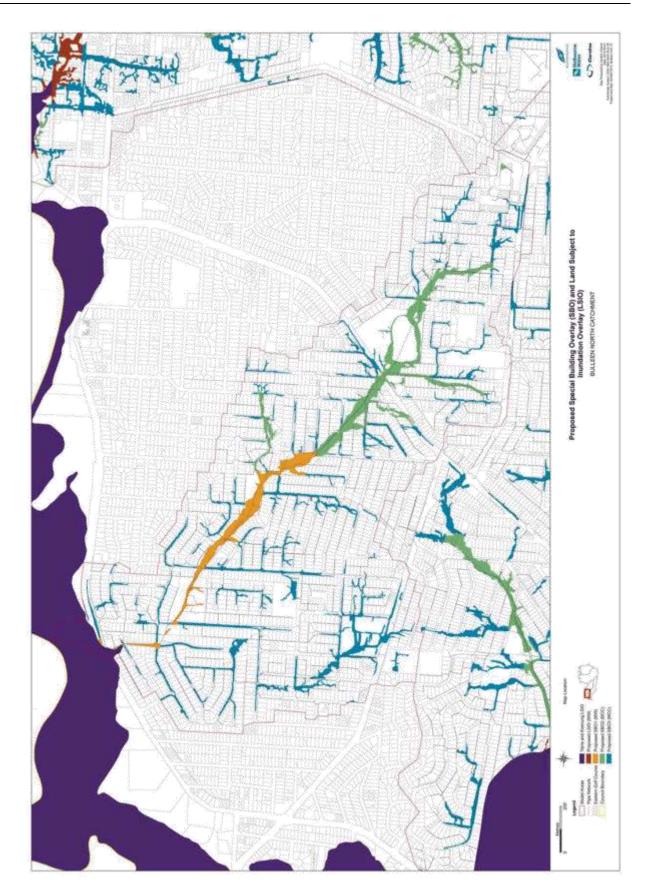
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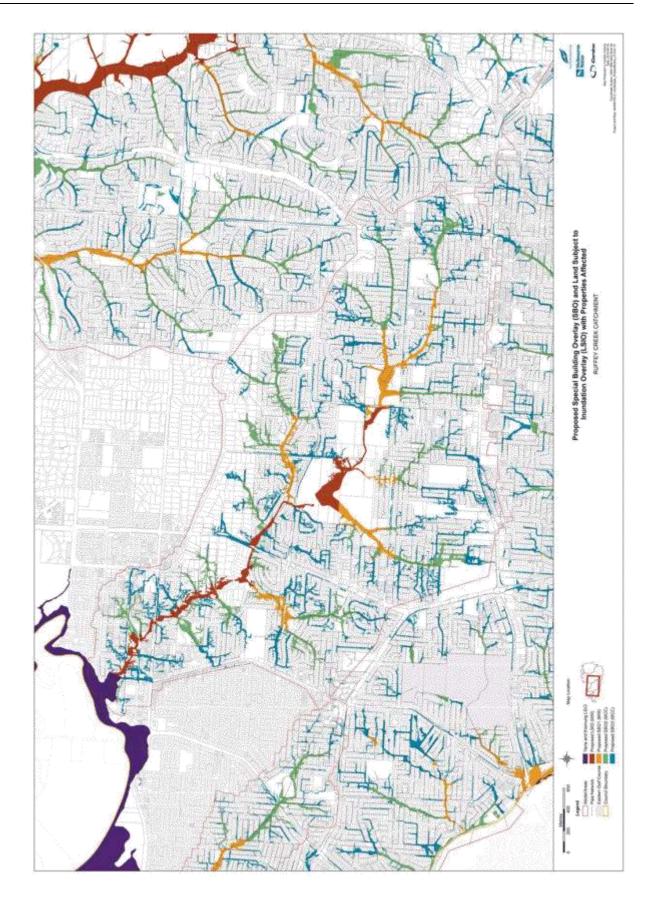
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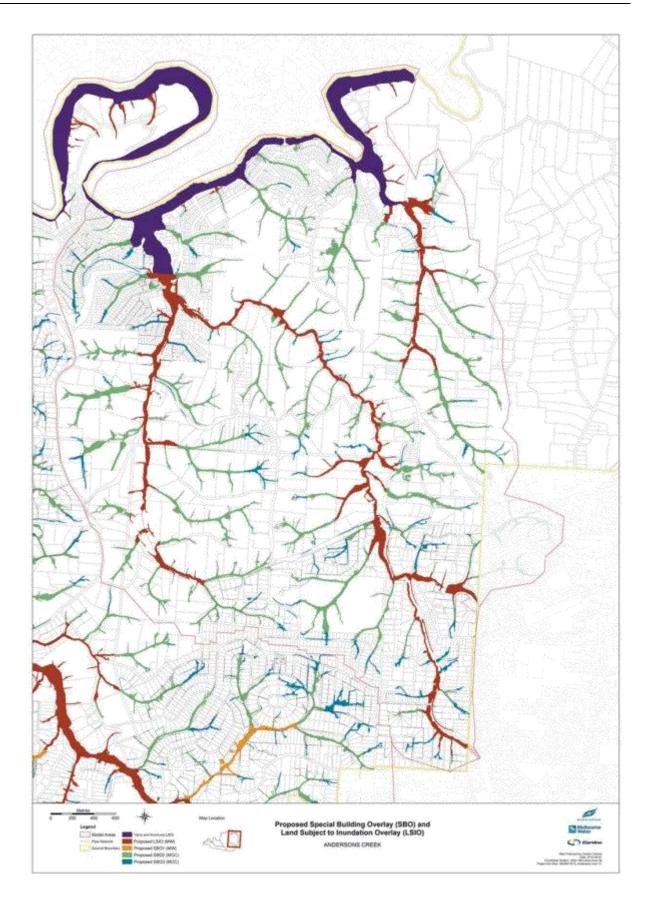
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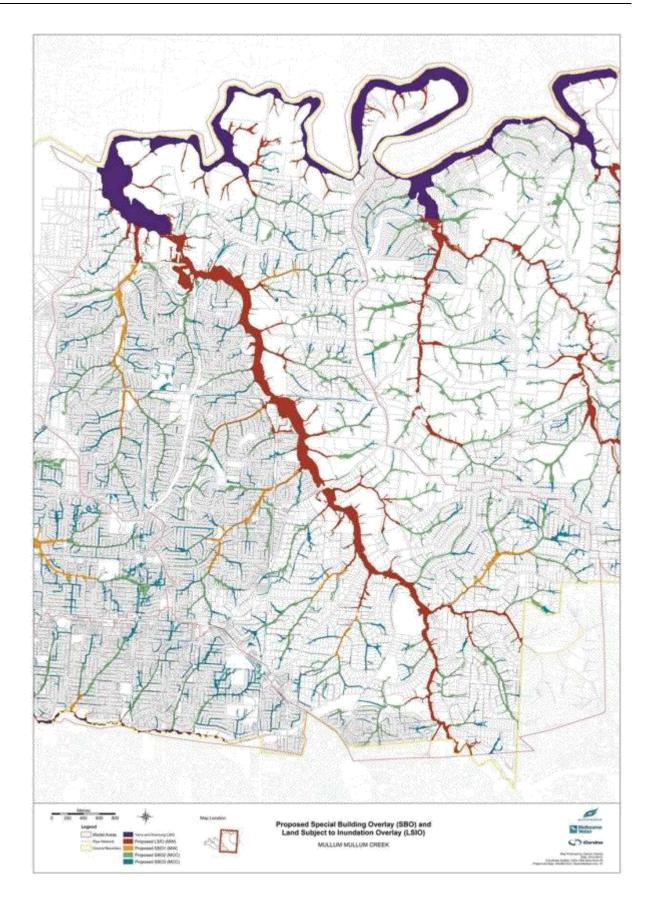


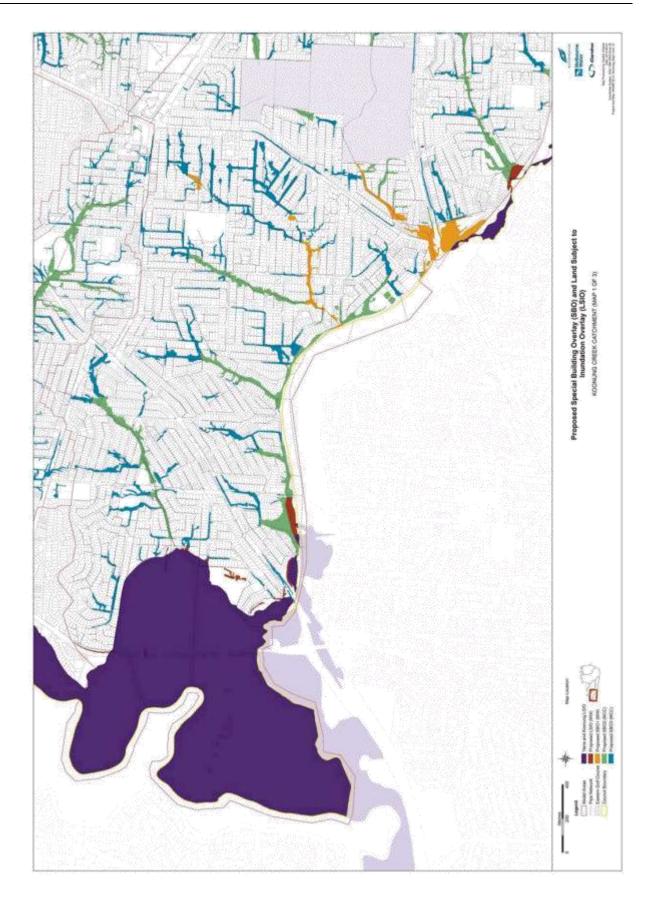


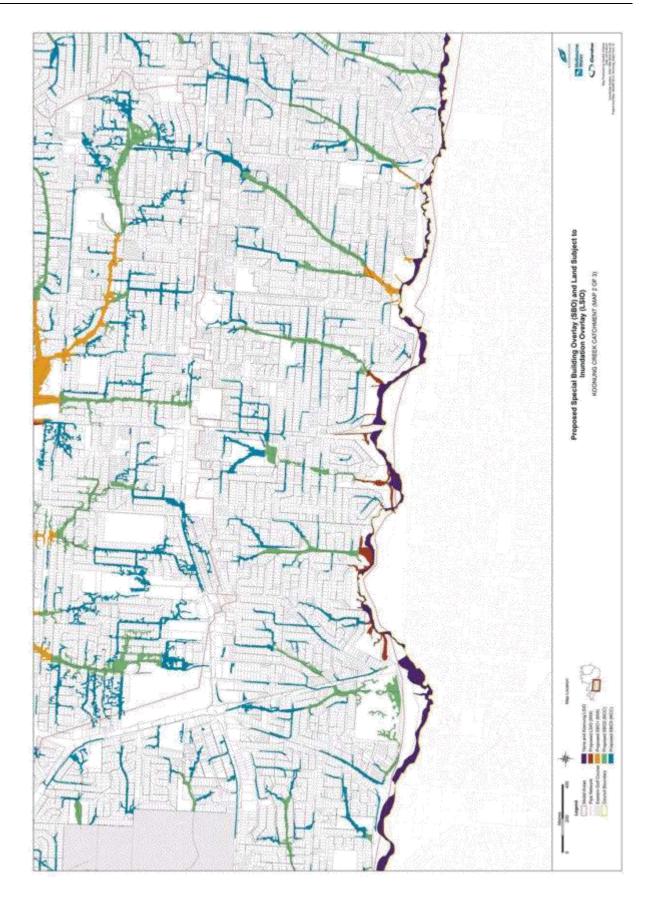


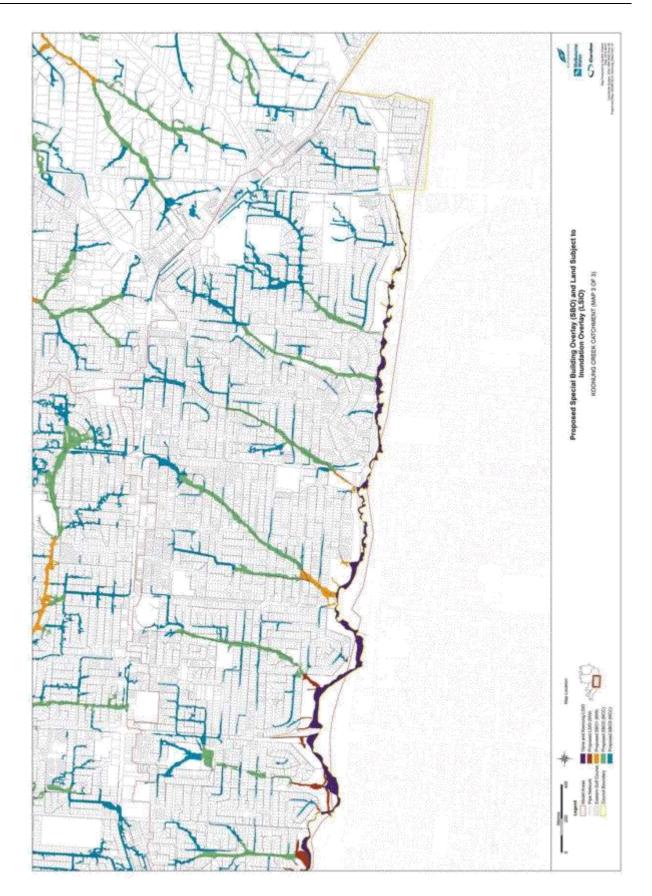












Planning and Environment Act 1987

MANNINGHAM PLANNING SCHEME

AMENDMENT C109

EXPLANATORY REPORT

Who is the planning authority?

This amendment has been prepared by Manningham City Council who is the planning authority for this amendment. Melbourne Water has also assisted in the preparation of the amendment.

The Amendment has been made at the request of Manningham City Council.

Land affected by the Amendment

The Amendment applies to land within five local catchments in the City of Manningham which have been identified by Melbourne Water and Council as being liable to inundation in a 1 in 100 year storm event. The land affected is shown on the proposed planning scheme maps that form part of this amendment.

What the amendment does

The Amendment implements revised flood modelling for the City of Manningham which has been recently undertaken by both Melbourne Water and Council.

Specifically, the Amendment proposes to change the Manningham Planning Scheme to:

- Amend the Municipal Strategic Statement (MSS) at Clause 21.12 Infrastructure and at Clause 21.16 Key References to include reference to:
 - The 'Flood Management Plan for Manningham Council and Melbourne Water June 2011' which provides the strategic framework for establishing the appropriate Planning Scheme overlays to reflect the results of the flood mapping project and;
 - The 'Development of the Special Building Overlay Technical Report for Manningham City Council (Cardno) September 2015', which provides an overview of the methodology used in the flood mapping of the five local catchments.
- Replace the Special Building Overlay (SBO) and Land Subject to Inundation Overlay (LSIO) maps with updated maps to reflect the revised flood extent (land subject to inundation in a 1 in 100 year storm event).
- Replace the existing SBO Schedule at Clause 44.05 with three new schedules to the SBO that distinguish between areas subject to inundation in relation to the 'main' drainage system (Melbourne Water drains) and the 'local' drainage system (Council drains), and establish additional planning permit exemptions for certain areas where Council is the nominated drainage authority.

The schedules are referred to as SBO1, SBO2 and SBO3 and these areas are defined on the planning Scheme (SBO) maps. Each schedule defines what permit exemptions apply to the relevant areas.

Schedule 1 to the Special Building Overlay (SBO1) covers the Melbourne Water drainage system and nominates Melbourne Water as the Determining Referral Authority. All applications for development in this overlay are referred to Melbourne Water to assess and provide the appropriate permit conditions and floor levels.

Schedule 2 to the Special Building Overlay (SBO2) covers the local drainage system and Council is the responsible authority for drainage. Council assesses all applications for development in this overlay and provides appropriate permit conditions and floor levels.

Schedule 3 to the Special Building Overlay (SBO3) is similar to SBO2, except that a planning permit will be required in fewer circumstances – such as when a building or extension is constructed with a floor level below an identified level. All applications for development in this overlay (not exempted from needing a permit) are referred to Council to assess and provide the appropriate permit conditions and floor levels.

The proposed revisions will result in:

- Approximately 200 properties no longer being covered by the SBO and LSIO;
- Approximately 9500 properties being covered by the SBO and LSIO for the first time; and
- Approximately 1000 properties remaining in the SBO and LSIO (noting this may include some revision to the extent of the SBO and LSIO over an individual property).

The SBO and LSIO do not prevent development but rather, through requiring a planning permit, ensure that development is sited and designed to minimise the impact of flooding.

Planning Permit exemptions

Exemptions from requiring a planning permit for specified buildings and works are nominated in the parent clause to the SBO and LSIO. A schedule is not proposed to be included in the LSIO and therefore additional exemptions are not included. SBO 1 and SBO2 also do not propose any additional exemptions beyond those included in the parent clause.

SBO3, however, does include a number of additional exemptions (i.e. where a permit is not required) as follows:

A permit is not required to carry out the following building or works for:

- a new dwelling where the floor level is at least 400 mm above the natural surface level and the sub floor does not obstruct the overland flow path.
- a replacement dwelling where the floor level is at least 400 mm above the natural surface level, the sub floor does not obstruct the overland flow path and the original building footprint remains the same. The responsible authority may require evidence of the existing building envelope.
- a single or multiple dwelling extension where:
 - the sub floor level does not obstruct the overland flow path; and
 - the floor level of the proposed dwelling extension/s is at least 400 mm above the natural surface level.
- an alteration to an existing building where the original building footprint remains the same and floor levels are constructed to at least 400mm above natural surface level.
- a replacement building (not including an out-building) where the floor level is at least 400 mm above the natural surface level, the original building footprint remains the same and the sub floor does not obstruct the overland flow path. The responsible authority may require evidence of the existing building envelope.
- new fencing with at least 25% openings and with the plinth at least 400 mm above the natural surface level.

Strategic assessment of the Amendment

Why is the Amendment required?

The SBO and LSIO are Victoria Planning Provisions (VPPs) which identify land in urban areas that are liable to inundation (flooding) by overland flows from the drainage system

(SBO) and from flooding associated with waterways and open drainage systems (LSIO). SBOs and LSIOs are based upon the extent of overland flooding and flooding associated with waterways that would result from a 1 in 100 year storm event.

The purpose of both the SBO and the LSIO is to ensure that new development is designed to maintain the free passage and temporary storage of floodwaters, to minimise flood damage and not cause any significant rise in flood level or flow velocity that may adversely affect existing properties. It also seeks to protect water quality.

Including the SBO and the LSIO in the planning scheme enables drainage and flooding issues to be addressed early in the development process (through triggering a planning permit for buildings and works) rather than only at the later building permit stage.

Implementation of the SBO and the LSIO can influence the siting of buildings and set appropriate conditions, such as raised floor levels, to address any flood risk to new development.

Melbourne Water and Council (as the authorities responsible for the main and local drainage systems respectively) prepare drainage survey and floodplain data that is then reflected in the Planning Scheme via the SBO and LSIO.

Melbourne Water has recently developed more advanced methods of mapping and modelling to determine land susceptible to flooding. The same mapping and modelling methods have been used by Council to model local drains. Following the recent flood mapping review, it is now known that the current SBO and LSIO do not accurately reflect all properties at risk of overland and mainstream flooding. Council has a responsibility to keep the Planning Scheme up to date, and the SBO and LSIO provides an important and transparent statutory mechanism for indicating properties that are subject to inundation in a severe storm event.

How does the Amendment implement the objectives of planning in Victoria?

The Amendment implements the objectives of planning in Victoria by:

- (a) Providing for the fair, orderly, economic and sustainable use, and development of land.
- (b) Balancing the present and future interests of all Victorians.

The Amendment will implement the objectives of planning in Victoria by providing for planning overlay controls that ensure that floodplain management issues are considered during the planning process.

How does the Amendment address any environmental, social and economic effects?

Environmental Effects

The Amendment will minimise the potential detrimental environmental effects of overland flooding and land affected by flooding associated with waterways and open drainage systems by ensuring drainage impacts are assessed at an early stage of the planning approval process. This will reduce the impact of new buildings and works on the free flow and storage of floodwaters.

Social and Economic Effects

The Amendment will have positive social and economic effects by ensuring that issues relating to drainage are identified at an early stage in the planning approval process.

The Amendment will minimise potential property damage by flooding by requiring a permit for buildings and works in the areas identified as subject to inundation. The controls will assist in minimising the personal, social, community and financial losses that result from flooding. The Amendment will also provide greater awareness and transparency of flood risks and impacts.

Does the Amendment address relevant bushfire risk?

The Amendment is not likely to increase the risk to life, property, community infrastructure and the natural environment from bushfire. The amendment does not alter the areas affected by the Bushfire Management Overlay.

Does the Amendment comply with the requirements of any Minister's Direction applicable to the amendment?

The Amendment is consistent with Minister's Direction No. 9 – Metropolitan Strategy (as amended 30 May 2014) pursuant to Section 12 of the *Planning and Environment Act 1987* – that requires planning authorities to have regard to the Metropolitan Strategy (Plan Melbourne).

Plan Melbourne states that we need to: "value and use Melbourne's rain fall to minimise water price increases, improve the health of waterways and bays, reduce urban flooding, enhance our liveability and amenity, and build Melbourne's expertise in whole-of-water management – a key capability of the 21st century."

Plan Melbourne also has as a direction (Direction 5.5) to 'Integrate whole-of-watercycle management to deliver sustainable and resilient urban development[®] in order to, amongst other things, "minimise the impact of flooding".

By improving and implementing better shape modelling, Council and Melbourne Water can better plan for future flood impacts, contribute to broader plans for whole-of-watercycle management with other governments and agencies and can reduce, through planning permit application, the impacts of flooding within the municipality.

The Amendment is also consistent with the Ministerial Direction on the Form and Content of Planning Schemes under Section 7(5) of the Act.

How does the Amendment support or implement the State Planning Policy Framework and any adopted State policy?

The Amendment has been assessed against the objectives of the State Planning Policy Framework and is considered to be consistent with the principles of State Policy, in particular:

Clause 13.02-1 Floodplain Management which includes strategies to:

- Identify land affected by flooding, including floodway areas, as verified by the relevant floodplain management authority in planning scheme maps. Land affected by flooding is land inundated by the 1 in 100 year flood event or as determined by the floodplain management authority.
- Avoid intensifying the impact of flooding through inappropriately located uses and development.

In relation to these strategies, the Amendment will assist in the protection of life, property and community infrastructure from flood hazard and from the natural flood carrying capacity of rivers, streams and floodways, and will protect the flood storage function of floodplains and waterways.

State Planning Policy places a clear onus on Responsible Authorities to ensure that flooding and drainage information is clearly shown in planning schemes and taken into consideration as part of the planning process. The proposed amendment will assist in the achievement of this intent.

How does the Amendment support or implement the Local Planning Policy Framework, and specifically the Municipal Strategic Statement?

The Amendment supports and implements the Local Planning Policy Framework by implementing a range of objectives and strategies contained in Clause 21 – Municipal Strategic Statement relating to floodplain management, monitoring stormwater quality and ensuring that use and development of land does not affect the role of land as an active floodway.

Does the Amendment make proper use of the Victoria Planning Provisions?

The VPPs include a number of overlay controls for identifying areas subject to inundation, including the SBO and LSIO which are applied to the overland flow paths of natural drainage depressions that have been developed for other uses and land affected by flooding associated with waterways and open drainage systems.

The introduction of the SBO and the LSIO are the best VPP tools to ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or velocity.

How does the Amendment address the views of any relevant agency?

The Amendment has been prepared by Council and Melbourne Water and reflects updated flood mapping information which has been prepared and provided by Council and Melbourne Water.

Does the Amendment address relevant requirements of the Transport Integration Act 2010?

The Amendment addresses the relevant requirements of the Transport Integration Act 2010.

The Amendment will not have any significant impact on the transport system, as defined by Section 3 of the *Transport Integration Act 2010*, as it would not result in any increase in demand on the transport system.

Resource and administrative costs

What impact will the new planning provisions have on the resource and administrative costs of the responsible authority?

By accurately identifying land that is subject to inundation, the Amendment will benefit Council and the community by enabling more accurate, timely and consistent advice to be provided by Council and Melbourne Water as the responsible drainage authorities.

The Amendment is not anticipated to result in any significant increase in the number of planning permit applications, but rather be an additional consideration under permits already required under other provisions in the scheme. Accordingly, the Amendment will not result in any significant resource implications for Council as the responsible authority.

Where you may inspect this Amendment

The Amendment is available for public inspection, free of charge at the following places:

- during office hours, at the office of the planning authority, Manningham City Council, 699 Doncaster Road, Doncaster
- at the Manningham website at www.yoursaymanningham.com.au/Amendment-C109
- at the Doncaster, The Pines, Bulleen, Warrandyte branch libraries and the Box Hill branch library
- at the Department of Environment, Water, Land and Planning website: www.dtpli.vic.gov.au/publicinspection.

Submissions

Any person who may be affected by the Amendment may make a submission to the planning authority.

Submissions about the Amendment must be received by 24 December 2015.

A submission must be sent to the:

Manager Economic and Environmental Planning Manningham City Council PO Box 1 DONCASTER VIC 3108

or submitted online at www.yoursaymanningham.com.au/Amendment-C109

Panel hearing dates

In accordance with clause 4(2) of Ministerial Direction No.15 the following panel hearing dates have been set for this amendment:

- · Directions hearing: To commence in the week beginning 21 March 2016
- Panel hearing: To commence in the week beginning 18 April 2016

Planning and Environment Act 1987

MANNINGHAM PLANNING SCHEME

AMENDMENT C109

INSTRUCTION SHEET

The planning authority for this amendment is the City of Manningham.

The Manningham Planning Scheme is amended as follows:

Planning Scheme Maps

The Planning Scheme Maps are amended by a total of 33 attached map sheets.

Overlay Maps

- Amend Planning Scheme Map Nos 1SBO, 2SBO, 3SBO, 6SBO, 7SBO, 8SBO,9 SBO and 11SBO in the manner shown on the attached maps marked "Manningham Planning Scheme, Amendment C109".
- Amend Planning Scheme Map Nos 1LSIO, 2LSIO, 3LSIO, 4LSIO, 6LSIO, 7LSIO, 8LSIO, 9LSIO and 11LSIO in the manner shown on the attached maps marked "Manningham Planning Scheme, Amendment C109".
- Insert new Planning Scheme Map No 4SBO in the manner shown on the attached map marked ^oManningham Planning Scheme, Amendment C109^e.

Planning Scheme Ordinance

The Planning Scheme Ordinance is amended as follows:

- In Local Planning Policy Framework replace Clause 21.12 with a new Clause 21.12 in the form of the attached document.
- In Local Planning Policy Framework replace Clause 22.16 with a new Clause 22.16 in the form of the attached document.
- In Overlays Clause 44.05, delete Schedule to the Special Building Overlay.
- In Overlays Clause 44.05 Special Building Overlay, insert a new Schedule 1 in the form of the attached document.
- In Overlays Clause 44.05 Special Building Overlay, insert a new Schedule 2 in the form of the attached document.
- In Overlays Clause 44.05 Special Building Overlay, insert a new Schedule 3 in the form of the attached document.
- In General Provisions Clause 61.03, replace the schedule with a new Schedule in the form of the attached document.

End of document

21/02/2013 C54Proposed C108

SCHEDULE TO CLAUSE 61.03

Maps comprising part of this scheme:

- 1, 1DDO, 1ESO1, 1ESO, 1HO, 1LSIO, 1PAO, 1SBO, 1VPO
- 2, 2DDO, 2EAO, 2ESO1, 2ESO, 2HO, 2LSIO, 2PAO, 2SBO, 2SLO1, 2SLO5, 2SLO6, 2VPO
- 3, 3DDO, 3ESO1, 3ESO, 3HO, 3LSIO, 3PAO, 3SBO, 3WMO, 3SLO1, 3SLO3, 3SLO6
- 4, 4DDO, 4EMO, 4ESO1, 4ESO, 4HO, 4LSIO, 4PAO, 4SBO, 4WMO, 4PAO
- 5, 5EMO, 5ESO, 5HO, 5LSIO, 5WMO, 5SLO1, 5VPO
- 6, 6DDO, 6DPO, 6EAO, 6ESO1, 6ESO, 6HO, 6LSIO, 6SBO, 6SLO5, 6VPO
- 7, 7DCPO, 7DDO, 7ESO, 7DPO, 7EAO, 7HO, 7IPO, 7LSIO, 7PAO, 7SBO, 7SLO5, 7SLO7, 7VPO
- 8, 8DDO, 8EAO, 8ESO, 8HO, 8LSIO, 8PAO, 8SBO, 8WMO, 8SLO1, 8SLO5, 8SLO6, 8SLO7, 8SLO8, 8VPO
- 9, 9DDO, 9EMO, 9ESO1, 9ESO, 9HO, 9LSIO, 9SBO, 9WMO, 9PAO, 9SLO1, 9SLO6, 9VPO
- 10, 10EMO, 10ESO, 10HO, 10LSIO, 10WMO
- 11, 11DDO, 11ESO, 11HO, 11LSIO, 11SBO, 11SLO1, 11SLO6

GENERAL PROVISIONS - CLAUSE 61.03 - SCHEDULE

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21.12 17/05/2009 VC59

INFRASTRUCTURE

21.12-1 02/10/2008 C52

Public transport

Overview

Over reliance on car based transport is an environmental and social concern. The municipality is currently serviced by a single mode of public transport (bus). There are opportunities to improve this through increasing the frequency of bus services and extending the hours of operation. In addition, there are opportunities to extend tramlines into the municipality. There is a need to encourage the use of existing public transport, which may include Park and Ride facilities. The State Government has a policy of achieving 20% of all travel being by public transport by 2020 (DOI 2004).

Refer to Infrastructure Framework Plan 6 for key infrastructure features and opportunities.

Movement network

There is a hierarchy of roads in the municipality including declared arterial roads, Council arterial roads, collector roads and local streets. There are deficiencies with the standards of some of the declared arterial roads and Council arterial roads, which need to be upgraded.

Doncaster Road is the main east-west arterial road and a major bus route in the municipality. Council will promote initiatives that improve the public transport function of Doncaster Road and seek to improve pedestrian amenity, visual character and its local identity by changing its appearance to a treed boulevard.

There are a number of major existing on-road and off-road routes throughout the municipality, which make up the existing Manningham bicycle network and are used by commuter and recreational cyclists. There is also a network of linear parks which provide additional recreational opportunities including walking and horse trails.

Council will continue to identify and upgrade the existing road, bicycle and pedestrian networks throughout the municipality. This will take into account social, economic and environmental values whilst recognising safety, traffic needs, improved access and mobility.

Services

Council is responsible for providing drainage for the local street network and local catchment areas. Council encourages developments to design and upgrade drainage infrastructure to reduce the occurrence of inundation and flooding, improve safety and enhance the amenity of the municipality. An integrated approach is sought to the management of stormwater and the progressive upgrading of stormwater and drainage infrastructure assets. Council will investigate the introduction of drainage contributions focussing on areas around activity centres, and will continue to identify land which has drainage and flood constraints.

The protection and enhancement of Manningham's waterways and catchments is a key issue. Manningham lacks reticulated sewerage systems in its low-density residential and green wedge areas, which has a significant impact on these waterways. Council will continue to encourage the provision of reticulated sewerage to unsewered areas and/or innovative solutions to reuse wastewater.

Council requires the undergrounding of services to all new development and subdivisions. With regard to the provision of new powerlines, only those powerlines of up to 66kV will be required to be located underground. The undergrounding of existing powerlines is also

MUNICIPAL STRATEGIC STATEMENT - CLAUSE 21.12

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encouraged particularly for historic and environmentally sensitive areas, where the opportunity arises.

Telecommunications and satellite dishes

Telecommunication facilities and satellite dishes often have visual and environmental impacts, including issues relating to amenity, visual intrusion on the streetscape or landscape and a lack of compatibility with surrounding land uses.

21.12-2 17/09/2009 VC59

Public transport

Key issues

- Lack of public transport services in some areas.
- Infrequency and limited hours of public transport services.
- The need to provide alternative public transport options.
- Connectivity between modes of transport.
- The need to encourage greater use of an improved public transport network.

Objectives

- To increase the usage of public transport.
- To improve the existing bus network with regard to frequency, connectivity and accessibility.
- To improve bus infrastructure including upgrading bus stops and interchanges.
- To encourage the provision of a second form of public transport (tramline).

Strategies

Strategies to achieve these objectives include:

- Facilitate the location and development of transport hubs at or adjoining activity centres.
- Facilitate the provision of bus shelters at high use public transport sites.
- Encourage creation of 'park and ride' and 'bike and ride' facilities and public transport linkages.

Implementation

These strategies will be implemented by:

Zones and overlays

Policy and exercise of discretion

- Implementing the Manningham Integrated Transport Strategy (2003).
- Implementing the Manningham Bicycle Strategy (2001).

MUNICIPAL STRATEGIC STATEMENT - CLAUSE 21.12

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Further strategic work

Reviewing the Manningham Bicycle Strategy (2001).

Other actions

- Continuing to advocate for improved public transport services and facilities within the municipality.
- Investigate appropriate locations for new 'park and ride' and 'bike and ride' facilities.

21.12-3 Roads

17/05/2009 VC69

Key issues

- · The continued upgrade of the road, bicycle and pedestrian networks.
- Balancing the environmental values of roadside vegetation with safety needs.
- The need to improve the streetscape and amenity along Doncaster Road and other main roads.

Objectives

- To ensure that road construction standards and new vehicle crossings achieve a balance between the role of providing safe and efficient passage of vehicles, bicycles and pedestrians while taking into account the natural and cultural heritage values of roadsides and the area's character.
- To maximise opportunities along Doncaster Road and other main roads to facilitate
 pedestrian and cyclist activity and provide higher levels of user amenity.
- To ensure that a comprehensive network of paths is available which facilitates safe and accessible bicycle and pedestrian movement.

Strategies

Strategies to achieve these objectives include:

- Require that design and construction standards cater for safe, efficient and effective vehicle movement and servicing needs.
- Require that design and construction standards protect remnant vegetation using techniques such as site assessment prior to any roadworks, the development of action/management plans to ensure protection of indigenous vegetation and the use of suitable indigenous plant species.
- Promote cycling and walking opportunities by providing safe bicycle routes and expanding the bicycle network, and providing pedestrian trails to improve accessibility to local and regional commercial, community and recreational facilities.
- Provide opportunities to enhance the amenity of Doncaster Road and other main roads.

Implementation

These strategies will be implemented by:

MUNICIPAL STRATEGIC STATEMENT - CLAUSE 21.12

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Zones and overlays

- Applying the Road Zone 1 for Category 1 roads.
- Applying the Road Zone 2 for Category 2 roads.

Policy and exercise of discretion

- Implementing the Public Open Space Strategy (2004).
- Implementing the Roadside Environmental Management Strategy (2004).
- Implementing the Manningham Bicycle Strategy (2001).
- Implementing the Manningham Integrated Transport Strategy (2003).
- Implementing the Doncaster Hill Pedestrian and Cycle Plan (2003).
- Implementing the Doncaster Hill Developer Contribution Plan (2004).

Further strategic work

- Reviewing the Design and Development Overlay for Doncaster Road (DDO1).
- · Reviewing the Manningham Bicycle Strategy (2001).

Other actions

- Consider recommendations from the North East Integrated Transport Study.
- Implementing the Arterial Roads Improvement Strategy (2004)
- Implementing the Road Safety Strategy (2005).

21.12-4 Services

17/09/200

Proposed C109

Key issues

- The introduction of water capture, reuse and recycling within developments.
- The existence of unsewered land.
- Low and/or declining water quality.
- Drainage capacity and the need to prevent loss of life and damage to property.
- Visual impact of services.
- Unsuitability of land (lot size, soil type, etc) to absorb wastewater.

Objectives

- To encourage connection to sewer where available and within reasonable proximity.
- · To integrate the capture and re-use of water within developments.
- To ensure that drainage infrastructure is designed and upgraded to provide a safe, and efficient system.

MUNICIPAL STRATEGIC STATEMENT - CLAUSE 21.12

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- To ensure that the use and development of land maintains the flood flow characteristics of the Yarra River and its tributaries.
- To encourage the use of recycled water.
- To ensure that appropriate management practice is applied to the urban stormwater system.
- To ensure the undergrounding of services to all new development and subdivisions.
- · To ensure that all new development and subdivision connect to mains water.
- To ensure that all new development and subdivision can treat and retain wastewater on site.

Strategies

Strategies to achieve these objectives include:

- Regularly monitor reports on water quality in natural waterways in Manningham.
- Regularly monitoring and reviewing stormwater quality.
- Regulate the off-site flow of water by installing and maintaining on-site detention systems and consider inclusion of a capture and reuse function within these systems.
- Ensure that the use and development of land does not affect the role of land as an active floodway.
- Promote best practice stormwater management and reuse techniques.
- Require subdivision applications to include a designated effluent disposal envelope on each lot where appropriate..
- Require applications for development and subdivision to include the results of land capability assessments where appropriate, which demonstrate that the proposal is capable of treating and containing wastewater on site.
- Encourage applicants to create natural biological filtration systems in areas of high sediment and/or nutrient run-off, including roadside developments and subdivisions.
- Require development proposals that increase water runoff from a site, to detain stormwater on site or conduct or assist with other works which are necessary to maintain or increase drainage capacity, where appropriate.
- Maintain the flood flow characteristic of the Yarra River and its tributaries.
- Require all new development, including subdivision to provide underground services.
- Require all new development, including subdivision to be connected to mains water.

Implementation

These strategies will be implemented by:

Zones and overlays

- Applying the Urban Floodway Zone.
- Applying the Special Building Overlay.
- Applying the Land Subject to Inundation Overlay.

Policy and exercise of discretion

MUNICIPAL STRATEGIC STATEMENT - CLAUSE 21.12

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Further strategic work

- Investigating introduction of a Developer Contributions Plan for the upgrade of drainage infrastructure.
- Identifying land with drainage and flood constraints in the planning scheme.
- · Developing Ecologically Sustainable Development Guidelines for the municipality.
- Investigating the appropriateness of a Local Planning Policy to guide ecologically sustainable development, for the municipality.

Other actions

- Continuing to liaise with Melbourne Water to co-operatively manage the stormwater and natural creek systems in the municipality.
- Continuing to monitor and review the operation of septic tank systems.
- Continuing to lobby Yarra Valley Water with regard to the sewer backlog program and the use of local alternative treatment technologies.
- Promoting the use of new technology in the treatment of wastewater for re-use.
- Implementing the Manningham Drainage Strategy 2004-2014 (2004).
- Implementing the Manningham Stormwater Management Plan (2001).
- Implementing the Domestic Wastewater Management Plan (2002).
- Implementing Manningham's Water15 Sustainable Water Management Plan (2005).
- Implementing Manningham Flood Management Plan for Manningham Council and Melbourne Water (2011)

21.12-5 02/10/2008 052

Telecommunications and satellite dishes

Key issues

Visual and environmental impact of telecommunication facilities and satellite dishes.

Objectives

- To ensure that any future telecommunications facilities and satellite dishes are located to minimise impacts on the environmental values of land
- To ensure that any future telecommunications facilities and satellite dishes are sited to minimise visual impacts on adjoining and nearby land.
- To ensure that telecommunication cables are situated underground.

Strategies

Strategies to achieve these objectives include:

- Encourage telecommunications infrastructure and satellite dishes, and arrangements for associated vehicle access and maintenance, in locations, which minimise environmental and visual impacts.
- Encourage the sharing of existing infrastructure for telecommunication facilities including the use of existing infrastructure such as roof-top locations or integrated with existing buildings.

MUNICIPAL STRATEGIC STATEMENT - CLAUSE 21.12

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- Require the application of low maintenance, non-reflective finishes and appropriate colour schemes to ensure telecommunication facilities and satellite dishes blend in with the surrounds.
- Require the undergrounding of new telecommunication cables.
- Require underground conduits to be installed with sufficient capacity to enable sharing
 of the conduit by other telecommunication carriers.

Implementation

These strategies will be implemented by:

Zones and overlays

Policy and exercise of discretion

Further strategic work

Other actions

- Preparing and continually updating a map showing existing telecommunication facilities to assist in the consideration of opportunities for co-location.
- Encouraging the design and location of low impact facilities to minimise visual impact.

21.12-6 02/10/2008 052

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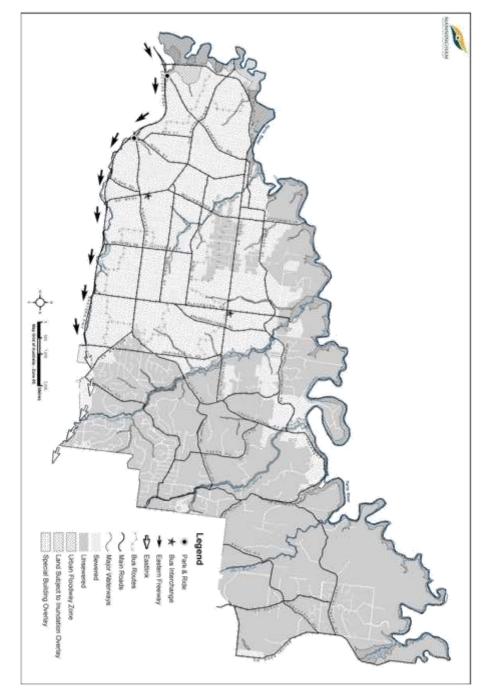
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Proposed C109 MANNINGHAM PLANNING SCHEME

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Planning and Environment Act 1987

MANNINGHAM PLANNING SCHEME

Notice of the Preparation of an Amendment

Amendment C109

Manningham City Council has prepared Amendment C109 to the Manningham Planning Scheme.

The Amendment affects land throughout the City of Manningham that has been identified by the City of Manningham and Melbourne Water as being liable to inundation (flooding) in a 1 in 100 year storm event. The land affected is shown on the proposed planning scheme maps that form part of this amendment.

The Amendment proposes to amend the Manningham Planning Scheme by replacing the existing Land Subject to Inundation Overlay (LSIO) and Special Building Overlay (SBO) with a new LSIO and three new Schedules to the SBO that distinguish between areas subject to inundation in relation to the 'main' drainage system (SBO1 – Melbourne Water drains) and the local drainage system (SBO2 and SBO3 – Council drains). SBO3 establishes additional planning permit exemptions for certain areas subject to inundation in relation to the 'local' drainage system.

More specifically the Amendment proposes to:

- Amend the Municipal Strategic Statement at Clauses 21.12 and 21.16 to include reference to the 'Flood Management Plan for Manningham Council and Melbourne Water June 2011' and the 'Development of the Special Building Overlay - Technical Report for Manningham City Council (Cardno) September 2015'.
- Replace the existing schedule to the SBO at Clause 44.05, with new Schedules 1, 2 and 3.
- Update the Special Building Overlay (SBO) and Land Subject to Inundation Overlay (LSIO) maps to reflect the revised flood extent (land subject to inundation in a 1 in 100 year storm event) and to delineate areas to which SBO1, SBO2 and SBO3 apply.

You may inspect the Amendment, any documents that support the Amendment and the Explanatory Report about the Amendment, free of charge, at the following locations:

- during office hours, at the office of the planning authority, Manningham City Council, 699 Doncaster Road, Doncaster
- at the Manningham website at <u>www.yoursaymanningham.com.au/Amendment-C109</u>
- at the Doncaster, The Pines, Bulleen, Warrandyte branch libraries and the Box Hill branch library
- at the Department of Environment, Land, Water and Planning website: <u>www.dtpli.vic.gov.au/publicinspection</u>.

Any person who may be affected by the Amendment may make a submission to the planning authority about the Amendment. Submissions must be made in writing giving the submitter's name and contact address, clearly stating the grounds on which the Amendment is supported or opposed and indicating what changes (if any) the submitter wishes to make.

Name and contact details of submitters are required for Council to consider submissions and to notify such persons of the opportunity to attend Council meetings and any public hearing held to consider submissions. The closing date for submissions is 24 December 2015.

A submission must be sent to the Manager Economic and Environmental Planning Manningham City Council PO Box 1 DONCASTER VIC 3108

or submitted online at www.yoursaymanningham.com.au/Amendment-C109

The planning authority must make a copy of every submission available at its office for any person to inspect free of charge until the end of the two months after the amendment comes into operation or lapses.

JOE CARBONE Chief Executive Officer

/20 Proposed C109	SCHED	ULE	1 TO	THE	SPECIAL	BUILDING OVERLAY
0.140						

Shown on the planning scheme map as SBO1

MELBOURNE WATER MAIN DRAINS

1.0 Permit requirement

---!---!20--Proposed C109

2.0 **Referral of Applications**

None specified.

--{--{20--Proposed C109

An application must be referred to Melbourne Water in accordance with Section 55 of the act unless in the opinion of the responsible authority, the proposal satisfies requirements or conditions previously agreed to in writing between the responsible authority and the floodplain management authority.

SPECIAL BUILDING OVERLAY - SCHEDULE 1

PAGE 1 OF 1

i/20 Proposed C109	SCHE	DULE	2 TO	THE	SPECIAL	BUILDING OVERLAY
÷1144						

Shown on the planning scheme map as ${\bf SBO2}$

MANNINGHAM COUNCIL DRAINS

1.0 Permit requirement

--{--{\$20--Proposed C109

2.0 Referral of applications

None specified.

--{--{20--Proposed C109

· No referral authority specified.

 An application will be considered by the City of Manningham as the authority responsible for local drains.

SPECIAL BUILDING OVERLAY - SCHEDULE 2

PAGE 1 OF 1

MANNINGHAM PLANNING SCHEME

DD:MMIYYYYY SCHEDULE 3 TO THE SPECIAL BUILDING OVERLAY Proposed C100

Shown on the planning scheme map as SBO3

MANNINGHAM COUNCIL DRAINS

Permit requirement

1.0 DD/MM/YYYY Proposed C109

A permit is not required to construct or carry out the following buildings or works:

- a new dwelling where the floor level is at least 400 mm above the natural surface level and the sub floor does not obstruct the overland flow path.
- a replacement dwelling where the floor level is at least 400 mm above the natural surface level, the sub floor does not obstruct the overland flow path and the original building footprint remains the same. The responsible authority may require evidence of the existing building envelope.
- a single or multiple dwelling extension where:
 - the sub floor level does not obstruct the overland flow path; and
 - the floor level of the proposed dwelling extension/s is at least 400 mm above the natural surface level.
- an alteration to an existing building where the original building footprint remains the same and floor levels are constructed to at least 400mm above natural surface level.
- a replacement building (not including an out-building) where the floor level is at least 400
 mm above the natural surface level, the original building footprint remains the same and
 the sub floor does not obstruct the overland flow path. The responsible authority may
 require evidence of the existing building envelope.
- new fencing with at least 25% openings and with the plinth at least 400 mm above the natural surface level.

2.0 Referral of applications

- No referral authority specified
- An application will be considered by the City of Manningham as the authority responsible for local drains.

SPECIAL BUILDING OVERLAY - SCHEDULE 3

PAGE 1 OF 1

ATTACHMENT 4

AMENDMENT C109

Review of the Land subject to Inundation Overlay and Special Building Overlay

CONSULTATION SUMMARY

PART 1: SUMMARY OF CONSULTATION PROCESS

Overview

Timeframe

- The Amendment was on exhibition for 6 weeks from 12 November to 24 December 2015. The minimum statutory requirement is one month, however, additional days were provided because of the complexity of the Amendment.
- During and immediately after the formal exhibition period, extensions of time were granted to any resident seeking an extension of time.

Notification given

- A total of 10,064 letters were sent notifying owners of the Amendment.
- Letters dated 9 November 2015 were customised to inform people how the Amendment affects their property.
- The letters included the formal Amendment Notice, the Explanatory Report and a double sided colour flyer giving basic information about the Amendment.
- Letters were also sent to Prescribed Ministers on 9 November 2015 informing them
 of the Amendment.
- A notice appeared in the Manningham Leader on 9 November 2015 and the Government Gazette on 12 November 2015 and again on the 26 November 2015.
- An article was included in the November edition of Manningham Matters that highlighted the Amendment for affected non-owner occupiers.

Information made available

- An interactive web tool was provided through a link on Council's web site, allowing
 people to search for their address and find out how their property is affected.
- Council's web site (yoursaymanningham.com.au/Amendment–C109) made available

 the Amendment documentation, Fact Sheet, Frequently Asked Questions, background material and a link to a submission form.
- Melbourne Water's web site was linked to Council's website and interactive web tool.
- Information folders were displayed at all Council libraries and the Council office.

Information sessions and meetings

 Six information sessions were held during the weeks beginning 17 November through to 9 December 2015. People were requested to pre-book for these sessions so that specific information about their property could be provided. 150 people attended these sessions.

In addition, all owners and/or interested parties were able to meet with Council
officers if they were not able to attend one of the information sessions.

How people responded to notification

- The dedicated Council webpage (*yoursaymanningham.com.au/Amendment-C109*) received approx. 4220 hits between when the webpage went live and the closing date for submissions (24 December 2015).
- The interactive map received 2,788 hits during the same period.
- Council officers were available for counter enquiries during the exhibition period and beyond. Approximately 120 people came to the counter during the exhibition period inquiring about the Amendment.
- Council officers also fielded a large number of telephone enquiries during the exhibition period with approx. 1000 phone calls received within the exhibition period.
- 360 submissions were received during the exhibition period. 198 submissions were
 received after the exhibition period taking the total number of submissions, at the
 time of writing this report to 558 (Less 6 submissions that have been withdrawn).

Subsequent communication actions undertaken post exhibition at the request of Council

- · All submitters received an acknowledgement letter in relation to their submission.
- At the request of Council, a follow up letter to all submitters was sent on 12 May 2016, explaining the process for the review of submissions and the type of information that will be considered in the review. This correspondence also offered the opportunity for addendums to original submissions to be submitted.
- In addition, at the request of Council, letters were also sent on 23 May 2016, to those properties affected by an identified communication ambiguity (58 private properties and 50 government properties), clarifying that the existing LSIO along the Yarra River will continue to apply in addition to the proposed controls. These property owners were also given an opportunity to lodge a submission or to submit addenda to existing submissions over a period of six weeks.
- The web based communication tool was also amended to include the existing LSIO in the 'Proposed Overlay' view.
- To the wider community, a separate dedicated advertisement was included in the Manningham Leader in the week beginning 16 May 2016 advising that Council officers are still considering submissions in relation to Amendment C109 and that further updates are being provided on the Your Say Manningham webpage.

Subsequent communication actions undertaken post February 2017 Council meeting at the request of Council

- Council considered submissions to Amendment C109 to the Manningham Planning Scheme, at its meeting of 21 February 2017, Council resolved "that this matter be deferred for three months to enable further consultation with councillors".
- In response to that resolution:
 - Council officers wrote to all of the then 523 submitters on 1 March February 2017, (the number of submitters at that time) advising them of the Council resolution and inviting them to make an appointment for a one on one information session to discuss the officers' response to their submissions;
 - Your Say Manningham consultation portal and the FAQS (frequently asked questions) were updated.
- Council officers met with 220 submitters at one on one meetings over 16 disparate days, including 6 evening sessions and two Saturday sessions.
- The information sessions generated a significant amount of follow up review work to be undertaken by Council officers and the consultants. This work included investigating new issues and information raised through the meetings in addition to the original submissions, further reviewing of the flood shape based on topographical information submitted by several submitters and responding to requests for further detailed information from the consultant.

Submitters meetings

- Three submitter's meetings are being held in September 2017, before the September Council meeting where submissions will be considered by Council.
- These meetings will enable submitters the opportunity to raise their concerns with Council.
- The submitters have been invited to these meetings based on the controls affecting their individual properties.

Quick Stats

No. of letters initially sent	10,064
Webpage hits	4,220
Interactive map hits	2,788
Phone calls	1,000
Counter enquiries	120
Attendees at Info Sessions November 2015	150
Attendees at March 2017 information 'one on one' sessions	220
No. of submissions	558

PART 2: SUMMARY OF SUBMISSIONS

Effect of the Amendment

Individual properties are affected in one of the following ways by the Amendment:

- Existing SBO removed
- Existing LSIO removed
- Retain existing SBO but change to either SBO1, SBO2 or SBO3
- Added to SBO for the first time and apply either the SBO1, SBO2 or SBO3
 - Added to the LSIO for the first time
 - Retain existing LSIO but change the existing floodshape
 - Other e.g. dual controls apply

Location of submissions

- 13 % of submissions related to properties in Melbourne Water's drainage areas (LSIO and SBO1)
- 38% of submissions related to properties in Council's drainage areas (SBO2)
- 44% of submissions related to properties in Council's drainage areas (SBO3)
- 5% of submissions related to properties with dual controls.

The submissions were also located in one of the 5 catchment areas – see attached catchment map as follows:

- 41% of submissions were from Ruffey Creek catchment
- 18% of submissions were from Koonung Creek catchment
- 29% of submissions were from the Mullum Mullum Creek catchment
- 5% of submissions from Bulleen catchment
- 7% of submissions from Anderson Creek catchment

Position taken on the amendment

- 92% objected to the Amendment, essentially seeking the removal of a property (or a group of properties) from the proposed Amendment.
- 1% objected to the Amendment, essentially seeking a modification to the floodshape or overlay designation exhibited in the Amendment.
- · 1% objected to the Amendment with no reasons given.
- 3% requested other changes that are not directly related to the Amendment e.g. drainage maintenance issues.

- 3% were received from properties not offering a position on the Amendment. A
 follow up letter was sent but no responses were received.
- 5% were received supporting the Amendment.

In addition:

- 1 submission was received from Parks Victoria offering no objection to the Amendment.
- · 1 submission was received from EastLink and does not object.
- · 1 submission was received from a property not affected by the Amendment.
- · 6 submissions were received and subsequently withdrawn.

Issues raised in submissions

There are a number of key issues raised in the submissions, as outlined in the table below. The table below provides information on the numbers and percentages of submissions that included a specific issue in their submission:

Issue		%/No of submissions
1.	Individual properties have not experienced flooding in the past and should therefore not be subject to the overlays.	34%
2.	The modelling is inaccurate and does not reflect real life flood events and/or or existing site/area characteristics such as existing topography.	
3.	 Council and/or Melbourne Water drainage works have already addressed any potential flooding impacts. 	
4.	The Council/Melbourne Water drains have not been properly maintained and/or are inadequate.	8%
5.	Council and Melbourne Water should review and upgrade the drainage system to cope with overland flow and flooding from the one in 100 year flood event.	23%
6.	New development and the increase in density across Manningham has increased the level of overland flow and flooding.	10%
7.	Property values and property resale will be impacted, Council rates should decrease/may increase as a result of the overlays and compensation should be payable.	35%
8.	Insurance costs/premiums will be impacted.	33%
9.	Buildings or structures on a property are unaffected by the proposed overlays, and will impact on the site unnecessarily.	2%
10	There will be a financial or administrative burden for future development – including additional costs associated with seeking planning permission and raising floor levels.	10%
11	The proposed overlay will only have a minor impact on the property due to a minimal incursion, the overlay falling over an existing easement or driveway and should therefore be removed.	13%

sue	
12. Built features (such as existing floor levels, on site drainage, retaining walls etc.) on the subject property and adjoining properties may currently divert water away or prevent water from entering a property. Therefore question relevance of overlay.	19% /.
13. Consultation process and information provided was inadequate.	3%
14. Other miscellaneous issues	11%

ATTACHMENT 5

AMENDMENT C109

Review of the Land subject to Inundation Overlay and Special Building Overlay

OFFICER RESPONSE TO ISSUES RAISED IN SUBMISSIONS

Response to Issues raised in submissions

Overview

The proposed changes to the boundaries of the SBO and LSIO are based on the best available information, best practice modelling and techniques developed over many years by experts in this field. The use of computer modelling is acknowledged as the only practical method to reliably map the extent of changes to the floodshape across the municipality.

Officer response to themes

This section provides the following in relation to each of the 14 issues identified:

- A short explanation of the issue;
- An officer response to the issue;
- Relevant commentary from previous Planning Panel reports where the issue has been previously considered.

Where a submission questions the accuracy of the modelling or raises a specific issue that cannot be categorised as generic, then a submission specific response has been prepared. These submission specific responses can be found in **Attachment 9**.

Issue 1 Individual properties have not experienced flooding in the past and should therefore not be subject to the overlays.

Explanation of issue:

Submissions objecting to the Amendment referred to previous flood events (or the lack thereof) in a local area. In this context, advice that their property had not experienced flooding was used to substantiate their position that the modelling must be incorrect.

Officer response:

- The shape of the overlay is based on the overland flow paths identified through best
 practice computer modelling. It is the most reliable, cost effective estimate that can
 be made from existing information and techniques.
- The lack of historical evidence about flooding on a particular site does not mean the property may not be inundated by overland flooding in the future.
- Storm events vary considerably and the factors that contributed to flooding in one storm event may not be repeated for the next.
- The SBO and LSIO maps are based on the forecasted overland stormwater flows
 associated with a 1 in 100 year storm event at a specific location, meaning that there
 is a 1 per cent chance that such an event could occur in any given year.
- Buildings and structures within the flow path may currently divert or otherwise hinder flood waters. If these structures were removed, then the flowpath would change and a property further down the flowpath may be impacted and experience flooding.

- Where this issue was raised in a submission, the Further Technical Review investigated and clarified if it was relevant to the floodshape on affected properties.
- Given the above, there is no justification to remove properties from the model simply because a submission has been made with this request.

Previous Panel findings

The Planning Panel in relation to Amendment C1 to the Bayside Planning Scheme considered the view of the Planning Authority that:

- "The technical basis for the derivation of the SBO is appropriate and accords with industry practice.
- It is unlikely that a single storm event will cause the extent of inundation shown on the SBO. Flooding tends to be localised because a single storm event is unlikely to cover the whole of the SBO area at one time.
- Varying the input parameters of the models would result in relatively minor variations to the flood levels on which the SBO is based.
- The general absence of severe flooding in the past 80 years does not undermine the validity of the SBO.
- Application of more rigorous prediction methods is unlikely to result in a significantly different outcome."

These points were also submitted to the Planning Panel in Amendment C18 to the Stonnington Planning Scheme:

"Melbourne Water stressed to the Panel that the SBO was not based upon a known or historical flood event. It was based upon the overland flows that would result from a storm event that occurs, on average, once every one hundred years. These overland flow paths were identified through computer modelling techniques."

In both cases, the Panel accepted these arguments and in relation to the latter case, the Panel noted:

"Whilst there may be no record of flooding on a property, however this did not mean that overland flows had not or would not occur at the site. Although flooding may not have previously been witnessed at the site, each storm event occurs independently of previous ones and it cannot be assumed that flooding has not previously or will not occur, on the basis that there are no records of such an event."

In Amendment C36 to the Boroondara Planning Scheme, the Panel made the following further points in relation to properties only marginally affected by the SBO and the need to maintain the integrity of the approach to flood mapping and controls:

"A number of the submitters sought the removal of these fringe elements of the SBO from their properties on the basis that no local knowledge existed to indicate that their land had been subject to flooding, even in recent heavy downpours. Others drew attention to constraining elements on their properties or adjoining properties that would serve to divert or withhold floodwaters from the natural flooding boundaries if the SBO flood levels were experienced. It

was contended that common sense consideration of these aspects should result in a decision to remove their property from the SBO...

The Panel can appreciate where a property is partially impacted by what some may view as a relatively small encroachment that these owners could experience a sense of frustration and view any variance that would relieve their property from the SBO as being an extremely minor variation, when viewed in context against the broad picture of the overall area impacted by any projected 1:100 flood. However if such variations were granted in a piecemeal approach then the whole integrity of the SBO would be challenged. It is important to appreciate that the SBO boundaries have been based upon rigorous application of both flood modelling and terrain modelling principles and each section of the SBO has been ultimately plotted and presented using prescribed and best practice of cartographic principles. To randomly vary boundaries without any substantial justification is inappropriate."

Issue 2 The modelling is inaccurate and does not reflect real life flood events and/or or existing site/area characteristics such as existing topography.

Explanation of issue

Submissions questioned the fundamental of the modelling and questioned the data that was used as a basis for the modelling.

Officer response

- The use of computer based modelling has been consistently accepted by Planning Panels as an appropriate basis for application of the SBO and LSIO.
- The terrain map used as the basis for the model is based on aerial photography and LIDAR point data provided by Melbourne Water.
- Council and Melbourne Water have gone to great lengths to ensure that the boundaries of the LSIO and SBO are mapped as accurately as possible (including undertaking further analysis following exhibition).
- A further technical review (peer review) has been undertaken to investigate whether there are any anomalies with the floodshape on affected properties that have made a submission. If an anomaly is found, then it has been recommended that the floodshape be amended.
- Fully assessing the flooding impact to an individual property will rightly occur at the
 planning application stage; when more detailed, site specific information can be
 assessed. At that stage any specific conditions for development can be most
 appropriately determined.

Previous Panel findings

The use of computer based flood modelling has been consistently supported by Planning Panels in the past.

This position is clearly outlined in the Panel Report on Amendment C18 to the Stonnington Planning Scheme:

"It is important to appreciate that the SBO boundaries have been based upon rigorous application of both flood modelling and terrain modelling principles and each section of the SBO has been ultimately plotted and presented using prescribed and best practice of cartographic principles. To randomly vary boundaries without any substantial justification is inappropriate. This aspect is best appreciated by taking an instance where a development on a property may incorporate a proposed underground car park and it is intended to grade the driveway from the street alignment down to the car park. The presence of a sliver of SBO across the property frontage would bring under scrutiny the levels of the driveway and if it was revealed that the proposed grade change was to introduce a significant change in levels that could result in a dramatic extension of the SBO not only over the property under development but also an adjoining property, then the presence of the SBO has fulfilled valuable role."

It has been accepted by all Planning Panels that have considered this issue that a full assessment of the flooding risk to a particular property is most appropriately undertaken at the planning permit stage, where accurately surveyed levels are provided by the permit applicant.

In the *Final Report on the New Format Planning Schemes*, Chief Panel Member, Helen Gibson raised the following points in relation to the Land Subject to Inundation Overlay (and which are equally applicable to the SBO):

"In the Panel's view, if accurate flood mapping is not being completed by DNRE [Department of Natural Resources and Environment], the relevant flood plain management authority should determine what land is potentially or likely to be affected by flooding and that land should be included in a Land Subject to Inundation Overlay. It does not matter that the boundaries may not be accurate at the time the overlay is applied. The Land Subject to Inundation Overlay only requires that a permit be obtained for buildings and works. It does not prohibit either use or development. The time to examine the evidence in detail about where flood levels lie in fact is at the time a permit application is made. The same approach needs to be adopted even when flood levels have been verified by DNRE but individual landowners dispute their accuracy. Panels do not have the resources to examine in detail competing arguments about where the flood levels lie on an individual property when there is a lack of agreement about this. At the amendment stage it is usually irrelevant. It is a matter more appropriately sorted out at the time any permit may be applied for."

Issue 3 Council and/or Melbourne Water drainage works have already addressed any potential flooding impacts.

Explanation of issue:

A number of submissions have raised the issue that drains in the vicinity of the subject property have been upgraded in recent years to address potential flooding impacts and that the modelling must not have factored in these recent upgrades.

Officer response

- Timing of any upgrades with respect to when the modelling was undertaken was considered. The drains in the ground at the time of the review were modelled.
- Council had to choose a point in time from which to proceed with the modelling using drainage infrastructure existing at that time, otherwise the modelling would still be unfinished due to the regular infrastructure improvements that are undertaken.
- Whether or not the submission property address is upstream or downstream of the upgrade is also important, as the property would not benefit from an upgrade if it was upstream of it.
- The Further Technical Review process involved interrogation of the drainage pipe GIS data in the surrounding area to the submission property to ascertain if an upgrade had taken place recently.
- The capital works records from the last few years were also scrutinised to identify
 possible upgrades that were not reflected in the GIS data.
- When a submission claimed that an upgrade had taken place, it could be one of the following scenarios:
 - The drainage upgrade was included in the modelling but the upgraded drains would not have the capacity to remove surface runoff entirely during a 1 in 100 year ARI event;
 - The upgrade was modelled (or not) but the submission property is upstream and does not benefit;
 - The upgrade was not modelled because it was undertaken after the modelling was done;
 - The upgrade was not modelled but should have been as it was undertaken before the modelling was done.

Issue 4 The Council/Melbourne Water drains have not been properly maintained and/or are inadequate.

Explanation of Issue

Submissions and enquiries have raised specific issues about drains blocked with leaves and other litter, or specific problems with the design of the local drainage network and have stated that poorly maintained infrastructure is partially responsible for the floodshape.

Office response

- Maintenance issues do not have any direct bearing on proposed Amendment C109 noting however, the organisation's broader obligation to respond to these issues. The modelling was generated on the assumption that all infrastructure was free from litter and obstructions, and in perfect working order.
- Council and Melbourne Water continue to maintain and upgrade their respective drainage systems to ensure that drains continue to cater for the 1 in 5 year standard (design standard applied to the system).

- Council also provides regular street sweeping services to reduce the amount of leaf (and other) litter that could collect in the drainage system and responds to specific complaints or issues raised by customers about specific drains.
- Enquiries registered with Council that raised issues about drains blocked with leaves and other litter, or specific problems with the design of the local drainage network, are logged in Council's customer requests system.
- Actions may include cleaning out the relevant drain and if necessary marking it up for future or special attention and contacting the customer about the action taken.

Previous Panel findings

The Planning Panel in relation to Amendment C2 to the Moreland Planning Scheme provided the following points in relation to this topic:

"It is to be expected that the introduction of overlays will tend to draw from the community responses to perceived inadequacies in the existing drainage systems and submitters will endeavour to utilize the process as a forum for focusing on such matters. However the Panel has no power to deal with such concerns and it can do little but to draw such concerns to the attention of the Council administering the Planning Scheme."

Issue 5 Council and Melbourne Water should review and upgrade the drainage system to cope with overland flow and flooding from the one in 100 year flood event.

Explanation of Issue

Submissions suggested that the entirety of the drainage system should be upgraded to accommodate overland flows from the 1 in 100 year flood events. Some suggested that these measures should be undertaken in lieu of expanding the SBO to cover more properties.

Officer response

- The drainage system in Manningham was predominantly constructed prior to 1975, well before consideration of overland flows from 1 in 100 year flood events and was constructed to accommodate 1 in 5 year flood events which was the standard at the time.
- Upgrading the entirety of the drainage system in Manningham to a 1 in 100 year standard would not simply necessitate the use of drainage pipes with larger diameters, but in some areas it would also necessitate realignment and widening of existing roads, demolishing existing buildings and increasing the natural ground level of all properties that are affected.
- This would result in significant disruption and displacement for many residents and a considerable financial cost to property owners and Council / Melbourne Water.
- The imposition of the SBO, requiring new buildings to be protected from flooding and for an assessment to be made about the impact of development on flowpaths, is comparatively less costly and disruptive than dealing with the damage caused by flooding events.

 Council has a strategic resource plan item for 2016/17 to review the current Drainage Strategy. This will use detailed flood mapping as a key input to understand the magnitude of and risk posed by flooding. This will enable a systematic approach to develop and prioritise management responses and interventions.

Previous Panel findings and background information

In Victoria, the use of the 1 in 100 flood level has been in effect since 1975 following the introduction of the *Drainage of Land Act 1974*. This provides the basis for declaring flood levels and flood areas and has since been incorporated into the *Water Act 1989* and the *Building Act 1993*. The standard and best practice prior to 1975 was for the drainage system to cope with 1 in 5 year flood events. This measure is also in the planning system, including the Special Building Overlay, which has as its stated purpose to:

"identify land in urban areas liable to inundation by overland flows from the urban drainage system as determined by, or in consultation with, the floodplain management authority".

Planning Panels have regularly considered this issue and have consistently agreed with Melbourne Water's comments about the true cost of addressing this legacy issue:

"To upgrade the whole Metropolitan system to accommodate a 1% flood standard would cost billions of dollars. [Melbourne Water's] current budget provides for a capital expenditure of approximately \$6-8,000,000 per annum on the main drainage system and therefore it is necessary to adopt other complementary approaches to deal with the issue."

"A massive injection of funds into improving stormwater drainage in settled suburbs would be at the expense of other community aspirations... it would not be reasonable to inhibit the normal expectations of owners to develop their properties, awaiting some future time when community priorities favour a massive injection of funds towards drainage improvements."

Issue 6 New development and the increase in density across Manningham has increased the level of overland flow and flooding.

Explanation of issue

A number of submissions have raised concerns with the impacts that increased densities in municipalities such as Manningham are having on existing infrastructure such as drainage, which in turn is increasing local flooding and overland flow impacts.

Officer response

- Manningham has a responsibility to allow increased densities in appropriate locations and Council actively requires developers to provide sustainable development and include on site drainage retention systems.
- Council's drainage system is designed for the 1 in 5 year flood and any excess flood water flows overland along roads and parks. Properties within areas that have limited or no overland flow paths are more prone to flooding.

- With increased urban consolidation, drainage services are being placed under increased pressure, affecting the quality, quantity and rate of flow of water emanating from new or intensified development and potentially causing flooding.
- Sustainable development that uses the principles of integrated water management can help address these issues. Integrated water management has three aims: reduce reliance on potable water supplies; reduce the amount of wastewater and stormwater generated; and improve water quality in water catchment ecosystems.
- Providing a drainage system that promotes the on-site retention and re-use of stormwater run-off and regulates overland flow to prevent flooding may assist in ameliorating an intensification of the impacts of flooding through inappropriately located uses and developments.

Previous Panel findings

The Planning Panel in relation to Amendment C2 to the Moreland Planning Scheme provided the following points in relation to this topic:

The occurrence of overland flows is due primarily to the limited capacity of the drainage infrastructure, which, in accordance with design standards of the time, was generally only required to be designed and constructed to the 1 in 5 year standard. Although incremental developments throughout the catchment may contribute to increases in runoff, this would only impact marginally upon what is an existing risk of inundation from the large storm events.

Issue 7 Property values and property resale will be impacted, accordingly, Council rates should decrease or may increase as a result of the overlays and compensation should be payable.

Explanation of issue

Submissions suggested that the inclusion of their property in the SBO and LSIO would negatively impact on the value of their property.

Officer response

- The flood prone nature of some land is an existing fact. Excess floodwater may still
 follow natural valleys and drainage paths that existed prior to the subdivision and
 development of the area.
- The LSIO and SBO have an important function to reflect this underlying condition of the land transparently to current owners and future purchasers of affected properties – so that they can make informed decisions about the property and about planning for their own safety during flooding events.
- Property values are determined by many different factors, including location, streetscape and amenity, the current economic conditions, as well as planning controls. It is therefore difficult to assign what effect, if any, the identification of land as liable to overland flows by the SBO and/or LSIO may have on the value of a property.

- Past Panels have not found evidence that the SBO and LSIO impacts on property
 values and have also determined this would not be a reason to avoid application of
 the controls see below.
- The Planning and Environment Act 1987 clearly sets out the circumstances where compensation is payable and is essentially limited to where land is reserved or required for a public purpose or where access is to be denied by the closure of a public road. It does not cover situations where controls such as the SBO/LSIO are imposed. Compensation would not be payable as a result of applying the overlay controls.
- The overlay does not cause or change the likelihood of flooding. While the overlay
 may identify the drainage conditions of the land, there is, appropriately, clear
 legislative indemnification from any claims arising out of the identification of land
 liable to flooding.
- In November 2016, Council appointed Charter Keck Cramer ('Charter') to provide advice on what, if any, impact the SBO will have on the values of those properties affected in the short and long term. Attachment 11 contains this report and the report concluded the following:

"In undertaking this assessment Charter has not been able to establish that the application of the SBO will negatively impact the values of those properties to be affected. This is consistent with the findings of the study undertaken by Charter for the City of Stonnington in 2004.

...it is Charter's opinion that the SBO will not negatively impact property values in the City of Manningham."

Previous Panel Findings

The Planning Panel, in relation to Amendment C18 to the Stonnington Planning Scheme concluded that:

"Panels have consistently found that there is no justification for setting aside of any SBO amendment on the basis of requests for compensation, loss of property value and possible increase in insurance premiums."

The Planning Panel, in relation to Amendment C50 to the Moreland Planning Scheme stated that:

"The value of any property is determined by the complex interplay of many different factors such as overall economic conditions, public economic policies, location, streetscape and amenity, and it is difficult to assign what effect, if any, the identification of land as liable to overland flows may have on the value of a property. This view is consistent with the conclusions of the Planning Panels for Amendment C3 to the Yarra Planning Scheme and Amendment C18 to the Stonnington Planning Scheme. These Panels generally found no correlation between the application of the SBO and property values. Melbourne Water also reported that the Stonnington Council commissioned Charter Keck Kramer (CKC) to review

the effects on property prices of the application of the SBO. CKC examined property prices in the City of Port Phillip and found no correlation. The Panel was not provided with any contrary evidence and concludes that the SBO or the LSIO are highly unlikely to affect property prices, and that it is appropriate that the condition of the land be recorded and available to interested people."

Specifically, the Charter Keck Kramer study concluded (as reported in the Panel Report to Amendment C18 to the Stonnington Planning Scheme):

"There is a general purchaser awareness of the SBO within the City of Port Phillip, and that purchasers understand the consequences that some properties affected by the Overlay may, in the course of renovation and extension, have to meet special planning and building requirements that would otherwise not apply. Notwithstanding, the pattern of sales and analysis, gives no evidence or cause to believe that the application of the SBO to any of the properties has had a measurable effect on the value of those properties when offered to the market on normal reasonable terms and conditions. Simply stated, the application of the Overlay within the City of Port Phillip appears to have had no adverse impact on the property values. For the reason that there is a strong socio-economic and demographic similarity between the City of Port Phillip and the City of Stonnington, and as many of the properties affected in the City of Port Phillip are of a similar style, construction mode and market value range as many of those likely to be affected within the City of Stonnington by the proposed introduction of the SBO, we consider it reasonable to anticipate that the introduction of the SBO in Stonnington will, similarly, have no measurable impact on the value of properties to which it will apply."

Issue 8 Insurance costs/premiums will be impacted.

Explanation of Issue

Submissions suggested that the inclusion of their property in the SBO and LSIO would result in higher insurance premiums.

Office response

- The potential impact on insurance premiums is not a matter that should have any bearing on the application of the LSIO or SBO.
- The application of the overlays does not cause or change the likelihood of flooding, but recognises the existing condition of land.
- The Insurance Council of Australia has advised Melbourne Water that most insurance policies provide coverage for storm damage, include cover for damages resulting from overland flows. However, this needs to be confirmed by the property owner's individual insurance provider.
- Previous Panels have consistently determined that the potential impact on insurance premiums is not a matter that should have any bearing on the application of the SBO or LSIO.

Previous Panel findings

The impact on insurance premiums has been consistently dismissed as a relevant issue by previous Panels. Whilst other panel reports generalised and combined these issues, in Amendment C1 to the Bayside Planning Scheme there was a significant discussion on this topic. Both the Council and Melbourne Water put the following to this Panel:

"This is not a relevant consideration in the determination of whether a development overlay should apply. Insurance contracts have always imposed an obligation of disclosure on policy holders. The application of an SBO does not cause or change the likelihood of flooding, but recognises the existing condition of land. Insurance companies would continue to calculate their premiums on the basis of what is known, and the properties identified in the overlay would still be subject to flooding in a 1 in 100 year rain event. If The Insurance Council of Australia has advised Melbourne Water that most insurance policies that provide coverage for storm damage, include cover for damages resulting from overland flows. However this would need to be confirmed by the household's individual insurer."

The Panel agreed with these points and added:

"The Panel agrees that [the impact on insurance] is not a matter which should affect the imposition of the overlay. Such a position, if accepted, may also affect the imposition of other overlays such as the Wildfire Management Overlay. The inclusion of the overlay in the scheme represents an important piece of information for property owners and potential purchasers and developers."

Issue 9 Buildings or structures on a property are unaffected by the proposed overlays, and therefore the overlay will impact the site unnecessarily.

Explanation of issue

A number of submissions have raised the issue that the overland flow path does not impact land where there is a building or structure, there will be no flooding of the house or garage in a 1 in 100 year flood event and therefore application of the overlay is irrelevant.

Officer response

- It is important to note that future buildings or development may not necessarily be in the same location as existing buildings or structures.
- The function of the LSIO and SBO is therefore to ensure that any future development within an affected portion of the site is designed appropriately in response to the identified flood potential.
- The removal of the SBO or LSIO could result in inappropriate development that increases flood risk to adjoining properties, or has an insufficient floor level or basement entrance that would be at risk of flooding.

Previous Panel findings

The Panel in relation to Amendment C2 to the Moreland Planning Scheme stated:

"The purpose of the Overlay is to identify land affected by flooding or overland flows as a result of a 1 in 100 year rainfall event. The Panel accepts that a prime function of the

overlay is to ensure that any future development within the affected portion of the site is appropriate in terms of the identified flood potential. The removal of the overlay could result in a development application that may seek to introduce a floor level that has an inappropriate relationship with the flood level."

Issue 10 There will be a financial or administrative burden for future development – including additional costs associated with seeking planning permission and raising floor levels.

Explanation of issue

Submissions stated that the inclusion of their property in the LSIO and/or SBO would be an administrative burden and could result in increased costs associated with future redevelopment or extensions to existing buildings.

Officer response

- A planning permit is only triggered if the proposed buildings and/or works fall within the area of land covered by the SBO and LSIO. In many cases (45% of affected properties), a planning permit would already be required under other provisions of the Planning Scheme.
- Costs associated with redevelopment in LSIO and SBO areas will vary depending on the site context, how the overlay covers the site and the proposed design of the development.
- Any additional costs of increasing floor levels should be considered as a safeguard against the cost incurred as a result of potential flood damage to new buildings.

Previous Panel findings

In relation to the issues associated with redevelopment, the Planning Panel for Amendment C50 to the Moreland Planning Scheme has highlighted that the SBO is a necessary planning mechanism to ensure that development responds to flood risk at the permit stage. It stated:

"The Panel notes that under the Overlays, a planning permit is required for buildings and works, and applications are referred to Melbourne Water. Upon application for a permit, each site can be investigated further, and a detailed assessment be made. Melbourne Water's requirements generally relate to the raising of floor levels or changes to site layout. The Overlays ensure that development proposals are tested prior to being implemented. This process ensures the proposed development is safe and minimises the risk of personal injury or property damage that may arise from periodic inundation. Often the referrals process is likely to improve the design of the development. The Panel also notes that applicants have the right to seek a Review by VCAT if they consider that the Responsible Authority or referral authority are being unreasonable."

Issue 11 The proposed overlay will only have a minor impact on the property due to a minimal incursion, or the overlay falling over an existing easement or driveway and should therefore be removed.

Explanation of issue

A number of submissions have questioned the relevance of the overlay as it only applies to a very small section of their property and is often located along the boundary or across an existing easement.

Officer response

- The extent of the proposed floodshapes affect properties differently. Some properties may only have .01% of their property affected by the floodshape, whereas other properties may be 100% affected. People will have different opinions about what is considered to be a minor incursion.
- Due to the flood mapping methodology, the flood extents generated from the flood model results may encroach slightly onto properties. As part of the development of the overlays, in cases where the flooded area of a property was entirely within 5 metres of a roadway and the percentage of the property affected was less than 10%, these areas were removed from the proposed overlay floodshape, prior to exhibition. These adjustments were considered appropriate given the low level of benefit associated with retention of these encumbrances in controlling future development.
- Several submissions have objected to the Amendment on the basis that their
 properties are only impacted by minor incursions. The City of Port Phillip Planning
 Scheme amendment proposed that in cases where incursions of 6% and 15sqm or
 less of the property area applied, the planning extents be removed from affected
 properties. Similar criteria has been developed as part of the Further Technical
 Review of submissions made to Amendment C109. In the case of Manningham, as
 the properties are generally significantly larger than the properties in Port Phillip
 (700sqm versus 300sqm), where the incursion is less than 30m2 and represents less
 than 6% of the property area and is not considered to be significant, then a
 recommendation may have been made to delete the overlay in the subject location.
- An assessment has also had to be made that trimming of the floodshape in such a way won't create a disconnect or significant impact on the connectivity of the floodshape.
- Consideration was also given to whether the minor flood shape incursion was associated with flow into or out of the property, based on the topography of the land. If the flood shape is associated with flow into the property, the flood shape is recommended to be retained.
- Consideration was given to the length of the incursion into the property. Incursions
 greater than 5 metres into properties are recommended to be retained.
- These requirements are in keeping with the adopted criteria for removal of minor incursions along the frontages of properties as part of the original filtering process, precedent associated with prior Panel processes and flood risk principles.

Previous Panel findings

In relation to Amendment C111 to the Port Phillip Planning Scheme, the Panel provided a response to this particular issue;

'the premise for the inclusion of a property for further technical review, i.e. that the SBO covers less than 15sqm, and less than 6% of the total site area of the site is regarded by the Panel appropriate in so far as there is consistency in procedure and approach across municipalities'.

Issue 12 Built features (such as existing floor levels, on site drainage, retaining walls etc.) on the subject property and adjoining properties may currently divert water away or prevent water from entering a property. Therefore question relevance of overlay was questioned.

Explanation of issue

Submissions have suggested that existing walls, buildings or fences (on their property or adjoining properties) currently protect their property from flood damage.

Officer response

- There is no certainty that development on a site or on adjoining sites will remain and continue to block the flowpath of water. If these structures are removed, then properties on the site or further down the flowpath may be affected by overland flows.
- In relation to existing buildings, once the flood water reaches floor level, the building is inundated and becomes part of the flow path.
- It is important to assess the impact of future development within the LSIO and SBO, particularly development that may impact on the flowpath.
- Adding further information to the terrain map in relation to the building locations, walls and fences and other structures and their impact on flows would be extremely complex and resource demanding (noting that the 'roughness factor' incorporated in the modelling already addresses the existence of obstructions).
- Therefore, a general depiction of the likely flooding impact is the most effective approach in deriving the LSIO and SBO boundaries.
- For all of these reasons, the presence of built form on an adjoining or nearby site, or on the site itself does not warrant removal of the property from the LSIO and/or SBO.

Previous Panel findings

In relation to Amendment C18 to the Stonnington Planning Scheme, the Panel provided a response to this particular issue:

"Whilst the model does embody some elements that deal with the recognition of flows in urban areas, the overland flow path projected by the model is based on the ground levels and assumes that no blockage of drainage infrastructure exists at the time of flooding and that structural barriers such as fences, houses and brick walls are less permanent [It is has been] consistently stressed in previous Panel hearings... that the SBO should be viewed as a

planning tool that aims to identify areas subject to the 100 ARI event... and it must be recognised that hydrological analysis was based on statistical concepts that were susceptible to change as more data became available. Consequently, hydraulic and hydrological analysis can be continuously refined."

Issue 13 Consultation process and information provided was inadequate.

Explanation of issue

Some submissions are critical of the exhibition process undertaken for the Amendment. Criticisms have included inadequate information and the exhibition period too close to Christmas.

Officer response

- Exhibition of the Amendment exceeded the statutory requirements specified under section 19 of the Planning and Environment Act, 1987.
- Exhibition of the Amendment also included non statutory communication measures as follows:
 - Interactive web tool
 - Information sessions
 - FAQs
 - Information on Council's web site
- The Amendment was exhibited for 6 weeks as opposed to the statutory requirement of 4 weeks under the *Planning and Environment Act, 1987*.
- Council received over 100 phone calls in the first two weeks of exhibition; attended to over 120 counter enquiries and every person who wished to speak to a Council officer directly had the chance to do so.
- All requests for an extension of time to submit and/or add to existing submissions was widely made known.
- Submissions were still being submitted after the closing date and can be received up until the panel hearing to consider submissions. The latest submission was received in December 2016.

Issue 14 Other issues

Explanation of issue

A number of submissions raised specific issues that require an individual response. The responses can be found in **Attachment 7** where each submission has also been summarised.

Previous Planning Panels - Summary

Planning Panels Victoria (PPV) have considered and reported on a significant number of planning scheme amendments relating to flood overlays or zones (including the LSIO and SBO), since the introduction of these provisions into the Victoria Planning Provisions more than 17 years ago. Most of the issues raised by submitters to Amendment C109 have been raised in previous Planning Panel hearings considering the introduction (or change to) the LSIO or SBO. Previous Planning Panels have consistently made the following points with respect to the application of the overlays:

The drainage system

- The application of the LSIO and SBO complement other flood mitigation, drainage maintenance and upgrade works undertaken by floodplain management authorities or local councils.
- Upgrading the entire drainage system to present day standards in order to accommodate for 1 in 100 year flood events would cost billions of dollars, and is not practical for floodplain management authorities (e.g. Melbourne Water) or for local councils to deliver.

Purpose of the LSIO and SBO

- · The flood prone nature of some land 'represents an existing fact'.
- The LSIO and SBO are tools to advise landowners and potential purchasers of the potential for the land to flood in a 1 in 100 year flood event, and allows authorities to consider any development proposals to reduce detrimental impacts.
- The LSIO and SBO do not prohibit development and the requirements in the LSIO and SBO only apply to development and works proposed within the area covered by the overlay.

Flood modelling

- The shape of the overlay is based on the overland flow paths identified through best
 practice computer modelling and is the most reliable estimate that can be made
 from existing information and techniques.
- It is unlikely that a single storm event will cause the extent of inundation shown on the LSIO and SBO. Flooding tends to be localised, because a single storm event is unlikely to cover the whole of the LSIO and SBO area at one time.
- The cost of gaining more intensive terrain information (via land surveys of individual properties) would be prohibitive and the most appropriate time to assess the flooding risk to a particular property is at the planning permit stage, where accurately surveyed levels area provided.

Development costs, property values & insurance

- There has generally been no correlation found between the application of the LSIO and SBO and property values.
- A potential increase in insurance premiums is not a relevant consideration as to whether the LSIO and SBO should be applied.
- The full disclosure of property information is appropriate and beneficial.

 The prospect of improved planning for the community is more important than the possibility of decreased property values or the increased costs associated with raising the floor level of a new building.

ATTACHMENT 6

AMENDMENT C109

Review of the Special Building Overlay and Land subject to Inundation Overlay

FURTHER TECHNICAL REVIEW –TEMPLATE AND CRITERIA USED WHERE FLOODSHAPE WAS REVIEWED

Further Technical Review

Overview

- Officers have undertaken a Further Technical Review (FTR) where submitters have questioned the inclusion of their property in the SBO and LSIO, the accuracy of the modelling and where the extent of coverage over the subject land is minimal.
- The FTR included a more detailed analysis to ascertain the exact flood risk to the property. The objective of this review was to check for anomalies.
- The FTR is based on a number of agreed criteria see below and may indicate that the LSIO or SBO floodshape could be removed or refined in shape or should be kept as exhibited.

Criteria for the Review

The following criteria were developed to guide the Further Technical Review of submissions and to ensure that there is a consistency in the response to submissions.

Criteria	Assessment
Actual terrain differs from LIDAR data used for modelling.	 Does the actual land shape and fall generally agrees with LIDAR data?
Actual drainage infrastructure differs from that modelled.	 Does it relate to private internal drainage infrastructure on a single lot? How does the actual drainage pipe diameter and compare against the modelled pipe diameter?
Flood extent incursion into property minor in nature.	 Is the incursion of the flood overlay on the property considered minor?
Other including unexplained isolated ponding, title boundaries and overlay designation.	 Is there unexplained isolate ponding which does not contribute to the integrity of the floodshape?

Template for the Review

The following template has been used to document the FTR undertaken for each submission where the accuracy of the modelling has been questioned.

Amendment-C109--Submission-Assessment-Technical-Report¶



Note: This is a Further Technical Review (FTR) where submitters have questioned the inclusion of their property in the SBO and LSIO due to: the accuracy of the modelling; where flooding has not been experienced in the past; and where the extent of coverage over the subject land is minimal. Other issues identified in submissions are addressed in the Council Report and relevant attachments.

Submission No.:

Property Address:

Catchment:

Proposed Planning Scheme Control(s):

Maps showing the proposed overlays are attached to this assessment.

Desktop review (Data collection/ assessor comments)

Previous reports of flooding for property (CFS Request Ref No's):

Area of incursion into property (m2):

Percentage of property area affected by incursion:

Officer Desktop Review Comments:

Site visit

Date of inspection (if required):

If site inspection not required, why:

Site photos informing this assessment, if necessary, are attached to this report.

Data and information collected from site visit:

Assessment against criteria

The criteria below have been used to assist in the review and assessment of the written submission content.

- Criteria 1: The extent to which the actual terrain differs from LIDAR data, and any potential impacts on the modelling.
- Criteria 2: The extent to which the as-constructed drainage infrastructure differs from that modelled, and any potential impacts on the modelling.

Amendment C109--Submission Assessment Technical Report ¶



Criteria 3: The extent to which a minor flood extent incursion protrudes into a property.

Criteria 4: Other

- The appropriateness of applying a different overlay designation having regard to the flood modelling; or
- The extent to which an anomaly has been identified with the title boundary; or
- The extent to which unexplained isolated small ponding could be removed without
 affecting the credibility of the flood mapping.

Officer response to submission:

Signed off:		
Date:		



26 July 2016

Barnaby McIlrath Maddocks 140 William Street Melbourne Victoria 3000

Dear Barnaby

Our ref: 4337-01L01v02

Amendment C109 to the Manningham Planning Scheme - Peer Review

In accordance with you letter of instruction of 11 February 2016 and subsequent correspondence I have undertaken a peer review of the methodology used to develop the flood mapping that forms the basis of the proposed Land Subject to Inundation (LSIO) and Special Building Overlays (SBO). This letter describes my review and opinion in relation to the proposed planning scheme amendment maps.

BACKGROUND

Purpose of the Amendment C109 is to make changes to the Manningham Planning Scheme to incorporate updated flood-related controls in the form of a Land Subject to Inundaiton overlay and 3 Special Building Overlays. The LSIO represents areas that may be subject to flooding from overbank flows associated with rural and urban waterways. SBO's define areas that are susceptible to flooding from urban runoff that exceeds tha capacity of the drainage system. Much of the municipality comprises development that is many decades old and does not have drainage infrastructure that meets current design standards. This means that drains do not have the capacity to convey nominal urban design flood flows (typically a minimum of the 5 year ARI design flood). Similarly, overland flow paths are either not available or do not have sufficient capacity to convey surface runoff without impacting private property.

Four overlays are proposed as follows:

- LSIO relates to overland flooding along Melbourne Water waterway assets
- SBO1 relates to overland flooding along Melbourne Water drainage assets
- SBO2 relates to overland flooding along Council drainage assets
- SBO3 relates to overland flooding along Council drainage assets, however the flood risk, impact and
 planning requirements are reduced compared to SBO2.

BASIS OF REVIEW

This review is based on the following documents and files.

Manningham Planning Scheme Amendment C109 – Explanatory Report, 2015



15 Business Park Drive Tel (03) 8526 0800 info@watertech.com.au ACN 093 377 283

WATER TECHNOLOGY



- Manningham Planning Scheme Amendment C109 Proposed Special Building Overlay Maps, Nos 1 - 4, 6 – 9 and 11.
- Development of the Special Building Overlay Technical Report, Cardno September 2015.
- Bulleen North Drain Catchment Mapping, Cardno November 2013.
- Final Study Report Flood Mapping of Koonung, Mullum Mullum and Andersons Creeks, Cardno March 2015.
- Ruffey Creek Flood Mapping, AECOM September 2013.
- Ruffey Creek TUFLOW Model Review, WBM March 2012
- Ruffey Lake Flood Mapping Data Review, Cardno January 2015
- Bulleen North Flood Mapping Data Review Technical Note, Cardno March 2015
- Ruffey Lake Flood Mapping Technical Note, Cardno March 2015
- Managing Stormwater Flooding Risks in Melbourne, Auditor General Victoria July 2005
- ARR Project 15 Two-Dimensional Modelling in Urban and Rural Floodplains -- Stage 1&2 Report, Engineers Australia November 2012.

BASIS OF LSIO AND SBO FLOOD OVERLAYS

The new overlays are based on flood mapping for 5 catchments within the Manningham City Council area. The approximate locations of these main drainage lines are shown in Figure 1. A brief description of each of the catchments is provided below.

- Bulleen North Drain This catchment is located entirely within the western end of the municipality
 and flows broadly in a north-west before discharging into the Yarra River. It is mostly urbanised and
 has an area of approximately 225 ha. This catchment was modelled and mapped by Cardno between
 approximately 2008 and 2013.
- Ruffey Creek Is situated north and east of Bulleen North Drain. It also flows in a north-west direction
 and discharges into the Yarra River. It is entirely within the municipality and has a catchment area of
 just over 1,000 ha. This catchment was modelled and mapped by AECOM between approximately
 2009 and 2013.
- Mullum Mullum Creek This waterway originates to the east of Manningham City and flows west, crossing the south-east municipal boundary. It then flows in a north-west direction before joining with the Yarra River. It is located to the north of Ruffey Creek and has a catchment area of approximately 2,700 ha within the municipality. This catchment was modelled and mapped by Cardno in 2014/2015.
- Koonung Creek Essentially forms the southern boundary of the Municipality. It flows from east to
 west with the northern part of the catchment in the Manningham City area and the area south of the
 main channel in another local government area. The catchment has an area of approximately 1,500 ha
 within the Municipality. This catchment was modelled and mapped in parallel with Mullum Mullum
 Creek and Andersons Creek by Cardno in 2014/2015.
- Andersons Creek This catchment is located on the eastern side of the municipality and has an
 area within the council boundary of approximately 1,800 ha. This is a small part of the catchment to
 the east. It flows in a northerly direction to the Yarra River. It was modelled and mapped by Cardno in
 2014/2015.

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WATER TECHNOLOGY WATER, COASTAL & ENVIRONMENTAL CONSULTANTS

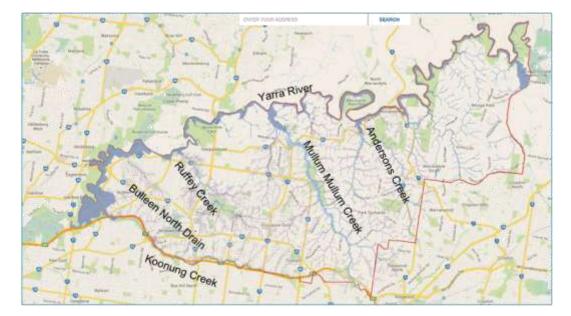


Figure 1- Location of study area catchments

FLOOD MODELLING METHODS

The 5 catchments were modelled in 3 separate studies with the Bulleen North Drain and Ruffey Creek being undertaken by Cardno and AECOM respectively between 2008 and 2013. The Koonung Creek, Mullum Mullum Creek and Andersons's creek catchments were modelled together by Cardno in 2014/15. Each modelling study used similar but slightly different flood modelling methods, however the use of LiDAR aerial survey to inform the models and mapping was common across all the studies.

A summary of the method for each study is provided below:

Bulleen North Drain

This catchment was modelled using a two-dimensional Rain on Grid (RoG) or Direct Rainfall Method (DRM) approach to generate overland flow distributions, depths and velocities. The SOBEK software package by Deltares was used for the modelling. The model utilised a grid resolution of 2 m which is in the range of appropriate values for detailed urban flood modelling.

Standard design rainfalls and losses were applied to the model, along with typical values of hydraulic roughness to characterise the impact of different land-uses on flooding. Appropriate Yarra River tailwater levels were applied for boundary conditions.

The full council pipe network was incorporated into the hydrodynamic model.

As part of this study a sensitivity analysis of the model results was undertaken to assess the potential variability of the model results under a range of conditions. This included; testing of the RoG method against alternative hydrologic approaches, testing the impact of changes to hydraulic roughness and the potential impact of removing part of the council pipe network from the model.

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WATER TECHNOLOGY WATER. COASTAL & ENVIRONMENTAL CONSULTANTS

Ruffey Creek

The Ruffey Creek catchment was modelled using a rainfall-runoff approach to develop the design hydrology and a TUFLOW hydrodynamic model for the overland flow routing. The hydrodynamic model used a 4 m grid resolution to define the topography which is within the range of appropriate values for this type of urban flood mapping study.

Standard design rainfalls and losses were applied to the model, along with typical values of hydraulic roughness to characterise the impact of different land-uses on flooding. Appropriate Yarra River tailwater levels were applied for boundary conditions.

The full council pipe network was incorporated into the hydrodynamic model with sub-catchment flows evenly distributed to nearby manholes.

As part of this study a validation of the hydrology and overland routing was undertaken.

Koonung, Mullum Mullum and Andersons Creek

This catchment was modelled using a two-dimensional Rain on Grid (RoG) or Direct Rainfall Method (DRM) approach to generate overland flow distributions, depths and velocities. The TUFLOW software package was used for the modelling, which is a standard requirement of Melbourne Water. The model utilised a grid resolution of 3 m which is in the range of appropriate values for detailed urban flood modelling. The study area was split into a number of sub-areas in order to ensure each model was of a manageable size for simulation and processing purposes.

Standard design rainfalls and losses were applied to the model, along with typical values of hydraulic roughness to characterise the impact of different land-uses on flooding. Appropriate Yarra River tailwater levels were applied for boundary conditions.

The full council pipe network was incorporated into the hydrodynamic model.

As part of this study a detailed reconciliation and validation analysis was undertaken to test the RoG method against alternative hydrologic approaches. This was performed for both the 100 year ARI and 5 year ARI design floods. This resulted in the adoption of higher pervious area runoff coefficients to compensate for the mitigating impact of surface storage on design flow peaks on RoG model.

Discussion

The modelling techniques applied for the different catchment are all considered appropriate for mapping urban flood extents. Discussion on key aspects of the modelling approach for the different areas is provided below.

Model Grid Resolution

It is noted that different hydrodynamic model grid resolutions have been applied in the different catchments; 2 m resolution for Bulleen North Drain, 4 m in Ruffey Creek and 3 m in the Koonung, Mullum Mullum and Anderson Creek catchments. I consider these are all in the range of appropriate resolutions for detailed urban flood mapping studies. There is no single, ideal model resolution that should be applied to these type of studies. The selection of a model set-up for a particular study will typically be based on a number of factors including topographic characteristics of the area, the size of the model domain and expected simulation times. Over the years, model resolutions have generally become finer as computing power has increased, allowing larger grids to be computed in a reasonable time. Through previous investigations and sensitivity testing it has been demonstrated that, in general, a 5 m grid resolution is sufficient to characterise urban flood behaviour. Whilst finer grids may provide a better visual presentation and represent some local topographic features more clearly, it has been found that peak flood depths and extents do not vary greatly with increased model resolution.

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WATER TECHNOLOGY

For the resolutions utilised in these studies I do not believe there is likely to be any discernible difference, between the areas, in the level of accuracy or reliability in the model outputs, such as flood depth and extent.

Modelling Method

As described in the previous section, 4 of the 5 catchments used the ROG hydrology method whilst the 5th catchment, Ruffey Creek, used a more traditional lumped rainfall-runoff method. The reasoning for the difference in approach is primarily one of timing, although user or authority preference may have played a role in this as well. Until fairly recently (within the last 5 years) the ROG approach to urban flood modelling was not widely accepted by drainage authorities in Australia. There has been caution in adopting the method as many people were not familiar with it and industry standards had not necessarily been updated to incorporate it. This may explain why the Ruffey Creek modelling project, which started around 2008, adopted a more traditional approach that was the accepted practice at the time. Whilst the Bulleen North Drain study occurred at a similar time, it was by a different consultant that may have been more familiar and confident with the use of the ROG method.

Experience over recent years suggests that a RoG approach is better suited to detailed council mapping studies where it is desirable to define flood impact down to the local scale. As described above, it is recognised that the Ruffey Creek study was undertaken some years ago and hence employed a different method to the other studies. The way in which storm flows interact between the pipe network and the surface is considered less "realistic" when a lumped hydrologic model is used and sub-catchment flows are split between manholes in a somewhat arbitrary way. Despite this, the accumulation of excess stormwater flow in low points within the topography, which is where local flooding typically manifests, will generally still be well represented using this method.

The lumped hydrology method assumes a high degree of efficiency in the drainage network and effectively unlimited inlet capacity at manholes as runoff is entered directly into the drainage system. Through this approach shallow surface storage in the upper catchment may be slightly underestimated and local surcharging of pipes overestimated. Subsequently, the Ruffey Creek model could be considered to be slightly conservative in areas where flows have been assumed to enter the pipe system by being evenly distributed to pits within a sub-area. This would typically be in parts of the upper catchment and be represented by slightly greater flood extents in some areas. However, the overall impact on flood depths, velocities and mapped extents is expected to be small.

Model Validation

Each model used some form of validation to reconcile or check design flows against a Rational Method and in some instances, against a RORB model for peak flows. This provides confidence in the flood mapping outputs. Sensitivity testing indicated that peak design flows though the catchments were higher for the RoG models when using standard parameters. This is consistent with literature and suggests that the RoG models explicitly take account of surface ponding that would otherwise flow directly to a catchment outlet in a lumped hydrologic model such as RORB.

Overall, there are sufficient checks on each model to provide confidence that the models developed and results obtained are of an appropriate standard for the planning amendment.

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WATER TECHNOLOGY

FLOOD MAPPING AND OVERLAY DEVELOPMENT

The development of flood mapping outputs has been consistently applied by Cardno for all 5 catchment areas. This mapping process has used an industry standard approach to filter out unnecessary flood data including areas with very shallow depths and low velocity x depth. Once this filtering is done, it is often common practice to further "thin" the data based on a minimum "puddle" area. That is an area that becomes isolated from the rest of the flood extent because the connecting flow path is too shallow and becomes removed. It is understood that thinning of "puddles" has been undertaken for the proposed flood mapping and overlays based on standard Melbourne Water criteria.

One issue that I have observed in the mapping outputs is the existence of multiple areas of isolated flood extent, particularly in the SBO3 layer. Figure 2 below shows an example section of the online flood overlay map from the Council website. This illustrates there are small sections of SBO3 that are mostly, if not entirely, within the road reserve. It could be argued that these areas do not serve a strong purpose compared to other areas connected to the main flow paths or ponding areas. In many of these places depths are very shallow, no property is directly affected and planning controls or conditions are unlikely to be required. It appears that these areas of shallow depth within the road reserve are unlikely to restrict access or impose any safety risk for evacuation or emergency service access. In my experience this information can be very useful to council officers for understanding nuisance flooding and planning maintenance or mitigation works. However, it is not necessary to include all flood information into an overlay and some manual thinning or cleaning up of the SBO3 layer may be beneficial. Such flood mapping extents may cause unnecessary anxiety within the community and additional work for council planning officers.



Figure 2- Bulleen North Drain - example isolated areas of SBO3

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CONCLUSIONS

It can be concluded that:

- The methods and outputs for the 5 catchment areas comprising the Amendment are appropriate for urban flood mapping and the development of flood-related planning overlays.
- Appropriate checks and validation have been made in each study such that the design flow estimates are considered robust.
- A consistent and appropriate method has been applied to the processing of model results to produce mapping outputs and overlays that are relatively consistent across the Municipality.
- It is considered that a number of small, isolated areas of inundation that are not expected to represent
 any significant threat to life or property could be removed from the SBO3 layer without compromising
 the appropriate management of flood risk within the area.

Please let me know if you have any questions regarding this information.

Yours sincerely

Warwick Bishop Director

warwick.bishop@watertech.com.au WATER TECHNOLOGY

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ATTACHMENT 8

AMENDMENT C109

Review of the Land Subject to Inundation Overlay and Special Building Overlay

SUMMARY OF INDIVIDUAL SUBMISSIONS, OFFICER RESPONSE & RECOMMENDATION

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

The following table summarises the individual submissions received (by issue) during and after the exhibition period of Amendment C109, including an officer response and recommendation.

Fourteen key issues have been identified for the 558 submissions received, the categorisation of which will assist in the review and analysis of the submissions.

The fourteen key issues are listed below:

- 1. Individual properties have not experienced flooding in the past and should therefore not be subject to the overlays.
- 2. The modelling is inaccurate and does not reflect real life flood events and/or or existing site/area characteristics, such as existing topography.
- 3. Council and/or Melbourne Water drainage works have already addressed any potential flooding impacts.
- 4. The Council/Melbourne Water drains have not been properly maintained and/or are inadequate.
- 5. Council and Melbourne Water should review and upgrade the drainage system to cope with overland flow and flooding from the one in 100 year flood event.
- 6. New development and the increase in density across Manningham has increased the level of overland flow and flooding.
- 7. Property values and property resale will be impacted, accordingly, Council rates should decrease / may increase as a result of the overlays and compensation should be payable.
- 8. Insurance costs/premiums will be impacted.
- 9. Buildings or structures on a property are unaffected by the proposed overlays, and therefore the overlay will impact the site unnecessarily.
- 10. There will be a financial or administrative burden for future development including additional costs associated with seeking planning permission and raising floor levels.
- 11. The proposed overlay will only have a minor impact on the property due to a minimal incursion or the overlay falling over an existing easement or driveway, and should therefore be removed.
- 12. Built features (such as existing floor levels, on site drainage, retaining walls etc.) on the subject property and adjoining properties may currently divert water away or prevent water from entering a property. Therefore question relevance of overlay.
- 13. Consultation process and information provided was inadequate.
- 14. Other miscellaneous issues these will be responded to individually in the table below.

Please refer to the 'Officer Response to Submissions' table at Attachment 4 for an overview of the issues raised and a generic response.

Abbreviations:

AHD – Australian Height Datum

AEP - Annual Exceedance Probability

ARI - Average Recurrence Interval

BoM – Bureau of Meteorology

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

DELWP – Department of Environment, Land, Water and Planning

OSD – On-site detention

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
1.	10 Louisa Place, Templestowe	Mullum Mullum Creek	SBO2	2, 4, 12	Taking account of the changes to the topography of properties upstream of 10 Louisa Place since 2009 when the Lidar data was collected, it is recommended to remove the central section of SBO2 from the property and realign the shape to the rear and eastern boundaries of the property. It is also recommended to change the designation of the new shape from SBO2 to SBO3, taking account of modelled flow depths.	Yes. Remove the central section of SBO2 from the property and realign the shape to the rear and eastern boundaries. Change the SBO2 to SBO3.
2.	24 Mullens Road, Warrandyte	Andersons Creek	SBO2	14	The submission content contained no objection and the submitter asked to be kept updated. Further clarification was also sought. Additional information was sent on 2 February 2016. No further submission was received.	No
3.	16 Larne Avenue, Donvale	Mullum Mullum Creek	SBO1	Withdrew submission	The submission contained no content. Clarification sought by Council. None provided. The submission was subsequently withdrawn.	No
4.	49 Dellfield Drive, Templestowe	Ruffey Creek	SBO2	1, 2, 3	The submission states that the terrain of the area is inconsistent with the proposed flood shape. The terrain data used in the model was captured in 2009 by DELWP and is the best available data for this type of modelling. A site visit was undertaken from the street for this property to verify the modelled flood shape against the terrain. Given the	Yes. Remove the SBO2 shape from 49 Dellfield Drive. In addition, remove SBO2

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					size of the catchments involved, each area has been broken up into a grid with 3m x 3m cells. This approach is considered to generally provide adequate resolution to define topographical features within the catchment. The proposed overlays identify flood prone land. Structures and buildings have not been modelled individually as they can be subject to change in the event of property redevelopment. Consideration has been given to the impact of structures such as buildings and walls through the application of surface roughness's in accordance with industry guidelines. The outcome of the review is that the exhibited flood shape be removed.	shape from 45 and 47 Dellfield Drive and remove part of the SBO2 shape from 43 Dellfield.
5.	55-57 Ennismore Crescent, Park Orchards	Mullum Mullum Creek	SBO1	4, 5	The property is located near a Melbourne Water main drain and the depths of flooding are consistent along the overland flow path. The overlay designation has been reviewed and reconfirmed as being appropriate based on the anticipated flood depth, direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. The outcome of the review is that the exhibited flood shape be retained at this location.	No
6.	368 George Street, Templestowe Lower	Ruffey Creek	SBO3	2	The submitter mentions the elevated nature of the property as a basis for the impossibility of flooding; however the SBO represents flow out of the property and onto the street via the driveway cut	No

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
7.	53 Bowen Road, Doncaster	Koonung Creek	SBO2	11	into the slope. A site visit confirmed surrounding topography and that overland runoff in excess of the pre 1970s drainage infrastructure could reasonably be expected to occur in the manner indicated by the SBO. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location. The submission states that the SBO does not cover	No
	East				a significant portion of the property. A desktop review has confirmed that the property is adjacent to a main overland flow path which encroaches significantly onto the submission property. A recent meeting involving the submitter and Council officers did not highlight any further issues to be addressed in addition to the points raised in the original submission. Due to the percentage of SBO coverage on the subject property and the modelled depth of flow, it is not recommended to remove the SBO2 area from the property.	
8.	12 Olympus Drive, Templestowe Lower	Ruffey Creek	SBO3	14	The submission did not contain an objection to the proposed amendment, however further clarification was sought. Additional information was sent to the submitter on 2 February 2016. No further submission was received.	No
9.	20 Beaufort Rise, Warrandyte	Mullum Mullum Creek	SBO1	14	The submission did not contain any comments. A further letter was sent on 22 January 2016 seeking comments, however, no further submission was received.	No

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
10.	3 Anton Court, Doncaster	Ruffey Creek	SBO2	2	The submitter is correct in stating the property slopes up from the level of the street, however the source of flow in this case is shallow overland runoff in excess of the capacity of the Council drains to the rear of the property, which flows through the property and onto the street, where it is largely contained within the roadway. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. The flood extent was modelled on a 1 in 100 year ARI or 1% AEP rainfall event in accordance with industry practices. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
11.	393 Heidelberg-Warrandyte Road, Warrandyte	Andersons Creek	SBO3	14	The submission contained no content. A further letter was sent on 22 January 2016 seeking comments, however, no further submission was received. The submission property is located near the Yarra River and contains the upstream extent of a minor flow path connecting to the existing LSIO overlay along the river.	No
12.	626 Ringwood-Warrandyte Rd., Park Orchards	Andersons Creek	SBO3	4	The submission does not object specifically to the SBO. The large property contains a narrow gully which drains to the creek at the front of the	No

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
13.	74 St Clems Road, Doncaster East	Koonung Creek	SBO2	1, 3, 7, 8	property along Ringwood-Warrandyte Road, with the SBO designated along the lines of the gully. Based on a desktop review, the flood shape is consistent with contours and catchment size and should be retained at this location. The submitter is correct in stating the property slopes up from the level of the street, however the source of flow in this case is shallow overland runoff in excess of the capacity of the Council drains to the rear of the property, which flows through the property and onto the street, where it is largely contained within the roadway. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. The flood extent was modelled on a 1 in 100 year ARI or 1% AEP rainfall event in accordance with industry practices. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this	No
14.	10 Michael Street, Templestowe Lower	Bulleen North	SBO2	2, 5, 7	Iocation.The submission does not object specifically to the SBO. The property is located in a gully, is in the centre of the flow path and could reasonably be expected to be flood prone during a major storm event. Although Council is incrementally upgrading	No

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
15.	20 Riverwood Lane, Templestowe Lower	Ruffey Creek	Remove LSIO SBO2	Withdrew submission	older drainage infrastructure, it cannot build a drainage system that can cope with all floods. However, it can ensure new buildings and works are constructed to reduce flooding in areas of greatest flood risk. The outcome of the review is that the extent of the SBO be retained at this location. The submission objected to the proposed SBO2 from a property development perspective. The	No
16.	3 Ridout Place, Bulleen	Koonung Creek	SBO3	1, 2	submission was subsequently withdrawn. The description of flooding in the submission is consistent with the application of the SBO at this location. A site visit has confirmed the surrounding topography, with the submission property located downstream of a gully in Morris William Reserve. Runoff could reasonably be expected to occur during storm events in the manner indicated by the SBO, with the flow path cutting the corner of no. 3. The properties on the low side of the street are affected by a flow path to the rear, with the flow largely contained by the roadway of Ridout Place. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
17.	2/47 Chippewa Avenue, Donvale	Mullum Mullum Creek	SBO2	4	The submission suggests that flooding is not a problem at the property provided the drains on Amy's Grove are regularly maintained. Due to the modelling being undertaken on the assumption that the drainage network is operating at capacity,	No

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					this is an issue separate to the extent of the flood shape. Should the modelling be undertaken with pits partially blocked, the flood shape would be more extensive than that indicated by the SBO. A site visit confirmed that the property is located in a sag and below road level of Amy's Grove and can reasonably be expected to experience overland flow when the capacity of the Council drain outside the property is exceeded during a major storm event. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
18.	33 Beckett Road, Donvale	Mullum Mullum Creek	SBO2	2, 11, 14 Measures should be taken to prevent dirt/rocks from adjacent properties washing onto neighbouring properties.	The submitter's description of runoff patterns are largely in line with the application of the SBO at this location. The submission takes issue with a small lobe of the flood shape and states there has not been flooding experienced. The submission states that there have been "some 1% events" experienced at this location. The review has confirmed the surrounding topography and drainage assets. The review has however found that the depths of flow in the vicinity of the carport as modelled were less than 30mm in depth and as such, it is recommended that the SBO2 area near the carport be trimmed and removed.	Yes. Remove part of the eastern section of the SBO2 shape.
19.	32 Fairbank Crescent, Templestowe Lower	Ruffey Creek	SBO3	2, 5, 7, 9, 11	The submission argues that the model should be used as a tool to improve drainage infrastructure. The proposed overlays will be valuable in identifying areas for critical drainage	Yes. Remove SBO3 incursion from the property.

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					improvements. Council has a policy of prioritising upgrades where flooding of habitable floor areas occurs. The submission is correct in identifying that the flood shape incursion is minor. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under certain conditions, development within an easement or in an area previously designated as a shared driveway may be permitted in some cases. Existing properties may be redeveloped in the future and the overlay will assist in the assessment of the impacts of any future development. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly.	
20.	3 Daws Road, Doncaster East	Ruffey Creek	SBO3	1, 11	The submission states that no flooding has been experienced in the last 10 years on the property. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under conditions, development within easement or in an area previously designated as a shared driveway may be permitted in some cases. Existing properties may be redeveloped in the future and the draft overlay will	Yes. Remove SBO3 ponding from the property. In addition, remove SBO3 from 2 and 3 Apricot Lane and 14 & 15/1 Daws Road

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					assist in the assessment of the impacts of any future development. In this case, the incursion is associated with an area of isolated ponding and is not considered to be significant. Thus, the ponding is recommended to be deleted from the exhibited flood shape.	
21.	74 Thompsons Road, Bulleen	Koonung Creek	SBO3	7,8	A site inspection and desktop review lead to the view that flooding will not reach sufficient depths to allow water to flow over the kerb between 74 and 76 Thompsons Road. An issue has been identified with the modelling in Thompsons Road which has resulted in a low point in the nature strip in Thompsons Road which permits modelled flows to enter 74 Thompsons Road. In reality it is likely that flows in a 1 in 100 year event will continue west along Thompsons Road to Allen Street. It is recommended that the SBO be removed from this property.	Yes. Remove SBO3 from property.
22.	98-100 Corriedale Crescent, Park Orchards	Mullum Mulllum Creek	SBO2	2	The submission states that the flood shapes accuracy is questionable. No specific observations of drainage patterns were provided in the submission, but it is possible the submitter has not experienced a 1 in 100 year ARI rainfall event of critical duration at this location. A site visit from the street has confirmed the topography with the submission property contains a gully which would reasonably be expected to experience runoff in the	No

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					manner indicated by the SBO during major storm events. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
23.	37 Scarlet Ash Drive, Templestowe Lower	Ruffey Creek	SBO3	2, 3	The submitter describes historical flooding in this area. There was a drainage upgrade in the vicinity of the submission property in 1998 and this was included in the modelling. The subject property is not downstream of the upgrade so it would not impact the flood extent. The review has confirmed the surrounding drainage assets. For the 25 minute duration which is the critical duration for this property, the event on the 29th of December 2016 was estimated as the equivalent of the 1 in 25 year rainfall event. This is much lower than the 1 in 100 year event that was used as a basis for the SBOs. The model is indicating that flood water is overtopping the gutter in Ironbark Drive and flowing into the subject property. Based on the depths of water on Ironbark Drive, it is not likely that they will be deep enough to do this. This has likely been caused by the resolution of the model picking up a low point in the gutter and another low point after the nature strip. This would lead to the low point being formed in the modelled surface due to the tinning process. Considering the depths in the subject properties are only just above the filtering parameter, this reduction in flow is likely to reduce them enough to remove them	Yes Remove SBO3 from property. In addition remove SBO3 from 35 Scarlet Ash Drive.

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					from the SBO. Therefore, it is recommended that	
					the SBO be removed from, 37 Scarlet Ash Drive.	
					The flood extent should be trimmed to the	
					property boundary now that there is no other	
					flooding in the property.	
24.	31 Hampshire Road,	Koonung Creek	SBO2	12	31 Hampshire Road is located in a valley running	No
	Doncaster				from Wetherby Reserve to Koonung Creek. The	
					adjacent property to the north is almost	
					completely covered by the SBO. That the SBO does	
					not encroach across a significant portion of the	
					submission property reflects both the upgraded	
					Council drainage infrastructure and the raised	
					nature of the ground above natural levels, which	
					has been mentioned in the submission. A site visit	
					confirmed that the drainage infrastructure in the	
					area was modelled correctly, and the topography is	
					largely consistent with the modelled terrain. There	
					is also a risk that the filling on the property could	
					be removed if the property is developed in the	
					future. It is considered that the Lidar data	
					adequately represents the ground conditions and	
					that the SBO2 should be retained in this case.	
25.	10A (2/10) Millicent Ave.,	Koonung Creek	SBO2	14	This submitter requested further information prior	No
	Bulleen			No objection	to the information session that was held in	
				at this stage.	November 2015. Information was emailed on 23	
					November 2015, and no further submission was	
					received. Following a further review, the	
					experiences of the submitter of property flooding	
					are consistent with the modelled SBO2 shape	

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					impacting the property. It is recommended that	
					the SBO2 shape be retained accordingly.	
26.	39 Scarlet Ash Drive,	Ruffey Creek	SBO3	3	The submitter describes historical flooding in this	Yes.
	Templestowe Lower				area. There was a drainage upgrade in the vicinity	Remove SBO3
					of the submission property in 1998 and this was	from property.
					included in the modelling. The subject property	
					would however not benefit from this upgrade. For	
					the 25 minute critical duration event for this	
					property, the event on the 29th of December 2016	
					was estimated as the equivalent of the 1 in 25 year	
					rainfall event. This is much lower than the 1 in 100	
					year event that was used as a basis of the SBOs.	
					The review has confirmed the surrounding	
					topography and drainage assets, with the	
					exception of the area behind kerb in Ironbark	
					Drive. The model is indicating that flood water is	
					overtopping the gutter in Ironbark Drive and	
					flowing into the subject property. Based on the	
					depths of water on Ironbark Drive, it is not likely	
					that they will be deep enough to do this. This has	
					likely been caused by the resolution of the model	
					picking up a low point in the gutter and another	
					low point after the nature strip. This would lead to	
					the low point being formed in the modelled	
					surface due to the tinning process. Considering	
					that the depths in the subject properties are only	
					just above the filtering parameter, this reduction in	
					flow is likely to reduce them enough to remove the	
					SBO. Therefore, it is recommended that the SBO	

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					be removed from 39 Scarlet Ash Drive. The flood extent should be trimmed to the property boundary now that there is no other flooding in the property and it is within 5m of the roadway.	
27.	3 Hampden Court, Templestowe	Ruffey Creek	SBO2	14 Object to amendment. No reasons given.	The submission objects to the amendment, but no specific basis for objection is provided. Based on a desktop review, the flood shape is consistent with contours and catchment size. The outcome of the review is that the extent of the SBO be retained at this location.	No
28.	20 Russell Street, Bulleen	Bulleen North	SBO1	3, 7	The updated modelling has identified the property is in an overland flow path. The flow path needs to be retained in the flood extent as the Council flow path to the south has been retained. However, it is necessary to connect this flow up to the main flow near the Melbourne Water drain (Bulleen North Drain). It has been selected as a Melbourne Water parcel so there is only one authority responsible for providing flood advice. The flood shape should remain as exhibited at this location.	No
29.	76 The Grange, Templestowe	Ruffey Creek	SBO2	7,8	The submitter has expressed concern regarding insurance and devaluation of the property. The property is in a gully adjacent to the Grange Reserve; has a drainage easement running along the east boundary; is in the main flow path and can reasonably be expected to experience overland runoff once the capacity of the Council drain is exceeded. The review has confirmed the surrounding topography and drainage assets. The	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					flood shape should remain as exhibited at this	
					location.	
30.	87-89 South Valley Road, Park	Andersons Creek	SBO2	1, 2	The submission states that flooding was	Yes.
	Orchards				experienced during construction of a nearby	Retain the SBO2
					property. This suggests the natural path of water is	shape at the rear
					consistent with the application of the SBO. The	of the property
					submitter also may not have experienced a 1 in	but delete the
					100 year rainfall event of critical duration at this	SBO2 shape
					location. The submission takes issue with the	leading to the
					extent of the southern flood shape running	gully.
					through the property compared to neighbouring	
					properties. A review of the Lidar data at this	
					location has found issues which warrant review of	
					the southern flood shape. The review has	
					generally confirmed the surrounding topography in	
					other areas and the existing drainage assets. The	
					SBO2 shape in the gully at the rear of the property	
					is confirmed. The SBO2 shape to the south is	
					recommended to be removed accordingly.	
31.	4 Berrima Road, Donvale	Mullum Mulllum	SBO3	14	This submission contained no content. A further	No
		Creek			letter was sent on 22 January 2016 seeking	
					comments, however, no further submission was	
					received. Due to the proximity of the subject	
					property to the flood extent it is reasonably	
					expected to be flood prone. The outcome of the	
					review is that the exhibited flood shape remain at	
					this location.	
32.	70 Melissa Street, Donvale	Mullum Mullum Creek	SBO2	5	Council's drainage system design is typically	No
					designed for a 1 in 5 year event, with flows in	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					excess of the pipe system travelling overland. The SBO is based on a 1 in 100 year ARI event. Due to the proximity of the property to the flood extent it is reasonably expected to be flood prone. The results of flood mapping have been used to identify potential drainage upgrades. The exhibited flood shape should remain at this location.	
33.	14 Olympus Drive, Templestowe Lower	Ruffey Creek	SBO3	2, 3, 5	The submission states that the property is elevated and unlikely to experience flooding. The flood shape at this location represents shallow overland runoff flowing downhill as a result of the upstream catchment to the south east rather than rising floodwater. This type of flooding is still considered a risk. The submission also refers to recent drainage upgrades. The upgrade in the Olympus Drive/Cassinia Rd catchment constructed in 2012 has been reviewed and found not to be represented in the model, however, the submission property is upstream of the works and the omission is unlikely to affect flooding at this property. The exhibited flood shape is consistent with the topographical contours of the property. The flood shape is recommended to be retained at this location and any updated drainage infrastructure is recommended to be included in a future review of the modelling.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
34.	11 Gairlock Court, Doncaster	Ruffey Creek	SBO3	2	This was modelled as water flowing in from the street, but it has been analysed and determined that the property should be removed from SBO3.	Yes. SBO3 to be removed from property.
35.	66 Knees Road, Park Orchards	Andersons Creek	SBO2	11	The submission states that the flood shape incursion is on a shared driveway and should not apply. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under conditions, development in close proximity to property boundaries, on shared driveways or within easements may be permitted in some cases. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be deleted accordingly.	Yes. Remove SBO2 incursion from the property.
36.	12 -14 Redhill Terrace Cherry Hill Estate (previously 141-161 Andersons Creek Road), Doncaster East	Mullum Mullum Creek	SBO2	12	The submission states that the modelling used to determine the extent of the SBO fails to recognise the development on the site. The On Site Detention system and private drains constructed for the development have been implemented to benefit properties downstream of the development and will not result in a change to the extent of flooding on the property. In addition, across the municipality, private drainage assets have not been included in the modelling for several reasons. Usually, OSD systems are only designed to minor storm event standards, with an overflow	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
37.	4 Birchgrove Crescent	Buffey Creek	SBO1	2 9 11	bypass for high intensity events. The drains constructed as part of the development are private assets which Council does not maintain and therefore cannot guarantee their effectiveness in high intensity events. Although in this case the OSD system has been constructed to major storm event standards, it will only impact the flood shape downstream of the asset, which is in the north east corner of the development. The changes made to the terrain as part of the development are not reflected in the LiDAR data which was captured in 2009. This data reflects the terrain at a point in time and will be updated in the future as new LiDAR data is made available. It is recommended to retain the flood shape at this location.	Yes
37.	4 Birchgrove Crescent, Templestowe	Ruffey Creek	SBO1	2, 9, 11	The overlay designation has been reviewed and reconfirmed as being appropriate based on the anticipated flood depth, direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. However, based on a review of the associated flow depths, and discussion with Melbourne Water, It is proposed to amend the designation from SBO1 to SBO3.	Yes Amend flood shape designation from SBO1 to SBO3
38.	Parks Victoria Land	Multiple	Multiple	14 Parks Victoria. No submission.	This submission from Parks Victoria notes that comments, if any, will be included in a DELWP submission. A submission from DELWP was not, however, received.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
39.	5 The Parkway, Templestowe	Mullum Mullum Creek	SBO2	2	The submitter does not provide any technical objection to the overlay placed on the property. The flood shape is reasonable in this instance due to the proximity of the subject property to the flood extent, as well as the levelling of the terrain within the property. As such, it is reasonably expected to be flood prone during major storm events. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
40.	4 Cavalier Street, Doncaster East	Ruffey Creek	SBO3	5	Council's drainage system design is typically designed for a 1 in 5 year event, with flows in excess of the pipe system travelling overland. The SBO is based on a 1 in 100 year ARI event. Due to the proximity of the property to the flood extent it is reasonably expected to be flood prone. The results of flood mapping have also been used to identify potential drainage upgrades. Council is working through a process to prioritise these capital works. As a result of these overlays, Council is better positioned to consider future drainage works across the municipality. Due to the modelling being undertaken on the assumption that the drainage network is operating at capacity, drainage maintenance is an issue separate to the extent of the flood shape. Based on the investigation undertaken and further review following a recent meeting with the submitter, it is	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					recommended that the flood shape should remain as exhibited at this location.	
41.	21 Caringal Avenue, Doncaster	Koonung Creek	SBO3	1, 5, 6	The submission states that no flooding has been experienced at this address and that poor planning on Council and Melbourne Water's behalf will result in future flooding, if it occurs. The flood shape at this location encroaches in at three points along three boundaries. It has been determined that incursions are mainly due to the rounding of the flood shape and are unlikely to affect continuity of the flood shape, therefore it is recommended that the overlay shapes be removed from this property.	Yes. Remove SBO3 shape.
42.	17 McCallum Road, Doncaster	Ruffey Lake	SBO2	1	The submission states that the residents have experienced two 1 in 100 year ARI storm events and not been flooded. No details of the date of the events have been provided so it is not possible to verify whether the events referred to were true 1 in 100 year ARI storms of critical duration. The flood shape in this area represents overland runoff in excess of the capacity of the existing drainage infrastructure travelling in a north westerly direction towards Ruffey Lake and is defined with a combination of depth, velocity and duration in line with industry practices. The review has confirmed the surrounding topography and drainage assets. Following the meeting with the submitter in 2017, Cardno were requested to review the submission.	Νο

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The flood shape should remain as exhibited at this	
					location.	
43.	5-7 Rainbow Valley Road, Park	Mullum Mullum Creek	SBO2	2	While the SBO2 only covers a small percentage of	Yes.
	Orchards				the property, the property has a defined gully and	Delete SBO2
					is predicted to be partially flood affected in a 1 in	from property.
					100 year ARI event of critical duration. The pipe	
					system within the property to divert overland run	
					off is considered private drainage and not relevant	
					to the SBO. A site visit confirmed the fall of the	
					property as stated by the resident in submission	
					and following addendums. Owing to issues with	
					the Lidar data due to heavy tree cover, removal of	
					the SBO2 is recommended.	
44.	6 Marshall Avenue, Doncaster	Koonung Creek	SBO2	N/A	The submission contained no objection to the	No
	East				proposed amendment but asked to be kept	
					informed of the process. The submission property	
					experiences runoff from the north east and the	
					flood shape is consistent with topographical	
					contours.	
45.	20 Sinclair Avenue,	Ruffey Creek	SBO3	2	Typically, underground drainage systems are	Yes.
	Templestowe Lower				designed to cope with 1 in 5 year ARI events with	Remove SBO3
					overland flow occurring once the capacity of the	shape.
					drains is exceeded. The existing Council drainage in	
					the area surrounding the submission property does	
					not provide complete protection for 1 in 100 year	
					ARI rainfall events accordingly. The SBO3 is based	
					on flood prone land, not specifically where	
					dwellings are flooded above floor level. Due to	
					issues with the LiDAR data near the house and in	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					Teresa Court, it is recommended that the SBO3 shape be deleted.	
46.	112-126 Old Warrandyte Road, Donvale	Mullum Mullum Creek	LSIO & SBO2	12, 14 Object to the amendment on the basis that the new overlay boundaries do not project any further into the subdivision than the existing overlay boundary. Issues to do with flooding were addressed as part of the original permit for subdivision which was granted in 2009. The	The submission argues that due to the current construction of Mullum Estate including earthworks and stormwater infrastructure, the exhibited flood shape should not apply to the property. This work has occurred since the capture of the LiDAR survey data used in the modelling. This LiDAR data and the derived flood shape are reflective of the ground conditions at a point in time. The exhibited flood shape is reflective of the conditions at the time of modelling. The addendum also argues that the extension of LSIO up the tributary gullies should be designated with an SBO rather than an LSIO. The intent of the amendment is that each property be subject to overlays solely under either Council or Melbourne Water control. Based on current data it is recommended to amend the designation of the flood shape on the main tributary gully to LSIO resulting in the entire gully being under Melbourne Water control. In recognition of the progress of the Stage 1 subdivisional works and lack of information available to incorporate into the model on new assets and levels, it is further proposed to delete the flood shape within the extent of Stage 1 of the subdivision, including the extension of the flood shape into 7 Yileen Court. In respect of 116-126 Old Warrandyte Road (Stage 2), two dams have	Yes. It is recommended to amend the designation of the flood shape on the main tributary gully to LSIO resulting in the entire gully being under Melbourne Water control. Further, it is proposed to delete the flood shape from Stages 1 and 2 of the subdivision and 7 Yileen Court.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
47.	17 Estelle Street, Bulleen	Bulleen North	SBO3	permit adequately dealt with flooding concerns on the subject land. 11	been noted in the landscape which will be removed when Stage 2 works proceed. Further review of the flood shape has also determined that the remaining overland flows at 116-126 Old Warrandyte Road are relatively shallow and given the pending civil construction works, it is recommended that the LSIO flood shape be deleted from the Stage 2 land. The submission states that the overlay incursion is on the driveway of the affected property and	No
					questions why other neighbouring property and questions why other neighbouring properties do not have a similar incursion. While the SBO2 only covers a small section of the property, the surrounding topographical features concentrate runoff to the driveway that is almost flat and would increase the depth of flow and partially flood in a 1 in 100 year ARI event of critical duration. If the property is redeveloped in the future, the overlay will be important in ensuring this is undertaken in a manner that considers the stormwater overland flow path from behind this property. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
48.	16 Pamela Court, Warrandyte	Mullum Mullum Creek	SBO3	2, 5, 7, 8	"The submission states that flooding has been experienced on the property but not in the way shown by the SBO." Council's underground drainage system design standard is typically for a 5	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					year ARI event, with flows in excess of the pipe system travelling overland, as compared with the 1 in 100 year event modelled to establish the SBO. The submission also refers to historical issues with blockages or maintenance of drains in the area. Whilst an important issue, it is not relevant to the SBO as the flood shape is modelled assuming no blockages exist in the system. The review has confirmed the surrounding drainage assets. The LiDAR and surface contour data were analysed along with site photos and it was found that in the 1 in 100 year flood event, the overland flows in the road will be deep enough to overtop and flow from Margaret Court into the property. The surface data seems to corroborate this occurrence as well as the subsequent flow path into the property and then out through the driveway. Therefore, it is recommended that there be no change to the SBO on this property.	
49.	32 Worthing Avenue, Doncaster	Mullum Mullum Creek	SBO1	2, 3, 14 Would like the overlay to be reduced to cover only the southern portion of the property.	The property. The property is located near a Melbourne Water main drain and the depths of flooding are consistent along the overland flow path. The overlay designation has been reviewed and reconfirmed as being appropriate based on the anticipated flood depth, direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					The outcome of the review is that the exhibited	
					flood shape be retained at this location.	
50.	12 Alder Court, Park Orchards	Koonung Creek	SBO1	8, 10, 11	There is minor flooding along the north western property boundary. This is updated modelling for an existing SBO flood shape. See Assessment of Submission Report dated 1 September 2017, pages 224 and 225. The outcome of the review is that the exhibited flood shape be removed at this location.	Yes. Remove SBO1 shapes from 12 Alder Court.
51.	91 South Valley Road, Park Orchards	Koonung Creek	SBO2	11	The SBO shape is sizable and the entire width of the flood extent flows through the property near the rear boundary. In addition, the flood extent for the 1 in 100 year ARI event is wider than the easement that traverses the property located in the gully which would convey storm water from the major rainstorm events. Removal of the SBO is not recommended as limitations for development along the easement alone do not reflect the flood extent. The review has confirmed the surrounding topography and drainage assets. No substantive issues over and above the original submission have been raised by the submitter for consideration. The flood shape should remain as exhibited at this location.	No
52.	3 Wren Court, Templestowe Lower	Bulleen North	SBO3	2,7	Although the property is located on a slope and in a high area, there are higher points in the surrounding terrain. The catchment area above is a medium size catchment and it would produce significant overland flows. The site visit confirmed	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					that the site conditions and flood shape are relatively consistent with the contour data used for the flood modelling. Drainage systems upstream of the property are designed typically for a 1 in 5 year ARI event. The slight gully above the property would direct overland flows starting at this property which are consistent with the SBO3 shape. The SBO is consistent with the expected overland flows and will assist in controlling any future development of the land, it is recommended that the SBO3 is retained on this site. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as	
53.	3 Parkside Court, Warrandyte	Mullum Mullum Creek	SBO2	2, 7, 8, 11	exhibited at this location. The submission states that the incursion of the flood shape is minimal and should not apply. A review has found that the small incursion of the flood shape on the common boundary of 2 and 3 Parkside Court is minor and would not provide any significant planning or risk mitigation benefit and can be trimmed to the property boundary. However, there is a second incursion of the flood shape through the battleaxe access to the property which corresponds with the main flow path and cannot be removed without compromising the integrity of the flood shape in this area. It is recommended that the aforementioned trimming be carried out as part of this amendment but it is recommended that the SBO2 overlay be retained.	Yes. Incursion of SBO2 on the common boundary between 2 and 3 Parkside Court to be removed. Second incursion of SBO2 through battleaxe access to property to remain.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
54.	18 Bali Hi Boulevard, Templestowe	Mullum Mullum Creek	SBO2	1, 2	Council's drainage system design standard is typically for a 1 in 5 year ARI event, with flows in excess of the pipe system travelling overland. The SBO is based on a 1 in 100 year ARI event. The fact that the submitter has not reported any flooding issues does not necessarily mean that the property is not flood prone in a 1 in 100 year ARI event. The rear of the property is characterised by a small gully and due to insufficient drainage is susceptible to inundation. In response to changes to ground levels at the rear of the property, it is proposed that SBO2 be trimmed and limited to the area of the easement at the rear of the property.	Yes. Remove eastern area of SBO2 beyond the western easement.
55.	2/13 Baratta Street, Doncaster East	Koonung Creek	SBO2	7	The submitter does not provide any technical objection to the overlay placed on the property. The flood shape is reasonable in this instance due to the proximity of the subject property to the flood extent as well as the levelling of the terrain within the property. As such it is reasonably expected to be flood prone during major storm events. The outcome of the review is that the extent of the SBO be retained at this location.	No
56.	21 Tandarook Crescent, Donvale	Koonung Creek	SBO2	2, 11	The submission states that a small portion of the property is affected by the SBO, and that the house is located away from these areas. Although the property experiences a minor incursion in terms of percentage of the property affected, it does not meet the criteria for trimming as a minor incursion as it is over 30m2. The review has confirmed the	Yes. Delete both SBO2 areas.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					surrounding topography and drainage assets. However, the incursions into the property are within the margin of model error and were not addressed as part of the automated shape smoothing process. The SBO2 shapes should be deleted from this property.	
57.	4 Skye Place, Doncaster East	Ruffey Creek	SBO3	1, 2, 3, 7	The submitter states that the property has not flooded in 30 years and asserts that the existing drains have enough capacity to handle stormwater runoff. Pluviograph data for Zerbes Reserve indicates that the most significant event impacting this area in the last 30 years was estimated to be between a 10 and 20 year ARI event. While the submitter may not have observed flooding, the property is within an expected flow path based on the aerial survey data and observations during the site visit. Although an upgrade has been done to increase the number of drainage pits in the court, the modelling indicates that in a 1 in 100 year ARI storm event, the easement drain capacity will be exceeded and, with flows in excess of the pipe capacity travelling overland. The flood shape is based on a 1 in 100 year ARI event of critical duration. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
58.	28 Hall Road, Warrandyte South	Andersons Creek	SBO2	2, 7, 8, 10, 12	While the SBO2 only covers the dam area of the property, the property has a significant area for overland run off from the road front to the rear, and is predicted to be flood affected in a 1 in 100 year ARI event of critical duration. If the property is re-developed in the future, it would be appropriate to ensure that the buildings are located to ensure that the floor levels are above flood levels. The enlargement of the dam has been reflected in the LiDAR data used in the modelling which was captured in 2009. The outcome of the technical review is that the SBO remain in place at this location.	No
59.	4 Whitefriars Way, Donvale	Mullum Mullum Creek	SBO2	5, 14 Council should not be applying controls retrospective ly. The use of the term flooding is incorrect and misleading.	Manningham's current design of drainage system is consistent with other Councils in that they are designed for a 1 in 5 year ARI. The implementation of an Overlay better positions Council to consider future drainage works across the municipality. The site investigation confirmed the topography of the property is consistent with contours and the road front boundary is within a defined gully. The outcome of the technical review is that the SBO remain in place in this location but the designation be changed from SBO2 to SBO3.	Yes. Change SBO2 to SBO3.
60.	40-42 Hertford Road, Doncaster East	Ruffey Creek	SBO2	3, 6	A discrepancy has been found between the modelled and actual drainage infrastructure at this location. The upgrade was undertaken prior to the flood modelling exercise which underpins the SBO and additional modelling has been undertaken to	Yes. SBO2 shape to be reduced.

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					quantify the impact of the upgrade on the flood shape. Cardno have rerun the model with the inclusion of the 1,050 mmd dia drain and the amended SBO shape is reduced from the SBO shape previously exhibited. The SBO shape is recommended to be amended and reduced in accordance with these results.	
61.	9 Mahoneys Court, Warrandyte	Mullum Mullum Creek	SBO3	1, 7	The submission refers to the existence of private drains which have mitigated against flooding of the property in the past. The site investigation confirmed that the topography of the property is consistent with contours. In addition, as the extent of the SBO3 area is bigger than 30sqm (even though it is less than 6% of the total land area), it is recommended that the overlay as exhibited should remain. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
62.	2/51 Beecroft Crescent, Templestowe	Ruffey Creek	SBO2	1, 2 12	The location of the property is on a sloping site and a larger catchment to the north west results in significant overland runoff across the property. The natural topography controls the overland flow. The drainage infrastructure including the sloping land surface has been correctly represented in the model and therefore, the analysis which has resulted in the application of SBO2. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
63.	29 McCallum Road, Doncaster	Ruffey Creek	SBO2	2	The submission states that the flood shape is not representative of the existing contours of the property. The LiDAR terrain data used in the modelling represents the latest and most complete terrain data available for this type of modelling. However, inspection of the back of the property has revealed that there are some inconsistencies between the Lidar data and actual levels. The flood shape is recommended to be removed accordingly.	Yes. Remove SBO2 shape from property.
64.	1/14 Chippewa Avenue, Donvale	Mullum Mullum Creek	SBO2	3	The submission states that the nearby 2012 Whitehorse Council drainage upgrade protected the property from flooding and the poor maintenance of the Council drainage system needs to be addressed. However, the fully maintained Council drainage would cater for only the runoff from the 1 in 5 year ARI event and the SBO2 is associated with a 1 in 100 year ARI event. The submitter also requests updated flood mapping and further drainage upgrades if the property is to remain under SBO2. Since the property is located at the middle of a natural gully, modelling of the Whitehorse Council drains is not expected to significantly impact the flood extent. The property is wholly under SBO2 and the depths of flow through the property exceed 100mm. The review has confirmed the surrounding topography and Manningham drainage assets. The flood shape should remain as exhibited at this location. The	No

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					recent mapping will be utilised to prioritise future Council drainage upgrade works, on an as needs basis to protect habitable floor areas.	
65.	20 Montpellier Crescent, Templestowe Lower	Ruffey Creek	LSIO	3	The majority of the overland flow across the parcel is from the south, not from Ruffey Creek. The overlay designation has been reviewed and given that the overland flows impacting this property are from the local catchment to the south, it is proposed to change the overlay designation from LSIO to SBO2.	Yes. Overlay designation to be changed from LSIO to SBO2. Designations for 16 and 18 Montpellier to be changed from LSIO to SBO2.
66.	3 Laloma Court, Templestowe Lower	Ruffey Creek	SBO2	2, 7, 8, 12	The submission states that the property is not at risk of flooding because it is elevated and the resident has upgraded their private drainage system. Although the property is elevated, it is sloping and the area to the south is even more elevated, with topographical gully-like features concentrating the shallow runoff in this area. In addition, private drainage systems have not been modelled as they can be removed at any time and Council cannot guarantee their effectiveness. Also, they do not significantly impact the flood extent during major storm events. The intent of the overlay is not to restrict future development but to ensure it is undertaken in a manner that considers the overland flow path of runoff. Different	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					construction methods will be considered provided the developer can demonstrate appropriate ways to manage stormwater runoff. A site visit undertaken confirmed that the topography of the area and Council drainage assets are consistent with that modelled. The flood shape is recommended to be retained at this location.	
67.	26 Jocelyn Court, Doncaster East	Ruffey Creek	SBO3	1, 2	The submission states that the property is on a slope and no flooding has ever been experienced. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. For the storm event on the 29th December 2016, the 15 minute storm was the storm associated with the greatest ARI from the event, which was 1 in 20 years. The impacts identified by the SBO are based on a 1 in 100 year storm event, so it is expected that the storm from the 29th December 2016 would have been significantly smaller. The drainage system implemented in the immediate area was designed for a 1 in 5 year event, with flows in excess of the pipe capacity travelling overland. Review of the model indicates that there are issues with the surface contour data and model resolution, leading to the creation of a low point in the modelled surface. It therefore is recommended to remove the SBO from this property.	Yes. Partial removal of the SBO shape on 26 Jocelyn Cr on the west side only.
68.	10 Hotham Street, Templestowe Lower	Bulleen North	SBO3	2, 3, 4, 5, 7, 8, 11	The submission states that Council should upgrade the drains if flooding is a problem and that the	Yes

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					drainage upgrade along Balmoral Ave should be included in the modelling. A review has found that these upgraded drains (2012) were included in the model, however the submission property is on a different flowpath and does not directly benefit from the upgrade. The modelling results indicate that this section of the flood shape is due to high velocities on the driveway of the property caused by water entering from 8 Hotham Street. Due to the presence of walls along the boundary of the property, it is unlikely that this transfer of water will occur. Therefore, it is recommended that the SBO on this property be removed.	Remove SBO3 from property.
69.	59 Fyfe Drive, Templestowe Lower	Ruffey Creek	SBO2	1, 7	The submission states that they have lived in the property for 15 years and have never flooded. In addition, the submission indicated that prior to buying the property research indicated no flooding liability. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. The proposed SBO3 applies to more than 50% of the property. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
70.	1/24 Roger Street, Templestowe Lower	Koonung Creek	SBO2	1, 12	The submission refers to experiences of flooding across the property, however, argues that the dwelling has never flooded. The flood shape incursion represents the lower lying area of the	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					property adjacent to a floodway and does not extend over the dwelling footprint. A site visit has found the flood shape to be consistent with site conditions and evidence described in the submission. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
71.	8 Chaim Court, Donvale	Koonung Creek	LSIO	1	The submission states that the property was purchased 42 years ago and that there has never been water from the Mullum Mullum Creek or from the road entering this property during that time, although the road has flooded in a few occasions in very intense rainfall events in the past. It is acknowledged that it is not appropriate to designate the flood shape on this property as LSIO as the flooding represents runoff from the north east as a result of the Council drains overflowing in high intensity rainstorm events larger than the 1 in 5 ARI. Council and Melbourne Water officers are in agreement that the overlay should be reclassified as SBO3 and the flood shape is consistent with the expected flooding in the 1 in 100 ARI storm event. Following the attendance of the submitter at the one-on-one interviews, Cardno were engaged to review the submission. It was confirmed that the property is located in the low point in Chaim Court and that the flood shape is considered to be appropriate. It is recommended that the overlay	Yes. It is recommended that the overlay be reclassified to SBO 3, however, that the overlay is not removed from this property. These changes also impact 3 and 5 Chaim Court and 59 Beckett Road.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					be reclassified to SBO3 and the overlay not be removed from this property.	
72.	11 Apple Blossom Court, Templestowe	Mullum Mullum Creek	SBO2	2, 14 Request a change from SBO2 to SBO3.	The submission states that due to the elevated nature of the property it will not experience any significant overland flow and refers to other lower lying properties not being affected by the overlay. The flood shape in this area represents overland flow to the north and east. It does not represent rising or standing water, so references to low lying properties are not relevant. The review has found the SBO shape is consistent with the topography and Council drainage assets. Given the lower modelled flow depths however, it is recommended that the overlay designation be downgraded from SBO2 to SBO3.	Yes. Amend the overlay from SBO2 to SBO3.
73.	10 Tennyson Court, Templestowe	Mullum Mullum Creek	SBO3	1	"The submission states that the property has never experienced flooding with the exception of on one occasion following a drain blockage." It is possible the submitter has not experienced a 1 in 100 year ARI rainfall event of critical duration at this location. The Council drainage infrastructure to the rear is only designed for a 1 in 5 year ARI rainfall event, so it is reasonable for overland flow to occur once the capacity of these drains is exceeded in the 1 in 100 year ARI event. The site visit confirmed that the drainage infrastructure is consistent with that modelled. The LiDAR and surface contour data was analysed along with the results of the modelling and site photos. It was found that the	Yes. Remove the SBO3 from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					flooding of the subject property is originating from the neighbouring property of 9 Tennyson Court. However, site photos indicate that water is not likely to enter the property at this location due to a high point has likely not been fully picked up in the resolution of the model. Therefore, it is recommended to remove the SBO from the entire property.	
74.	13/1 Daws Road, Doncaster East	Ruffey Creek	SBO3	7, 11, 12	The submission states that the existing drainage in the vicinity of the property is adequate. It is possible that the submitter has not experienced a 1 in 100 year ARI storm of critical duration at this location. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under certain conditions, development within an easement or in an area previously designated as a shared driveway may be permitted. Existing properties may be redeveloped in the future and the overlay will assist in the assessment of the impacts of any future development. In this case, the incursion is partly associated with an area of isolated ponding and is not considered to be significant and it is recommended that the ponding area be deleted from the exhibited flood shape.	Yes. Remove isolated ponding area of the SBO3.
75.	65 Dehnert Street, Doncaster East	Ruffey Creek	SBO1	2, 12	The property is located adjacent to the Melbourne Water George Street Main Drain. The overlay shape has been reviewed and reconfirmed as being appropriate based on the	Yes, SBO1 to be converted to SBO2.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					anticipated flood depth and direction of flow, however, the overlay is associated primarily with overland flows from the local catchment and as such, it is proposed that the overlay be changed from SBO1 to SBO2.	Remove SBO1 shape from front of 65 Denhert. Remove SBO1 shape from north-western corner of 116 George.
76.	99 The Grange, Templestowe	Ruffey Lake	SBO2	2, 3, 7, 8, 12	The submission and addendum references the higher level of the land and associated retaining walls of the property with respect to the neighbouring properties. In general, the area is located in the middle of a floodway connecting Serpells Community Reserve and The Grange Reserve. Private infrastructure such as retaining walls, structures and buildings are not individually modelled as they are not protected and can be subject to change in the event of property redevelopment. Consideration has been given to the impacts of structures such as buildings and features such as landscaping and fences on the mapped flood extents, through the application of roughness factors to land areas. Roughness factors are allocated taking consideration of land use and type and density of development for individual sub catchment areas. The review has confirmed the surrounding topography and drainage assets. However, given the depth of flows reflected in modelling for the northern and eastern areas of	Yes. Amend SBO2 to SBO3 at the northern property boundary and the eastern overlay area. SBO2 is to be retained over the driveway area.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					the property, it is recommended that the overlay designation be changed from SBO2 to SBO3 in these areas. A further addendum (following completion of the technical review) has reiterated the concerns with the modelled contours and the drainage locations, and has concluded that there are no significant or risk mitigation benefits in retaining the overlays. In addition, the addendum also questions the impact of the variability of the Lidar of 100mm +/	
77.	8 Lalani Terrace, Templestowe	Mullum Mullum Creek	SBO3	3, 12	The submission refers to recent drainage upgrades in addition to observed overland flow along the easement running along the eastern boundary. The recent upgrade mentioned in the submission relates to the reconstruction of the corner of Serpells Road and Tuckers Road which was undertaken in 2010, however, no drainage pipes were installed as part of that work and the land surface is not considered to be substantially altered. A site visit has confirmed that the local topography and drainage assets and the flood shape are considered to be consistent with site conditions. The outcome of the review is that the exhibited flood shape be retained at this location.	No
78.	7 Myers Court, Doncaster	Koonung Creek	SBO2	2, 3	The submission refers to drainage upgrades along the valley from Arthur St to Frank St. These have been checked and found to be modelled consistently in the flood mapping. The comparison with the other properties on Frank St with respect	Yes. SBO shape to be reduced at its eastern extent.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					to land elevation may not be relevant as they are in	
					a different flow path. The south west corner of the	
					property is located at the lowest point of the gully	
					line that runs along north east to south west	
					direction at that location and the modelled depths	
					at the lowest point are consistent with this	
					depression. The extent of SBO means during the	
					event of flood there would be certain depth of flow	
					with certain duration and velocity over those	
					areas. Water will accumulate to that depth at that	
					part of the land for certain duration and then flow	
					downstream. When the natural surface is	
					developed to a constructed surface, the runoff will	
					be increased. This reduction is due to the fact that	
					infiltration would be reduced. Drainage assets have	
					been modelled correctly with a site visit verifying	
					the referenced upgrade works. Although upgrades	
					have taken place in the past, these serve to	
					remove flooding of habitable floor areas but do not	
					remove all nuisance flows because there are	
					existing deficiencies in the surrounding network.	
					The review has confirmed the surrounding	
					topography and drainage assets. The SBO shape in	
					this area has been reviewed based on the	
					topographical survey information supplied and the	
					SBO shape is proposed to be reduced accordingly.	
79.	4 Cypress Avenue,	Ruffey Creek	SBO3	1, 2	The submission states that, due to the slope of the	No
	Templestowe Lower				property and existence of drains to the rear,	
					flooding is unlikely to be an issue. The flood shape	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					in this area represents overland runoff travelling in a southerly direction, in line with the topography of the area and the upstream catchment. The proposed overlay will assist in ensuring redevelopment is undertaken in a way that considers the extent of this runoff. Although the submitter may not have experienced flooding, it is possible that a 1 in 100 year ARI rainfall event of critical duration has not been experienced at this location. The Council drains in the easement along the eastern boundary would provide a 1 in 5 year ARI level of service. The review has confirmed the topography and drainage assets in this area. The outcome of the review is that the exhibited flood shape be retained at this location.	
80.	12 Speers Court, Warrandyte	Mullum Mullum Creek	SBO3	1, 5, 7, 8	The submission states that no flooding has been experienced on the subject property. The submission also states that if the drainage infrastructure is unable to cope with the amount of runoff, Council or Melbourne Water should upgrade the drains. It is possible that the submitter has not experienced a 1 in 100 year ARI storm event of critical duration at this location. Council cannot build a drain that can cope with all storm events. Typically, underground drainage systems are designed to cope with minor (1 in 5 year ARI) storm events with flows in excess of the underground network travelling overland. The SBO was based	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
81.	43 Knees Road, Park Orchards	Andersons Creek	SBO3	2	on modelling for a 1 in 100 year ARI event in line with industry practices. This identifies flood prone land during major storms and assists in ensuring development occurs in a way that considers the natural flow path and sites dwellings in a safe location. A site visit has confirmed that the flood shape is consistent with the site conditions and topography. The outcome of the review is that the exhibited flood shape be retained at this location. The submission takes issue with the flood shape encroaching over the house footprint. The	Yes. The flood shape
					upstream catchment for the property is located to the north east and the property contains a small gully. A review and site visit has found there is limited basis for the connection of the flood shape between the ponding on the house footprint and the gully. The outcome of the review of the SBO shape at this location is recommended to be removed from the house footprint, however, the flood shape is recommended to be retained in the gully running through the property. This action was confirmed at a recent meeting with the submitter.	at this location is to be amended to remove the SBO from the house footprint, however, the flood shape is recommended to be retained in the gully running through the property.
82.	9 Bayles Court, Donvale	Mullum Mullum Creek	SBO1	2, 12 Withdrawn	The property is located adjacent to the Melbourne Water Hunt Street Main Drain. The SBO1 overlay has been reviewed and the outcome of the review is that the exhibited flood shapes be removed from 9 Bayles Court.	Yes. SBO1 shapes to be removed.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
83.	6 Robyn Street, Doncaster	Ruffey Creek	SBO2	1, 2	The submission states that flooding will not be an issue for the property. The property contains a minor incursion at the rear that is not considered to be significant. Having the overlay on the property is not expected to yield any significant planning or risk mitigation benefits. The outcome of the review is to recommend that the flood shape be deleted from the property.	Yes. Remove the SBO2 incursion from property.
84.	51 Larne Avenue, Donvale	Mullum Mullum Creek	SBO3	2, 7, 14 Waste of Council revenue	The flood shape be deleted from the property. The flood shape does not represent a recently increased risk of flooding and does not aim to prevent development, but rather aims to ensure that development is undertaken in a manner which considers overland runoff. The modelling results were analysed and it was found that there is no overland flow connection between water on Park Road and this property. The catchment contributing to this flood extent is generated from 107 Park Road, 23 White Lodge Court and 53 Larne Street as well as 51 Larne Avenue itself. It is therefore not likely that the kerb and channel on Park Road will reduce flooding on 51 Larne Avenue. As such, no change to the SBO is recommended.	No
85.	20 McLeod Street, Doncaster	Koonung Creek	SBO2	7, 8, 11	The submission states that the incursion of the flood shape is minimal and should not apply. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under conditions, development in close proximity to property boundaries, on shared driveways or within easements may be permitted in some cases.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					In this case, although the incursion represents a small percentage of the property size, the property may be subdivided in the future. The incursion is over 30 m2 and does not meet the criteria to be trimmed. In addition, the property is close to areas of flooding in excess of 500 mm in depth and this is considered a higher risk area. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
86.	41 Botanic Drive, Doncaster	Ruffey Creek	SBO1	1	The property is located adjacent to the Melbourne Water Roseland Grove Main Drain. The overlay designation has been reviewed and owing to discrepancies with the Lidar data, it is recommended to remove the SBO1 flood extent. The outcome of the review is that the exhibited SBO1 shape is to be removed.	Yes. SBO1 flood extent is to be removed.
87.	106 Rathmullen Quadrant, Doncaster	Koonung Creek	SBO2	2,6	The property receives runoff from the north east. The relative position of the property to the surrounding areas is consistent with the contour map and the SBO3 map including depths of overland flow. The front excavation of the property at 108 Rathmullen Quadrant has been correctly picked up by the depths of overland flow at that location. The drainage infrastructure has been checked and found to be consistently modelled. The proposed overlays will ensure that any possible future redevelopment will be done in a way that considers the path of overland runoff.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
88.	43 Eucalypt Avenue, Templestowe Lower	Ruffey Creek	SBO3	1, 2	The review confirmed that the terrain of the site and drainage infrastructure is consistent with that modelled. The outcome of the review is that the exhibited flood shape be retained at this location. "The submission states that flooding has not been experienced and that the drainage system is sufficient." Council drainage systems are typically designed to cater for a 1 in 5 year ARI event. It is possible the submitter has not experienced a 1 in 100 year ARI storm event of critical duration at this location. The property slopes down from road level and there is an easement drain along the rear boundary. The review confirmed that the existing drainage infrastructure is consistent with that modelled. The LiDAR and surface contour data were analysed and it is unlikely that water will flow into the properties on Eucalypt Avenue from the Council drain running along the rear of the properties. This has likely been caused by the model resolution picking up a low point in the backyard of 43 Eucalypt Avenue. It is therefore recommended to remove the SBO from 43	Yes. Remove SBO3 from property. Also remove the SBO from 41, 45 and 47 Eucalypt Avenue.
89.	36 Hotham Street, Templestowe Lower	Bulleen North	SBO3	2, 7	Eucalypt Avenue. The submission states that the existing topography of the property is sloping and is not reflected accurately in the proposed overlay. The flood shape at this location represents concentrated runoff from the west due to the topography and water flowing onto Hotham Street.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					A site visit has found that the flood shape is consistent with site conditions. The intent of the proposed overlays is not to prevent future development but to ensure that it is undertaken in a manner which considers the overland flow path. The site visit confirmed that the terrain of the site and drainage infrastructure is consistent with that modelled. The outcome of the review is that the exhibited flood shape be retained at this location.	
90.	42 Winston Drive, Doncaster	Ruffey Creek	SBO2	5	The content of the submission acknowledges that flooding occurs which supports the application of the SBO in this case. The flood modelling which underpins the SBO will be used to prioritise drainage upgrades. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
91.	25 Amersham Drive, Warrandyte	Mullum Mullum Creek	SBO3	2	The flood extent indicates shallow flooding of the driveway area which is located in a gully and collects runoff from the east and south. Currently the property is under construction and the planning permit may have been issued before the commencement of the amendment. Although the driveway is the only part of the property affected by the SBO, it is not considered a basis for removal from the overlay as future redevelopment may occur and it is important to have the overlay to identify flood prone land. In addition, removal of the SBO would disconnect the adjacent flood shape	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					and it is not recommended for removal. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
92.	20 Bullen Street, Doncaster East	Koonung Creek	SBO2	1, 14 Flood overlay should be reduced in size.	The submission describes flooding along the easement at the rear, however, questions the extent of the proposed overlay. Although the flooding that has been experienced may not have been as extensive as that indicated by the flood shape, it is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. A site visit has confirmed the flood shape is consistent with the topography and drainage assets at this location. Cardno have also reviewed the submission and the SBO is recommended to be retained.	No
93.	43 Botanic Drive, Doncaster	Ruffey Creek	SBO1	1, 2	The property is located adjacent to the Melbourne Water Roseland Grove Main Drain. The overlay designation has been reviewed and owing to discrepancies with the Lidar data, it is recommended to remove the SBO1 flood extent.	Yes. Remove SBO1 shape.
94.	14 Coleridge Court, Templestowe	Mullum Mullum Creek	SBO3	2	Although the incursion of the flood shape on the property is minor compared to the size of the property, the purpose of the proposed overlay is to ensure that future development is protected from flooding and the property may be subdivided in the future. In this case, it is not recommended to amend the flood extent as the incursion makes up almost the entire width of the flow path at this	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
95.	17 Thea Grove, Doncaster East	Koonung Creek	SBO1	2, 3, 5, 12	location and trimming would compromise the integrity of the flood shape in this area. The site visit confirmed that the terrain of the site and drainage infrastructure is consistent with that modelled. The outcome of the review is that the exhibited flood shape be retained at this location. Property is located adjacent to a Melbourne Water Main Drain (Leeds Road MD). The applicable flood level is 76.17 metre AHD. The overlay designation has been reviewed and reconfirmed as being appropriate based on the anticipated flood depth, direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. Based on a desktop analysis it was found that the flooding at the front of the property should continue along Thea Grove instead of entering the property. As such, it is recommended that this be removed from the flood overlay. The outcome of the review is that the exhibited flood shape be retained, with the exception of the SBO1 shape at the front of the property which is recommended to be deleted.	Yes. Delete SBO1 flood shape at front of property but retain remainder of SBO1 shape.
96.	6 Hillcroft Drive, Templestowe	Ruffey Creek	SBO1	1, 2	Property is located adjacent to a Melbourne Water Main Drain (Greenridge Avenue Drain). The overlay extent has been reviewed and reconfirmed as being appropriate based on the direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the	Yes, It is recommended that the flood shape be retained but the

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					relative locations of abutting SBO extents. A review of the flow depths has however revealed that the property flooding results from shallow flows primarily associated with flows from the rear of the property. It is recommended that the flood shape be retained but the overlay designation be changed from SBO1 to SBO3. This recommendation has been agreed with Melbourne Water.	overlay designation be changed from SBO1 to SBO3.
97.	34 Anthony Avenue, Doncaster	Koonung Creek	SBO3	2, 11, 14 Future fencing exemptions in SBO3 will result in security issues for people and animals as the plinth will need to be constructed 400mm above the surface level.	The submission requests for the flood shape to be trimmed due to the minimal incursions into the property. A review has found the modelled flood shape to be consistent with site conditions as the property is adjacent to the main flow path through Anthony Reserve. The purpose of the proposed overlays is to minimise flooding risk for redevelopment. However, due to the minimal incursion and limited planning and risk mitigation benefit afforded by the incursion into this property, the flood shape is recommended to be deleted from the property. An issue has also been raised that future fencing exemptions in SBO3 will result in security issues for people and animals as the plinth will need to be constructed 400mm above the surface level. In response to this issue, it is recommended to amend the wording in the SBO 3 to include a minor text change to the Schedule to SBO3 to address some potential ambiguity with the controls.	Yes. Remove SBO3 incursion from the property. In Schedule 3 to the Special Building Overlay, it is recommended to change the last dot point under <i>Clause 1.0 Permit</i> <i>requirement</i> as follows; <i>"New fencing</i> <i>with at least 25%</i> <i>openings</i> <u>or</u> <i>with</i> <i>a plinth at least</i>

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					Specifically, in Schedule 3 to the Special Building Overlay, it is recommended to change the last dot point under <i>Clause 1.0 Permit requirement</i> as follows; <i>"New fencing with at least 25% openings</i> <u>or</u> <i>with a</i> <i>plinth at least 400mm above the natural surface</i> <i>level".</i>	400mm above the natural surface level".
98.	6 Judith Court, Doncaster	Ruffey Creek	SBO2	2, 6, 11	The submission refers to the impact of surrounding development infrastructure on drainage system capacity. The flood shape has been found to be consistent with the topography and Council drainage assets, however fulfils the minor incursion criteria and is recommended to be deleted from the property.	Yes. Remove SBO2 incursion from the property.
99.	22 Saxon Street, Doncaster	Ruffey Creek	SBO2	12	The property is located at a low point of three roads, Winbrook Court, The Glades and the south part of Saxon Street. The confluence of these streets contributes to the overland flow towards this property. The private drainage mentioned in the submission is beyond the scope of Council's responsibility, even though it caters for the 1 in 5 ARI event. The SBO2 is a result of the 1 in 100 ARI event. The extent of SBO2 is significant and the depths are also more than 100 mm. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
100.	8 Larne Avenue, Donvale	Mullum Mullum Creek	SBO2	2	The submission states that the backyard has had earthworks undertaken since 2009 that affect the	Yes.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					potential flood risk and therefore the extent of the SBO should be reviewed. A desktop review and site visits have found that there have been changes to the terrain since the capture of the LiDAR survey data used in the modelling. These changes warrant trimming of the SBO shape. In addition, a review of the modelled overland flow characteristics supports review of the SBO designation from SBO2 to SBO3.	Trim the SBO shape and change the designation of the remaining shape from SBO2 to SBO3
101.	2A Sunhill Road, Templestowe Lower	Bulleen North	SBO3	2, 7, 8	The submission states that, due to the elevated nature of the property, flooding is implausible. The property experiences runoff in a south westerly direction from the small catchment to the north east. The review confirmed that the terrain of the site and drainage infrastructure is consistent with that modelled. The outcome of the review is that the exhibited flood shape be retained at this location.	No
102.	6 Drummond Close, Donvale	Mullum Mullum Creek	SBO1	2, 3, 7, 8, 12	The property is traversed by a Melbourne Water main drain (Larne Avenue Drain) and the applicable flood level for the property is 72.15 metres Australian Height datum (AHD). The property is located at the confluence of two significant overland flow paths, a Melbourne Water SBO1 and a Council SBO2 and the flow paths are consistent with a 1 in 100 storm event when all Council drains and private drains are at full capacity and the balance of the storm event follows overland flow paths.	Yes. Reduce eastern SBO1 extent within property.

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					The overlay designation has been reviewed and reconfirmed as being appropriate based on the anticipated flood depth, direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. However, field survey has found that there is a discrepancy with the Lidar data which warrants reduction of the extent of the eastern side of the SBO1 shape. The outcome of the review is that the exhibited SBO1 shape be reduced but otherwise retained at this location.	
103.	41 Chippewa Avenue, Donvale	Mullum Mullum Creek	SBO2	1, 2	The submission describes living at the address for some time and never having experienced any flooding. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. Based on the topography and the size of the catchment, the area indicated by the SBO can reasonably be expected to experience overland flow when the capacity of the drain outside 2/47 Chippewa (on Amys Grove) is exceeded. The review confirmed that the terrain of the site and drainage infrastructure is consistent with that modelled. The outcome of the review is that the exhibited flood shape be retained at this location.	No
104.	33 Balmoral Avenue, Templestowe Lower	Bulleen North	SBO3	1, 7, 8, 11	The submitter is correct in identifying that the area affected by the SBO3 is less than 2m2 and entirely within the easement at the rear of the property.	Yes.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The purpose of the proposed overlays is to ensure	Remove the
					that future development is protected from	SBO3 incursion
					flooding. In this case, the incursion is not	on property.
					considered to be significant and application of the	
					SBO will not yield any significant planning or risk	
					mitigation benefit. Thus, the exhibited flood shape	
					is recommended to be amended accordingly.	
105.	8 Habitat Park Drive,	Mullum Mullum Creek	SBO2	14	The submitter's property is not affected by the	No
	Doncaster East			Only the	SBO, although the surrounding body corporate	
				common	land (the Canowinda Owners Corporation) is	
				property is	affected. The drainage assets at this estate at the	
				affected by	time of modelling were privately owned and	
				the overlays.	managed and have not been included in the flood	
					modelling. The review has confirmed that the	
					overlays on body corporate land are reflective of	
					the surrounding topography. The flood shape	
					should remain as exhibited at this location.	
106.	9 Whittlenoom Street,	Koonung Creek	SBO3	2,9	The submission states that Whittlenoom Street is	No
	Doncaster East				flood prone but that it is unlikely to have an impact	
					on the subject property as it is elevated above	
					street level. The observed flooding is consistent	
					with the application of the SBO in this area, with	
					the flow path encroaching onto the submission	
					property, representing overland runoff onto the	
					street rather than water rising up from the street.	
					The submission also states that existing walls and	
					landscaping do not impede water flow during	
					storm events. Features such as buildings and other	
					structures have not been modelled individually,	

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					but allowances have been made in the model for typical obstructions to flow by adopting appropriate roughness factors in accordance with industry practices. In addition, the submission states that the incursion of the flood shape onto the property is outside of the likely building envelope. Whilst the flood shape may not encroach into the current building footprint, the purpose of the proposed overlays is to ensure that any future development is protected from flooding. Under certain conditions, development outside the normal building envelope or in easements may be permitted in some cases. The review confirmed that the terrain of the site and drainage infrastructure is consistent with that modelled. Due to the narrow width of the flood shape at this location, it is not recommended to remove the SBO from the property as it would compromise the integrity of the flood shape in this area. The outcome of the review is that the exhibited flood shape be retained at this location.	
107.	14 Habitat Park Drive, Doncaster East	Mullum Mullum Creek	SBO2	14	The submitter's property is not affected by the SBO, although the surrounding body corporate land (the Canowinda Owners Corporation) is affected. No objection at this stage. Requested further information. Information provided. No further response received	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The review has confirmed that the overlays on body corporate land are reflective of the surrounding topography. The flood shape should remain as exhibited at this location.	
108.	393 Park Road, Park Orchards	Mullum Mullum Creek	LSIO	5,7, 8, 12, 14 Overland flow may come from adjacent owned Council property and it is Council's responsibility to contain this water. Concerned about erosion from Mullum Creek which flows onto property.	The overlay designation has been reviewed and is recommended to be amended by removing part of the LSIO. The area shown on page 226 over the building is to be removed from the LSIO overlay.	Yes. It is recommended to remove part of the LSIO.
109.	33 Thiele Street, Doncaster	Ruffey Creek	SBO3	1, 2, 7, 8	Thiele Street is a major flowpath for stormwater runoff. The submission questions what information has led to this area marked as being flood prone where it was not before. This flood modelling that underpins the SBO has been undertaken recently	Yes. Remove the SBO3 shape.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					by Council and Melbourne Water using the latest	
					available data and aims to protect future	
					development from flooding. The submission states	
					that the properties at the end of the street which	
					have flooded are not subject to the overlay. There	
					has been significant drainage upgrades undertaken	
					at the intersection of Thiele and Ambrose Streets	
					around 1993. This has resulted in the excess	
					floodwater on Thiele St during storm events being	
					accommodated by the numerous grated pits at this	
					intersection rather than flowing through the	
					properties to the north. This upgrade will not	
					appreciably benefit upstream properties such as 33	
					Thiele Street. However, LiDAR and surface contour	
					data as well as site photos were analysed and it	
					was found that it is unlikely that water will pool	
					enough in the areas shown in the SBO within the	
					property. The resolution of the model has not	
					picked up certain features adequately for these	
					reasons. Therefore, it is recommended that the	
					SBO be removed from this property.	
110.	4 Hillcroft Drive, Templestowe	Ruffey Creek	SBO1	1, 2, 12	Property is located adjacent to a Melbourne Water	Yes.
					Main Drain (Greenridge Avenue Drain). However	SBO1 incursions
					only effected by two grid points less than 50mm	are
					deep. Therefore not considered flooding from MW	recommended to
					SBO1.	be removed from
					Recommend that the exhibited flood shape is	the property.
					deleted so the property is not included in the	
					overlay, as agreed with Melbourne Water.	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
111.	36A Talford Street, Doncaster East	Koonung Creek	SBO3	3, 7, 8, 12	The submission states that the drainage infrastructure which has been constructed in the area should remove the risk of flooding. The property is located in a position vulnerable to overland runoff, being in a local gully. The private drainage infrastructure constructed as part of the development is not considered to have a significant impact on the modelled flood extent for a 1 in 100 year ARI storm event as they are usually designed to cater for minor storm events. In addition, Council underground drainage infrastructure is usually designed for a 1 in 5 year ARI event with runoff in excess of this flowing overland. A review has confirmed the flood shape is consistent with the topography and drainage assets at this location and the SBO is recommended to be retained.	No
112.	23A Morna Road, Doncaster East	Koonung Creek	SBO2	3, 12	The submission states that, due to recent drainage upgrades and development of the neighbouring property, the risk of flooding has been removed from the subject property. A review has found that the upgrades to the Council drains along Mantell Road have been included in the modelling; however, this does not reduce the risk of flooding for the submission property as the upgrade is downstream of the property. In addition, the flood shape does not indicate any flooding from the neighbouring property to the east. The submission property experiences overland runoff from the	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					north east which follows the natural gully but is not entirely contained within the floodway for a 1 in 100 year ARI event which forms the basis of the SBO. A site visit has confirmed the flood shape is consistent with the topography and drainage assets at this location and the SBO is recommended to be retained.	
113.	10 Hillcroft Drive, Templestowe	Ruffey Creek	SBO1	1, 2, 8, 12	Property is located adjacent to a Melbourne Water Main Drain (Greenridge Avenue Drain). The overlay extent has been reviewed and reconfirmed as being appropriate based on the direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. A review of the flow depths has however revealed that the property flooding results from shallow flows primarily associated with flows from the rear of the property. It is recommended that the flood shape be retained but the overlay designation be changed from SBO1 to SBO3. This recommendation has been agreed with Melbourne Water.	Yes. It is recommended that the flood shape be retained but the overlay designation be changed from SBO1 to SBO3.
114.	60 Millicent Avenue, Bulleen	Koonung Creek	SBO2	1, 11	The submission states that the property is affected in a minimal way by the flood shape and that flooding has not been experienced at this location. The purpose of the proposed overlays is to ensure that future development is protected from flooding. In this case, the incursion is not considered to be significant and application of the	Yes. Remove SBO2 incursion on property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					SBO would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly.	
115.	286 Church Road, Templestowe	Ruffey Creek	SBO2	1, 2, 7, 8, 10, 11	The submission states that the property has never been affected by flooding. The property contains a small incursion from the upstream extent of the flood shape. A site visit confirmed the flood shape is consistent with the terrain and drainage infrastructure. The submission is correct in identifying that the flood shape incursion is minor. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Existing properties may be redeveloped in the future and the proposed overlay will assist in the assessment of the impacts of any future development. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly.	Yes. Remove SBO2 incursion on property.
116.	4 Janet Street, Templestowe Lower	Bulleen North	SBO3	1, 2, 7, 8, 10, 11	The submission states there is no experience of flooding at the subject property. It is possible the submitter has not experienced a 1 in 100 year ARI rainfall event of critical duration at this location, which the flood extent is modelled on, in line with industry practices. The SBO represents flow out of the property and onto the street via the driveway. A site visit confirmed surrounding topography and	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					that overland runoff in excess of the pre 1970's drainage infrastructure could reasonably be expected to occur in the manner indicated by the SBO. The review and recent meeting with the submitter have confirmed the flood shape is consistent with the topography and drainage assets at this location and the SBO is recommended to be retained.	
117.	2 Athunga Court, Doncaster	Koonung Creek	SBO3	3	The submission makes reference to previous experiences of flooding prior to the drainage upgrade undertaken in 1996, and describes having no experience of flooding since the upgrade. A desktop review and site visit has confirmed that the upgraded drains have been included in the modelling. Council drains are typically designed to convey a 5 year ARI event. Even with the upgraded drains running through the property, excess overland runoff could be reasonably expected to occur during a 1 in 100 year storm event of critical duration as a result of drainage inadequacies in the upstream catchment. The review has confirmed the flood shape is consistent with the topography and drainage assets at this location and the SBO is recommended to be retained.	No
118.	13-19 Tram Road, Doncaster	Koonung Creek	SBO2	12	Following the recent meeting with the submitter, Cardno were engaged to review the submission and SBO at this property, including undertaking a site inspection. Due to the absence of some drainage from the model, inadequate application	Yes Delete SBOs from the site.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					of the outlet pipes under the Eastern Freeway and significant changes to the surface made since the modelling was undertaken, it is recommended that all SBOs be removed from the subject area.	
119.	15 Kersey Place, Doncaster	Ruffey Creek	SBO3	2	The submitter does not consider that flooding is a risk at this property. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. The SBO identifies flood prone land which may not impact existing buildings. The purpose of the proposed overlays is to ensure that future development is protected from flooding. The review has confirmed the flood shape is consistent with the drainage assets at this location. Site photos and a review of the model indicate that there are issues with the model resolution at the property boundary and it is recommended that the SBO be removed from the property on this basis.	Yes. Remove SBO3 from property.
120.	8 Tiffany Court, Doncaster	Ruffey Creek	SBO3	2, 12	The submission references garden landscaping as a basis for contesting the flood shape. Private infrastructure such as retaining walls, structures and buildings are not individually modelled as it is not feasible on a catchment wide scale to do so. Consideration has been given to the impacts of structures such as buildings and features such as landscaping and fences on the mapped flood extents, through the application of roughness factors to land areas. Roughness factors are allocated taking account of land use for individual	Yes. Remove the SBO3 from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					sub catchment areas. A site visit has confirmed the local Council drainage infrastructure. From site conditions, it is unlikely that flood water will flow as shown in the model results. The site is built up above the roadway significantly with the driveway allowing any excess flood water to be conveyed out of the property. This has likely resulted from thinning issues impacting the LiDAR data due to the dense vegetation and steep nature of the front of the property. Therefore, it is recommended that the SBO be removed from the property.	
121.	14 Kelly Street, Doncaster	Ruffey Creek	SBO3	1, 2, 12	The submission key theme is that runoff patterns experienced by the residents are not consistent with the proposed flood shape. The exhibited flood shape covers part of the footprint of the house at the submission address, with the submitter stating that the underfloor area has remained dry over the past 35 years. A site visit has confirmed the local Council drainage infrastructure as modelled. Modelled depths of flooding were checked on the roadway outside 12 Kelly Street in the modelling results and it was found that they were not deep enough to overtop the gutter at this location. The 3 meter grid cell dimension has picked up a low point within the gutter and then another low point further down the slope of the footpath. This essentially has meant that the top of the gutter has been ignored in this section of the model and so water was able to freely flow into 14 Kelly Street.	Yes. Remove SBO3 shape. In addition remove SBO3 from 12 & 16 Kelly. Remove part of shape from 2 Tully Crt.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					Flooding at the rear of the property was found to be caused by the presence of a swimming pool leading to an unconnected flood extent. Based on these factors, it is recommended that the SBO3 shape be deleted from the property.	
122.	30 South Valley Road, Park Orchards	Andersons Creek	SBO2	1,2	The key issue raised in the submission is that runoff patterns experienced on the property are not as extensive as indicated by the SBO. It is possible that the submitter has not experienced a 1 in 100 year ARI rainfall event of critical duration at this location. The exhibited flood shape, which is modelled on a 1 in 100 year ARI event, is generally consistent with the terrain on the submission property. A review of the mapped flows to the southern and eastern areas of the property has found that the flow depths are shallow and deletion of these shapes will not significantly impact the management of flood risk. However, the SBO2 shape running from the property entry to the west should be retained. The designation of this extent can be changed from SBO2 to SBO3.	Yes. Southern and eastern SBO2 areas to be removed. Remaining SBO area designation to be changed to SBO3.
123.	8 Board Street, Doncaster	Ruffey Creek	SBO2	3, 7	The submission states that Council has upgraded drainage in the area in 1991, increasing the capacity of the drains. The flood modelling has included these upgraded drains. It is possible that this upgrade has assisted in reducing the extent of flooding but not removed the risk completely for a major storm event. A site visit has confirmed the local conditions, with the property being located in	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					an area prone to flooding. The review has confirmed the SBO shape is consistent with the topography and drainage assets at this location and the SBO is recommended to be retained.	
124.	15 Grand Boulevard, Doncaster	Koonung Creek	SBO2	7, 8, 12	Filtering of the flood shape data originally involved deletion of isolated flood shapes less than 500 square metres in area, subject to meeting conditions. The flood shape impacting 15 Grand Boulevarde can be deleted under this criteria.	Yes. Delete SBO2 overlay from 15 and 17 Grand Boulevard and from 10 and 12 Eagleview Walk.
125.	2 Roslyn Court, Donvale	Mullum Mullum Creek	SBO2	5	It is not feasible for Council to resolve all flooding issues across the municipality instantaneously. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. Officers will inspect the property and assess the need for drainage improvement works. The flood shape should remain as exhibited at this location. This recommendation is supported by a further review undertaken by Cardno.	Νο
126.	12 Hillcroft Drive, Templestowe	Ruffey Creek	SBO1	1, 12	Property is located adjacent to a Melbourne Water Main Drain (Greenridge Avenue Drain). The overlay extent has been reviewed and reconfirmed as being appropriate based on the direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the	Yes. It is recommended that the flood shape be retained but the

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					relative locations of abutting SBO extents. A review of the flow depths has however revealed that the property flooding results from shallow flows primarily associated with flows from the rear of the property. It is recommended that the flood shape be retained but the overlay designation be changed from SBO1 to SBO3. This recommendation has been agreed with Melbourne Water.	overlay designation be changed from SBO1 to SBO3.
127.	9 Nambour Road, Templestowe	Ruffey Creek	SBO2	1, 2, 14 Can justify a change from SBO2 to SBO3 with a reduction in the flood shape.	The submission states that there has never been any flooding or standing water on the property. The extent of the SBO represents overland runoff. It is possible that the submitter has not experienced a 1 in 100 year ARI storm event of critical duration at this location. The modelled flood depths at the lowest point on the property are in excess of 500 mm which is consistent with the natural valley and the filling of neighbouring properties during development which created a basin like feature on the submission property. The submitter also states that the small incursion at the front of the property is not consistent with experiences of flooding. This incursion represents overflow from the side entry pit located adjacent to the driveway of the submission property. The submission raises the issue of overlay designation and states that areas with shallower flooding should be designated SBO3 rather than SBO2. Council has differentiated between SBO2 and SBO3	Yes. Delete part of the SBO2 shape from the property but retain the shape at the western boundary.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					based on a flow depth limit of 100mm. The majority of the flood shape in the northern section of the property experience modelled depths in excess of 100 mm. The SBO2 designation in this area is considered to be appropriate. In this case, a review of the modelled depths has found the designation of SBO2 to be appropriate for the rear SBO incursions on the submission property. Issues with the model resolution as well as thinning issues caused by the dense vegetation at the south- eastern boundary of the property warrant review and removal of the SBO2 shape over the driveway. Minor incursions on the southern and eastern boundaries are also proposed to be removed.	
128.	14 Rangeview Road, Donvale	Mullum Mullum Creek	SBO3	1, 2, 3	The submission refers to recent drainage upgrades as a basis for the arguing that the flood shape is incorrect. The desktop review and site visit have confirmed the as-constructed drainage assets have been included in the modelling. Although recent upgrades have taken place, Council's drainage system design is typically for a 1 in 5 year event, with flows in excess of the pipe system travelling overland. The SBO is based on a 1 in 100 year ARI event. The review has confirmed that the flood shape is consistent with the topography and drainage assets at this location and the SBO is recommended to be retained.	Νο

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
129.	5 The Parkway, Templestowe	Mullum Mullum Creek	SBO2	13	Requests extension of time to lodge a detailed submission.	No
130.	2/62 Rathmullen Quad, Doncaster	Koonung Creek	SBO3	2, 7, 8, 12	The former Eastern Golf Course site has not been set up in the model as a hard boundary as suggested. Council is requiring drainage and overland flow measures on the former Eastern Golf Course (EGC) site to be designed to ensure that there are no adverse impacts on neighbouring properties. The modelling has been based on the LiDAR in 2008. The flooding occurring and impacting the property is not from the EGC area but rather from overland flows from Bordeaux Street and the drainage line going past the rear of 62 Rathmullen Quadrant. Flows continue south as mentioned, they are just not shown for the EGC area. The peak depth on Bordeaux Street opposite number 44 is 300 mm which causes overland flows through this location to the rear of 62 Rathmullen Quadrant and to EGC. On the property the peak depth for the 100 year ARI is 100 mm. This places the area under the SBO3 criteria. The SBO process includes any area where flooding should be considered for future development. It is noted that the buildings are likely to be flood free due to their elevated floor level, however the site has predicted inundation of 100 mm during the 100 year ARI event. It is recommended that the SBO3 shape impacting this property be retained.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
131.	20 Springwood Close, Donvale	Mullum Mullum Creek	SBO3	1, 5, 7, 14 Council subsidy required to allow implementat ion of additional on-site drainage	The submission is correct in stating the dwelling is not proposed to be impacted by the flood extent. The SBO is based on the flood prone land, not specifically where dwellings are flooded above floor level. The submission also states that Council should upgrade the drains in the area rather than imposing the SBO. Underground drainage systems are usually designed to a 1 in 5 year ARI level of service with flows in excess travelling overland in major storms. Council cannot build a drainage network that can cope with all storm events. Council spends \$2 million annually upgrading drainage infrastructure with priority given to alleviating flooding of habitable floor areas. Although the flood incursion into the property is minor, due to the width of the flow path at this location, removal of the SBO would compromise the integrity of the SBO flood shape in its entirety. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location. The submission also states that a Council subsidy is required to allow implementation of additional on- site drainage. In response to this issue, drainage of private properties is an owner responsibility under the Water Act. Council can facilitate the construction of public drainage infrastructure to convey storm water flows emanating from private property, but as such infrastructure provides a	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					special benefit to the affected land owners, property owners will be required to contribute to the associated costs.	
132.	3 Peter Budge Avenue, Templestowe	Ruffey Creek	SBO2	1, 2, 3, 12	The submission refers to topographical features including a retaining wall that are not reflected in the exhibited flood shape. The submission also refers to recent drainage improvement works in The Grange Reserve. A desktop review has found that the improvements were largely related to pit enlargement and no upgrade to the 975 mm drainage pipe in the reserve was undertaken. The drainage pipes in this area are the limiting factor in the drainage system capacity in the modelled storm event which underpins the SBO. A site visit confirmed the existence of the retaining wall at the north boundary of the property, the flood shape indicates water running towards the walk way from inside the property at depths less than 150 mm adjacent to the northern boundary. Private infrastructure such as retaining walls were not individually modelled but allowance was made for such structures through the application of roughness factors. The proposed SBOs have been developed using the theoretical 1 in 100 year rainfall event. It is likely that an event of this size has not been experienced at the property in the last 17 years. The flood depths within the easement are significant and should remain as SBO2 but the modelled depths of water within the	Yes. Change overlay designation from SBO2 to SBO3 within the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					subject property are predominately less than 0.1m. As such, it is recommended that this area be changed from SBO2 to SBO3.	
133.	8 Eumeralla Avenue, Templestowe Lower	Ruffey Creek	SBO2	1, 2 Withdrawn	The submission states that there has not been flooding experienced on the property and the incursion of the flood shape is minimal. The fact that the resident has not experienced flooding does not necessarily mean that the property is not flood prone in a critical duration 1 in 100 year ARI event, as topographical contours indicate the steep drop off on the western boundary which is reflected in the existence of a drainage easement. Although the size of the incursion is minor relative to the size of the property, the purpose of the proposed overlays is to ensure that future development is protected from flooding and the property may be subdivided in the future. Under certain conditions, development in close proximity to property boundaries, on shared driveways or within easements may be permitted in some cases. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
134.	14-16 Elgin Crescent, Park Orchards	Mullum Mullum Creek	SBO3	2	The submission states that the exhibited flood path is not true to the terrain. A desktop review and site visit has found that overland flows enter the property from the north-east and travel through the property to the south-west. The two sources	Yes. The SBO3 flood shape to better reflect the

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					of runoff have been connected in the SBO as part of the filtering process but it is recommended to amend the flood shape to better reflect the mapped flood extent, which will result in a reduction of the size of the exhibited flood shape. This assessment has been reviewed following a recent meeting with the submitter and has been reconfirmed.	mapped flood extent.
135.	38 Hertford Road, Doncaster East	Koonung Creek	SBO2	1, 2, 3, 5, 6, 7, 8	A discrepancy has been found between the modelled and actual drainage infrastructure at this location. The upgrade was undertaken prior to the flood modelling exercise which underpins the SBO and additional modelling is required to quantify the impact of the upgrade on the flood shape. A discrepancy has been found between the modelled and actual drainage infrastructure at this location. The upgrade was undertaken prior to the flood modelling exercise which underpins the SBO and additional modelling has been undertaken to quantify the impact of the upgrade on the flood shape. Cardno have rerun the model with the inclusion of the 1,050 mm diameter drain. The SBO shape is recommended to be amended and reduced in accordance with these results.	Yes. Amend flood shape in accordance with revised modelling. In addition remove SBO2 from 4 Camelot. Reduce SBO2 at 36 Hertford, 22 and 24 Taunton.
136.	6 Anton Court, Doncaster	Ruffey Creek	SBO2	2, 11	The submission states that the flood shape is not consistent with the fall of the land. The property contains a small incursion of the flood shape. Based on a desktop review, this incursion is not considered to provide significant	Yes. Remove the SBO2 incursion from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					planning or flood risk mitigation benefits and is	
					recommended to be amended accordingly.	
137.	5 Cerberus Street, Donvale	Koonung Creek	SBO2	14	Lodged as a submission with no content. Clarification sought by Council. None provided. However the incursion is considered to be minor and is recommended to be deleted from the property.	Yes. Remove the SBO2 incursion from the property.
138.	222 Blackburn Road, Doncaster East	Mullum Mullum Creek	SBO3	1, 2	Although the resident may not have experienced flooding, it cannot be said with certainty that the property is not flood prone during a 100 year ARI. Also, the extent of the SBO is based on the flood prone land, not specifically where dwellings are flooded above floor level. Exemption is not recommended due the proximity of the property to the flood extent. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
139.	11 Scarlet Ash Drive, Templestowe Lower	Ruffey Creek	SBO3	1, 2, 8	Although the resident may not have experienced flooding, the property is located at the foothill of surrounding elevated areas to the north-west and is expected to be partially flood prone in the event of a 1 in 100 year ARI rainfall. Existing Council drains are typically designed for a 1 in 5 year event, with flows in excess of the pipe system travelling overland. The model is based on a 1 in 100 year ARI and the overlay on the property is to ensure that appropriate floor levels are adopted for future development in the flood affected area. The	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
140.	47-53 Croydon Road, Warrandyte South	Andersons Creek	SBO2 & SBO3	2, 5, 9, 14 Existing controls already prohibit development of the land.	The submission describes runoff patterns during a storm and these are consistent with the application of the SBO2 to the property. The SBO3 represents more shallow runoff as a result of overflow from the dam uphill. The purpose of the overlays is not to prevent development but to ensure it is undertaken in a way that considers the overland flow path. The review has confirmed the surrounding topography and drainage assets. The review has found that the flow depth in the SBO3 area is shallow and given the steep terrain, it is proposed to delete the SBO3 shape.	Yes. Delete the SBO3 shape but retain the SBO2 shape.
141.	5 Whistlewood Close, Doncaster East	Mullum Mullum Creek	SBO2	2	A meeting was recently conducted involving Council officers and the submitter and no substantive additional issues were. The SBO2 overlay on the property is accurate and consistent with the contour map used for modelling. The topography was confirmed during a site visit. Although the contour maps provided by the resident differed from the contours used for the modelling, it must be noted that the LiDAR data used for mapping collected in 2009 is more recent than that provided by the resident who has lived at the property for 30 years. Exemption is not recommended as any form of trimming would compromise the integrity of the SBO shape. The	Νο

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
142.	61 Oakland Drive, Warrandyte	Mullum Mullum Creek	SBO3	2, 12	The submission states that the topographical data used in the modelling is outdated and the fact that other low lying areas on the street aren't affected highlights the inaccuracy of the flood modelling. The terrain data used in the model was captured in 2009 by DELWP and is the best available data for this type of modelling. Site visits have been undertaken throughout the municipality by engineers to verify the modelled flood shape against the terrain where required. A site visit was undertaken from the street for this property. Given the size of the catchments involved, each area has been broken up into a grid with 3m x 3m cells. This approach is considered to provide adequate resolution to define topographical features within the catchment. The proposed overlays identify flood prone land. Structures and buildings have not been modelled individually as they can be subject to change in the event of property redevelopment. Consideration has been given to the impact of structures, such as buildings and walls, through the application of surface roughnesses in accordance with industry guidelines. The submission states that any runoff in the area would occur in a northerly direction and be rapid, which is consistent with the application of	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					the SBO in this area as the flood shape does not only represent pooling water but is defined with a combination of depth, velocity and duration in line with industry practices. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
143.	16 Nottingwood Street, Doncaster East	Ruffey Creek	SBO1	2, 5, 7	Property is located adjacent to a Melbourne Water Main Drain (George Street Drain). The applicable flood level is 91.08 metres AHD. The overlay designation has been reviewed on site and taking account of the locations of drainage infrastructure at the rear of the property, the flood shape is proposed to be removed from the eastern side of the property. Given that the flows impacting the property primarily emanate from surcharge from the Council drainage system at the rear of the property, it is proposed that the remaining section of SBO1 be changed to SBO3.	Yes. The eastern section of the SBO1 shape is recommended to be deleted. The remaining section of the flood shape is recommended to be converted from SBO1 to SBO3. The overlays
						associated with 18 and 20 Nottingwood are also recommended to be converted

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
						from SBO1 to SBO3.
144.	27 Marilyn Street, Doncaster	Koonung Creek	SBO2	5, 7, 8, 13	The submission acknowledges that flooding is an issue at this location and puts forward proposed solutions for managing the drainage issues. Council cannot resolve all flooding issues across the municipality instantaneously, the flood mapping which underpins the SBO is a useful tool in identifying areas to prioritise drainage upgrades with a focus on alleviating flooding of habitable floor areas. The current drainage system design is typically for a 1 in 5 year ARI storm event, with flows in excess of the pipe system travelling overland. The SBO is based on a 100 year ARI event. The flood extent incursion on the property is significant. Removal of the SBO would compromise the integrity of the SBO flood shape in its entirety and result in discontinuity of the flood extent. The submission property lies within a defined valley and overland runoff could reasonably be expected to occur in the manner indicated by the SBO. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
145.	5 Mossy Creek Slope, Warrandyte	Andersons Creek	LSIO	1, 7, 8, 12	The drainage system above and within the property is under Council control and the flooding is a result of run off from the upstream catchment in the 1 % AEP event which drains down to	Yes. SBO shape to be reduced, retaining the

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					Andersons Creek. The overlay designation has been reviewed and is recommended to be amended based on the nature and depth of the flooding in this area. In addition, issues have been identified with the Lidar data at the front of the property. It is recommended to reduce the SBO shape and change the designation at this location to SBO3, as agreed by Council and Melbourne Water representatives. Site Visit required to determine if flows will enter the property. From this site inspection it is evident that the neighbouring driveway (6 Mossy Slope Creek) will experience overland flooding before 5 Mossy Creek Slope will get any inundation. As a result, the flow path has been amended to follow the easement and on site topography. Cardno agrees that the flood shape can be changed to SBO3, as the cause of flooding occurs from overland flow down Mossy Creek Slope.	shape at the rear of the property and changing the designation from SBO1 to SBO3.
146.	69 Croydon Road, Warrandyte South	Andersons Creek	SBO2	1, 2, 14 Existing controls already prohibit development of the land	The SBO shape is sizable and the entire width of the flood extent travels through the property flowing east to west. Exemption is not recommended as limitations for development along an easement do not warrant an amendment and it would result in discontinuity of the flood extent. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
147.	15 Margot Avenue, Doncaster	Ruffey Creek	SBO3	1, 2, 7, 8, 12	In response to the issue that existing controls already prohibit development of the land, this is not strictly correct. The existing controls on the land will, however, already trigger the need for a permit for buildings and works. Approximately 45% of the affected properties already have other planning scheme controls that trigger the requirement for a planning permit. The proposed amendment will ensure, however, that new development is appropriately controlled and has regard to identified flood levels. The submission states that a small portion of the SBO shape encroaches across the eastern property boundary which has a retaining wall and the flood shape is a misrepresentation of reality. The review has generally confirmed the surrounding topography and drainage assets. The submitter claims to have never seen flooding on the property in 40 years. As the SBOs have been developed using the theoretical 1 in 100 year rainfall event, it is possible that there has not been an event of this magnitude at the property in the last 40 years. LiDAR and surface contour data were analysed along with site photos and it was found that the resolution of the modelled surface has not picked up the mentioned retaining wall on the property. It is therefore recommended to remove the SBO	Yes The SBO shape can be removed from this property. The SBO can also be removed from 12 , 13 and 14 Brinbank Court.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
148.	5 Streeton Lane, Doncaster East	Mullum Mullum Creek	SBO3	2, 11	The submission states that, due to the steep slope of the property, no flooding has been experienced. The fact that the resident has not experienced flooding does not necessarily mean that the property is not prone to overland runoff in a critical duration 1 in 100 year ARI event, as topographical contours indicate that overland runoff would be concentrated from uphill onto the street. A site visit has confirmed the topography and drainage infrastructure. The purpose of the proposed overlays is to ensure that future development is protected from flooding and the property may be subdivided in the future. Under certain conditions, development in close proximity to property boundaries, on shared driveways or within easements may be permitted in some cases. The review has confirmed the surrounding topography and drainage assets. The outcome of the review was discussed with the submitter at a recent meeting. The flood shape should remain as exhibited at this location.	Νο
149.	236 Blackburn Road, Doncaster East	Ruffey Creek	SBO3	2	Due to the proximity of the property to the surrounding terrain, it is reasonably expected to be flood prone as it is situated at the foothill of elevated properties and area. Flow in excess of Council's typical 1 in 5 year ARI drainage system capacity is likely to inundate this property. The review has confirmed the surrounding topography	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					and drainage assets. The flood shape should remain as exhibited at this location.	
150.	24 Jocelyn Court, Doncaster East	Ruffey Creek	SBO3	1, 2, 7, 8	A site visit confirmed the flood shape is consistent with terrain and LiDAR data. The modelling indicates that the property is prone to overland flows in a 1 in 100 year ARI event even though the resident may not have experienced flooding. Following a recent meeting with the submitter, the model was reviewed and it was found that there is a model resolution and data tinning issue arising from the steep slope, presence of thick vegetation, the garage and boat which has led to a low point in the modelled surface at 26 Jocelyn. Taking this into account, the SBO shape on the western side of 24 Jocelyn is proposed to be removed. However, it is not recommended to remove the flood extent on the eastern side of 24 Jocelyn Court. Site photos and the modelling results support retention of this shape. The flood shape should be amended as shown in the attached plan.	Yes. Remove SBO shape in the western side of the property.
151.	12 Larne Avenue, Donvale	Mullum Mullum Creek	SBO2	1, 3, 7, 8	The drainage system along the easement is not sufficient to convey the runoff from a 100 year ARI event. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location, subject to minor trimming of the shape at three locations.	Yes. Trim and remove 3 small SBO2 areas.
152.	7 Montclair Court, Templestowe	Ruffey Creek	LSIO	2, 3, 5, 7, 8	The existing street and easement drainage system is only capable of catering for the 1 in 5 year ARI storm. The road way and overland flow paths can	Yes. Change LSIO to SBO3 and also

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					assist in conveying the additional storm water	change for
					runoff generated in the 1 in 100 ARI event,	adjacent
					affecting properties on the low side of Montclair	properties at 2, 3,
					Court. No 6 Montclair Court is located at the low	4, 5, 6 and 8
					point of the court and the drainage connection to	Montclair Court
					the Ruffey Creek is located next to the western	
					boundary of this property. The flood mapping	
					indicates water up to 300 mm would pond in front	
					of this property and water would flow over the	
					kerb level across the whole frontage of the	
					property as shallow flow. The request from the	
					submitters to investigate options to divert	
					overland flows by undertaking works at the	
					intersection of Dellfield Drive and Montclair will be	
					investigated and referred for consideration	
					through Councils Capital Works Program. It has	
					been agreed with Melbourne Water that the flood	
					shape designation within the property be amended	
					to SBO 3 from the exhibited designation of LSIO.	
153.	10A Hillcroft Drive,	Ruffey Creek	SBO3	2, 14	The SBO overlay on subject properties is	No
	Templestowe			Mapping	representative of overland run off rather than	
				incorrectly	raised water levels from Hillcroft Dr as suggested	
				identifies	by the resident. This area is reasonably considered	
				10A and 10B.	to be prone to overland runoff in a 1 in 100 year	
				(reverses)	ARI storm event of critical duration. Due to the	
					proximity of the property to the SBO shape and the	
					percentage of overlay coverage, removal of the	
					SBO would compromise the integrity of the SBO	
					flood shape. The review has confirmed the	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
154.	25 McCallum Road, Doncaster	Ruffey Creek	SBO1	2, 5	Property is located adjacent to a Melbourne Water Main Drain (Roseland Grove Drain). The applicable flood level is 69.52 metres AHD. Submission suggesting that the flooding is from Ruffey Creek. However the flooding is an overland flow associated with the Main drain. Suggested mitigation works are beyond the scope of the amendment and are a part of a capital works program. The overlay designation has been reviewed and owing to discrepancies with the Lidar data, it is recommended to remove the western flood extent. However, the eastern SBO1 shape is to be retained at this location.	Yes. Remove the western flood extent, but the eastern SBO1 shape is to be retained. Also remove SBO2 from 37 and 39 Botanic Drive
155.	23 Wagon Road, Templestowe	Mullum Mullum Creek	SBO1	14 Object to amendment. No reasons given.	Property is located adjacent to a Melbourne Water Main Drain (Templestowe East Drain). The applicable flood level is 51.66 metres AHD. No specific issues are raised in the submission, just object to the amendment. Following attendance of the submitter at the one- on-one interviews, Cardno were engaged to review the submission. The overlay designation was again reviewed and reconfirmed as being appropriate based on the anticipated flood depth, direction of flow, the location of the flood extent relative to	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					Council and Melbourne Water infrastructure and	
					the relative locations of abutting SBO extents.	
					The outcome of the review is that the exhibited	
					flood shape be retained at this location.	
156.	2 Pagoda Court, Doncaster	Ruffey Creek	SBO3	4	The submission acknowledges that the property is	Yes.
					prone to flooding and states that Council should	Amend SBO
					upgrade the drains in the area. The property	shape in
					owner has advised that flooding occurs up to 4	property.
					times a year due to an undersized pit. There is a	
					spoon drain entering a 225mm diameter pipe via a	
					small drainage pit that frequently blocks upstream	
					of the site. This then spills water into the site via	
					the north east corner and the flows pass around	
					the house on both sides. The flood shape is not as	
					depicted in the overlay but it is a steep site with	
					known flood issues. The site visit confirmed that a	
					spoon drain is located over the top of a 150mm	
					diameter pipe. These assets discharge to a pit	
					which outlets to a 225mm diameter pipe. The	
					spoon drain and 150mm diameter pipe flows	
					exceed the pit capacity and hence overflow	
					through 2 Pagoda Court. The flood shape will be	
					adjusted to reflect the onsite conditions but a	
					larger concern is the frequency of the overflows	
					from this location. It is recommended that the	
					flood shape be adjusted in line with	
					recommendations and that the drainage	
					infrastructure be reviewed to mitigate frequent	
					nuisance flooding.	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
157.	10-12 Curry Road, Park Orchards	Mullum Mullum Creek	SBO2	1, 2, 3, 12	The submission references landscaping and private drainage assets and states that the flood shape does not take these into consideration. Given the extent of the catchments involved, each catchment area has been broken up into a grid with cells 3m by 3m in size. This approach is considered to provide adequate resolution to define topographical features within the catchment. Private infrastructure, such as retaining walls, structures and buildings, is not individually modelled as it is not protected and can be subject to change in the event of property redevelopment. Consideration has been given to the impacts of structures, such as buildings, and features, such as landscaping and fences, on the mapped flood extents, through the application of roughness factors to land areas. Roughness factors are allocated using aerial photography, taking consideration of land use and type and density of development for individual sub catchment areas. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
158.	49 Lawanna Drive, Templestowe	Ruffey Creek	SBO2	2	The submission objects to the flood shape as incursions over the footprint of the dwelling. Ridge exists through property and there is only a small catchment discharging from property out to road. Private infrastructure such as retaining walls, structures and buildings are not individually	Yes. Remove SBO2 shape from property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					modelled but consideration is given to their impacts through the application of roughness factors to land areas. A site visit has confirmed the drainage infrastructure is consistent with that modelled. There are however some discrepancies with the Lidar data which warrant removal of the SBO2 shape from the property.	
159.	10 Omar Street, Templestowe Lower	Ruffey Creek	SBO3	7, 8, 11	The submission argues that the risk of flood damage on the property is negligible. The SBO extent fulfils the minor incursion criteria of less than 30m2 and 6%. The overlay is recommended to be amended accordingly.	Yes. Remove the SBO3 incursion proposed from the property.
160.	11 Ardgower Court, Templestowe Lower	Ruffey Creek	SBO3	1, 2	The submission correctly states that the property is on a hill and water could not inundate from Ruffey Creek. The property contains the upstream extent of the flood shape which forms from runoff from uphill as a result of the steep driveway cut into the slope which channels runoff onto the street at high velocities. A site visit has confirmed that the local topography is consistent with the flood shape. It is recommended to retain the flood shape at this location.	No
161.	28 Sheahans Road, Bulleen	Bulleen North	SBO3	2	The submission states that the property is elevated and flooding is not a problem. The flood shape at this location does not represent water rising up from the street level but overland runoff from uphill being channelled onto the road. A site visit has confirmed that the drainage assets have been consistently modelled. A small amount of water is	Yes. Remove SBO3 shape.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
162.	30 Sheahans Road, Bulleen	Bulleen North	SBO3	2	generated in the model from upstream properties. Onsite investigation showed that water is not likely to pool and flow towards 28 Sheahans Road and instead flow out through the driveway of 30 Sheahans Road. The driveway has been incorrectly modelled in the LiDAR data. Removal of the SBO3 shape from this property is supported. The submission states that the property is elevated and flooding is not a problem. The flood shape at this location does not represent water rising up from the street level but collective overland runoff from uphill being channelled onto the road. A site visit has confirmed the drainage assets are consistent with the modelled flood shape. A small amount of water is generated in the model from upstream properties. Onsite investigations showed that water is not likely to pool and flow towards 28 Sheahans Road and instead will flow out through the driveway of 30 Sheahans Road. This feature has not been picked up in the surface topography used by the model likely due to the dense vegetation/trees along the boundary between the two properties as well as the steep drop-off present due to the retaining wall. Removal of the flood shape from this property is	Yes. Remove SBO3 shape.
					recommended on the basis that if the shape is removed on 28 Sheahans Road the rest of the SBO shape would qualify for removal.	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
163.	22 Esther Street, Templestowe Lower	Bulleen North	SBO2	2	The submission does not object specifically to the shape of the overlay but contains numerous questions which have been responded to directly. A desktop review has found the flood shape to be consistent with the topography and drainage patterns in the area. The flood shape should remain as exhibited at this location.	No
164.	2/15 Ashford Street, Templestowe Lower	Bulleen North	SBO3	2, 6, 7, 8	The submission questions the accuracy of the modelling and states that the driveway would channel runoff onto the street. Private infrastructure such as retaining walls, structures and buildings are not individually modelled as they are not protected and can be subject to change in the event of property redevelopment. Consideration has been given to the impacts of structures such as buildings, features, landscaping and fences on the mapped flood extents, through the application of roughness factors to land areas. Roughness factors are allocated considering land use and type and density of development for individual sub catchment areas. The submission property experiences runoff from elevated areas to the south and west. This has been confirmed with a site visit from the street. The submission claims that the property did not flood on 20 December 2016 rainstorm event. Modelling results on the property indicated that flooding has a critical duration of 15 minutes and for the event on the 29th December 2016, the maximum ARI was 1 in	Yes. Only part of the SBO to be removed. In addition partial removal of SBO3 from 13 Ashford.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					33 years. The proposed SBOs have been developed using the theoretical 1 in 100 year rainfall event. Therefore, it is expected that flooding at this location would be significantly worse than occurred during the event on the 29th December 2016. LiDAR and contour data as well as site photos indicate that most of the flooding that occurs at 15 Ashford Street is situated around the driveway and flows down to Ashford Street. The modelled flood depths are shown to be significant over the driveway area. Flows between Units 1 and 2 seem unlikely, as the majority of the flow path is situated over Unit 1. It is recommended that the flood shape be partially removed as shown on the	
165.	314-318 Reynolds Road, Donvale	Mullum Mullum Creek	SBO2	2	plan. The submission states that the property is near the top of a hill and should not flood. The flood shape is delineated with a combination of depth, flow and duration. The property contains the upstream extent of the flood shape which forms from shallow runoff further uphill and is concentrated in the gully which flows down to Mullum Mullum Creek. This type of flooding is still considered a risk and the overlay will assist in ensuring any future development of the site is undertaken in a way that considers this risk. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
166.	29-31 Frogmore Crescent, Park Orchards	Mullum Mullum Creek	SBO3	2	The submission states that the property is on a slope and no flooding has been experienced. The flood shape at this location represents the upstream extent of overland runoff from the properties to the north east which are concentrated in the gully-like topographical features in the backyard of the submission property and flow to the west. It is possible the submitter has not experienced a 1 in 100 year ARI storm of critical duration despite residing there for 44 years. A site visit confirmed the overall topography of the area and that the flood shape is reasonable with respect to the land. It is recommended that the flood shape be retained at this location.	No
167.	619 Doncaster Road, Doncaster	Koonung Creek / Ruffey Lake	SBO2 & SBO3	13	The review has confirmed the surrounding topography and drainage assets. The submission states that the flood shape at this location should be remodelled to take account of the drainage upgrade constructed as part of the 1 Grosvenor St, Doncaster development in 2015. This argument is not considered a valid basis to amend the flood shape due to the fact that the drainage improvements are downstream of the submission property and remodelling would not significantly alter the extent of the flood shape upstream. In addition, the flood modelling which underpins the SBO represents the drainage network at a point in time. The drainage upgrade in question was	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					constructed after the flood modelling was undertaken, and therefore could not be included in the modelling for this catchment. The flood shape should remain as exhibited at this location.	
168.	57 Beecroft Crescent, Templestowe	Ruffey Creek	SBO2	1, 2, 8	The location of the property is on sloping land but it has a significant catchment to the north west. The natural topography controls the overland flow. The drainage infrastructure and the sloping land surface have been correctly represented in the model and the SBO2 resulting from the analyses is consistent with that. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
169.	13 Totara Court, Templestowe Lower	Ruffey Creek	SBO3	2	The submission contains no specific basis for objection. Based on a desktop review and site visit, the flood shape is consistent with contours and catchment size. The SBO was revised again following a recent meeting with the submitter. The outcome of the review is that the extent of the SBO be retained at this location.	No
170.	5 Trudi Court, Donvale	Mullum Mullum Creek	SBO1	1, 2, 3, 7	The property is located in the vicinity of a Melbourne Water Drain (Larne Avenue Drain). The property is subject to Council flooding however the flooding of downstream 23 Larne Avenue is flooding from Melbourne Waters main drain at the front of the property and from local catchment flows towards the rear of the property. The overlay designation has been reviewed and given	Yes. The designation of the overlay is to be changed from SBO1 to SBO3.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					the flow depths and local catchment source of the flows, it is proposed to change the overlay designation from SBO1 to SBO3.	The SBO1 overlay through 7 and 8 Drummond and the rear of 23 Larne is to be changed to SBO3.
171.	32 Balmoral Avenue, Templestowe Lower	Bulleen North	SBO3	7, 9, 11	The submission states that the whole property should not be encumbered by the SBO if only a portion of the land experiences flooding. A technical review has found that the flood shape is consistent with the topography and drainage infrastructure. The flood shape should remain as exhibited at this location.	No
172.	42 Eucalypt Avenue, Templestowe Lower	Ruffey Lake	SBO3	2,7	The submission states that the property is significantly higher than the street and does not flood. The flood shape at this location represents runoff coming from uphill, being concentrated in the gully-like feature of the driveway and onto the street, and does not extend over the dwelling footprint. Although the incursion does not cover a significant portion of the property, it does not meet the minor incursion criteria as it is over 30 m2 in area. The review has confirmed the surrounding topography and drainage assets. Following a recent meeting with the submitter, the SBO shape has been reviewed and should remain as exhibited at this location.	No
173.	1/29 Lynne Street, Donvale	Koonung Creek	SBO3	5	The description of flooding in the submission is consistent with the application of the SBO at this	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					location. A site visit has confirmed the surrounding topography, with the submission property located within a defined gully. The SBO is based on modelling that has been undertaken by Council and Melbourne Water in the event of a major storm event. This information was not available at the time of building. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
174.	2 Jacaranda Court, Templestowe Lower	Ruffey Lake	SBO3	2	The submission states that as the property is on a slope, flooding is not a problem. Although in an elevated area, the property still receives runoff from the upstream catchment which comprises the school property on top of the hill to the north of the property. There is an easement drain along the rear of the property and pit overflow also contributes to the flood shape at this location. A site visit has confirmed that the flood shape is representative of site conditions and the flood shape is recommended to be retained at this location.	No
175.	5 Ennersdale Court, Templestowe	Mullum Mullum Creek	SBO3	2, 7, 8	The submission states that the property is significantly higher than the street and does not flood. The flood shape at this location represents runoff coming from uphill, being concentrated in the gully-like feature of the driveway and onto the street, and does not extend over the dwelling footprint. Although the incursion does not cover a	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					significant portion of the property, it does not meet the minor incursion criteria as it is over 30 m2 in area. The review has confirmed the surrounding topography and drainage assets. Following a recent meeting with the submitter, the SBO shape has been reviewed and should remain as exhibited at this location.	
176.	2-4 Drayton Crescent, Park Orchards	Mullum Mullum Creek	SBO2	5, 7, 8	The submission refers to drainage upgrade works undertaken recently and states that Council has failed to divert the flow of runoff to Alan Morton Reserve. A desktop review has found that the updated drainage infrastructure was taken into consideration in the modelling. In addition, the terrain data used was captured in 2009 is the highest quality and most up to date data available for flood modelling. The submission property is in a natural gully and collects runoff from the north, east and west. The topography was confirmed with a site visit. The drainage upgrade was designed for minor storm event standards in line with current design practices. Council cannot build a drainage system that can cope with all storm events. During major storm events, excess runoff will still follow the natural topography of the land. The intent of the proposed overlays is to ensure future development is undertaken in a manner that considers the overland flow path during major storm events. The review has confirmed the surrounding topography and drainage assets. A	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					further site inspection and review conducted by Cardno and completed in August 2017 agreed with the previous Council officer assessment. The flood	
177.	244-246 Heidelberg- Warrandyte Road, Warrandyte	Mullum Mullum Creek	SBO3	2, 3, 12	shape should remain as exhibited at this location. The submission states that flooding used to occur in the manner indicated by the SBO prior to the construction of St Muir Drive and that no flooding has been experienced on the property since then. Although the roadway and associated drainage would significantly alter the overland flow path during minor storm events, during a 1 in 100 year	Yes. Remove SBO3 shape.
					event of critical duration it is expected that some flow will still occur into the submission property into the low lying area containing an earthen pond. The terrain LIDAR data used in the modelling was captured in 2009 and a site visit has found it is consistent with present site condition in this area as it has not adequately modelled the St Muir Drive terrain. The review has confirmed the surrounding drainage assets. Further review by Cardno supports	
178.	11 Limassol Court, Donvale	Mullum Mullum Creek	SBO2	2, 4, 11	removal of the SBO shape. The submission states that the experience of flooding at this location is less extensive than that indicated by the SBO. It is not clear whether the submitter has experienced a 1 in 100 year ARI rainfall event of critical duration, upon which the SBO is based. Topographical features of the property result in runoff from the roadway cutting across the front and following the gully along the	Yes. Reduce SBO2 shape near house.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					northern boundary. This topography, along with drainage infrastructure has been confirmed with a site visit. The submission also refers to drainage infrastructure being blocked during some storm events. The modelling assumes the drains are operating at capacity. The review has confirmed the surrounding topography, with the exception of a small area near the dwelling. The existing drainage assets have been confirmed and appropriately modelled. Minor trimming of the SBO2 shape is proposed near the house due to issues identified with the Lidar data.	
179.	27 Margot Avenue, Doncaster	Ruffey Creek	SBO3	2, 7, 11	The submission states that the SBO is only on the driveway and that it is sloping and other properties with similar driveways are not affected. The upstream catchment behind the house results in a small collection of runoff as indicated by the SBO shape. A site visit confirmed that the flood shape is only located at the driveway which is steep. This has been likely caused by the resolution of the model picking up a low point in the gutter and tinning to another erroneous low point in the property. It is therefore recommended to remove the SBO from this property.	Yes. Remove SBO3 shape.
180.	27 Lisbeth Avenue, Donvale	Mullum Mullum Creek	SBO2	11	The overland flow coming to the property is from its upstream catchment located in the south west and north west direction with a distance varying between 200 to 300 m from the property. The area is served by 750 mm pipe at the east and that	Yes. Remove the SBO2 incursion from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					has been correctly modelled. The intrusion of SBO2 is a strip of area (less than 1% of the land), the width of the strip is less than 1m, located at the backyard and within easement. The overlay is recommended to be removed.	
181.	4 Fromhold Drive, Doncaster	Ruffey Creek	SBO2	1, 2, 7, 12	The submission states that the property is elevated and flooding is not a problem. The flood shape at this location does not represent water rising up from the street level but collective overland runoff from uphill being channelled onto the road. The argument that the neighbouring house will protect the submission property from runoff has some merit as the filling occurred after the generation of the Lidar data. A site visit has found that the flood shape requires amendment to address the recent filling of 6 Fromhold Drive.	Yes. Remove section of SBO2 shape at the eastern side of the property and connect the 2 SBO2 shapes on the western boundary. Remove SBO2 shape from 6 Fromhold Drive.
182.	10 Cypress Avenue, Templestowe Lower	Ruffey Creek	SBO3	1, 3, 11	The submission argues that no flooding has been experienced at this location. The incursion of the flood shape does not provide any significant planning or risk mitigation benefits and is recommended to be deleted from the property.	Yes. Remove the SBO3 incursion from property.
183.	529-539 Ringwood- Warrandyte Road, Warrandyte South	Andersons Creek	SBO2	1, 12	The source of overland flow coming to the property is the upstream catchment area located in the east side of the property within 1 km. The gully running in the east west direction at this location originated from the hill in the east and the gully passes through the southern part of the land.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
184.	35 Lynnwood Parade, Templestowe Lower	Ruffey Creek	SBO1	1, 2	The property is located in the vicinity of a Melbourne Water main drain (Montpellier Crescent Drain). The maintenance issue with regard to wood chips has been reported to our Operations and Maintenance team. The property is located in the vicinity to a Melbourne Water main drain (Montpellier Crescent Drain). The LiDAR and contour surface data as well as site photos were analysed which indicate that there have been thinning issues with the removal of the buildings on a steep slope. This has likely created several localised low points which have led to misleading flood modelling results. It is therefore recommended to remove the SBO1 from 35 Lynnwood Parade.	Yes. Remove SBO1 shape from 35 Lynnwood Parade. Remove SBO1 from front of 37 Lynnwood but retain balance of SBO1.
185.	25 Airdrie Court, Templestowe Lower	Ruffey Creek	SBO2	2, 5, 6, 7	The submission states that the property is on a slope and any flood water would quickly drain away. The proposed SBO identifies land prone to overland flooding from runoff or overflow from Council drains rather than inundation. Modelling resolution issues and issues with the Lidar data in steep terrain warrant review of the SBO shapes. It is recommended that both SBO extents be deleted accordingly.	Yes. Delete both SBO shapes at this property.
186.	338 Serpells Road, Doncaster East	Mullum Mullum Creek	SBO2	1, 14 Mapping	The submission states that there is an error in the address data used in the mapping. A desktop	Yes.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
187.	43 Flannery Court, Warrandyte	Mullum Mullum Creek	SBO2	shows incorrect number.	review of the general flood shape in this area has found it to be consistent with the drainage infrastructure. The review has found an issue with the Lidar data at this property which has effected the SBO results. The SBO2 shape is recommended to be deleted accordingly. A meeting was recently conducted involving Council officers and the submitter but no substantive issues were raised during the meeting in addition to those raised in the original submission. The submission refers to a neighbour's swimming pool as a reason for flooding. The reason for flooding is from the overland flow generated from the upper catchments. A swimming pool, if located upstream, would actually serve as a storage facility and reduce the impact of flooding to the submission property. The review has found that the drainage of the properties is mainly governed by topography for 1 in 100 ARI events. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location as the extent of SBO2 is significant.	Remove SBO2 shape for property. Remove SBO3 from 340 Serpells. Trim eastern section of SBO2 from 336 Serpells. No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
188.	476-480 Ringwood- Warrandyte Road, Warrandyte	Andersons Creek	SBO2	11	The submission points out that the overlay does not encroach onto the property. The property does contain a very minor incursion of the flood shape which is not considered to provide any planning or risk mitigation benefit. The flood shape is recommended to be deleted from the property.	Yes. Remove the SBO2 incursion from property.
189.	14 Moonbria Way, Templestowe	Mullum Mullum Creek	SBO2	5	The content of the submission supports the need to apply the SBO at this location. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	Νο
190.	1A Pinnacle Crescent, Bulleen	Koonung Creek	SBO3	4, 5	The content of the submission supports the need to apply the SBO at this location. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. Council allocates approximately \$2 million annually to upgrading its underground	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality instantaneously. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
191.	1 Pinnacle Crescent, Bulleen	Koonung Creek	SBO3	4, 5	The content of the submission supports the need to apply the SBO at this location. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality instantaneously. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
192.	291 George Street, Doncaster	Ruffey Creek	SBO2	2, 11	The submission states that the incursion is within an easement and no building could occur in that	Yes.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					location. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under certain conditions, development in close proximity to property boundaries or within easements may be permitted in some cases. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly.	Remove the SBO2 incursion from property.
193.	20 Philip Avenue, Doncaster	Koonung Creek	SBO3	2, 5, 7, 8, 12	The submission refers to landscape features and states that the flood shape is unfairly affecting the property compared to other properties at a similar slope/elevation. Given the extent of the catchments involved, each catchment area has been broken up into a grid with cells 3m by 3m in size. This approach is considered to provide adequate resolution to define topographical features within the catchment. Private infrastructure, such as retaining walls, structures and buildings, are not individually modelled as they are not protected and can be subject to change in the event of property redevelopment. Consideration has been given to the impacts of structures, such as buildings, and features, such as landscaping and fences, on the mapped flood extents, through the application of roughness factors to land areas. The	Yes. Remove the SBO3 incursion from property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					flood shape incursion onto the submission	
					property fulfils the minor incursion criteria and the	
					flood shape is recommended to be amended	
					accordingly.	
194.	32 Barton Street, Doncaster	Ruffey Creek	SBO2	2	The submission states that the dwelling is safe	No
	East				from flooding due to the elevated position.	
					The relative elevation of the property to other	
					houses on the street is irrelevant as the flood	
					shape indicates that the runoff is coming from the	
					east and flowing onto the roadway. In addition,	
					the SBO identifies flood prone land, not specifically	
					where dwellings have flooded above floor level.	
					There is evidence in street view and aerial imagery	
					data that recent redevelopment of the site has	
					taken place, however the shape of the overall land	
					has not significantly changed. The review has	
					confirmed the surrounding topography and	
					drainage assets. The flood shape should remain as	
					exhibited at this location.	
195.	22 Tracey Street, Doncaster	Ruffey Creek	SBO3	2	The submission refers to the local topography and	No
	East				questions why the properties on the low lying side	
					of the street have not been covered by the SBO.	
					The properties on the low lying side of the street	
					are not flooded as the runoff from the street is	
					safely collected in the roadway and channelled	
					down Monica St. The topographical data reflects	
					the fact the driveway is slightly cut into the slope	
					creating a gully-like feature in the model which	
					concentrates the runoff from uphill. The flow paths	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					referred to in the submission have been reviewed. There is a disconnect in the flood shape between no. 22 and 24 Tracey St. No.s 24 and 26 are flatter and the flood shape suggests more of a ponding behaviour with a connection to Jocelyn Ct, whereas the flood shape on the submission property represents channelling of shallow runoff onto Tracey St. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
196.	15 Eucalypt Avenue, Templestowe Lower	Ruffey Creek	SBO2	7, 8, 10	The submission does not specifically object to the flood shape but to the proposed amendment in general. A review has found the flood shape to be consistent with the site conditions, with the intersection of Eucalypt Ave and Cassinia Rd experiencing large volumes of runoff during storm events. Due to the need to consider overland flow paths when redevelopment occurs it would be appropriate to retain the flood shape at this location.	No
197.	31-33 Ennismore Crescent, Park Orchards	Mullum Mullum Creek	SBO3	2	The submission states that the flood shape is inconsistent with the dwelling constructed on site and that the mapping reflects outdated data. The flood shape at this location does not represent water rising up from street level, rather the flood shape represents runoff from the property flowing downhill onto the street. The contours and flood	Yes. Remove the SBO3 shape. In addition remove SBO3

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					shape have been found to be consistent with the	from 35
					fall of the land evident from the street. Private	Ennismore.
					infrastructure such as retaining walls, structures	
					and buildings are not individually modelled but are	
					accounted for through the application of	
					roughness factors, which vary with land use	
					allocated by individual sub catchment areas. The	
					model surface and results were analysed and it was	
					found that an abnormality was present in the	
					surface at the area of the flood extent in the	
					middle of the property which has likely been	
					caused by thinning issues. Therefore, it is	
					recommended that this area be removed from the	
					SBO. If the above area is removed, all other SBO	
					areas in this flow path will be below the filtering	
					threshold and should therefore also be removed	
					from the overlay.	
198.	254 Church Road,	Ruffey Creek	SBO3	1,8	The submission states that no flooding has been	No
	Templestowe				experienced during 40 years of living at the	
					address.	
					The flood shape predominantly covers areas of the	
					backyard with a small incursion at the front. It is	
					possible the submitter is referring to the floor	
					levels of the house not being flooded. It is also	
					possible the submitter has not experienced a 1 in	
					100 year ARI event of critical duration at this	
					location. A site visit has confirmed the overall	
					topography and drainage infrastructure in the area	
					and it has been found to be consistent with that	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					modelled. The flood shape should remain as	
					exhibited at this location.	
199.	12 Viscount Drive, Doncaster	Ruffey Creek	SBO3	2	The submission refers to the source of overland flow to the property. The overland flow is anticipated to flow onto the property from 14 Stanley Drive. The statement, however, about flash flood water coming from 14 and 16 Viscount Drive is incorrect and the SBO shape has been misinterpreted at that location. The detailed review of the contours and drainage infrastructure have been done and the modelling is correctly represented. The review has confirmed the surrounding topography and drainage assets.	No
					The flood shape should remain as exhibited at this location.	
200.	1/24 Maggs Street, Doncaster East	Ruffey Creek	SBO2	7, 8 12	The submission states that when the property was purchased there was no SBO and the imposition at this point in time is unfair. The flood modelling which underpins the SBO has recently been undertaken by Council and Melbourne Water using the latest data available. Simply because no previous flooding information was available does not mean there was no risk of flooding in a major storm event when the property was built or purchased. The dwellings are located on the higher side of the property and the SBO only encroaches into the shared driveway. The review has confirmed the surrounding topography and drainage assets. No substantive issues were raised	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					during the recent meeting with Council officers, in addition to those raised in the original submission. The flood shape should remain as exhibited at this location.	
201.	32 Winston Drive, Doncaster	Koonung Creek	SBO3	1, 7, 8	The submission states that a 1 in 100 year ARI storm was experienced and flooding was not experienced at this location. No specific details have been provided in order to verify whether the storm described was a true 1 in 100 year ARI storm of critical duration at this location. A review of the flood shape in addition to a site visit from the street has found that it is reasonable to expect runoff to occur in the manner indicated by the SBO during major storm events due to the topography and drainage assets at this location. The flood shape should remain as exhibited at this location.	No
202.	5 Eleanor Court, Donvale	Koonung Creek	SBO2	5, 7, 8, 12	Ground levels at the rear of the property have been amended since the Lidar data was collected. The existing Council drainage infrastructure was checked and found to be appropriately modelled. The experiences of flooding are consistent with the application of the SBO at this location. There is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the local drainage assets. Given changes to the terrain in te back yard of the property, it is	Yes. Reduce the extent of the SBO2 overlay at the rear of the property In addition trim SBO3 extent at rear of 15-17 and 19-21 McGowans

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					recommended that the SBO shape be trimmed and reduced accordingly.	
203.	7 Pictor Court, Donvale	Ruffey Creek	SBO3	1, 2, 7, 8	The submission states that the property is in an elevated location and no flooding has previously been experienced. The SBO shape indicates shallow runoff from Mitcham Rd flowing into the back yard. The flood shape does not indicate flooding of habitable floor areas. Site investigation showed that the high-point of the footpath on Mitcham Road has unlikely been picked up in the resolution of the model. Due to the small size of the footpath and the fact that the slope of the land drops significantly on the property side of the footpath, it is likely that a low point in the gutter and then another low point in the property in the model have led to an interpolation of a low-point allowing water into the property. Flood depths from the model at Mitcham Road are less than 60mm, which are smaller than the gutter depth at this location. Therefore, it is likely that water will not overtop the footpath and enter the subject properties here. It is recommended that the SBO shape be removed from this property.	Yes. Remove SBO3 shape from property. In addition amend part of the flood shape on the east side of No 8 Pictor Cr and reduce shape at 344 Springvale. Remove from No 5, 1/6 & 2/6 Pictor Court.
204.	48 Treevalley Drive, Doncaster East	Mullum Mullum Creek	SBO2	2, 12	The submitter's property is affected by SBO2. The road falls steeply past this property and the driveway falls to the road. Flows from the road cannot enter the property. It is recommended that the SBO2 area be deleted accordingly.	Yes. Delete SBO2 area.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
205.	72 Olympus Drive, Templestowe Lower	Ruffey Creek	SBO3	2, 8, 10	The submission refers to the relative elevation of the front of the property to 70 Olympus Drive which is lower. Review of the modelled depths associated with the unfiltered flood shape data confirms the impact of overland flows on 72 Olympus Drive. The flood shape at this location is associated with runoff from the south and west (74 Olympus Drive). It is recommended that the flood shape be amended to reduce the extent of the flood shape on the property, in line with the unfiltered flood shape results. This outcome was discussed with the submitter at a recent meeting.	Yes. The flood shape for 72 Olympus Drive is proposed to be modified.
206.	4-6 Yarra Street, Warrandyte	Andersons Creek	SBO2	3, 4	The submission refers to a previous drainage upgrade at this location following reported drainage issues. A discrepancy has been found between the modelled and actual drainage infrastructure at this location. The upgrade was undertaken prior to the flood modelling exercise which underpins the SBO and additional modelling is required to quantify the impact of the upgrade on the flood shape. The flood shape is recommended to be reviewed in this area following additional modelling, which is expected to be completed prior to the Panel hearing.	No
207.	82 Deep Creek Drive, Doncaster East	Mullum Mullum Creek	SBO3	2, 5, 6	Overall, the flood shape is consistent with the site condition. The SBO shape is considered to be consistent with the local topography and existing drainage assets, for a 1 in 100 year ARI storm event	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					of critical duration. The SBO shape should be retained accordingly.	
208.	1 Cottesloe Court, Doncaster East	Mullum Mullum Creek	SBO3	1, 2, 5, 7, 8	The submission states that the property is on a slope and no flooding has been experienced. The flood shape is reflective of the topography of the property and the existing Council drainage infrastructure. Council drains catering for residential flows typically do not cater for 1 in 100 year ARI events. The gully like feature across the property as seen from the Nedlands Ct and Cottesloe Ct is responsible for the connectivity of the SBO3 between the two road ways. The submission also states that Council should prioritise upgrading drains if flooding is an issue. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. These works are prioritised based on frequency of flooding of habitable floor areas. There remains a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. LiDAR and surface contour data were analysed along with site photography and it was found that it is very likely that water running down Cottesloe Court will enter this property from the driveway. In the modelling 1 in 100 year rainfall event, the modelling results suggest that there will be a significant amount of overland flow running down Cottesloe Court. As the driveway of 1	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					Cottesloe court is virtually at the level of the road, this is likely to be the preferential flow path for water to take. Site photos show that the Cottesloe Court is sloped to side of the street that the subject property is on. Furthermore, the driveway of 1 Cottesloe court is virtually at the road level and so it would not take much depth of water to overtop it and flow into the property. The modelling is suggesting that in the 1 in 100 year rainfall event, there will be enough depth of water in the roadway to do so. Therefore, it is recommended that there be no change to the SBO in this property.	
209.	41 Taparoo Road, Templestowe	Mullum Mullum Creek	SBO3	2, 4, 5	The description of runoff through the rear of the submission property is consistent with the application of the SBO at this location. The topographical features of the land result in runoff from the south being concentrated and channelled in a north westerly direction via the fall of the land. The submission states that the neighbouring property at No. 39 receives inundation however it is not clear how this could occur. The submission also states that Council should install more stormwater infrastructure on King Street and undertake more frequent maintenance. Although important, the maintenance of drainage infrastructure is a separate issue to the proposed overlays. The flood mapping which underpins the SBO assumes the drains are operating at capacity	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					and if blockages were assumed, the flood extent would be even more extensive than that exhibited. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
210.	41 Hazel Drive, Templestowe Lower	Bulleen North	SBO2	2	The submission refers to a retaining wall and benching on the north boundary of the property as a basis for improbability of the property being flood prone. A site visit has confirmed the ground conditions. The flood shape at this location represents the upstream extent of water flowing out of the property and therefore a retaining wall or change in elevation of ground level would not impede the runoff. However, a review has found that, based on the modelled flood depths and the terrain of the site, the flood shape should be deleted from the property.	Yes. Remove the SBO2 incursion from the property.
211.	9A Balmoral Avenue, Templestowe Lower	Bulleen North	SBO3	7	The submission property is in the expected flow path of runoff from the east. The property is located in a low point along Balmoral Avenue and the flood shape is consistent with topographical contours. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
212.	371 Serpells Road, Doncaster East	Mullum Mullum Creek	SBO2 & SBO3	2, 11	The submission property is located in a gully and is located just upstream of the Melbourne Water main drain, which reflects the significant upstream	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					catchment. A site visit has confirmed the	
					topography and drainage infrastructure. The flood	
					shape should be retained at this location.	
213.	7 Cemetery Road, Warrandyte	Andersons Creek	SBO3	5, 7 13	The submission states that a drainage scheme is	No
					required in the area and, through the introduction	
					of the SBO, Council is shifting the responsibility of	
					drainage onto ratepayers. The drainage patterns in	
					this area are governed by the topography.	
					Consideration will be given to means to reduce the	
					risk of culvert inlet blockage. A site visit has	
					confirmed the topography is consistent with the	
					flood shape. The overlays will assist in helping to	
					identify areas to prioritise drainage upgrades	
					throughout the municipality, in addition to	
					ensuring future development in undertaken in a	
					manner that considers flood risk. The review has	
					confirmed the surrounding topography and	
					drainage assets. The flood shape should remain as	
					exhibited at this location.	
214.	3 Pinnacle Crescent, Bulleen	Koonung Creek	SBO3	4, 5, 8, 10	The content of the submission supports the need	No
					to apply the SBO at this location. Manningham City	
					Council has a policy to prioritise drainage upgrades	
					where required to alleviate flooding of habitable	
					floor areas. Council allocates approximately \$2	
					million annually to upgrading its underground	
					drainage network. These works are prioritised	
					based on frequency of flooding of habitable floor	
					areas. It is not feasible for Council to resolve all	
					flooding issues across the municipality	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The points raised in the submission about drain maintenance are important and the impacts are recognised. The description in the submission of the history of the problem suggests adequate work has been done by Council to investigate the matter and add it to the list of priorities for work. However, it represents an issue that is not relevant to the flood modelling which underpins the SBO. The flood shape has been modelled assuming that the drains are in working order and no blockages are present. Overland flow results in the model when the capacity of the drainage system is exceeded. Assuming blockages in the network would increase the size of the SBO beyond what is currently proposed. A site visit has been undertaken and it has determined that the flood shape is consistent with site conditions. The flood shape is recommended to be retained at this location.	
215.	30 Anthony Avenue, Doncaster, and 30A Anthony Avenue, Doncaster	Ruffey Creek	SBO3	2, 7, 8, 9, 11, 12	The submission property is located at a low point in Anthony Avenue and adjacent to the main flow path. The incursion of the flood shape onto the property is considered minor and would not provide significant planning or risk mitigation benefit and is recommended to be amended accordingly.	Yes. The SBO3 incursion is proposed to be removed from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
216.	34 Dellfield Drive, Templestowe Lower	Ruffey Creek	SBO3	2, 12	The submission and addendum state that the school building and associated private drains at the rear of the property would protect the property from flooding. The flood modelling identifies flood prone land, and features such as buildings are not modelled individually but taken into consideration through the adoption of appropriate roughness factors in accordance with industry guidelines. Private drainage assets have not been modelled for a number of reasons. Council does not maintain these and cannot guarantee their capacity or effectiveness. In addition, Council has no control over the protection of these assets. The submission also states that, should the school property be redeveloped, Council would ensure stormwater was managed in a way that would protect the submission property and that the SBO should not apply. The SBO cannot be amended based on a possible future scenario. In addition, developments are usually only required to manage stormwater runoff for minor storm events and not to a 1 in 100 year ARI standard. A site visit has confirmed the topography and drainage assets in the area, however it is noted that the modelled flood depths at this address are shallow and retention of this flood shape will not appreciably assist the management of future flood risk. It is	Yes. SBO flood shape is proposed to be deleted from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					recommended to remove the SBO3 from the	
					property.	
217.	1 Grosvenor Street, Doncaster	Ruffey Creek	SBO2	12	The submission refers to the recently installed 1 in 100 year stormwater drain on Grosvenor Street and questions the impact the proposed Amendment will have on the development. The drain installed as part of the development was constructed in 2015 and is not reflected in the modelling which underpins the SBO which was completed in the preceding years. It is beyond Council's responsibility to update the modelling to include the drain for this amendment and this will be included in a future review of the modelling which underpins the SBO. The proposed amendment will not affect the completion of the current development on the site, however the overlay is proposed to remain on the land as exhibited until a future review of the modelling is	No
218.	2 Ananda Court, Donvale	Koonung Creek	SBO2	1, 2, 3, 4, 6, 7, 8	undertaken. The submission property is on the main flood path of runoff from the north east. A desktop review has found the topography and modelled drainage infrastructure to be consistent with the flood shape. Although the gully is on a slope, flash flooding or overland runoff is still considered a risk and the proposed overlays will assist in ensuring future development is undertaken in an appropriate manner. The review has confirmed the surrounding topography and drainage assets. The	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					flood shape should remain as exhibited at this	
					location.	
219.	36 Henry Street, Doncaster	Ruffey Creek	SBO2	2, 3, 7, 8	This property has had two submissions due to the change in ownership prior to the end of the submission review period. This submission notes the drainage upgrade Council completed in 2006 and that they had not been any flooding of the property since 2006. The second submission only points out the possible drop in land value and increase of insurance premiums that could occur if the overlay is put in place. The previous flooding in 1991 and 2002 prompted Council to upgrade the Council drain within the easement in 2006. The drainage upgrade includes pits at the low point in the road to improve the inlet capacity and an increase to a 525mm diameter pipe. The flood shape should remain as exhibited at this location.	Νο
220.	22 Council Street, Doncaster	Ruffey Creek	SBO2	1, 2, 3	The submission refers to the storm event of 4-5 Feb 2011 and claims that this was rated as a 1 in 500 year ARI event and the submission property did not experience any flooding. The best available rainfall data from the BoM has been used to develop the models. There are no BoM rain gauges within the municipality with the accuracy needed to identify the critical storm duration that lead to this events. Additionally, rain does not fall uniformly at the same intensity in all catchments. Storm water runoff is dependent on the topography and runoff characteristic of the land.	Yes. Delete the SBO2 flood shapes from 22 Council Street.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The 2011 storm event is known to have exhibited a	
					large degree of spatial variability. The modelled	
					storm event applies 1% AEP rainfall with the	
					corresponding critical duration for each catchment.	
					This has been verified against our historic data	
					from customer service requests received following	
					high intensity rainfall events in the municipality	
					and evidence of the impacts experienced in	
					previous floods. The flood mapping has been	
					conducted in accordance with industry best	
					practice, the flood shape of the SBO is based on	
					modelling a 1% Average Exceedance Probability	
					(1% AEP) or 1% chance of storm of this magnitude	
					occurring in a year. This is the same method used	
					by other Councils and Water Authorities in	
					Victoria. Given the size of the catchments involved,	
					each area has been broken up into a grid with 3m x	
					3m cells. This approach is considered to provide	
					adequate resolution to define topographical	
					features within the catchment. The proposed	
					overlays identify flood prone land. Structures and	
					buildings have not been modelled individually as	
					they can be subject to change in the event of	
					property redevelopment. Consideration has been	
					given to the impact of structures such as buildings	
					and walls through the application of surface	
					roughnesses in accordance with industry	
					guidelines. The review has confirmed the drainage	
					assets. However, owing to issues with the model	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
221.	67-69 Ennismore Crescent, Park Orchards	Mullum Mullum Creek	SBO2	1, 2	resolution and minor discrepancies between the fall of the land within the road reservation abutting the property, it is recommended that both SBO shapes be deleted from 22 Council Street. The submission refers to earthworks undertaken that have raised the front yard of the property, with the submission stating this would prevent flooding from following the path indicated by the SBO. A desktop review and site visit has confirmed the earthworks are reflected in the LiDAR data and has been modelled adequately. The site visit confirmed that runoff from the north down Ennismore Cres would still cut through the front of the submission property and make its way to Curry Rd due to the roadway of Ennismore Cres being slightly higher than the front yard of the property which is indicated in the photos. The extent of the SBO2 is significant and the depths of overland flow are also greater than 500 mm at the pond areas. The review has confirmed the surrounding topography and drainage assets. In response to	No
222.	16 Murndal Drive, Donvale	Mullum Mullum Creek	SBO2	2, 12	the recent follow-up meeting with the submitter, Cardno reviewed the submission. The recommendation is that the flood shape should remain as exhibited at this location. The submission refers to changes of topography	No
					caused by excavation of neighbour's property and therefore overland flow should be passing through that area.	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					A site visit was undertaken and it was found that the retaining wall built in that location by his neighbour was high enough and consistently represented in the contour map. The SBO2 shape would not be entering to the neighbour's property as claimed in the submission. The stormwater drains of Council, as also mentioned in the submission, are existing in the backyard of the property and they are to cater for smaller events (1 in 5 ARI) and would not be adequate for bigger events (1 in 100 ARI). There has been a drainage upgrade undertaken in 2014 while the modelling was being done. This upgrade has not been included in the modelling and can be incorporated into a future revision. The submission property is upstream of the upgrade and the omission will not significantly affect the flood shape at this location. The review has confirmed the surrounding topography. The flood shape should remain as exhibited at this location.	
223.	3 Cliveden Court, Templestowe	Mullum Mullum Creek	SBO3	7, 8, 11	A review has found that the flood shape is consistent with the topography of the area and the drainage infrastructure, however, the incursion is minimal and is not considered to provide significant planning or risk mitigation benefits and the flood shape is recommended to be amended accordingly.	Yes. Remove the SBO3 incursion from the property.
224.	3 Trudi Court, Donvale	Mullum Mullum Creek	SBO3	1, 7, 8, 11	The submission states that due to the sloping nature of the ground, the property is not prone to	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					flooding. In addition, the floor level of the house is significantly higher than the area with the proposed SBO3 and that the dwelling would never flood. Although the SBO covers a small portion of the property, the land may be subdivided in the future and the draft overlay would assist in ensuring future development is undertaken in a way that considers the risk of overland runoff. The review has confirmed the surrounding topography and drainage assets. It is confirmed that the existing dwelling is not encumbered by the proposed SBO. Following a recent meeting with the submitter the SBO has once again been reviewed and it is recommended that the SBO should remain as exhibited at this location.	
225.	9 Myers Court, Doncaster	Koonung Creek	SBO2	2,3	The submission states the previous drainage upgrade works have addressed the issue of flooding at this location. A review has found that the upgraded infrastructure has been modelled, however, there remain residual overland flows in a major storm event. The area is a defined gully with a significant upstream catchment. The submission also questions why there are lower lying properties on Frank St are not included in the proposed overlay. The flood shape at this location represents overland runoff from the north east, not rising water from the south. The flood shape is less extensive around the 1-3 Frank St because more of the runoff is accommodated by the underground	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					pipes of 1500 mm and 750 mm in diameter at that location. The review has confirmed the surrounding topography and drainage assets. In response to the follow-up meeting with the submitter, Cardno were requested to review the submission. Based on the foregoing, changes to the SBO2 shape are not supported.	
226.	1 Niobe Court, Templestowe Lower	Ruffey Creek	SBO3	1	The submission states that no flooding has been experienced while the submitter has lived at the address and takes issue with the SBO being based on a flood with a 1% chance of occurring in any year. The SBO is based on a 1 in 1 year ARI event is industry practice and has been adopted in other Councils including Banyule and Port Phillip. It may be that the submitter is referring to not experiencing any flooding of the dwelling itself. The SBO defines flood prone land, not specifically where dwellings have flooded above floor level. The flood shape incursion is along the frontage of Andromeda Way which is expected to experience significant volumes of runoff during storm events. A site visit and further review following a recent meeting with the submitter has confirmed the flood shape is consistent with site conditions and it is recommended to be retained at this location.	No
227.	3 Millwood Court, Templestowe	Ruffey Creek	SBO2	1, 2, 8	The catchment to the north west contributes to the runoff. The natural topography controls the overland flow. The drainage infrastructure has been correctly represented in the model. The	Yes. Delete SBO2 shape from property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					review has however identified issues with the Lidar data and modelling resolution which require review of the SBO. It is recommended that the SBO2 shape as exhibited be deleted at this location.	Delete SBO2 extent from 2 and 5 Millwood Court. Trim part of SBO2 extent from 1 Millwood.
228.	55 Caringal Avenue, Doncaster	Koonung Creek	SBO2	1, 2, 7, 8	The submission states that flooding is not seen as a risk to the property. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. In addition, the submission may be indicating the dwelling has never been flooded above floor level. The SBO identifies flood prone land, not where buildings are flooded above floor level. The purpose of the proposed overlays is to ensure that future development is protected from flooding. The SBO covers a small area in the corner of this property and is not considered to provide significant planning or risk mitigation benefit and it is recommended that the flood shape be amended accordingly.	Yes. Remove the SBO2 incursion from the property.
229.	17 Janet Street, Templestowe Lower	Bulleen North	SBO2	1, 7, 8, 11	The submission and addendum states that the ground levels have been changed in the backyard in the 1970's. The modelling was undertaken using LiDAR data dated 2009 and is the best available data for this type of modelling. A site visit was undertaken for this property. The proposed overlays identify flood prone land. Structures and buildings have not been modelled individually but,	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					consideration has been given to the impact of structures through the application of surface roughnesses in accordance with industry guidelines. The submission also refers to private on site detention and drainage installed as part of the development on the neighbouring property. These private systems are designed for minor storms and do not significantly change the flood extent in a 1 in 100 year ARI event of critical duration and thus have not been modelled. Following the meeting held with the submitters in 2017, Cardno was requested to further review the submissions. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
230.	21 Marianne Way, Doncaster	Koonung Creek	SBO3	2, 4, 5, 7, 8, 12	The submission refers to drainage installed as part of the subdivision of the site. This has not been modelled as it is designed to minor storm event standards for runoff from the subject property, not flows from the broader catchment. The submission states that the property is on a slope, however the flood shape at this location is reflective of overland runoff and not ponding of water. This type of flooding is still considered a risk. Although there has been a drainage upgrade in neighbouring Anthony Reserve, the submission property does not directly benefit due to its relative position in the catchment. The maximum modelled flows through the property are approximately 50mm	Yes. Remove the SBO3 overlay. In addition the SBO3 overlay can be removed from 23 Marianne Way.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					deep. These would not overtop the kerb and channel in Irene Court, and flows would be conveyed down Irene Court and out to Marianne Way. This has likely been caused by the resolution of the model not properly picking up the high point within the nature strip. Therefore, it is recommended that the SBO overlay shape be removed from this property. Furthermore, if this is removed the remaining SBO on the property can also be removed as it is within 5 meters of the road.	
231.	6 Trevinden Close, Templestowe	Ruffey Creek	SBO3	1, 2, 3, 12	The submission states that the property is on a slope and no flooding has been experienced. The drainage system implemented in the immediate area is designed for a 1 in 5 year event, with flows in excess of the pipe system travelling overland. The modelled SBO overlay on the property is based on a 100 year ARI storm event. The surrounding terrain includes a gully along the north boundary. A site visit confirmed that the overland flow would be unlikely as there are inconsistencies with the LiDAR data near structures. It is recommended that the SBO3 shape be removed.	Yes. Remove the SBO3 overlay.
232.	59 Beecroft Crescent, Templestowe	Ruffey Creek	SBO2	2	The submission states that the property is on a hill and no flooding has been experienced. A site visit has confirmed the terrain and drainage infrastructure is consistent. The SBO indicates that the roadway of Beecroft Ave contains significant surface water in a 1 in 100 year ARI storm which	No change to 59 Beecroft Crescent, however, delete part of SBO2 at

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					causes overland runoff through the submission property to concentrate in the manner indicated by the SBO. in response to a meeting with the submitter in 2017, Cardno were requested to review the submission and SBO. Following the recent meeting with the submitter, Cardno were engaged to review the SBO. The review has confirmed the surrounding topography, drainage assets and the SBO shape. The flood shape should remain as exhibited at this location.	front of 61 Beecroft
233.	8 Lynnwood Parade, Templestowe Lower	Ruffey Creek	SBO2 & SBO3	2	The site visit confirmed the drainage infrastructure in this vicinity. The overlay is representative of overland runoff in a 1 in 100 year ARI event. LiDAR and surface contour data were analysed along with site and aerial photography. It was found that an erroneous low point seems to have been created in this area due to tinning and model resolution issues. It is therefore recommended to remove this SBO from the property. The flooding in the south of the property can be removed as there is not a complete flooded grid cell inside the property which is well within the error bounds of the model. Furthermore, this has been exacerbated by the automatic smoothing process. The flood extent in the north of the property can also be removed as it is within 5m of the roadway and it is the only flood extent on the property if the others are removed. Therefore, it is recommended to remove all SBOs from this property.	Yes. Remove all SBO3 areas from property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
234.	5 Reddan Court, Doncaster	Ruffey Creek	SBO2	2, 4, 5, 6, 12	The submission references the Council drainage infrastructure in the area. The current drainage system design is typically for a 1 in 5 year ARI storm event, with flows in excess of the pipe system travelling overland. The SBO is based on a 100 year ARI event. The submission also makes reference to properties at a lower elevation not being subject to the overlay. The nature and flow of the SBO is dependent on either features of the terrain such as gullies or the pipe network in the area. The LiDAR data used for mapping shows a defined gully in which the property is located and where the overland run off is likely to flow in a 100 year ARI. The results of the flood mapping have been used to identify potential drainage upgrades. Council is working through a process to prioritise these capital works. The submission also mentions the Tullamore development and questions how this would impact flooding. Stormwater is expected to exit that developed site at the current point of discharge. The developer is required to install significant drainage works, including a detention basin, to reduce outflows to pre-development conditions. The development is not expected to have a major impact on drainage patterns in the surrounding areas. The flood extent incursion on the property is significant. Removal of the SBO would compromise the integrity of the SBO flood	Νο

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					shape it in its entirety and result in discontinuity of the flood extent. The submission property lies within a defined valley and overland runoff could reasonably be expected to occur in the manner indicated by the SBO. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
235.	35 Illawong Drive, Donvale	Mullum Mullum Creek	LSIO & SBO2	2, 12	The submission argues that due to the current construction of Mullum Estate including earthworks and stormwater infrastructure, the exhibited flood shape should not apply to the property. This work has occurred since the capture of the LiDAR survey data used in the modelling. This LiDAR data and the derived flood shape are reflective of the ground conditions at a point in time. The exhibited flood shape is reflective of the conditions at the time of modelling. The addendum also argues that the extension of LSIO up the tributary gullies should be designated with an SBO rather than an LSIO. The intent of the amendment is that each property be subject to overlays solely under either Council or Melbourne Water control. Based on current data it is recommended to amend the designation of the flood shape on the main tributary gully to LSIO resulting in the entire gully being under Melbourne Water control. In recognition of the progress of the Stage 1 subdivisional works and lack of information	Yes. It is recommended to amend the designation of the flood shape on the main tributary gully to LSIO resulting in the entire gully being under Melbourne Water control. Further, it is proposed to delete the flood shape from Stages 1 and 2 of the subdivision and 7 Yileen Court.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					available to incorporate into the model on new assets and levels, it is further proposed to delete the flood shape within the extent of Stage 1 of the subdivision, including the extension of the flood shape into 7 Yileen Court. In respect of 116-126 Old Warrandyte Road (Stage 2), two dams have been noted in the landscape which will be removed when Stage 2 works proceed. Further review of the flood shape has also determined that the remaining overland flows at 116-126 Old Warrandyte Road are relatively shallow and given the pending civil construction works, it is recommended that the LSIO flood shape be deleted from the Stage 2 land.	
236.	4 Gum Ridge Close, Templestowe	Ruffey Creek	SBO2	1, 2, 5	The submission states that the property is on the high side of the street and does not experience flooding. This is consistent with the flood shape at this location which does not encroach on the property itself but on to the shared driveway through the defined gully running in a westerly direction through No. 2 and No 7 Gum Ridge Close. The overlay encumbrance is as a result of common property and is reflective of the property details adopted as the basis of the flood mapping. The flood shape is consistent with the topography and drainage assets at this locations and is recommended to be retained.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
237.	15 Murndal Drive, Donvale	Mullum Mullum Creek	SBO2	1	The submission references the current drainage infrastructure and suggests that it is adequate to prevent flooding. Such Council drainage infrastructure is designed typically for a 1 in 5 year event, with flows in excess of the pipe system travelling overland. The SBO overlay on the property is based on a 100 year ARI. Although the resident may not have experienced this magnitude of flooding, the model indicates that the capacity of the underground drain will be exceeded in a 1 in 100 year event and overland flows will result. Due to the defined valley which runs through the property, it is reasonably expected that this area of the property is flood prone in a major storm event. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
238.	2/1 Harry Street, Doncaster East	Koonung Creek	SBO2	1, 2	The SBO extent fulfils the minor incursion criteria of less than 30m2 and 6%. The overlay is to be amended accordingly.	Yes. Remove the SBO2 incursion from the property.
239.	7/48 Leslie Street, Donvale	Mullum Mullum Creek	SBO2	2	The submission states that because the house was built in the 1980s, it should have adequate drainage. This is possibly a reference to the supporting material which outlines the history of drainage design standards. The underground drainage pipes along the southern boundary of No. 48 were	No

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					constructed around 1981. Regardless of when	
					they were built, residential underground drainage	
					pipes do not generally have the capacity to convey	
					a 1 in 100 year ARI storm event of critical duration.	
					The relevant point from the reference to the	
					design standards is that since the late 1970s/early	
					1980s, safe passage for overland flows had to be	
					considered for when the underground drains were	
					full during storm events. It is possible that the	
					drainage at this location was designed prior to the	
					new standards being implemented, or that another	
					constraint resulted in the major storm overland	
					flow path running through residential properties.	
					Nonetheless, if redevelopment of the site occurs in	
					the future, it would be appropriate to consider	
					overland runoff patterns at this location. The	
					review has confirmed the surrounding topography	
					and drainage assets. The flood shape should	
					remain as exhibited at this location.	
240.	6 Linton Avenue,	Ruffey Creek	SBO3	2	The submission property experiences runoff from	Yes.
	Templestowe Lower				the south east. The flood shape is consistent with	Remove SBO3
					the topography however it satisfies the minor	incursion from
					incursion criteria and would not yield significant	property.
					planning or risk mitigation benefits and is therefore	
					recommended to be deleted from the property.	
241.	18 Philip Avenue, Doncaster	Koonung Creek	SBO3	2, 4, 12	The submission contains detailed information	Yes
					regarding the topography of the immediate area	Remove the
					including the footpath and retaining wall. The	SBO3 from the
					terrain data used in the model was captured in	property.

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					2009 by DELWP and is the best available data for this type of modelling. Structures and buildings have not been modelled individually but consideration has been given to the impact of structures the application of surface roughness factors in accordance with industry guidelines. LiDAR and contour data were analysed along with site photography and it was found that it is unlikely to flood the property from the road due to the presence of the kerb and channel and the ability of the overland flows to be diverted along Ernst Street. The SBO in the rear of the property is therefore unlikely to occur as it originates from water entering from the front. Therefore, it is recommended to remove the SBO on this property.	
242.	70-82 Gold Memorial Road Warrandyte & 84 Gold Memorial Road, Warrandyte	Andersons Creek	SBO2	1, 5	With respect to 70-82 Gold Memorial Road, although the dwelling is located on the highest point of the property, the extent of the SBO is based on the flood prone land not specifically where dwellings are flooded above floor level. The property contains a steep natural gully and the removal of the SBO would result in discontinuity of the flood extent, therefore its deletion is not recommended. With respect to 84 Gold Memorial Road, however, the SBO extent fulfils the minor incursion criteria and is recommended to be amended accordingly.	No to removal for 70-82 Gold Memorial Road. Yes for removal of SBO2 incursion from 84 Gold Memorial Road.
243.	53 Roseland Grove, Doncaster	Ruffey Creek	SBO2	2, 3, 7, 8	The submission has queried whether or not the recent drainage upgrade is reflected in the flood	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				3001113310113	modelling. The current 1050 mm drainage pipes constructed around 2001 have been included in the modelling however the area is flood prone and the upgrade was implemented to reduce the extent of inundation and flooding of habitable floor levels but does not to eliminate overland flooding entirely. Due to the proximity of the subject property to the flood extent it is reasonably expected to be flood prone. A site visit confirms that the property is located within a slight valley serving a natural floodway for the catchment area south of the property. The review has confirmed the surrounding topography and drainage assets. Cardno have also undertaken a further review of the submission following the recent meeting with the submitter. The flood shape should remain as exhibited at this location.	Amenument
244.	6 Bembooka Court, Doncaster	Ruffey Creek	SBO3	12	The submission requests exemption from a property development perspective. The flood shape is consistent with pit overflow in Bembooka Court travelling overland. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
245.	101 The Grange, Templestowe	Ruffey Creek	SBO2	2, 5, 7, 10	The submission objects to the amendment from a property value and development point of view and states that if the drainage infrastructure is unable to cope with the amount of runoff, Council or Melbourne Water should upgrade the drains.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
246.	2 White Lodge Court, Donvale	Andersons Creek	SBO3	2, 5, 7, 8, 11	Council cannot build a drain that can cope for all storm events. Typically, underground drainage systems are designed to cope with minor (1 in 5 year ARI) storm events with flows in excess of the underground network travelling overland. The SBO was based on modelling for a 1 in 100 year ARI event in line with industry practices. This identifies flood prone land during major storms and assists in ensuring development occurs in a way that considers the natural flow path and sites dwellings in a safe location. A site visit has confirmed the flood shape is consistent with the site conditions and should be retained. The submission states that the property is affected in a minimal way by the flood shape and that flooding has not been experienced at this location. The overlay is caused by a small overland flow path on the western boundary of the site which is covered by an easement layer. The purpose of the proposed overlays is to ensure that future development in close proximity to property boundaries or within easements may be permitted subject to conditions. The flood modelling that underpins the SBO was based on a 1 in 100 year ARI storm event in accordance with industry	Yes. Remove SBO3 overlay
					practices. Modelled results were analysed and it was found that the majority of flood depths were less than 50mm. The only catchment supplying	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					runoff to this location is a neighbouring house and the local property itself. There have also been significant modifications to the neighbouring property so any flows being supplied from that site are no longer entering this area. Given the low flow depth and changes to topography in the neighbouring property, it is recommended that the overlay be removed.	
247.	3 Kandanga Grove, Bulleen	Koonung Creek	SBO2	2, 3, 4, 7, 8	The submission queries the impact of drainage upgrades on the flood shape. A review has found the 1050 mm drainage pipe constructed along the eastern boundary of the property around 2012 was included in the modelling, however the area is flood prone and the upgrade was implemented to reduce extent of inundation and flooding of habitable floor levels but does not eliminate overland flooding entirely during major storm events. Due to the proximity of the subject property to the flood extent it is reasonably expected to be flood prone. A site visit confirms that the property is located adjacent to a valley serving as a natural floodway for the catchment area north of the property. Removal of the SBO would result in discontinuity of the flood extent. The review has confirmed the surrounding topography and drainage assets. Cardno have also reviewed the submission and concur with Council officers. The flood shape should remain as exhibited at this location.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
248.	23 Browning Drive,	Mullum Mullum Creek	SBO2	1, 2, 5, 7, 8,	The submission questions the accuracy of the flood	Yes.
	Templestowe			12	shape and states that they were not made aware	Designation of
					of the overlay at the time of purchase or when	overlay to be
					applying for a planning permit to undertake further	changed from
					works on the property. A site visit has confirmed	SBO2 to SBO3.
					the flood shape is consistent with the topography	
					of the site. Furthermore, implications of	
					landscaping and alterations of the land within the	
					property are largely irrelevant to the overall SBO	
					shape in this area because runoff is occurring from	
					Old Orchard Cl. Although the submitter claims not	
					to have experienced any flooding due to	
					experienced heavy rainfall it cannot be confirmed	
					that a 1 in 100 year ARI storm event of critical	
					duration was experienced. The flood extent is	
					significant and due to the proximity of the property	
					to the main flow path it is reasonably expected to	
					be flood prone as it is with in a valley and is subject	
					to overland flow from upstream catchment areas	
					east of the property. The review has confirmed the	
					surrounding topography and drainage assets.	
					However, a review of the modelled flow	
					characteristics supports the downgrading of the	
					proposed SBO from SBO2 to SBO3.	
249.	12 Lawsons Court,	Mullum Mullum Creek	SBO3	8, 11	The submission states that due to the location of	No
	Templestowe				the incursion of the flood shape, exemption should	
					be granted from the SBO as no building would	
					occur in the area designated.	
					This is not considered a valid basis to amend the	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					flood shape as future development may occur in areas not currently permitted. The SBO identifies flood prone land and the intent is to ensure future development is undertaken in a way that considers the overland flow paths during major storm events. In addition, amending the SBO would compromise the integrity of the flood shape at this location. A review had found that the flood shape extends beyond the easement along the northern boundary, is consistent with the topography and drainage infrastructure and should be retained.	
250.	12 Saxonwood Drive, Doncaster East	Ruffey Creek	SBO2	1, 2	The submission states that no flooding has been experienced on the property even during major storms. Following the recent meeting with the submitter, Cardno were engaged to review the SBO and submission. The properties to the east are in a low point along Blackburn Rd and excess runoff flows in a westerly direction following the contours of the land. A site visit has confirmed the Council drainage assets. However as the Lidar data does not adequately reflect levels around the pool, it is recommended to amend the SBO2 shape at this location. In addition, it is recommended that the SBO2 area near the driveway be deleted to address issues associated with the model resolution. It is recommended to retain but modify the SBO2 shape at 12 Saxonwood.	Yes. Delete SBO2 area at front of property. Modify SBO2 shape at rear of property.
251.	12 Ross Street, Doncaster East	Koonung Creek	SBO3	2, 3	"The submission questions why other, lower lying Ross Street properties are not affected by the	Yes

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					proposed overlay. The property is located at the intersection of Ross St and Hislop St. While there are multiple drainage pits in the street near 12 Ross Street, the associated underground drain has a capacity of between a 1 in 5 and a 1 in 10 year ARI standard. In a 1 in 100 year ARI event, the capacity of this system will be exceeded, leading to overland flows. The capacity of private drainage assets on private property as referenced by the submitter are limited by the capacity of the drainage system to which they discharge and as such, these assets will not make a significant contribution to property protection in a 1 in 100 year ARI event. The LiDAR and surface contour data were analysed along with site photography and it was found that there has been an unrepresentative low point in the nature strip model caused by the thinning of the large tree from the tin. Therefore, it is recommended that the SBO be removed from this property.	Remove SBO3 from property.
252.	16 Dellfield Drive, Templestowe Lower	Ruffey Creek	SBO3	2, 11	The submission states that the upstream catchment is small and model input data inaccurate. The property experiences a minor incursion of the flood shape. The SBO extent fulfils the minor incursion criteria of less than 30m2 and 6% therefore it is recommended that it be removed.	Yes. Remove the SBO3 incursion from the property.
253.	6 Montclair Court, Templestowe	Ruffey Creek	LSIO	2, 3	The existing street and easement drainage system is only capable of catering for the 1 in 5 year ARI	Yes.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					storm. The road way and overland flow paths can assist in conveying the additional storm water runoff generated in the 1 in 100 ARI event, affecting properties on the low side of Montclair Court. No 6 Montclair Court is located at the low point of the court and the drainage connection to the Ruffey Creek is located next to the western boundary of this property. The flood mapping indicates water up to 300 mm would pond in front of this property and water would flow over the kerb level across the whole frontage of the property as shallow flow. The request from the submitters to investigate options to divert overland flows by undertaking works at the intersection of Dellfield Drive and Montclair will be investigated and referred for consideration through Councils Capital Works Program. It has been agreed with Melbourne Water that the flood shape designation within the property be amended	It is recommended that the LSIO be modified to a SBO 3 and the flood shape extent be retained.
254.	8 Cypress Avenue, Templestowe Lower	Ruffey Creek	SBO3	1, 2, 5, 7, 8	to SBO3 from the exhibited designation of LSIO. The submission states that the property is on a hill and no flooding has been experienced. A site visit has confirmed that the terrain and drainage infrastructure is consistent with that modelled. The property is near the top of the catchment and runoff is shallow, however high velocity also impacts the definition of the flood shape. Topographical features direct the flow of runoff and this may result in places with a lower	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					elevation not being flooded. The submission also states that drains should be upgraded rather than imposing the SBO. The overlays are based on new modelling recently undertaken by Melbourne Water and Council and provide new insight into land prone to overland runoff and flooding. They will assist in prioritisation of drainage upgrades, with preference given to alleviating flooding of habitable floor areas. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
255.	21 Alexander Road, Warrandyte	Mullum Mullum Creek	SBO2	2	The submission states that flooding is unlikely because the catchment is not large and there is sufficient capacity in the roadway and channel to cater for large storm events. The associated catchment area is approximately 42 hectares in area. Runoff occurs onto the roadway mainly through the neighbouring property but also cuts the corner of the submission property. Alexander Rd serves as a floodway, however the point of incursion onto the property is within an area expected to be flooded during a 1 in 100 year ARI event of critical duration. The elevation difference between the property and the road way is irrelevant given the direction of flow through the southern boundary and onto the road. The waterway mentioned by the submitter contains underground Council drainage typically designed	Yes. Convert the SBO2 overlay to SBO3.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
256.	9 and 94 Valenark Drive	Mullum Mullum Creek	SBO2	12.14	for a 1 in 5 year ARI, with flows in excess of the pipe system travelling overland. The SBO is based on a 100 year ARI event. The review has confirmed the surrounding topography and drainage assets. Due to the surrounding terrain the property is reasonably expected to experience runoff in the manner indicated by the SBO. Following the recent meeting involving the submitter and Council officers, Cardno were requested to review the submission. A review of the overland flow depths associated with the SBO has found that the SBO as it relates to 21 Alexander Road should be downgraded from SBO2 to SBO3. The submission states that the SBO is unnecessary	Νο
230.	9 and 9A Valepark Drive, Donvale	Wullum Wullum Creek	3002	12, 14 Existing properties under 500sqm therefore already require a permit for development	due to the requirements of the recent development undertaken on the site. Although the subdivided properties are less than 500m2 in size each, the west boundary of both is located within a defined valley and is expected to be partially flood affected in a 100 year ARI event. The overlays identify flood prone land and do not consider whether a recent development has taken place. The intent is to ensure that appropriate floor levels are adopted for future developments. The purpose of the private retention system referred to in the submission is detain run off produced by the property itself and will not mitigate flooding from the upstream catchment. The review has confirmed the surrounding topography and public	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
257		Keening Cooch	6002		drainage assets. No substantive matters warranting review of determination on the original submission were raised during a recent meeting with the submitter. The flood shape should remain as exhibited at this location.	N
257.	559-561 Doncaster Road, Doncaster, and 563 Doncaster Road, Doncaster	Koonung Creek	SBO3	1, 2, 3, 5, 6, 7, 8	The submission states that the property has never been flooded in the last 100 years. Council has correspondence from a flooding complaint in the vicinity that, due to the relative position of the submission property 559-561 Doncaster Rd to the site of the complaint, suggests flooding does occur through 559-561 Doncaster Rd. The records do not implicate 563 Doncaster Rd however it cannot be assumed a property is not flood prone based on a lack of recollections of flooding at that location. The drains along Doncaster Rd are not sufficient to completely remove surface water during a 1 in 100 year ARI event of critical duration and runoff can reasonably be expected to occur in the manner indicated by the SBO. A site visit has confirmed the topography of the land and Council drainage infrastructure and the flood shape is consistent with runoff from Doncaster Rd entering the property during major storm events. The intent of the overlay is to protect future development from flooding. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
258.	33 The Grange, Templestowe	Ruffey Creek	SBO2	2, 12	The overlay is a representation of overland runoff flowing over the property generally in a south westerly direction. The submitter correctly states that there is a significant decline in the terrain west of the property in addition to the decline of Chippendale Ct from The Grange intersection and LiDAR data suggests that overland runoff continues to channel through a slight gully along the north side of The Grange. Private infrastructure such as retaining walls, structures and buildings are not individually modelled as they are not protected and can be subject to change in the event of property redevelopment. The review has confirmed the surrounding topography and discrepancies with the Lidar data in the property to the rear and the nature strip in front of the property. The review has confirmed the drainage assets. The SBO2 shape is recommended to be amended to delete the shape at the front of the property and amend the shape on the western boundary but retain the SBO2 along the rear property boundary.	Yes. Amend SBO2 by deleting shape at the front of the property and the eastern SBO2 area, but retaining the SBO2 area at the rear of the property. Delete the SBO2 shape at the front of 35 The Grange and on the western boundary but retain balance of SBO2.
259.	97 The Grange, Templestowe	Ruffey Creek	SBO2	1, 7, 8, 10	The submission states that no flooding has been experienced since buying the property in 2004. Although the submitter may not have experienced flooding, it is possible that the submitter has not experienced a 1 in 100 year ARI storm event of critical duration at this location. The property is in a location reasonably expected to be flood prone	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					as it is located within a defined valley in the terrain and has a large upstream catchment. The review has confirmed the surrounding topography and drainage assets. In response to the follow-up meeting with the submitter, the submission was referred to Cardno for review. The flood shape should remain as exhibited at this location.	
260.	68 Board Street, Doncaster	Ruffey Creek	SBO3	1, 3, 6	The submission refers to previous drainage upgrades and questions why the overlay is being applied. The current 1050 mm drainage pipes constructed around 2001 have been included in the modelling, however the area is in the main flow path due the position in a low point along Board Street. The descriptions of the neighbouring property flooding are consistent with the flood shape which encroaches on the property boundary. The upgrade was implemented to reduce extent of inundation and flooding of habitable floor levels but does not to eliminate overland flooding entirely. Removal of the SBO is not recommended as it would result in discontinuity of the flood extent. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
261.	107-115 Andersons Creek Road, Doncaster East	Mullum Mullum Creek	SBO2	2, 12	The submission states that the modelling used to determine the extent of the SBO fails to recognise the development approved on the site. The OSD systems and private drains have not been included	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					in the modelling for the following reasons: Such	
					OSD systems are only designed to minor storm	
					event standards, with an overflow bypass for high	
					intensity events. The drains constructed as part of	
					the development are private assets which Council	
					does not maintain and therefore cannot guarantee	
					their effectiveness in high intensity events. The	
					submission also refers to engineering levels	
					provided by Council and Melbourne Water during	
					the development approval process. These levels	
					were provided prior to the introduction of the	
					proposed SBO2 overlay. Council and Melbourne	
					Water have recently completed the flood	
					modelling study that underpins the proposed SBO	
					& LSIO overlays. Whilst Council can use the new	
					flood modelling data to inform advice given to	
					developers, there is no obligation for the developer	
					to adopt the levels based on the proposed SBO	
					until the amendment is formally gazetted into the	
					Manningham Planning Scheme. The submission	
					also states that the existing buildings on the	
					southern portion of the site that are affected by	
					the SBO2 raises liveability issues. The purpose of	
					the proposed overlays is to identify areas prone to	
					overland flooding as a result of local or main drains	
					exceeding their capacity in a major (1 in 100 year	
					ARI) event. There is a need to minimise any flood	
					risk to future development of this area by requiring	
					appropriate conditions and floor levels. The	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					submission states that there was a gap in information Council provided during the development process regarding existing stormwater systems. Council is not aware of any gap in information regarding existing Council stormwater systems. A review of existing drainage infrastructure has been undertaken and the drainage infrastructure that has been modelled reflects the in-ground assets. The outcome of the review is that the extent of the SBO be retained at this location.	
262.	1 Forest Place, Templestowe	Mullum Mullum Creek	SBO3	9, 11	The submission is correct in identifying that the flood shape incursion is minor. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under conditions, development within an easement or in an area previously designated as a shared driveway may be permitted in some cases. Existing properties may be redeveloped in the future and the proposed overlay will assist in the assessment of the impacts of any future development. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Accordingly the exhibited flood shape is recommended to be amended.	Yes. Remove the SBO3 incursion from the property.
263.	27 Marcus Road, Templestowe Lower	Bulleen North	SBO2	4, 5, 6, 7, 8	The submission acknowledges that the property is prone to flooding and states that Council should upgrade the drains in the area.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The observed flooding of this property is consistent	
					with the application of the SBO at this location.	
					Underground drainage systems are usually	
					designed to convey a 1 in 5 year ARI or 20% AEP	
					rainfall event, with overland flow occurring once	
					the capacity of the underground drainage network	
					is exceeded. Since the 1970,s improved controls	
					have been in place that consider overland flow	
					paths for up to the 1 in 100 year ARI/1% AEP storm	
					event. Australian Rainfall & Runoff was updated in	
					1987 to reflect updated design practices, with	
					pipes conveying minor flows from a 1 in 5 year	
					ARI/20% AEP rainfall event and overland flow	
					paths to safely convey major flows through	
					residential areas in a 1 in 100 year ARI/1% AEP	
					rainfall event. Councils are not obligated to	
					upgrade drainage systems in place prior to the new	
					standard from the 1970s/80s, however	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas. Council allocates	
					approximately \$2 million annually to upgrading its	
					underground drainage network. These works are	
					prioritised based on frequency of flooding of	
					habitable floor areas. It is not feasible for Council	
					to resolve all flooding issues across the	
					municipality immediately. In the interim, there is a	
					need to ensure that future development is	
					designed to set habitable floor levels above the	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
264.	96 Golden Way, Bulleen	Bulleen North	SBO3	3	The submission states that work carried out by Council 13 years ago in 2003, have stopped flooding in the area. The original drains were upgraded in 1998, with a 225 mm drain and triple grated pit outside the adjoining property as described in the submission. These upgrades were included in the modelling. Even with the upgraded drains being taken into account, overland runoff is still seen to occur along Golden Way, with an overland flow path via the submission property to Morris William Reserve. The flood extent was modelled on a 1 in 100 year ARI or 1% AEP rainfall event in accordance with industry practices. It is unlikely that the drainage upgrade will cope with the flood modelled as part of the SBO development. None of the recent rainfall events reported were close to the theoretical 1 in 100 year ARI flood that the SBO has been based on. As such, it is expected that no flooding would have been observed in the area around 96 Golden Way for the above events, as council drainage will have adequately conveyed these minor flows. It is recommended that the SBO3 be retained as modelled.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
265.	23 Murndal Drive, Donvale	Mullum Mullum Creek	SBO2	1, 2, 7, 8	Following the recent meeting with the submitter, Cardno were engaged to review the submission and SBO. Based on the field survey plan provided, the SBO shape has been reviewed and trimmed at its eastern extent. It is recommended that the revised SBO2 shape be adopted.	Yes. Trim the eastern side of the SBO2 shape.
266.	21 Monaco Street, Doncaster & 14 Alison Avenue, Bulleen	Koonung Creek	SBO3 (21 Monaco St) SBO1 (14 Alison Ave)	2, 7, 8, 11	 21 Monaco Street - the submission states that the area of the property covered by the SBO is elevated and unlikely to experience flooding. A site visit from the street, in combination with a desktop review, has found that the submission property is likely to experience overland runoff from the north east which would flow onto Monaco Crescent, rather than rising up from the street onto the property. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location. 14 Alison Avenue - The depth of flooding is minimal on the property at the north west and north east corners and is not considered to be flooding from the Melbourne Water system. The overlay extents have been reviewed and are recommended for removal. 	No for 21 Monaco Street. Yes for 14 Alison Avenue - remove the SBO1 from this property.
267.	14-16 Stanley Drive, Doncaster	Ruffey Creek	SBO3	2	Previous analysis was undertaken for this property in response to previous submissions. It was found that the modelling indicated that in a 1 in 100 year flood event, water is deep enough within Stanley	No

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					Drive to overtop a low point within the nature strip which then flows into the driveway of the subject property. This additional analysis has not identified any additional evidence to negate the findings of the previous analysis and therefore it is recommended that no change be made to the SBO at this location.	
268.	20 Stanley Drive, Doncaster	Ruffey Creek	SBO3	2	The submission states that the incursion to the front of the property is unlikely to occur due to the height of the footpath and road kerb in relation to Stanley Drive. In addition, the submission states that the rear incursion is unlikely due to the backyard landscaping and fences and small catchment size. Given the extent of the catchments involved, each catchment area has been broken up into a grid with cells 3m by 3m in size. This approach is considered to provide adequate resolution to define topographical features within the catchment. Private infrastructure, such as retaining walls, structures and buildings, is not individually modelled as it is not protected and can be subject to change in the event of property redevelopment. Consideration has been given to the impacts of structures, such as buildings, and features, such as landscaping and fences on the mapped flood extents, through the application of roughness factors to land areas. Roughness factors are allocated using aerial photography, taking	Yes. Remove the SBO3 incursion from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					consideration of land use and type and density of development for individual sub catchment areas. A site visit has confirmed the topography and as- built drainage infrastructure is consistent with that modelled. However, the incursions are considered minor and would not yield any significant planning or risk mitigation benefit. Accordingly, the extent of the flood shape is recommended to be amended.	
269.	22 Koolkuna Avenue, Doncaster	Koonung Creek	SBO2	1, 2	The submission describes having lived at the property for 38 years and not experienced flooding. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. In addition, the submission may be indicating the dwelling has never been flooded above floor level. The SBO identifies flood prone land, not where buildings are flooded above floor level. Based on the topography and the size of the catchment, it is reasonable to expect this property would experience flooding in the manner indicated by the SBO. A site visit confirmed that the drainage infrastructure in the area was modelled correctly and flood shape is consistent with the terrain. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
270.	25 Berrima Road, Donvale	Mullum Mullum Creek	SBO3	2, 5, 8	The submitter's experiences of drainage patterns from One Tree Hill Reserve and properties to the	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					rear are consistent with the application of the SBO. The submission suggests that water flows through the neighbouring property before flowing at an angle through the West corner of the submission property, and that the SBO does not reflect these observations. Although the SBO shape is not defined through the neighbouring property, it is likley that the modelled flood depths are not significant enough to define the flood shape that far upstream. A site visit confirmed the general topography and drainage infrastructure in One Tree Hill Reserve and surrounds, which contains a grated easement drain pit. Typically, Council drainage infrastructure of this age was not designed to protect against a 100 year ARI event of critical duration. The flood shape should remain as exhibited at this location.	
271.	1 Glenview Road, Doncaster East	Koonung Creek	SBO2	3, 4, 5, 6, 7	The submission acknowledges that the property has been prone to flooding in the past and states that Council should upgrade the drains in the area. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. Council allocates approximately \$2 million annually to upgrading it's underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. There is a need to ensure	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					that future development is designed to set habitable floor levels above the major storm flood level through the application of SBO's. The review has confirmed the surrounding topography and drainage assets. The observed flooding of this property is consistent with the application of the SBO at this location. The flood shape should remain as exhibited at this location	
272.	7 Streeton Lane, Doncaster East	Mullum Mullum Creek	SBO3	2, 3, 4, 5, 7, 8	The submission states that Council should upgrade the pits in Streeton Lane and undertake more frequent maintenance. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. In terms of maintenance, generally Council drainage infrastructure is inspected on a yearly basis and pit cleaning undertaken. In addition to this, inspections are carried out when specifically requested by residents. The submission property is located in a position prone to runoff from the south connecting	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					to the main flow path to the north during major storm events. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
273.	70 Roseland Grove, Doncaster	Ruffey Creek	SBO2	1, 2, 3	The submitter states that, due to the slope of the property, any flood water would drain away. The submitter also states that in their 25 years living at the property, it has not been subject to flooding. The submitters may not however have been present at the site during a 1 in 100 year ARI event of critical duration. The overlay has been reviewed and based on the flow depths and extent of the shape, it is recommended that the exhibited SBO2 shape be deleted.	Yes. Delete SBO2 from property. In addition realign SBO2 impacting the frontages of 62 and 64 Roseland Grove into road reserve and convert to SBO3.
274.	15 Brindy Crescent, Doncaster East	Koonung Creek	SBO3	2	The submission refers to a drainage pit located in the driveway of the property. This is a private asset which was constructed as part of the subdivision of the block and connects to the council drain downstream. Private drainage infrastructure often has minimal impact on flash flooding during major storm events. In addition, Council does not maintain these assets and cannot guarantee their effectiveness. For these reasons, private drainage infrastructure has not been modelled in the flood mapping study that	Yes. Remove the SBO3 incursion from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					underpins the proposed SBO. A desktop review has found the flood shape incursion onto the submission property is minimal. The purpose of the proposed overlays is to ensure that future development adequately addresses the risk of flooding in a major storm event. Existing properties may be redeveloped in the future and the draft overlay will assist in the assessment of the impacts of any future development. In this case, the incursion is not considered to be significant and application of the SBO would not yield any significant planning or risk mitigation benefit. Accordingly, the exhibited flood shape is recommended to be amended.	
275.	39 Thiele Street, Doncaster	Ruffey Creek	SBO3	1, 2, 5, 7, 10	The submitter has previously been advised through discussions with Council that the flood shape encroaching on the property is not due to overland flow from Corella Street. The submitter states that properties down the hill on Thiele St do not have as significant an encroachment as the submitter's property. A site visit has confirmed the drainage assets in the area were modelled correctly. The submitter makes points relating to inadequate drainage infrastructure in the area and Council's duty to avert reasonably foreseeable risks. The proposed C109 amendment is an important aspect of risk management as it will enable the setting of future floor levels above modelled flood levels and the identification and prioritisation of future	Yes. Remove the SBO3 shape.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					drainage upgrade works. LiDAR and surface contour data as well as site photos were analysed and it was found that it is unlikely that water will pool enough in the areas shown in the SBO within the property. The resolution of the model has not adequately picked up certain features. Therefore, it is recommended that the SBO be removed from this property.	
276.	34 Henry Street, Doncaster	Ruffey Creek	SBO2	2, 3, 7, 8, 14 Tullamore is incorrectly excluded from the overlay.	The submission refers to drainage upgrades undertaken by Council. A review has found the original drains were upgraded in 1996 and these upgrades have been included in the modelling. Although this improvement has taken place, it has not completely removed the risk of flooding during a major storm event, as there are also inadequacies in the surrounding drainage infrastructure and runoff occurs from higher up in the catchment. A site visit has confirmed the terrain of the area, with the property expected to experience significant overland runoff once the capacity of the upstream drains has been exceeded during a major storm event. The review has also confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location. The Tullamore Estate was included in the flood mapping which informed the proposed planning scheme overlays. As part of the development, earthworks are being undertaken and drainage	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					infrastructure is being constructed which will ultimately vest in Council. The development process ensures that flood and overland flow paths must be provided to ensure that no new properties are affected by flooding as a result of the land development. Flood modelling has also been undertaken in respect of the proposed infrastructure by the developer, to confirm that major overland flows through the site are appropriately controlled, without inundation of any proposed residential blocks. It follows that the flood modelling undertaken as part of Amendment C109 will be superseded in respect of the Tullamore Estate, prior to the development of housing. This issue has been addressed by truncating the flood extent at the upstream and downstream site property boundaries and the flood extent within the Tullamore site has been deleted from the proposed Overlay. This approach is purely an administrative exercise. The proposed overlays both upstream and downstream of this site are based on the previous flood mapping work which took account of flows through the Tullamore site. The approach taken is considered to be	
277.	3 White Lodge Court, Donvale	Andersons Creek	SBO3	2, 5, 11	reasonable and appropriate. The submission states that the property is affected in a minimal way by the flood shape and that flooding has not been experienced at this location. The overlay is caused by a small overland flow path	Yes Remove SBO3 overlay

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				submissions	on the western boundary of the site which is covered by an easement layer. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Development in close proximity to property boundaries or within easements may be permitted subject to conditions. The flood modelling that underpins the SBO was based on a 1 in 100 year ARI storm event in accordance with industry practices. Modelled results were analysed and it was found that the majority of flood depths were less than 50mm. The only catchment supplying runoff to this location is a neighbouring house and the local property itself. There have also been	Amendment
278.	19 Illowong Drivo, Donyala	Mullum Mullum Creek	802	2 12	significant modifications to the property. Given the low flow depth and changes to topography, it is recommended that the overlay be removed.	No
278.	19 Illawong Drive, Donvale	Mullum Mullum Creek	SBO2	3, 12	The submission states that, due to the localised filling of the area affected by the flood extent in addition to the Council drainage infrastructure, the area affected by the SBO should not be classed as being flood prone. A site visit and desktop review has found that the Council drains and ground levels represented in the LiDAR data used in the model are consistent with the site. Although the localised filling has taken place and the council overflow drain has been constructed, the main flow path remains along this alignment, with the areas with natural surface levels experiencing greater flood	NO

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					depths than the filled area. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. The flood extent was modelled on a 1 in 100 year ARI or 1% AEP rainfall event in accordance with industry practices. The review has confirmed the surrounding topography and drainage assets. A meeting was recently conducted involving Council officers and the submitter but none of the matters discussed warranted further review of the SBO shape. The SBO shape should remain as exhibited at this location.	
279.	4 Ryall Court, Doncaster	Ruffey Creek	SBO3	2, 3, 4, 5, 8	The submission describes previous flooding from the rear of the property which is consistent with the application of the SBO at this location. The drainage pit referred to in the submission is a private asset which Council does not maintain and therefore cannot guarantee effectiveness in high intensity events. Private drainage assets have not been modelled as part of the flood study that underpins the SBO. A site visit has confirmed the topography at this location and the outcome of the review is that the SBO be retained.	No
280.	176 Church Road, Doncaster	Ruffey Creek	SBO2	1, 2, 5, 12	The submission states that, given the constructed retaining wall, it would not be possible for flood water to rise up from the roadway. Private	Yes.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					infrastructure such as retaining walls, structures and buildings are not individually modelled as they are not protected and can be subject to change in the event of property redevelopment. Consideration has been given to the impacts of structures such as buildings and features on the mapped flood extents, through the application of roughness factors to land areas. The flood extent was modelled on a 1 in 100 year ARI or 1% AEP rainfall event in accordance with industry practices. The review has confirmed the drainage assets. Site visit confirmed that flows are unlikely to occur as indicated by the modelling results due	Remove SBO2 shape from property. In addition, remove SBO2 from 178 Church Road.
281.	77 Turana Street, Doncaster	Ruffey Creek	SBO3	1, 2, 4, 5	to the steepness of the driveway and unencumbered flow into the roadway. The submission states that the modelled flow paths are unlikely to occur. Specifically in relation the submission property, no flooding has been experienced by the submitter in the manner indicated by the SBO. It is possible the submitter has not experienced a 1 in 100 year ARI storm event of critical duration at this location. In addition, given the size of the catchment, the terrain in the model has been represented as a grid of cells 3 m x 3 m in size. This approach is considered to provide appropriate resolution to define the topographical features within each catchment. A site visit has also been undertaken from the street and found that the flood shape is	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					consistent with the topography of the surrounding	
					area and the Council drainage assets. The	
					submission also references the development	
					engineering controls and permit trigger points	
					proposed as part of the amendment and argues	
					that many requirements are unreasonable. The	
					intent of the proposed overlays is not to prevent	
					development but ensure it is undertaken in a	
					manner which considers flood risk. Should the	
					permit exemption requirements for properties	
					with the SBO3 overlay not be met with respect to	
					floor levels and obstruction of the overland flow	
					path, the developer must demonstrate appropriate	
					methods for considering the overland flow path	
					through the site as part of a planning permit. The	
					submission also implies that Council should	
					manage overland flows rather than imposing the	
					SBO. Typically, underground drainage systems	
					(including private infrastructure required to be	
					constructed as part of a development) are	
					designed to minor storm event standards with	
					excess flows during major storm events travelling	
					overland. Since the 1970's improved controls have	
					been in place that consider overland flow paths for	
					up to the 1 in 100 year ARI/1% AEP storm event.	
					Australian Rainfall & Runoff was updated in 1987	
					to reflect updated design practices, with pipes	
					conveying minor flows from a 1 in 5 year ARI/20%	
					AEP rainfall event and overland flow paths to safely	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970's/80's, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The outcome of the review is that the flood shape is consistent with site conditions and should be retained at this location.	
282.	14 Old Orchard Way, Doncaster	Ruffey Creek	SBO2	2, 11	The submission states that the flood shape is inconsistent with the retaining walls at the front of the property. Given the extent of the catchments involved, each catchment area has been broken up into a grid with cells 3m by 3m in size. This approach is considered to provide adequate resolution to define topographical features within the catchment. Private infrastructure such as retaining walls, structures and buildings are not individually modelled as they are not protected and can be subject to change in the event of property redevelopment. Consideration has been given to the impacts of structures such as buildings and features such as landscaping and fences on the mapped flood extents, through the application of roughness factors to land areas. Roughness factors take consideration of land use and type and density of development for individual sub catchment areas. A site visit has confirmed the	Yes. Delete SBO2 shape from property. Delete SBO2 shape from 16 Old Orchard Way.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					topography and drainage infrastructure are consistent with that modelled. However, issues have been identified with the Lidar data, which warrant the removal of the SBO shape from the property.	
283.	27 Menarra Street, Doncaster	Koonung Creek	SBO3	1, 4, 5, 7, 8, 11, 14 Question how a multi- unit approval was granted for 25 Rhonda Street when there is a flooding issue.	The submission states that the incursion of the flood extent on the property is minor. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under conditions, development within easements or close to property boundaries may be permitted in some cases. Existing properties may be redeveloped in the future and the proposed overlay will assist in the assessment of the impacts of any future development. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly. In relation to the multi-unit development at 25 Rhonda Street, Council's Engineering and Technical Services Unit raised no objection to the proposal, but required the construction of an on-site storm water detention system to alleviate pressures on Council's drainage system.	Yes. Remove the SBO3 from the subject property.
284.	5 Amberwood Court,	Ruffey Creek	SBO3	2, 12	The source of the flooding is overland flows from	Yes.
	Templestowe				upstream properties. These flows are shallow at upstream locations and as such have not been	Remove the SBO3.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					shown as part of the proposed overlay. Features such as buildings and other structures have not been modelled individually as roughness factors make allowance for typical features. In addition, such features are subject to amendment and or removal and the purpose of the flood modelling is to control future development. It is considered that the land features within the catchment are generally consistent with the adopted Manning's 'n' value (roughness factor). However, the portion of the flood shape on the south-western property boundary meets the criteria for removal as a minor incursion as it is less than 30sm in area and less than 6% of the total property area, represents outflow, it's removal will not adversely affect the continuity of the flood shape and intrudes less than 5 metres into the property. On this basis, it is recommended that this portion of the flood shape be removed. General findings -LiDAR and surface contour data were analysed along with site photos and it was found that there were some slight abnormalities in the modelled terrain. This was likely caused by model resolution and tinning issues on steep terrain with the presence of vegetation creating some erroneous low points. As such, it is recommended that the SBO be removed from 5 Amberwood Court.	In addition the SBO be removed from 4 and 6 Amberwood Court.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
285.	2/57 Baird Street South, Doncaster	Koonung Creek	SBO3	5, 7, 8	"The submission states that, if Council drainage infrastructure is inadequate, it should be upgraded." Underground drainage systems are typically designed to cope with the most frequent storms being a 1 in 5 year ARI rainfall event. The SBO identifies flood prone land in major storm events and is derived from modelling a 1 in 100 year storm event (1% chance of occurring in a year). During major storm events overland flow occurs once the capacity of the underground drainage network is exceeded. Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. Council allocates approximately \$2 million annually to the upgrade of its underground stormwater drainage system. These works are prioritised based on the frequency and extent of flooding of habitable floor areas. There is also a need to ensure that future development is designed to set habitable floor areas above the major storm flood level. Following a recent meeting with the submitter, a further review has confirmed the surrounding topography, drainage assets and the results of the previous investigations. The flood shape should remain as exhibited at this location.	No
286.	53 Lawanna Drive, Templestowe	Ruffey Creek	SBO2	1, 2, 4, 5, 7, 12, 14 Safety issues with having a	The model indicates flows from private property to the street at this location. The submission states that there has never been any flooding concerns with the property while the submitter has been at	Yes. Remove the SBO2 shape from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
				400mm gap between a fence and the ground.	the address. It is possible the submitter has not experienced a 1 in 100 year ARI rainfall event of critical duration which underpins the derivation of the SBO. In addition, the submitter references minor changes to the landscape at the neighbouring property which have taken place since 2009, when the LiDAR data used in the modelling was captured. There are however some discrepancies with the Lidar data which warrant removal of the SBO2 shape.	Remove SBO2 shape from 51 Lawanna.
287.	1 Eama Court, Bulleen	Koonung Creek	SBO3	5, 12	The submission references a private On Site Detention System that was constructed as part of the subdivision of the property and states that the SBO highlights the inadequacies of the surrounding drainage infrastructure. OSD systems such as this are designed to minor storm event standards and have little impact in a major storm event upon which the SBO is derived. Council underground drainage infrastructure is also typically designed to convey a 1 in 5 year event, with overland flow occurring once the capacity is exceeded during major storm events. An updated design standard was introduced in the late 1970s that requires consideration of these overland flow paths during major storm events. The drains and lot layout at this location were determined prior to this design standard being introduced. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
288.	28 Menarra Street, Doncaster	Koonung Creek	SBO3	1, 2, 5, 7, 8	flooding of habitable floor areas. Council allocates approximately \$2 million annually to the upgrade of its underground stormwater drainage system. These works are prioritised based on the frequency and extent of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor areas above the major storm flood level. Based on a desktop review of modelled flood depths and connectivity, amendment of the SBO extent is not recommended at this location. The modelling which underpins the SBO has been	Νο
					undertaken using an industry accepted methodology and stringent quality control. The flood shape is representative of pit overflow runoff onto Menarra Street. The submission states that, if Council drainage infrastructure is inadequate, it should be upgraded. Underground drainage systems are typically designed to cope with the most frequent storms - those with a 20% chance of occurring in a year, or a 1 in 5 year ARI rainfall event. The SBO identifies flood prone land in major storm events and is derived from modelling a 1 in 100 year storm event (1% chance of occurring in a year). During major storm events overland flow occurs once the capacity of the underground drainage network is exceeded. An	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					updated design standard was introduced in the late 1970s that requires consideration of these overland flow paths during major storm events. The drains at this location were built in the 1960s, prior to this design standard being introduced. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970s/80s, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. Council allocates approximately \$2 million annually to the upgrade of its underground stormwater drainage system. These works are prioritised based on the frequency and extent of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor areas above the major storm flood level. The review has confirmed the surrounding topography and drainage assets.	
289.	9 Woodhouse Road, Doncaster East	Koonung Creek	SBO3	1, 2	The flood shape should remain as exhibited at this location. The submitter states that the elevated nature of the property would make flooding impossible. The flood shape at this location does not represent water rising from the level of Woodhouse Road but rather overland runoff, or flash flooding. The property is in the main flow path from runoff to	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					the north east travelling in a westerly direction. Based on a review, the SBO extent is recommended to be retained at this location.	
290.	2 Trudi Court, Donvale	Mullum Mullum Creek	SBO3	2, 7, 8	The submitter's description of runoff patterns during rainfall events are consistent with the application of the SBO at this location. Although the flood shape does not represent standing water, overland runoff or flash flooding is still considered a significant risk. The purpose of the proposed overlays is to ensure that future development is protected from flooding. A site visit has confirmed that the topography and drainage infrastructure is consistent with that modelled. The flood shape is recommended to be retained at this location.	No
291.	14 Saxonwood Drive, Doncaster East	Ruffey Creek	SBO2	2, 4, 5, 7, 8	The submission acknowledges that the property has experienced minor flash flooding in the past and states that Council should upgrade the drains in the area. The observed flooding of this property is consistent with the application of the SBO at this location. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s, improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with	Νο

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970s/80s, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
292.	43 Corella Court, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The submission states that the existing Council drains in the Thiele St area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. The submission also states that Council should prioritise upgrading the drains in the area. Council allocates approximately \$2	Yes. Partial trimming of the SBO shape required.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. There is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The modelled flows impacting 43 Corella emanate from Schramms Reserve. The review has confirmed the surrounding topography and drainage assets. The modelling results indicate that the automatic smoothing process has inadvertently joined the flood extent on 45 Corella Court to that of 43 Corella Court at the rear of the property. It is recommended that this be separated and trimmed accordingly.	
293.	1/7 Meryl Street, Doncaster East	Koonung Creek	SBO3	2, 12	The private drainage assets referred to in the submission have not been included in the modelling for the following reasons: Such systems are only designed to minor storm event standards, with an overflow bypass on Onsite Detention Systems for high intensity events. The drains constructed as part of the development are private assets which Council does not maintain and therefore cannot guarantee their effectiveness in high intensity events. Such systems do not significantly affect the flood shape for a 1 in 100	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					year ARI rainfall event. The submission also refers to engineering levels provided by Council during the development approval process. These levels were provided and development undertaken prior to the introduction of the proposed SBO3 overlay. Council and Melbourne Water have recently completed the flood modelling study that underpins the proposed SBO & LSIO overlays. Whilst Council can use the new flood modelling data to inform advice given to developers, there is no obligation for the developer to adopt the levels based on the proposed SBO until the amendment is formally gazetted into the Manningham Planning Scheme.	
294.	2 -4 Grange Park Avenue, Doncaster	Koonung Creek	SBO3	1, 2, 3	The submission states that there is no historical evidence of flooding at 2 Grange Park Avenue. It is possible that the submitter is referring to floor levels not being flooded at this location. The SBO identifies land prone to overland runoff during a 1 in 100 year ARI storm event, not where floor levels have been flooded. It cannot be assumed that an area is not flood prone simply because there are no recollections of flooding at that location. The drainage upgrades mentioned in the submission have been investigated. There was a drainage upgrade on Grange Park Ave in 1999, and these have been included in the modelling. The submission property is located upstream of this upgrade and therefore it would not reduce the	No change to 2 Grange Park Avenue. Remove SBO3 over 4 Grange Park Avenue.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					extent of runoff experienced at the submission address. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location with respect to 2 Grange Park Avenue. The submission states that there is no historical evidence of flooding at 4 Grange Park Avenue. The SBO identifies land prone to overland runoff during a 1 in 100 year ARI storm event, not where floor levels have been flooded. It cannot be assumed that an area is not flood prone simply because there are no recollections of flooding at that location. The drainage upgrades mentioned in the submission have been investigated. There was a drainage upgrade on Grange Park Ave in 1999, and this infrastructure has been included in the flood model. The submission property is located upstream of this upgrade and therefore it would not reduce the extent of runoff experienced at the submission address. As the incursion on the side boundary is designated as a minor incursion, it is recommended that the flood shape be removed.	
295.	15 Bamfield Close, Templestowe	Ruffey Creek	SBO2	2, 4, 5	The submission supports the purpose of the SBO and acknowledges the exhibited flood shape along the west side of the property; however takes issue with the extent of the SBO to the east and south of the dwelling. A site visit has confirmed the overall topography of the property is in line with the exhibited flood	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					shape. Given the extent of the catchments	
					involved, each catchment area has been broken up	
					into a grid with cells 3m by 3m in size. This	
					approach is considered to provide accurate	
					resolution to define topographical features within	
					the catchment. In addition, the submitter requests	
					drainage upgrades be considered on Rasmussen	
					Drive and for more regular drain maintenance.	
					Council's drainage upgrade works are prioritised	
					based on the frequency and extent of flooding of	
					habitable floor areas. It is not feasible for Council	
					to resolve all flooding issues across the	
					municipality instantaneously. In the interim, there	
					is a need to ensure that future development is	
					designed to set habitable floor areas above the	
					major storm flood level. Based on the review, the	
					incursion of the flood shape onto this property is	
					recommended to be retained accordingly.	
296.	37 Council Street, Doncaster	Ruffey Creek	SBO2	1, 2, 12	The submission states that the landscaping at the	No
					property by the original owner has removed the	
					risk of flooding.	
					Given the extent of the catchments involved, each	
					catchment area has been broken up into a grid	
					with cells 3m by 3m in size. This approach is	
					considered to provide adequate resolution to	
					define topographical features within the	
					catchment. Private infrastructure, such as	
					retaining walls, structures and buildings, is not	
					individually modelled as it is not protected and can	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					be subject to change in the event of property	
					redevelopment. Consideration has been given to	
					the impacts of structures, such as buildings, and	
					features, such as landscaping and fences, on the	
					mapped flood extents, through the application of	
					roughness factors to land areas. Roughness factors	
					are allocated using aerial photography, taking	
					consideration of land use and type and density of	
					development for individual sub catchment areas.	
					The submission also states that no flooding has	
					been experienced in 25 years of living at the	
					property. Although the submitter may not have	
					experienced runoff to the extent defined by the	
					SBO2, it is possible that a 1 in 100 year event of	
					critical duration has not been observed by the	
					submitter. The flood mapping is based on a 1 in	
					100 year event of critical duration. A site visit	
					confirmed the flood shape is consistent with site	
					conditions, and the outcome of this review is that	
					the extent of the SBO be retained at this location.	
297.	26 Council Street, Doncaster	Ruffey Creek	SBO2	1, 2, 12	The submission states that landscaping and private	No
					drains have removed the risk of flooding.	
					Given the extent of the catchments involved, each	
					catchment area has been broken up into a grid	
					with cells 3m by 3m in size. This approach is	
					considered to provide adequate resolution to	
					define topographical features within the	
					catchment. Private infrastructure, such as	
					retaining walls, structures and buildings, is not	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					individually modelled as it is not protected and can	
					be subject to change in the event of property	
					redevelopment. Consideration has been given to	
					the impacts of structures, such as buildings, and	
					features, such as landscaping and fences, on the	
					mapped flood extents, through the application of	
					roughness factors to land areas. Roughness factors	
					are allocated using aerial photography, taking	
					consideration of land use and type and density of	
					development for individual sub catchment areas.	
					The submission also refers to drains within the	
					property. Private drainage systems such as this do	
					not significantly impact the flood extent in a major	
					storm event. In addition, they are not maintained	
					by Council and their effectiveness cannot be	
					guaranteed. For these reasons, private drainage	
					infrastructure has not been modelled as part of	
					this exercise. A site visit has confirmed the general	
					topography of the area. The outcome of the	
					assessment is that the extent of the SBO be	
					retained at this location.	
298.	5 Lomond Court, Warrandyte	Mullum Mullum Creek	SBO3	1, 2, 7, 8, 12	The shared driveway of the submission property is	No
					affected by the SBO. The submitter states that	
					there has not been any flooding on the property in	
					the last 9 years. It is possible they are referring to	
					their own property rather than the shared	
					driveway. The driveway experiences runoff due to	
					the small gully to the west of the submission	
					property channelling the flow. The review has	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					confirmed the surrounding topography and drainage assets. It is not recommended to alter the flood shape in this instance as it would compromise the ability to consider the overland flow path as part of possible future redevelopment of the site. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
299.	2 Mahoneys Court, Warrandyte	Mullum Mullum Creek	SBO3	1, 2, 7, 8, 12	The submitter takes issue with the flood shape being derived from a simulation and describes drainage patterns that are less extensive than that indicated by the SBO. It is possible the submitter has not experienced a 1 in 100 year ARI rainfall event of critical duration at this location. The submission correctly identifies that the concrete walls in the garden supply shop on the neighbouring property have not been modelled. LiDAR and surface contour data was analysed along with site photos and the results of the modelling have been reviewed. It was found that the surface used in the model did not pick up the mentioned wall due to the model resolution. Therefore, it is recommended that the SBO be removed from this area of the property. As there are no other flood extents now on the property and the second incursion is within 5m of the roadway, it is recommended to also remove this extent from the property.	Yes. Remove SBO3 from property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
300.	43 Ross Street, Doncaster East	Koonung Creek	SBO3	2, 7, 8, 11	The submission states that the incursion of the flood shape is minor and that the overlay should not apply. The incursion has been deemed significant based on area (over 30m2) and appropriate to be retained in order to allow for an assessment of impacts of any future development on the overland flow path. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
301.	189-191 Park Road, Donvale	Mullum Mullum Creek	SBO3	11	The submission states that the incursion of the flood shape is minor and that the overlay should not apply. Although the incursion does represent a small percentage of the total property area, it has been deemed significant based on area (over 30m2) and appropriate to be retained in order to allow for an assessment of impacts of any future development on the overland flow path. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
302.	12 Thiele Street, Doncaster East	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					rainfall event, with overland flow occurring once	
					the capacity of the underground drainage network	
					is exceeded. Since the 1970s, improved controls	
					have been in place that consider overland flow	
					paths for up to the 1 in 100 year ARI/1% AEP storm	
					event. Australian Rainfall & Runoff was updated in	
					1987 to reflect updated design practices, with	
					pipes conveying minor flows from a 1 in 5 year	
					ARI/20% AEP rainfall event and overland flow	
					paths to safely convey major flows through	
					residential areas in a 1 in 100 year ARI/1% AEP	
					rainfall event. Councils are not obligated to	
					upgrade drainage systems in place prior to the new	
					standard from the 1970s/80s, however	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas. The submission	
					also states that Council should prioritise upgrading	
					the drains in the area. Council allocates	
					approximately \$2 million annually to upgrading its	
					underground drainage network. These works are	
					prioritised based on frequency of flooding of	
					habitable floor areas. It is not feasible for Council	
					to resolve all flooding issues across the	
					municipality immediately. In the interim, there is a	
					need to ensure that future development is	
					designed to set habitable floor levels above the	
					major storm flood level. The review has confirmed	
					the surrounding topography and drainage assets.	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					The flood shape should remain as exhibited at this	
					location.	
303.	27 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8,	The exhibited flood shape does not appear to	No
				10	encroach onto the submission property. The	
					submission states that the existing Council drains	
					in the Thiele Street area are under capacity and,	
					due to development further upstream in the	
					catchment, additional loads have been placed on	
					the drainage network.	
					Underground drainage systems are usually	
					designed to convey a 1 in 5 year ARI or 20% AEP	
					rainfall event, with overland flow occurring once	
					the capacity of the underground drainage network	
					is exceeded. Since the 1970s improved controls	
					have been in place that consider overland flow	
					paths for up to the 1 in 100 year ARI/1% AEP storm	
					event. Australian Rainfall & Runoff was updated in	
					1987 to reflect updated design practices, with	
					pipes conveying minor flows from a 1 in 5 year	
					ARI/20% AEP rainfall event and overland flow	
					paths to safely convey major flows through	
					residential areas in a 1 in 100 year ARI/1% AEP	
					rainfall event. Councils are not obligated to	
					upgrade drainage systems in place prior to the new	
					standard from the 1970s/80s, however	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas. The submission	
					also states that Council should prioritise upgrading	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					the drains in the area. Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
304.	41 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10, 11	The submission states that the existing Council drains in the Thiele St area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. The fact that flooding in this area has been observed is consistent with the justification to apply the SBO3. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970's improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Manningham City Council has a policy to prioritise	Yes. Remove the SBO3 shape. In addition remove SBO shape from 21 Thiele St, 31 Thiele St, 37 Thiele St.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas. Council allocates	
					approximately \$2 million annually to upgrading its	
					underground drainage network. These works are	
					prioritised based on frequency of flooding of	
					habitable floor areas. There is a need to ensure	
					that future development is designed to set	
					habitable floor levels above the major storm flood	
					level. The submission also states that the terrain	
					data used in the flood modelling does not reflect	
					the site conditions. LiDAR data is considered to be	
					the most suitable and fit-for-purpose elevation	
					data available for this purpose. The submission	
					property is upstream of the upgraded drains at the	
					intersection of Thiele and Ambrose streets while	
					the referenced properties on Ambrose St are	
					downstream of the improvements and thus are	
					protected from overland runoff during a major	
					storm event. However, LiDAR and surface contour	
					data as well as site photos were analysed and it	
					was found that it is unlikely that water will pool	
					enough in the areas shown in the SBO within the	
					property. The resolution of the model has not	
					picked up certain features adequately for these	
					reasons. Therefore, it is recommended that the	
					SBO be removed from this property.	
305.	43 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8,	The submission states that the existing Council	Yes.
				10, 13	drains in the Thiele St area are under capacity and,	Remove the
					due to development further upstream in the	SBO3 shape.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					catchment, additional loads have been placed on	
					the drainage network. The fact that flooding in this	
					area has been observed is consistent with the	
					justification to apply the SBO3. Underground	
					drainage systems are usually designed to convey a	
					1 in 5 year ARI (Average Recurrence Interval) or	
					20% AEP (Annual Exceedance Probability) rainfall	
					event, with overland flow occurring once the	
					capacity of the underground drainage network is	
					exceeded. Since the 1970's improved controls have	
					been in place that consider overland flow paths for	
					up to the 1 in 100 year ARI/1% AEP storm event.	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas. Council allocates	
					approximately \$2 million annually to upgrading its	
					underground drainage network. These works are	
					prioritised based on frequency of flooding of	
					habitable floor areas. There is a need to ensure	
					that future development is designed to set	
					habitable floor levels above the major storm flood	
					level. The submission also states that the terrain	
					data used in the flood modelling does not reflect	
					the site conditions. LiDAR data is considered to be	
					the most suitable and fit-for-purpose elevation	
					data available for this purpose. The submission	
					property is upstream of the upgraded drains at the	
					intersection of Thiele and Ambrose streets while	
					the referenced properties on Ambrose St are	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					downstream of the improvements and thus are protected from overland runoff during a major storm event. However, LiDAR and surface contour data as well as site photos were analysed and it was found that it is unlikely that water will pool enough in the areas shown in the SBO within the property. The resolution of the model has not picked up certain features adequately for these reasons. Therefore, it is recommended that the SBO be removed from this property.	
306.	23 Corella Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The exhibited flood shape does not apply to the subject property. The submission states, however, that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s, improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970s/80s, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The submission also states that Council should prioritise upgrading the drains in the area. Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
307.	25 Corella Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The exhibited flood shape does apply to the subject property. The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once	Νο

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					the capacity of the underground drainage network	
					is exceeded. Since the 1970s improved controls	
					have been in place that consider overland flow	
					paths for up to the 1 in 100 year ARI/1% AEP storm	
					event. Australian Rainfall & Runoff was updated in	
					1987 to reflect updated design practices, with	
					pipes conveying minor flows from a 1 in 5 year	
					ARI/20% AEP rainfall event and overland flow	
					paths to safely convey major flows through	
					residential areas in a 1 in 100 year ARI/1% AEP	
					rainfall event. Councils are not obligated to	
					upgrade drainage systems in place prior to the new	
					standard from the 1970s/80s, however	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas.	
					The submission also states that Council should	
					prioritise upgrading the drains in the area. Council	
					allocates approximately \$2 million annually to	
					upgrading its underground drainage network.	
					These works are prioritised based on frequency of	
					flooding of habitable floor areas. It is not feasible	
					for Council to resolve all flooding issues across the	
					municipality immediately. In the interim, there is a	
					need to ensure that future development is	
					designed to set habitable floor levels above the	
					major storm flood level. The review has confirmed	
					the surrounding topography and drainage assets.	

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Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				The flood shape should remain as exhibited at this	
32 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The exhibited flood shape does not apply to the subject property. The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970s/80s, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The submission	No
			Overlay	Overlay related to submissions 32 Thiele Street, Doncaster Ruffey Creek SBO3 2, 5, 6, 7, 8,	Overlayrelated to submissionsOther response to submission32 Thiele Street, DoncasterRuffey CreekSBO32, 5, 6, 7, 8, 10The exhibited flood shape does not apply to the subject property. The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
309.	48 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The exhibited flood shape does not apply to the subject property. The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970s/80s, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The submission also states that Council should prioritise upgrading the drains in the area. Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
310.	45 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The submission states that the existing Council drains in the Thiele St area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP	Yes. Remove the SBO3 shape.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					(Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas in major storm events. Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. There is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. However, LiDAR and surface contour data as well as site photos were analysed and it was found that it is unlikely that water will pool enough in the areas shown in the SBO within the property. the resolution of the model has not picked up certain features adequately for these reasons. Therefore, it is recommended that the SBO be removed from	
311.	25 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	this property. The exhibited flood shape does not apply to the subject property. The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					the capacity of the underground drainage network	
					is exceeded. Since the 1970s improved controls	
					have been in place that consider overland flow	
					paths for up to the 1 in 100 year ARI/1% AEP storm	
					event. Australian Rainfall & Runoff was updated in	
					1987 to reflect updated design practices, with	
					pipes conveying minor flows from a 1 in 5 year	
					ARI/20% AEP rainfall event and overland flow	
					paths to safely convey major flows through	
					residential areas in a 1 in 100 year ARI/1% AEP	
					rainfall event. Councils are not obligated to	
					upgrade drainage systems in place prior to the new	
					standard from the 1970s/80s, however	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas.	
					The submission also states that Council should	
					prioritise upgrading the drains in the area. Council	
					allocates approximately \$2 million annually to	
					upgrading its underground drainage network.	
					These works are prioritised based on frequency of	
					flooding of habitable floor areas. It is not feasible	
					for Council to resolve all flooding issues across the	
					municipality immediately. In the interim, there is a	
					need to ensure that future development is	
					designed to set habitable floor levels above the	
					major storm flood level. The review has confirmed	
					the surrounding topography and drainage assets.	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The flood shape should remain as exhibited at this	
					location.	
312.	17 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8,	The submission states that the existing Council	No
				10	drains in the Thiele Street area are under capacity	
					and, due to development further upstream in the	
					catchment, additional loads have been placed on	
					the drainage network.	
					Underground drainage systems are usually	
					designed to convey a 1 in 5 year ARI or 20% AEP	
					rainfall event, with overland flow occurring once	
					the capacity of the underground drainage network	
					is exceeded. Since the 1970s improved controls	
					have been in place that consider overland flow	
					paths for up to the 1 in 100 year ARI/1% AEP storm	
					event. Australian Rainfall & Runoff was updated	
					in 1987 to reflect updated design practices, with	
					pipes conveying minor flows from a 1 in 5 year	
					ARI/20% AEP rainfall event and overland flow	
					paths to safely convey major flows through	
					residential areas in a 1 in 100 year ARI/1% AEP	
					rainfall event. Councils are not obligated to	
					upgrade drainage systems in place prior to the new	
					standard from the 1970s/80s, however	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas.	
					The submission also states that Council should	
					prioritise upgrading the drains in the area. Council	
					allocates approximately \$2 million annually to	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
313.	50 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The exhibited flood shape does not apply to the subject property. The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970s/80s, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The submission also states that Council should prioritise upgrading the drains in the area. Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
314.	15 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					the capacity of the underground drainage network	
					is exceeded. Since the 1970s improved controls	
					have been in place that consider overland flow	
					paths for up to the 1 in 100 year ARI/1% AEP storm	
					event. Australian Rainfall & Runoff was updated in	
					1987 to reflect updated design practices, with	
					pipes conveying minor flows from a 1 in 5 year	
					ARI/20% AEP rainfall event and overland flow	
					paths to safely convey major flows through	
					residential areas in a 1 in 100 year ARI/1% AEP	
					rainfall event. Councils are not obligated to	
					upgrade drainage systems in place prior to the new	
					standard from the 1970s/80s, however	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas.	
					The submission also states that Council should	
					prioritise upgrading the drains in the area. Council	
					allocates approximately \$2 million annually to	
					upgrading its underground drainage network.	
					These works are prioritised based on frequency of	
					flooding of habitable floor areas. It is not feasible	
					for Council to resolve all flooding issues across the	
					municipality immediately. In the interim, there is a	
					need to ensure that future development is	
					designed to set habitable floor levels above the	
					major storm flood level. The review has confirmed	
					the surrounding topography and drainage assets.	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					The flood shape should remain as exhibited at this	
					location.	
315.	23 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8,	The submission states that the existing Council	Yes
				10	drains in the Thiele St area are under capacity and,	SBO3 incursion to
					due to development further upstream in the	be removed
					catchment, additional loads have been placed on	
					the drainage network. The submission also states	
					that Council should prioritise upgrading the drains	
					in the area. Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas. Council allocates	
					approximately \$2 million annually to upgrading it's	
					underground drainage network. These works are	
					prioritised based on frequency of flooding of	
					habitable floor areas. There is a need to ensure	
					that future development is designed to set	
					habitable floor levels above the major storm flood	
					level which is the objective of the proposed	
					Amendment. The outcome of the review is that the	
					flood shape represents a minor incursion onto the	
					property and the flood shape is recommended to	
					be removed accordingly.	
316.	44 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8,	The exhibited flood shape does not apply to the	No
				10	subject property. The submission states that the	
					existing Council drains in the Thiele Street area are	
					under capacity and, due to development further	
					upstream in the catchment, additional loads have	
					been placed on the drainage network.	
					Underground drainage systems are usually	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					designed to convey a 1 in 5 year ARI or 20% AEP	
					rainfall event, with overland flow occurring once	
					the capacity of the underground drainage network	
					is exceeded. Since the 1970s improved controls	
					have been in place that consider overland flow	
					paths for up to the 1 in 100 year ARI/1% AEP storm	
					event. Australian Rainfall & Runoff was updated in	
					1987 to reflect updated design practices, with	
					pipes conveying minor flows from a 1 in 5 year	
					ARI/20% AEP rainfall event and overland flow	
					paths to safely convey major flows through	
					residential areas in a 1 in 100 year ARI/1% AEP	
					rainfall event. Councils are not obligated to	
					upgrade drainage systems in place prior to the new	
					standard from the 1970s/80s, however	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas. The submission	
					also states that Council should prioritise upgrading	
					the drains in the area. Council allocates	
					approximately \$2 million annually to upgrading its	
					underground drainage network. These works are	
					prioritised based on frequency of flooding of	
					habitable floor areas. It is not feasible for Council	
					to resolve all flooding issues across the	
					municipality immediately. In the interim, there is a	
					need to ensure that future development is	
					designed to set habitable floor levels above the	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					major storm flood level. The flood shape should remain as exhibited at this location.	
317.	35 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The submission states that the existing Council drains in the Thiele St area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The submission also states that Council should prioritise upgrading the drains in the area. Council allocates approximately \$2 million annually to upgrading its underground drainage network. There is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. LiDAR and surface contour data as well as site photos were analysed and it was found that it is unlikely that water will pool enough in the areas shown in the SBO within the property. The resolution of the model has not picked up certain features adequately for these reasons. Therefore, it is recommended that the SBO be removed from this property.	Yes. Remove the SBO3 shape.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
318.	40 Thiele Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The exhibited flood shape does not apply to the subject property. The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970s/80s, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The submission also states that Council should prioritise upgrading the drains in the area. Council allocates approximately \$2 million annually to upgrading its underground drainage network.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
319.	6 St Muir Drive, Warrandyte	Mullum Mullum Creek	SBO3	1, 2, 12	The submission references the location of the property at the top of a hill, however there is an area upstream of the property to the north which would contribute to shallow overland runoff during major storm events. The submission also mentions that flooding has not been experienced since 1999. It is possible that this area has not been affected by a 1 in 100 year ARI rainfall event in that period. A site visit has found the drainage infrastructure is consistent with the modelled drains. The entire overlay through these properties is a series of connected low points over houses. Since St Muir Drive has been developed, flows are redirected to the road. It is recommended that the SBO3 shape be deleted accordingly. Desktop assessment shows that flood shape occurs where a pond is located on the property . A site inspection revealed that the entire valley has been	Yes. Remove the SBO3 overlay. In addition remove SBO3 from 8 and 10 St. Muir Drive.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					filled and the site visit confirmed this. The entire	
					flood shape is to be removed.	
320.	6 Eric Avenue, Templestowe	Bulleen North	SBO3	1, 2,	The submission states that the property is elevated	Yes.
	Lower				and no flooding has been experienced. The	Remove the
					incursion is considered minor and not considered	SBO3 from
					to provide significant planning or risk mitigation	property.
					benefits. The flood shape is recommended to be	
					deleted from the property.	
321.	4 Tulip Court, Doncaster East	Mullum Mullum Creek	SBO3	1, 2, 5, 7, 8,	The submission states that the existing Council	No
				13	drains in the area are under capacity and, due to	
					development further upstream in the catchment,	
					additional loads have been placed on the drainage	
					network. Underground drainage systems are	
					usually designed to convey a 1 in 5 year ARI	
					(Average Recurrence Interval) or 20% AEP (Annual	
					Exceedance Probability) rainfall event, with	
					overland flow occurring once the capacity of the	
					underground drainage network is exceeded.	
					Council has a policy to prioritise drainage upgrades	
					where required to alleviate flooding of habitable	
					floor areas. The submission also states that Council	
					should prioritise upgrading the drains in the area.	
					Council allocates approximately \$2 million annually	
					to upgrading it's underground drainage network.	
					These works are prioritised based on frequency of	
					flooding of habitable floor areas. There is also a	
					need to ensure that future development is	
					designed to set habitable floor levels above the	
					major storm flood level. A review has found the	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					flood shape to be consistent with the topography and drainage assets in the area and should be retained.	
322.	11 Ambrose Street, Doncaster	Ruffey Creek	SBO2	2, 5, 6, 7, 8, 10	The submission states that the existing Council drains in the Thiele St area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970's improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970's/80's, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The submission also states that Council should prioritise upgrading the drains in the area. Council	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					allocates approximately \$2 million annually to upgrading it's underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality in a short timeframe. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
323.	7 Ambrose Street, Doncaster	Ruffey Creek	SBO2 & SBO3	2, 5, 6, 7, 8, 10	It is recommended that based on the minor incursion criteria, that the SBO2 overlay be removed from the property. LiDAR and surface contour data were investigated and it was found that due to the model resolution, tinning of the modelled surface was inadequately represented at the front of the property. Therefore, it is recommended that the SBO3 flood shape at the front of the property be removed as well.	Yes. SBO2 and SBO3 incursions to be removed.
324.	41A Corella Court, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The submission states that the existing Council drains in the Thiele St area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					underground drainage network is exceeded. Since	
					the 1970s improved controls have been in place	
					that consider overland flow paths for up to the 1 in	
					100 year ARI/1% AEP storm event. Australian	
					Rainfall & Runoff was updated in 1987 to reflect	
					updated design practices, with pipes conveying	
					minor flows from a 1 in 5 year ARI/20% AEP rainfall	
					event and overland flow paths to safely convey	
					major flows through residential areas in a 1 in 100	
					year ARI/1% AEP rainfall event. Councils are not	
					obligated to upgrade drainage systems in place	
					prior to the new standard from the 1970s/80s,	
					however Manningham City Council has a policy to	
					prioritise drainage upgrades where required to	
					alleviate flooding of habitable floor areas. The	
					submission also states that Council should	
					prioritise upgrading the drains in the area. Council	
					allocates approximately \$2 million annually to	
					upgrading its underground drainage network.	
					These works are prioritised based on frequency of	
					flooding of habitable floor areas. It is not feasible	
					for Council to resolve all flooding issues across the	
					municipality immediately. In the interim, there is a	
					need to ensure that future development is	
					designed to set habitable floor levels above the	
					major storm flood level. The review has	
					confirmed the surrounding topography and	
					drainage assets. The flood shape should remain as	
					exhibited at this location.	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
325.	37 Corella Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970s/80s, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The submission also states that Council should prioritise upgrading the drains in the area. Council allocates approximately \$2 million annually to upgrading its underground drainage network.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
326.	39 Corella Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					standard from the 1970s/80s, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The submission also states that Council should prioritise upgrading the drains in the area. Council allocates approximately \$2 million annually to upgrading its underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
327.	27 Corella Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The exhibited flood shape does not apply to the subject property. The submission states that the existing Council drains in the Thiele Street area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s improved controls	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					have been in place that consider overland flow	
					paths for up to the 1 in 100 year ARI/1% AEP storm	
					event. Australian Rainfall & Runoff was updated in	
					1987 to reflect updated design practices, with	
					pipes conveying minor flows from a 1 in 5 year	
					ARI/20% AEP rainfall event and overland flow	
					paths to safely convey major flows through	
					residential areas in a 1 in 100 year ARI/1% AEP	
					rainfall event. Councils are not obligated to	
					upgrade drainage systems in place prior to the new	
					standard from the 1970s/80s, however	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas.	
					The submission also states that Council should	
					prioritise upgrading the drains in the area. Council	
					allocates approximately \$2 million annually to	
					upgrading its underground drainage network.	
					These works are prioritised based on frequency of	
					flooding of habitable floor areas. It is not feasible	
					for Council to resolve all flooding issues across the	
					municipality immediately. In the interim, there is a	
					need to ensure that future development is	
					designed to set habitable floor levels above the	
					major storm flood level. The review has confirmed	
					the surrounding topography and drainage assets.	
					The flood shape should remain as exhibited at this	
					location.	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
328.	31 Corella Street, Doncaster	Ruffey Creek	SBO3	2, 5, 6, 7, 8, 10	The submission states that the existing Council drains in the Thiele St area are under capacity and, due to development further upstream in the catchment, additional loads have been placed on the drainage network. Underground drainage systems are typically designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. The modelled storm is a 1 in 100 year ARI event.	Yes. Remove SBO3 shape. In addition that the SBO shape at 29 and 33 Corella St, be removed.
					Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas Council allocates approximately \$2 million annually to upgrading it's	
					underground drainage network. These works are prioritised based on frequency of flooding of habitable floor areas. There is a need to ensure that future development is designed to set habitable floor levels above the major storm flood level. The review has confirmed the surrounding topography and drainage assets, aside from the modelling of the spoon drain within Schramms	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					Reserve. The spoon drain and path divert overland flows away from this property. It is recommended that the SBO shape be removed.	
329.	129-131 Gosford Crescent, Park Orchards	Mullum Mullum Creek	SBO2	2, 12, 14 SBO2 should be changed to SBO3.	A review of modelled overland flow characteristics in respect of the north-south flow path through 129-131 Gosford Crescent has found that the flow depths are generally less than 100mm in depth. On this basis, the review supports a change to the designation of the north-south SBO extent from SBO2 to SBO3.	Yes Change the SBO2 to SBO3 for the north – south flow path.
330.	92 Canopus Drive, Doncaster East	Mullum Mullum Creek	SBO3	1, 2, 7, 8, 12	A review of the area indicates that the likely cause of the modelled flooding breakout is due to the presence of both a speed hump within the road and the thinning of the LiDAR where a large tree is located immediately in front of 92 Canopus Drive. This has resulted in floodwater within the road reserve being directed into the property.	Yes. It is proposed to remove the SBO3 from the property.
331.	9 Browning Drive, Templestowe	Mullum Mullum Creek	SBO2	1, 2, 4, 5, 6, 7, 8, 13	The submission states that in the past, a blocked drain has caused flooding that differs from that suggested by the SBO shape. It is not clear whether this event relates to a 1 in 100 year ARI event of critical duration, which the flood extent has been modelled on in accordance with industry practices. In addition, the modelling assumes the drainage infrastructure is free from blockages. Should blockages be applied in the modelling, the flood shape would be even more extensive than the currently proposed shape. The submission also refers to the current	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
			Overlay		construction of the dwelling. The intent of the proposed overlays is not to prevent future development, but to ensure that it is undertaken in a manner that considers the risk of flooding. The permit exemption requirement referred to in the submission does not mean the current dwelling is illegal. If the site was to be redeveloped, a slab construction could be considered provided the developer could demonstrate appropriate management of runoff and freeboard levels. The submission also refers to previous development of Forest Court to the south east which forms the catchment for the submission property. Typically, underground drainage systems (both Council's and private systems installed as part of developments) are designed to minor storm event standards. Although some main drains provide a 1 in 100 year ARI service level, Council cannot build an entire drainage network that will cope with all storm events. The submission also refers to No. 1 Browning Drive and states that the flood shape should encroach on	-
					to that property. The modelled flood shape suggests runoff is largely restricted to the roadway at that location and the mentioned property slopes up from the street. The review has confirmed the surrounding	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					topography and drainage assets. The flood shape	
					should remain as exhibited at this location.	
332.	245 Thompsons Road,	Bulleen North	SBO3	1, 2, 3	The submission references the geometry of the	Yes. It is
	Templestowe Lower				roadway and states any runoff would flow down	recommended to
					Thompsons Road rather than entering the	delete the flood
					property.	shape on this
					A review and site visit has found that, although the	property and
					property is below the level of the road, there is	neighbouring
					nothing to suggest that runoff from Thompsons	properties 243
					Road would overflow the footpath and enter the	Thompsons Rd,
					property and deletion of the flood shape on this	and no's 16-18
					property and neighbouring properties at No.243	Sylvia St to the
					Thompsons Road, and no's 16-18 Sylvia Street to	rear.
					the rear is recommended.	
333.	323-325 Tindals Road,	Mullum Mullum Creek	SBO3	2, 10, 12, 14	A contour map from the Land department of state	Yes.
	Warrandyte			Land within	government with 1 metre contours has been	Trim and modify
				LDRZ should	provided in the submission with the contention	the SBO shape
				be exempt	that there is no land depression to form the	for this property.
				from	ponding and flood inside the property. Council's	
				overlays.	more accurate 0.5 metre contour data provides a	
				Having a 25%	higher level of resolution which better represents	
				fence	the actual land surface and shows the more	
				permeability	nuanced surface characteristics which govern	
				is irrelevant	water flow on the property. A site visit has	
				in the LDRZ.	confirmed that the Council's terrain data is up to	
				Once drains	date in terms of showing a steep slope (of cutting)	
				have been	at the eastern and south eastern parts of the	
				upgraded,	property. The comparison with other properties is	
				overlay	not relevant because the other properties are	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
				should be removed. 400mm above ground level requirement - question applicability to a concrete slab construction. Issue with applying 400mm requirement where there has been 'cut and fill'.	influenced by different upstream catchments .The Council drainage infrastructure in the area including the Kyrenia Ct and Tindals Rd are all represented in the model correctly. The site inspection indicated that the flood extent shown was potentially due to a combination of steeper catchment (greater than 30%), higher velocity flow rates and shallow flows. The property is not likely to be inundated in the south-western area as exhibited. However, the modelled flow along the easement on the northern boundary is confirmed. It is recommended that the SBO shape for this property be trimmed and modified as shown in the attached plan.	
334.	1/16 Coolabah Street, Doncaster	Koonung Creek	SBO2	1, 2, 3, 7,	The submission states that no flooding has been experienced in 26 years of living at the property. A review has found an anomaly in the SBO at this location. Based on a review of the modelled depths, the SBO is recommended to be deleted from the property.	Yes Remove the SBO2 from this property
335.	50 Dehnert Street, Doncaster East	Ruffey Creek	SBO3	1, 2	A review and site visit from the street has found that the flood shape represents water flowing out of the property (i.e. the flood shape forms within the property) and that the topographical features of the property result in shallow runoff. The review	Yes. Remove SBO3 from property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
220	C Ruch Diaco Worranduto	Mullum Mullum Creak	6803	2	has confirmed the surrounding drainage assets. LiDAR and surface contour data were analysed and it was found that there have possibly been some tinning issues in this area which have resulted in an unlikely low point within the backyard of the subject property. It is therefore recommended that the SBO be removed from 50 Dehnert Street.	No
336.	6 Rush Place, Warrandyte	Mullum Mullum Creek	SBO3	2	The submission states that the flood shapes are inconsistent with the topography. A review has found the flood shape to be consistent with the topography with the SBO3 representing shallow overland flow down to the roadway. The construction at 6 Rush Place would change the surface of the land however this will be considered as part of a future planning scheme amendment. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
337.	7 Ashford Street, Templestowe Lower	Ruffey Creek	SBO3	2, 12	The submission refers to landscaping features affecting the flow of runoff on the property. The submission property fulfils the minor incursion criteria and the flood shape is recommended to be deleted from the property.	Yes Remove the SBO3 incursion from property
338.	48-50 Lynnwood Parade, Templestowe Lower	Ruffey Creek	SBO3	1, 2, 3, 12	The submission states that the SBO is not consistent with the experiences of flooding at this location and the property is elevated from the road. Although the property is above the road, the roadway is full of runoff during major storm events	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					and additional runoff from the catchment to the south of the property flows down and joins with the main flood extent and is channelled onto the road by the driveway. It is possible the submitter has not experienced a 1 in 100 year ARI storm of critical duration at this location. A site visit has confirmed the drainage infrastructure and terrain is consistent with the modelled flood extent and it is recommended to retain the flood shape at this location.	
339.	23-71 Alexander Road, Warrandyte	Mullum Mullum Creek	SBO1	1, 2	The Land Subject to Inundation Overlays (LSIO)'s on the property are contained within the valley of the drainage lines. The property is already extensively encumbered by an existing LSIO. The specific rainfall on the property is only a small part of the runoff through the property in a 1 in 100 year event and the broader catchment is taken into account for the purpose of the modelling. Following the recent meeting with the submitter, Melbourne Water, Council and Cardno officers have again reviewed the overlay and submission. Responses to queries raised are included on page 106 of the Assessment of Submission Report dated 1 September 2017. The overlay designation has been reviewed and reconfirmed as being appropriate based on the anticipated flood depth, direction of flow, the location of the flood extent relative to Council and Melbourne Water	Yes. Convert small section of LSIO as exhibited to match existing LSIO overlay.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					infrastructure and the relative locations of abutting	
					LSIO extents.	
340.	26 Hillcroft Drive,	Ruffey Creek	SBO1	1, 7, 8, 10	Property is located adjacent to a Melbourne Water	Yes.
	Templestowe				Main Drain (Greenridge Avenue Drain). The overlay	It is
					extent has been reviewed and reconfirmed as	recommended
					being appropriate based on the direction of flow,	that the flood
					the location of the flood extent relative to Council	shape be
					and Melbourne Water infrastructure and the	retained but the
					relative locations of abutting SBO extents. The	overlay
					intersection of Hillcroft Drive and Fernbrook Way is	designation be
					downstream of the submitter's property and has	changed from
					no bearing on the mapped flood extent at the	SBO1 to SBO3.
					submitters property. Although the submitter	Refer to map at
					claims that the property has not been subject to	Attachment 10.
					overland flows previously, the property may not	
					have been subject to a 1 in 100 year ARI event over	
					this period. A review of the flow depths has	
					however revealed that the property flooding	
					results from shallow flows. It is recommended that	
					the flood shape be retained but the overlay	
					designation be changed from SBO1 to SBO3. This	
					recommendation has been agreed with Melbourne	
					Water.	
341.	3 Exeter Close, Templestowe	Ruffey Creek	SBO3	1, 2, 5	The submission states that the property is on the	Yes.
	Lower				high side of the street and has never experienced	Remove SBO3
					flooding. The property contains the upstream	from property.
					extent of the flood shape. The modelled flow is	
					discharging onto the street rather than rising up	
					from the street. A site visit has confirmed that the	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					modelled drainage infrastructure is consistent with the actual drains in the area. The flood extents in the property are in the vicinity of the garage and down the driveway. The garage extent is isolated and has likely been caused by the resolution of the model combined with issues of thinning of the LiDAR on a steep slope. It is therefore recommended that this area be removed from the SBO. The flood extent on the driveway is also deemed unlikely due to the slope and unobstructed connection to the roadway. As above, this has likely been caused by issues with thinning of the tin as well as the model resolution. Therefore, it is also recommended to remove this partient from the SBO.	
342.	21 Dellfield Drive, Templestowe Lower	Ruffey Creek	SBO3	21 Dellfield Drive	section from the SBO. The submission states that, due to the location near the top of a hill, there has been no flooding experienced and the SBO should not apply. The property contains the upstream extent of a lobe of shallow runoff flowing in a south easterly direction and joining the main flow path down Dellfield Drive. The steep slope in this area contributes to the flood shape with high expected velocities of runoff. There is Council drainage infrastructure in an easement along the rear of the property which would be designed to provide a 1 in 5 year ARI level of service. During major storm events, overflow from these pits could be expected to occur in the manner indicated by the SBO.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					Topographical contours interpolated through the building footprint suggest the land of the submission property forms a depression which collects and channels runoff. Although the property may be several metres above the level of the footpath, the extent of the SBO is based on flood prone land, not specifically where dwellings are flooded above the floor level. The intent of the proposed overlays is not to prohibit future development, but to ensure that appropriate flood levels are adopted for future development in the area subject to the overlay. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
343.	6 Paltarra Court, Doncaster East	Mullum Mullum Creek	SBO2	1, 3, 4, 5, 7, 8	The submission argues that Council already has a planning permit procedure for most constructions. Existing planning permits do not take into consideration the overland flow path of runoff during a 1 in 100 ARI event which is considered a significant risk to future developments. Although the resident may not have experienced flooding, it cannot be certain that the property is not flood prone during a 1 in 100 year ARI storm of critical duration. As stated in the submission, the footprint of the dwelling is not affected by flooding and this is reflected in the shape of the SBO which encroaches only on the northern boundary. The extent of the SBO is based on the flood prone land,	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					not specifically where dwellings are flooded above the floor level. The submission also states that if the drains are not adequate and they should be upgraded. Council's drainage system design is typically for a 1 in 5 year event, with flows in excess of the pipe system travelling overland. It is not feasible for Council to build a drainage network that can cope with all storm events. The SBO is based on a 100 year ARI event as per industry standards. The flood shape at this location is consistent with the topography and drainage infrastructure and should be retained.	
344.	18 Amberwood Court, Templestowe	Ruffey Creek	SBO1	1, 2, 13	The property is located adjacent to a Melbourne Water main drain (Greenridge Avenue Drain). Regarding the issue the submitter "never witnessed a flood", it cannot be assumed that flooding has not previously or will not occur at any given property, on the basis that there are no records of flooding, or flooding to the extent identified by the Special Building Overlay(SBO). The SBO is based upon the extent of overland flows that would result from a 1 in 100 year Storm Event. The overlay designation has been reviewed due to issues with the Lidar data at this location, it is proposed to delete the SBO1 shapes at the southern and western property boundaries. The flows effecting the eastern boundary are associated with the local catchment, rather than	Yes. Delete SBO1 extents from southern and western boundaries. Retain SBO at eastern boundary. Designation of eastern extent to be changed from SBO1 to SBO3. Extents for 15, 17 and 19 Hillcroft

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					flows from Hillcroft Drive. The SBO on the eastern boundary is recommended to be retained but given the relativeley shallow flow depths, the designation is proposed to be changed from SBO1 to SBO3.	Drive with the exception of the section at the front boundaries to be changed from SBO1 to SBO3.
345.	24 Hillcroft Drive, Templestowe	Ruffey Creek	SBO1	1, 6, 13	The property is located adjacent to a Melbourne Water main drain (Greenridge Avenue Drain) and the applicable flood level for the property is 56.27 metres Australian Height Datum(AHD) for a 1 in 100 year storm event. Regarding the issue the submitter has "never seen a flood", it cannot be assumed that flooding has not previously or will not occur at any given property, on the basis that there are no records of flooding, or flooding to the extent identified by the Special Building Overlay (SBO). The SBO is based upon the extent of overland flows that would result from a 1 in 100 Storm Event. The overlay extent has been reviewed and reconfirmed as being appropriate based on the direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. However, review of the flood depths has identified an opportunity to change the overlay designation from SBO1 to SBO3. The outcome of the review is that the	Yes. It is recommended that the flood shape be retained but the overlay designation be changed from SBO1 to SBO3.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					exhibited flood shape be retained but amended to SBO3.	
346.	1 Wallace Avenue, Donvale	Mullum Mullum Creek	SBO2	2, 4, 5, 6	The submission states that flooding has not been experienced since the house was built and that flooding is unlikely due to the distance to the nearest gully. The SBO indicates that the property is expected to be partially flood prone during a 1 in 100 year ARI rainfall event of critical duration. In addition, the resident may have experienced a 1 in 100 year ARI event and has observed flooding of the rear of the property. The extent of the SBO is based on flood prone land, not specifically where dwellings are flooded above the floor level. The intent of the proposed overlays is not to prohibit future development, but to ensure that appropriate flood levels are adopted for future development in the area subject to the overlay. The submission also refers to private drainage and states that developments should have adequate onsite drainage systems. As per current practice, Council requires new developments to manage the stormwater runoff from the property to minor storm event standards, including on-site detention systems. The upkeep and upgrades of Council drainage system also requires the identification of locations in need of development or upgrades in an efficient and cost effective manner. The results of the flood mapping will be used to identify potential	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					drainage upgrades. The submission also makes reference to drain maintenance issues. While a valid concern, it is an issue separate to the exhibited flood extent. The flood modelling has been undertaken using the assumption that the drains are free from blockages and operating at capacity. Should blockages be assumed in the model, the flood extent would be more extensive than the exhibited shape. The open drain along Springvale Road, as well as other minor Council drains within the municipality, are typically designed for a 1 in 5 year ARI event, with flows in excess of these systems travelling overland. The SBO is based on a 100 year ARI event, in which case the open drain would not be sufficient in draining away runoff from the road reserve. Due to the proximity of the subject property to the flood extent it is reasonably expected to experience flooding in the manner indicated by the SBO. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
347.	5 Paltarra Court, Doncaster East	Mullum Mullum Creek	SBO2	1, 3, 4, 5, 7, 8	The submission argues that Council already has a planning permit procedure for most constructions. Existing planning permits do not take into consideration the overland flow path of runoff during a 1 in 100 ARI event which is considered a significant risk to future developments. Although	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					the resident may not have experienced flooding, it cannot be certain that the property is not flood prone during a 1 in 100 year ARI storm of critical duration. As stated in the submission, the footprint of the dwelling is not affected by flooding and this is reflected in the shape of the SBO which encroaches only on the northern boundary. The extent of the SBO is based on the flood prone land, not specifically where dwellings are flooded above the floor level. The submission also states that if the drains are not adequate they should be upgraded. Council's drainage system design is typically for a 1 in 5 year event, with flows in excess of the pipe system travelling overland. It is not feasible for Council to build a drainage network that can cope with all storm events. The SBO is based on a 100 year ARI event as per industry standards. The flood shape at this location is consistent with the topography and drainage infrastructure and should be retained.	
348.	13 Balwyn Road, Bulleen	Koonung Creek	SBO3	10, 14 Extent of SBOs in neighbouring municipalitie s is significantly less. Will	The submission does not object specifically to the shape of the overlay on the property but raises concerns about the development implications of the proposed overlays. A desktop review has found the flood shape is consistent with the topography of the area and Council drainage assets and should be retained. The submission also states that the extent of SBOs	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				limit housing	in neighbouring municipalities is significantly and	
				choice and	that it will limit housing choice and urban	
				urban	consolidation in Manningham. The application of	
				consolidatio	the proposed controls is not considered to	
				n in	negatively affect Manningham's urban	
				Manningham	consolidation objectives. Manningham has a	
					responsibility to allow increased densities in	
					appropriate locations and Council actively requires	
					developers to provide sustainable development	
					and include on site drainage retention systems.	
					The controls will not prohibit development but will	
					require it to take into account the potential risk for	
					overland flow damage. The flood shape as	
					exhibited should be retained.	
349.	2/15 Thomas Street,	Koonung Creek	SBO2	1, 2, 6, 7, 8,	The submission property is located in the bottom	No
	Doncaster East			14	of a valley immediately upstream of Greendale	
				Disagree	Reserve which is a floodway running the south	
				with term	west to Koonung Creek. This location is expected	
				'overland	to experience large amounts of runoff during major	
				flooding'.	storm events and has significant Council drainage	
				'Stormwater	infrastructure which is indicative of drainage	
				runoff'	patterns in this area. It is recommended that the	
				would be	SBO2 shape be retained as exhibited.	
				better.		
350.	2/19 Churchill Street,	Ruffey Creek	SBO3	7, 8, 10, 12,	The submission states that the current dwelling is	No
	Doncaster East			14	sited in such a way to deal with shallow depths of	
				Use of term	runoff. The SBO is based on flood prone land, not	
				flooding is	specifically where dwellings are flooded above	
					floor level. The review has confirmed the	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
				misleading.	surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
351.	50 Lawanna Drive, Templestowe	Ruffey Creek	SBO2	2, 3, 5, 7, 8, 10, 12, 13, 14 Application of retrospective regulations is inappropriat e. 400mm gap below fences is a safety issue.	The submission states that Manningham City Council should have been aware of the flood risk at the time of subdivision. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970's improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the change in standards from the 1970's/80's, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas in a 1 in 100 year ARI event. The flood modelling that underpins the SBO will allow Council to prioritise drainage upgrades in critical	Yes. A minor amendment is recommended to the flood shape in the north east corner of the property, to disconnect the flood shape to the north from the main extent.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					areas. The submission also refers to a spoon drain along the property boundary. This is understood to be a private. Private drains have not been modelled as part of the flood mapping study underpinning the proposed SBO as they are not maintained by Council and do not significantly impact the flood extent. In addition, the submission references a brick wall along the property boundary. Individual structures such as this were not modelled individually but their effects on overland flow taken into consideration through the adoption of appropriate roughness factors in accordance with industry practices. The submission also refers to the topographical data used in the flood model. The LiDAR data used in the flood study was captured in 2009 and would reflect improvements at that point in time including tennis courts and swimming pools. Contours have been interpolated through building footprints in accordance with industry practices. Based on a review of the modelled flood depths and connectivity of the flood shape, a minor amendment is recommended to the flood shape in the north east corner of the property.	
352.	55 Roseland Grove, Doncaster	Ruffey Creek	SBO2	5, 7, 8	The submission states that the Council's drainage system is inadequate and that Council should upgrade the system rather than impose an SBO. Council allocates approximately \$2 million annually to the upgrade of its underground stormwater	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					drainage system. These works are prioritised based on the frequency and extent of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor areas above the major storm flood level. The submission also mentions "Water Supply System Charge, Sewerage System Charge" however these are payable to the relevant Water Authority and not Council, who are responsible for stormwater drainage but not sewerage (sanitary drains) or water supply. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
353.	36-44 Rainbow Valley Road, Park Orchards	Mullum Mullum Creek	SBO2	2, 7, 11	The flood shape is consistent with the topographical features of the property. The submission questions the value of applying an SBO largely over an easement. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under certain conditions, development in close proximity to property boundaries or within easements may be permitted in some cases. The review has confirmed the surrounding topography and drainage assets. In this case, the incursion is considered to be significant and amendment is not	Νο

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					recommended as it would hinder the ability to consider flow paths during future development of the site. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
354.	441 Serpells Terrace, Donvale	Mullum Mullum Creek	SBO1	2	The property is adjacent to a Melbourne Water main drain (Hunt Street Drain). Melbourne Water agrees the building is not subject to flooding, only inundation at the front of the property. The overlay and levels at the front of the property have been reviewed and it is agreed that flooding of the area at the front of the property between the driveways in a 1 in 100 year event is unlikely. It is proposed to reduce the area of the SBO1 shape at the front of 441 Serpells Road accordingly.	Yes. Reduce the area of the SBO1 incursion into the property at the front boundary.
355.	18 Rhonda Street, Doncaster	Koonung Creek	SBO3	5, 7, 8, 14 Does not apply to Eastern Golf course. Inconsistent.	The submission states that the Council should upgrade the drainage system rather than imposing the SBO. Council allocates approximately \$2 million annually to the upgrade of its underground stormwater drainage system. These works are prioritised based on the frequency and extent of flooding of habitable floor areas. It is not feasible for Council to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor areas above the major storm flood level.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The submission also mentions the Eastern Golf Course development site and questions the impact of development on surrounding properties. In terms of storm water discharge from the site. The development site is required to manage the storm water runoff from the site itself and the upstream catchment which extends to Manningham Road and Williamsons Road. At the time of the flood modelling, the drainage system and overland flow paths of the development site had not been finalised and it was deemed appropriate to exclude the site from the exhibited flood shape until completion. It is proposed that surcharge of storm water will exit the site at the same points as the undeveloped site in extreme events. Taking into consideration the capacity of the outlet pipe, any outflow from the site in excess of the pipe capacity will be stored on site and released at a slower rate of flow and will not exceed the predevelopment discharge flow rate as designated by Melbourne Water. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
356.	17-25 Brindy Crescent, Doncaster East	Koonung Creek	SBO3	1, 2, 7, 8, 10	The submission states that the flood shape is implausible due to the topography. A review has found that this isolated finger of ponding affecting 17-25 Brindy Crescent is an	Yes. Remove isolated area of SBO3 ponding from properties 17, 19, 1/21, 21,

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					anomaly and it is recommended to be deleted	23 and 25 Brindy
					from the flood extent.	Crescent and the
						connecting
						section of LSIO
						from Koonung
						Reserve (74
						Wetherby Road)
						to the south.
357.	13 Pamela Street, Warrandyte	Mullum Mullum Creek	SBO2	1, 2, 8	The submission states that the property slopes	No
					down hill significantly from the house and that	
					flooding is not an issue. The SBO shape covers the	
					low lying corner of the property as runoff from	
					Pamela Court flows in a north easterly direction.	
					The footprint of the dwelling is not affected by the	
					flood shape. The submission also questions how houses at a higher elevation can be affected by the	
					overlay but houses at a lower elevation can remain	
					unaffected. The exhibited SBO shape represents	
					the flow of excess runoff over the land, not rising	
					flood water. Based on a site visit the exhibited SBO	
					has been found to be consistent with the terrain	
					and site conditions. The flood shape should	
					remain as exhibited at this location.	
358.	9 Lynnwood Parade,	Ruffey Creek	SBO3	2	The submission correctly states that, due to the	No
	Templestowe Lower				slope of the property, water would run off and not	
					remain flooded. Although the flood shape does	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					not represent standing water, overland runoff or flash flooding is still considered a significant risk. The purpose of the proposed overlays is to ensure that future development is protected from flooding. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
359.	108 McGowans Road, Donvale	Mullum Mullum Creek	SBO2	2, 12	The submission states that, due to the slope of the property and landscaping features such as paved areas, there is no significant impediment to runoff during storm events and that water could not build up to the extent shown by the SBO. Over the last 10 years, the submitter has not observed stormwater overland flow to the extent that the SBO2 defines. Although the submitter may not have experienced runoff to the extent defined by the SBO2, it is possible that a 1 in 100 year event of critical duration has not been observed by the submitter. The flood mapping is based on a 1 in 100 year event of critical duration. A site visit confirmed the flood shape is consistent with site conditions, however based on modelled depths in the area, it is recommended the local extent of the SBO2 affecting 106-108 McGowan's Rd be changed to the designation of SBO3.	Yes. Change SBO2 overlay to SBO3 Change overlay for 106 McGowans to SBO3.
360.	51-53 South Valley Road, Park Orchards	Andersons Creek	Not affected.	2, 3	A review of this property has demonstrated that an overlay is not proposed as part of Amendment C109.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
361.	14 Oak Crescent,	Ruffey Creek	SBO2 &	1, 2, 3	The submission states that the property is near the	Yes.
	Templestowe Lower		SBO3		top of a hill, is sloping, and has not experienced	SBO3 incursion
					flooding in 50 years. The exhibited SBO2 shape is	proposed to be
					representative of the high velocity of runoff during	removed. SBO2
					a 1 in 100 year ARI rainfall event of critical duration	shape is
					due to the terraced nature of the terrain at this	proposed to be
					location which was confirmed during a site visit.	trimmed along
					This type of runoff is still considered a risk and the	the eastern
					overlays will assist in protecting future	boundary.
					development of the site. A meeting was recently	
					conducted involving Council officers and the	
					submitter but no substantive additional issues	
					were raised for resolution. The SBO3 incursion	
					along the street frontage is considered minor and	
					is recommended to be trimmed along the property	
					boundary. The exhibited SBO2 shape is	
					recommended to be retained with the exception of	
					the narrow SBO2 strip along the eastern boundary,	
					which is recommended to be removed.	
362.	48 Lawanna Drive,	Ruffey Creek	SBO2	2, 3, 5, 7, 8,	The submission states that Manningham City	No with respect
	Templestowe			10, 12, 13,	Council should have been aware of the flood risk at	to the exhibited
				14	the time of subdivision.	overlay.
				Retrospectiv	Underground drainage systems are usually	
				e	designed to convey a 1 in 5 year ARI or 20% AEP	In Schedule 3 to
				regulations.	rainfall event, with overland flow occurring once	the Special
				Allowing a	the capacity of the underground drainage network	Building Overlay,
				400mm gap	is exceeded. Since the 1970s improved controls	change the last
				below fences	have been in place that consider overland flow	dot point under
					paths for up to the 1 in 100 year ARI/1% AEP storm	Clause 1.0 Permit

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				will create	event. Australian Rainfall & Runoff was updated in	requirement as
				safety issues.	1987 to reflect updated design practices, with	follows;
					pipes conveying minor flows from a 1 in 5 year	"New fencing
					ARI/20% AEP rainfall event and overland flow	with at least 25%
					paths to safely convey major flows through	openings or with
					residential areas in a 1 in 100 year ARI/1% AEP	a plinth at least
					rainfall event. Councils are not obligated to	400mm above
					upgrade drainage systems in place prior to the new	the natural
					standard from the 1970s/80s, however	surface level".
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas. The flood	
					modelling that underpins the SBO will allow	
					Council to prioritise drainage upgrades in critical	
					areas.	
					The submission also refers to a spoon drain along	
					the property boundary. The spoon drain along the	
					property boundary of No. 50 is not understood to	
					be a Council asset. Private drains have not been	
					modelled as part of the flood mapping study	
					underpinning the proposed SBO as they are not	
					maintained by Council and do not significantly	
					impact the flood extent.	
					In addition, the submission references a brick wall	
					along the property boundary. Individual structures	
					such as this were not modelled individually but	
					their effects on overland flow have been taken into	
					consideration through the adoption of appropriate	
					roughness factors in accordance with industry	<u> </u>

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					practices. The submission also refers to the topographical data used in the flood model. The LiDAR data used in the flood study was captured in 2009 and would reflect improvements at that point in time, including tennis courts and swimming pools. Contours have been interpolated through building footprints in accordance with industry practice. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location. The controls are not considered to be retrospective as they identify land that is currently at risk of flooding in a severe storm event. In respect to the fencing safety issue, it is recommended that the wording in the SBO 3 be amended to include a minor text change to the Schedule to SBO3 to address some potential ambiguity with the controls. Specifically, in Schedule 3 to the Special Building Overlay, it is recommended to change the last dot point under Clause 1.0 Permit requirement as follows: <i>"New fencing with at least 25% openings or with a plinth at least 400mm above the natural surface</i>	
363.	13 Thomas Street, Doncaster East	Koonung Creek	SBO2	1, 3, 6, 7, 8	Ievel". The submission states that the property has experienced several 1 in 100 year storms and that no flooding has been experienced. Without	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					knowing the dates of the events the submitter is	
					referring to it is not possible to ascertain whether	
					or not these storms were actually of 1 in 100 year	
					ARI events of critical duration. Manningham	
					experienced significant flood events in 1991, 1992,	
					2003 and more recently 2011 resulting in	
					inundation and damage to properties across the	
					municipality. The submission also refers to	
					drainage infrastructure that has been upgraded by	
					both Council and Melbourne Water since 1977. A	
					review has found the as-constructed drains have	
					been included in the modelling. Drainage upgrades	
					are typically designed to protect habitable floor	
					areas in major storm events and the fact that	
					upgrades took place does not necessarily remove	
					the risk of flooding during major storm events.	
					Based on the position of the submission property	
					relative to the gully in the area it can reasonably be	
					expected to experience overland runoff in the	
					manner indicated by the SBO. The review has	
					confirmed the surrounding topography and	
					drainage assets. The flood shape should remain as	
					exhibited at this location.	
364.	86 Larnoo Drive, Doncaster	Mullum Mullum Creek	SBO3	8, 11	The submission is correct in identifying that the	Yes.
	East			,	flood shape incursion is minor. The purpose of the	Remove SBO3
					proposed overlays is to ensure that future	from the
					development is protected from flooding. Under	property.
					conditions, development within easement or in an	, , , , , , , , , , , , , , , , , , , ,
					area previously designated as a shared driveway	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
365.	20 Finlayson Street, Doncaster	Koonung Creek	SBO3	1, 11, 12	may be permitted in some cases. Existing properties may be redeveloped in the future and the draft overlay will assist in the assessment of the impacts of any future development. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly. The submission is correct in identifying that the flood shape incursion is relatively minor in terms of the area of the incursion and the percentage of the property area affected. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under conditions, development close to property boundaries may be permitted in some cases. Existing properties may be redeveloped in the future and the proposed overlay will assist in the assessment of the impacts of the flood shape on any future development. In this case, the incursion extends more than 5 metres in to the property and is recommended to be retained.	No
366.	29 Lynnwood Parade, Templestowe Lower	Ruffey Creek	SBO1	2, 8, 11	Very minor flooding. Not considered flooding from Melbourne Water's drainage system. It is recommend the exhibited flood shape be changed so the property is not included in the overlay.	Yes. Remove the SBO1 from the property.
367.	4 Paddys Lane, Park Orchards	Mullum Mullum Creek	SBO3	2	The submission points out that the SBO has been defined by Council as areas prone to overland	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					flooding as a result of the capacity of local or main	
					drains being exceeded in a 1 in 100 year storm	
					event. An argument is then made that, due to	
					there being no Council drainage upstream of the	
					property, the flood shape is in error.	
					Although the submitter is correct in stating that	
					there are no Council drains in Stintons Water	
					Supply Reserve upstream of the submission	
					property, the reference to the capacity of drains	
					being exceeded also encompasses areas without	
					piped drainage networks but for which Council is	
					responsible for providing drainage. A site visit	
					confirmed the topography of the area. Although	
					the flood shape incursion onto the property is	
					minor compared to the size of the parcel, the	
					property may be subdivided in the future and the	
					overlay will assist in assessing the impacts of	
					overland flows on the development. The review	
					has confirmed the surrounding topography and	
					drainage assets. The flood shape should remain as	
					exhibited at this location.	
368.	5 Dilkara Court, Doncaster	Mullum Mullum Creek	LSIO	1, 2, 5	The property is adjacent to Mullum Mullum Creek.	Yes.
	East				Regarding the submission that there "is no	Overlay
					evidence for the past 100years any flooding". It	designation to be
					cannot be assumed that flooding has not	changed from
					previously or will not occur at any given property,	LSIO to SBO3.
					on the basis that there are no records of flooding,	In addition flood
					or flooding to the extent identified by the Land	shapes for 4
					Subject to Inundation Overlay (LSIO). The overlay is	Dilkara and 58-60

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					based upon the extent of overland flows forecast	Larnoo Drive to
					as resulting from a 1 in 100 year Storm event. The	be changed to
					depths of flooding at the rear of the property are	SBO3.
					approximately 4cms to 9cms deep, and if the floor	
					levels of the dwelling are 3000mm (as advised by	
					the submitter) above natural surface, the floor	
					level of the house will be above the modelled flood	
					level. The overlay designation has been reviewed	
					and given that the flows emanate from the local	
					catchment to the west rather than overflow from	
					Mullum Mullum Creek, it is recommended that the	
					overlay designation be changed from LSIO to SBO3.	
369.	22 Russell Street, Bulleen	Bulleen North	SBO1	1, 3, 12	The update modelling has identified that the	No
					property is in an overland flow path. It has been	
					selected as a Melbourne Water parcel so there is	
					only one authority responsible for providing flood	
					advice. The overlay designation has been reviewed	
					and reconfirmed as being appropriate based on the	
					anticipated flood depth, direction of flow, the	
					location of the flood extent relative to Council and	
					Melbourne Water infrastructure and the relative	
					locations of abutting SBO extents.	
					The outcome of the review is that the exhibited	
					flood shape be retained at this location.	
370.	13 Catherine Avenue,	Mullum Mullum Creek	SBO3	2	The submission states that, due to the sloping	No
	Doncaster East				nature of the property, flooding is not a problem.	
					The shape of the SBO at this location suggests	
					overflow from the Council drainage infrastructure	
					along the northern easement flowing down the	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					slight gully and onto the street. This type of flooding is still considered a risk and the overlays will assist in protecting future development. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
371.	7/9 Long Valley Way, Doncaster East	Mullum Mullum Creek	SBO1	14	The ground movement has been reported to Melbourne Water's maintenance team. The overlay designation has been reviewed and reconfirmed as being appropriate based on the anticipated flood depth, direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. The outcome of the review is that the exhibited flood shape be retained at this location. This result has been confirmed through a further review undertaken by Cardno.	Νο
372.	5 Hampden Court, Templestowe	Ruffey Creek	SBO2	2, 4, 12	The submission states that remodelling is necessary as the flood shape shows flood in the dwelling which has never occurred. In addition, the submission states that the flood shape does not accurately represent the landscape and structures and does not reflect experiences of runoff due to a blocked drain along the eastern boundary. A desktop review and site visit has found the flood shape is consistent with topographical contours with overflow from Caprice Court flowing in a	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					southerly direction. The submitter's experiences of	
					flooding due to a blocked Council drain are not	
					reflected in the model as the assumption is made	
					that drains are operating at capacity. Assuming	
					blockages would result in the flood shape being	
					more extensive than shown. The modelling is	
					undertaken to identify flood prone land, not	
					whether dwellings are flooded above floor level.	
					Terrain data is interpolated through building	
					footprints and appropriate surface roughnesses	
					applied in the model to represent the effect of	
					buildings on surface runoff. The extent of SBO2 is	
					significant and should redevelopment of the	
					property occur it is important to ensure the	
					overland flow paths during major storm events are	
					considered in an appropriate way. The review has	
					confirmed the surrounding topography and	
					drainage assets. The flood shape should remain as	
					exhibited at this location.	
373.	27 Hillcroft Drive,	Ruffey Creek	SBO1	1, 2, 11	The property is located adjacent to a Melbourne	No
	Templestowe				Water main drain (Greenridge Avenue Drain) and	
					the applicable flood level for the property is 55.71	
					metres Australian Height Datum(AHD) for a 1 in	
					100 year storm event.	
					Regarding the issue the submitter has "never had	
					any flooding issues", it cannot be assumed that	
					flooding has not previously or will not occur at any	
					given property, on the basis that there are no	
					records of flooding, or flooding to the extent	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					identified by the Special Building Overlay (SBO). The SBO is based upon the extent of overland flows that would result from a 1 in 100 Storm Event. The inundation at the top portion of the property is part of the overland flow path, not rising up from the main drain. The review has confirmed the surrounding topography and drainage assets. The flood shape	
374.	84 Deep Creek Drive, Doncaster East	Mullum Mullum Creek	SBO3	2, 6	should remain as exhibited at this location. Overall, the flood shape is consistent with the site conditions except the pipes of new development at the backyard. The drainage pipes installed as part of the Canowindra development were not Council assets at the time of modelling and will therefore be considered as part of a future planning scheme amendment. The outcome of the review is that the exhibited SBO remain at this location.	No
375.	5 Darren Rise, Doncaster East	Mullum Mullum Creek	SBO2	2	The submission states that flooding is most unlikely at the submission address due to the elevated nature of the property. The flood shape at this location represents runoff from surrounding elevated areas flowing through the submission property and onto Darren Rise. The submission property has a slight gully which collects shallow runoff. Although the property is elevated, it has a reasonably large upstream catchment and this contributes to the flood shape. A site visit has confirmed the topography and	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					drainage assets. It is recommended the flood	
					shape be retained at this location.	
376.	7 Ardgower Court,	Ruffey Creek	SBO3	2	The submission refers to the elevated nature of the	No
	Templestowe Lower				property and states that it would be impossible for	
					floodwaters to rise that high without inundating	
					the surrounding areas.	
					The flood shape incursions at this location form	
					within the property (the upstream extent) and flow	
					out of the property and towards Ruffey Creek. It	
					does not represent rising water from the Creek.	
					The elevated nature of the property was confirmed	
					during a site visit. Although the incursions are	
					around the edges of the property, if the property is	
					redeveloped in the future it would be appropriate	
					for the overland flow path to be considered, and	
					the incursions are considered to be significant	
					based on area (more than 30 m2). The review has	
					confirmed the surrounding topography and	
					drainage assets. The flood shape should remain as	
					exhibited at this location.	
377.	27 Ferndell Crescent,	Ruffey Creek	SBO2	1, 3, 7, 8	The submission states that no flooding has been	No
	Templestowe				recorded in the area or on the property.	
					The property is located in an area which is prone to	
					flooding during major storm events due to the	
					topography and large upstream catchment.	
					Council has records of complaints of flooding in the	
					area. It is possible the submitter has not	
					experienced a 1 in 100 year ARI storm of critical	
					duration, or is referring to the house never	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
270					flooding above floor level. The SBO identifies flood prone land, not specifically where dwellings have flooded above floor level. In addition, the submission questions why drains have not been upgraded if flooding is an issue. Council cannot build a drainage system that can cope with all storm events. Typically, underground drainage systems are designed to minor storm event standards in accordance with industry practices. A site visit has found that the flood shape is consistent with the site conditions and should be retained as exhibited.	
378.	8 Montclair Court, Templestowe	Ruffey Creek	LSIO	1, 2, 5, 8	The existing street and easement drainage system is only capable of catering for the 1 in 5 ARI storm. The roadway and overland flood paths can assist in conveying the additional stormwater runoff generated in the 1 in 100 ARI event, affecting properties on the low side of Montclair Court. It has been agreed with Melbourne Water that the flood shape designation within the property be amended to SBO3 from the exhibited designation of LSIO. The overlay should remain, but it is recommended that the LSIO overlay be changed to SBO3.	Yes. The overlay should remain but should be changed to SBO3.
379.	183-191 Tindals Road, Donvale	Mullum Mullum Creek	SBO3	2, 4, 7, 8	The mains points of the submission relate to the adequacy of drainage maintenance in the area. In general, pit clearing and maintenance is undertaken on a 12 monthly basis throughout the municipality. Targeted or additional maintenance is	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					carried out where required upon request. Due to the modelling being undertaken on the assumption that the drainage network is operating at capacity, this is a separate issue to the extent of the flood shape. The results of the flood mapping have been used to identify potential drainage upgrades. Council is working through a process to prioritise future capital improvement works. The review has confirmed the surrounding topography and drainage assets. Analysis of the modelling results was undertaken and it was found that the majority of flood waters in the subject property are generated from the property itself and that directly to the north. There is a small catchment from the road as well. However, site photos show that the water will still enter the properties through driveways and low points of the kerb and channel. The flood shape should remain as exhibited at this	
380.	3 Moresby Avenue, Bulleen	Koonung Creek	SBO3	2	location. The submission states that the property has been inaccurately represented in the flood modelling due to the location of the property and the fact that lower lying areas are not flooded. The flood shape is representative of shallow runoff concentrated from uphill. Immediately downhill from the submission property, the flood shape is largely restricted to the roadway which prevents lower properties from experiencing an incursion from the flood shape. A desktop review and site	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					visit has found the flood shape to be consistent with site conditions and the flood shape should be retained at this location.	
381.	6 Raymond Elliot Court, Park Orchards	Mullum Mullum Creek	LSIO	1, 2	The flood mapping is based on a 1 in 100 year ARI flood event. Although the submitter reports that they have not witnessed overland flows through the property in the last 16 years, it is unlikely that an event of this magnitude has affected the property in that time. The underground drainage system in the vicinity of the property is suitable for minor flows and in a major storm event, overland flows would be expected. The mapped topography and drainage system are consistent with the mapped flood extents. The two minor LSIO extents which intrude into 6 Raymond Elliot Court along the south-eastern boundary are recommended for removal as they meet the minor incursion criteria. Review of the flow depths for the remaining flood extent at the northern end of the property indicates that this flood extent can be converted to SBO2. These changes have been agreed with Melbourne Water.	Yes. The two minor LSIO extents which intrude into 6 Raymond Elliot Court along the south- eastern boundary to be removed. Convert the flood extent at the northern end of the property from LSIO to SBO2.
382.	3 Orchid Court, Park Orchards	Andersons Creek	SBO2	2, 11	The submission is correct in identifying that the flood shape incursion is minor. The purpose of the proposed overlay is to ensure that future development is protected from flooding. Under certain conditions, development within the easement or in an area previously designated as a shared driveway may be permitted in some cases.	Yes. Remove the SBO2 from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					Existing properties may be redeveloped in the future and the draft overlay will assist in the assessment of the impacts of any future development. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly.	
383.	327 Tindals Road, Warrandyte	Mullum Mullum Creek	SBO3	1, 2	The submission claims the flood modelling has given no consideration to existing contours and at no point has runoff occurred in the way indicated by the SBO. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. A desktop review followed by a site visit generally confirmed the current terrain, with the property located below the level of the road and falling quite steeply. Although the property is near the top of the catchment, modelled flood depths are shallow (between 50 mm and 100 mm). The slope of Tindals Rd and the fact that the property is located below road level suggest runoff during major storm events could reasonably be expected to occur. The review has confirmed the surrounding topography and drainage assets. The driveway has a 300 mm diameter pipe under the entrance. The catch drain flowing to this point is represented within the hydraulic model but the 300 mm diameter pipe	Yes. Parts of the overlay will be removed within this property.

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					under the driveway has not been included. As a result the catch drain flows into the site within the model whereas in reality it would continue to the easement to the east. In addition, an issue with the LiDAR data over the tennis court, together with consideration of the effects of the driveway culvert warrant removal of the SBO shape over the tennis court. The flows will not come down the driveway of the property, or across the tennis court. The flood shape will however remain along the property boundary to the south, in accordance with the attached plan.	
384.	5 Sturdee Road, Donvale	Mullum Mullum Creek	SBO2	5, 6, 8	The submission objects to the amendment predominantly from a property development perspective. A desktop review has found the flood shape incursion along the rear of the property is consistent with the topography and Council drainage infrastructure. Although the incursion represents a small portion of the submission property, it covers a large proportion of the flood width at this location and trimming would result in a disconnect from the flood shape. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
385.	6 Kyrenia Court, Warrandyte	Mullum Mullum Creek	SBO2	1, 2, 4, 8, 9	The intent of the overlays is to ensure future development is undertaken in a way that considers flooding risks. The submission states that no development will occur at the bottom of the valley	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					on the property. It cannot be certain that future	
					developments will not be undertaken on the	
					affected rear area and this is not a valid basis for	
					amendment of the flood shape. Although the	
					submitter states that minor flooding is likely to	
					occur in adjacent properties due to the current	
					drainage system, it must be noted that Council's	
					drainage system is typically for a 1 in 5 year event,	
					with flows in excess of the pipe system travelling	
					overland. The SBO is based on a 100 year ARI	
					event, therefore it cannot be certain that the	
					property is not flood prone during a 100 year ARI.	
					The flood extent is significant at this location and,	
					based on a site visit and desktop review, runoff	
					during major storm events can reasonably be	
					expected to occur in the manner indicated by the	
					SBO. Removal of the SBO would compromise the	
					integrity of the flood shape at this location. The	
					review has confirmed the surrounding topography	
					and drainage assets. The flood shape should	
					remain as exhibited at this location.	
386.	25 Ferndell Crescent,	Ruffey Creek	SBO2	1, 7, 8	The submission states that no flooding has been	No
	Templestowe	,			experienced and it is unreasonable to apply the	
					SBO. Although the submitter may not have	
					experienced flooding it cannot be certain that the	
					property is not flood prone during a 100 year ARI,	
					due to the position of the property relative to the	
					terrain (within a defined gully) and the size of the	
					upstream catchment. The review has confirmed	

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					the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location. Removal of the SBO would compromise the integrity of the SBO flood shape in its entirety.	
387.	13 Alfreda Avenue, Bulleen	Koonung Creek	SBO2	3, 7, 8	The submitter has noted past events of minor flooding which is an indication that the property is prone to flooding along the rear boundary. The previous drainage upgrade undertaken in 2008/2009 involved the installation of a 1200mm dia underground drain to the rear of 1 Alfreda Avenue but did not continue up to 13 Alfreda Avenue. As a result, the previous drainage upgrade does not appreciably affect the SBO2 shape at the rear of 13 Alfreda Avenue. Although drainage upgrade has been modelled, it is not feasible to eliminate the overland flow impacting 13 Alfreda Avenue. The SBO is consistent with the topography, size of upstream catchment and drainage infrastructure and is recommended to be retained.	No
388.	16 Hillcroft Drive, Templestowe	Ruffey Creek	SBO1	1, 2, 7, 8	The property is located adjacent to a Melbourne Water main drain (Greenridge Avenue Drain) and the applicable flood level for the property is 61.23 metres Australian Height Datum(AHD) for a 1 in 100 year storm event. Regarding the issue the submitter has "never observed floodwaters", it cannot be assumed that flooding has not previously or will not occur at any given property, on the basis that there are no records of flooding,	Yes. It is recommended that the flood shape be retained but the overlay designation be

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					or flooding to the extent identified by the Special	changed from
					Building Overlay (SBO). The SBO is based upon the	SBO1 to SBO3.
					extent of overland flows that would result from a 1	
					in 100 Storm Event which has a 1% chance of	
					occuring in any given year. The flood mapping is	
					also not suggesting "water will climb a hill yet not	
					pool on lower elevations" this is an overland	
					flowpath between Council flooding (SBO3) and the	
					Melbourne Water main drain. The overlay extent	
					has been reviewed and reconfirmed as being	
					appropriate based on the direction of flow, the	
					location of the flood extent relative to Council and	
					Melbourne Water infrastructure and the relative	
					locations of abutting SBO extents. Review of the	
					associated flow depths has however resulted in a	
					recommendation to amend the overlay	
					designation for this property from SBO1 to SBO3.	
389.	40 Ross Street, Doncaster East	Koonung Creek	SBO2	7	The submission raises concerns about the overlay	No
					devaluing the property. A review has found the	
					flood shape is consistent with the topography and	
					drainage assets at this location and it would	
					compromise the integrity of the flood shape in this	
					area to remove the SBO from the property. The	
					review has confirmed the surrounding topography	
					and drainage assets. The flood shape should	
					remain as exhibited at this location.	
390.	4 Hallifax Court, Doncaster	Mullum Mullum Creek	SBO3	1, 2, 4	The submitter states that pit overflow would not	No
	East				result in runoff through the submission property.	
					There is a Council drainage pit outside the	

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					submission property and the property slopes to the east. A desktop review and site visit has confirmed that overflow from this pit during major storm events could reasonably be expected to cut through the corner of the submission property and flow through the neighbouring property at a lower elevation towards Larkin Court. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
391.	6 Veda Court, Templestowe	Ruffey Creek	SBO3	2,7	The submission claims that the contours of the land have not been taken into consideration. A review has found the flood shape to generally be consistent with the topographical features of the land. The model has used LiDAR data to create the ground surface. This data as well as contour data and site photos were analysed against the proposed flood extent. It was found that the modelled surface generally seems to match well with the surface and results. The main overland flow path is through the rear of the property as expected. However, a small tinning issue has been picked up in the centre of the property near the house, and it is recommended that this area be trimmed out of the extent.	Yes. Trim and remove part of the SBO3 extent from the property. In addition remove SBO3 from 269, 271, 275 and 277 Church Rd.
392.	2 Eumeralla Avenue, Templestowe Lower	Ruffey Creek	LSIO	7	The flood depths on the southern portion of the property range from approximately 5cms to 34cms and on the northern portion from approximately 5cms to 14cms. These are depths in a 1 in 100 year	Yes. Remove a section of the southern SBO shape.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					storm event and Melbourne Water does not agree with the statement "I do not believe this lot of my property is suitable for residential anymore" The update of the overlays is not intended to prohibit future development, but to ensure that any new development is referred so that drainage, floodplain Management and environmental issues can be addressed early in the planning process. Following the interview with the Submitter in March 2017, Cardno were engaged to further review the overlay impacting the property. Based on the foregoing, it is recommended that a small section of the southern flow path be removed from the overlay as indicated in the attached plan. The northern flow path follows the low points of the terrain as confirmed by the site visit and thus it is recommended that this shape remain unchanged. As the flooding on this property is caused by flow from upstream catchments and not from backwaters from Ruffey Creek, it is recommended that the overlays be changed from LSIO to SBO. It is recommended that the northern flow path be changed to SBO3 and the southern flow path be	Change the southern SBO shape to SBO2 and the northern SBO shape to SBO3.
393.	38 Fyfe Drive, Templestowe Lower	Ruffey Creek	SBO2	2, 3	changed to SBO2. The submission states that the property is sloping, has not experienced flooding and the drainage on the street was upgraded.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The flood shape at this location represents runoff from the south east, in particular overflow from the easement drain along the rear of the property. The property is upstream from Fyfe Drive and so the drainage upgrade does not make a difference to the flood shape on the property. The upgrade was undertaken to service the overflow from the north side of the road. If cannot be certain the experienced rainfall event was a true 1 in 100 year ARI of critical duration as no details were provided. In any case, the flood shape is consistent with the topography and Council drainage assets and is recommended to be retained at this location. The upgraded drainage pipes of Fyfe Drive are to be	
394.	14 Hillcroft Drive, Templestowe	Ruffey Creek	SBO1	1, 2	included in a future review of the modelling. The property is located adjacent to a Melbourne Water main drain (Greenridge Avenue Drain). Regarding the issue the submitter has "never observed floodwaters", it cannot be assumed that flooding has not previously or will not occur at any given property, on the basis that there are no records of flooding, or flooding to the extent identified by the Special Building Overlay (SBO). The SBO is based upon the extent of overland flows that would result from a 1 in 100 Storm Event which has a 1% chance of occurring in any given year. The flood mapping is also not suggesting "water will climb a hill yet not pool on lower elevations" this is an overland flowpath between	Yes. It is recommended that the flood shape be retained but the overlay designation be changed from SBO1 to SBO3.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					Council flooding (SBO3) and the Melbourne Water main drain. The overlay extent has been reviewed and reconfirmed as being appropriate based on the direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. Review of the associated flow depths has however resulted in a recommendation to amend the overlay designation for this property from SBO1 to SBO3.	
395.	33 Lynnwood Parade, Templestowe Lower	Ruffey Creek	SBO1	2, 8	The property is located in the vicinity to a Melbourne Water main drain (Montpellier Crescent Drain). The LiDAR and contour surface data as well as site photos were analysed which indicate that there have been thinning issues with the removal of the buildings on a steep slope. This has likely created several localised low points which have led to misleading flood modelling results. It is therefore recommended to remove the SBO on 33 Lynnwood Parade.	Yes. Remove SBO1 from property.
396.	1 Peter-Budge Avenue, Templestowe	Ruffey Creek	SBO2	2, 3, 5, 7, 8	The submission refers to recent upgrades of Council drainage infrastructure at this location. A review has found this work encompassed miscellaneous works to the pits and no upgrade of the main drain along this alignment was undertaken. This drain is the limiting factor in system capacity at this location and the model indicates this pipe is running full during the modelled 1 in 100 year storm event.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
397.	17 Glenda Street, Doncaster	Koonung Creek	SBO3	1, 2, 7	The submission also states that any further upgrades should be undertaken in the adjacent Reserve to minimise disturbance. Underground drainage systems are typically designed for a 1 in 5 year ARI with excess flow occurring overland. Council has a policy to prioritise drainage upgrades to alleviate flooding of habitable floor areas in a 1 in 100 year ARI flood event. There are records of flooding in the backyard at this location which support the application of the SBO in this area. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location. The submission states that no flooding has been experienced at this location. Although the resident	Yes Remove SBO3
					may not have experienced flooding, it cannot be certain that the property is not flood prone during a 1 in 100 year ARI event of critical duration. A site visit confirmed site conditions are consistent with the flood shape and it is recommended to retain the flood shape at this location. CARDNO Consultants site visit showed the presence of a catch drain in the footpath that had not been picked-up in the resolution of the model. As flooding on the footpath is only approximately 0.02m, the catch drain should be adequate to convey this nuisance flooding down Glenda Street instead of entering the subject properties. Due to the shallow flood depths along the road, it is also	from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					recommended to remove this flood extent as well. Council officers agree with this assessment, the SBO shape can be removed from this property.	
398.	10 Larne Avenue, Donvale	Mullum Mullum Creek	SBO2	2, 8, 11, 12	The submission claims that the terrain data used in the modelling is outdated. The LiDAR terrain data used in the modelling was captured in 2009 and represents the most recent and complete data available for flood modelling in this area. A site visit has confirmed that the modelled contours are consistent with the terrain with a defined gully running along the south west corner of the property. Due to the size of the upstream catchment it is considered the width of the SBO is an appropriate representation of the critical duration 1 in 100 year ARI storm event. Altering the SBO would compromise the integrity of the SBO and removal would result in discontinuity of the flood extent. The review has confirmed the surrounding topography and drainage assets. However, a review of the modelled overland flow characteristics supports review of the SBO designation from SBO2 to SBO3.	Yes. Change the designation of the SBO from SBO2 to SBO3. Change designation from SBO2 to SBO3 for 6 Larne, 6 Selsdon, and 9 Murndal. Delete southern section of SBO3 from 5 Selsdon. Amend part of SBO2 to SBO3 at 11 Murndal
399.	14 Dellfield Drive, Templestowe Lower	Ruffey Creek	SBO3	2, 3, 11	The submission states that the open channel along the rear of the property in the school grounds is large enough to convey the 1 in 100 year ARI runoff and has provided calculations. Although conservative in that they ignored the presence of underground drainage pipes,	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					calculations provided in the submission have underestimated the catchment size by about half and seem to have overestimated the size of the open channel, based on the photos provided. It is highly unlikely that the channel would convey close to 3000 L/s of water. While the incursion is less than 30m2 and represents less than 6% of the property area, it intrudes more than 5 metres on to the property and its removal would have a significant impact on the connectivity of the flood shape. It is recommended that the flood extent for this property be retained accordingly.	
400.	94 Thompsons Road, Bulleen	Koonung Creek	SBO3	2	The submission correctly states that the property is in an elevated area. The flood shape is consistent with the topographical contours and Council drainage infrastructure. The rear of the property is reasonably expected to be flood prone as the south boundary is within a defined gully. The overlay is significant in that the removal of the SBO would result in discontinuity of the flood extent. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
401.	9 Kyrenia Court, Warrandyte	Mullum Mullum Creek	SBO3	2, 5, 7, 8, 11	The submission states that the proposed overlay is an unnecessary duplication of the existing encumbrance of the easement that exists on the property. Under certain conditions, development in close proximity to property boundaries, or within easements may be permitted in some cases.	Yes. Trim and reduce the SBO3 shape.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The existence of an easement is not a valid basis for amendment of the flood extent. The submission also states that Council should upgrade drains on Tindals Road. The flood modelling will allow prioritisation of drainage upgrades, with preference given to alleviating flooding of habitable floor areas. The review has confirmed the surrounding topography and drainage assets. The 'bump' in the flood shape toward the front boundary has been caused by issues with thinning of the tin. Similarly, the flow path defined by the model grid at the rear of the property is larger than the area expected to be flooded during the 1 in 100 AEP event, based on the on ground site inspection and measured width of the easement low point. It is recommended that the SBO3 shape for this property be reduced as shown on the attached plan.	
402.	207-227 Serpells Road, Templestowe	Mullum Mullum Creek	SBO2	2, 10	The submission states that the proposed overlay is unnecessary due to the fact that it corresponds to a dam on the property and all runoff within the property is generated by the site itself with no further upstream catchment. In addition, the submission states that any future development of the site would be required to manage stormwater flows. Although this is the case, the intent of the proposed SBO is to identify flood prone land in order to ensure future development is undertaken	No

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					in a way that considers the overland flow path. Removing the SBO would compromise the integrity of the flood shape in this area and hinder Council's ability to ensure redevelopment of the site occurs in an appropriate manner. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
403.	29 Montpellier Crescent, Templestowe Lower	Ruffey Creek	SBO2	1, 2	The submission states that due to the position of the property on the high side of the street it would be physically impossible to flood. Although the property is indeed elevated from street level, the flood shape at this location represents collective runoff from the upstream catchment to the rear of the property (south east) which reaches the required combination of depth, velocity and duration to be defined in the flood shape. This runoff flows onto Montpellier Crescent. A site visit has confirmed the flood shape is consistent with the site conditions and it is recommended to retain the flood shape at this location.	No
404.	4 Wonuka Court, Doncaster East	Ruffey Creek	SBO3	1, 2, 5, 8	The submission queries the modelling undertaken which underpins the SBO. This has been completed in recent years by Melbourne Water and Council using the Tuflow software package based on the Rainfall on Grid (ROG) methodology. The terrain is modelled using LiDAR data which represents the most detailed and recent data available for this	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
NO.				submissions	type of modelling. Existing Council and Melbourne Water drains were also incorporated into the modelling. Rainfall is applied to the terrain in the model which calculates the resultant overland flow in excess of the drainage system. Underground drainage systems are typically designed for a 1 in 5 year ARI event, with flows in excess of the pipe system travelling overland. The SBO is based on a 1 in 100 year ARI event of critical duration. Although the resident may not have experienced flooding in the past, it is possible that the submitter has not been at the property during a 1 in 100 year ARI storm event of critical duration. Due to the proximity of the subject property to the flood extent it is reasonably expected to be flood prope	Amendment
405.	18 Speers Court, Warrandyte	Mullum Mullum Creek	SBO3	2, 3, 12	extent it is reasonably expected to be flood prone as it is located within a defined valley. A further review following a recent meeting with the submitter has confirmed the surrounding topography and drainage assets and the previous investigation findings. The SBO shape should remain as exhibited at this location. The submission states that the SBO is inconsistent with drainage patterns on the property and refers	No
					to infrastructure constructed on the property and refers property which have managed flows. Although it may be the case that the submitter has not experienced runoff since the garage on the neighbouring property has been constructed, it cannot be said that this has removed the risk of	

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					runoff during a 1 in 100 year ARI storm of critical duration. In addition this private infrastructure has not been modelled as it is not considered to significantly impact the flood shape during major events and may be subject to change without Council having control over it. The flood shape is consistent with the topography of the land and existing Council drainage infrastructure and is recommended to be retained at this location.	
406.	160 Bulleen Road, Bulleen	Koonung Creek	LSIO	2, 10	This LSIO is not connected to any flow path and doesn't add any value in terms of flood risk mitigation. Melbourne Water recommends that the isolated LSIO flood shape at the eastern side of the property be removed from the exhibited overlay.	Yes. It is recommended to remove the exhibited isolated LSIO from the eastern side of the property.
407.	288 Church Road, Templestowe	Ruffey Creek	SBO2	1, 2, 8, 10	The submission states that no flooding has been experienced despite witnessing several significant storm events. Although the resident may not have experienced flooding, the property may not have experienced a 100 year ARI storm event of critical duration. The review has confirmed the surrounding drainage assets. The modelling results were analysed along with the LiDAR and surface contour data. The results are indicating that water is surcharging from the Council drain which runs along the back of the property when it's capacity has been exceeded. It is noted that the flooding	Yes. Delete SBO2 from the property. In addition delete SBO2 from 3, 5 and 7 The Grange.

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					here does not seem to follow the likely path and	
					has been caused by some tinning issues with the	
					LiDAR due to the heavy vegetation. It is unlikely	
					that water will pool in the locations identified and	
					as such it is recommended that the extent be	
					removed from 288 Church Road.	
408.	6/2 Everard Drive, Warrandyte	Andersons Creek	SBO2	3, 4, 7, 11, 13	The submission states that the only time the area	No
					receives runoff from Yarra St is when Council fails	
					to maintain the drains outside the property. The	
					description of previous runoff patterns are	
					consistent with the application of the SBO at this	
					location. The property is subdivided with 7 units.	
					The SBO shape affects the common property and	
					follows Everard Drive which has a low point at this	
					location and is below the level of Yarra St. Due to	
					the modelling being undertaken on the assumption	
					that the drainage network is operating at capacity,	
					this is an issue separate to the extent of the SBO	
					shape. Should the modelling be undertaken with	
					pits partially blocked, the flood shape would be	
					even more extensive than that indicated by the	
					SBO. The flood shape is consistent with the	
					topography and drainage patterns in the area and	
					should be retained. No additional issues affecting	
					the proposed SBO were raised during the meeting.	
409.	95-97 South Valley Road, Park	Andersons Creek	SBO2 &	1, 11	The submission states that no flooding has been	No
	Orchards		SBO3		experienced since 1988. It is possible the submitter	
					is referring to floor levels not being flooded, as the	
					defined gully on the property is expected to	

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					experience significant runoff during major storm events. The overlay designation is SBO2 rather than the LSIO referred to in the submission and represents overland runoff to the west due to flash flooding rather than rising or standing water. There is a small portion of the flood shape designated as SBO3 but in the context of the SBO2 overlay, the SBO3 overlay is not supported for removal. The submission also argues that the presence of the easement over the gully makes the SBO superfluous, however this is not considered a valid basis for amendment as, under conditions, redevelopment may occur in areas currently encumbered with an easement. No issues warranting further review of the SBO2 overlay affecting this property were raised at a recent meeting with the submitter. It is recommended that the SBO2 overlay be adopted as exhibited.	
410.	66 Beecroft Crescent, Templestowe	Ruffey Creek	SBO2	2, 3, 11, 12	The submitter questions the title boundary and states that the topographical data does not reflect the retaining wall on the property. A review has found the flood shape to be representative of the site conditions, however due to the minimal nature of the incursion it is not considered to provide significant planning or risk mitigation benefits and is recommended to be deleted from the property.	Yes. Remove the SBO2 incursion from the property.
411.	62 Old Warrandyte Road, Donvale	Mullum Mullum Creek	SBO2	2, 7, 8	The sewerage upgrades mentioned in the submission are not related to the stormwater	No

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					drainage network and have no effect on the SBO. A review has found the flood shape is consistent with the topography and drainage assets at this location and it would compromise the integrity of the flood shape in this area to remove the SBO from the property. It is recommended that the SBO2 shape remain as exhibited at this location.	
412.	49 Ashford Street, Templestowe Lower	Ruffey Creek	SBO3	1, 2	The SBO extent fulfils the minor incursion criteria of less than 30m2 and 6 %, and amending the flood extent would not cause a disconnect in the flood shape at this location. The flood shape is to be amended accordingly.	Yes. Remove the SBO3 incursion from property.
413.	17 Sheahans Road, Templestowe Lower	Bulleen North	SBO3	1, 2, 12	The submission correctly states that flooding of the property could not occur from the drains on Sheahans Road. In this case, the flood shape is representative of overland flow from the east, with a retaining wall and underground level of the dwelling contributing to the significant velocity of runoff. There is underground Council drainage infrastructure to the north east, with shallow overflow reaching the required combination of depth, velocity and duration to define the flood extent at this location. The submission also states that properties that do not have Council drainage infrastructure within their boundaries shouldn't have an SBO. The SBO identifies flood prone land, and it is important to retain the integrity of the flood shape as representative of the overland flow path regardless	No

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					of the location of Council drains. A site visit has confirmed the topography of the property and surrounding area and thus, the flood shape is recommended to be retained at this location.	
414.	37 Ross Street, Doncaster East	Koonung Creek	SBO2	6, 10	The submission states that the property was purchased with the understanding the Council drainage system was adequate. Underground drains are typically designed to cater for minor storm events, with flows in excess of the pipe system travelling overland. The SBO is based on a 100 year ARI event in accordance with industry practices. Development areas have been and are being managed with other policies/measures other than the SBO overlay for example, On Site Detention systems and continual improvement of capital works. Following the meeting held with the submitter in 2017, Cardno were engaged to review the SBO and submission. The flood shape is significant in this location. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
415.	5 Kyreli Close, Donvale	Mullum Mullum Creek	SBO2	1, 2, 12	The submission states that no damage to the property has been experienced during heavy rainfall events in the past. The fact that the resident has not experienced damage during heavy rainfall events does not necessarily mean that the property is not flood prone in a 100 year ARI. The submission also correctly states that the dwelling is	No change to 5 Kyreli Close, however, convert SBO2 shapes at 6 Kyreli Close and 233 Tindals Road

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					situated on the high side of the property. The southwest boundary of the property lies within a defined valley which was confirmed during a site visit. The overlay within the property is significant and removal of the SBO would result in discontinuity of the flood extent. Site photos show that the property is located significantly lower than Reynolds Road and Kyreli Close. The flood extent shows that the garage would be inundated in the 1 in 100 year event but not the house itself. This seems like a relatively accurate representation of the flood event. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	from SBO2 to SBO3
416.	5 Kiandra Court, Doncaster East	Ruffey Creek	SBO3	1, 2, 7, 8	The submission correctly states that the property is in an elevated area. The flood shape is consistent with the local topography and Council drainage infrastructure. As the incursion meets the minor incursion criteria, it is recommended that the SBO shape be removed.	Yes. Delete SBO3 shape.
417.	19 Glenda Street, Doncaster	Koonung Creek	SBO3	1, 2, 7, 8, 12	The submission argues that the flood shape at the property represents an anomaly in the modelling and that there is brick fence that would act as a barrier to runoff. Shallow runoff occurs through the property in a north westerly direction due to the property being below the level of the roadway and situated in a low point of Glenda St between Menarra St and Ayr St. The brick wall mentioned in	Yes. Remove the SBO3 shape.

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					the submission has been confirmed however	
					private structures such as fences, retaining walls	
					etc. have not been modelled individually as they	
					are subject to change. Consideration has been	
					given to the impacts of such structures on the	
					mapped flood extents through the application of	
					surface roughness factors in the model in	
					accordance with industry practices. The site visit	
					however found a catch drain in the footpath that	
					had not been picked-up in the resolution of the	
					model. As flooding on the footpath is only	
					approximately 20mm in depth, the catch drain	
					should be adequate to convey this nuisance	
					flooding down Glenda Street instead of entering	
					the subject properties. It is recommended that the	
					SBO be removed accordingly.	
					Council officers agree, the shallow flows can be	
					handeled by the drain and the SBO shape can be	
					removed from these properties.	
418.	21 Glenda Street, Doncaster	Koonung Creek	SBO3	1, 2, 7, 8	The submission argues that the flood shape at the	Yes.
					property represents an anomaly in the modelling.	Remove the
					Shallow runoff occurs through the property in a	SBO3 shape.
					north westerly direction due to the property being	
					below the level of the roadway and situated in a	
					low point of Glenda St between Menarra St and	
					Ayr St. A site visit confirmed that the flood extent	
					is consistent with site conditions. The review has	
					confirmed the surrounding drainage assets. The	
					site visit showed the presence of a catch drain in	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
419.	6 Dale Street, Bulleen	Koonung Creek	SBO2	2, 3, 7, 8	the footpath that had not been picked-up in the resolution of the model. As flooding on the footpath is only approximately 20mm in depth, the catch drain should be adequate to convey this nuisance flooding down Glenda Street instead of entering the subject properties. Due to the shallow flood depths along the road, it is also recommended to remove this flood extent as well. The submission recollection of historical flood events of water pooling is consistent with the flood overlay along Dale St. It must be noted that the SBO is based on a 100 year ARI event of critical duration. Although the drains in the area were upgraded in the last 20 years, it is possible that the upgrade works have protected the house from inundation in a 1 in 100 year ARI storm event but overland flows will still pass through the property in a major storm event. The flood shape encroaches over the current dwelling footprint however the SBO defines flood prone land, not specifically where dwellings have flooded above floor level. The SBO shape is consistent with the topography of the area and the fact the property is within a valley in the terrain. The SBO shape is recommended to be retained but the designation is recommended to be changed from SBO2 to	The SBO shape is recommended to be retained but the designation is recommended to be changed from SBO2 to SBO3. The SBO designation is recommended to be changed from SBO2 to SBO3 for 4, 8 and 10 Dale Street.
420.	4 Conway Avenue, Donvale	Mullum Mullum Creek	SBO3	1, 2, 5, 7, 8, 11	SBO3. The property contains a minor incursion of the flood shape that is not considered to provide	Yes

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					significant planning or risk mitigation benefits. The overlay is recommended to be deleted from the property.	Remove the proposed SBO3 incursion
421.	50 Millicent Avenue, Bulleen	Koonung Creek	SBO2	2	The SBO incursion fulfils the minor incursion criteria of less than 30m2 and 6% of property area. The overlay is recommended to be removed from this property accordingly. For consistency, the minor incursion criteria have also been applied to the neighbouring properties with No. 52 and No. 54 Millicent Ave also recommended to be trimmed.	Yes. Proposed SBO2 overlay incursion to be removed from property and adjacent properties at 52 and 54 Millicent Avenue also.
422.	1 Trudi Court, Donvale	Mullum Mullum Creek	SBO3	4, 7, 11	The submission states that the property would not be subject to flooding if the easement drains were maintained and the properties upstream retained excess runoff. Typically, underground drainage systems are designed to minor storm event standards with excess runoff travelling overland in major storm events. Even if on-site detention systems were constructed upstream, these are also designed to minor storm event standards and would not remove the risk of overland runoff during major storm events. The SBO is based on a 100 year ARI event in accordance with industry guidelines in order to identify flood prone land. In terms of maintenance, the drainage pipe network is modelled blockage free and operating at full capacity. If blockage were assumed, the flood	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					extent would be greater than what is defined by the overlay. The submission also states that development is unlikely to occur in the area designated by the overlay. This is not considered a basis to amend the flood shape, as the intent of the overlay is to identify flood prone land and development may occur in the future in areas not currently permitted. Removal of the SBO would result in a discontinuity of the flood extent and therefore should be retained. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
423.	2 The Pines Outlook, Doncaster East	Mullum Mullum Creek	SBO3	14 Lodged as a submission with no content. Clarification sought by Council. None provided.	The flood shape is considered reasonable in this instance and no objection is made regarding the shape of the overlay. The review has confirmed the surrounding topography and drainage assets. At a recent meeting with the submitter, a query was raised as to whether the kerb and channel and underground drainage located in the upstream north-south leg of The Pines Outlook would divert flows away from the submitter's property in a 1 in 100 year ARI event. The modelled SBO extent does indicate that some flows will travel north, then along the east-west leg of The Pines Outlook, however, part of these overland flows will also travel through the submitter's property in a major	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					storm event according to the model. The flood shape should remain as exhibited at this location.	
424.	29 Hillcroft Drive, Templestowe	Ruffey Creek	SBO1	1, 2, 10	The property is located adjacent to a Melbourne Water main drain (Greenridge Avenue Drain) and the applicable flood level for the property is 56.23 metres Australian Height Datum(AHD) for a 1 in 100 year storm event. Regarding the issue the submitter has "never experienced any flooding in the area", it cannot be assumed that flooding has not previously or will not occur at any given property, on the basis that there are no records of flooding, or flooding to the extent identified by the Special Building Overlay (SBO). The SBO is based upon the extent of overland flows that would result from a 1 in 100 Storm Event. The flooding is from an overland flow path down the hill towards the main drain, the house may be approximately 10 metres above the main drain. The overlay designation has been reviewed and reconfirmed as being appropriate based on the anticipated flood depth, direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. The outcome of the review is that the exhibited flood shape be retained at this location.	No
425.	2 Sowter Court, Donvale	Mullum Mullum Creek	SBO2	1, 2,	The submission states that the property is elevated and no flooding has been experience. The	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					submitter may be referring to not experiencing flooding above floor level. The extent of the SBO is based on flood prone land, not where dwellings have flooded above floor level. The exhibited flood shape coincides with the low point in Sowter Court and the valley which passes from this point through the subject property. A site visit confirmed that the house was located at the high point of the property however the front of the property is low lying. Although the resident may not have experienced flooding, they may not have been present during a 1 in 100 year ARI storm event of critical duration. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
426.	880-882 Doncaster Road, Doncaster East	Koonung Creek	SBO3	14 Submission but only wants to be kept informed.	The flood shape is considered reasonable in this instance and no objection has been made regarding the shape of the overlay. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	Νο
427.	50-52 and 54-56 Ennismore Crescent PARK ORCHARDS /The Pines, Mossdale Court TEMPLESTOWE and King Street, 11 Gairlock Court, 9A and 10 Brentvale Court and 3 and 4A Myron Place,	Mullum Mullum Creek Andersons Creek Ruffey Creek	SBO1, SBO2, SBO3	2, 14 A consistent approach across all Council's should be adopted.	The submission raises issues relating to the SBO designation affecting the Ennismore properties. A review has found that the designation of the SBO corresponding to the steep gully between the two submission properties should be amended to be SBO3 based on the anticipated flood depth,	Yes. Change SBO1 to SBO3 for 50-52 Ennismore Crescent and remove SBO1 from eastern

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
	DONCASTER and Larnoo Drive, DONCASTER EAST				direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. In addition, it is recommended to trim the flood shape along the eastern boundary of No. 54-56 Ennismore Cres. The incursion of the SBO1 along the road frontage of No. 54-56 Ennismore Cres does not meet the criteria applied for properties adjacent to flooded roadways during derivation of the SBO extent. Cardnos further review found that the SBO3 shape at the rear of the property requires adjustment as the Lidar data does not adequately reflect the ground conditions at this location. The overlay is recommended to be realigned and trimmed in this area. The SBO3 extent within 13 Dirlton Crescent is also to be removed and the SBO3 extent impacting 15 Dirlton Creacent is also to be reduced. The reduced extent SBO impacting 50-52 Ennismore Cres is to be SBO3 and the SBO1 incursion abutting the roadway in front of 54-56 Ennismore Cres is to be retained.	boundary but not from road frontage boundary for 54- 56 Ennismore Crescent. Change SBO1 to SBO3 in the gully between the two properties (Dirlton Reserve). Reduce the SBO3 extent at 54-56 Ennismore at the rear of the property and reduce the SBO3 extent within 15 Dirlton Crescent. Delete the SBO3 extent from 13 Dirlton Crescent. Reduce the SBO3 extent within 15 Dirlton Crescent. Reduce the SBO3 extent within 15 Dirlton Crescent. Reduce the SBO3 extent within 15 Dirlton Crescent. It is recommended to amend the SBO at The Pines (181

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				omitted from modelling. Unfair	Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. The SBO information will be used by Council to prioritise future drainage improvement works. Drainage improvement works are prioritised to protect habitable floors at risk of flooding. A site visit has confirmed the topography of the area and that the property is in an area expected to be flood prone during major storm events. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
429.	3 Cassinia Road, Templestowe Lower	Ruffey Creek	SBO2	1, 3, 7, 8	The submission refers to previous upgrades in this location. A discrepancy has been found between the modelled and actual drainage infrastructure at this location. The upgrade was undertaken prior to the flood modelling exercise which underpins the SBO and additional modelling is required to quantify the impact of the upgrade on the flood shape. The flood shape is recommended to be reviewed in this area following additional modelling which is expected to be completed prior to the Panel Hearing.	No
430.	6 Oakland Drive, Warrandyte	Mullum Mullum Creek	SBO3	1, 2, 5, 7, 8, 14 Council	The submission states that no flooding has been experienced in the manner indicated by the SBO. It is possible the submitter is referring to floor	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
						Reynolds Road)
						to remove the
						flood extent from
						existing roof
						areas. It is
						proposed to
						amend the flood
						shape
						designation from
						SBO1 to SBO3 for
						1 and 2/13, 1 and
						2 /14, 15, 15A,
						16, 17 and 18
						Mossdale Court
						and 28, 1 and
						2/30, 32 and 32A
						Greenridge
						Avenue. It is
						recommended to
						remove the SBO3
						from properties
						11 Gairlock
						Court, 2/10, 9 &
						9A Brentvale
						Court.
428.	3 - 4 Glen Court, Templestowe	Ruffey Creek	SBO2	5, 7, 8, 10, 14	The submission states that Council should upgrade	No
				Eastern Golf	the drains in the upstream catchment.	
				Course has	Underground drainage systems are usually	
				been	designed to convey a 1 in 5 year ARI (Average	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				wastes money on unnecessary actions such as 'rubbish bin police".	levels not flooding. The SBO identifies flood prone land, not specifically where dwellings have flooded above floor level. It is also possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. The topography of the area, suggests the property is prone to overland runoff from the north east. A site visit has confirmed the terrain and Council drainage infrastructure and it is recommended to retain the flood shape at this location. The reference to Council wasting money on such things as 'rubbish bin police' is not a relevant issue to the Amendment.	
431.	1 Timbertop Ridge, Warrandyte	Andersons Creek	SBO2	1, 2, 9, 13	The submission states that, due to the elevated nature of the property, flooding is implausible. The flood shape forms within the property boundary and flows to the dam to the north of the property. The SBO shape at this location does not represent pooling or inundation, and whole the flows are fast moving, they are of low depth. A small portion of the property is affected (approximately 1% of the property area). The review has confirmed the surrounding topography and drainage assets. Given that the depths are very shallow and that the property is only slightly impacted by the extent, it is recommended that this property be removed from the proposed SBO2.	Yes. Delete SBO2 areas.
432.	31 Beckett Road, Donvale	Mullum Mullum Creek	SBO2	2, 5,	The submission states that the property is sloping and the flood shape is questionable.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					A site visit confirmed that the flood shape is consistent with the topography and drainage assets in the area. The flood extent is significant and removal would result in discontinuity of the overlay with in neighbouring properties. Due to the proximity of the subject property to the flood extent is it reasonably expected to be flood prone as characterised by the LiDAR data used and existing site conditions. Therefore the flood shape is to be retained at this location.	
433.	37A Ross Street, Doncaster East	Koonung Creek	SBO2	1, 2, 7, 12	The submission states that the property is higher than the adjacent properties on Ross Street and no flooding has been experienced. The property contains a minor incursion along the eastern boundary. The SBO extent fulfils the minor incursion criteria of less than 30m2 and 6%. The overlay is recommended to be amended accordingly.	Yes. Remove the SBO2 incursion from the property.
434.	1 Olga Mews, Bulleen	Bulleen North	SBO3	1, 7, 12	The submission argues that drainage works and retaining walls in Olga Mews have removed the risk of flooding. It cannot be certain the central drain running through Olga Mews is sufficient for a 1 in 100 ARI. Private drains such as these are usually designed for a 1 in 5 ARI. It is beyond the scope of Council to consider private drains and functionality for the overlay modelling. Although the resident may not have experienced flooding, it cannot be certain that the properly is not flood prone during a 100	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					year ARI as runoff can reasonably be expected to occur from the south east in the manner indicated by the SBO. Removal of the flood shape at this location would compromise the integrity of the SBO flood shape in its entirety. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
435.	9 Cliveden Court, Templestowe	Mullum Mullum Creek	SBO3	2	The submission states that the property slopes up from the street and that it would be impossible to flood. The flood shape at this location represents shallow overland runoff from uphill (west) flowing onto Cliveden Court, not water rising up from the court. This type of runoff is still considered a risk and the draft overlays will assist future development to consider the flow of stormwater through the property. A site visit has confirmed the topography of the area and that the modelled flood extent is consistent. The outcome of the review and recent meeting with the submitter is that the flood shape be retained.	No
436.	19 Winters Way, Doncaster	Koonung Creek	SBO3	8, 11	The submission is correct in identifying that the flood shape incursion is minor. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under certain conditions, development within an easement or in an area previously designated as a shared driveway may be permitted in some cases. Existing properties may be redeveloped in the	Yes. Remove SBO3 incursion from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					future and the proposed overlay will assist in the	
					assessment of the impacts of any future	
					development. In this case, the incursion is not	
					considered to be significant and application of the	
					SBO in this case would not yield any significant	
					planning or risk mitigation benefit. Thus, the	
					exhibited flood shape is recommended to be	
					amended accordingly.	
437.	37 Winston Drive, Doncaster	Ruffey Creek	SBO2 &	2	The submission states that flooding would not	Yes.
			SBO3		occur up a sloping driveway. The review has	Remove the SBO
					confirmed the surrounding drainage assets. The	from the
					general fall of the land is to the east. The submitter	property.
					requests removal of the overlay. The LiDAR and	
					surface contour data were analysed for the site	In addition
					together with the aerial photography and it was	partially remove
					found that there is an issue with the model	SBO shape from
					resolution at this location. This has likely arisen	39 Winston
					from tinning issues with regards to the steep	Drive.
					terrain and presence of thick vegetation impacting	
					the LiDAR data. As such, it is recommended to	
					remove the SBO extent on this property.	
438.	10 Myers Court, Doncaster	Koonung Creek	SBO2	1, 3	The submission states the previous drainage	Yes.
					upgrade works have addressed the issue of	Reduce overlay
					flooding at this location. A review has found that	on property.
					the upgraded pipes have been modelled however,	
					the model indicates that there are still residual	
					overland flows in a major storm event. The	
					drainage infrastructure mentioned in the	
					submission with regard to drainage pits along	

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					Myers Ct is consistently represented in the model and has been confirmed on site. The current estimate of the 1 in 100 AEP flood exceeds the capacity of the pipe upgrade works. The overland flow paths convey the excess water in major storm events. Issues with the Lidar data allowed flooding to be mapped over the location of the house and pool. The review has confirmed the surrounding topography, with the exception of the Lidar data issues previously referenced. It is recommended that the SBO shape be trimmed back and amended in recognition of the Lidar data issues over the house and pool area.	
439.	5 Pioneer Drive, Templestowe	Ruffey Creek	SBO2	2, 12	The incursion of the flood shape fulfils Cardno's original criteria for exclusion of properties from the SBO which are adjacent to flooded roads. This criteria applies to incursions within 5 metres of a road reservation which impact less than 10% of the total property area. The flood shape is recommended to be deleted from the property.	Yes. Remove SBO2 incursion from the property.
440.	2 Wren Court, Templestowe & 35 Fyfe Drive, Templestowe	Ruffey Creek	SBO3	2, 5, 7, 8	The submission states that the Council should upgrade the drainage network rather than impose the SBO. Council allocates approximately \$2 million annually to the upgrade of its underground stormwater drainage system. These works are prioritised based on the frequency and extent of flooding of habitable floor areas. It is not feasible for Council	No

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					to resolve all flooding issues across the municipality immediately. In the interim, there is a need to ensure that future development is designed to set habitable floor areas above the major storm flood level. The terrain data used for the flood modelling which underpins the SBO was captured in 2009 and is the highest quality and most up to date data available for the task. Building retaining walls and other structures are not modelled individually, but factored into the modelling by adopting high surface roughness values. The fall of the surrounding area, as well as the location and capacity of the Council drainage system, determine the size, shape and direction the SBO. Site visits confirmed the flood shape and SBO extent is consistent with the terrain and	
441.	37 McGowans Road, Donvale	Mullum Mullum Creek	SBO3	4, 5	should be retained. The incursion to the rear represents runoff from uphill flowing onto Roslyn Crt. The submission states no flooding has been experienced at this location. The flood shape is consistent with the tennis/basketball court cut into the slope at the rear of the property. The submission also states that flooding has only been avoided due to maintenance on the resident's behalf. Although an important issue, it is not relevant to the flood mapping exercise which underpins the SBO. In the model it has been assumed the drainage network is operating at full capacity and that no blockages	Yes. Delete SBO3 shape at rear of property.

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					are present. The review has generally confirmed the surrounding topography and drainage assets. However, given the issues with the Lidar data over the tennis court, it is considered that the SBO3 shape shown is not consistent with the fall of the land in this area. It is recommended that the SBO3 shape be deleted at this location.	
442.	26-28 Ennismore Crescent, Park Orchards	Mullum Mullum Creek	SBO2	1, 2, 11	The submission states that no flooding has been experienced in the manner indicated by the SBO. The submission confirms the existence of a natural gully originating in the adjacent property to the north and flowing through 26-28 Ennismore Cres. The exhibited SBO is consistent with this topographical feature. It is possible the submitter has not experienced a 1 in 100 year ARI storm of critical duration at this location. The submission also states that no building would occur in the area designated by the flood shape. This is not considered a valid basis to remove the flood shape as future development may occur in areas not currently permitted. Removing the SBO would also compromise the integrity of the SBO shape at this location. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited but it is recommended that the designation be changed from SBO2 to SBO3.	Yes. SBO designation to be changed from SBO2 to SBO3. Change designation of SBO from SBO2 to SBO3 at 22-24 Brucedale.
443.	4 Millwood Court, Templestowe	Ruffey Creek	SBO2	1, 2, 8	The submission states that because the house is higher than the level of the road, no flooding has	Yes.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					been experienced and the SBO should not apply. The extent of the SBO is based on the flood prone land, not specifically where dwellings are flooded above floor level. The flood shape at this location represents runoff from the elevated areas to the rear being channelled onto the roadway by the topographical features of the modelled land. The review has confirmed the surrounding drainage assets. LiDAR and surface contour data as well as site and aerial photos were analysed and it was found that there are tinning and model resolution issues on the steep terrain which warrant deletion of the SBO2 shape.	Delete SBO2 shape.
444.	32 Hotham Street, Templestowe Lower	Bulleen North	SBO3	2, 4, 5, 6	The submission argues that the property has a history of flooding and that Council has been negligent in its provision of drainage for the property. In addition, the submission states that the experiences of flooding at this location does not match the SBO. The submission argues that the property has a history of flooding and that Council has been negligent in its provision of drainage for the property. In addition, the submission states that the experiences of flooding at this location does not match the SBO. The review has confirmed the surrounding topography and drainage assets as modelled. The submitter claims that several properties have been flooded on more than one occasion including 29, 30, 31 and 32 Hotham Street, 5, 7 and 9 Michael Street, 5 and 6 Roma	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					Court and 31 and 33 Balmoral Avenue. It is unclear	
					whether the flooding referenced in the submission	
					has occurred since Council's drainage improvement	
					works which have reduced overland flows from	
					reaching the Hotham Street valley were completed	
					in 2011. The flood mapping shows flooding of 30	
					and 32 Hotham Street and 5, 7 and 9 Michael	
					Street. Modelling of the theoretical 1 in 100 year	
					flood event (which is what the overlay is based on)	
					shows that water does indeed pool in the roadway	
					outside these properties. Typically, Council	
					drainage systems are design to cater for the 1 in 5	
					year ARI approximately. As such, overland flow will	
					always be present in overland flow paths such as in	
					this area. It does show that water enters several of	
					these properties but not over the depth of 0.05m	
					which is what the overlays have been filtered to. A	
					site visit from the street and desktop review has	
					found the flood shape is indicative of the	
					conditions, The modelling results indicate that	
					flooding of this property is predominately caused	
					by water pooling within Hotham Street and	
					entering the property through the driveway and	
					then flowing into the garage. They also indicate	
					that in the theoretical 1 in 100 year flood event,	
					water surcharges from the Council drainage	
					network at the back of the property when the	
					capacity of the pipes are exceeded. This	
					corroborates well with the LiDAR and surface	

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					contour data as well as from observations from the owner of the property. It is therefore recommended that no changes be made to the overlay in this location.	
445.	13 Ardgower Court, Templestowe Lower	Ruffey Creek	SBO3	2	The submission states that the property is elevated and would not experience flooding. The flood shape at this location represents overland runoff from the upstream catchment area south of the property which is concentrated along the steeper areas within the property terrain. It does not represent rising water from Ruffey Creek in this case. The SBO is delineated from a combination of depth, velocity and duration of flow, not necessarily rising floodwater. Buildings and other structures are factored into the modelling by adopting high surface roughness values. The topography of the surrounding area, as well as the location and capacity of the Council drainage system, determine the size, shape and direction the SBO. The flood shape is consistent with topographical contours and is recommended to be retained at this location.	No
446.	302 George Street, Doncaster	Ruffey Creek	SBO1	7, 14 Flooding is linked to the development of Westfield Shopping Town.	The property is traversed by a Melbourne Water main drain (Bonview Road Drain) and the applicable flood level for the property is 66.65 metres AHD for a 1 in 100 year storm event. The submission questions "whose responsibility it is to fix it". Any capital works associated with flooding are beyond the scope of this planning	No

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					scheme amendment. The amendment will ensure	
					that drainage, floodplain management, and	
					environmental issues are addressed for any new	
					development.	
					The overlay has taken into consideration	
					development upstream of the property. The	
					overlay at this location is an overland flow path	
					associated with the Bonview Road Main drain	
					catchment.	
					The overlay designation has been reviewed and	
					reconfirmed as being appropriate based on the	
					anticipated flood depth, direction of flow, the	
					location of the flood extent relative to Council and	
					Melbourne Water infrastructure and the relative	
					locations of abutting SBO extents.	
					The outcome of the review is that the exhibited	
					flood shape be retained at this location.	
					The submission also states that flooding is linked to	
					the development of Westfield Shopping Town. All	
					land generates storm water runoff during major	
					rainfall events, which then discharges to	
					downstream areas. It is generally not feasible to	
					contain storm water runoff in a major or 1 in 100	
					year ARI storm event on any land. In response to a	
					previous planning permit for development on the	
					Westfield Doncaster site, a storm water detention	
					system was constructed and runoff from the site	
					was directed to the detention system, limiting	
					overland flows discharging from this site. Any	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
447.	28 Brackenbury Street,	Andersons Creek	SBO2	1, 7, 12	further development of the Westfield Doncaster site will be subject to planning approval and control of storm water runoff will be considered as part of this process. The submission states the property has not flooded	No
447.	28 Brackenbury Street, Warrandyte	Andersons Creek	5802	1, 7, 12	Ine submission states the property has not flooded in the past and the open drain along the southern boundary of the property is sufficient to remove the risk of flooding. Although the resident may not have experienced flooding, it cannot be certain that the properly is not partially flood prone during a 1 in 100 year ARI. The flood extent indicates that the volume of runoff is too significant for the current drainage in the area. There are planned underground drains in this area which will assist in reducing the amount of overland runoff if/when they are constructed. The flood extent is significant and removal of the SBO would compromise the integrity of the SBO flood shape in its entirety. Due to the proximity of the subject property to the flood extent, it is reasonably expected to be flood prone as the south boundary falls within a defined valley. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	NO
448.	17 Heads Road, Donvale	Mullum Mullum Creek	SBO3	2, 11	The submission is correct in identifying that the flood shape incursion is minor. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under	Yes. Remove SBO3 incursion from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					certain conditions, development within an easement or in an area previously designated as a shared driveway may be permitted in some cases. Existing properties may be redeveloped in the future and the draft overlay will assist in the assessment of the impacts of any future development. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly.	
449.	10 Campbell Court, Warrandyte	Mullum Mullum Creek	SBO2	2, 4, 5, 6	The submission argues that the maps provided in the technical report do not match the topography of the developed site. The LiDAR data used for modelling was captured in 2009 and is the most current and complete data available for this type of modelling. A review has found that the topographical data used in the modelling are reflective of the developed conditions and reflect the dwelling and tennis court on the property. The submission also questions the intent of the overlays and states that they do not prevent development and therefore will not help the drainage system inadequacies that exist. The results of the flood mapping will be used to identify potential drainage upgrades. Council is working through a process to prioritise these capital works. Development areas have been and	Yes. Change SBO2 to SBO3 and retain SBO shape. Convert SBO2 areas in 9 and 11 Campbell Court and 15 Pound Road to SBO3.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					are being managed with other policies/measures other than the SBO overlay for example On Site Detention systems and capital improvement works. The flood shape is consistent with the topography of the land and the fact that the submission property contains a defined gully. A review of the flow characteristics has however found that the SBO designation should be changed from SBO2 to SBO3.	
450.	8 Cliveden Court, Templestowe	Mullum Mullum Creek	SBO3	14 Object. No reasons given.	The flood shape is considered reasonable in this instance. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
451.	18 Montclair Court, Templestowe	Ruffey Creek	SBO3	1, 2, 4, 5	The submission states that the property is elevated and would not experience flooding. The flood shape at this location represents overland runoff from the upstream catchment area in addition to a small area of pit overflow. The modelled rainfall event is a 1 in 100 year ARI storm of critical duration which is in line with industry modelling practices. The submission also refers to a past flood event however this represents a different flooding mechanism (rising water from Ruffey Creek) than what the SBO represents. The results of the flood mapping will be used to identify potential drainage upgrades. Council are working through a process to prioritise these capital works. A site visit has confirmed the topography and	Yes Remove the SBO3 from the property. In addition remove SBO3 from 16, 17, and 19 Montclair. Trim and reduce SBO3 at 14 and 15 Montclair.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					drainage infrastructure in the area. LiDAR and surface contour data indicate that there has been some erroneous tinning in this area due to the steep slope and thick vegetation. Therefore, it is recommended that this SBO3 area be removed from the property.	
452.	26 Harris Gully Road, Warrandyte 10 West End Road and; 4 First Avenue WARRANDYTE	Andersons Creek	LSIO	2, 7, 8, 12, 13	The submission is based on the possible implications of an LSIO overlay would have on land value and insurance premiums for the retirement village. The submission also refers to drainage improvements undertaken as part of the development and changes to levels within the site as a result of the works. Private drainage assets are not considered as part of the flood mapping as these assets are privately managed and maintained and are subject to change. Further analysis of the modelled overland flow depths through the property and discussions with Melbourne Water have led to a recommendation that the flood shape be retained as exhibited but the designation of the flood shape be amended from LSIO to SBO3. It has been agreed with Melbourne Water that the cut off line for the division between SBO3 and LSIO would be the southern boundary of 26 Harris Gully Road. The submission addendum states that the proposed flood shape does not correlate to the contour data of the First Street and West End properties. A site meeting and inspection was	Yes. Change the proposed LSIO to SBO3, for 26 Harris Gully Road without changing the shape of the overlay. This change will also affect properties located at 4 Mossy Creek Slope, 22 and 24 Harris Gully Road and 36-42 Drysdale Road Warrandyte. Refer to map at Attachment 10.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					held at 10 West End Road as requested. The inspection found that the flood shape is consistent with the terrain of the area, with runoff during major storm events reasonably expected to enter the West End Road property from a low point in the roadway and flowing in a northerly direction towards the Yarra River, through 4 First Street. In addition, the addendum states that the proposed overlays would negatively impact the ability to construct a retirement village due to the higher floor levels required. This point is acknowledged, but it is the responsibility of Council to ensure that floor levels are set above the 1 in 100 year ARI storm event flood level to minimise the risk of flooding of habitable areas. Therefore it is recommended that the flood shape remain unaltered through 4 First Street and 10 West End Road.	No change is recommended for 4 First Street and 10 West End Road.
453.	11 Cliveden Court, Templestowe	Mullum Mullum Creek	SBO3	1, 2, 4, 5, 7, 8, 10	The submitter previously raised concerns regarding the modelling. Responses were previously prepared by Cardno and provided to the submitter. The submitter queried previous rainfall records. The 25th December 2011 flood event was determined to have rainfall with a recurrence interval of between 2 and 55 year ARI for the critical duration at the site. The location lies between two rainfall gauges. As such this event was not likely to be of a magnitude equivalent to a 100 year ARI event. If analysis was restricted to	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					observed floods only, in almost all areas the flood risk would be grossly under predicted and the likelihood and impact of a catastrophic extreme event would increase. Council are proactively trying to plan and manage future flood risk via the adoption of the SBO overlay. The SBO applied to the property is as a result of runoff from the neighbouring block in part, but also due to the overland flooding that follows the orientation of the underground pipe alignment along the eastern boundary of the property. The submitter confirmed that runoff has been witnessed into the property particularly from the neighbouring property in previous years. It is recommended that the SBO shape be retained as exhibited.	
454.	28 Harris Gully Road, Warrandyte	Andersons Creek	LSIO	2, 12	The modelling of the overland flow path is based on the whole catchment area, not just 26 Harris Gully Road. The overlay designation has been reviewed and based on the anticipated flood depth, direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure, it is recommended that the overlay designation be downgraded from LSIO to SBO3.	Yes. Change overlay designation from LSIO to SBO3.
455.	9 Lyons Place, Doncaster East	Mullum Mullum Creek	SBO2	9, 11	The submission states that the proposed overlay is unnecessary as it covers an area that could not be built on. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under certain conditions, development	Νο

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					in close proximity to property boundaries, on shared driveways or within easements may be permitted in some cases. The existence of an easement is not a valid basis for amendment of the flood extent. Although the incursion of the flood shape makes up a small percentage of the property, the block may be subdivided in the future. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
456.	122-124 Old Warrandyte Road, Donvale	Mullum Mullum Creek	LSIO & SBO2	2, 12	The submission argues that due to the current construction of Mullum Estate including earthworks and stormwater infrastructure, the exhibited flood shape should not apply to the property. This work has occurred since the capture of the LiDAR survey data used in the modelling. This LiDAR data and the derived flood shape are reflective of the ground conditions at a point in time. The exhibited flood shape is reflective of the conditions at the time of modelling. The submitter further argues that the existing dam will be filled as part of the subdivisional works. Given the pending subdivisional works, removal of the flood shape from Lot 1, 122-124 Old Warrandyte Road Donvale is recommended.	Yes. It is recommended to delete the flood shape from Lot 1, 122-124 Old Warrandyte Road.
457.	19 Lilian Street, Bulleen	Koonung Creek	SBO2	5	The submission objects to development in the surrounding areas and states that increased runoff has caused the property to be flood prone. New developments are required to manage runoff	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					to minor storm event standards with on-site	
					detention systems where necessary. Underground	
					drainage infrastructure is typically designed to	
					minor storm events standards with excess flow	
					occurring overland during major storms. Since the	
					1970s improved controls have been in place that	
					consider overland flow paths for up to the 1 in 100	
					year ARI/1% AEP storm event. Australian Rainfall	
					& Runoff was updated in 1987 to reflect updated	
					design practices, with pipes conveying minor flows	
					from a 1 in 5 year ARI/20% AEP rainfall event and	
					overland flow paths to safely convey major flows	
					through residential areas in a 1 in 100 year ARI/1%	
					AEP rainfall event. Councils are not obligated to	
					upgrade drainage systems in place prior to the new	
					standard from the 1970s/80s, however	
					Manningham City Council has a policy to prioritise	
					drainage upgrades where required to alleviate	
					flooding of habitable floor areas. Due to the	
					proximity of the submission property to the flood	
					extent, is it reasonably expected to be flood prone	
					during major storm events. The review has	
					confirmed the surrounding topography and	
					drainage assets. The flood shape should remain as	
					exhibited at this location.	
458.	27 Eucalypt Avenue,	Ruffey Creek	SBO3	1, 2, 11	The submission is correct in identifying that the	Yes.
	Templestowe Lower				flood shape incursion is small. Under certain	Remove SBO3
					conditions, development within an easement may	shape.
					be permitted. Existing properties are expected to	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
450	AA EA Alavandar Paad	Mullum Mullum Grook	5803	2.14	be redeveloped in the future and the draft overlay will assist in the assessment of any impacts. Owing to the issue identified with the LiDAR data over the incursion, It is recommended that the SBO shape be removed from this property.	No with respect
459.	44-54 Alexander Road, Warrandyte	Mullum Mullum Creek	SBO3	2, 14 Fencing exemptions (25% permeability and 400mm plinth height) are absurd for this area.	The submission states that the topography of the property and the catchment size would not result in the level of runoff indicated by the flood shape. A site visit has confirmed the terrain within the property is consistent with the flood shape and each area of runoff pertains to a viable catchment area or source or overflow. The submission also refers to permit exemption requirements for fencing. It is intended that any fence along an existing alignment may be replaced like-for-like. A fence along a new alignment would have to be constructed in a manner that allowed passage of runoff. The intent of the draft overlays is to allow redevelopment to take place in a way that considers the overland flow path. It is considered important to retain the flood shape at this location to facilitate this. The review has confirmed the surrounding topography and drainage assets. At a recent meeting with the submitter, he advised that there is a private 225mm diameter drain at the outlet to the dam. It was confirmed that this drain was not included in the model as it is private infrastructure of which Council has no record. Private infrastructure is generally not included in	No with respect to the exhibited flood shape. In Schedule 3 to the Special Building Overlay, change the last dot point under Clause 1.0 Permit requirement as follows; "New fencing with at least 25% openings or with a plinth at least 400mm above the natural surface level".

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					the model as Council has no control over it. The flood shape should remain as exhibited at this	
					location.	
					The submission also refers to permit exemption	
					requirements for fencing. It is intended that any	
					fence along an existing alignment may be replaced	
					like-for-like. A fence along a new alignment would	
					have to be constructed in a manner that allowed	
					passage of runoff.	
					The intent of the draft overlays is to allow	
					redevelopment to take place in a way that	
					considers the overland flow path. It is considered	
					important to retain the flood shape at this location	
					to facilitate this. The review has confirmed the	
					surrounding topography and drainage assets. The	
					flood shape should remain as exhibited at this	
					location.	
					The submission also states that fencing exemptions	
					(25% permeability and 400m plinth height) are	
					absurd for this area in Warrandyte. In respect to	
					the fencing permeability issue, it is considered that	
					allowing water to flow across properties and not	
					be encumbered or diverted by fencing structures is	
					an important development principle.	
					Notwithstanding, it is recommended to amend the wording in the SBO 3 to include a minor text	
					change to the Schedule to SBO3 to address some	
					potential ambiguity with the controls.	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					Specifically, in Schedule 3 to the Special Building Overlay, it is recommended to change the last dot point under Clause 1.0 Permit requirement as follows; "New fencing with at least 25% openings or with a plinth at least 400mm above the natural surface level".	
460.	30 Hillcroft Drive, Templestowe	Ruffey Creek	SBO1	14 Requested to attend an information session. No further submission made.	The SBO is based upon the extent of overland flows that would result from a 1 in 100 Storm Event which has a 1% chance of occurring in any given year. The property is currently subject to an SBO along the property frontage and under the proposed mapping, the mapped extent will be reduced from the existing situation. The overlay extent has been reviewed and reconfirmed as being appropriate based on the direction of flow, the location of the flood extent relative to Council and Melbourne Water infrastructure and the relative locations of abutting SBO extents. Review of the associated flow depths has however resulted in a recommendation to amend the overlay designation for this property from SBO1 to SBO3.	Yes. It is recommended that the flood shape be retained but the overlay designation be changed from SBO1 to SBO3.
461.	23 Marcus Road, Templestowe Lower	Bulleen North	SBO2	1, 2, 7, 13	The submission questions the accuracy of the SBO, stating that drain information is inaccurate and the submitter questions whether Council has considered historical records of flooding. The flood modelling which underpins the SBO has been undertaken using the best available GIS data.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					Numerous validation checks have been performed on the data to ensure it is fit for purpose. In addition, the results of the flood modelling have been verified against historic data from customer service requests received following high intensity rainfall events in the municipality and evidence of the impacts experienced in previous floods. A site visit has confirmed that the flood shape is consistent with the topography of the land as there is a natural slight valley running through the properties on this side of Marcus Rd. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
462.	21 Marcus Road, Templestowe Lower	Bulleen North	SBO2	1, 7	The submission states that no flooding has been experienced in 10 years of living at the address and that water flows straight down Marcus Rd toward Thompsons Rd rather than through the property. While the roadway does experience runoff during major storm events, topographical contours also indicate a slight valley running north-south through the properties on the west side of Marcus Rd. There is also Council drainage infrastructure along this alignment which is indicative of drainage patterns in this location. Site visits have also been undertaken in this area to verify the flood shape. The review has confirmed the surrounding topography and drainage assets. No additional substantive issues have been raised by the	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					submitter which would warrant further review of this submission. The flood shape should remain as exhibited at this location.	
463.	28 Victoria Street, Bulleen	Bulleen North	SBO3	2,7	The submission correctly states that, due to the slope of the property, water would run off and not remain flooded. Although the flood shape does not represent standing water, overland runoff or flash flooding is still considered a significant risk. The purpose of the proposed overlays is to ensure that future development is protected from flooding. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly.	Yes. Remove the SBO3 incursion from the property.
464.	6 Pambara Court, Donvale	Mullum Mullum Creek	SBO2	1, 2, 8	The submission states that there have never been any issues with flooding on the property. Given the existence of a major gully through the property it is assumed the submission is referring to not experiencing flooding of habitable floor areas. The flood shape does not extend through the house footprint and does not suggest flooding of habitable floor areas. The private spoon drains are not considered to have a significant effect on runoff patterns during major storm events and have not been modelled individually. A site visit confirmed the topography and drainage assets on the property, with the flood shape being consistent	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					with the gully lines and slight depressions on the north facing slope which concentrate the runoff into the gully. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
465.	20 Ernst Street, Doncaster	Koonung Creek	SBO3	1, 2, 7, 8, 9	The submission refers to the height difference between No 18 and 20 Ernst Street. Given the extent of the catchments involved, each catchment area has been broken up into a grid with cells 3m by 3m in size. This approach is considered to provide adequate resolution to define topographical features within the catchment. Private infrastructure such as retaining walls, structures and buildings are not individually modelled as they are not protected and can be subject to change in the event of property redevelopment. Consideration has been given to the impacts of structures such as buildings and features such as landscaping and fences on the mapped flood extents, through the application of roughness factors to land areas. Roughness factors are allocated using aerial photography, taking consideration of land use and type and density of development for individual sub catchment areas. A site visit has confirmed the topography and as- built drainage infrastructure is consistent with that modelled. However, the incursions are considered minor and would not yield any significant planning	Yes. Remove SBO3 incursion from the property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					or risk mitigation benefit. Thus, the extent of the flood shape is recommended to be amended accordingly.	
466.	27 Airdrie Court, Templestowe Lower	Ruffey Creek	LSIO	2	The property is located adjacent to Ruffey Creek. The mapping at this location is an update of the LSIO. LiDAR and surface contour data were analysed and it was found that the thick vegetation around the channel has led to some tinning issues which has not adequately picked up the top of the bank of the creek. It is also considered unlikely that overland flows would enter the property from the street in a 1 in 100 year storm. It is recommended that the LSIO shape on this property be deleted accordingly.	Yes. Delete LSIO from property. Also delete LSIO from 26 and 28 Airdrie and amend SBO2 at 82 Dellfield Dve.
467.	41 Lookover Road, Donvale	Mullum Mullum Creek	SBO2	1, 12	The submission describes having lived at the property for 20 years and not experienced flooding. It is possible that the submitter has not experienced a 100 year ARI event of critical duration. The submission also refers to a drain running through this property, which has been confirmed as being modelled. Council drainage infrastructure of this age generally does not have the capacity to completely convey runoff from major storm events. Based on the topography and the size of the catchment, it is reasonable to expect this property would experience flooding in the manner indicated by the SBO. A site visit confirmed that	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					the drainage infrastructure in the area was modelled correctly and flood shape is consistent with the terrain. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
468.	20 Peachwood Rise, Doncaster East	Mullum Mullum Creek	SBO2	2,8	The submission states that, due to the location of the property, flooding is not seen as a risk. The property contains a minor incursion of the flood shape which represents flow out of the property. Based on the size of the incursion and a review of modelled depths and connectivity, it is recommended the flood shape be deleted from the property.	Yes. Remove the SBO2 incursion from the property.
469.	1 Parkside Court, Warrandyte	Andersons Creek	SBO2	1, 2, 3	The submission states that the property is on the side of a hill, and that the property is unlikely to experience flooding. The flood shape at this location represents runoff along the gully which the submission property is adjacent to. Although the flood shape does not represent standing water, overland runoff or flash flooding is still considered a significant risk. The purpose of the proposed overlays is to ensure that future development is protected from flooding. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
470.	86-90 Webb Street, Warrandyte	Andersons Creek	SBO2	2, 8, 10, 12	The submission correctly identifies that the property is elevated and located a significant	Yes. The eastern SBO2 shape be

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					distance away from the Yarra River. However, the flood shape represents runoff from the local catchment toward the Yarra River rather than rising waters from the river. The flood shapes are consistent with the topographical features of the property. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under certain conditions, development in close proximity to property boundaries or within easements may be permitted in some cases. In this case, as a result of the shallow depth of the eastern incursion, it is recommended that the SBO shape be deleted. Given the depths of flows in the western valley, it is recommended that the SBO designation be changed from SBO2 to SBO3.	deleted. The western SBO shape be changed from SBO2 to SBO3. Convert SBO2 to SBO3 at 92 Webb St and 80-84 Webb St.
471.	50 Windella Quadrant, Doncaster	Koonung Creek	LSIO & SBO2	2, 7, 8, 12	The submission states that the backyard has had earthworks undertaken since 2009 that affect the extent of the SBO that should apply to the property. A desktop review and site visit has found the submission property has probably had this work undertaken since the capture of the LiDAR survey data used in the modelling. This LiDAR data and the derived flood shape are reflective of the ground conditions at a point in time and will become outdated in the future as changes are made to the existing ground surface around the municipality. In addition, the submission states that multiple overlays should not apply to the	Yes. Change LSIO to SBO2 at southern boundary of property. Similarly, convert the LSIO at the rear of 52A Windella to SBO2.

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					property. The exhibited flood shape indicates most of the incursion is designated as SBO2 with a very small area designated as LSIO. The outcome of the review is that the extent of LSIO currently encroaching on the property be changed to SBO2 and the LSIO commence at the southern property boundary.	In addition, it has been agreed with Melbourne Water that the LSIO incursion into the Koonung Creek Reserve (1- 11 Church Road Doncaster) at the rear of 44 Windella Quadrant should be removed.
472.	13 Tandarook Crescent, Donvale	Mullum Mullum Creek	SBO2	1, 2, 4	The mains points of the submission relate to having resided on the property for over 40 years and never experienced flooding and the adequacy of drain maintenance. While important, maintenance is an issue which is separate to the extent of the flood shape. The submitter also describes their experiences of runoff during storm events as less extensive than that indicated by the SBO. The review has confirmed the surrounding topography and drainage assets. However, the review has also identified modelling resolution issues which result in a recommendation to delete the SBO2 shape from the property.	Yes. Remove the SBO2 shape from the property.
473.	13 Dillwynia Avenue, Templestowe Lower	Ruffey Creek	SBO2	2, 5, 6, 7, 8, 13	The flood shape represents runoff flowing out of the property and onto the street rather than rising up from street level as suggested in the	Yes. Delete SBO2 shape.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					submission. The purpose of the proposed overlays is to ensure that future development is protected from flooding. The review has confirmed the local drainage assets. It was found that there were some tinning and model resolution issues around the building due to it being on a steep slope. Therefore, it is expected that the flood extent will not occur as shown in the SBO. It is recommended that the SBO2 be deleted from this property.	
474.	39 The Boulevarde, Doncaster	Ruffey Creek	SBO2	2, 8, 9	The submission states that the property is elevated from the roadway and would not experience flooding. In addition, there are properties at lower elevations that do not have the overlay. A review has found that the property is at a low point on The Boulevarde which experiences significant depths of runoff during the modelled 1 in 100 year ARI storm event. There are three grated side entry pits at this location however these are typically not designed to cope with runoff from major storm events. The incursion on the driveway of the property represents runoff from uphill being concentrated onto the street. It does not indicate that the dwelling will experience flooding. It is unclear which specific lower lying properties are referred to in the submission, however as runoff follows the natural gully lines and depressions it is reasonable that areas of lower elevation do not experience flooding if they are not on the main flow path. The review has confirmed	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
475.	Unknown, Unknown	Unknown	Unknown		The submission contains no property address upon which to review the modelling or proposed flood shape.	N/A
476.	3/76 Franklin Road, Doncaster East	Koonung Creek	SBO3	3	The submission states that there was a history of flooding at the location but a recent upgrade has been done which has removed the risk of flooding. A desktop investigation has found the upgraded drains to be represented in the model. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location since the upgrade has taken place. The upgrade was implemented to reduce the extent of flooding but does not remove overland flow entirely from the submission property. A further review following a recent meeting with the submitter has confirmed the surrounding topography and drainage assets and the findings of the previous investigation. The SBO shape should remain as exhibited at this location.	No
477.	10 Amberwood Court, Templestowe	Ruffey Creek	SBO3	7, 8	The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
478.	14 Nottingwood Street, Doncaster East	Ruffey Creek	SBO1	14 Object but no reasons given.	The property is adjacent to a Melbourne Water main drain (George street drain). The applicable flood level for the property is 90.79 metres Australian Height datum (AHD).	Yes. SBO1 to be removed.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					This submission is an objection without any specific issues listed. The overlay designation has been reviewed on site and taking account of the locations of drainage infrastructure at the rear of the property, the flood shape is proposed to be removed from the property.	
479.	19 Olympus Drive, Templestowe Lower	Ruffey Creek	SBO3	1, 2	The submission references previous storm events and states that flooding has not been experienced in the manner indicated by the SBO. In addition, the submission refers to previous instances of flooding of downhill properties which are not affected by the proposed overlays. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. The modelled flood extent is based on a simulation which assumes the drainage network is operating at capacity and no blockages are present. Real-life storms often result in blockages which may alter the flood path. This may be one reason why the flood shape differs to the submitter's experiences of runoff at this location. In any case, the incursion of the flood shape onto the submission property is minimal and is recommended to be deleted from the property.	Yes. Remove SBO3 incursion from the property.
480.	211/187 Reynolds Road, Doncaster East	Mullum Mullum Creek	SBO3	14 Object as on third floor of	The submission objects to the amendment as they are located on the third floor of an apartment block. The proposed overlays are not intended to be applied retrospectively but will apply to any	Yes. Remove SBO3 incursion

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Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
21 Olympus Drive, Templestowe Lower	Ruffey Creek	SBO3	apartment block.	proposed future development of the site. Such proposals could include earthworks or the erection of new fencing which has the potential to exacerbate flood impacts or full redevelopment of the site. Notwithstanding, the incursion on the eastern boundary of the property at No. 187 Reynolds Road is considered to be minor and is recommended to be deleted from the entire property as it fulfils the minor incursion criteria. The submission states that no flooding has been experienced in 22 years in this location and that Council should upgrade the drainage. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. The actual drainage infrastructure in this area has been appropriately modelled, with a drainage pit outside the adjacent property. The front yard of the submission property is cut in below the level of the road. The SBO shape is limited to the front of the property and is located in a depressed area, however a site inspection by CARDNO indicates	proposed from the property. This change affects all apartments located at 187 Reynolds Road. Yes. Remove SBO3 shape.
5 Chaim Court, Donvale	Mullum Mullum Creek	LSIO	2	The submission expresses doubt that water would build up and flood the area of the property encumbered by the exhibited LSIO, and that any	Yes The LSIO overlay should be
	21 Olympus Drive, Templestowe Lower	21 Olympus Drive, Templestowe Lower Ruffey Creek	Overlay 21 Olympus Drive, Templestowe Lower Ruffey Creek SBO3	Overlay related to submissions apartment block. 21 Olympus Drive, Templestowe Lower Ruffey Creek SBO3 1, 5, 7, 8	Overlayrelated to submissionOrder response to submissionImage: Control of the submissionapartment block.proposal could include earthworks or the erection of new fencing which has the potential to exacerbate flood impacts or full redevelopment of the site. Notwithstanding, the incursion on the eastern boundary of the property at No. 187 Reynolds Road is considered to be minor and is recommended to be deleted from the entire property as it fulfils the minor incursion criteria.21 Olympus Drive, Templestowe LowerRuffey CreekSBO31, 5, 7, 8The submission states that no flooding has been experienced in 22 years in this location and that Council should upgrade the drainage. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. The actual drainage infrastructure in this area has been appropriately modelled, with a drainage pit outside the adjacent property. The front yard of the submission state in a depressed area, however a site inspection by CARDNO indicates that there is sufficient elevation along the footpath to stop storm water running into this property, therefore the SBO shape can be removed.5 Chaim Court, DonvaleMullum Mullum CreekLSIO2The submission expresses doubt that water would build up and flood the area of the property

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					and does not reach the gully within the property. Although the driveway may experience runoff, during major storm events it can be expected that the gully on the property would experience a concentration of shallow runoff from the north east as indicated by the exhibited flood shape. The flood depths on this property are not representative of inundation from Mullum Mullum Creek, therefore it is recommended that the flood shape be retained but the current LSIO designation of the incursion be changed to SBO3. These changes should also affect 3 and 5 Chaim Court and 59 Beckett Road.	and the flood extent should be retained. These changes also affect 3 and 5 Chaim Court and 59 Beckett Road.
483.	Applewood Residents' Assoc, 5 Grand Boulevard, Doncaster	Koonung Creek	SBO2	2, 12	Following the recent meeting with the submitter, Cardno were engaged to review the submission and SBO at this property, including undertaking a site inspection. Due to the absence of some drainage from the model, inadequate application of the outlet pipes under the Eastern Freeway and significant changes to the surface made since the modelling was undertaken, it is recommended that all SBOs be removed from the subject area.	Yes. Delete all SBOs from the site.
484.	1 Narcissus Court, Doncaster East	Mullum Mullum Creek	N/A	14 Question whether affected by amendment. Want confirmation	A review of this property has demonstrated that an overlay is not proposed to apply to this property as part of Amendment C109.	N/A

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				that not affected.		
485.	12 West End Road, Warrandyte	Andersons Creek	SBO3	2, 10, 12	The submission objects to the proposed overlays because of the distance away from local waterways and the potential impact on future development. The property experiences runoff from the south west, the flood shape at this location does not represent inundation from a river or creek. This type of flooding is still considered a risk. The intent of the proposed overlays is not to prevent future development but ensure it is undertaken in a manner which considers the risk of flooding. The outfall drain constructed as part of this development is not relevant to the flood shape affecting the subject property. The flood shape is consistent with the topography of the area and catchment size. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No
486.	418 Doncaster Road, Doncaster	Koonung Creek	SBO3	5,8	The submission does not contain an objection to the proposed amendment but highlights the urgent need for the provision of adequate drainage in the vicinity of 418 Doncaster Road. The fact that flooding in this area has been observed is consistent with the justification to apply the SBO3. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) rainfall event, with overland	Νο

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					flow occurring once the capacity of the	
					underground drainage network is exceeded.	
					Council has a policy to prioritise drainage upgrades	
					where required to alleviate flooding of habitable	
					floor areas. These works are prioritised based on	
					frequency of flooding of habitable floor areas.	
					During the site visit and meeting with the	
					submitter, previous overland flow events were	
					discussed. In response to these concerns, Council	
					officers intervened with the neighbouring property	
					and required internal drainage improvement works	
					which have since been completed. These flows	
					have largely abated since these works have been	
					completed. There is a need to ensure that future	
					development is designed to set habitable floor	
					levels above the major storm flood level. The	
					review has confirmed the surrounding topography	
					and drainage assets. The flood shape should	
					remain as exhibited at this location.	
487.	42 Cantala Drive, Doncaster	Ruffey Creek	SBO2	2, 3, 4, 7, 8	The submission states that the drainage	No to 42 Cantala
					infrastructure in the area was upgraded in the past	Drive, however,
					and should remove the risk of flooding. Drainage	convert SBO1 to
					plans were checked and it was found that the	SBO2 at 305
					correct pipes were included in the model.	George Street.
					Although the upgrades have taken place, they	
					were implemented to reduce flooding of habitable	
					floor areas and do not remove all overland flow	
					entirely during a 1 in 100 year ARI storm event. The	
					property is in a position prone to flooding and	

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					previous experiences of flooding described in the submission supports the application of the SBO in this area. The review has confirmed the surrounding topography and drainage assets. In response to the recent meeting with the submitter, Cardno were requested to review the SBO at this location. The flood shape should remain as exhibited at this location.	
488.	252 Church Road, Templestowe	Ruffey Creek	SBO3	2	The submission opposes the amendment and argues that Council should upgrade drainage in the area rather than imposing the SBO. Underground drainage systems are usually designed to convey a 1 in 5 year ARI or 20% AEP rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Since the 1970s improved controls have been in place that consider overland flow paths for up to the 1 in 100 year ARI/1% AEP storm event. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Councils are not obligated to upgrade drainage systems in place prior to the new standard from the 1970s/80s, however Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					flooding of habitable floor areas. In addition, the submission argues that redevelopment in the area is unlikely to change the topography. It cannot be certain what form future development of the site may take. There are examples of multi-unit developments in the municipality with significant underground garage excavations which could pose a significant flood risk if the overland flow path is not considered during design. The proposed overlays ensure that whatever form it may take, future development will consider the risk of flooding. A desktop review has found that the flood shape is consistent with the topography and Council drainage infrastructure and it is recommended to retain the flood shape at this location.	
489.	2 Glenwood Close, Donvale	Mullum Mullum Creek	SBO3	2, 7	The submission expresses doubt that the SBO should be applied to the property. The SBO2 and SBO3 flood extents in general are associated with flash flooding from a 1 in 100 year ARI major rainfall event impacting local catchments. These events can cause damage to houses and property but due to the relatively small catchment sizes involved, these events are typically characterised by much shorter duration flows. A site visit confirmed the lay of the land with the overlay along the alignment of a small gully which concentrates runoff from adjacent properties onto the street. In addition, the submitter recalls storm	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					events which damaged properties in the street and resulted only in surface water runoff. It is possible that the described storm is not representative of a 1 in 100 year ARI storm event. The SBO extent was modelled on a 1 in 100 year ARI or 1% AEP rainfall event in accordance with industry practices. Although the affected area of the property is minor, it represents half the width of the flood shape at this location and removal would compromise the integrity of the flood shape in this area. The review has confirmed the surrounding topography and drainage assets. Based on the previous investigation and review following a recent meeting with the submitter, it is recommended that the flood shape remain as exhibited at this location.	
490.	48 Hall Road, Warrandyte South	Andersons Creek	SBO2	2, 5, 7	The submission states that the SBO should not be applied to the property. The SBO2 and SBO3 flood extents in general are associated with flash flooding from a 1 in 100 year ARI major rainfall event impacting local catchments. These events can cause damage to houses and property but due to the relatively small catchment sizes involved, these events are typically characterised by much shorter duration flows. A site visit confirmed the lay of the land with the overlay representation of the topography. The submitter maintained that the experienced flooding was less extensive than that	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					indicated by the SBO and that during storms runoff is largely restricted to the spoon drains on the property. It is possible that the submitter has not experienced the impacts of a 1 in 100 year ARI rainfall event on the property. The SBO extent was modelled on a 1 in 100 year ARI or 1% AEP rainfall event in accordance with industry practice. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
491.	17 Banool Quadrant, Doncaster East	Ruffey Creek	SBO3	2, 14 Dispensation s for heights, setbacks and site coverage restrictions for planning permits should be given to compensate for raised floor levels resulting from flood controls. Cost effective alternatives	Consideration has been given to the LiDAR topographical data as well as the existing drainage infrastructure as part of the modelling. Consideration has been given to the impacts of structures such as buildings, features, landscaping and fences on the mapped SBO extents, through the application of roughness factors to land areas. Roughness factors are allocated based on land use for individual sub catchment areas. The intent of the proposed overlays is not to prevent development but ensure it is undertaken in a manner which considers flood risk. As a result of the recent development works, the site characteristics have changed and the flood risk has been managed effectively. Some flooding is expected to remain at this north west corner of the site from an open grate pit, however as it is no longer connected to the flows within Banool Quadrant, this area becomes an 'isolated island'. In	Yes. Remove the SBO3 shape. In addition remove SBO3 from 2/232-234 Blackburn, 15 & 21 Banool. Reduce SBO3 at 19 Banool

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				to providing solutions for managing or redirecting overland flow should be provided as part of the planning application process	the filtering process any isolated island below 200 m2 has been removed to ensure a consistent flood shape associated with the SBO3 layer. There is now little need for the SBO3 layer to remain. It is our opinion that the site previously had some associated flood risk but due to changes to the site associated with the current development works and the associated flood result filters, this area can now be removed from the SBO3 layer.	
492.	11 Owens Street, Doncaster East	Ruffey Creek	SBO3	7, 8, 11	The submitter is correct in identifying that the area affected by the SBO3 at the rear of the property is minor. The purpose of the proposed overlays is to ensure that future development is protected from flooding. Under certain conditions, development close to existing property boundaries or within easements may be permitted in some cases. In this case, the incursion is not considered to be significant and application of the SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly.	Yes. Remove the SBO3 incursion from the property.
493.	Unit 2 /29A Turnstone Street, Doncaster East	Koonung Creek	SBO2	1, 6, 7, 8, 12	The submission refers to private drainage infrastructure installed as part of the development of the property and states that the units were built according to the requirements at the time. Although this is the case, there is a need to ensure future development is protected from flooding.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					The flood modelling which underpins the SBO provides new information not previously available to Council when approving development within he municipality. The private stormwater system constructed as part of the development is designed to minor storm event standards and is not expected to significantly impact the flood extent during major storm events. In addition they are subject to change and Council does not maintain and cannot guarantee their effectiveness. The property is in a defined valley and can reasonably be expected to experience flooding in the manner indicated by the SBO. The review has confirmed the surrounding topography and drainage assets. The SBO2 shape should remain as exhibited at this location.	
494.	15 Totara Court, Templestowe Lower	Ruffey Creek	SBO3	1, 2, 3, 7, 8	The submission states that no flooding has been experienced at this location. It is possible the submitter has not experienced a 1 in 100 year ARI event of critical duration at this location. In addition, the flood shape represents collective runoff from uphill (to the east) which is channelled down the driveway and onto Totara Crt. A site visit was undertaken which confirmed the topography of the area in addition to Council drainage infrastructure. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
495.	29 Council Street, Doncaster	Ruffey Creek	SBO2	2	The submission states that the property would not flood due to the relative elevation of the neighbouring property which is lower. A review has found that the flood shape forms within the property and flows west so the relative height compared to the neighbouring property is not a valid basis for amendment. A site visit has confirmed the topography and drainage infrastructure. The flood shape should remain as exhibited at this location	No
496.	19 Banool Quadrant, Doncaster East	Ruffey Creek	SBO3	2, 10, 14 Cost effective alternatives to providing solutions for managing or redirecting overland flow should be provided as part of the planning application process.	The submission states that the modelled flow paths are unlikely to occur. Specifically in relation to the submission property, no flooding has been experienced by the submitter in the manner indicated by the SBO. It is possible the submitter has not experienced a 1 in 100 year ARI storm event of critical duration at this location. In addition, given the size of the catchment, the terrain in the model has been represented as a grid of cells 3 m x 3 m in size. This approach is considered to provide appropriate resolution to define the topographical features within each catchment. The submission refers to 1.0 m contour data not suggestive of water pooling. 0.5 m contour data suggests overflow of the easement drain along the rear of the property would occur in the manner indicated by the SBO. The submission also references the development engineering controls and permit trigger points	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					proposed as part of the amendment and argues that many requirements are unreasonable. The intent of the proposed overlays is not to prevent development but ensure it is undertaken in a manner which considers flood risk. Should the permit exemption requirements for properties with the SBO3 overlay not be met with respect to floor levels and obstruction of the overland flow path, the developer must demonstrate appropriate methods for considering the overland flow path through the site as part of a planning permit. The fencing requirements only apply to fences along new alignments, fences along existing alignments may be replaced like-for-like. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location. Developments are encouraged to provide onsite solutions for managing overland flow as part of the planning permit process.	
497.	19 Clancys Lane, Doncaster	Ruffey Creek	SBO3	2, 5, 8	The submission argues that the property is sloping and flooding is not an issue. The flood shape represents shallow runoff through the property from the west and onto the street. This type of flooding is still considered a risk, and a desktop review has found that the flood shape is consistent with the topographical contours in the area and the Council drainage assets and should be retained.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
498.	3 Kelly Street, Doncaster	Ruffey Creek	SBO3	2	A detailed study of the area was undertaken and it was found that the modelled surface was not representative of actual conditions at the resolution analysed. Upon inspection of the street, it is more likely that flood waters will remain within the roadway. Therefore, it is recommended that 1, 3 and 5 Kelly Street be removed from the SBO3.	Yes. Remove SBO3 from 3 Kelly Street In addition remove SBO3 from 1 and 5 Kelly Street
499.	Applewood Residents' Assoc, No. 5 Grand Boulevard, Doncaster	Koonung Creek	SBO2	7, 12,	Following the recent meeting with the submitter, Cardno were engaged to review the submission and SBO at this property, including undertaking a site inspection. Due to the absence of some drainage from the model, inadequate application of the outlet pipes under the Eastern Freeway and significant changes to the surface made since the modelling was undertaken, it is recommended that all SBOs be removed from the subject area.	Yes. Delete all SBOs from the site.
500.	17 Alexander Road, Warrandyte	Mullum Mullum Creek	SBO2	2	The submission property contains an incursion of the flood shape into the rear of the property. Although the incursion represents a small percentage of the property area, it does not meet the criteria for trimming as it is too significant and subdivision of the property may occur in the future. A review has found the flood shape to be consistent with the topography and drainage assets in this area and is therefore recommended to be retained.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
501.	19 Tandarook Crescent, Donvale	Mullum Mullum Creek	SBO2	2	The submission acknowledges flooding occurs through the property but questions the extent of the flood shape and the LiDAR data used in the modelling. The photographic evidence provided supports the application of the SBO at this location with significant amounts of runoff shown. In addition, it is possible the submitter has not experienced a 1 in 100 year ARI storm of critical duration at this location. The flood study has used LiDAR data collected as part of the 2008-9 Greater Melbourne Urban LiDAR Project and obtained from DELWP. When collecting the data, DELWP employed numerous methods for ensuring accuracy. This data represents the most complete and up-to-date data available for this kind of flood mapping and the use of this data represents industry practice. Due to the position of the property relative to the catchment in addition to evidence supplied by the submitter, the property can reasonably be expected to experience runoff in the manner indicated by the SBO. The review has confirmed the surrounding topography and drainage assets. Following the follow-up meeting with the submitter, Cardno were requested to review the submission. The results of the further review are that the flood shape should remain as exhibited at this location.	No
502.	27 Heads Road, Donvale	Mullum Mullum Creek	SBO2	14 Concerned	The submission does not specifically object to the shape of the overlay. The property receives runoff	Yes.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				about implications of amendment. No further details provided.	from the west and contains two intersecting gullies. The flood shape is consistent with the topography and the existing Council infrastructure present on the property. It is recommended that the flood overlay be retained on this property but that the designation of the SBO be changed from SBO2 to SBO3.	Change overlay from SBO2 to SBO3. In addition change 25 Heads from SBO2 to SBO3. Change southern section of SBO2 at 29 Heads to SBO3.
503.	1 Lansell Drive, Doncaster	Ruffey Creek	SBO3	1, 2	The submission states that the property is not near a river or creek and no flooding has been experienced since 1968. The flood shape at this location represents runoff from the south being concentrated and channelled onto the roadway and joining with the main flood shape on Lansell Drive, with the roadway conveying the runoff to the west which is why the houses on the lower side of the street are not affected. It is possible this property has not experienced a 1 in 100 year ARI storm event of critical duration at this location. This flood shape is consistent with the flow characteristics at this location. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
504.	21 Ada Street, Doncaster	Koonung Creek	SBO3	11, 14 Query if including a plinth on the fence will divert any water and therefore allow for overlay to be removed.	The submission argues that a small area is affected by the SBO. Unfortunately, the incursion exceeds the minor incursion criteria for trimming. The flood shape is consistent with the Council drainage assets in the easement to the rear. The review has confirmed the surrounding topography and drainage assets. LiDAR and contour surface data were analysed along with aerial photography and it was found that some tinning issues have likely occurred in these properties. Some low points have been picked up in the pool which has created some erroneous local depressions and it is therefore recommended to remove the SBO from 21 Ada Street.	Yes. Remove SBO3 from property. In addition remove the SBO from 19 Ada Street and 18 Caringal Avenue.
505.	23-31 Tills Drive, Warrandyte	Andersons Creek	LSIO	2, 12	Further flood shape amendments were also identified in the vicinity of this property based on discussions with Melbourne Water. Applicable considerations include flow depths, the minor nature of several incursions and the ability of the proposed flood shapes to assist with the management of flood risk. The proposed changes include the removal of the proposed LSIO flood shapes from 50-60 Tills Drive (Black Flat), the southern LSIO from 36-48 Tills Drive and the small incursion into 22-34 Tills Drive. The minor LSIO incursion across the southern boundary of 22-34 Tills Drive is also proposed to be deleted. It is proposed to modify the proposed LSIO flood extents at 8-20 Tills Drive to SBO1.	Yes. It is proposed to retain the flood shape at 23-31 Tills Drive but convert the LSIO to SBO3, based on a review of the subject flows. The proposed changes include the removal of the proposed LSIO flood shapes from 50-60 Tills

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
						Drive (Black Flat), the southern LSIO from 36-48 Tills Drive and the small incursion into 22- 34 Tills Drive. The minor LSIO incursion across the southern boundary of 22- 34 Tills Drive is also proposed to be deleted. It is proposed to modify the proposed LSIO flood extents at 8-20 Tills Drive to SBO1. Refer to map at
506.	282 Yarra Street, Warrandyte	Andersons Creek	LSIO	2, 12	The front of this property is encumbered by the existing LSIO. Following a recent meeting with the submitter, Melbourne Water have reviewed the submission and recommend that the existing LSIO shape remain at this property.	Attachment 10. No
507.	280 Yarra Street, Warrandyte	Andersons Creek	LSIO	2, 12	The front of this property is encumbered by the existing LSIO. Following a recent meeting with the	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					submitter, Melbourne Water have reviewed the submission and recommend that the existing LSIO shape remain at this property.	
508.	3 Glenwood Close, Donvale	Mullum Mullum Creek	SBO3	2	The submission expresses doubt that the SBO should be applied to the property. The SBO2 and SBO3 flood extents in general are associated with flash flooding from a 1 in 100 year ARI major rainfall event impacting local catchments. These events can cause damage to houses and property but due to the relatively small catchment sizes involved, these events are typically characterised by much shorter duration flows. A site visit confirmed the overlay along the alignment of a small gully which concentrates runoff from adjacent properties onto the street. In addition, the submitter recalls storm events which damaged properties in the street and resulted only in surface water runoff. It is possible that the described storm is not representative of a 1 in 100 year ARI storm event. The SBO extent was modelled on a 1 in 100 year ARI or 1% AEP rainfall event in accordance with industry practices. Although the affected area of the property is minor, it represents more than half the width of the flood shape at this location and removal would compromise the integrity of the flood shape in this area. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
509.	361-363 Ringwood- Warrandyte Road, Warrandyte	Andersons Creek	SBO1	2	The flow path generally follows the drainage line for the tributary of the Yarra River. No changes recommended to the exhibited flood shape.	No
510.	25 Park Road, Donvale	Mullum Mullum Creek	SBO2, SBO3	2	The submission states that the existing 900 mm drain on site was not included in the modelling and that the flood shape needs to be reviewed. A desktop review has found that the 900 mm drain which discharges under Eastlink was not included in the flood model. The model was updated with the additional of this pipe was well as changing the alignments of the pipes in the area to match the results of the survey undertaken in the Stormy Water Solutions report. As expected, the 1 in 100 year flood extent on the subject property is greatly reduced with the introduction of the 900mm diameter outlet pipe as well as changing the pipe alignments. It is recommended to change the flood extent in this area to be consistent with the new modelling results. Furthermore, the depths of flooding in this area have been reduced to be predominately below 0.1m and hence it is recommended that it be changed from SBO2 to SBO3.	Change flood extent to be consistent with the new modelling. Change from SBO2 to SBO3.
511.	6 Birbank Court, Doncaster	Ruffey Creek	SBO3	1, 2, 4, 7, 8, 10	The submitter states that she has lived at 6 Birbank Court for 12 years and has never experienced any flooding while living at this property. A review of available rainfall gauge data for sites located at the Eastern Golf Course and Zerbes Reserve indicates that over the last 12 years, there is no evidence of	Yes. Remove SBO3 from property.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
512.	76 St Clems Road, Doncaster East	Koonung Creek	SBO2	submissions	this area having been impacted by a 1%AEP storm event. The submitter's observations are consistent with this assessment. The review has confirmed the surrounding drainage assets are as modelled. LiDAR and surface contour data were analysed along with site and aerial photography and it was found that when the buildings and vegetation have been tinned out of the modelled topography, it has created some erroneous low points which water is being trapped in. Hence, it is recommended that the SBO be removed from 6 Birbank Court. The submitter states that 76 St Clems Road flooded at the rear approximately 20 years ago in a high intensity storm, but not to the extent mapped as part of SBO2.	Amendment In addition remove SBO3 from 7 Birbank.
					part of SBO2. Local rain gauge records indicate that the property would have experienced a 1 in 40 ARI storm event (approx.) in 1999. As the flood mapping is based on a critical duration 1 in 100 year ARI storm event, the reported inundation is considered to be consistent with the mapped flood extent as part of SBO2. Upgrades on St Clems Road (450 mm drains) and through the property at No. 66 (525 mm drains) undertaken in 1995, would have little impact on the overland flows along the valley at the rear of 76 St Clems Road. The SBO 3 only covers a relatively small area at the rear of the property emanating from the floodway at the rear of the property in St Clems Reserve. The flood	

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					overlay is consistent with the expected property flooding in major storm event and should be retained. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location.	
513.	35 Rowan Street, Doncaster East	Ruffey Creek	SBO3	1, 4, 7, 8	While the property is located near the top of Rowan Street, it is also located in a valley of a medium sized sub- catchment which contributes flows in a major storm event. A low point exists upstream of the submitters property at 62 Oeens Street and the model indicates that overland flows in a major storm event will be directed through 62 Owens Street, then through the front of 35 Rowan Street. The modelling results indicate that depths of flooding within Owens Street will be large enough to overtop the gutter and flow into 62 Owens Street. The topography at this location is consistent with the Lidar data and with the modelled flood extent. There is opportunity to consider this location for inclusion in a future drainage upgrade works program, subject to an assessment of modelled flood damage within the catchment and project prioritisation. The flood shape is consistent with the expected flow of water from the catchment area upstream of the property in a 1 in 100 year ARI event. It is recommended that the proposed SBO3 overlay remain unchanged.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
514.	13 Marianne Way, Doncaster	Koonung Creek	SBO3	1, 2	This submission has objected to the proposed overlay on the basis that there is an error in the elevation of the terrain model of + or - 100 mm and if SBO 3 has maximum depth of 100 mm could make the depth 0.0 mm at their property and the overlay should not exist within this property, however, if the error was + 100 mm the depth of flow would be 200 mm making it SBO 2. The variation in the terrain model is used to explain level variations to the AHD, however, the flood overlay is measured in depth and velocity of flow relative to the terrain model. The depth would be the same regardless of the elevation of the model, since the difference would be uniform at all points in the terrain model, this indicates that the depths indicated in the overlay are still valid. The submitter also states that this property is located in a steep section of Marianne Way and does not understand how it could flood. The existing drainage system in Marianne Way is only capable of carrying the 1 in 5 ARI event storm water flow, the road is located in a steep valley and the road way conveys the additional runoff created by the 1 in 100 ARI storm event. In this event the whole road reserve is taken up by the overland storm water flows. At the intersection flows from Ernst Street the flow joins the overland flow in Marianne Way increases in depth and runs over the corner of 13 Marianne Way.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
515.	26 Baradine Cres Donvale	Mullum Mullum Creek	LSIO to be removed	14. Supports proposed removal of LSIO. No objection to amendment.	The flood overlay is consistent with the expected hydraulic function and flows on this property in major storm event and should be retained. The review has confirmed the surrounding topography and drainage assets. The flood shape should remain as exhibited at this location. Submitter wanted to confirm that LSIO was still proposed to be removed under Amendment C109. No objection to amendment. An addendum has reiterated support for the removal of the overlay. Further, the submission notes that the original correspondence stated that the overlay will be removed, and as such many similarly affected residents have relied on this as the final outcome. The submission concludes that Council should honour this letter, and that failure to remove this will waste Council resources, retain unnecessary planning controls and restrictions on properties, and creates unnecessary concern. Irrespective of the other overlays, the submission recommends splitting the amendment so that	No
516.	11 Sowter Court Donvale	Mullum Mullum Creek	SBO2	1	supported removals can progress. The submission contains no specific objection to the flood shape however requests a review of the inclusion of the property in the proposed SBO2 overlay. The purpose of the proposed overlays is to ensure that future development is protected from flooding. In this case, the incursion is not considered to be significant and application of the	Yes. Remove property from SBO2

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					SBO in this case would not yield any significant planning or risk mitigation benefit. Thus, the exhibited flood shape is recommended to be amended accordingly.	
517.	50 Riverview Terrace Bulleen	Koonung Creek	SBO3	2	The submission states that the SBO3 should be removed on the basis that the submitter has resided in the dwelling since 1962 has not witnessed flooding of the property. A site inspection has been conducted as requested, which confirmed that storm water overland runoff would affect the rear of this property. This property may not have experienced a 1 % AEP event since 1962 and the absence of witnessed flooding in this time does not negate the flood mapping results. Owing to the elevation of the existing house, flood effects on the existing dwelling would have been minimal as the SBO3 flood extents affect the rear of the allotment and are generally less than 100 mm in depth. Based on the site observations and officer analysis of the submission, it is recommended that the proposed SBO3 flood overlay on this property remains in place as exhibited.	No
518.	7 Aminga Avenue, Doncaster	Mullum Mullum Creek	SBO3	Submission withdrawn.	Submission withdrawn.	No
519.	25 Baradine Terrace, Donvale	Mullum Mullum Creek	LSIO to be removed	14 Support proposed removal of LSIO. No	Submission wanted to confirm that LSIO was still proposed to be removed under Amendment C109. No objection to amendment.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				objection to amendment.		
520.	103 James Street Templestowe	Ruffey Creek	SBO2	2	The submission states that the modelling which underpins the proposed overlays is inaccurate due to the modelling assumptions relating to terrain, in addition to changes in the land surface. Following the recent meeting involving Council officers and the submitter, Cardno were requested to review the SBO affecting this property. The existing drainage system was appropriately modelled. The flood shape is modelled on a 1 in 100 year ARI rainfall event in accordance with industry standards. LiDAR and surface contour data was analysed along with aerial and site photos. It was found that the modelled surface is likely not completely representative of the actual surface. This has been caused by tin thinning issues due to buildings and thick tree cover on steep slopes which has led to some unrealistic low points in the modelled terrain in this area. It is recommended to delete the SBO2 shape from 103 James Street accordingly.	Yes Delete SBO2 shape from 103 James Street. On addition remove SBO2 shapes from 105 and 107 James Street as well as 15 Milne Street and 94 Wood Street. Also delete SBO3 extents from 105 and 107 James Street.
521.	36 Henry Street, Doncaster	Mullum Mullum Creek	SBO2	7, 14 Concerned about impact of Amendment on growth in Manningham	The submission contests the flood mapping primarily based on concerns regarding potential impacts on insurance and land value. It is recommended to retain the flood shape at this location as exhibited.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					The amendment will not prohibit redevelopment in Manningham. Rather, it seeks to have in place controls regarding siting and design.	
522.	20-23 Airdrie Court, Doncaster	Ruffey Creek	SBO2	2	The flood overlay shown on this land has been estimated using LIDAR data dated 2009. The submission states that the land has been filled in 2012 and a preliminary assessment of the site by Stormy Water Solutions states that flooding is now unlikely at this site. The site inspection confirms that there has been filling of up to 1 metre placed on this land and the flood shape is likely to be impacted. Assessment has been made of the impacts of the filling on the SBO2 shape. It is recommended that the SBO2 shape be deleted from this property.	Yes. Delete SBO2 from property.
523.	3 Bernarro Court, Donvale	Mullum Mullum Creek	SBO2	2, 11, 14 There is a restrictive covenant on the property	Contours and LiDAR surface data show that there is a valley located at the incursion which follows the flood extent shown in the SBO. There is a slope on the property, but there is also a slope in the adjacent property in the opposite direction which causes the valley in this location. Easements and development restrictions could be changed in the future and therefore cannot be given as a reason to remove the SBO. Maximum depth of water within the flood shape on the property is less than 0.1. Therefore, it is recommended that shape changed to SBO3. In addition, the SBO2 overlay impacting 2 Knight Court is also to be changed to SBO3.	Yes. Change overlay from SBO2 to SBO3. In addition, the SBO2 overlay impacting 2 Knight Court is also to be changed to SBO3.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
524.	9 Gloucestor Court, Templestowe	Ruffey Creek	SBO3	1, 7, 8	The submitter states that she has lived at the property for 42 years and the property has never been subject to flooding. The flood shape affecting the property represents less than 6% of the property area. The flood shape for this site is less than 6% of the property area, is less than 30sm in area and it is recommended that the flood shape be removed under the minor incursion criteria.	Yes. Remove SBO3 flood shape.
525.	1 Murndal Drive, Donvale	Mullum Mullum	SBO3	2	A low point exists in Murndal Drive abutting numbers 1 and 3. The modelled flood shape is consistent with the site conditions in a 1 in 100 year ARI storm event. There is good agreement between the actual drainage infrastructure and the modelled drainage system. The flood shape is greater than 30sm in area and as such, is not considered to be a minor incursion. It is recommended that the flood shape in respect of this property be retained.	No
526.	1/62 Furneaux Grove, Bulleen	Koonung Creek	SBO2	1,2,4	The property is located downstream of a low point in Furneaux Grove. The terrain had been modelled based on LiDAR data dated 2008-9 and this represents the most complete and up-to-date data available for flood mapping and the use of this data is consistent with industry practice. The flood shape modelled in respect of a 1 in 100 year ARI storm event is considered to be consistent with the topography and existing underground drainage system capacity. Underground drainage systems are usually designed to convey a 1 in 5 year ARI	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					(Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The flood modelling that underpins the SBO will allow Council to prioritise future drainage upgrades in critical areas. There remains a need for the proposed overlays, to control development and minimise future flood risk. Based on the foregoing, it is recommended that the exhibited flood shape remain unaltered.	
527.	15 Whitefriars Way, Donvale		SBO3	1,2	House never flooded in last 17 years, even on 29 December 2016. Submitter also claims that the previous owners similarly never witnessed flooding of the property in the previous 11 years. Land to the west of the property falls toward 15 Whitefriars Way. Council has no record of any Council easement drains serving properties upstream of 15 Whitefriars Way. It is highly likely that there has been no flooding experienced at the	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					property. It is considered that the flood shape for this property is consistent with the site conditions and it is recommended that the flood shape be retained.	
528.	4 Eleanor Court, Donvale	Mullum Mullum	SBO2	2,14	Submitter requests that flood overlay be deleted from 4 Eleanor Court, as he claims that the associated flooding is due to inadequate Council drainage. The existing drain in this vicinity is a 375mm diameter underground drain constructed as part of the subdivision in the late 1960's. The underground drainage was not designed to convey runoff from the 1 in 100 year ARI storm event which is the event in respect of which the flood modelling has been undertaken. Given the foregoing, there appears to be good correlation between the modelled flood shape and previous flood events and it is recommended that the flood shape be retained for this property.	No
529.	110 McGowans Road, Donvale	Mullum Mullum	LSIO	12	Council records indicate the existence of an underground drain between 225mm and 525mm diameter along the northern boundary of 106 McGowans Road. It is noted that the flow path along this low point is caused by local catchment flooding and not from the creek. In the modelled 1 in 100 year rainfall event, this pipe is shown as not having adequate capacity to deal with flows at this location. Furthermore, the modelling results show in excess of 100mm depth of flooding. Therefore, it is recommended that the overlay be changed	Yes. Change part of LSIO to SBO2.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					from LSIO to SBO2 up to the point where it connects with the watercourse LSIO.	
530.	58-62 Stintons Road, Park Orchards	Andersons Creek	SBO2	2	There is a defined valley which runs east to west across the rear of the property which is consistent with the mapped flood shape. The Special Building Overlay designation has however been reviewed based on the modelled flow depths and it is proposed to downgrade the designation from SBO2 to SBO3.	Yes. Flood shape to be converted from SBO2 to SBO3.
531.	3 Greta Court, Lower Templestowe	Bulleen North	SBO3	1, 4, 6	The submitter states that in the 50 years spent at the property, he has not witnessed overland flows through the property, except on one occasion in 2016. It is possible that the submitter has not experienced a 1 in 100 year ARI flood event while living at the property. The flood shape modelled in respect of a 1 in 100 year ARI storm event is considered to be consistent with the topography and existing underground drainage system capacity. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. The proposed SBO3 flood shape is considered to be consistent with the reported flows through the property in 2016 and no changes to the flood shape are proposed.	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
532.	16 Rangeview Road, Donvale	Mullum Mullum	SBO3	3	The critical storm duration for the property is 120 minutes. For the storm event on the 29th December 2016, the 120 minute storm was the storm associated with the greatest ARI from the event, which was 1 in 55 years. Contour and LiDAR data show that there is a valley running though the property which follows the same alignment as indicated by the flood modelling results. The model was updated and re-run with the upgraded pipes included which has resulted in a significant decrease in SBO on the property. It is therefore recommended to upgrade the SBO to include these revised modelling results.	Yes. Reduce extent of SBO3 flood shape.
533.	19 Springwood Close, Donvale	Mullum Mullum	SBO3	5, 7, 8	Flows come from Old Warrandyte Road upstream, through 21 and 22 Springwood Close, then through 18 and 19 Springwood Close, on their way to Mullum Mullum Creek. The impacts shown by the flood extents from the SBO, have been produced from a 1 in 100 year storm event, so it is expected that the storm from the 29th December 2016 would have been significantly smaller than that which was used for the development of the SBOs. Manningham City Council has a policy to prioritise drainage upgrades where required to alleviate flooding of habitable floor areas. The flood modelling that underpins the SBO will allow Council to prioritise future drainage upgrades in critical areas. There remains a need for the proposed overlays, to control development and	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					minimise future flood risk. Based on the foregoing, it is recommended that the exhibited flood shape remain unaltered. The flood shape modelled in respect of a 1 in 100 year ARI storm event is considered to be consistent with the topography and existing underground drainage system capacity. It is recommended that the SBO3 shape as modelled be supported without amendment.	
534.	11 Akoonah Close, Donvale	Mullum Mullum	SBO2	1, 5, 7, 8, 12	While the submitter states that the property has not flooded during the last 36 years, it is possible that the submitter has not been present at the property during a 1 in 100 year ARI storm event. The flood shape modelled in respect of a 1 in 100 year ARI storm event is considered to be consistent with the topography and existing underground drainage system capacity. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Australian Rainfall & Runoff was updated in 1987 to reflect updated design practices, with pipes conveying minor flows from a 1 in 5 year ARI/20% AEP rainfall event and overland flow paths to safely convey major flows through residential areas in a 1 in 100 year ARI/1% AEP rainfall event. Manningham City Council has a policy to prioritise	No

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					drainage upgrades where required to alleviate flooding of habitable floor areas. The flood modelling that underpins the SBO will allow Council to prioritise future drainage upgrades in critical areas. Council will consider whether to refer the Amendment to an independent Panel in September 2017. The property is located on the low side of Springvale Road and the residential catchment to the east of Springvale Road falls to the west, toward 11 Akoonah Close. The property is located in a shallow valley. It is considered that the SBO is consistent with the local topography and the capacity of the existing drainage systems. It is recommended that amendment to the SBO not be supported in this case.	
535.	12 Moonbria Way, Templestowe	Mullum Mullum	SBO2	14 Council must reconsider overlay. No reasons given	The property is subject to 2 minor incursions of SBO2, at the eastern boundary and the north- western corner of the property. The total incursion has been determined to be an area of 15sm with less than 2% of the total property area affected. It is recommended that the SBO2 incursions be removed from the property.	Yes. Remove SBO2 from property.
536.	18 Hillcroft Drive, Templestowe	Ruffey Creek	SBO1	1	The submitter states that there has been no flooding experienced at 18 Hillcroft Drive in the last 18 years. It is however possible that the submitter has not been present at the property during a 1 in 100 year ARI storm event. The overlay shapes impacting the property are consistent with overland flows along Hillcroft Drive and overland	Yes. SBO to be downgraded from SBO1 to SBO3.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
537.	4 Sowter Court, Donvale	Mullum Mullum	SBO2	2	flows running from the north toward Hillcroft Drive. On review, the flow depths are consistent with an SBO3 designation and it is recommended that the property be downgraded to SBO3. The proposed SBO only occurs adjacent to the road, within 9m of the front boundary. Any development, etc. proposed by the owner of the property would only be affected by the SBO if it is within 9m of the road. The existing house is not encumbered by the proposed SBO. While the	No
538.	35 Fyfe Drive, Lower	Ruffey Creek	SBO2	1, 5	house is not encumbered, given the depth of flows and risk, it is recommended to retain the SBO2 overlay. In a 1 in 100 year rainfall event, the underground	Yes.
556.	Templestowe	Kulley Creek	3002	1, 5	pipes will be full and so water will surcharge and flow overland as modelled. Flood modelling results show that the majority of these areas are likely to experience greater than 0.1m of flood depth and the SBO2 designation is appropriate. Site photos indicate that the flood extent on the south-eastern section of the property is unlikely to occur and so should be removed. Furthermore, it is recommended that the extent running along the	Remove part of the SBO2 overlay. Change SBO2 at 37 Fyfe and 12 Dillwynia
539.	10 Boonah Court, Lower Templestowe	Ruffey Creek	SBO3	1, 2	western boundary as indicated from the site photos be trimmed to better reflect the site conditions. It is recommended that the SBO2 overlay be adjusted accordingly. Modelling results indicate that flooding of the property originates from the upstream catchment,	Yes.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					and overflow of the Council drainage at the rear of the property. As shown by the SBO shape, properties at a lower elevation are also flooding from upstream flows. Council drainage is generally sized to accommodate flows associated with a 1 in 5 year ARI storm event at a maximum. During 1 in 100 year ARI rainfall events, the underground pipes will be full and so surcharge and overland flows can be expected. The LiDAR and surface contour data were investigated which showed that when the area around the house was thinned from the tin, it created a slight inaccurate depression. Thus, it is recommended that the flood shape for 10 Boonah Court be trimmed back to the house, but the flood shape between the property and 6 Herlihys Road be retained.	It is recommended that the flood shape in 10 Boonah Court be trimmed back to the house, but the flood shape between the property and 6 Herlihys Road be retained. In addition SBO3 to be removed from 7 Ardgower Court.
540.	11 Louisa Place, Templestowe	Mullum Mullum	SBO3	2, 12	Taking account of the changes to the topography of properties upstream of 11 Louisa Place since 2009 when the Lidar data was collected, it is recommended to realign the central section of SBO2 from the property to the rear of the property.	Yes. Realign the central section of SBO2 to the rear of the property. In addition realign the SBO3 shape through 12, 13 and 14 Louisa Place.

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Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
541.	3/20 Allen Street, Bulleen	Koonung Creek	SBO3	4	Minor nuisance flooding has occurred in the past at this property due to blockages in the drain within the easement at 78 Thompsons Road. The submitter disputes that water would come from Thompsons Road. A site inspection and desktop review lead to the view that flooding will not reach sufficient depths to allow water to flow over the kerb between 74 and 76 Thompsons Road. An issue has been identified with the modelling in Thompsons Road which has resulted in a low point in the nature strip in Thompsons Road which permits modelled flows to enter the common property at 20 Allen Street. In reality it is likely that flows in a 1 in 100 year event will continue west along Thompsons Road to Allen Street. It is recommended that the SBO be removed from this property.	Yes. Remove SBO3 from property. In addition SBO shape to be removed from: 76 Thompsons Road, 1,2 /20 Allen St, 14, 16 and 18 Allen St, 35 Furneaux Gr and part of the SBO3 at 37 Furneaux Gr.
542.	3 Veda Court, Templestowe	Ruffey Creek	SBO3	1, 2, 4, 7, 8	The submitter states that the property is not at risk of flooding based on knowledge that the property has not flooded since the building was constructed in the early 2000's. Given that the modelling is based on a 1 in 100 year ARI storm event of critical duration and the submitter has only been living at the property for two years, it is likely that the submitter has not experienced the impacts of a major storm event while at this property. Underground drainage systems are usually designed to convey a 1 in 5 year ARI (Average Recurrence Interval) or 20% AEP (Annual	No.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					Exceedance Probability) rainfall event, with overland flow occurring once the capacity of the underground drainage network is exceeded. Council's policy is to prioritise drainage upgrades where required to minimise flooding of habitable floor areas. The flood modelling that underpins the SBO will allow Council to prioritise future drainage upgrades in critical areas. Council will consider whether to refer the Amendment to an independent Panel in September 2017. Taking account of the results of the field and desktop reviews, it is recommended that the SBO be retained as exhibited at this location.	
543.	4 St Muir Drive, Warrandyte	Mullum Mullum	SBO3	1, 2, 12	The submission states that the property is on the high side of the street and that they installed extensive drainage, as well as that the driveway falls towards St Muir Drive. The contours indicate that there is a Shallow valley running north to south through the middle of this properties as well as 6, 8, and 10 St Muir Drive. This gully ends back in the road reserve where any overland runoff would be deposited. site inspection conducted by CARDNO Consultants has confirmed that possibly as part of the development of the land, the gully has been filled and the houses have been built overt the region where the gully was situated. CARDNO Consultants have recommended that the SBO shape be removed from this properties as the gully is no longer present and any storm water	Yes. Remove SBO3 from property.

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					runoff would run to St Muir Drive and be conveyed in the road carriage way. Council officers agree that the SBO shape can be removed from this property.	
544.	12 Jolen Court, Donvale	Mullum Mullum	LSIO	10	The property is already encumbered by the LSIO and the current Amendment will result in reduction of the impact of the LSIO on this property when compared with the existing overlay. It is recommended that the reduced LSIO be applied as exhibited to 12 Jolen Court as proposed. However, based on the review of the overland flow characteristics, it is recommended that the overlay designation be changed from LSIO to SBO2.	Yes. Change LSIO to SBO2. In addition, change LSIO to SBO2 for 13 and 14 Jolen Crt and 9 Era Crt.
545.	1 Mintara Court, Templestowe	Ruffey Creek	SBO3	1, 4	The submitters state that they have lived at the property for 30 years and the property has never been subject to flooding in that time. The incursion of SBO3 into this property is less than 30sm and encumbers less than 6% of the property area. It is recommended that as the removal of the incursion will not significantly compromise the management of flood risk at this location, the SBO3 shape be removed from the property.	Yes. Remove SBO3 from property.
546.	332 Serpells Road, Doncaster East	Mullum Mullum	SBO2	2	The property is located on the western side of a valley which conveys overland flows in major storm events such as the modelled 1 in 100 year event. The proposed SBO has been reviewed taking	No

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					account of the local site conditions and including the site topography and it is considered that the modelled SBO extent should be retained.	
547.	2 Forest Place, Templestowe	Mullum Mullum	SBO3	4, 7, 8, 12	The property is located downstream of a low point in Forest Place. The modelling for the SBO is based on a 1 in 100 year ARI storm event and the results indicate that the capacity of the existing drain is exceeded in a major event, leading to overland flows from the low point through private property. It is likely that the submitter has not been present at the property during a 1 in 100 year storm event of critical duration. Council's policy is to prioritise drainage upgrades where required to minimise flooding of habitable floor areas. The flood modelling that underpins the SBO will allow Council to prioritise future drainage upgrades in critical areas. There remains a need for the proposed overlays, to control development and minimise future flood risk. The flood shape modelled in respect of a 1 in 100 year ARI storm event is considered to be consistent with the topography and existing underground drainage system capacity. It is recommended that the SBO3 shape as modelled be supported without amendment.	No
548.	19 Margaret Court, Warrandyte	Mullum Mullum	SBO3	2	The submission disputes the shape of the SBO overlay and states that in high intensity events overland storm water runoff enters the property	Yes. Remove SBO3 from the middle

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
549.	307 George Street, Doncaster	Ruffey Creek	SBO1	1, 11	from the driveway and heads toward the property boundary between 19 and 20 Margaret Court. The LiDAR data shows that water would enter the property at the driveway (where the drain is located), pool in the tennis court and spill out along the eastern boundary of the property. The SBO shape should be changed to better reflect the LiDAR data. Deletion of the SBO1 incursion from this property	of the block and replace it over the driveway. Yes.
					is supported.	SBO1 to be deleted from property.
550.	21 Corsican Avenue, Doncaster East	Mullum Mullum	SBO3	1, 7, 8, 10	The LiDAR and contour surface data as well as site photos were analysed which indicate that there is a low point on the road which would pond in the 1 in 100 year ARI storm event, however, the pond depths would not be sufficient to overtop the nature strip and the footpath elevation. This has likely been caused by the resolution of the model not properly picking up the high point within the pedestrian strip. It is therefore recommended to remove the SBO in respect of both 21 and 19 Corsican Avenue.	Yes. Remove SBO3. The SBO shape to be removed from 19 Corsican Avenue as well
551.	273 Church Road, Templestowe	Ruffey Creek	SBO3	1, 2, 7, 8	The terrain at the property in the vicinity of the building has not been adequately picked up in the modelled surface. This has likely been caused by the building being inadequately thinned from the LiDAR as well as model resolution issues. This has led to pooling of water in the location of the	Yes. Remove SBO3 from property. In addition the SBO shape to be

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					building which is unlikely to occur. Therefore, it is recommended that this area be removed from the	removed from 269, 271 and 275
					SBO. Incursions at the front of the property are unlikely, and can also be removed. It is recommended that flood shapes effecting 271 Church Road be removed.	Church Road to be removed.
552.	12 Acheron Street, Templestowe	Koonung Creek	SBO2	1, 3	The house is suitably raised above the pool area level to be protected from flooding. Flood water is expected to overflow in this area and flow down the easement to the downstream reserve. The SBO overlays have been developed based on the theoretical 1 in 100 year ARI rainfall event. Therefore, it is highly likely that no flooding has occurred as represented by the SBO overlays in the last 25 years. As there is a large drain running along the boundary of this property, once the capacity of this is exceeded, overland flow will be generated and flow along this valley. The LiDAR and contour information as well as site photos corroborate the flood extent as shown in the SBO. It is recommended that the SBO remains as exhibited.	No
553.	2 Oxford Close, Templestowe	Mullum Mullum	SBO3	1, 7, 8	From aerial imagery, the LiDAR data used for modelling accurately represents the property, showing the tennis courts on both 2 and 3 Oxford Close clearly, as well as the flow path behind the tennis court on 2 Oxford Close. Flooding through the rear of the property follows the drainage network to Cliveden Court, and are the flows are	Yes. Remove SBO3 from property. In addition remove SBO3 from 3 Oxford Cl,

AMENDMENT C109 - REVIEW OF THE LAND SUBJECT TO INUNDATION OVERLAY AND SPECIAL BUILDING OVERLAY

Sub. No.	Property Address	Catchment	Proposed Overlay	lssues related to submissions	Officer response to submission	Recommended change to the Amendment
					shallow, hence the application of the lowest SBO category (SBO3). Given the steepness of the site and the flow paths noted onsite, it is considered that the proposed SBO will not appreciably assist flood risk management. It is proposed that the	2 Cliveden Crt and 42 Websters Rd
554.	26 Chippendale Court, Templestowe	Ruffey Creek	SBO2	1, 7, 8	SBO shape be removed from this property. LiDAR and surface contour data as well as site photos show that the subject property sits in the low point at the junction of Dellwood Court and Chippendale Court. Flows will naturally flow from the north and south down Chippendale Court and from the east down Dellwood Court. 26 Cheppendale road is then located at the confluence of these flow paths which is why there is an underground drain that runs along the property. It is recommended to retain the SBO shape accordingly.	No
555.	Eastlink	Mullum Mullum	Multiple	14. No objection	Eastlink have not made a submission per se but have raised queries regarding the modelled flood extents. Cardno met with Grayson Andrew to discuss the issues raised and the following responses are provided. Tunnel entrance shown as flooded, this has 1 in 200 year ARI protection. The rainfall on grid modelling floods this area due to the topography being included but not the associated infrastructure for the freeway. The flood extent has been removed from the SBO layers. Areas marked up as per email were queries as they were close to the Eastlink boundary. Most	Yes. Delete SBO2 from Eastlink Reserve abutting tunnels.

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Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
					of these areas have been trimmed to the MW LSIO and have not been modified. 25 Park Road flooding seems too extensive. This has been revised and remodelled with the correct pipes under the freeway and will be amended upon adoption. LSIO definition near Chaim Court. This SBO area has been redefined as SBO3	
556.	7 Saxon Street, Doncaster	Ruffey Creek	SBO2	1, 2, 12, 14. Overlay will not provide any significant risk mitigation benefit	As the SBOs have been developed using the theoretical 1 in 100 year rainfall event, it is possible that there has not been an event of this magnitude at the property in the last 50 years. However, it is unexpected that water would rise up the driveway given its elevation. This is likely that the LiDAR data thinning in the vicinity of the retaining wall has led to this result. It is recommended that the SBO2 extent be deleted from the property accordingly.	Yes. Remove SBO2 from property. In addition remove SBO2 from 5 Saxon St.
557.	24 Taunton Street, Doncaster East	Ruffey Creek	SBO2	3, 7	In 2007 the pipe network in the vicinity of this property was upgraded to a 1050mm dia pipe. This pipe upgrade was not included in the original modelling as it was not supplied in the GIS layer by Council. The upgraded pipe has since been inserted into the model based on the Council supplied plans and rerun for the 1 in 100 year flood event. The introduction of this pipe has reduced the flood extent in this area but while the pipe is effective and significantly improves the level of protection to the property, the model indicates that there are still overland flows through the property in a 1 in 100 year ARI storm event. The	Yes. SBO2 extent to be amended to match revised modelling.

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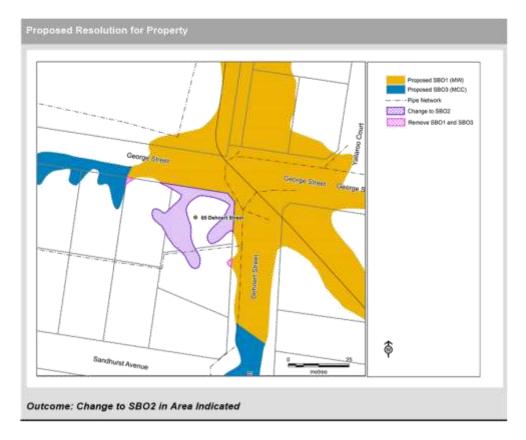
Sub. No.	Property Address	Catchment	Proposed Overlay	Issues related to submissions	Officer response to submission	Recommended change to the Amendment
				3001113310113	overland flow paths take the excess water in events such as these. The flow through the pipe is also limited by the fact that it still outlets into a single 525mm diameter pipe in Hertford Road. It is recommended that the SBO shape associated with the property be amended to match the revised modelling.	Amenument
558.	20 Bali Hi Boulevard, Templestowe	Mullum Mullum Creek	SBO2	2, 4, 7, 8	Refer to Panel. No review undertaken at this stage.	No

N:\AMENDMENTS\C109 - Local Flooding\ATTACHMENTS TO COUNCIL REPORT SEPTEMBER 2017\ATTACHMENT 9 SUMMARY OF SUBMISSIONSAND RECOMMENDED CHANGES.docx

1.1.1.1 65 Dehnert Street, Doncaster East (Submission 75)

1.1.1.2 Conclusions and Recommendations

Based on the assessment of the flood modelling results and the resulting site visit.



ATTACHMENT 9 - TABLE OF RECOMMENDED CHANGES TO EXHIBITED AMENDMENT C109 (Excluding Minor Incursions – See Attachment 11)

- 253 changes recommended to submitting properties 45% of submissions
- 841 changes recommended to non-submitting properties (including minor incursions)
- 1 change to text within the controls

SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
1	10 Louisa Place TEMPLESTOWE	SBO2	Remove central section of SBO2 & realign shape to rear and eastern boundaries. Change SBO2 to SBO3. See attached plan.
4	49 Delifield Drive TEMPLESTOWE LWR	SBO2	Remove SBO2 from No. 49. Remove SBO2 from 45 & 47 Dellfield Drive and remove part of SBO2 from 43 Dellfield.
18	33 Beckett Road DONVALE	SBO2	Remove part of eastern section of SBO2. See attached plan.
19	32 Fairbank Cres Lower TEMPLESTOWE	SBO3	Remove SBO3
20	3 Daws Road DONCASTER EAST	SBO3	Remove SBO3 from No. 3. Remove SBO3 from 2 & 3 Apricot Lane and 13, 14 & 15/1 Daws Rd
21	74 Thompsons Road BULLEEN	SBO3	Remove SBO3 from property.
23	37 Scarlet Ash Drive TEMPLESTOWE LWR	SBO3	Remove SBO3 from No 37 and No 35 Scarlet Ash Drive.
26	39 Scarlet Ash Drive TEMPLESTOWE LWR VIC	SBO3	Remove SBO3 for No. 39.
30	87-89 South Valley Road PARK ORCHARDS	SBO2	Retain SBO2 at rear of No. 87-89 Delete SBO2 beyond gully. See attached plan.
34	11 Gairlock Court DONCASTER	SBO3	Remove SBO3 from No. 11.
35	66 Knees Road PARK ORCHARDS	SBO2	Remove SBO2
37	4 Birchgrove Crescent TEMPLESTOWE	SBO1	Change SBO1 to SBO3. See attached plan.
41	21 Caringal Avenue DONCASTER	SBO3	Remove SBO3.
43	5-7 Rainbow Valley Road PARK ORCHARDS	SBO2	Delete SBO2.

RECOMMENDED CHANGES IN RESPONSE TO SUBMISSIONS						
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT			
45	20 Sinclair Avenue TEMPLESTOWE LWR	SBO3	Yes. Remove SBO3 shape.			
46, 235 & 456	112-126 Old Warrandyte Road DONVALE	LSIO & SBO2	Amend designation of SBO on main tributary gully to LSIO. Delete SBOs from Stages 1 and 2 of subdivision and 7 Yileen Crt. See attached plan.			
50	12 Alder Court PARK ORCHARDS	SBO1	Remove SBO1 from 12 Alder Crt			
53	3 Parkside Court WARRANDYTE		Remove part of SBO2 See attached plan.			
54	18 Bali Hi Boulevard TEMPLESTOWE	SBO2	Remove eastern area of SBO2 beyond western easement. See attached plan.			
56	21 Tandarook Crescent DONVALE	SBO2	Delete SBO2.			
59	4 Whitefriars Way DONVALE	SBO2	Change SBO2 to SBO3.			
60	40-42 Hertford Road DONCASTER EAST	SBO2	Reduce SBO2. See attached plan.			
63	29 McCallum Road DONCASTER	SBO2	Remove SBO2			
65	20 Montpellier Crescent TEMPLESTOWE LWR	LSIO	Changed from LSIO to SBO2. Change 16 and 18 Montpellier from LSIO to SBO2. See attached plan.			
67	26 Jocelyn Court DONCASTER EAST	SBO3	Remove SBO3 at No. 26. Remove SBO3 on west side of No. 24 but retain balance of SBO3 at No. 24.			
68	10 Hotham Street TEMPLESTOWE	SBO3	Remove SBO3.			
71	8 Chaim Court DONCASTER	LSIO	Change from LSIO to SBO 3 No's 3, 5 & 8 Chaim Crt and 59 Beckett Rd.			
72	11 Apple Blossom Court TEMPLESTOWE	SBO2	Change from SBO2 to SBO3.			
73	10 Tennyson Court TEMPLESTOWE	SBO3	Remove SBO3			
74	13/1 Daws Road DONCASTER EAST	SBO3	Remove SBO3			

RECOMMEND	ED CHANGES IN RESPONSE TO SU	JBMISSIONS	
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
75	65 Dehnert Street DONCASTER EAST	SBO1	Change SBO1 to SBO2, Remove SBO1 from front of 63 Denhert and change remainder from SBO1 to SBO2. Remove SBO1 from north-western corner of 116 George and change remainder from SBO1 to SBO2, See attached plan.
76	99 The Grange TEMPLESTOWE	SBO2	Amend SBO2 to SBO3 to north and eastern areas. Retain SBO2 over driveway area. See attached plan.
78	7 Myers Court DONCASTER	SBO2	Reduce SBO2 at eastern extent. See attached plan.
81	43 Knees Road PARK ORCHARDS	SBO3	Remove SBO3 over house. Retain SBO3 in gully. See attached plan.
82	9 Bayles Court DONVALE	SBO1	Remove SBO1
83	6 Robyn Street DONCASTER	SBO2	Remove SBO2
86	41 Botanic Drive DONCASTER	SBO1	Remove SBO1
88	43 Eucalypt Avenue TEMPLESTOWE LWR	SBO3	Yes. Delete SBO3 from property. Also remove the SBO3 from 41, 45 and 47 Eucalypt Avenue.
93	43 Botanic Drive DONCASTER	SBO1	Remove SBO1
95	17 Thea Grove DONCASTER EAST	SBO1	Remove SBO1 at front of property. Retain remainder of SBO1. See attached plan.
96	6 Hillcroft Drive TEMPLESTOWE	SBO1	Change from SBO1 to SBO3.
97	34 Anthony Avenue DONCASTER	SBO3	Remove SBO3
98	6 Judith Court DONCASTER	SBO2	Remove SBO2
100	8 Larne Avenue, DONVALE	SBO2	Trim SBO2 & change remainder SBO2 to SBO3. See attached plan
102	6 Drummond Close DONVALE		Reduce eastern SBO1. See attached plan.
104	33 Balmoral Avenue LOWER TEMPLESTOWE	SBO3	Remove SBO3
108	393/395 Park Road PARK ORCHARDS	LSIO	Remove section of LSIO. See attached plan.
109	33 Thiele Street DONCASTER	SBO3	Remove SBO3.
110	4 Hillcroft Drive, TEMPLESTOWE	SBO1	Remove SBO1
113	10 Hillcroft Drive TEMPLESTOWE	SBO1	Change from SBO1 to SBO3
114	60 Millicent Avenue BULLEEN	SBO2	Remove SBO2
115	286 Church Road TEMPLESTOWE	SBO2	Remove SBO2

RECOMMEND	ED CHANGES IN RESPONSE TO SI	UBMISSIONS	
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
118	13-19 Tram Road DONCASTER	SBO2	Delete all SBOs from site.
119	15 Kersey Place DONCASTER	SBO3	Remove SBO3.
120	8 Tiffany Court DONCASTER	SBO3	Remove SBO3.
121	14 Kelly Street DONCASTER	SBO3	Remove SBO3 from 12, 14 & 16 Kelly. Remove part of SBO3 from 2 Tully Crt.
122	30 South Valley Road PARK ORCHARDS	SBO2	Remove southern and eastern SBO2 areas. Change remainder to SBO3. See attached plan.
124	15 Grand Boulevard DONCASTER	SBO2	Delete all SBO2 from Applewood.
126	12 Hillcroft Drive TEMPLESTOWE	SBO1	Change from SBO1 to SBO3
127	9 Nambour Road TEMPLESTOWE	SBO2	Delete part of SBO2 but retain SBO2 at western boundary. See attached plan.
132	3 Peter Budge Avenue TEMPLESTOWE	SBO2	Change from SBO2 to SBO3.
134	14 – 16 Elgin Street PARK ORCHARDS	SBO3	Reduce SBO3See attached plan.
135	38 Hertford Road DONCASTER EAST	SBO2	Reduce SBO2. Remove SBO2 from 4 Camelot. Reduce SBO2 at 36 Hertford and 22 Taunton. See attached plan.
136	6 Anton Court DONCASTER	SBO2	Remove SBO2
137	5 Cerberus Street DONVALE	SBO2	Remove SBO2
140	47-53 Croydon Road WARRANDYTE SOUTH	SBO2 & SBO3	Remove SBO3, Retain SBO2. See attached plan.
143	16 Nottingwood Street DONCASTER EAST	SB01	Remove eastern section of SBO1. Change remainder from SBO1 to SBO3. Change SBO1 at 18 and 20 Nottingwood to SBO3. See attached plan.
145	5 Mossy Creek Slope WARRANDYTE	LSIO	Reduce LSIO. Change from LSIO to SBO3. See attached plan.
147	15 Margot Avenue DONCASTER	SBO3	Remove SBO3. Remove SBO3 from 12, 13 and 14 Birbank Crt.
150	24 Jocelyn Court DONCASTER EAST VIC	SBO3	Yes. Remove SBO3 on west side of property. See attached plan.
151	12 Larne Avenue DONVALE	SBO2	Trim and remove 3 small SBO2 areas. See attached plan.
152	7 Montclair Court TEMPLESTOWE	LSIO	Change LSIO to SBO3 at 2, 3, 4, 5 and 7 Montclair Crt. See attached plan.
154	25 McCallum Road DONCASTER	SBO1	Remove western SBO1 area. Remove SBO2 from 37 and 39 Botanic Drive. See attached plan.

RECOMMEND	ED CHANGES IN RESPONSE TO SU	JBMISSIONS	
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
156	2 Pagoda Court DONCASTER	SBO3	Amend SBO3. See attached plan.
158	49 Lawanna Drive TEMPLESTOWE	SBO2	Remove SBO2.
159	10 Omar Street TEMPLESTOWE	SBO3	Remove SBO3
161	28 Sheahans Road BULLEEN	SBO3	Remove SBO3.
162	30 Sheahans Road BULLEEN	SBO3	Remove SBO3.
164	2/15 Ashford Street TEMPLESTOWE LWR	SBO3	Remove part of SBO3 from 2/15 & 13 Ashford. See attached plan.
170	5 Trudi Court DONVALE	SBO1	Change from SBO1 to SBO3 at 5 Trudi, 7 and 8 Drummond and the rear of 23 Larne.
177	244-246 Heidelberg- Warrandyte Road WARRANDYTE	SBO3	Remove SBO3.
178	11 Limassol Court DONVALE	SBO2	Reduce SBO2 near house. See attached plan.
179	27 Margot Avenue DONCASTER	SBO3	Remove SBO3.
180	27 Lisbeth Avenue DONVALE	SBO3	Remove SBO2.
181	4 Fromhold Drive DONCASTER	SBO2	Remove section of SBO2 at eastern side. Connect 2 SBO2 shapes on western boundary. Remove SBO2 from 6 Fromhold Dve. See attached plan.
182	10 Cypress Avenue TEMPLESTOWE	SBO3	Remove SBO3.
184	35 Lynnwood Parade TEMPLESTOWE LOWER	SBO1	Remove SBO1 from 35 Lynnwood Pde. Remove SBO1 from front of 37 Lynnwood. See attached plan.
185	25 Airdrie Court TEMPLESTOWE LOWER	SBO2	Yes. Delete both SBO2 areas.
186	338 Serpells Road DONCASTER EAST	SBO2	Remove SBO2 from No. 338. Remove SBO3 from 340 Serpells. Trim eastern section of SBO2 at 336 Serpells. See attached plan.
188	476-480 Ringwood Warrandyte Road WARRANDYTE	SBO2	Remove SBO2.
192	291 George Street DONCASTER	SBO2	Remove SBO2
193	20 Phillip Avenue DONCASTER	SBO3	Remove SBO3.
197	31-33 Ennismore Crescent PARK ORCHARDS	SBO3	Remove SBO3 from 31-33 and 35 Ennismore.

RECOMMEND	ED CHANGES IN RESPONSE TO SU	JBMISSIONS	
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
202	5 Eleanor Court DONVALE	SBO2	Reduce SBO2 extent at rear of property. Trim SBO3 at rear of 15-17 and 19-21 McGowans. See attached plan.
203	7 Pictor Court DONVALE	SBO3	Remove SBO3 from No 5, 1/6 2/6 & 7 & part of SBO3 from eas side of No 8 Pictor. Reduce SBO3 at 344 Springvale. See attached plan.
204	48 Treevalley Drive DONCASTER EAST	SBO2	Remove SBO2.
205	72 Olympus Drive TEMPLESTOWE	SBO3	Modify SBO3. See attached plan.
210	41 Hazel Drive TEMPLESTOWE	SBO2	Remove SBO2.
215	30 and 30A Anthony Avenue DONCASTER	SBO3	Remove SBO3.
216	34 Delifield Drive TEMPLESTOWE LOWER	SBO3	Remove SBO3.
220	22 Council Street DONCASTER	SBO2	Remove SBO2.
223	3 Cliveden Court TEMPLESTOWE	SBO3	Remove SBO3.
227	3 Millwood Court TEMPLESTOWE	SBO2	Delete SBO2 from 2, 3 and 5 Millwood. Trim part of SBO2 from 1 Millwood. See attached plan.
228	55 Caringal Avenue DONCASTER	SBO2	Yes. SBO2 incursion proposed to be removed from the property.
230	21 Marianne Way DONCASTER	SBO3	Remove SBO3 from 21 & 23 Marianne Way.
231	6 Trevinden Close TEMPLESTOWE	SBO3	Remove SBO3.
233	8 Lynnwood Parade TEMPLESTOWE LOWER	SBO2 & SBO3	Remove SBO3 & retain SBO2.
235	35 Illawong Drive DONVALE	LSIO & SBO2	Amend SBO main gully to LSIO. Delete SBO's from Stages 1 and 2 of subdivision and 7 Yileen Crt.
238	2/1 Harry Street DONCASTER	SBO2	Remove SBO2.
240	6 Linton Avenue LOWER TEMPLESTOWE	SBO3	Remove SBO3.
241	18 Philip Avenue DONCASTER	SBO3	Remove SBO3.
242	84 Gold Memorial Road WARRANDYTE	SBO2	Remove SBO2.
246	2 White Lodge Court DONVALE	SBO3	Remove SBO3
248	23 Browning Drive TEMPLESTOWE	SBO2	Change SBO2 to SBO3.
250	12 Saxonwood Drive DONCASTER EAST	SBO2	Delete SBO2 at front. Change SBO2 shape at rear of property.

RECOMMEND	ED CHANGES IN RESPONSE TO SU	JBMISSIONS	
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
251	12 Ross Street DONCASTER EAST	SBO3	Remove SBO3.
252	16 Delifield Drive LOWER TEMPLESTOWE	SBO3	Remove SBO3.
253	6 Montclair Court TEMPLESTOWE	LSIO	Change LSIO to SBO 3.
255	21 Alexander Road WARRANDYTE	SBO2	Change SBO2 to SBO3.
258	33 The Grange TEMPLESTOWE	SBO2	Remove SBO2 at front and eastern SBO2 area. Delete SBO2 at front of 35 The Grange and on western boundary. See attached plan.
262	1 Forest Place TEMPLESTOWE	SBO3	Yes. SBO3 incursion on property proposed to be removed.
265	23 Murndal Drive DONVALE	SBO2	Trim eastern side of the SBO2 extent. See attached plan.
266.1	14 Alison Avenue BULLEEN	SBO1	Remove SBO1.
268	20 Stanley Drive DONCASTER	SBO3	Remove SBO3.
273	70 Roseland Grove DONCASTER	SBO2	Remove SBO2. Realign SBO2 from 62 and 64 Roseland Grove into road and change to SBO3. See attached plan.
274	15 Brindy Crescent DONCASTER	SBO3	Remove SBO3.
275	39 Thiele Street DONCASTER	SBO3	Remove SBO3.
277	3 White Lodge Court DONVALE	SBO3	Remove SBO3.
280	176 Church Road DONCASTER	SBO2	Remove SBO2 from 176 and 178 Church Road.
282	14 Old Orchard Way DONCASTER	SBO2	Remove SBO2 from 14 and 16 Old Orchard Way.
283	27 Menarra Street DONCASTER	SBO3	Remove SBO3.
284	5 Amberwood Court TEMPLESTOWE	SBO3	Remove SBO3 from 4, 5 and 6 Amberwood Court.
286	53 Lawanna Drive TEMPLESTOWE	SBO2	Remove SBO2 from 51 and 53 Lawanna.
292	43 Corella Court DONCASTER	SBO3	Partially remove SBO3. See attached plan.
294	2 & 4 Grange Park Avenue DONCASTER	SBO3	Remove SBO3 from 4 Grange Park Ave only.
299	2 Mahoneys Court WARRANDYTE	SBO3	Yes. Remove SBO3 from the property.
304	41 Thiele Street DONCASTER	SBO3	Remove SBO3 from 21, 31, 37 and 41 Thiele St
305	43 Thiele Street DONCASTER	SBO3	Remove SBO3.
310	45 Thiele Street DONCASTER	SBO3	Remove SBO3.

RECOMMEND	ED CHANGES IN RESPONSE TO SU	BMISSIONS	
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
315	23 Thiele Street DONCASTER	SBO3	Remove SBO3.
317	35 Thiele Street DONCASTER	SBO3	Remove SBO3.
319	6 St Muir Drive WARRANDYTE	SBO3	Remove SBO3 from 6, 8 and 10 St. Muir Drive.
320	6 Eric Avenue LOWER TEMPLESTOWE	SBO3	Remove SBO3.
323	7 Ambrose Street DONCASTER	SBO2 & SBO3	Remove SBO2 and SBO3.
328	31 Corella Street DONCASTER	SBO3	Remove SBO3 from 29, 31 and 33 Corella St.
329	129 Gosford Crescent PARK ORCHARDS	SBO2	Change SBO2 to SBO3 for north- south flow path. See attached plan.
330	92 Canopus Drive DONCASTER	SBO3	Remove SBO3.
332	245 Thompsons Road LOWER TEMPLESTOWE	SBO3	Delete the flood shape at 243 and 245 Thompsons Rd, and no's 16-18 Sylvia St.
333	323-325 Tindals Road WARRANDYTE	SBO3	Modify SBO3. See attached plan.
334	1/16 Coolabah Street DONCASTER	SBO2	Remove SBO2.
335	50 Dehnert Street DONCASTER EAST	SBO3	Remove SBO3.
337	7 Ashford Street LOWER TEMPLESTOWE	SBO3	Remove SBO3.
339	23-71 Alexander Road WARRANDYTE	LSIO	Yes. Convert small section of LSIO to match existing LSIO overlay. See attached plan.
340	26 Hillcroft Drive TEMPLESTOWE	SBO1	Change from SBO1 to SBO3.
341	3 Exeter Close TEMPLESTOWE LOWER	SBO3	Remove SBO3.
344	18 Amberwood Court TEMPLESTOWE	SBO1	Remove SBO1 from southern and western boundaries. Change eastern extent from SBO1 to SBO3. Extents for 15, 17 and 19 Hillcroft Drive to be changed from SBO1 to SBO3. See attached plan.
345	24 Hillcroft Drive TEMPLESTOWE	SBO1	Change from SBO1 to SBO3.
351	50 Lawanna Drive TEMPLESTOWE	SBO2	Disconnect flood shape to north from main extent. See attached plan,
354	441 Serpells Terrace DONVALE	SBO1	Reduce SBO1 at the front boundary. See attached plan.

iii

RECOMMEND	ED CHANGES IN RESPONSE TO S	UBMISSIONS	
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
356	17-25 Brindy Crescent DONCASTER EAST	SBO3	Remove SBO3 from 17, 19, 1/21, 21, 23 and 25 Brindy Crescent and the connecting section of LSIO from Koonung Reserve (74 Wetherby Road) to the south.
359	108 McGowans Road DONVALE	SBO2	Change SBO2 to SBO3 at 106 and 108 McGowans Road.
361	14 Oak Crescent LOWER TEMPLESTOWE	SBO3 and SBO2	Remove SBO3. Trim SBO2 along eastern boundary. See attached plan.
364	86 Larnoo Drive DONCASTER EAST	SBO3	Remove SBO3
366	29 Lynwood Parade, LOWER TEMPLESTOWE	SBO1	Remove SBO1
368	5 Dilkara Court DONCASTER EAST	LSIO	Change from LSIO to SBO3 at 4 and 5 Dilkara and 58-60 Larnoo Dve
378	8 Montclair Court TEMPLESTOWE	LSIO	Change from LSIO to SBO3.
381	6 Raymond Elliot Court PARK ORCHARDS	LSIO	Remove two minor LSIO intrusions along south-eastern boundary. Change extent at north end of property from LSIO to SBO2.
382	3 Orchid Court PARK ORCHARDS	SBO2	Remove SBO2.
383	327 Tindals Road WARRANDYTE	SBO3	Remove parts of SBO3. See attached plan.
388	16 Hillcroft Drive TEMPLESTOWE	SBO1	Change from SBO1 to SBO3.
391	6 Veda Court TEMPLESTOWE	SBO3	Trim and remove part of SBO3 from property. Remove SBO3 from 269, 271, 275 and 277 Church Rd. See attached plan.
392	2 Eumeralla Avenue TEMPLESTOWE LOWER	LSIO	Remove section of southern LSIO and changes to SBO2. Change north extent to SBO3. See attached plan.
394	14 Hillcroft Drive TEMPLESTOWE	SBO1	Change from SBO1 to SBO3.
395	33 Lynnwood Parade TEMPLESTOWE LOWER	SB01	Remove SBO1.
397	17 Glenda Street DONCASTER	SBO3	Remove SBO3.

RECOMMENDED CHANGES IN RESPONSE TO SUBMISSIONS			
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
398	10 Larne Avenue DONVALE	SBO2	Change from SBO2 to SBO3. Change for 6 and 10 Larne, 6 Selsdon, and 9 Murndal. Remove south section of SBO3 at 5 Selsdon. Change part of SBO2 to SBO3 at 11 Murndal. See attached plan.
401	9 Kyrenia Court WARRANDYTE	SBO3	Trim and reduce SBO3. See attached plan.
406	160 Bulleen Road, BULLEEN	LSIO	Remove LSIO from the eastern side of the property.
407	288 Church Road TEMPLESTOWE	SBO2	Delete SBO2 from 288 Church and 3, 5 and 7 The Grange.
410	66 Beecroft Crescent TEMPLESTOWE	SBO2	Remove SBO2.
412	49 Ashford Street TEMPLESTOWE	SBO3	Remove SBO3.
416	5 Kiandra Court DONCASTER EAST	SBO3	Remove SBO3.
417	19 Glenda Street DONCASTER	SBO3	Remove SBO3.
418	21 Glenda Street DONCASTER	SBO3	Remove SBO3.
419	6 Dale Street BULLEEN	SBO2	Change from SBO2 to SBO3 for 4, 6, 8 and 10 Dale Street.
420	4 Conway Avenue DONVALE	SBO3	Remove SBO3
421	50 Millicent Avenue BULLEEN	SBO2	Remove SBO2 from 50, 52 and 54 Millicent Avenue.
427	50-52 and 54-56 Ennismore Crescent PARK ORCHARDS	SBO1	Change SBO1 to SBO3 for 50-52 Ennismore Cres. Remove SBO1 from eastern boundary for 54-56 Ennismore Crescent. Change SBO1 to SBO3 in Dirlton Reserve. Reduce SBO3 extent at 54-56 Ennismore at rear of property. Reduce SBO3 at 15 Dirlton Crescent. Delete SBO3 from 13 Dirlton Crescent. Reduce SBO3 extent within 15 Dirlton Crescent. Delete SBO3 extent from 13 Dirlton Crescent. See attached plan.

RECOMMENDED CHANGES IN RESPONSE TO SUBMISSIONS			
SUBMISSION	PROPERTY ADDRESS	EXHIBITED	RECOMMENDED CHANGE TO
NO.		OVERLAY	EXHIBITED AMENDMENT
427a	The Pines, Mossdale Court TEMPLESTOWE and King Street, 11 Gairlock Court, 9A and 10 Brentvale Court and 3 and 4A Myron Place, DONCASTER and Larnoo Drive, DONCASTER EAST	SBO1 & SBO3	Remove SBO from existing roof areas at The Pines (181 Reynolds Road). Change SBO1 to SBO3 at 1 and 2/13, 1 and 2 /14, 15, 15A, 16, 17 and 18 Mossdale Court and 28, 1 and 2/30, 32 and 32A Greenridge Avenue. Remove SBO3 from 11 Gairlock Court, 2/10, 9 & 9A Brentvale Court. See attached plans.
431	1 Timbertop Ridge WARRANDYTE	SBO2	Remove SBO2 areas.
433	37A Ross Street DONCASTER EAST	SBO2	Remove SBO2.
436	19 Winters Way DONCASTER	SBO3	Remove SBO3.
437	37 Winston Drive DONCASTER	SBO2 & SBO3	Remove SBO3 from 37 and partially remove SBO3 from 39 Winston Drive. See attached plan.
438	10 Myers Court DONCASTER	SBO2	Reduce SBO2. See attached plan
439	5 Pioneer Drive TEMPLESTOWE	SBO2	Remove SBO2.
441	37 McGowans Road DONVALE	SBO3	Remove SBO3.
442	26-28 Ennismore Crescent PARK ORCHARDS	SBO2	Change from SBO2 to SBO3 at 26-28 Ennismore Crescent and 22-24 Brucedale Crescent.
443	4 Millwood Court TEMPLESTOWE	SBO2	Delete SBO2.
448	17 Heads Road DONVALE	SBO3	Remove SBO3.
449	10 Campbell Court WARRANDYTE	SBO2	Change SBO2 to SBO3 at 9, 10 and 11 Campbell Court and 15 Pound Road
451	18 Montclair Court TEMPLESTOWE	SBO3	Remove SBO3 from 16, 17, 18 and 19 Montclair. Trim and reduce SBO3 at 14 and 15 Montclair.
452	26 Harris Gully Road, WARRANDYTE	LSIO	Change LSIO to SBO 3 at 4 Mossy Creek Slope, 22, 24 and 26 Harris Gully Road and 36-42 Drysdale Road Warrandyte.
454	28 Harris Gully Road WARRANDYTE	LSIO	Change LSIO to SBO3.
456	Lot 1, 122-124 Old Warrandyte Road DONVALE	LSIO & SBO2	Remove LSIO and SBO2.
458	27 Eucalypt Avenue Lower TEMPLESTOWE	SBO3	Remove SBO3.
460	30 Hillcroft Drive TEMPLESTOWE	SBO1	Change SBO1 to SBO3.

RECOMMEND	ED CHANGES IN RESPONSE TO SU	BMISSIONS	
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
463	28 Victoria Street BULLEEN	SBO3	Remove SBO3.
465	20 Ernst Street DONCASTER	SBO3	Remove SBO3.
466	27 Airdrie Court TEMPLESTOWE LWR	LSIO	Remove LSIO from 26, 27 and 28 Airdrie and change SBO2 at 82 Dellfield Dve. See attached plan.
468	20 Peachwood Rise DONCASTER	SBO2	Remove SBO2
470	86-90 Webb Street WARRANDYTE	SBO2	Remove eastern SBO2. Change western SBO from SBO2 to SBO3. Change SBO2 to SBO3 at 80-84 & 92 Webb St. See attached plan.
471	50 Windella Quadrant DONCASTER	LSIO & SBO2	Change LSIO to SBO2 at southern boundary. Change LSIO to SBO2 at rear of 52A Windella. Remove LSIO incursion into the Koonung Creek Reserve (1-11 Church Road Doncaster) at the rear of 44 Windella Quadrant. See attached plan.
472	13 Tandarook Crescent DONVALE	SBO2	Remove SBO2 from 11 & 13 Tandarook.
473	13 Dillwynia Avenue TEMPLESTOWE LOWER	SBO2	Remove SBO2.
478	14 Nottingwood Street DONCASTER EAST	SBO1	Remove SBO1.
479	19 Olympus Drive Lower TEMPLESTOWE	SBO3	Remove SBO3.
480	211/187 Reynolds Road DONCASTER EAST	SBO3	Remove SBO3. (affects all apartments, not just 211).
481	21 Olympus Drive TEMPLESTOWE LOWER	SBO3	Remove SBO3.
482	5 Chaim Court DONVALE	LSIO	Change LSIO to SBO3.at 3 and 5 Chaim Court and 59 Beckett Road.
483	Applewood Retirement Village 5 Grand Boulevard DONCASTER	SBO2	Delete all SBOs from the site.
491	17 Banool Quadrant DONCASTER EAST	SBO3	Remove SBO3 from 2/232-234 Blackburn, 15, 17 & 21 Banool. Reduce SBO3 at 19 Banool. See attached plan.
492	110 Owens Street DONCASTER	SBO3	Remove SBO3
498	3 Kelly Street DONCASTER	SBO3	Yes. Remove SBO3 from 1, 3 and 5 Kelly Street.

RECOMMEND	ED CHANGES IN RESPONSE TO SU	BMISSIONS	
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
499	"Applewood Residents' Assoc., 5 Grand Boulevard DONCASTER "	SBO2	Delete all SBOs from the site. See attached plan.
502	27 Heads Road DONVALE	SBO2	Change SBO2 to SBO3 at 25 & 27 Heads. Change southern section of SBO2 to SBO3 at 29 Heads.
504	21 Ada Street DONCASTER	SBO3	Remove SBO2 from 19 & 21 Ada Street and 18 Caringal Avenue.
505	23-31 Tills Drive WARRANDYTE	LSIO	Change LSIO to SBO3 at 23-31 Tills Drive. Remove LSIO from 50-60 Tills Drive (Black Flat), the southern LSIO from 36-48 Tills Drive and small incursion into 22-34 Tills Drive. Remove minor LSIO incursion across southern boundary of 22-34 Tills Drive. Change LSIO to SBO1.at 8-20 Tills Drive. See attached plan.
510	25 Park Road DONVALE	SBO2 & SBO3	Change SBO2 extent. Change SBO2 to SBO3. See attached plan
511	6 Birbank Court DONCASTER	SBO3	Remove SBO3 from 6 & 7 Birbank.
516	11 Sowter Court DONVALE	SBO2	Remove SBO3.
520	103 James Street TEMPLESTOWE	SBO2	Remove SBO2 from 103, 105 and 107 James Street as well as 15 Milne and 94 Wood Streets. Delete SBO3 from 105 and 107 James Street.
522	20-23 Airdrie Court TEMPLESTOWE	SBO 2	Remove SBO2.
523	3 Bernarra Court DONVALE	SBO2	Change SBO2 to SBO3 at 3 Bernarra and 2 Knight Court.
524	9 Gloucester Court, Templestowe	SBO3	Remove SBO3.
529	110 McGowans Road DONVALE	LSIO	Change part of LSIO to SBO2. See attached plan.
530	58-62 Stintons Road PARK ORCHARDS	SBO3	Change from SBO2 to SBO3.
532	16 Rangeview Road DONVALE	SBO3	Reduce extent of SBO3. See attached plan.
535	12 Moonbria Way TEMPLESTOWE	SBO2	Remove SBO2.
536	18 Hillcroft Drive TEMPLESTOWE	SBO1	Change SBO1 to SBO3. Also change SBO1 to SBO3 at 2, 8, 20, 22, 28, 32, & 34 Hillcroft Drive.

RECOMMEND	ED CHANGES IN RESPONSE TO SU	BMISSIONS	
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
538	35 Fyfe Drive, TEMPLESTOWE LOWER	SBO2	Remove part of SBO2 at 35 Fyfe Drve. Reduce SBO2 at 37 Fyfe and 12 Dillwynia. See attached plan.
539	10 Boonah Court, TEMPLESTOWE LOWER	SBO3	Reduce SBO3 at 10 Boonah Crt. Remove SBO3 at 7 Ardgower Court. See attached plan.
540	11 Louisa Place TEMPLESTOWE	SBO3	Realign central section of SBO2 to rear of property. Realign SBO3 through 12, 13 and 14 Louisa Pl. See attached plan
541	3/20 Allen Street, Bulleen	SBO3	Remove SBO3 from 76 Thompsons Road, 1,2 &3 /20 Allen St, 14, 16 and 18 Allen St, 35 Furneaux Gr and part of the SBO3 at 37 Furneaux Gr.
543	4 St Muir Drive, Warrandtye	SBO3	Remove SBO3.
544	12 Jolen Court DONVALE	LSIO	Change LSIO to SBO2 for 13 and 14 Jolen Crt and 9 Era Crt.
545	1 Mintaro Court, Templestowe	SBO3	Remove SBO3.
548	19 Margaret Court, WARRANDYTE	SBO3	Relocate SBO3 to over the driveway. See attached plan.
549	307 George Street DONCASTER	SBO1	Yes, SBO1 to be deleted from property.
550	21 Corsican Avenue, Doncaster East	SBO3	Remove SBO3.
551	273 Church Road, TEMPLESTOWE	SBO3	Remove SBO3 from 269, 271, 273 and 275 Church Road.
553	2 Oxford Close, Templestowe	SBO3	Remove SBO3 from 2 & 3 Oxford Cl, 2 Cliveden Crt and 42 Websters Rd.
555	Eastlink	SBO2	Delete SBO2 from Eastlink Reserve abutting tunnels.
556	7 Saxon Street, Doncaster	SBO2	Remove SBO2 from 5 and 7 Saxon Street.
557	24 Taunton Street, DONCASTER EAST	SBO2	Reduce SBO2. See attached plan.
No Submission	10 and 12 Rupert Street and 142 Blackburn Road, Doncaster East	SBO3	Remove SBO3 from 10 & 12 Rupert St and 142 Blackburn Rd
No Submission	8 Wonuka Court, Doncaster East	SBO3	Remove SBO3.
No Submission	36 Ardgower Court, Templestowe Lower	LSIO	Change LSIO to SBO2.
No Submission	61 Beecroft Crescent TEMPLESTOWE	SBO2	Delete part SBO2 at front of 61 Beecroft. See attached plan.
No Submission	6 Kyreli Close and 233 Tindals Road, DONVALE	SBO2	Change SBO2 to SBO3 at 6 Kyreli Close and 233 Tindals Road.

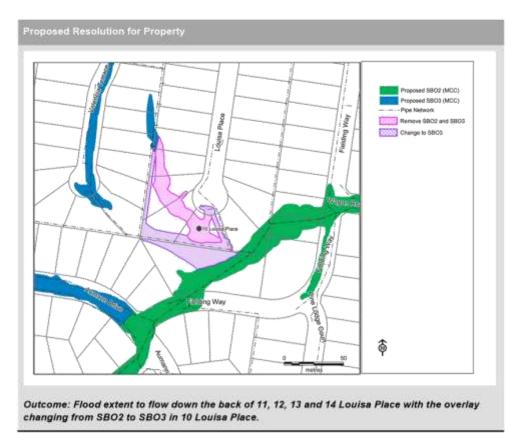
SUBMISSION NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
No Submission	305 George Street, DONCASTER	SBO2	Convert SBO1 to SBO2.

In Schedule 3 to the Special Building Overlay, it is recommended to change the last dot point under *Clause 1.0 Permit requirement* as follows;

 "New fencing with at least 25% openings <u>or</u> with a plinth at least 400mm above the natural surface level".

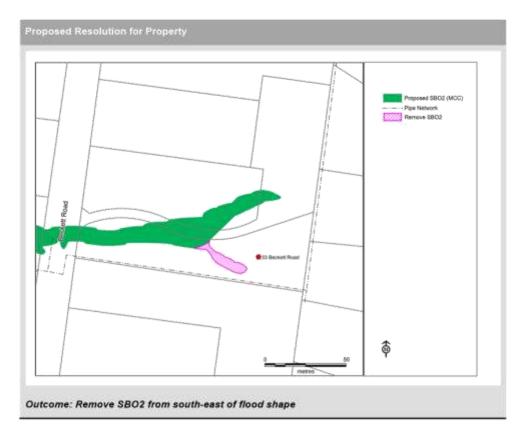
1.1.1.1 10 Louisa Place, Templestowe (Submission 1)

1.1.1.2 Conclusions and Recommendations



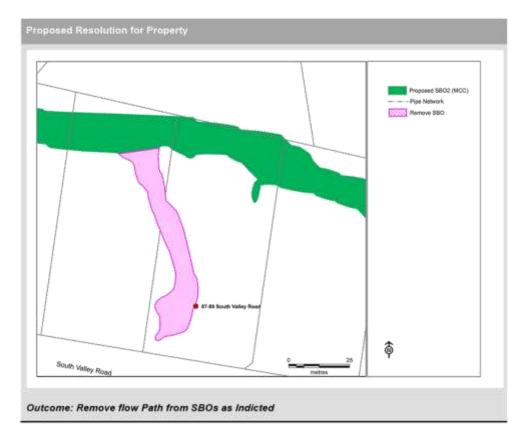
1.1.1.1 33 Beckett Road, Donvale (Submission 18)

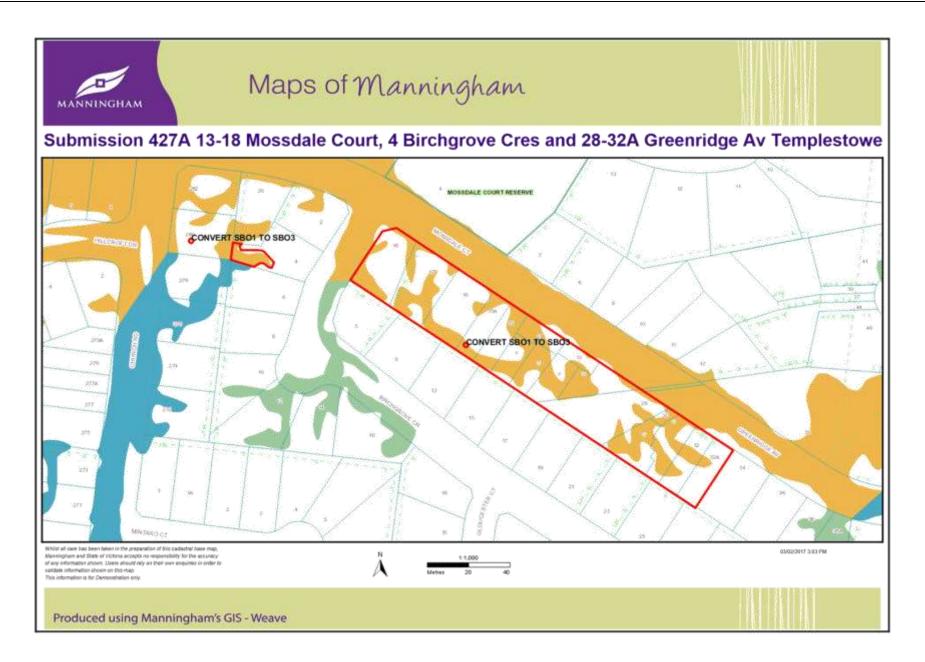
1.1.1.2 Conclusions and Recommendations



1.1.1.1 87-89 South Valley Road, Park Orchards (Submission 30)

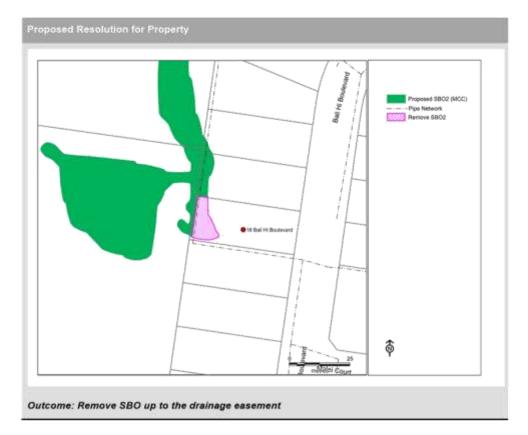
1.1.1.2 Conclusions and Recommendations





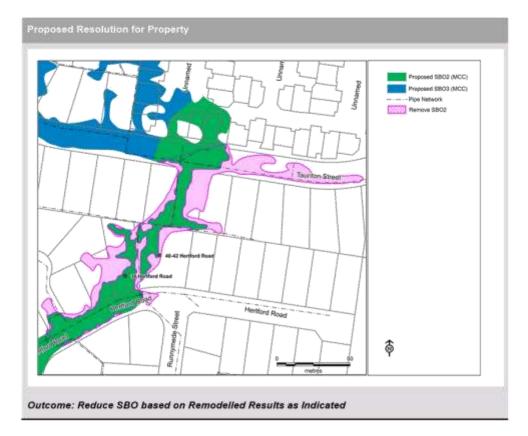
1.1.1.1 18 Bali Hi Boulevard, Templestowe (Submission 54)

1.1.1.2 Conclusions and Recommendations



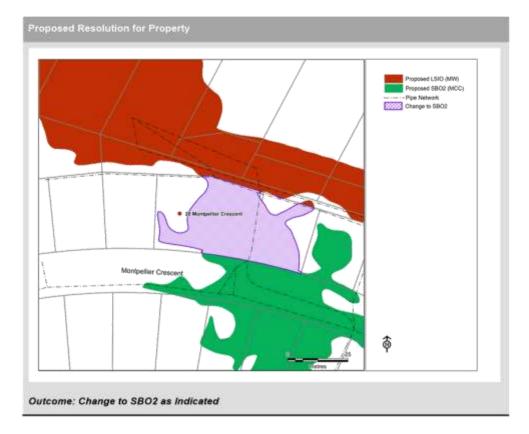
1.1.1.1 40-42 Hertford Road, Doncaster East (Submission 60)

1.1.1.2 Conclusions and Recommendations



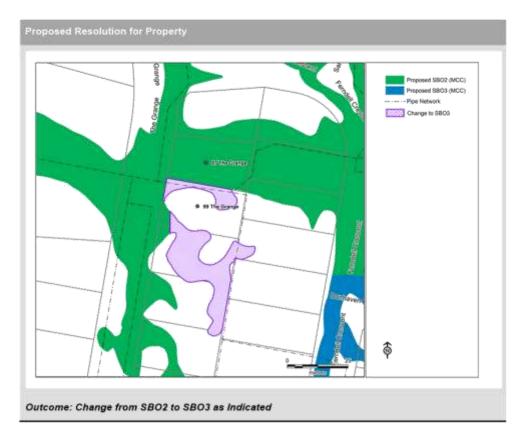
1.1.1.1 20 Montpellier Crescent, Templestowe Lower (Submission 65)

1.1.1.2 Conclusions and Recommendations



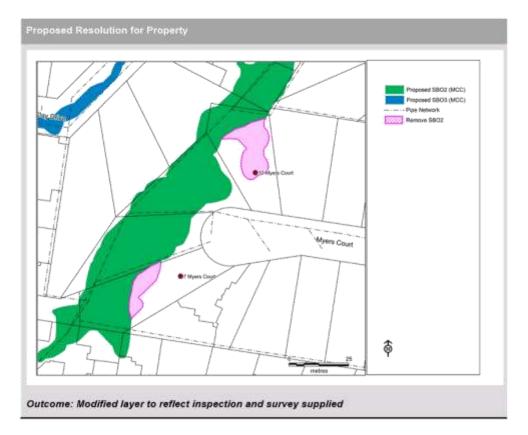
1.1.1.1 99 The Grange, Templestowe (Submission 76)

1.1.1.2 Conclusions and Recommendations



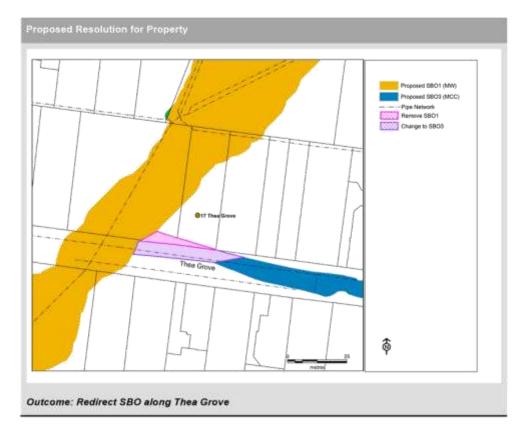
1.1.1.1 7 Myers Court, DONCASTER (Submission 78)

1.1.1.2 Conclusions and Recommendations



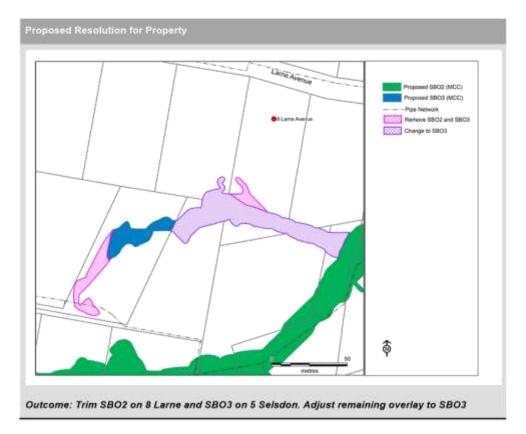
1.1.1.1 17 Thea Grove, Doncaster East (Submission 95)

1.1.1.2 Conclusions and Recommendations



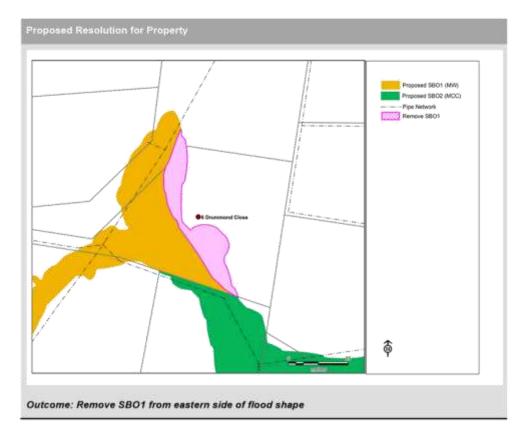
1.1.1.1 8 Larne Avenue, Donvale (Submission 100)

1.1.1.2 Conclusions and Recommendations



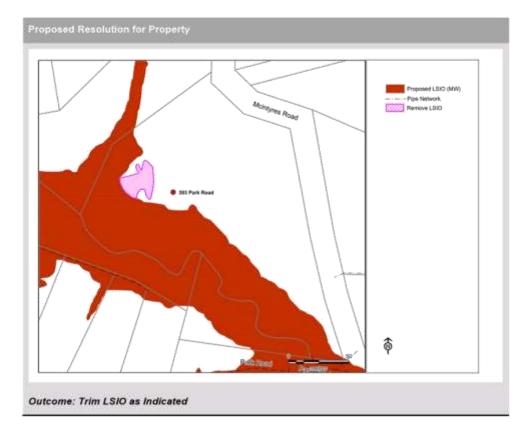
1.1.1.1 6 Drummond Close, Donvale (Submission 102)

1.1.1.2 Conclusions and Recommendations



1.1.1.1 393/395 Park Road, Park Orchards (Submission 108)

1.1.1.2 Conclusions and Recommendations



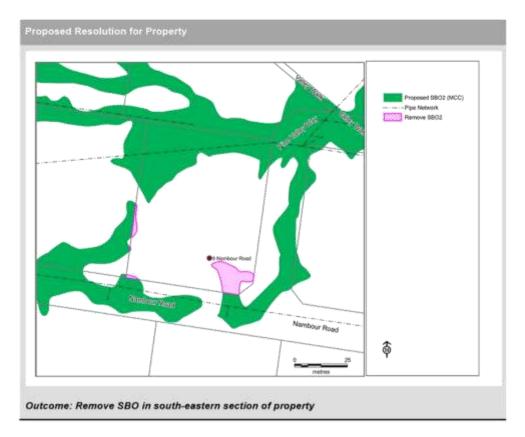
1.1.1.1 30 South Valley Road, Park Orchards (Submission 122)

1.1.1.2 Conclusions and Recommendations

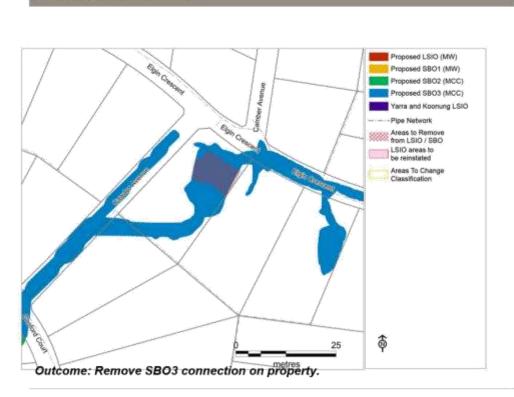


1.1.1.1 9 Nambour Road, Templestowe (Submission 127)

1.1.1.2 Conclusions and Recommendations



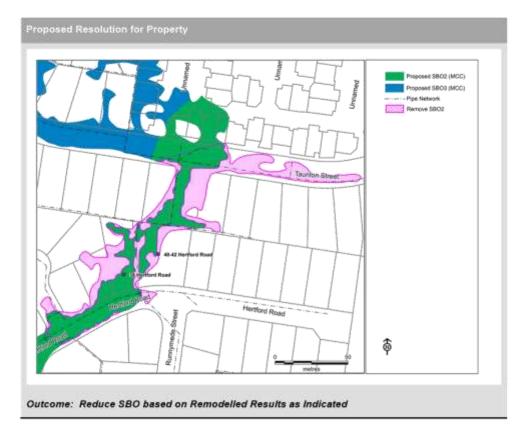
14 Elgin Crescent, Park Orchards (Submission 134)



Proposed Resolution for Property

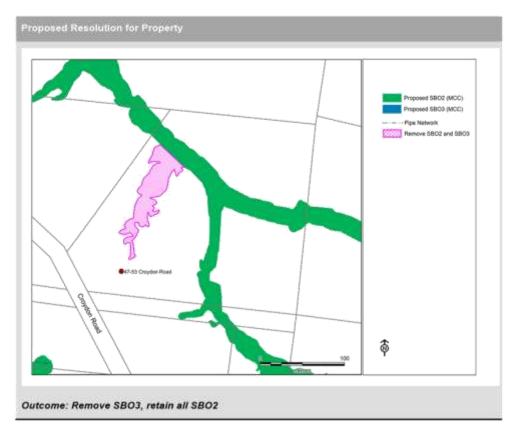
1.1.1.1 38 Hertford Road, Doncaster East (Submission 135)

1.1.1.2 Conclusions and Recommendations



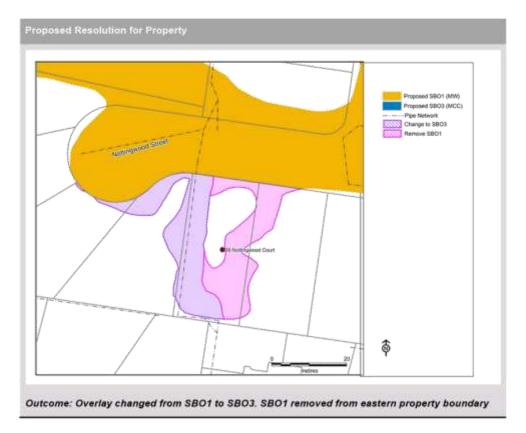
1.1.1.1 47-53 Croydon Road, Warrandyte South (Submission 140)

1.1.1.2 Conclusions and Recommendations



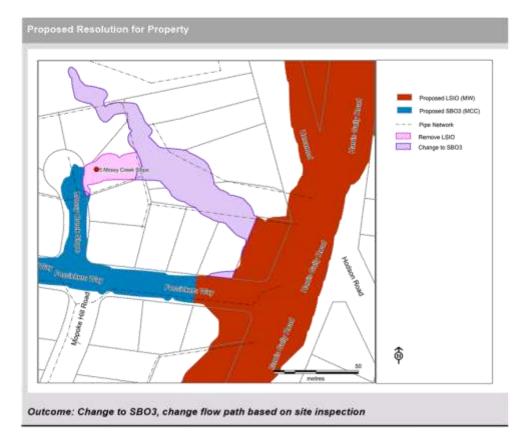
1.1.1.1 16 Nottingwood Street, Doncaster East (Submission 143)

1.1.1.2 Conclusions and Recommendations



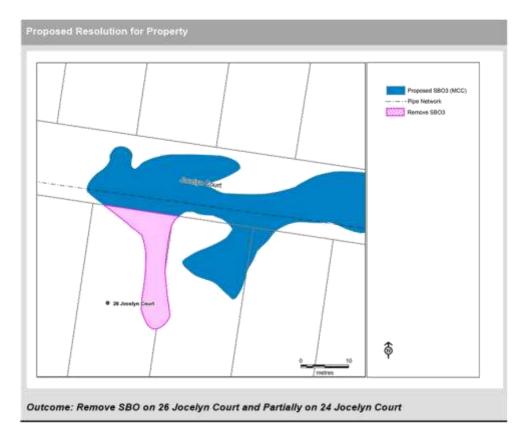
1.1.1.1 5 Mossy Creek Slope, Warrandyte (Submission 145)

1.1.1.2 Conclusions and Recommendations



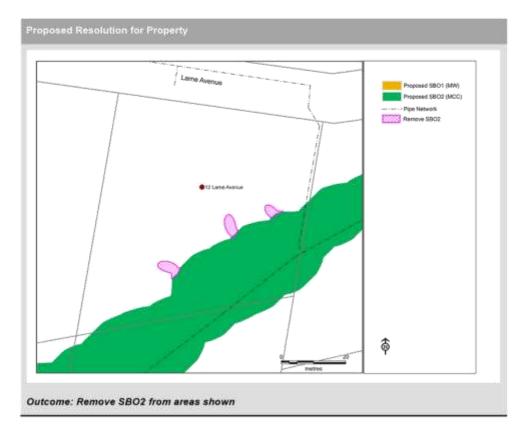
1.1.1.1 24 Jocelyn Court, Doncaster (Submission 150)

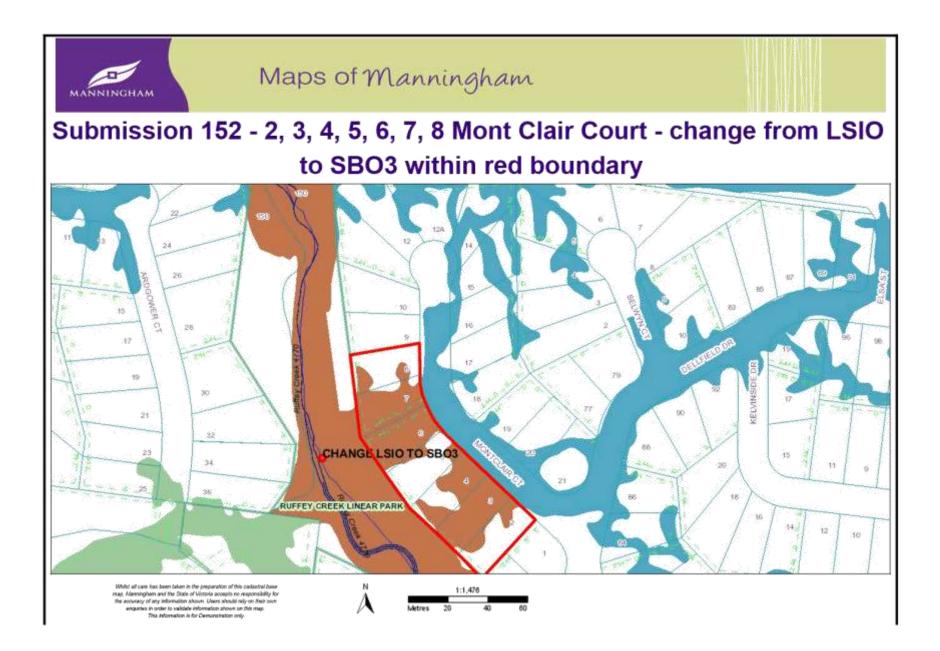
1.1.1.2 Conclusions and Recommendations



1.1.1.1 12 Larne Avenue, Donvale (Submission 151)

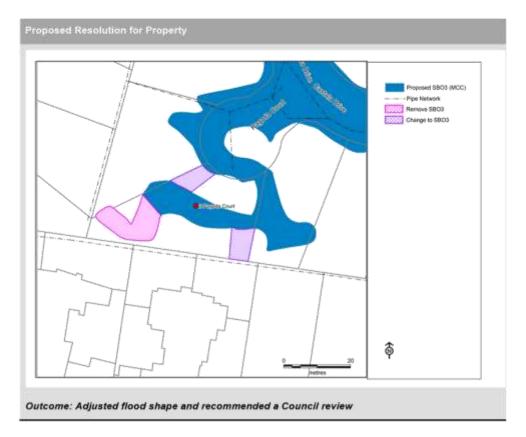
1.1.1.2 Conclusions and Recommendations





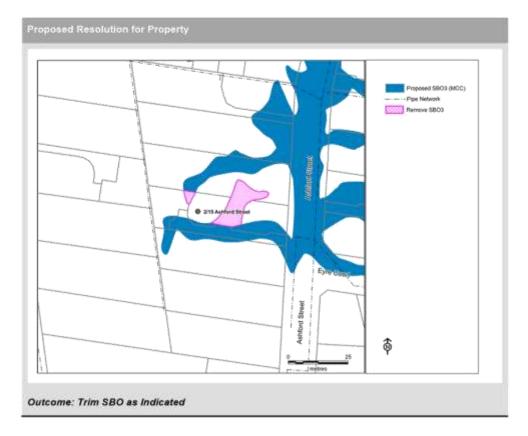
1.1.1.1 2 Pagoda Court, Doncaster (Submission 156)

1.1.1.2 Conclusions and Recommendations



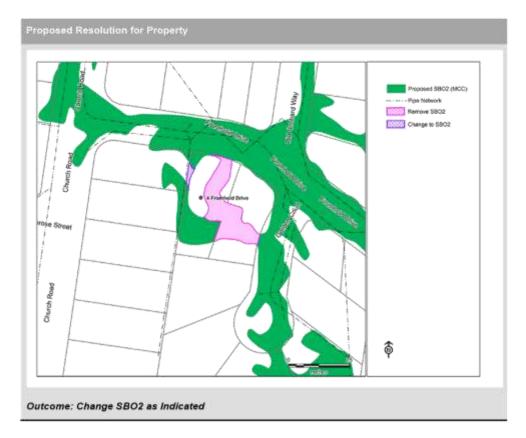
1.1.1.1 2/15 Ashford Street, Templestowe Lower (Submission 164)

1.1.1.2 Conclusions and Recommendations



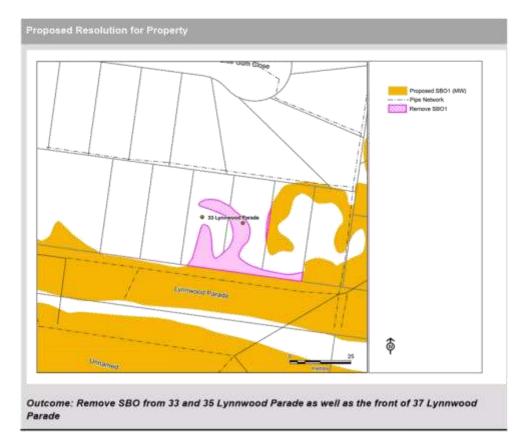
1.1.1.1 4 Fromhold Drive, Doncaster (Submission 181)

1.1.1.2 Conclusions and Recommendations



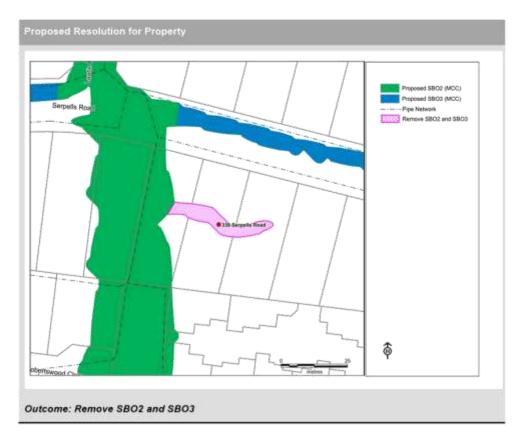
1.1.1.1 35 Lynnwood Parade, Lower Templestowe (Submission 184)

1.1.1.2 Conclusions and Recommendations



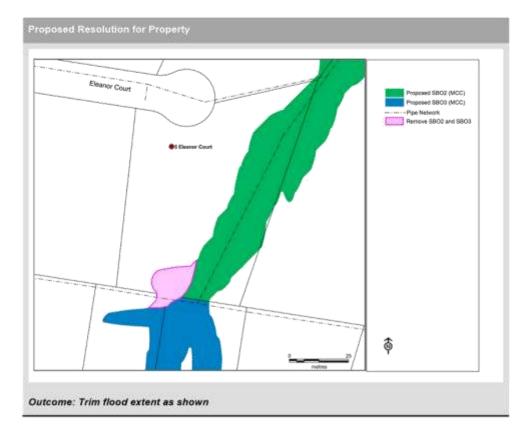
1.1.1.1 338 Serpells Road, Doncaster East (Submission 186)

1.1.1.2 Conclusions and Recommendations



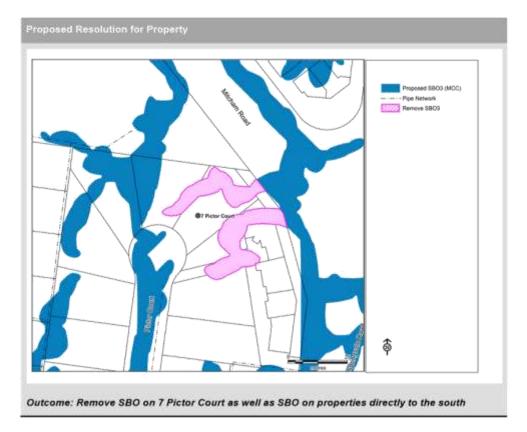
1.1.1.1 5 Eleanor Court, Donvale (Submission 202)

1.1.1.2 Conclusions and Recommendations



1.1.1.1 7 Pictor Court, Donvale (Submission 203)

1.1.1.2 Conclusions and Recommendations



72 Olympus Drive, Templestowe Lower (Submission 178)

Council have asked Cardno for the following specific advice for this property:

This property is affected by SBO which appears to be related to an artificial connection. If this is the case can it be removed from the SBO?

Key findings:

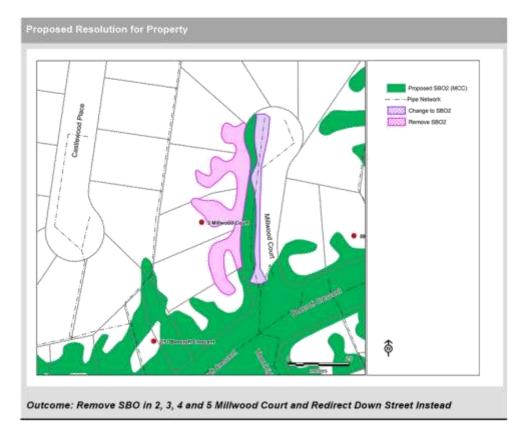
 We suggest trimming the SBO especially at the building footprint, but not to remove the entire property from the control. The connection was made based on raw model (unfiltered) results which show the front of the property as flooded.

Proposed Resolution for Property

Outcome: Trim SBO3 at existing building to remove connection.

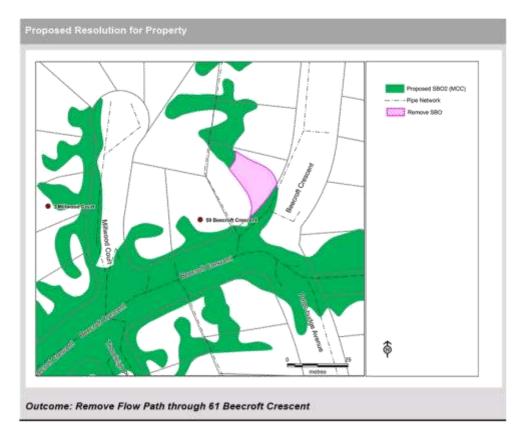
1.1.1.1 3 Millwood Court, Templestowe (Submission 227)

1.1.1.2 Conclusions and Recommendations



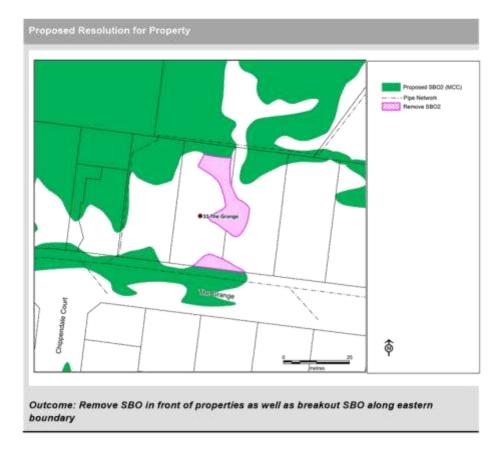
1.1.1.1 59 Beecroft Crescent (Submission 232)

1.1.1.2 Conclusions and Recommendations



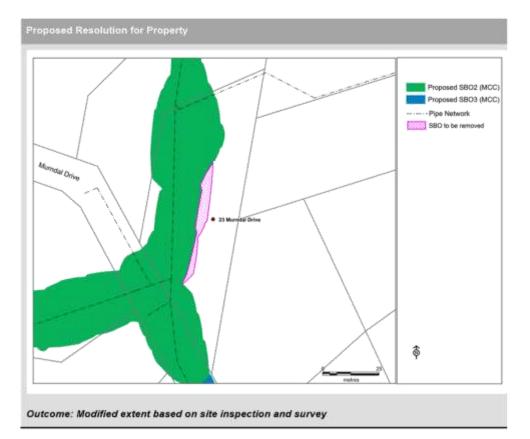
1.1.1.1 33 The Grange, Templestowe (Submission 258)

1.1.1.2 Conclusions and Recommendations



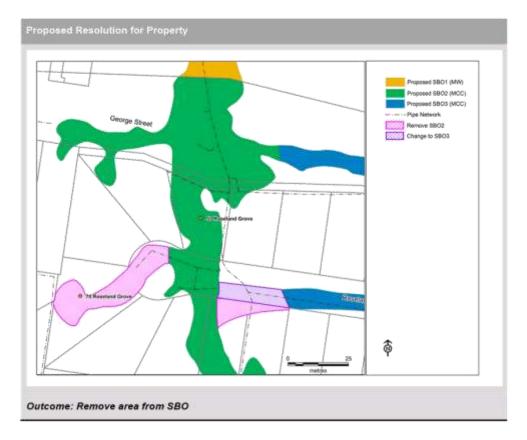
1.1.1.1 23 Murndal Drive, Donvale (Submission 265)

1.1.1.2 Conclusions and Recommendations



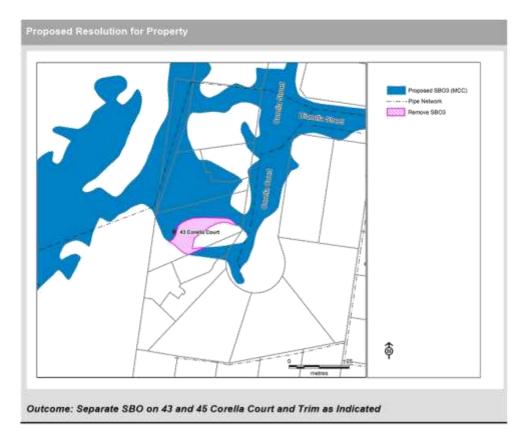
1.1.1.1 70 Roseland Grove, Doncaster (Submission 273)

1.1.1.2 Conclusions and Recommendations



1.1.1.1 43 Corella Court, Doncaster (Submission 292)

1.1.1.2 Conclusions and Recommendations



129 Gosford Crescent, Park Orchards (Submission 329)

The submitter has queries the use of a single SBO2 for the two flow paths that are active within their property boundary at 129 Gosford Crescent. They have requested that the SBO be checked to determine if the full extent of flooding lies under SBO2 or SBO3. For reference the east-west flow path classification is not in dispute, rather the north-south flow path is under review.

2.1.1 Key area of dispute and findings

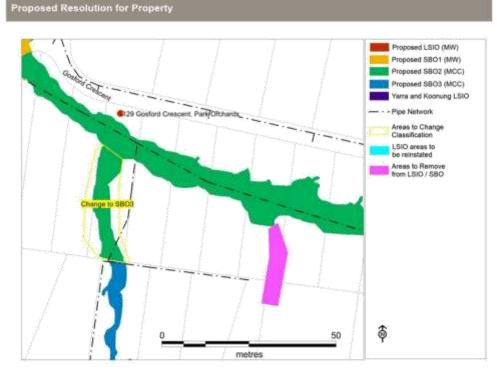
Summary of dispute: The full flood area has been defined as SBO2 and the submitter is querying if this should be a mix of SBO2 and SBO3 for the two different flow paths through the site.

129 Gosford Crescent has two flow paths covering the property. The east-west flow path is the larger of the two with peak flood depths exceeding 1 m within the property. This area must remain under the SBO2 classification and is not in dispute.

The flow path from south to north through the site has less surface depth than the northern flow path. Whilst a small portion of this flow path has depths greater than 100 mm for the 100 year ARI event, overall it is less than this. Consequently it is recommended that this is changed from SBO2 to SBO3.

2.1.2 Conclusions and Recommendations

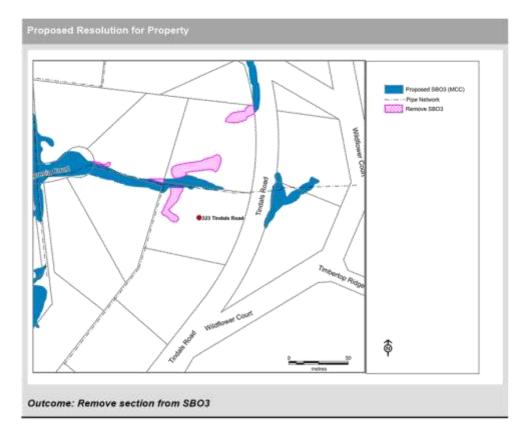
Due to the majority of depths being less than 100 mm for the north – south flow path it is recommended that the SBO2 should change to SBO3 for the north – south flow path.



Outcome: No Change Proposed

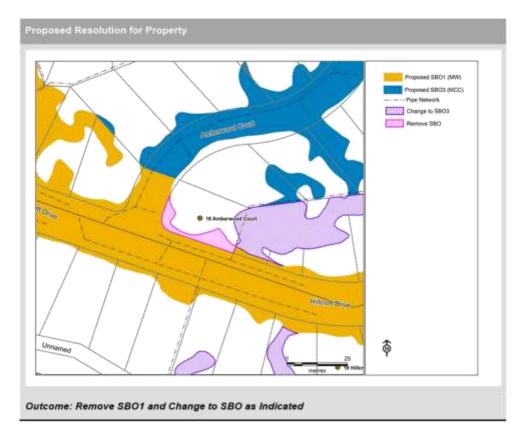
1.1.1.1 323-325 Tindals Road, Warrandyte (Submission 333)

1.1.1.2 Conclusions and Recommendations



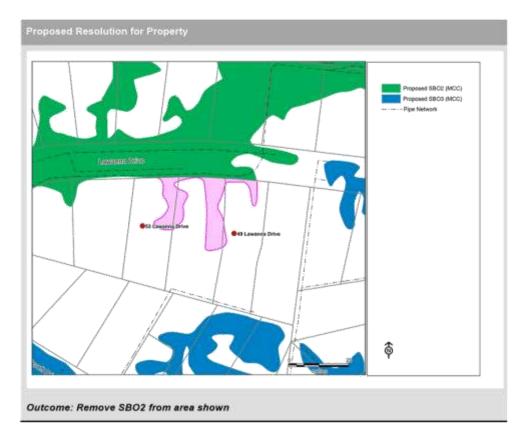
1.1.1.1 18 Amberwood Court, Templestowe (Submission 344)

1.1.1.2 Conclusions and Recommendations



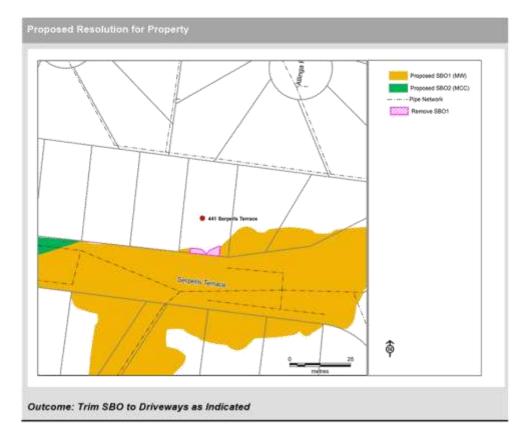
1.1.1.1 50 Lawanna Drive, Templestowe (Submission 351)

1.1.1.2 Conclusions and Recommendations



1.1.1.1 441 Serpells Terrace, Donvale (Submission 354)

1.1.1.2 Conclusions and Recommendations



14 Oak Crescent, Templestowe Lower (Submission 361)

Council have asked Cardno for the following specific advice for this property:

- A) Site visit shows a drop off on the eastern boundary of the property. Can the SBO be clipped in this area? AND
- B) Can the SBO2 be removed from the northern edge of the property?

Key findings:

- A) Eastern Boundary
 - If Council are comfortable that there is a sharp drop off this can be trimmed out. However it is the model resolution that resulted in the SBO extent shown, and it may be inconsistent (precedent setting) with other properties to remove this.
- B) Northern Edge
 - 2) The model shows 3 grid cells as being flooded in the north, and this is joined to the flow path along Oak Crescent. It is not understood why Council requested this area removed, however we suggest it is retained.

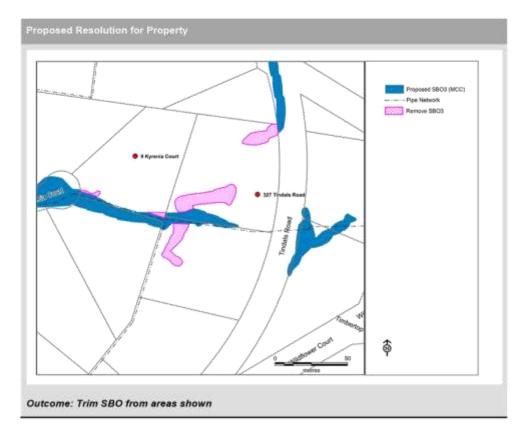
Proposed Resolution for Property



Outcome: Remove SBO2 at eastern property boundary, and retain elsewhere with no change.

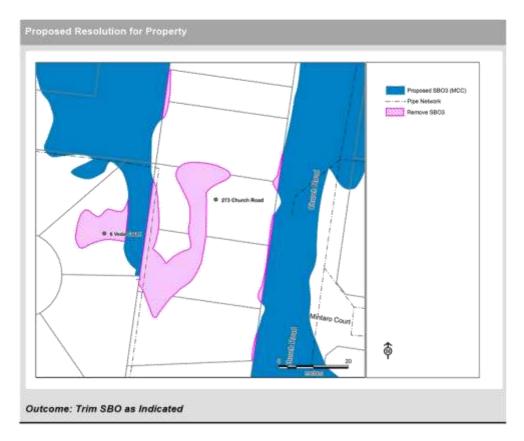
1.1.1.1 327 Tindals Road, Warrandyte (Submission 383)

1.1.1.2 Conclusions and Recommendations



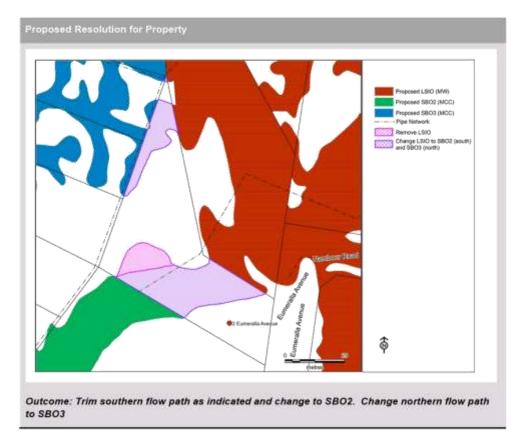
1.1.1.1 6 Veda Court, Templestowe (Submission 391)

1.1.1.2 Conclusions and Recommendations



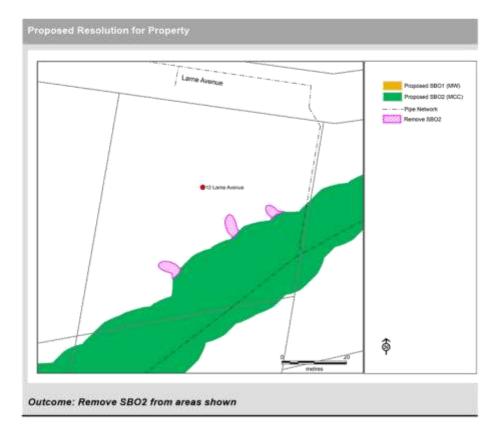
1.1.1.1 2 Eumeralia Avenue, Templestowe Lower (Submission 392)

1.1.1.2 Conclusions and Recommendations



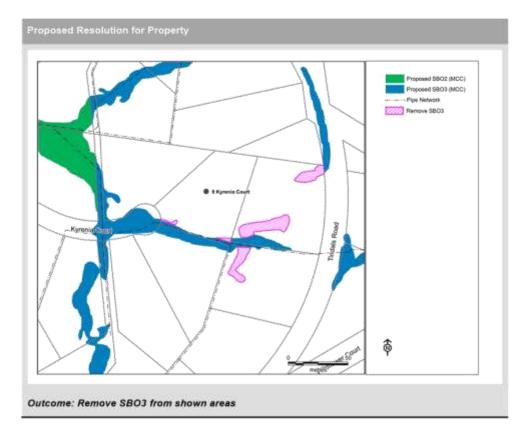
1.1.1.1 10 Larne Ave (Submission 398)

1.1.1.2 Conclusions and Recommendations



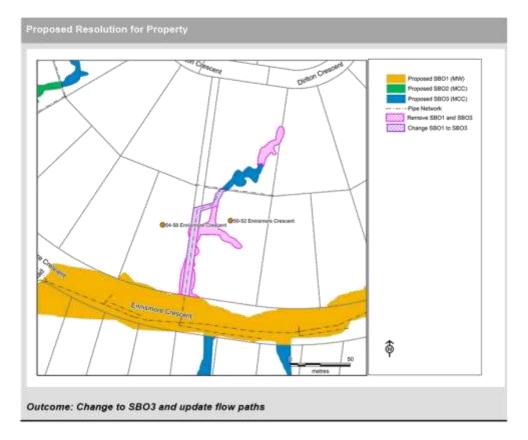
1.1.1.1 9 Kyrenia Court, Warrandyte (Submission 401)

1.1.1.2 Conclusions and Recommendations



1.1.1.1 50-52 and 54-56 Ennismore Crescent, Park Orchards (Submission 427)

1.1.1.2 Conclusions and Recommendations



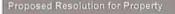


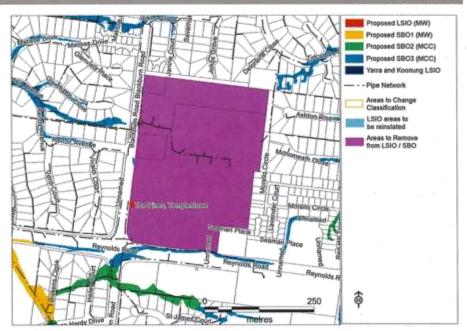
5.11.2 The Pines, Templestowe (Submission 427a)

Submittere Concerns The property consists of major roofs and flow paths sit on top of these, in particular Target where there is an SBO2 proposed. There are flow paths which would not occur as there is an extensive drainage system within the site.

It is recommended that the SBO be removed from the site.

Private drainage infrastructure has not been considered. This is a blanket rule that has been applied across the full municipality. The reasoning for this is Council cannot guarantee that the private drainage infrastructure is appropriately constructed and maintained. The only Council infrastructure on the property is a 375 mm pipe.





Outcome: Remove SBO from property.

June 2016

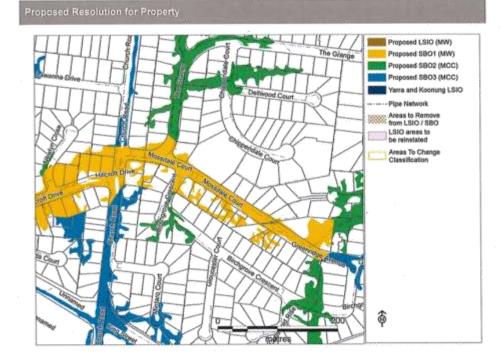
Cardno

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5.11.3 Mossdale Court, Templestowe (Submission 427a)

Submitters Concerns	Response
The SBO is appropriate along the main road, however it is not suitable on the steep paths that lead to the road as these are shallow (and fast).	The SBO picks up both deep flow and fast flowing sheet flow. This is entirely appropriate. It should be noted that this model is not rainfall on grid, therefore the source of the water is from flows surcharging from the stormwater network at the rear of properties and flowing toward Mossdale Court. If Melbourne Water and Council can agree, it is recommended that the small flow paths from the properties adjoining Mossdale Court are converted into SBO3 (from SBO1).



Outcome: Council to liaise with MW to see if Proposed SBO1 in properties adjoining Mossdale Court can become SBO3.

June 2016

Cardno

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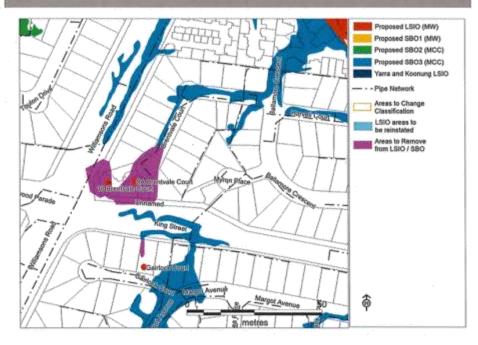


5.11.4 King Street, Doncaster (Submission 427a)

The submitter discusses 3 specific areas in the Ruffey Creek catchment as shown in the table below.

Submitters Concerns	Response
King Street – there is a zig zag shape in the SBO on the road itself.	This has no implication and does not affect any residents. The zig zag shape is relatively subtle and generally shows flows in the road reserve. Whilst it may differ slightly from the topography on site, it is consistent with the LiDAR aerial survey data. No amendment is proposed.
11 Gairlock Court - the SBO is not realistic.	This was water flowing in from the street, but it has been analysed and determined that the property should be removed from SBO3.
9A &10 Brentvale Court – the SBO is not realistic	This is ponding on the surface. The area has been analysed and it has been determined that the properties should be removed from SBO3.
3 & 4A Myron Place – there appears to be SBO missing.	There is sufficient pipe capacity in this area, particularly as water is held up upstream at Gairlock Court.

Proposed Resolution for Property



Outcome: Remove SBO2 from properties 11 Gairlock Court, 10 & 9A Brentvale Court

June 2016

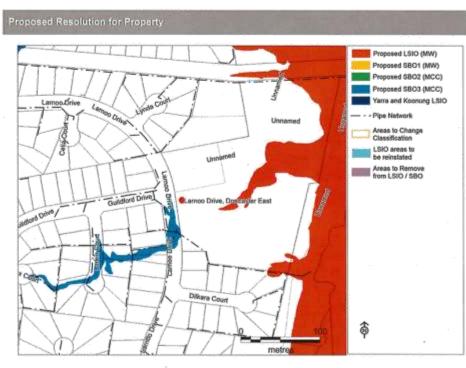
Cardno

69



5.11.5 Larnoo Drive (Gum Nut Gully), Doncaster East (Submission 427a)

The submitter queries why the flow path is shown as discontinuous. The flow path is discontinuous as there is a pipe diameter change. The smaller pipes converge into a 600 mm pipe immediately upstream of where the 'discontinuity' is reported.

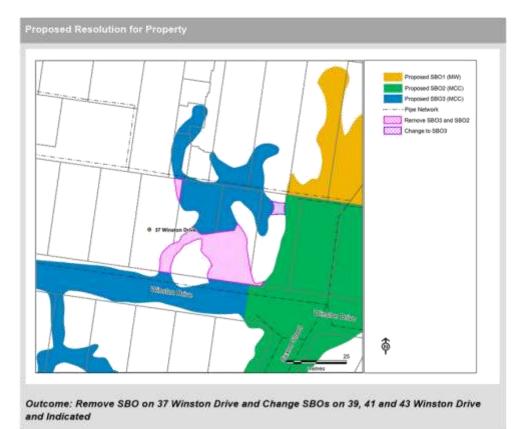


Outcome: No Change Proposed



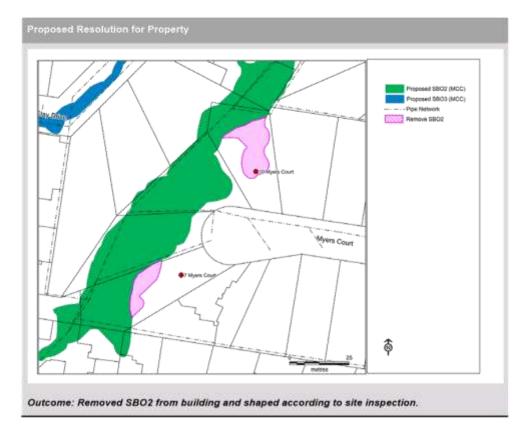
1.1.1.1 37 Winston Drive, Doncaster (Submission 437)

1.1.1.2 Conclusions and Recommendations



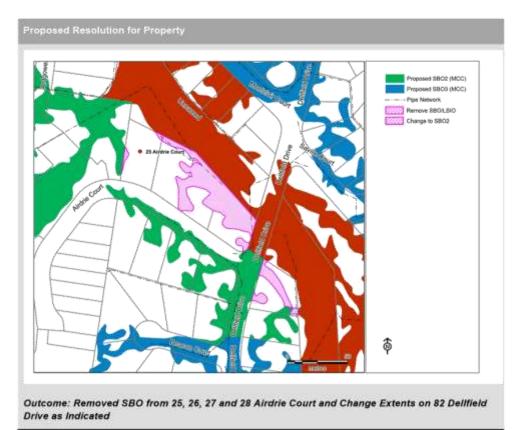
1.1.1.1 10 Myers Court, Doncaster (Submission 438)

1.1.1.2 Conclusions and Recommendations



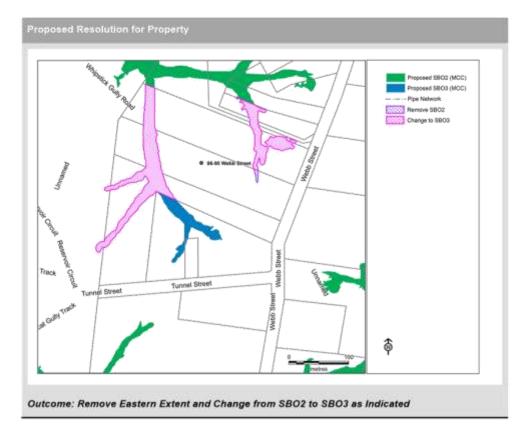
1.1.1.1 27 Airdrie Court (Submission 466)

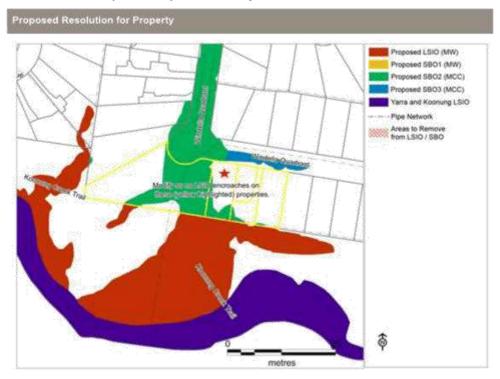
1.1.1.2 Conclusions and Recommendations



1.1.1.1 86-90 Webb Street, Warrandyte (Submission 470)

1.1.1.2 Conclusions and Recommendations



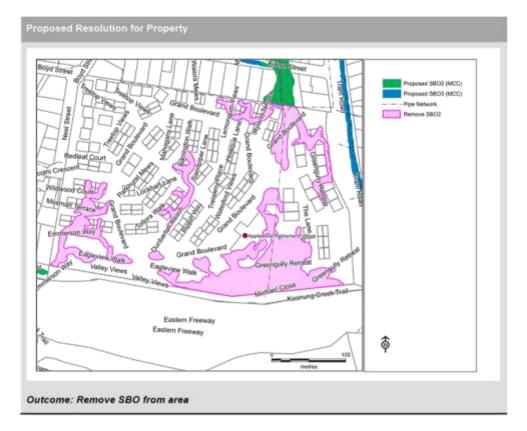


50 Windella Quadrant, Doncaster (Submission 471)

Outcome: Modify to SBO2 so that no LSIO encroaches on the Windella Quadrant Properties

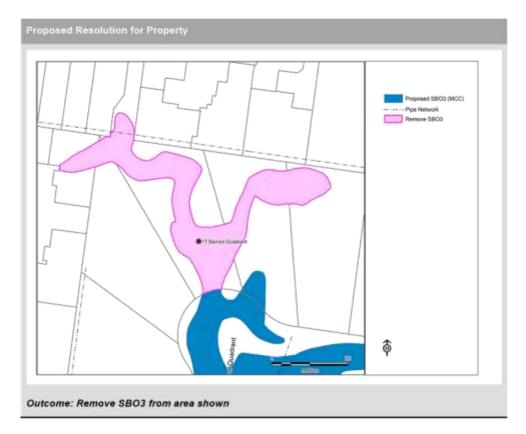
1.1.1.1 Applewood Retirement Village (Submission 483)

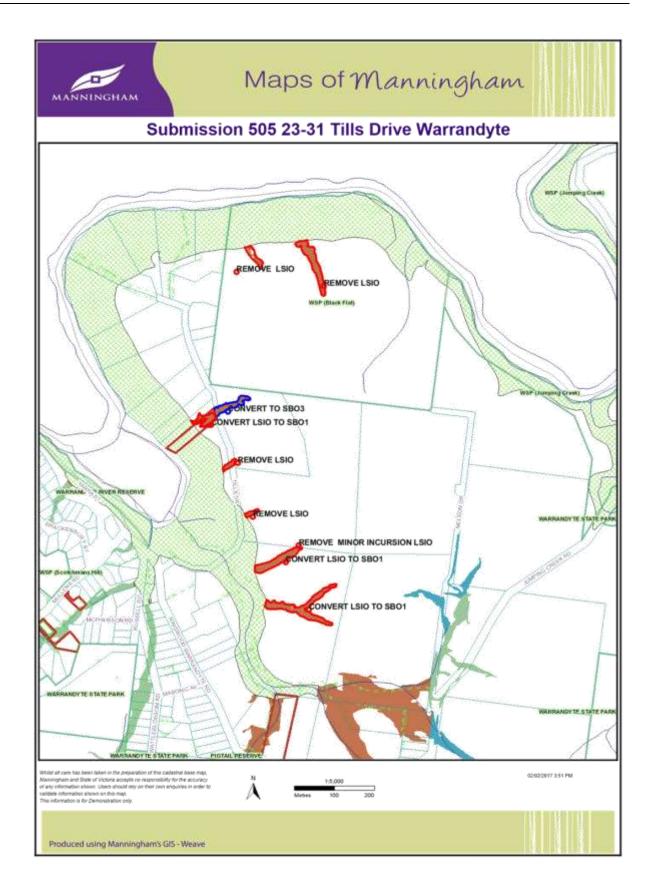
1.1.1.2 Conclusions and Recommendations



1.1.1.1 17 Banool Quadrant, Doncaster East (Submission 491)

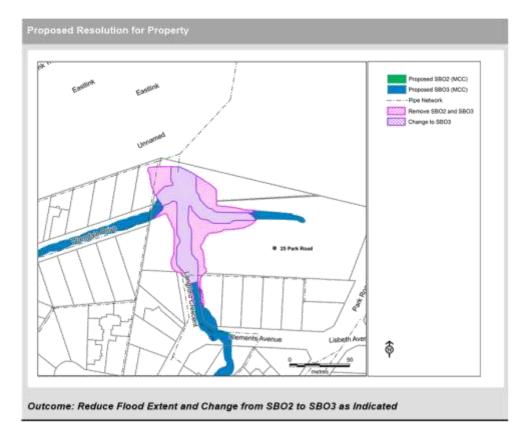
1.1.1.2 Conclusions and Recommendations





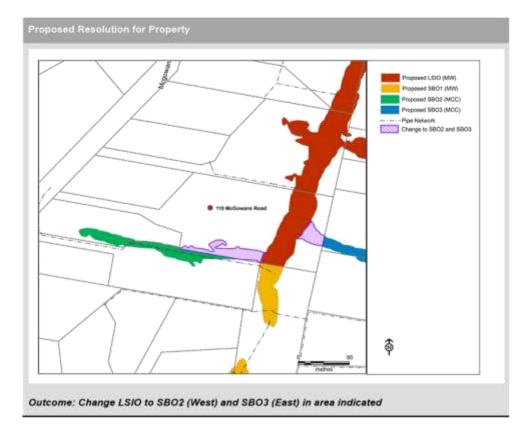
1.1.1.1 25 Park Road, Donvale (Submission 510)

1.1.1.2 Conclusions and Recommendations



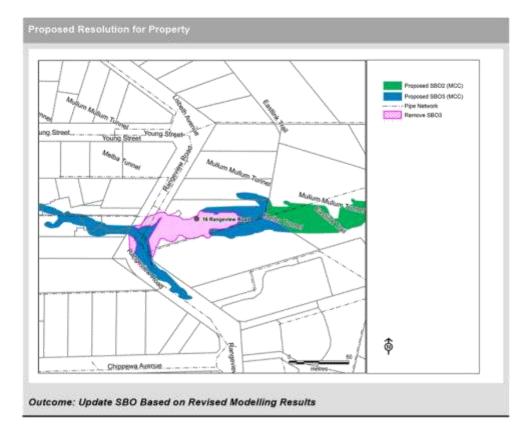
1.1.1.1 110 McGowans Road, Donvale (Submission 529)

1.1.1.2 Conclusions and Recommendations



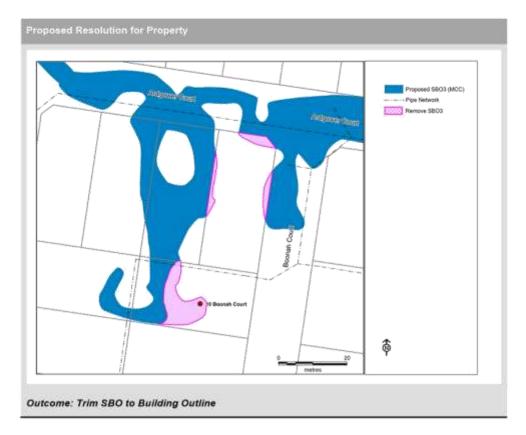
1.1.1.1 16 Rangeview Road, Donvale (Submission 532)

1.1.1.2 Conclusions and Recommendations



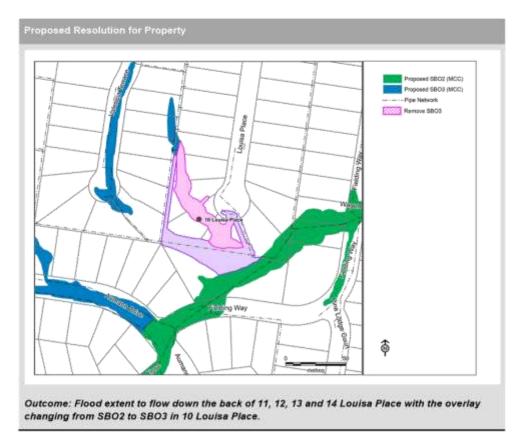
1.1.1.1 10 Boonah Court, Templestowe Lower (Submission 539)

1.1.1.2 Conclusions and Recommendations



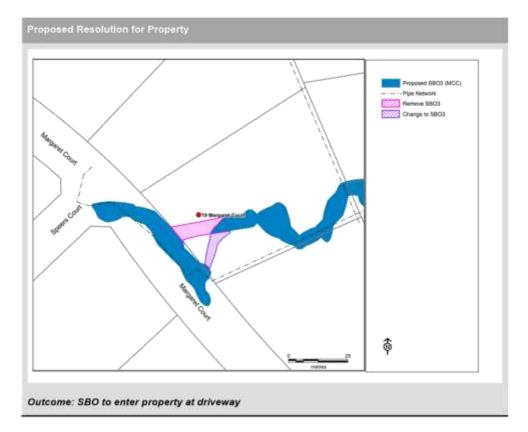
1.1.1.1 11 Louisa Place, Templestowe (Submission 540)

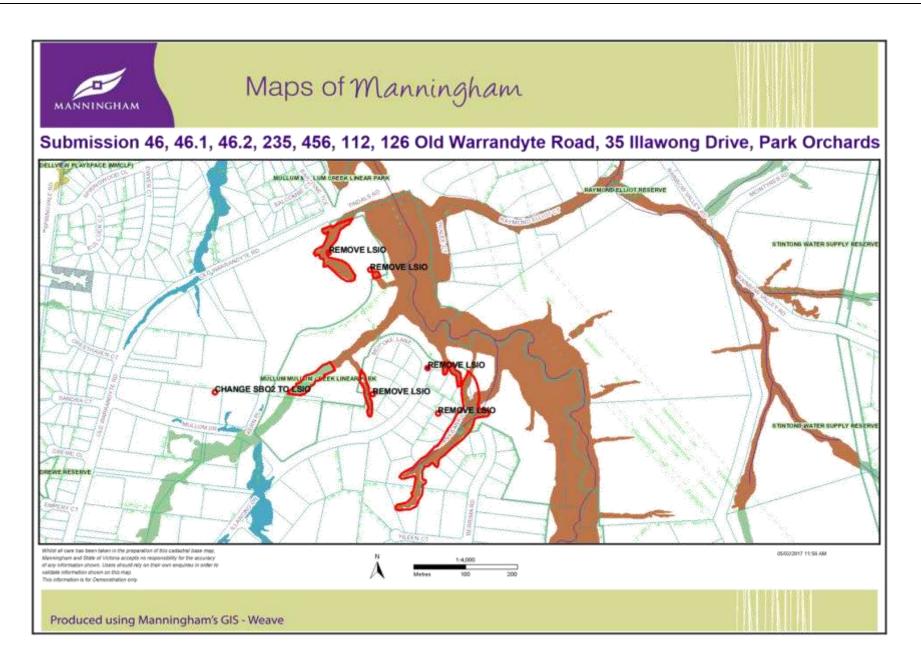
1.1.1.2 Conclusions and Recommendations

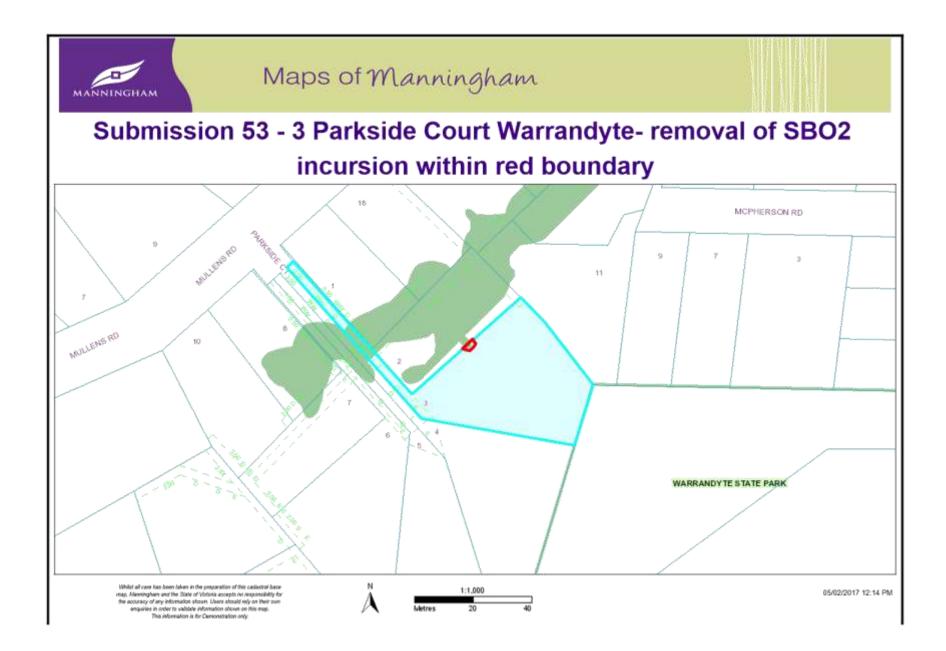


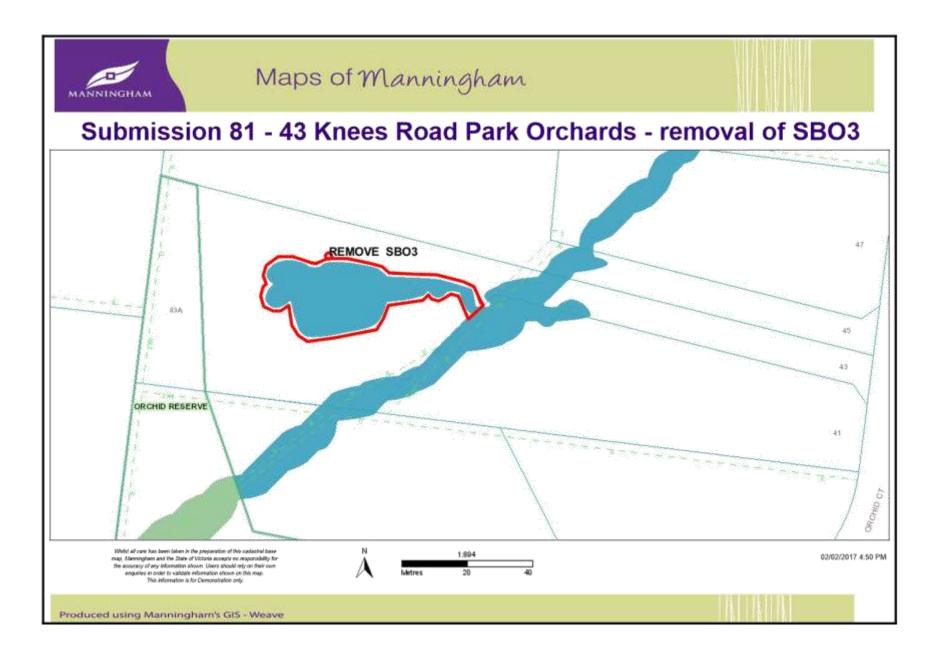
1.1.1.1 19 Margaret Court, Warrandyte (Submission 548)

1.1.1.2 Conclusions and Recommendations





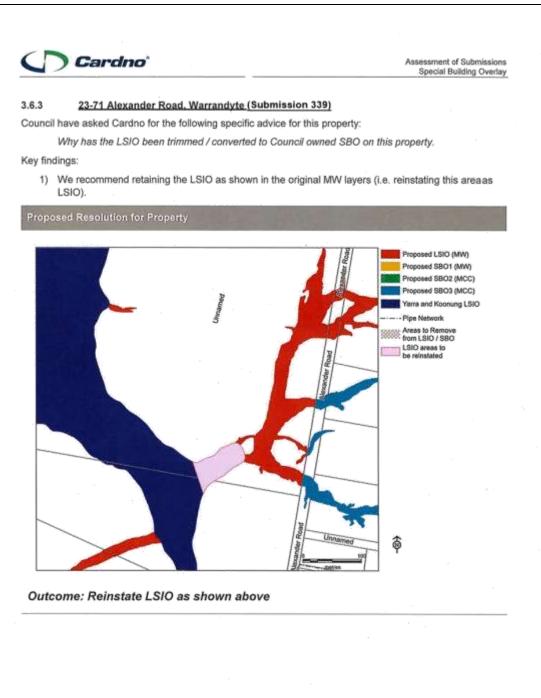




1.1.1.1 11 Limassol Court, Donvale (Submission 178)

1.1.1.2 Conclusions and Recommendations

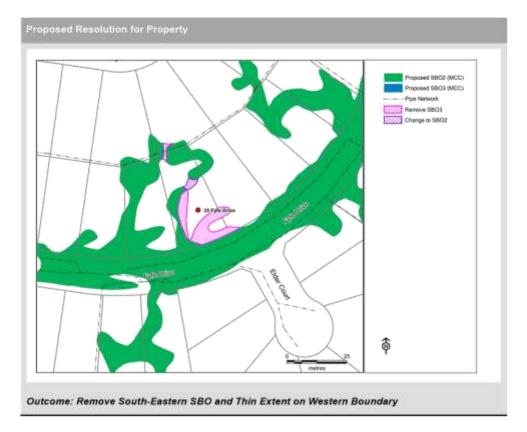


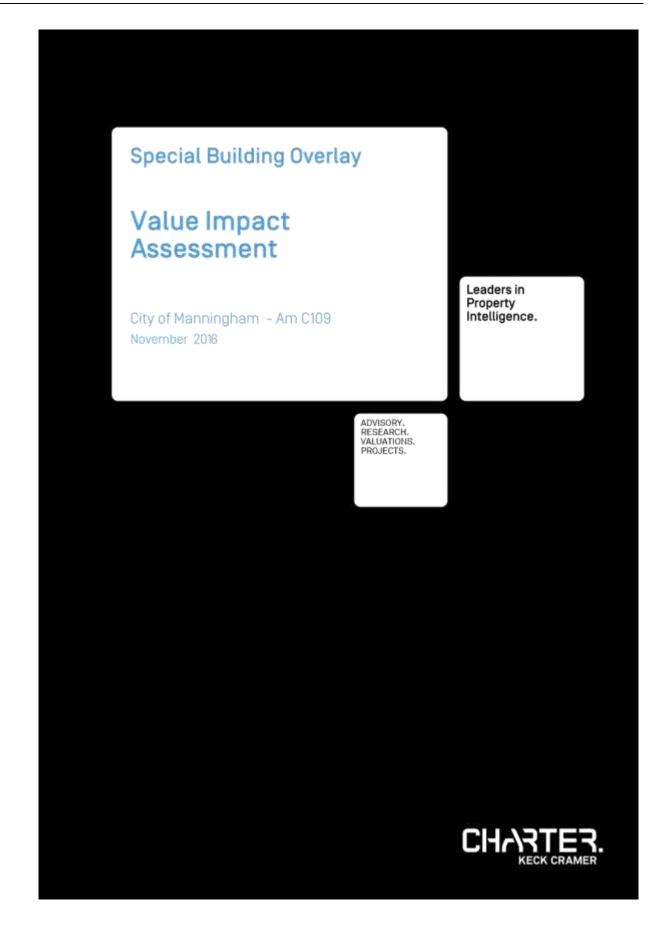




1.1.1.1 35 Fyfe Drive, Templestowe Lower (Submission 538)

1.1.1.2 Conclusions and Recommendations







Special Building Overlay Property Value Impact Assessment

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Instructions

Instructing Party	Susan Ross Strategic Planner City of Manningham Email <u>susan.ross@manningham.vic.gov.au</u>				
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Our Reference	Charter Contact	Rob Burgess			
	Report Author(s)	Rob Burgess & Gianna Hartland			



1. Introduction

1.1 Background

Manningham City Council is currently undertaking Amendment C109 to the Manningham Planning Scheme.

The purpose of the amendment is to introduce and revise the Land Subject to Inundation Overlay (LSIO) and Special Building Overlay (SBO) in five catchments in the municipality. The amendment affects approximately 10,100 properties.

The amendment proposes to introduce the following controls:

- LSIO and SBO1 Relates to Melbourne Water watercourses and main drains respectively, and affects approximately 1300 properties.
- SB02 Relates to the Council local drains, where there is a possible flood depth of more than 100mm, and affects
 approximately 3900 properties.
- SB03 Relates to the Council local drains, where there is a possible flood depth of less than 100mm, and affects
 approximately 4900 properties.

1.2 Purpose

Charter Keck Cramer ('Charter') has been appointed by the Manningham City Council to provide advice on what, if any impact the SBO will have on the values of those properties affected in the short and long term.

1.3 Methodology

In preparing this advice, a number of tasks have been undertaken. These are outlined as follows:

- A review of Amendment C109 documentation (including the Explanatory Report and the planning maps, SB0 Schedules, and Consultation Report);
- A review of previous advice prepared by Charter Keck Cramer for the City of Stonnington (2004);
- An analysis of historic sales of directly comparable properties sold (with and without the SBO) within the City of Manningham;
- Internal advice sought from Charter Keck Cramer's Residential Valuers;
- Review of relevant literature and research;
- Review of previous SBO amendments and Independent Panel findings;
- · Case Studies of SBO Amendments in other Local Government Areas; and
- Internal advice sought from Charter Keck Cramer's Quantity Surveying Team.



2. Flood Management Controls & the Victorian Planning System

2.1 Flood Management Controls

In Victoria, planning controls relating to flood management are provided for in the Victoria Planning Provisions (VPPs) through various overlay and zone controls. These are implemented through the planning scheme of the relevant local government authority (LGA). The purpose of these controls is to:

- Minimise the effects of overland flows and flooding on new buildings, and
- Ensure new developments don't adversely affect existing properties.

These controls are based on the extent of flooding resulting from a 1 in 100 year storm. That is, a storm event of such intensity, based on historical rainfall data, which has a one per cent chance of occurring in any given year.

There are three types of overlay and one zone that relate to flood control. The purpose of these overlays and zone is to set appropriate conditions and floor levels to address any flood risk to developments. These overlays and zone require a planning permit for various buildings and works. These are:

Special Building Overlays (SBO)

The SBO is applied to areas identified as prone to overland flooding. The purpose of the SBO is to set appropriate conditions and floor levels to address any flood risk to developments. These overlays require a planning permit for buildings and works.

The purpose of the SBO is as follows:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To identify land in urban areas liable to inundation by overland flows from the urban drainage system as determined by, or in consultation with, the floodplain management authority.
- To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
- To protect water quality in accordance with the provisions of relevant State Environment Protection Policies, particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).

Land Subject to Inundation Overlays (LSIO)

The LSIO applies to land affected by flooding associated with waterways and open drainage systems, i.e. floodplains. These overlays require a planning permit for buildings and works.

The purpose of the LSO is as follows:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To identify land in a flood storage or flood fringe area affected by the 1 in 100 year flood or any other area determined by the floodplain management authority.
- To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, is compatible with the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
- To reflect any declaration under Division 4 of Part 10 of the Water Act, 1989 where a declaration has been made.
- To protect water quality in accordance with the provisions of relevant State Environment Protection Policies, particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).
- To ensure that development maintains or improves river and wetland health, waterway protection and flood plain health.



Floodway Overlays (FO)

The FO applies to land identified as carrying active flood flows (in excess of one metre) associated with waterways and open drainage systems.

The purpose of the FO is as follows:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To identify waterways, major floodpaths, drainage depressions and high hazard areas which have the greatest
 risk and frequency of being affected by flooding.
- To ensure that any development maintains the free passage and temporary storage of floodwater, minimises flood damage and is compatible with flood hazard, local drainage conditions and the minimisation of soil erosion, sedimentation and silting.
- To reflect any declarations under Division 4 of Part 10 of the Water Act, 1989 if a declaration has been made.
- To protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).
- To ensure that development maintains or improves river and wetland health, waterway protection and flood
 plain health.

Urban Floodway Zone (UFZ)

Unlike the overlays, the UFZ controls land use as well as development, with land use being restricted to low intensity uses such as recreation and agriculture. Development is generally not encouraged in the UFZ.

Where applicable, these controls are expressed in council planning schemes and show the location and extent of special features, such as where land may be subject to flooding.

The purpose of the UFZ is as follows:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To identify waterways, major floodpaths, drainage depressions and high hazard areas within urban areas which
 have the greatest risk and frequency of being affected by flooding.
- To ensure that any development maintains the free passage and temporary storage of floodwater, minimises flood damage and is compatible with flood hazard, local drainage conditions and the minimisation of soil erosion, sedimentation and silting.
- To reflect any declarations under Division 4 of Part 10 of the Water Act, 1989.
- To protect water quality and waterways as natural resources in accordance with the provisions of relevant State Environment Protection Policies, and particularly in accordance with Clauses 33 and 35 of the State Environment Protection Policy (Waters of Victoria).



3. City of Manningham - Amendment C109

3.1 Amendment C109

Amendment C109 applies to land within five local catchments in the City of Manningham. These have been identified by Melbourne Water and Council as being liable to inundation in a 1 in 100 year storm event. The land affected is shown on the proposed planning scheme maps that form part of the amendment.

Amendment C109 will result in:

- Approximately 200 properties no longer being covered by the SBO and LSIO;
- Approximately 9500 properties being covered by the SBO and LSIO for the first time; and
- Approximately 1000 properties remaining in the SB0 and LSI0 (noting this may include some revision to the extent of the SB0 and LSI0 over an individual property).

In relation to the SBO, the Amendment proposes to change the Manningham Planning Scheme to:

Replace the existing SBO Schedule at Clause 44.05 with three new schedules to the SBO that distinguish between
areas subject to inundation in relation to the 'main' drainage system (Melbourne Water drains) and the 'local'
drainage system (Council drains), and establish additional planning permit exemptions for certain areas where
Council is the nominated drainage authority.

The schedules are referred to as SB01, SB02 and SB03 and these areas are defined on the planning Scheme (SB0) maps. Each schedule defines what permit exemptions apply to the relevant areas.

- Schedule 1 to the Special Building Overlay (SBO1) covers the Melbourne Water drainage system and nominates Melbourne Water as the Determining Referral Authority. All applications for development in this overlay are referred to Melbourne Water to assess and provide the appropriate permit conditions and floor levels.
- Schedule 2 to the Special Building Overlay (SB02) covers the local drainage system and Council is the responsible
 authority for drainage. Council assesses all applications for development in this overlay and provides appropriate
 permit conditions and floor levels.
- Schedule 3 to the Special Building Overlay (SB03) is similar to SB02, except that a planning permit will be required in
 fewer circumstances such as when a building or extension is constructed with a floor level below an identified
 level. All applications for development in this overlay (not exempted from needing a permit) are referred to Council to
 assess and provide the appropriate permit conditions and floor levels.

3.1.1 Planning Permit Requirements

The SBO and LSIO do not prevent development but rather, through requiring a planning permit, ensure that development is sited and designed to minimise the impact of flooding. Implementation of the SBO and the LSIO can influence the siting of buildings and set appropriate conditions, such as raised floor levels, to address any flood risk to new development.

Exemptions from requiring a planning permit for specified buildings and works are nominated in the parent clause to the SB0 and LSI0. A schedule is not proposed to be included in the LSI0 and therefore additional exemptions are not included. SB01 and SB02 also do not propose any additional exemptions beyond those included in the parent clause. SB03, however, does include a number of additional exemptions (i.e. where a permit is not required). Permit requirements of the SB0, and associated schedules are outlined in the following table:



SBO (Schedule)	Permit Requirements	Permit Exemptions
1	 A permit is required to construct a building or to construct or carry out works, including: A fence, Roadworks. Bicycle pathways and trails. Public tollets. A domestic swimming pool or spa and associated mechanical and safety equipment if associated with one dwelling on a lot. A pergola or verandah, including an open-sided pergola or verandah, including with a finished floor level not more than 800mm above ground level and a maximum building height of 3 metres above ground level. A deck, including a deck to a dwelling with a finished floor level not more than 800mm above ground level. A non-domestic disabled access ramp. A permit is required to subdivide land. 	Yes (the Schedule states that a permit is not required in various circumstances).
2	See Above	Yes
3	The permit requirements for Schedule 1 and 2 do not apply to Schedule 3 which provides numerous permit exemptions (see adjacent).	 A permit is not required to construct or carry out the following buildings or works: A new dwelling where the floor level is at least 400 mm above the natural surface level and the sub floor does not obstruct the overland flow path. A replacement dwelling where the floor level is at least 400 mm above the natural surface level, the sub floor does not obstruct the overland flow path and the original building footprint remains the same. The responsible authority may require evidence of the existing building envelope. A single or multiple dwelling extension where: the sub floor level does not obstruct the overland flow path, and the floor level of the proposed dwelling extension/s is at least 400 mm above the natural surface level. an alteration to an existing building where the original building footprint remains the same and floor levels are constructed to at least 400 mm above the natural surface level. a replacement building (not including an outbuilding) where the floor isvel is at least 400 mm above the natural surface level. building footprint remains the sub floor does not obstruct the overland flow path. The responsible authority may require evidence of the existing building envelope.

Table 1: Planning Permit Requirements



4. Land Use Regulation & Property Values

4.1 Land Use Regulation & Value Impacts

Providing a general description of the various effects that land use regulation may have on property values establishes a number of important principles when considering any possible value impact of the proposed SBO in the City of Manningham.

Land use regulations can affect the market value of property in different ways. Though some of the impacts can be easily established, in many cases they are complex and can be misconstrued. Land use regulations often have a complex set of negative and positive effects on private property values and the net effect of regulatory restrictions cannot be known in advance or easily attributed.

Though it is often assumed that land use regulations negatively impact (reduce) property values, in recognising local externalities, such regulations often preserve or provide amenities that make communities more attractive and which have positive value implications.

The complexity of attempting to understand the specific impact of land use regulations on property values is highlighted in the scenario whereby a zoning regulation that limits development may lower the value of property on which it is applied but which if also applied to neighbouring properties may result in raising the first property's value due to one or more positive effects (e.g., enhanced neighbourhood amenities). Hence, these reciprocal effects may make the net effect positive.

A property affected by multiple regulations with different effects (negative and positive) further complicates the ability to establish an understanding of the effect on values.

It is difficult to establish whether a negative restriction effect will be greater than or smaller than the potential positive amenity effect. Therefore one must look at specific land values to know whether, for a particular land-use regulation or set of regulations, the net effect is positive, negative, or neutral.

4.2 The Potential Effects of Land Use Regulation

Land-use regulations can broadly be described as having three potential effects on land values. These are restriction effects, amenity effects, and scarcity effects. In describing these, Jaeger states:

"The first effect likely will be negative for restricted properties, but in many cases amenity and/or scarcity effects have a positive and potentially offsetting effect. As a result, and despite the widespread belief that most land-use regulations have negative effects on property values, the opposite may be true in many cases.

Restriction effects result when a regulation limits the use of a particular piece of land so that its "highest and best use" is prevented, therefore decreasing the property's value. If, however, the prohibited use would not be chosen because it is not the "highest and best use" of that piece of land, then the regulation will have no effect on the property's value.

Significantly, many land use regulations are implemented to generate positive amenity effects and in doing so, generate positive value impacts. For example, regulations are often introduced to support and/or enhance the liveability of a neighbourhood by excluding incompatible land uses and development outcomes deemed inappropriate. Zoning that achieves this and protects the characteristics of residential properties can make neighbourhoods more appealing and predictable.

Scarcity effects occur when land-use regulations change the supply of land that can be put to a particular use in a specific location. Simply, if a regulation allows an office use but prohibits a residential use, the supply of land for office use will increase and the supply of land for residential use will decrease. Depending on how binding the restriction is, the price of land for office use may decline, and the price of land for residential use may rise".¹

W_Jaeger; How Have Land-use Regulations Affected Property Values in Oregon, 2007



5. The Impacts of Flood on Property Values

5.1 Flood Risk & Property Value Implications

Though there is a perception that residential property values are adversely affected by flood risk expressed through the introduction of regulatory mechanisms such as the SBO, it is important to distinguish that there is a practical difference between disclosure of flood risk and actual flooding events.

Research indicates that actual flooding is much more likely to trigger an adverse effect on property values than floodplain designation or regulation² with the extent of discounting likely to be directly related to the degree of risk and any discount generally attributable to an actual flood event. Where multiple floods have occurred in a relatively short timeframe, the extent of discounting is generally higher. Significantly, the discount experienced as a result of flood generally diminishes and property values typically recover in time. The resilience of property values in flood affected areas is often due to waterfront locations which often attract price premiums and which often outweigh any discount.

In the case of land use regulation pertaining to flooding, the disclosure of flood risk through the introduction of flood related overlay controls by local government authorities often generates concerns amongst landowners who presume that such controls will have an adverse impact on property values.

In contemplating any potential value impact associated with the disclosure of flood risk via mapping or the introduction of regulatory control, it is important to recognise that the level of flood risk does not in fact change but simply recognises an existing condition of the land. In the case of Amendment C109, the expansion of the proposed SBO is the result of recent modelling undertaken by Melbourne Water in conjunction with the City of Manningham.

5.2 Case Studies - Disclosure of Flood Risk & Property Values

In a comprehensive review of international and local research findings relating to the disclosure effect on residential properties, it was found that "the bulk of studies found no change in property values upon disclosure". One study provided evidence for the devaluation of properties. These results were based on a study of the effect of flood notification on Section 149 certificates in Sydney's Blacktown, Penrith and Hawkesbury Council areas, which found that the robustness of the housing market was such that individual property characteristics were stronger determinants of price than flood notification".

In a separate study, a change to the official 100 year ARI flood level at Penrith in western Sydney in 1994 was anticipated to have a short-term impact on affected properties. However an examination of sales prices in 1999–2000 did not detect any noticeable variation.⁵ Additionally, an assessment of property values that followed the release of the United Kingdom's Environment Agency's flood maps concluded that "the impact on residential property price growth was non-existent in the absence of flood events".⁶

In the one study where there was evidence for the devaluation of flood liable properties upon disclosure (Sydney's Georges River district), the 25% decline in property values in 1984 was perceived to be due to the release of floodplain maps. The subsequent recovery in values in 1985 was interpreted as a response to the withdrawal of the maps. Research into the annual data that provided the basis to these results was however considered to be inadequate. The research also revealed that community perceptions can affect property values, warranting the need for considered consultation and best practice flood risk assessment in the first instance.

³ Ibid

^s Ibid



² S.Yeo; Are Residential Property Values Adversely Affected By Disclosure of Flood Risk?

⁴ Egan National Valuers, 2000

⁶ Lamond, J et al; The impact of flooding on the price of residential property: a transactional analysis of the UK market

6. Previous SB0 Amendments

6.1 Background

Since the introduction of the Victoria Planning Provisions in 1997, numerous planning scheme amendments to introduce the SBO into metropolitan planning schemes have been undertaken.

In considering submissions made on grounds of negative property value impacts associated with the SBO, Panels have consistently dismissed these for a variety of reasons, including that this is not a valid planning consideration. Significantly, a review of relevant Panel reports relating to the proposed implementation of the SBO has found that no evidence demonstrating a reduction in property values due to the SBO has been provided.

It is noteworthy that as of September 2016, every one of the 31 Melbourne metropolitan local government authorities (LGAs), has a flood related Overlay within its planning scheme. Of these LGAs, 29 apply the Special Building Overlay.

6.2 Previous Panel Findings

A summary of the relevant Panel Reports findings, in relation to the issue of property values - including reference to the advice previously prepared by Charter Keck Cramer - is outlined below.

6.2.1 City of Port Phillip - Amendment C111 [2016]

Referring to the advice prepared by Charter Keck Cramer and previously referred to by other Panels, the Planning Panel in relation to Amendment C111 to the Port Phillip Planning Scheme concluded that:

Panels have consistently found that there is no justification for setting aside of any SBO amendment on the basis of requests for compensation, loss of property value, and possible increase in insurance premiums.

The Panel in relation to Amendment C50 to the Moreland Planning Scheme stated that:

The value of any property is determined by the complex interplay of many different factors such as overall economic conditions, public economic policies, location, streetscape and amenity, and it is difficult to assign what effect, if any, the identification of land as liable to overland flows may have on the value of a property.

This view is consistent with the conclusions of the Planning Panels for Amendment C3 to the Yarra Planning Scheme and Amendment C18 to the Stonnington Planning Scheme. These Panels generally found no correlation between the application of the SBO and property values.

Melbourne Water also reported that the Stonnington Council commissioned Charter Keck Kramer (CKC) to review the effects on property prices of the application of the SBO. CKC examined property prices in the City of Port Phillip and found no correlation. The Panel was not provided with any contrary evidence and concludes that the SBO or the LSIO are highly unlikely to affect property prices, and that it is appropriate that the condition of the land be recorded and available to interested people.

This Panel is satisfied that Council's approach in relation to this issue is appropriate, and that property value conclusions by previous Panels should be similarly applied to this Amendment.

6.2.2 City of Moreland - Amendment C50 [March 2008]

The Planning Panel, in relation to Amendment C50 to the Moreland Planning Scheme stated that:

A number of submitters expressed concerns that the disclosure of the flood prone nature of their properties will have a detrimental impact on property prices.

The Panel commented:

Both Council and Melbourne Water suggested that perception of impacts of planning controls on property values is not usually considered relevant to the assessment of planning proposals. The value of any property is determined by the complex interplay of many different factors such as overall economic conditions, public economic policies, location, streetscape and amenity, and it is difficult to assign what effect, if any, the identification of land as liable to overland flows may have on the value of a property.



This view is consistent with the conclusions of the Planning Panels for Amendment C3 to the Yarra Planning Scheme and Amendment C18 to the Stonnington Planning Scheme. These Panels generally found no correlation between the application of the SBO and property values.

The Panel was not provided with any contrary evidence and concludes that the SBO or the LSIO are highly unlikely to affect property prices, and that it is appropriate that the condition of the land be recorded and available to interested people".

6.2.3 City of Stonnington - Amendment C18 [September 2004]

In response to the large number of the submitters to Amendment C18 who expressed concern about the perceived impact of the SBO on property values, the City of Stonnington commissioned Charter Keck Cramer, to investigate the potential for there to be an adverse effect on the value of land subject to the SBO. Based on a review of the SBO that had been in place in the City of Port Phillip for four years, the following conclusion was made:

We have confirmed that there is a general purchaser awareness of the SBO within the City of Port Phillip, and that purchasers understand the consequences that some properties affected by the overlay may, in the course of renovation and extension, have to meet special planning and building requirements that would otherwise not apply.

Notwithstanding the pattern of sales and analysis, gives no evidence or cause to believe that the application of the SBO to any of the properties has had a measurable effect on the value of those properties when offered to the market on normal reasonable terms and conditions. Simply stated, the application of the overlay within the City of Port Phillip appears to have had no adverse impact on the property values.

For the reason that there is a strong socio economic and demographic similarity between the City of Port Phillip and the City of Stonnington, and as many of the properties affected in the City of Port Phillip are of a similar style, construction mode and market value range as many of those likely to be affected within the City of Stonnington by the proposed introduction of the SBO, we consider it reasonable to anticipate that the introduction of the SBO in Stonnington will, similarly, have no measurable impact on the value of properties to which it will apply.

In response to the Charter Keck Cramer advice, the Panel concluded:

"It is submitted that this conclusion is consistent with what one would expect, particularly as the potential for flooding identified by the SBO reflects that which already exists. It is submitted that the overlay does no more than to document what is already important and relevant information, and make it readily available to property owners or a prospective purchaser.

The application of the overlay does not prevent land from being developed, it only requires consideration of issues arising from flooding to be dealt with in detail, in a timely manner.

The SBO, therefore, does not affect property values. What it does is to enable the proper value of a property to be determined, having regard to all relevant site opportunities and constraints, including any constraint arising from the fact that the land is subject to inundation. It also equally protects all land by ensuring that development that may have an adverse effect on adjoining land is properly assessed".

6.2.4 City of Yarra - Amendment C3 (October 2000)

Completed in 2003, the Panel considering Amendment C3 made the following comments:

The panel supports the views of the Council and Melbourne Water that property values are determined by a range of factors which, in addition to the classic criteria of "position, position, position", may include size, design, location, historic character, etc., etc.,

Purchasers, in the normal course of events, make trade-offs between these criteria. In the current economic climate it would appear to the panel that real estate values in inner city locations are at an all-time premium and there is no evidence, at present, that there is any correlation between the approval of a SBO and a major downturn in property values".



7. City of Manningham - Assessment of Sales

7.1 Assessment Method

In determining if the application of a SBO has a measurable effect on property values, we undertook a direct comparison analysis of properties within the City of Manningham subject to the current SBO. Notwithstanding, we understand the impact of property values is vulnerable to a complex range of different variables such as location, streetscape, amenity, improvements and economic considerations, making the determination of an impact on property values as a result of the SBO both challenging and in some degrees subjective.

In undertaking the assessment, we identified properties within the City of Manningham subject to a SBO, specifically focusing on properties where at least 50% of the site is affected. Furthermore, we focused on properties that transacted between 2013 - 2016, and benchmarked these properties against sale evidence of a directly comparable nature, although not subject to a SBO. Our research was tested on a number of affected properties in order to establish a pattern.

7.2 Assessment Results

Of the sales analysed there is no evidence or basis to indicate that the Special Building Overlay has had an adverse impact on property values in the City of Manningham (see Appendix 1). Charter is of the opinion that this can be attributed to the sound level of demand for residential property within the municipality and whilst purchasers have a general awareness of the Special Building Overlay, a measurable effect on value was not evidenced. Our research was tested on a number of affected properties in order to establish a pattern.



8. Value Effects of the SBO

8.1 Potential Value Effects of the SBO

Though the SBO indicates that flooding is an issue that needs to be taken into account in the planning of future development, the real risks to those properties affected by it have not changed. This is because it is not the application of the SBO which makes land more prone to flooding as the SBO is simply a planning mechanism to identify the flooding characteristics of land at risk.

To establish the value implications of applying the SB0 throughout the City of Manningham, understanding the specific regulatory requirements imposed by it, in particular consideration of what aspects of it are likely to have a negative value impact, is fundamental. Importantly, the SB0 does not prohibit either use or development but requires drainage matters to be considered in detail when a development application is submitted to the responsible authority for consideration.

To understand the potential value impacts of the SBO it is instructive to begin with consideration of the identified effects of land-use regulation (as described in Section 3.0). As outlined, these effects are described as 'restrictive', 'amenity', and 'scarcity'. In terms of potential restrictive effects, the SBO will not prevent individual properties from functioning as their highest and best use. Nor will it impact the supply of land that can be used for its current use (residential) resulting in a scarcity effect. On this basis, application of the SBO is not envisaged to impact property values.

Where land use regulation aims to protect or create positive characteristics of residential properties this often results in neighbourhoods remaining, or becoming, more appealing. The introduction of the new residential zones in Victoria is an example of land use regulation where this objective is likely to have such an effect. Though SBO permit requirements for new development will contribute to minimising the flooding of properties, it is unlikely this will have any positive (or negative) value impact on properties. In achieving this objective it may however contribute to preserving values in the long term. Nevertheless, it is important to recognise that without the SBO, development of neighbouring properties could obstruct flows and result in a general rise in flood levels to the detriment of their own property.

8.2 Requirements of the SBO

Practically, the requirements of the SBO only take effect when certain buildings and works are proposed to be undertaken at an affected property. These requirements vary according to the applicable Schedule as there are different permit requirements and exemptions for each (see Table 1).

Until the time that certain buildings and works are proposed, the SBO has no impact on the existing use or functional requirements of the property. In such circumstances, the SBO has no material impact on the inherent value of the property.

The question of whether there is a negative value impact can therefore only be answered in the context where proposed buildings and works warrant the practical permit requirements of the SBO to be met. Though different permit requirements (and exemptions) are prescribed, a review of the SBO and associated Schedules indicates that the most onerous requirement of the SBO relates to the need for new dwellings or dwelling extensions, to meet minimum floor level requirements. For the purposes of this task, this is the measure against establishing which value impacts of the SBO have been considered.

As the minimum floor level requirements to be imposed by the SBO would be specific to each location, the extent and type of development (including size and number of dwellings) and the costs to meet these requirements could reasonably be expected to vary. However, the standard costs of constructing above natural ground level to achieve compliance with the minimum floor level requirements⁷ are generally not considered significant in the context of a projects total development costs⁸.

Further to the above, it should be noted that minimum ground level requirements prescribed within the SBO and associated schedules are provided as a basis for which building and works would be exempt from requiring a planning permit. Buildings and works below these specified levels may be achieved if permission from the City of Manningham or where relevant, Melbourne Water, is provided.



Up to 400mm as per the requirements of SB03

^{*} Though this cannot be quantified for all potential development outcomes on all affected sites, this general advice has been provided by Charter's Quantity Surveying Group and assumes standard costs.

9. Conclusion

In undertaking this assessment Charter has not been able to establish that the application of the SBO will negatively impact the values of those properties to be affected. This is consistent with the findings of the study undertaken by Charter for the City of Stonnington in 2004.

Though concern over value impacts is regularly expressed in submissions to amendments to introduce the SBO, there has been no evidence provided through the Independent Panel process to establish this. This outcome is reinforced through numerous studies that have found that while actual flood events can impact property values, flood related policies and controls have no noticeable effect. This is further reaffirmed in the analysis of sales in the City of Manningham, undertaken by Charter, which shows there is no evidence that the Special Building Overlay has had an adverse impact on property values.

Property values are determined by a multitude of factors and are subject to a wide variety of influences. These include: - Economic considerations (i.e. interest rates, employment levels, income growth, finance availability, consumer

- confidence, supply and demand); - Population and demographic trends;
- Suburb, location and street desirability; and
- Suburb, location and street desirability; and
- Dwelling characteristics and features (lot size, style/age of property, internal space, renovation potential, quality of finishes.

In a strong housing market, such as metropolitan Melbourne, these factors are all considered to be stronger determinants of price than flood notification, which tends to be obscured against these considerations. This is particularly so, in a competitive auction process, where the SBO is relegated as a genuine price determinant.

Against the many numerous factors affecting property values, the worst case scenario associated with the SBO – i.e. potentially having to construct above a minimum floor levels, is a negligible obligation which in any case, only applies where certain buildings and works are proposed.

For the reasons outlined, it is Charter's opinion that the SBO will not negatively impact property values in the City of Manningham.



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10. Appendices



Appendix 1

34 Golf Hill Avenue, Doncaster



- improved with a two storey brick veneer residence, presenting in a well maintained although dated condition. Accommodation comprises four bedrooms.
- Rectangular shaped allotment of 681 sq.m., zoned General Residential Zone (GRZ1), abutting the former Eastern Golf Course to the rear boundary (proposed Mirvac development).
- 75% of the land is subject to a Special Building Overlay (SBO).
- Transacted February 2013 for a consideration of \$747,088.

Comparable Sales Sales Schedule - Residential Dwellings/ Development Site

Address	Description/ Comments	Zoning	Land Area (sq.m.)	Sale Price/ Date
18 Burgundy Drive Doncaster	Irregular shaped allotment, improved with a part two storey residence presenting in well maintained, although dated condition. Property abuts the former Eastern Golf Course to the rear boundary (proposed Mirvac development). Comparable size allotment, superior location within walking distance to Westfield Shopping Centre. The property is not subject to a Special Building Overlay. Improvements present in dated condition. Considered comparable overall as a sum of money.	General Residentiai Zone (GRZ1)	659	\$750,000 3/13
7 Prunella Close Doncaster	irregular shaped allotment, located at the bowl of a cul-de-sac. Improved with a single storey brick veneer dwelling presenting in dated condition. Larger allotment, comparable zoning and not subject to a Special Building Overlay. Superior location within walking distance to Westfield Shopping Centre. Inferior improvements. Sale considered superior overall due to location.	General Residential Zone (GRZ1)	701	\$789,000 3/13
25 Burgundy Drive Doncaster	Rectangular shaped allotment, located opposite Burgundy Drive Reserve. Improved with a single storey residential dwelling presenting in dated condition. Site suits redevelopment and since the date of sale the property has been redeveloped with two dwellings. Smaller allotment, located directly opposite Burgundy Drive Reserve. Improvements considered to be of nominal added value. Higher tand/building value rate adopted for the subject property.	General Residential Zone (GRZ1)	656	\$640,000 2/13



3 Hillcroft Drive, Templestowe



- Established brick veneer dwelling presenting in a well maintained, renovated condition providing for three bedroom accommodation.
- Sited on a generally rectangular shaped allotment of 664 sq.m., zoned General Residential Zone (GRZ3).
- 80% of the land is subject to a Special Building Overlay (SBO).
- Transacted June 2014 for a consideration of \$865,000.

Comparable Sales

Const	the second second second second second second second second second second second second second second second se		Land Area	Sale Price/
Address	Description/ Comments	Zoning	(sq.m.)	Date
42 Hillcroft Drive Templestowe	Rectangular shaped allotment, improved with a brick dwelling which at the date of sale presented in a well maintained condition. The dwelling provides for three bedroom accommodation. The land abuts Ruffey Creek, with 30% of the land subject to a Significant Landscape Overlay. The land is not subject to a Special Building Overlay. Similar sized allotment, located within the subject thoroughfare. The dwelling provides for a comparable level of accommodation, presenting to a comparable quality. The land is not subject to a Special Building Overlay, atthough we note that approximately 30% of the land is subject to a Significant Landscape Overlay.	General Residential Zone (GRZ3)	662	\$885,000 5/14
18 Mintaro Court Templestowe	Rectangular shaped allotment with a gentie cross-fall, improved with a residential dwelling preventing in a dated condition. The dwelling provides for four bedroom accommodation. The land is not subject to any overlays. Similar sized allotment, nearby location. The dwelling provides for a superior level of accommodation, although presenting in a far inferior quality. The land is not subject to any overlays.	General Residential Zone (GRZ3)	653	\$830,000 10/14
70 Beecroft Crescent Templestowe	Generally rectangular shaped allotment improved with a brick dwelling presenting in a renovated condition. The dwelling provides for four bedroom, two bathroom accommodation. The property abuts The Grange Reserve and is not subject to any overlays. Similar sized allotment, located 600 metres east of the subject property, abutting The Grange Reserve and within close proximity to Serpell Primary School. The dwelling provides for a superior level of accommodation, at a slightly superior quality. The land is not subject to any overlays. Lower purchase price evidenced in the subject property due to accommodation, quality and location.	General Residential Zone (GRZ3)	655	\$920.000 9/14



50 Mincha Avenue, Templestowe Lower



- Established dwelling providing for three bedroom, two bathroom accommodation. Internal photographs of the dwelling are not available; therefore the condition of the property cannot be ascertained.
- Sited on a rectangular shaped allotment of 653 sq.m., zoned General Residential Zone (GRZ1).
- Approximately 80% of the land is subject to a Special Building Overlay (SBO).
- Transacted March 2015 for a consideration of \$790,000.

Comparable Sales

	Post of the second		Land Area	Sale Price/
Address	Description/ Comments	Zoning	(sq.m.)	Date
3 Wattle Court Templestowe Lower	Rectangular shaped allotment, improved with a residential dwelling presenting in a dated condition. The dwelling provides for four bedroom accommodation. The land is not subject to any overlays. Similar size allotment located within a cul-de-sac position, 350 metres north-east of the subject property. The dwelling provides for a superior level of accommodation. The land is not subject to any overlays.	General Residential Zone (GRZ1)	645	\$780,000 12/14
125 Swanston Street Templestowe Lower	Rectangular shaped allotment, improved with a residential dwelling presenting in a well maintained albeit, dated condition. The dwelling provides for three bedroom accommodation. The land is not subject to any overlays. Slightly smaller allotment, within immediate proximity. The dwelling provides for a comparable level of bedroom accommodation. The land is not subject to any overlays.	General Residential Zone (GRZ1)	637	\$790,000 8/14
17 Chatsworth Quadrant Templestowe Lower	Rectangular shaped allotment, improved with a residential dwelling presenting in a dated condition. The dwelling provides for four bedroom accommodation. The land is not subject to any overlays. Slightly larger allotment, located further south-east. The dwelling provides for a superior level of accommodation, presenting in a dated condition. The land is not subject to any overlays.	General Residential Zone (GRZ1)	686	\$790,000 8/14



7 Dundas Court, Doncaster East



- Established brick veneer dwelling presenting in a well maintained, albeit in parts dated, condition providing for three bedroom plus study accommodation.
- Sited on an allotment of 711 sq.m., zoned General Residential Zone (GRZ1).
- 100% of the land is subject to a Special Building Overlay (SBO).
- Transacted December 2015 for a consideration of \$1,050,000.

Address	Description/ Comments	Zoning	Land Area (sq.m.)	Sale Price/ Date
12 Dundas Court Doncaster	Irregular shaped corner allotment, improved with a brick dwelling presenting in a well maintained, renovated condition. The dwelling provides for five bedroom plus study accommodation. The land is not subject to the Special Building Overlay. Smaller allotment, superior corner position located within the subject thoroughfare. The property presents to a far superior standard and provides for a superior level of accommodation. The land is not subject to a SPO.	General Residential Zone (GRZ1)	645	\$1,267,500 10/16
16 Rowan Street Doncaster East	Irregular shaped corner allotment, improved with a brick dwelling presenting in a well maintained, renovated condition. The dwelling provides for three bedroom accommodation plus an external studio/home office. Approximately 5% of the land is subject to a Special Building Overlay. Smaller allotment, superior corner position, located nearby. The property presents to a superior standard and provides for an external studio/home office. Approximately 5% of the land is subject to a Special Building Overlay.	General Residential Zone (GRZ1)	651	\$1,230,000 7/16
3 Skye Place Doncaster East	Irregular shaped allotment located to the end of a cul- de-sac. The land is improved with a brick dwelling presenting in a well maintained, partially renovated condition, providing for three bedroom, two bathroom accommodation. The land is not subject to a Special Building Overlay. Similar size allotment, also located at the end of cul- de-sac, nearby. Presenting to a generally comparable condition to the subject. The land is not subject to a Special Building Overlay.	General Residential Zone (GRZ1)	697	\$1,080,000 5/16
23 Rowan Street Doncaster East	Irregular shaped allotment, improved with a dated residential dwelling providing for three bedroom, two bathroom accommodation. The land is not subject to the Special Building Overlay. Smaller allotment, nearby location. Dwelling presents to a similar dated condition. Comparable zoning to the subject property, although the land is not subject to a SBO)	General Residential Zone (GRZ1)	650	\$925,000 9/15



12 Newlyn Close, Templestowe



- Established brick dwelling presenting in a well maintained, albeit dated, condition providing for four bedroom plus study accommodation.
- Sited on a corner allotment of 680 sq.m., zoned General Residential Zone (GRZ3).
- Approximately 80% of the land is subject to a Special Building Overlay (SBO).
- Transacted September 2016 for a consideration of \$985,000.

Comparable Sales

Address	Description/ Comments	Zoning	Land Area (sq.m.)	Sale Price/ Date
11 Newlyn Close Templestowe	Irregular shaped allotment, improved with a brick dwelling presenting in a well maintained, albeit slightly dated condition. The property provides for three bedroom accommodation. The land is subject to a Special Building Overlay, of which approximately 20% is affected. Smaller allotment, located on the subject thoroughfare. The property provides for an inferior level of accommodation to the subject property although presents to a superior quality. The site is approximately 20% affected by a Special Building overlay.	General Residential Zone (GRZ3)	668	\$956,000 5/16
10 Cottswold Rise Templestowe	Irregular shaped allotment, cul-de-sac location. The site is improved with a brick veneer dwelling presenting in dated condition. The dwelling provides for four bedroom, two bathroom accommodation. The land is not subject to a Special Building Overlay. Larger allotment, located nearby, also within a cul-de-sac position. The property provides for a superior level of accommodation, although presents to an inferior quality. The land is not subject to a Special Building Overlay.	General Residential Zone (GRZ3)	806	\$1,030,000 3/16
25 Lawanna Drive Templestowe	Rectangular shaped allotment, improved with a brick veneer dwelling presenting in a well maintained, albeit dated condition. The dwelling provides for three bedroom, one bathroom accommodation. The land is not subject to a Special Building Overlay. Larger allotment, inferior position on a sloping site. The property provides for an inferior level of accommodation, presenting in a comparable quality. The land is not subject to a Special Building Overlay.	General Residential Zone (GRZ3)	786	\$907,500 3/16





ATTACHMENT 11 – RECOMMENDED CHANGES TO EXHIBITED AMENDMENT C109 - MINOR INCURSIONS

(IN ADDITION TO ATTACHMENT 9)

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
1.	Macedon Plaza 15/325 Manningham Road TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
2.	33 Amersham Drive WARRANDYTE VIC, 3113	SB02	Minor incursion - Remove SBO2
3.	1 Alfreda Avenue BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
4.	3 Alfreda Avenue BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
5.	5 Alfreda Avenue BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
6.	27 Alfreda Avenue BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
7.	29 Alfreda Avenue BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
8.	37 Alfreda Avenue BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
9.	4 Apex Crescent BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
10.	15 Gympie Street BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
11.	21 Lilian Street BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
12.	12 Lincoln Drive BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
13.	2/12A Lincoln Drive BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
14.	2 Lindsay Street BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
15.	26 Millicent Avenue BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
16.	1/10 Millicent Avenue BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
17.	14 Westwood Drive BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
18.	1/7 Westwood Drive BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
19.	12 White Way BULLEEN VIC, 3105	SB02	Minor incursion - Remove SBO2
20.	13 Ambrose Street DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
21.	2 Anton Court DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
22.	1/114 Ayr Street DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
23.	Applewood Retirement Village 4 Barrington Walk DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
24.	16 Bellara Street DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
25.	1/13 Bellara Street DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
26.	32 Board Street DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
27.	162 Church Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
28.	167 Church Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
29.	169 Church Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2

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NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
30.	178 Church Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
31.	187 Church Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
32.	195 Church Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
33.	60 Clay Drive DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
34.	15 Coolabah Street DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
35.	11/413 Doncaster Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
36.	14/413 Doncaster Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
37.	Applewood Retirement Village 13 Eagleview Walk DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
38.	3 Ella Court DONCASTER VIC, 3108	SB02	Convert SBO2 to SBO3
39.	9 Ella Court DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
40.	3 Fromhold Drive DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
41.	17 Golf Hill Avenue DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
42.	12 Golf Links Court DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
43.	29 Hampshire Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
44.	33 Hampshire Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
45.	29 Harcourt Street DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
46.	26 Koolkuna Avenue DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
47.	38 Koolkuna Avenue DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
48.	26 Lauer Street DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
49.	6A Myers Court DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
50.	38 Park Avenue DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
51.	7 Reddan Court DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
52.	12 Robyn Street DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
53.	7 Roseland Grove DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
54.	22 Roseland Grove DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
55.	5 Roseville Avenue DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
56.	13 Roseville Avenue DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
57.	18 Roseville Avenue DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
58.	24 Roseville Avenue DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
59.	2 Ruffey Lake Court DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
60.	29 The Boulevarde DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
61.	33 The Boulevarde DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2

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NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
62.	1/29 Tram Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
63.	5 Tully Court DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
64.	31 Westfield Drive DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
65.	20/224 Williamsons Road DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
66.	54 Windella Quadrant DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
67.	1/36 Windella Quadrant DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
68.	69 Winston Drive DONCASTER VIC, 3108	SB02	Minor incursion - Remove SBO2
69.	173 Andersons Creek Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
70.	259 Andersons Creek Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
71.	158-160 Andersons Creek Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
72.	4/148 Andersons Creek Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
73.	8/148 Andersons Creek Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
74.	30 Arawata Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
75.	1/28 Ashton Rise DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
76.	10 Baratta Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
77.	15 Baratta Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
78.	102 Bellevue Avenue DONCASTER EAST VIC, 3109	SBO2	Minor incursion - Remove SBO2
79.	218 Blackburn Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
80.	15/213 Blackburn Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
81.	2/219 Blackburn Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
82.	4 Camelot Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
83.	5 Daphne Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
84.	8 Daphne Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
85.	1/3 Daphne Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
86.	12 Daws Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
87.	29 Devon Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
88.	11 Dianne Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
89.	3/1 Dianne Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
90.	3/3 Dianne Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
91.	873 Doncaster Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
92.	2/871 Doncaster Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
93.	5/27 Dryden Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
94.	35 Fernlea Crescent DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
95.	6 Finch Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
96.	8 Finch Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
97.	3 Habitat Park Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
98.	12 Habitat Park Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
99.	7 Harry Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
100.	9 Harry Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
101.	15 Harry Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
102.	17 Harry Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
103.	5A Harry Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
104.	Roseville Retirement Village 93/110 King Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
105.	10 Longstaff Court DONCASTER EAST VIC, 3109	SB02 and SBO3	Remove SBO2 and SBO3
106.	11 Longstaff Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
107.	12 Longstaff Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
108.	13 Longstaff Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
109.	6 Lyons Place DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
110.	2A Minaki Avenue DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
111.	25 Morinda Crescent DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
112.	27 Morinda Crescent DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
113.	21 Morna Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
114.	2 Mullum Place DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
115.	14 Murphy Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
116.	2 Paltarra Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
117.	3A Paula Crescent DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
118.	17 Renshaw Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
119.	16 Ridley Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
120.	69 Rosella Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
121.	39 Ross Street DONCASTER EAST VIC, 3109	SB02	Remove SBO2. Property still impacted by SBO3.
122.	21 Rowan Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
123.	2 Silverdale Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
124.	72 St Clems Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
125.	78 St Clems Road DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
126.	3 Stafford Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
127.	19 Thomas Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
128.	4 Tidcombe Crescent DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
129.	5 Toinette Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
130.	39 Tracey Street DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
131.	31 Treevalley Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
132.	33 Treevalley Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
133.	35 Treevalley Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
134.	37 Treevalley Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
135.	39 Treevalley Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
136.	41 Treevalley Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
137.	44 Treevalley Drive DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
138.	3/5 Vicki Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
139.	7 Wimbledon Court DONCASTER EAST VIC, 3109	SB02	Minor incursion - Remove SBO2
140.	30-32 Beckett Road DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
141.	4 Bernarra Court DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
142.	12 Chippewa Avenue DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
143.	5/30 Chippewa Avenue DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
144.	1/47 Chippewa Avenue DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
145.	2/10 Chippewa Avenue DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
146.	45 Craig Road DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
147.	5A Jilpanger Road DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
148.	16 Langford Crescent DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
149.	29 Lisbeth Avenue DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
150.	22 Murndal Drive DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
151.	46-48 Old Warrandyte Road DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
152.	27 Lisbeth Avenue DONVALE VIC, 3111	5B02	Minor incursion - Remove SBO2
153.	433 Serpells Terrace DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
154.	42 Valepark Drive DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
155.	6 Wallace Avenue DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
156.	6 Whitefriars Way DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
157.	23 Wooddale Grove DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
158.	65 Woodhouse Road DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
159.	80 Woodhouse Road DONVALE VIC, 3111	SB02	Minor incursion - Remove SBO2
160.	65-67 Berringa Road PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
161.	10-12 Daintree Avenue PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
162.	22-24 Drayton Crescent PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
163.	26-28 Drayton Crescent PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
164.	5 Enfield Avenue PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
165.	7 Joseph Court PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
166.	33 Knees Road PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
167.	1 Minter Court PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
168.	31-35 North Valley Road PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
169.	18 Tacoma Street PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
170.	16 Villanova Court PARK ORCHARDS VIC, 3114	SB02	Minor incursion - Remove SBO2
171.	10 Apple Blossom Court TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
172.	22 Bali Hi Boulevard TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
173.	6 Castlewood Place TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
174.	7 Castlewood Place TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
175.	1 Chelmsford Avenue TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
176.	27 Chippendale Court TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
177.	304 Church Road TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
178.	18 Colonsay Street TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
179.	2 Cottswold Rise TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
180.	6 Forest Place TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
181.	1 Glen Court TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
182.	22 Glendarragh Road TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
183.	8 Gum Ridge Close TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
184.	8 Hathaway Close TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
185.	8 Hillhouse Road TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
186.	8A Hillhouse Road TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
187.	55 Lawanna Drive TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
188.	7 McLachlan Street TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
189.	15 Milne Street TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
190.	12 Moonbria Way TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
191.	13 Moonbria Way TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
192.	12 Nambour Road TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
193.	6 Orama Court TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
194.	13/131 Parker Street TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
195.	3/123 Parker Street TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
196.	343 Porter Street TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
197.	4 Shelley Court TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
198.	15 Taparoo Road TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
199.	26 The Grange TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
200.	32 The Grange TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
201.	109 The Grange TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
202.	1/82 Wood Street TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
203.	2/92 Wood Street TEMPLESTOWE VIC, 3106	SB02	Minor incursion - Remove SBO2
204.	44 Chalon Avenue TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
205.	3 David Road TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
206.	1 Esther Street TEMPLESTOWE LOWER VIC, 3107	SB02 and SBO3	Remove SBO2 and SBO3
207.	21 Fyfe Drive TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
208.	28 Fyfe Drive TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
209.	34 Fyfe Drive TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
210.	10 Gertrude Street TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
211.	24 Hazel Drive TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove 58O2
212.	51 Hazel Drive TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
213,	17 Hodgson Street TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
214.	1/10 Hodgson Street TEMPLESTOWE LOWER VIC, 3107	SB02	Remove SBO2. Property still subject to SBO3.
215.	6 Jacana Avenue TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
216.	13 Janet Street TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
217.	11 Montpellier Crescent TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
218.	12 Montpellier Crescent TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
219.	20 Oak Crescent TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
220.	24 Riverwood Lane TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
221.	26 Riverwood Lane TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
222.	1 Roma Court TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
223.	10 Rooney Street TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
224.	12 Rooney Street TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
225.	7 Sassafras Drive TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
226.	28 Scarlet Ash Drive TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
227.	5 Totara Court TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
228.	10 Totara Court TEMPLESTOWE LOWER VIC, 3107	SB02	Minor incursion - Remove SBO2
229.	119 Brackenbury Street WARRANDYTE VIC, 3113	SB02	Minor incursion - Remove SBO2
230.	127-133 and 2/127-133 Harris Gully Road WARRANDYTE VIC, 3113	SB02	Minor incursion - Remove SBO2
231.	287-301 Jumping Creek Road WARRANDYTE VIC, 3113	SB02	Remove SBO2. Property still impacted by SBO3.
232.	6 Mahoneys Court WARRANDYTE VIC, 3113	SB02 and SBO3	Remove SBO2 and SBO3
233.	49 Oakland Drive WARRANDYTE VIC, 3113	SB02	Minor incursion - Remove SBO2
234.	6 Russell Road WARRANDYTE VIC, 3113	SB02	Minor incursion - Remove SBO2
235.	23 West End Road WARRANDYTE VIC, 3113	SB02	Minor incursion - Remove SBO2
236.	1 Green Ridge WARRANDYTE SOUTH VIC, 3134	SB02	Minor incursion - Remove SBO2
237.	46 Bordeaux Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
238.	95 Pound Road WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3
239.	88-154 Park Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
240.	4/115-117 James Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3
241.	47 Herlihys Road TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3
242.	25 Alison Avenue BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
243.	77 Bourke Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
244.	Grant Olson Reserve 32-34 Bourke Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
245.	28 Calderwood Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
246.	2/22 Carrathool Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
247.	34 Cuthbert Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
248.	38 Cuthbert Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
249.	39 Cuthbert Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
250.	22 Doyle Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
251.	24 Doyle Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
252.	26 Doyle Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
253.	5 Eama Court BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
254.	69 Furneaux Grove BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
255.	15 Gympie Street BULLEEN VIC, 3105	SBO2 and SBO3	Remove SBO2 and SBO3
256.	21 Gympie Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
257.	10 Latrobe Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
258.	40 Lincoln Drive BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
259.	136 Manningham Road BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
260.	29 Nirvana Crescent BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
261.	35 Nirvana Crescent BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
262.	5 Panorama Court BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
263.	7 Panorama Court BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
264.	15 Panorama Court BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
265.	6 Penderel Way BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
266.	13 Pleasant Road BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
267.	14 Ralph Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
268.	35 Robinson Grove BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
269.	19 Ronald Avenue BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
270.	21 Ronald Avenue BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
271.	58 Sheahans Road BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
272.	60 Sheahans Road BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
273.	2 Spring Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
274.	5 Virginia Court BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
275.	11 Virginia Court BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
276.	24 Warringal Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
277.	40 Warringal Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
278.	41 Warringal Street BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
279.	14 Yarraleen Place BULLEEN VIC, 3105	SBO3	Minor incursion - Remove SBO3
280.	22 Anthony Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
281.	1/28 Anthony Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
282.	12 Arnold Grove DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
283.	2 Attunga Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
284.	1/57 Baird Street South DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
285.	30 Ballamore Crescent DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
286.	8 Bembooka Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
287.	1 Benton Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
288.	2 Benton Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
289.	7 Bernice Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
290.	2 Birbank Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
291.	3 Birbank Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
292.	54 Board Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
293.	16 Brentvale Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
294.	21 Burgundy Drive DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
295.	9 Cantala Drive DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
296.	22 Cantala Drive DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
297.	2 Capri Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
298.	3 Capri Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
299.	13 Caringal Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
300.	20 Caringal Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
301.	2 Christine Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
302.	17 Clancys Lane DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
303.	20 Clancys Lane DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
304.	32 Clancys Lane DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
305.	19 Corella Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
306.	21 Corella Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
307.	72 Council Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
308.	76 Council Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
309.	1/10 Curlew Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
310.	3 Curnola Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
311.	3 Dianella Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
312.	20 Dion Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
313.	3/728 Doncaster Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
314.	2 Ernst Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
315.	20 Ernst Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
316.	3 Esta Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
317.	7 Fairway Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
318.	31 Finlayson Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
319.	4/32 Firth Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
320.	3/3 Firth Street DONCASTER VIC 3108	SBO3	Minor incursion - Remove SBO3
321.	2 Gairlock Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
322.	316 George Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
323.	1/157 George Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
324.	15 Grange Park Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
325.	24 Grange Park Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
326.	2/11 Grange Park Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
327.	6 Gregory Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
328.	13 Hanke Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
329.	10 Harvell Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
330.	7 Hender Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
331.	42 Henry Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
332.	48 Henry Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
333.	181 High Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
334.	1 Howard Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
335.	2/27 Katrina Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
336.	23 Kiewa Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
337.	26 Lauer Street DONCASTER VIC, 3108	SBO2 and SBO3	Remove SBO2 and SBO3
338.	19 Lawford Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
339.	22 Log School Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
340.	5/2 Malcolm Crescent DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
341.	394 Manningham Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
342.	2 Margot Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
343.	9 Margot Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
344.	43 Margot Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
345.	15 Marianne Way DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
346.	21 Marilyn Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
347.	4 Maverick Close DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
348.	12 Menarra Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
349.	4 Monaco Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
350.	12 Monaco Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
351.	13 Monaco Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
352.	24 Outlook Drive DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
353.	5 Park Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
354.	7 Park Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
355.	2/49 Queens Avenue DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
356.	3 Ralund Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
357.	60 Rathmullen Quadrant DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
358.	7 Robyn Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
359.	46 Roseland Grove DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
360.	4 Saxon Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
361.	15 Somerville Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
362.	24 Stanley Drive DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
363.	26 Stanley Drive DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
364.	30 Stanley Drive DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
365.	Studley Reserve Pre-School 18 Studley Street DONCASTER VIC, 3108 – 2 properties	SBO3	Minor incursion - Remove SBO3
366.	36 Studley Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
367.	38 Studley Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
368.	6 Terence Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
369.	75 The Boulevarde DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
370.	26 Thiele Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
371.	1, 2, 3, 4, 5, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310 /6 Thiele Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
372.	5 Tiffany Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
373.	3/73 Tram Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
374.	1/79 Tram Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
375.	4 Tully Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
376.	33 Turana Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
377.	39 Turana Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
378.	67 Turana Street DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
379.	7 Viscount Drive DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
380.	11/224 Williamsons Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
381.	15/224 Williamsons Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
382.	51 Wilsons Road DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
383.	18 Winbrook Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
384.	25 Winston Drive DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
385.	18 Winters Way DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
386.	32 Winters Way DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
387.	2 Zander Court DONCASTER VIC, 3108	SBO3	Minor incursion - Remove SBO3
388.	1 Aida Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
389.	2/13 Amelia Crescent DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
390.	1/6 Amelia Crescent DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
391.	2 Apple Green Lane DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
392.	3 Apricot Lane DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
393.	3 Banool Quadrant DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
394.	5 Banool Quadrant DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
395.	10 Banool Quadrant DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
396.	11 Banool Quadrant DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
397.	10 Belvedere Avenue DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
398.	11 Belvedere Avenue DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
399.	5 Belvoir Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
400.	1/27 Beverley Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
401.	160 Blackburn Road DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
402.	172 Blackburn Road DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
403.	176 Blackburn Road DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
404.	1, 2, 3, 4, 5 & 6 /221-223 Blackburn Road DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
405.	3/225 Blackburn Road DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
406.	7/34 Bowen Road DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
407.	1/10 Bullen Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
408.	12 Catherine Avenue DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
409.	15 Catherine Avenue DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
410.	10 Cavalier Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
411.	32 Champion Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
412.	30 Churchill Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
413.	2/7 Churchill Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
414.	2/21 Churchill Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
415.	3/21 Churchill Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
416.	2/11 Colchester Drive DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
417.	19 Corsican Avenue DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
418.	14 Craiglea Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
419.	15/1 Daws Road DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
420.	40 Deep Creek Drive DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
421.	66 Deep Creek Drive DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
422.	56 Dehnert Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
423.	10 Dryden Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
424.	16 Dryden Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
425.	20 Gainsborough Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
426.	8 Gedye Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
427.	102 George Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
428.	9 Glendora Lane DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
429.	6 Halsbury Close DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
430.	1 Happy Valley Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
431.	Jackson Court Shopping Centre 20 Jackson Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
432.	1/6 Kara Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
433.	2 Kiandra Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
434.	Roseville Retirement Village Community Facility and Medical Centre 110 King Street DONCASTER EAST VIC, 3109 – 2 properties	SBO3	Minor incursion - Remove SBO3
435.	Roseville Retirement Village 57/110 King Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
436.	51 Larnoo Drive DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
437.	10 Longstaff Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
438.	4 Maude Avenue DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
439.	1/4 May Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
440.	11 Morello Circle DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
441.	15 Morello Circle DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
442.	8 Morinda Crescent DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
443.	10 Morinda Crescent DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
444.	53 Morna Road DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
445.	4 Mowbray Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
446.	2 Oran Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
447.	59 Owens Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
448.	19 Paula Crescent DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
449.	6 Peachwood Rise DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
450.	16 Peter Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
451.	2/2 Pine Way DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
452.	72 Polaris Drive DONCASTER EAST VIC, 3109	SBO3	Remove SBO3. Property still impacted by SBO2.
453.	4 Pushkin Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
454.	6A Pushkin Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
455.	1/33 Renshaw Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
456.	Apt's 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 212, 213, 214, 215, 216, 217, 218, 219, 220, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311/ 187 Reynolds Road DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
457.	55 Rosella Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
458.	24 Rowan Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
459.	68 Russell Crescent DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
460.	355 Serpells Road DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
461.	5 Sherbrooke Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
462.	6 Sherbrooke Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
463.	8 Stafford Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
464.	3 Steorra Mews DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
465.	8 Streeton Lane DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
466.	4 Supreme Place DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
467.	1/39 Talford Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
468.	28A Tidcombe Crescent DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
469.	11 Toinette Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
470.	Tolstoy Reserve 4 Tolstoy Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
471.	11 Towong Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
472.	12 Tracey Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
473.	22 Treevalley Drive DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
474.	9 Tyrol Court DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
475.	Woodlea Reserve 14-22 Woodlea Street DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
476.	9 Worthing Avenue DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
477.	17 Worthing Avenue DONCASTER EAST VIC, 3109	SBO3	Minor incursion - Remove SBO3
478.	1 Anglemere Crescent DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
479.	7 Barwon Court DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
480.	62 Carbine Street DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
481.	11 Chaim Court DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
482.	15 Chaim Court DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
483.	25 Craig Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
484.	4A Florence Avenue DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
485.	3 Glenwood Close DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
486.	8A Hamal Street DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
487.	40A Harris Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
488.	4 Honybun Court DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
489.	54 Lisbeth Avenue DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
490.	4 Martha Street DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
491.	76-78 McGowans Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
492.	132 Mitcham Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
493.	27 Murndal Drive DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
494.	313 Oban Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
495.	113 Old Warrandyte Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
496.	98-102 Old Warrandyte Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
497.	13 Oregon Drive DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
498.	17 Oregon Drive DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
499.	9 Park Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
500.	5 Pictor Court DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
501.	67 Roy Street DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
502.	277-279 Springvale Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
503.	Pinetree Retirement Village 61/330 Springvale Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
504.	Pinetree Retirement Village 62/330 Springvale Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
505.	Pinetree Retirement Village 8/330 Springvale Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
506.	Pinetree Retirement Village 9/330 Springvale Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
507.	9 The Elms DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
508.	78 Tunstall Road DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
509.	1 Underwood Drive DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
510.	8 Vasey Grove DONVALE VIC, 3111	SBO3	Minor incursion - Remove SBO3
511.	69-71 Arundel Road PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
512.	72-74 Arundel Road PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
513.	Park Orchards Primary School 1-3 Bowmore Avenue PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
514.	2-4 Brympton Avenue PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
515.	13-14 Dirlton Crescent PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
516.	67-69 Enfield Avenue PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
517.	29 Falconer Road PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
518.	30 McEwan Road PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
519.	18 Milne Road PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
520.	20 Milne Road PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
521.	27-31 Tacoma Street PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
522.	3 Yeoman Court PARK ORCHARDS VIC, 3114	SBO3	Minor incursion - Remove SBO3
523.	293 Old Warrandyte Road RINGWOOD NORTH VIC, 3134	SBO3	Minor incursion - Remove SBO3
524.	637 Ringwood-Warrandyte Road RINGWOOD NORTH VIC, 3134	SBO3	Minor incursion - Remove SBO3
525.	Memorial Hall 11-13 Anderson Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3
526.	8 Ashcroft Avenue TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3
527.	19 Aumann Drive TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3
528.	23 Bamfield Close TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3

NO.	O. PROPERTY ADDRESS		RECOMMENDED CHANGE TO EXHIBITED AMENDMENT	
529.	277 Church Road TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
530.	292 Church Road TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
531.	10 Cliveden Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
532.	3 Donhaven Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
533.	2 Ferndell Crescent TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
534.	14 Ferndell Crescent TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
535.	9A Gardenview Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
536.	9 Gloucester Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
537.	10 Gloucester Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
538.	85 Greenridge Avenue TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
539.	90 Greenridge Avenue TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
540.	10 Hathaway Close TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
541.	11 Hathaway Close TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
542.	67 James Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
543.	85 James Street TEMPLESTOWE VIC, 3106	SBO3 Minor incursion - Re SBO3		
544.	4/119 James Street TEMPLESTOWE VIC, 3106	James Street TEMPLESTOWE VIC, SBO3 Minor incl SBO3		
545.	5/111 James Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
546.	16 Kelvinside Drive TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
547.	7 Lalani Terrace TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
548.	9 Lalani Terrace TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
549.	2 Lankester Street TEMPLESTOWE VIC, 3106	SBO3 Minor incursion - Remo SBO3		
550.	12 Lawanna Drive TEMPLESTOWE VIC, 3106	SBO3 Minor incursion - Remove SBO3		
551.	1 Lawsons Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT	
552.	30 Mahoney Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
553.	47 Matisse Drive TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
554.	59 Matisse Drive TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
555.	1/12 McLachian Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
556.	1 Mintaro Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
557.	16 Mintaro Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
558.	3 Nambour Road TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
559.	9 Noorilim Close TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
560.	2 Norwich Place TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
561.	3 Oliver Road TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
562.	142 Parker Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
563.	1/138 Parker Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
564.	147-151 Parker Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
565.	12 Rasmussen Drive TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
566.	6 Renoir Avenue TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
567.	8 Renoir Avenue TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
568.	10 Renoir Avenue TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
569.	8 Selwyn Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
570.	46 Serpells Road TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
571.	248 Serpells Road TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
572.	29 Shakespeare Drive TEMPLESTOWE VIC, 3106	SBO3 Minor incursion - Remov SBO3 SBO3		
573.	9 Sunny Rise TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	
574.	65 Taparoo Road TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3	

NO.	NO. PROPERTY ADDRESS		PROPERTY ADDRESS EXHIBIT OVERL		RECOMMENDED CHANGE TO EXHIBITED AMENDMENT
575.	2 Tatterson Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3		
576.	3A Veda Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3		
577.	137 Victoria Street TEMPLESTOWE VIC, 3106				
578.	9 Wallmah Close TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3		
579.	22 Whitehall Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3		
580.	4 Willowbank Court TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3		
581.	46 Wood Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3		
582.	3/55 Wood Street TEMPLESTOWE VIC, 3106	SBO3	Minor incursion - Remove SBO3		
583.	14-16 Airdrie Court TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3		
584.	6 Alburnum Crescent TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3		
585.	10 Alburnum Crescent TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3		
586.	12 Andromeda Way TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3		
587.	40 Ashford Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3		
588.	2/12 Ashford Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remov SBO3		
589.	3 Balmoral Avenue TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remov SBO3		
590.	7 Balmoral Avenue TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3		
591.	2 Beacon Court TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remov SBO3		
592.	6 Cambridge Wynd TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remov SBO3		
593.	15 Cambridge Wynd TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remov SBO3		
594.	2 Conifer Place TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remov SBO3		
595.	5 Conifer Place TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remov SBO3		
596.	20 Crawford Road TEMPLESTOWE LOWER VIC, 3107				
597.	18 Delifield Drive TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remov SBO3		

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT	
598.	598. 19 Dellfield Drive TEMPLESTOWE LOWER VIC, 3107		Minor incursion - Remove SBO3	
599.	29 Dellfield Drive TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
600.	38 Dellfield Drive TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
601.	44 Delifield Drive TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
602.	1 Esther Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
603.	2 Esther Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
604.	41 Eucalypt Avenue TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
605.	6 Exeter Close TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
606.	7 Exeter Close TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
607.	1 Eyre Court TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
608.	1A Eyre Court TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
609.	26 Fairbank Crescent TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
610.	10/50-54 Foote Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
611.	12/50-54 Foote Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
612.	3/50-54 Foote Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
613.	13A Gertrude Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
614.	5/9 Herlihys Road TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
615.	3/376 High Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
616.	12 Hodgson Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
617.	54 Hodgson Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
618.	64 Hodgson Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
619.	3 Jacaranda Court TEMPLESTOWE LOWER VIC, 3107	rt TEMPLESTOWE LOWER SBO3 Minor incu SBO3		
620.	3 Lorna Court TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT	
621.	7 Lynnwood Parade TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
622.	14 Lynnwood Parade TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
623.	70 Lynnwood Parade TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
624.	46 Macedon Road TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
625.	53 Macedon Road TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
626.	59-61 Macedon Road TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
627.	289 Manningham Road TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
628.	1/25 Marcus Road TEMPLESTOWE LOWER VIC, 3107	SBO3	Remove SBO3. Property still impacted by SBO2.	
629.	12 Michael Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Remove SBO3. Property still impacted by SBO2.	
630.	18 Olympus Drive TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
631.	19/60 Parker Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
632.	8 Riverwood Lane TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
633.	1 Rooney Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
634.	2/9 Rosemary Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
635.	9 Scarlet Ash Drive TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
636.	20 Sheahans Road TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
637.	9 Sinclair Avenue TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
638.	31 Sinclair Avenue TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
639.	33 Sinclair Avenue TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
640.	14 Sophora Court TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
641.	18 Sylvia Street TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
642.	279 Thompsons Road TEMPLESTOWE LOWER VIC, 3107	SBO3	Minor incursion - Remove SBO3	
643.	23 Amersham Drive WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	

NO.	PROPERTY ADDRESS	EXHIBITED OVERLAY	RECOMMENDED CHANGE TO EXHIBITED AMENDMENT	
644.	644. 12 Antigoni Court WARRANDYTE VIC, 3113		Minor incursion - Remove SBO3	
645.	2 Flannery Court WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
646.	147 Flannery Court WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
647.	266A Heidelberg-Warrandyte Road WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
648.	7-11 Hutchinson Avenue WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
649.	28 Lynette Avenue WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
650.	6 Mahoneys Court WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
651.	10 Mahoneys Court WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
652.	4 Mirabella Court WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
653.	6-8 Naughton Avenue WARRANDYTE VIC, 3113			
654.	7-9 Orchard Grove WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
655.	8 Poppys Court WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
656.	103 Pound Road WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
657.	5 Swansfield Court WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
658.	16 Valley Way WARRANDYTE VIC, 3113	SBO3	Minor incursion - Remove SBO3	
659.	13 Fadaro Crescent WARRANDYTE SOUTH VIC, 3134	SBO3	Minor incursion - Remove SBO3	
660.	. 84 Hall Road WARRANDYTE SOUTH VIC, SBO3 Minor incursion		Minor incursion - Remove SBO3	
661.	6 Homan Court WARRANDYTE SOUTH VIC, 3134	SBO3	Remove SBO3. Property still impacted by SBO2.	
662.	62. 2 Carrathool Street, BULLEEN VIC, 3105 SBO3 Remove SE Boundary i		Remove SBO3. – Boundary issue with modelling.	
663.	4 Carrathool Street, BULLEEN VIC, 3105	SBO3 Remove SBO3. – Boundary issue with modelling.		
664.	4A Carrathool Street, BULLEEN VIC, 3105	5 SBO3 Remove SBO3 Boundary issue modelling.		

10.2 Amendment C114 to Manningham Planning Scheme (42 Walker Street Doncaster) - Consideration of submissions

File Number:	IN1	17/512	
Responsible Director:	Director Planning and Environment		
Attachments:	1 2 3 4 5	Site Location 🕹 🗃 Zoning and overlays 👲 🗃 Covenant Beneficiaries 🖉 📬 Exhibited Amendment 🕂 📬 Submitters' Properties 🛙 📬	

5 Submitters' Properties U

6 Summary of Submissions <u>J</u>

EXECUTIVE SUMMARY

The purpose of this report is to consider and respond to submissions received to the exhibition of Amendment C114 to the Manningham Planning Scheme.

Amendment C114 has been requested by the owner of 42 Walker Street, Doncaster. The purpose of the Amendment is to amend the Planning Scheme in order to remove the restrictive covenants that encumber this site which specify that no more than one dwelling may be constructed on the lot and require any dwelling to be constructed of specified materials. Those covenants apply to a total of 95 properties in the area.

The site is within a General Residential Zone Schedule 2 (GRZ2) and is also affected by Design and Development Overlay Schedule 8 (DDO8-2), where increased housing densities, in the form three storey 'apartment style' development or two storeytownhouse style dwellings are specifically between encouraged.

The Amendment was exhibited for a five (5) week period from 19 June to 28 July 2017. A total of 36 (thirty-six) submissions have been received, of which 33 object to the proposed amendment (16 of them from beneficiaries properties of the covenants) and 3 of the beneficiaries support the proposed amendment.

In summary, the main issues raised by the objecting submissions relate to:

- the impact on existing neighbourhood character;
- contravention of an existing building scheme;
- no net community benefit;
- the undesirable precedent;
- detriment and loss of amenity;
- contrary to previous advice of Council;
- no improved housing choice;
- conflict with previous panel report;
- not meeting the test under section 60(5) of the Planning and Environment Act;
- reduction in property values; and
- concerns in relation to notification.

The exhibition period has now closed and Council is required to consider all submissions with the options of referring the submissions to an independent panel or abandoning it.

Following consideration of the proposed amendment and the related submissions against criteria commonly used for the assessment of amendments to planning schemes to remove restrictive covenants it is recommended that all submissions be referred to an Independent Panel for consideration.

The report and recommendations of the Independent Panel would then be considered by Council before it makes a decision as to whether to adopt the Amendment and submit it to the Minister for Planning for approval.

1.	RECOMMENDATION				
	MOVED: SECONDED:	CR ANNA CHEN CR MIKE ZAFIROPOULOS			
	That Council resolves Planning Scheme.	to abandon Amendment C114 to the Manningha	m		
	SUSPEND STANDING	ORDERS			
	MOVED: SECONDED:	CR GEOFF GOUGH CR ANDREW CONLON			
	That standing orders be	e suspended to allow speakers to be taken out of ord	er. CARRIED		
	RESUME STANDING ORDERS				
	MOVED: SECONDED:	CR PAUL MCLEISH CR MIKE ZAFIROPOULOS			
	That Standing Orders b	e resumed.	CARRIED		
		THE SUBSTANTIVE MOTION WAS PUT AND) CARRIED		

2. BACKGROUND

Subject land and surrounds

2.1 The land affected by Amendment C114 is 42 Walker Street, Doncaster, which is located on the eastern side of the street approximately 190 metres south of the Short Street and Doncaster Road intersection. It has an area of approximately 1,201sqm. Refer to **Attachment 1**.

- 2.2 The subject land is currently occupied by a single storey building which comprises two attached dwellings. It is affected by two restrictive covenants which prohibit the erection of "any building other than one dwelling house together with the usual outbuildings and that such dwelling house shall have external walls of brick and roof of slate or tile…" (Instrument of Transfer B416105 and B771605).
- 2.3 The subject land is within a General Residential Zone Schedule 2 (GRZ2) Residential areas surrounding activity centres and along main roads (Sub precincts A & B) and is also affected by Design and Development Overlay Schedule 8 (DDO8-2) Residential areas surrounding activity centres and along main roads (Sub-precinct A). (Attachment 2) The DDO8 includes objectives designating the subject land as being suitable for three storey 'apartment style' development or two storey-townhouse style dwellings, depending on the land size.
- 2.4 The subject land and the adjoining land to the north, east and west of the subject site is developed with single detached dwellings and is also included within the General Residential Zone Schedule 2. Land to the north of Hepburn Road is largely developed with apartment style residential developments and is within the Doncaster Hill Activity Centre Zone.

Restrictive Covenants

- 2.5 Many residential lots in the City of Manningham have titles which contain restrictive covenants. Covenants or restrictions can limit the use and development of the land in various ways, including a restriction that not more than one dwelling may be erected. This is commonly known as a single dwelling covenant.
- 2.6 The covenant is noted on the title and the full details are contained in a separate document called the Instrument of Transfer. It is not extinguished with the sale of land the restriction is passed on to each subsequent purchaser (legal beneficiary).
- 2.7 Whilst planning schemes provide more comprehensive and transparent planning controls that guide use and development throughout a municipality, covenants can still apply and cause issues if a landowner wishes to develop their land, depending on the restriction of the covenant.

Beneficiaries of a covenant

- 2.8 Owners of land within the same subdivision are not all necessarily beneficiaries of a covenant shown on the title for a particular lot. The extent of nearby land owners having the benefit of the covenant is dependent upon the wording of the covenant and the date that each lot was transferred from the parent title.
- 2.9 The proponent has provided evidence to confirm that there are 95 beneficiaries of the covenants which affect the subject site, including the Council (local streets and land purchased for future open space), VicRoads (alignment/widening of Doncaster Road), a commercial property on the corner of Doncaster Road and Short Street and residential properties.

- 2.10 The map at **Attachment 3** shows the subject site at 42 Walker Street, Doncaster outlined in bold and highlights the beneficiaries of the two relevant covenants, which are mostly properties within an area formerly known as the Glen Tower Estate:
 - yellow and yellow hatched depicts the beneficiaries of the covenant relating to the land highlighted orange (Lot 69 on Plan of Subdivision 56685); and
 - yellow hatched depicts the beneficiaries of the covenant relating to the land highlighted green (Lot 68 on Plan of Subdivision 56685).
- 2.11 It should be noted that the covenants were removed from properties at 16, 18, 20, 22 and 24 Hepburn Road and 1 Short Street, Doncaster as part of Amendment C72 the Manningham Planning Scheme which was approved in December 2008. The amendment implemented a recommendation of the State Government's Priority Development Panel which reviewed the Doncaster Hill Strategy and related planning controls and advised that: "Quite clearly these covenants are inappropriate for a centre identified for significant change, as envisaged in the Doncaster Hill Strategy, and have had their day." (pg 14 PDP report)

Removal of covenants

- 2.12 There are three methods available for the variation or removal of a restrictive covenant on a title:
 - Apply for variation or removal via a planning permit;
 - Apply for an amendment to the relevant Planning Scheme; or
 - Pursue the variation or removal by an application to the Supreme Court under section 84 of the *Property Law Act 1958*.

Application for planning permit

- 2.13 On 1 September 2016, Manningham City Council refused an application (reference PL15/025679) to remove the restrictive covenant applicable to 42 Walker Street, Doncaster. The application was refused as objections were received from twelve (12) properties raising a variety of concerns.
- 2.14 Under section 60(5) of the *Planning and Environment Act 1987*, Council cannot grant a permit which allows for the removal or variation of a restriction unless it is satisfied that:
 - The owner of any land benefited by the restriction will be unlikely to suffer any detriment of any kind (including perceived detriment) as a consequence of the removal or variation of the restriction; and
 - If that owner objected to the granting of the permit, the objection was not vexatious or not made in good faith.

Planning Scheme amendment

2.15 With regard to the planning scheme amendment mechanism, section 6(2)(g) of the *Planning and Environment Act 1987* provides that a planning scheme may regulate or provide for the removal or variation of a restrictive covenant.

- 2.16 A request to amend the Manningham Planning Scheme to remove the covenant as it applies to 42 Walker Street was submitted by Project Planning & Development Pty Ltd on 29 August 2016.
- 2.17 Amendment C114 to the Manningham Planning Scheme seeks to facilitate the removal of the restrictive covenants as they apply to 42 Walker Street, Doncaster, by modifying the Schedule to Clause 52.02 of the Manningham Planning Scheme. Consequently, it will be possible for the owner of the subject land affected by this amendment to lodge a plan of removal of restriction for certification under section 23 of the *Subdivision Act 1988* showing the restrictive covenants as removed.
- 2.18 A copy of the exhibited Amendment documentation is included as Attachment 4.
- 2.19 At its meeting on 28 March 2017, Council resolved to seek authorisation from the Minister for Planning to prepare and exhibit Amendment C114 to the Manningham Planning Scheme.
- 2.20 Authorisation to prepare and exhibit the Amendment was granted on 30 May 2017.
- 2.21 The amendment was placed on public exhibition for five weeks between 19 June and 28 July 2017.
- 2.22 Notices were sent to all the beneficiaries of the covenant in addition to other owners and occupiers whom it may be considered may be materially affected by the amendment, prescribed Ministers and other statutory authorities. A public notice was also placed on the site as required.
- 2.23 All interested parties were given the opportunity to make a written submission or to lodge a submission on-line on the 'Your Say Manningham' website.
- 2.24 A total of 36 submissions have been received, of which 33 object to the proposal and 3 support the proposed amendment. Sixteen (16) of the submissions that object to the amendment are beneficiaries of the covenants, as are the three in support. One submitter is a tenant of Council owned land so is not a beneficiary of the covenant.
- 2.25 The location of the submitters' properties is shown in Attachment 5.

3. DISCUSSION / ISSUE

Matters to be considered

- 3.1 The purpose of this report is for Council to consider the submissions received to Amendment C114 to the Manningham Planning Scheme.
- 3.2 Section 23(1) of the *Planning and Environment Act 1987* outlines the options available to a Council when considering submissions to a planning scheme amendment, as follows:
 - Change the Amendment in the manner requested; or
 - Refer the submissions to a Panel appointed under Part 8; or
 - Abandon the Amendment or part of the amendment.

- 3.3 Whilst the *Planning and Environment Act 1987* provides that a planning scheme may regulate or provide for the removal or variation of a restrictive covenant, it is not explicit about what matters should be considered as part of that process.
- 3.4 Recent planning panels which have considered submissions relating to amendments involving the removal of restrictive covenants have used the following criteria to assess proposals:
 - The purpose of the restrictive covenant;
 - The benefit of the covenant;
 - Changes which have occurred in the character of the neighbourhood and circumstances which impact on the relevance of the covenant;
 - The detrimental impact on the amenity of the neighbouring properties;
 - Consistency with planning policies; and
 - Creation of an undesirable precedent.
- 3.5 The Panel Report for Amendment C50 to the Manningham Planning Scheme came to the following conclusions regarding the relevance of restrictive covenants:

"As a general planning principle the Panel does not accept that covenants should override the strategic planning for an area. The broader state and local policies to direct development toward activity centres should be the primary concern of planning provisions. Should private arrangements exist that prevent the implementation of these strategic direction then this is a separate matter that can be addressed in other forums."

Summary of submissions

3.6 The following section summarises the main issues raised by submitters and provides a summary of the officers' response to those submissions. A more detailed report on the issues raised by submitters and the officers' response is included in **Attachment 6**. Eleven of the submissions were identical proforma type submissions signed by individuals.

The proposal will result in the erosion of the existing neighbourhood character which has been controlled through the existence of the covenants

Officers' response

- 3.7 It is acknowledged that the application of the covenants over the broader estate for the last 55 years, has resulted in the preservation of an area predominantly developed with single dwellings surrounded by large open space areas. However, it has been recognised in a number of Panel reports and by the *Reformed Zones Ministerial Advisory Committee's report (2009),* that "...the *extent to which a private planning treaty (such as a single dwelling covenant) could undermine public planning policy of urban consolidation is a concern.*"
- 3.8 The site at 42 Walker Street is located within Precinct 2 Residential Areas Surrounding Activity centres and Along Main Roads of the *Residential Character Guidelines* (2005). A substantial level of change is anticipated for these areas, with a focus on higher density development.

3.9 As noted in the Panel Report for Amendment C72 to the Manningham Planning Scheme, "...that the submitters rely on the covenant to protect the character of the area they bought into 30 to 40 years ago is to ignore the inevitability of change, and it is the purpose of well-considered Planning Scheme and amendments to manage the pressures of change in a way that produces a net community benefit and minimises detriment."

Contravenes the existing building scheme for the area benefitted by the covenant

3.10 Two of the submissions have specifically raised the issue of a "building scheme" being in place and that the proposed restrictive covenant removal is inconsistent with an existing building scheme applying to all the lots. Similarly, 23 other submitters refer to the obligations that a covenant places on affected land owners.

Officers' Response

- 3.11 The Supreme Court is often asked to consider cases involving restrictive covenants. These cases might arise:
 - (as set out above) by an application under section 84(1) of the *Property Law Act 1958*, which allows a person with an interest in land subject to a covenant to apply to the Court to discharge or modify the restrictive covenant; or
 - where a person entitled to the benefit of a restrictive covenant, and seeks to enforce that covenant.
- 3.12 Generally speaking, where a scheme of development is established, all purchasers and their assigns are bound by, and entitled to the benefit of the restrictive covenant, and the Supreme Court has so held (see *Fitt v Luxury Developments Pty Ltd* [2000] VSC 258).
- 3.13 However, the statutory planning scheme amendment process under the *Planning and Environment Act 1987* is an established process, by which the State government has mandated a process for the removal or amendment of a restrictive covenant. The Act sets out matters which are relevant when considering a planning scheme amendment the question as to whether a building scheme exists is a matter which is only relevant when a person applies to remove or vary a covenant in the Supreme Court, or alternatively a person applies to enforce a restrictive covenant (again, usually through a Supreme Court process).
- 3.14 The assessment required in the consideration of a planning scheme amendment, as it applies to 42 Walker Street, Doncaster, relates solely to the acceptable tests for removal of a covenant by way of a planning scheme amendment and the enforcement of the covenant against beneficiaries is not one of the considerations.

There is no net community benefit resulting from the proposed removal of the covenant

Officers' response:

3.15 The benefit of the covenant is one of the criteria recent panels have used to assess proposals for removal of restrictive covenant proposals via amendments to planning schemes,

3.16 Further discussion around determining net community benefit in considering the removal of the restrictive covenants currently applying to the subject site is included in Sections 3.80-3.82 of this report:

The removal of the covenants will set an undesirable precedent and open the floodgates for similar developments

Officers' Response:

- 3.17 Concern around precedent has been considered in a number of Planning Panel Reports. In relation to Amendment C161 to the Yarra Ranges Planning Scheme (4 May 2017) the Panel discussed the issue of precedent and noted *that it* "...agrees with the reasoning of the C72 Panel. The law allows covenants to be removed in appropriate circumstances. Each application to remove a covenant (by whatever method) will be assessed on its merits, and assessed against the relevant statutory tests or criteria that apply. Removal of one covenant in a subdivision does not automatically justify removal of other similar covenants."
- 3.18 Further decisions highlight the distinction of criteria in the consideration of requests for removal of covenants depending on the mechanism used to request removal. In the Yarra Ranges Panel Report for C161 it was further noted, "...that the precedent issue was a significant factor for the Supreme Court in Oostermeyer v Powell and Ors. However as noted above, the tests that a Court must apply when considering an application to remove a covenant under the Property Law Act are different to the criteria that a panel must apply when considering a mendment..."

The proposal will result in detriment and loss of amenity

3.19 Thirteen of the submitters have suggested that the removal of the covenant and the associated redevelopment of the land will affect the amenity of the area by virtue of things such as increased population density/overcrowding; parking issues; increased noise; increased traffic and associated detriment to the level of safe pedestrian access; local streets becoming through roads to avoid traffic congestion at Doncaster; worsening of access arrangements; and more pressure on existing infrastructure.

Officers' response

- 3.20 The likely detriment to existing property owners in terms of applications for planning permits is different from the extent of detriment that is considered in other forms of assessment for restrictive covenant removal, such as a Planning Scheme amendment. In the Yarra Ranges C161 Panel report it was noted that *"previous panels have found that while potential detriment to landowners who benefit from the covenant is a relevant consideration, the detriment test that applies under section 60(5) for a permit application should not be applied to an amendment."*
- 3.21 The Panel Report for Yarra Ranges C161 noted "...the fact that detriment could occur is not, in itself, a reason to recommend against the Amendment. The task of the Panel is to weigh these potential impacts on surrounding landowners against (among other things) the broader benefits that removal of the covenants might achieve".
- 3.22 Overdevelopment of land and protection of amenity considerations is controlled by the current zoning provisions and planning overlays. This planning framework has been recognised as providing a more sophisticated framework for assessing the potential impact and merits of a proposal than a blanket covenant restriction.

- 3.23 It is acknowledged that the likely loss of amenity could only be assessed adequately by way of an assessment under the planning permit process for any future development proposal. However, in considering the removal of the restrictive covenant it is necessary to identify the potential impacts on the amenity and weigh these against the potential benefits of the covenant removal.
- 3.24 A detailed discussion on whether it is considered that the proposed removal of the covenant will have an impact on the interest of affected persons is included in Sections 3.72-3.79 of the report.

<u>A letter from the former Manningham CEO in 2006 is legally binding on Council</u> preventing consideration of further covenant removals from land outside the Doncaster <u>Hill area</u>

3.25 Seven of the submitters have suggested that Council is legally bound to follow previous advice given by Manningham's former CEO in a letter dated 22 June 2006, regarding Council's consideration of removal of restrictive covenants for areas outside Doncaster Hill.

Officers' response

- 3.26 The letter referred to related to Council's position in relation to restrictive covenants and more particularly the mechanism for their removal. The letter noted that in relation "...to properties 'within' the Doncaster Hill precinct where it would be beneficial for the property owners by consent or agreement to meet the objectives of the Doncaster Hill Strategy and under these circumstances **only**, Council is likely to support the removal of the covenants." The letter further stated that "Save for specific sites and examples 'within' the Doncaster Hill precinct ...Council has never discussed any intent; holds no plan or desire; and has not foreshadowed any intention or interest at any time to take any action that would interfere with the protection that beneficiaries enjoy with Restrictive Covenants."
- 3.27 It is considered that the intent of the letter was to convey that Council would not initiate any process to remove a covenant from land outside the Doncaster Hill precinct.
- 3.28 That was further reinforced in a letter dated 14 July 2008, from Council's Mayor at the time, to the Minister for Planning, in relation to the removal of covenants in the Glen Tower Estate, which indicated that Council has consistently advised the current petitioners that Council will not take action via a planning scheme amendment to remove the covenants <u>unless</u> the owners first requests Council to take that action. (underline added)
- 3.29 Whilst recognising that the letter signed by the CEO in 2006 has been understood by many residents as being an undertaking that Manningham City Council would not consider any future proposals to remove restrictive covenants, as indicated in the Panel report for Amendment C72 to the Manningham Planning Scheme, "... whilst the request that Council declare that it will never allow the removal of covenants from the estate in the future is understood, no Council can bind itself forever to any course of action, to do so would unlawfully fetter the powers and discretions of the Council the future."

- 3.30 The fundamental issue is that under section 6(2)(g) of the *Planning and Environment Act 1987*, a planning scheme can provide for the removal of restrictions. In this instance, the removal of the restrictive covenant has been initiated at the request of a private landowner and must therefore be considered by Council in the context of the relevant legislative provisions.
- 3.31 It is also important to recognise that the subject site and surrounds are an area in transition. As noted previously, the subject site and surrounds have been identified within the Manningham Planning Scheme as an area where a substantial level of change is anticipated. The Panel Report which considered Amendment C50 to the Manningham Planning Scheme, (which introduced elements of the Residential Character Guidelines into the Manningham Planning Scheme) stated that "As a general planning principle the Panel does not accept that covenants should override the strategic planning for an area. The broader state and local policies to direct development toward activity centres should be the primary concern of planning provisions. Should private arrangements exist that prevent the implementation of these strategic direction then this is a separate matter that can be addressed in other forums."

The removal of the covenant will not result in an improved housing choice for the area as the single dwelling character already provides an improved housing choice

3.32 Comments have been made by two submitters that the removal of the covenants from the subject property and subsequent redevelopment of the land with a higher density development is not likely to substantially increase housing choice or improve housing affordability. It has also been submitted that there is already adequate supply of townhouses and apartment buildings elsewhere, without the need to redevelop the subject site.

Officers' response:

3.33 It is considered that the amendment will allow for the more efficient use and development of the subject land, and that this will have a broader community benefit in light of the strategic objectives for the area which seek to encourage increased residential densities.

Proposed covenant removal does not meet the test under section 60(5) of the Planning and Environment Act 1987

3.34 Three of the submissions provided extensive background material in reference to the test required for the consideration of the removal of restrictive covenants and the related case law.

Officers' response

3.35 The legislative provisions described in these submissions are the tests outlined in section 60(5) of the *Planning and Environment Act 1987,* which apply to an application for a planning permit to remove a restrictive covenant and not to a request for an amendment to a planning scheme.

The findings from the Panel report for Amendment C50 should be implemented in controlling this area as a lower density area.

3.36 Two of the submissions suggest that comments made in the Panel report for Amendment C50 are still applicable in relation to the area south of Doncaster Hill; and the Panel's recommendation that the Walker Street vicinity is not an area that should support substantial change, due to the topography; access arrangements; and physical impediments to easily walking, should be implemented.

Officers' response

- 3.37 In the report to Council on 28 March 2006, which considered the Panel's recommendations, it was noted that "AM C50 does not constitute a neighbourhood character study, where neighbourhoods are broken down into small areas based on similarities with the existing built form. AM 50 adopts a more complex approach whereby the character precincts are determined on the ability to manage developmental change in the municipality. Accordingly, the character precincts are of a significantly larger scale compared to neighbourhood character studies undertaken by other Councils. Factors influencing the precinct boundaries of AM C50 include the scale and form of the built form, topography, street layout, proximity to activity centres, road widths, and existing planning controls."
- 3.38 In not supporting the Panel's recommendation, the Council supported the officers' response that, "Much of the areas mentioned are substantially less than 400 m from not only the boundary of the Principal Activity Centre but the Westfield Shopping Centre. Given the community, transport, open space and streetscape facilities proposed in the Doncaster Activity Centre these areas will have excellent access and linkages."
- 3.39 The findings of the Panel report for Amendment C50 are only relevant in so far as the reasoning and principles applied by the Panel. The conclusion made by the Panel at the time that the area (relating to the Glen Towers Estate) south of Doncaster Road is not an area that should support substantial change is not a proposition that is open to challenge, as the strategic framework for the area has already been adopted by Council and approved by the State Government.
- 3.40 The Manningham Planning Scheme, together with the *Manningham Residential Strategy* (2012), outline the current strategic planning framework for residential development for the municipality and identify the desired built form for the area as being an area of substantial change. The residential planning framework is consistent with and supports the Metropolitan Planning Strategy *Plan Melbourne* 2017-2050.

Concerns in relation to notification

3.41 One submitter has raised specific concerns that there was no notice to the beneficiaries that the amendment was being considered by Council (prior to exhibition). Further concern was raised in relation to the condition of the notice on the site during the advertising period.

Officers' response

- 3.42 No notice is required to be undertaken prior to the authorisation being granted for Council to prepare and exhibit an amendment.
- 3.43 The public notification measures undertaken as part of this amendment comply with the requirements of section 19 the *Planning and Environment Act 1987*.
- 3.44 The Amendment was exhibited from 19 June 2017 to 28 July 2017. Letters were sent to all identified beneficiaries of the restrictive covenant and adjoining and nearby property owners. Notice was also given to prescribed Ministers and relevant government authorities.
- 3.45 In accordance with section 19 (2A) of the *Planning and Environment Act 1987* an advertising sign was placed on the land at the commencement of the advertising period on 20 June 2017. The sign was re-inspected on 24 July and 28 July and subsequently removed on 7 August.

3.46 During the exhibition period it was noted that the sign had been removed and it was found face down on another part of the site. However it was replaced and was displayed for a longer period (until 7 August) and inspected regularly to ensure that it remained displayed.

Criteria for consideration of the removal of a restrictive covenant by an amendment to the Planning Scheme

- 3.47 As noted in the Panel report to Amendment C112 to the Manningham Planning Scheme, "...the widely accepted criteria for an amendment to authorise variation or removal of a covenant are those set out by the Mornington Peninsula C46 Panel report." Those criteria are outlined in more detail below.
- 3.48 Council has recently considered Amendment C112 to the Manningham Planning Scheme. That amendment authorised the removal of restrictive covenant applying to a number of properties along Doncaster Road. Of relevance to the current amendment, is the Panel discussion on the test for a planning scheme amendment which would authorise the removal of a covenant. The Panel noted that:

"...the widely accepted criteria for an amendment to authorise variation or removal of covenant are those set out in the Mornington Peninsula C46 Panel report:

First, the Panel should be satisfied that the Amendment would further the objectives of planning in Victoria. The Panel must have regard to the Minister's Directions, the Planning Provisions, MSS, strategic plans, policy statements, codes or guidelines in the Scheme, and significant effects the Amendment might have on the environment, or which the environment might have on any use or development envisaged in the Amendment.

Second, the Panel should consider the interests of affected parties, including the beneficiaries of the covenant.

Third, the Panel should consider whether the removal or variation of the covenant would enable a use or development that complies with the Planning Scheme.

Finally, the Panel should balance conflicting policy objectives in favour of net community benefit and sustainable development. If the Panel concludes that there will be a net community benefit and sustainable development it should recommend the variation or removal of the covenant."

- 3.49 These principles have been adopted and applied by many subsequent panels.
- 3.50 An assessment of the consistency with the criteria to be applied in removing or varying a restrictive covenant is set out below:

Does the variation further the objectives of Planning in Victoria?

- 3.51 The Amendment implements the following objectives of planning in Victoria:
 - Providing for the fair, orderly, economic and sustainable use, and development of land – s4(1)(a).
 - To secure a pleasant, efficient and safe working, living, and recreational environment for all Victorians and visitors to Victoria s4(1)(c).
 - Balancing the present and future interests of all Victorians s4(1)(g).

- 3.52 The proposed amendment is generally consistent with these objectives in that it:
 - Facilitates the more sustainable use of the land through the consolidation and more efficient utilisation of the subject land located in a residential precinct identified for substantial change (Residential areas surrounding activity centres and along main roads).
 - Provides the opportunity for the use and development of the land for residential development within close proximity to existing transport and services.
 - Provides new housing opportunities and facilitates infill housing opportunities in a location that is identified in State and local policy (including the *Manningham Residential Strategy*) as a preferred location for medium and higher density housing.
- 3.53 The Amendment is affected by Ministerial Direction No. 9 Metropolitan Planning Strategy and Direction No.11 Strategic Assessment of Amendments. This amendment is consistent with the requirements of both these Directions.
- 3.54 Ministerial Direction No. 9 Metropolitan Strategy relates to Plan Melbourne 2017-2050 – Metropolitan Planning Strategy. Plan Melbourne 2017 -2050 identifies that "Melbourne has grown rapidly over the past decade and that between 2015 and 2051 Melbourne is projected to grow by 3.4 million people, from a population of 4.5 million to almost 8 million. During the same period, Victoria's total population will reach 10.1 million. A population increase of that magnitude would require another 1.6 million dwellings... "
- 3.55 The Strategy further notes the need to ensure that people have affordable and accessible housing choices.
- 3.56 A key aspect of that strategy is "for Melbourne to become more equitable and accessible, local residents need to have a choice of housing within their neighbourhood. Middle-ring suburbs are well served with jobs and services and can provide greater housing choices in these locations, but development must be carefully managed."
- 3.57 Of relevance is Policy 2.1.2, which notes the need to "facilitate an increased percentage of new housing in established areas to create a city of 20-minute neighbourhoods close to existing services, jobs and public transport". The Strategy identifies that "Victoria in Future projections indicate that around 65 per cent of all new dwellings will be in Melbourne's established areas, with 35 per cent in growth area greenfield sites." The likely housing distribution figures from 2015–2051 based on Victoria in Future 2016 indicate that for the eastern region the net dwelling additions between 2015 2051 amount to 175,000."
- 3.58 This amendment will provide the opportunity for multiple dwellings to be developed on the subject site. As noted previously, the site is within a General Residential Zone Schedule 2 (GRZ2) and is also affected by Design and Development Overlay Schedule 8 (DDO8-2), where increased housing densities are specifically encouraged.
- 3.59 The removal of the restrictive covenants will allow for the objectives of the Manningham Planning Scheme to be realised by permitting opportunities for redevelopment of the land, as well as providing a range of housing options within close proximity to the Doncaster Hill Activity Centre.

- 3.60 The Amendment is also consistent with the objectives and strategies outlined in the Local Planning Policy Framework (LPPF) of the Manningham Planning Scheme. In particular:
 - Clause 21.03 Key Influences: encourages higher density housing in close proximity to activity centres, major roads and transport routes that address changing demographic needs.
 - Clause 21.04 Vision Strategic Framework: depicts the subject sites, as being a preferred location for medium and higher density housing.
 - Clause 21.05-2 Housing: identifies that a substantial level of change is anticipated in Precinct 2, which applies to the subject sites, with these areas being a focus for higher density development.
 - The Strategies identified in clause 21.05-2 of the MSS, which include the need to:
 - Ensure that the provision of housing stock responds to the needs of the municipality's population.
 - Ensure higher density residential development occurs around the prescribed activity centres and along main roads identified as Precinct 2 on the Residential Framework Plan 1 and Map 1 to this clause.
- 3.61 The Municipal Strategic Statement notes that an ageing population, coupled with a trend for smaller household size, will lead to imbalance between the housing needs of the population and the available housing stock. It is further noted that residential development that consolidates the role of established urban areas and reduces the pressure for development in more sensitive locations will be encouraged. Higher density housing in close proximity to activity centres, major roads and transport routes will be encouraged.
- 3.62 Further provisions of the Municipal Strategic Statement support the strategic justification:
 - Clause 21.05-1 of the Scheme indicates that higher density housing will be encouraged in close proximity to activity centres and along major roads and transport routes.
 - Clause 21.05-2 Housing issues identifies the need to accommodate Manningham's projected population growth through urban consolidation, in infill developments and Key Redevelopment Sites. The specific objectives of this clause include the need to:
 - ensure that housing choice, quality and diversity will be increased to better meet the needs of the local community and reflect demographic changes.
 - ensure that higher density housing is located close to activity centres and along main roads in accordance with relevant strategies.
- 3.63 The *Manningham Residential Strategy* (2012) and the *Manningham Residential Character Guidelines* (2012) are key policy documents that seek to direct and manage the level of change in a manner that will best serve the interests of the municipality in terms of housing needs, built form and environmental outcomes.

- 3.64 The Manningham Residential Character Guidelines (March 2005) note that a substantial level of change is anticipated for areas in Precinct 2. This area will be the focus for higher density developments. Three storey buildings, including 'apartment-style' developments will be encouraged on larger lots. The Guidelines further note that "The future development vision is to encourage development that contributes to a preferred neighbourhood character."
- 3.65 Amendment C50 to the Manningham Planning Scheme introduced the Design and Development Overlay (DDO8) in 2007 and applied discretionary maximum building height and minimum lot size conditions in 2 sub-precincts to areas generally along main roads and surrounding activity centres.
- 3.66 The subject site is within sub precinct "A" as identified in the residential character guidelines. Sub-precinct A (shown on MPS DDO8-2) is an area where two storey units (9 metres) and three storey (11 metres) 'apartment style' development are encouraged. Three storey, contemporary developments should only occur on land with a minimum area of 1800m2 where the land comprises more than one lot, the lots must be consecutive lots which are side by side and have a shared frontage. The area of 1800m2 must all be in the same sub-precinct. In this sub-precinct, if a lot has an area less than 1800m2, a town house development proposal only will be considered, but development should be a maximum of two storeys. All development in sub precinct 2 should have a maximum site coverage of 60%.
- 3.67 Higher developments on the perimeter of sub-precinct A should be designed so that the height and form are sufficiently stepped down, so that the scale and form complement the interface of sub-precinct B or other adjoining zone.
- 3.68 On 28 May 2013, Council resolved to adopt Amendment C96 to the Manningham Planning Scheme. The purpose of that amendment was to tighten the DDO8 controls as part of addressing emerging built form trends.
- 3.69 Amendment C96 approved on 13 February 2014 resulted in the introduction of three Sub-precincts: Main Road, Sub-precinct A and Sub-precinct B. Those Subprecincts were based on the mapping exhibited during Amendment C50. Properties along the main roads were included within a newly formed Main Roads sub-precinct (DDO8-1)
- 3.70 The maximum building heights and minimum lot size controls applying to the balance of the Sub-precinct A area (DDO8-2) became mandatory requirements, with the aim of tightening the controls to achieve a greater transition in the built form between the Main Road Sub-precinct and other adjoining sub-precincts or zones, and to achieve an increased variety in dwelling types.
- 3.71 It is also noted that the Panel report for Amendment C72 to the Manningham Planning Scheme which removed the covenants from six of the properties within the area, noted that "the removal of the covenants affecting properties part of precinct 2 of the Doncaster Hill Activity centre is a small part of a complex and comprehensive process to implement the Metropolitan Strategy 2030 for the Doncaster Hill Activity Centre" and further concluded that "the amendment is consistent with the objectives of the planning scheme."
- 3.72 It is considered that the proposed removal of the restrictive covenants currently applying to 42 Walker Street, Doncaster is consistent with the strategic direction for the area as set out by the State and Local Planning Policy Framework.

Would the variation have an impact on the amenity of any person?

- 3.73 As noted in Mornington Peninsula Planning Scheme Amendment C137 and Planning Permit Application No CP09/004 – Heronswood-Panel Report: 21 June 2011, the planning framework provides a much more sophisticated basis for determining the merits of the proposal that may be put forward in future than the blanket provision applied under the existing covenant.
- 3.74 As part of this assessment, it is important to consider the interests of affected parties and the possible detrimental impacts to the amenity of neighbouring properties. Whilst a number of potential amenity concerns have been raised by submitters in this regard, it is noted that the proposal does not include specific development plans. Any proposed residential development on the subject land would be required to go through a planning application process, including notification in accordance with the *Planning and Environment Act 1987*.
- 3.75 In order to address amenity impacts and to ensure that any multi-unit development application is designed to a high standard, the application would be required to include a site analysis and design response pursuant to the Manningham Planning Scheme. Compliance with the design objectives contained in the Design and Development Overlay 8 would also be required.
- 3.76 As noted previously, the subject site is included within a General Residential Zone Schedule 2. The purpose of the zone includes:
 - To encourage development that respects the neighbourhood character of the area.
 - To implement neighbourhood character policy and adopted neighbourhood character guidelines.
 - To provide a diversity of housing types and moderate housing growth in locations offering good access to services and transport.
- 3.77 The subject site is also affected by the Design and Development Overlay Schedule 8- Precinct 2 which envisages that the land would be developed in a way that :
 - respects the neighbourhood character of the area.
 - provides a diversity of housing types and moderate housing growth in locations offering good access to services and transport.
- 3.78 One of the key concerns raised in the submissions is the likely impact of the covenant removal on the neighbourhood character and the amenity of the area.
- 3.79 The zoning provisions and other planning controls for the site identify the need for any development to respect the neighbourhood character and have regard to the amenity of the area. While it is recognised that the proposed removal of the restrictive covenant from 42 Walker Street Doncaster will change the single dwelling nature of the area, this change is consistent with the strategic direction for the area which identifies the area as an area of substantial change.

3.80 The likely impact of the potential redevelopment of the land, particularly in terms of additional traffic generated, parking demand, and overall amenity impacts on the streetscape, is likely to be adequately managed by the current planning provisions applicable to the site. Further it is relevant to note that in relation to the traffic movements surrounding the site, as the subject site directly abuts the Development Contributions Plan Overlay-Schedule 1, a future road extension from Hepburn Road through to Frederick Street has been identified. A number of properties have been purchased by Council in Walker Street to facilitate the road extension. Timing of the proposed extension has not yet been determined and a future review of *Doncaster Hill Development Contributions Plan 2005* infrastructure items is currently being undertaken by Council. That review will assess the viability of all current transport infrastructure projects.

Would the variation or removal result in a net community benefit?

- 3.81 "The justification in the removal of the restrictive covenant needs to clearly identify the benefits and disbenefits to be considered in determining whether the variation of the existing covenant would provide a net benefit to the community" (Mornington Peninsula Planning Scheme Amendment C137 page 28).
- 3.82 In relation to Amendment C123 to the Boroondara Planning Scheme (5 March 2012), the Panel noted that property rights conferred by the covenants do not have any special status by virtue of them being conferred by a restrictive covenant. The Panel report noted that the interests of beneficiaries are to be considered according to the general principles of how the interest of individual persons are considered under the planning scheme when assessing net community benefit and the benefits and disbenefits of the proposal.
- 3.83 The benefits of removing the covenant can be identified as enabling the implementation of the objectives of the *Manningham* Residential Strategy *2012* which identifies the area as one where a substantial level of change is to be expected.

Conclusion

- 3.84 On balance it is considered that, having applied the assessment criteria in relation to the request for amendment and consideration of the submissions, that the benefit resulting from the covenant's removal will exceed any potential detrimental effects, which could be adequately identified, assessed and managed by the planning regulatory system applicable to the site.
- 3.85 Accordingly, it is proposed that no changes be made to the exhibited amendment in response to the submissions and that therefore all the submissions be referred to an independent panel appointed by the Minister for Planning.

4. IMPACTS AND IMPLICATIONS

- 4.1 The proposed Amendment supports and implements many of the policies of the State Planning Policy Framework including:
 - Clause 11.02-1 Supply of Urban Land
 - Clause 11.04-2 Housing Choice and Affordability
 - Clause 16.01-1 Integrated Housing
 - Clause 16.01-2 Location of Residential Development

- 4.2 The Amendment will also assist in implementing the policy directions outlined in the Local Planning Policy Framework (LPPF) and the Municipal Strategic Statement (MSS). In particular, Clause 21.05 identifies the subject site as being located within Sub precinct A (DDO8-2) and thus suitable for a '*substantial level* of change....with these areas being a focus for higher density developments.'
- 4.3 In addition, the *Manningham Residential Strategy (2012)*, identifies the need to locate increased residential development densities close to public transport networks and employment opportunities.

5. IMPLEMENTATION

Finance / Resource Implications

5.1 The proponent will be responsible for covering the costs of the amendment process in accordance with the *Planning and Environment (Fees) Regulations 2016.*

Communication and Engagement

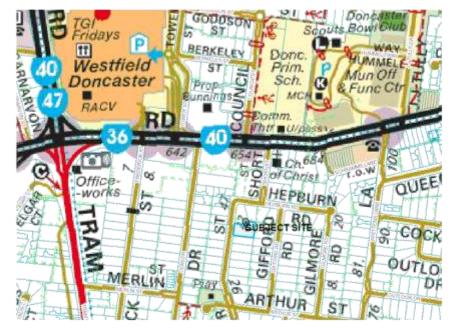
- 5.2 A Communications Strategy and Engagement Plan was prepared in relation to the exhibition of Amendment C114.
- 5.3 Each submitter will be notified of Council's decision and of any subsequent key stage in the Amendment process.

Timelines

- 5.4 Section 4(3) of Ministerial Direction No. 15 requires the appointment of a Panel within 40 business days of the closing date of submissions.
- 5.5 If Council resolves to refer the submissions to an Independent Panel, the Directions Hearing and Independent Panel Hearing dates have been pre-set for the following dates:
 - Directions Hearing in the week commencing on 8 November 2017.
 - Panel Hearing- in the week commencing 4 December 2017.

6. DECLARATIONS OF CONFLICT OF INTEREST

No Officers involved in the preparation of this report have any direct or indirect conflict of interest in this matter.



SUBJECT SITE: 42 WALKER STREET DONCASTER



SITE: 42 WALKER STREET DONCASTER

PLANNING CONTROLS





Planning Overlays- 1 of 2 Maps



Planning Overlays- 2 of 2 Maps



Planning and Environment Act 1987

MANNINGHAM PLANNING SCHEME

AMENDMENT C114

EXPLANATORY REPORT

Who is the planning authority?

This amendment has been prepared by the Manningham City Council which is the planning authority for this amendment.

The Amendment has been made at the request of Project Planning and Development Pty Ltd, on behalf of the owner of 42 Walker Street, Doncaster.

Land affected by the Amendment

The Amendment applies to the following property, being the land described as:

 42 Walker Street, Doncaster (Lot 2 on Plan of Subdivision 068562 Certificate of Title Volume 08586 Folio 869).

What the amendment does

The lot to which this amendment applies is affected by two restrictive covenants which prohibit the erection of "any building other than one dwelling house together with the usual outbuildings and that such dwelling house shall have external walls of brick and roof of slate or tile..." (Instrument of Transfer B416105 and B771605).

The Amendment seeks to facilitate the removal of the restrictive covenants from the subject land to which the Amendment applies, by modifying the Schedule to Clause 52.02 of the Manningham Planning Scheme. Consequently, it will be possible for the owner of the subject land affected by this amendment to lodge a plan of removal of restriction for certification under section 23 of the Subdivision Act 1988 showing the restrictive covenants as removed.

Upon that plan of subdivision being lodged and registered at the Titles Office, the restrictive covenants affecting the site will be removed.

Strategic assessment of the Amendment

Why is the Amendment required?

Amendment C114 is required to remove the restrictive covenants from 42 Walker Street, Doncaster to enable the subject property to be developed in accordance with the planning scheme controls that apply to the property and to facilitate development consistent with the vision of the *Manningham Residential Strategy (March 2012)* which is a reference document in the Manningham Planning Scheme.

How does the Amendment implement the objectives of planning in Victoria?

Amendment C114 is consistent with the objectives of planning in the *Planning and Environment Act* 1987. The Amendment seeks to facilitate the removal of the restrictive covenant from the subject property to enable development in accordance with the Planning Scheme provisions that apply to the subject land, in particular the General Residential Zone and Design and Development Overlay Schedule 8. Section 4(1) of the *Planning and Environment Act 1987* outlines the objectives of planning in Victoria. The relevant objectives are:

(a) 'to provide for the fair, orderly, economic and sustainable use, and development of land;'
 (g) 'to balance the present and future needs of all Victorians;'

Section 4(2) outlines the objectives of the planning framework established by the Act. The relevant objectives are:

- (a) 'to ensure sound, strategic planning and co-ordinated action at State, regional and municipal levels;..'
- (e) 'to facilitate development which achieves the objectives of planning in Victoria and planning objectives set up in planning schemes.'
- (g) to encourage the achievement of planning objectives through positive actions by responsible authorities and planning authorities.'

How does the Amendment address any environmental, social and economic effects?

The Amendment will have positive social and economic effects by allowing for the removal of existing restrictive covenants which currently limits, among other things, the subject property to accommodating only one dwelling on a lot and restricts the dwelling's building materials.

The Amendment facilitates development opportunities to fulfil the objectives of the Manningham Residential Strategy (March 2012) and the planning provisions that apply to the subject properties.

The Amendment is not anticipated to have any negative environmental effects.

Does the Amendment address relevant bushfire risk?

The amendment applies to land in an established urban area and bushfire risk is not relevant in this instance.

Does the Amendment comply with the requirements of any Minister's Direction applicable to the amendment?

The amendment is affected by Ministerial Directions No. 9 *Metropolitan Planning Strategy* and Direction No.11 *Strategic Assessment of Amendments*. This amendment meets the requirements of both these Directions.

Ministerial Direction No. 9 Metropolitan Strategy relates to Plan Melbourne 2017-2050– Metropolitan Planning Strategy.

Specifically, *Plan Melbourne* 2017 -2050 identifies that Melbourne has grown rapidly over the past decade and that *between* 2015 and 2051 Melbourne is projected to grow by 3.4 million people, from a population of 4.5 million to almost 8 million. During the same period, Victoria's total population will reach 10.1 million. A population increase of that magnitude would require another 1.6 million dwellings...

The Strategy further notes the need to ensure that people have affordable and accessible housing choices.

A key aspect of that strategy is "for Melbourne to become more equitable and accessible, local residents need to have a choice of housing within their neighbourhood. Middle-ring suburbs are well served with jobs and services and can provide greater housing choices in these locations, but development must be carefully managed." Of relevance is Policy 2.1.2 which notes the need to "facilitate an increased percentage of new housing in established areas to create a city of 20-minute neighbourhoods close to existing services, jobs and public transport". The Strategy identifies that "Victoria in Future projections indicate that around 65 per cent of all new dwellings will be in Melbourne's established areas, with 35 per cent in growth area greenfield sites." The likely housing distribution figures from 2015–2051 based on Victoria in Future 2016 indicate that for the eastern region the net dwelling additions between 2015 – 2051 amount to 175,000.

This amendment will provide the opportunity for multiple dwellings to be developed on the subject site. This is considered to be appropriate as the site is located within a General Residential Zone schedule 2 (GRZ2) which intends to provide a diversity of housing types.

The property is also affected by the Design and Development Overlay Schedule 8, Precinct 2 (Sub Precinct A). The precinct contains objectives which:

- support three storey, 'apartment style', developments within the Main Road subprecinct and in sub-precinct A, where a minimum land size can be achieved; and
- support two storey townhouse style dwellings with a higher yield within sub precinct B
 and sub-precinct A, where the minimum land size cannot be achieved.

The removal of the restrictive covenants will allow for the objectives of the Manningham Planning Scheme to be realised by permitting opportunities for redevelopment of the land as well as providing a range of housing options within close proximity to the Doncaster Hill Activity Centre.

How does the Amendment support or implement the State Planning Policy Framework and any adopted State policy?

The State Planning Policy Framework (SPPF) identifies principles of land use and development planning relevant to the current amendment. The Amendment is consistent with the following objectives and strategies:

- Clause 11 Settlement: Planning is to anticipate and respond to the needs of existing and future communities through provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure.
- Clause 11.02-1 Supply of Urban Land: The objective of this Policy is to ensure a sufficient supply of land is available for residential, commercial, retail, industrial, recreational, institutional and other community uses. One of the relevant strategies is that planning for urban growth should consider opportunities for the consolidation, redevelopment and intensification of existing urban areas.
- Clause 16 Housing: The objective requires that planning should provide for housing diversity, and ensure the efficient provision of supporting infrastructure.
- Clause 16.01-1 Integrated Housing: The objective is to promote a housing market that meets community uses. The policy includes a strategy to increase the supply of housing in existing urban areas by facilitating increased housing yield in appropriate locations, including under-utilised urban land.
- Clause 16.01-2 Location of Residential Development: This Policy identifies the need to locate new housing in or close to activity centres and in urban renewal precincts and sites that offer good access to jobs, services and transport. The policy includes the following strategies:

- Increase the proportion of new housing in designated locations within established urban areas and reduce the share of new dwellings and dispersed development areas.
- Encourage higher density housing development on sites that are well located in relation to jobs, services and public transport.
- Ensure an adequate supply of redevelopment opportunities within established urban areas to reduce the pressure for fringe development.
- Facilitate residential development that is cost-effective in infrastructure provision and use, energy efficient, incorporates water efficient design principles and encourages public transport use.
- Identify opportunities for increased residential densities to help consolidate urban areas.
- Clause 16.01-3 Housing opportunities areas: To identify areas that offer opportunities for more medium and high density housing near employment and transport in Metropolitan Melbourne.
- Clause 16.01-4 Housing Diversity: The objective of this policy is to provide for a range of housing types to meet increasingly diverse needs. The strategies include:-
 - Ensure housing stock matches changing demand by widening housing choice, particularly in the middle and outer suburbs.
 - Encourage the development of well-designed medium-density housing which:
 - Respects the neighbourhood character.
 - Improves housing choice.
 - Makes better use of existing infrastructure.
 - Improves energy efficiency of housing.
 - Support opportunities for a wide range of income groups to choose housing in well serviced locations.
 - Ensure planning for growth areas provides for a mix of housing types and higher housing densities in and around activity centres.

How does the Amendment support or implement the Local Planning Policy Framework, and specifically the Municipal Strategic Statement?

The Municipal Strategic Statement (MSS) identifies that in residential areas there is need for a greater mix of housing in the form of medium and higher density residential higher density housing will encourage in close proximity activity centres and along major roads and transport routes.

The MSS at Clause 21.05-2 *Housing directions* notes the need to accommodate Manningham's projected population growth through urban consolidation, in infill developments and key redevelopment sites. The objectives are as follows:

- To ensure that housing choice, quality and diversity will be increased to better meet the needs of the local community and reflect demographic changes.
- To ensure that higher density housing is located close to activity centres and along main roads in accordance with relevant strategies.

A number of strategies are identified in the MSS including:

- Ensure that the provision of housing stock responds to the needs of the municipality's population.
- Ensure higher density residential development occurs around the prescribed activity centres and along main roads identified as Precinct 2 on the Residential Framework Plan 1 and Map 1 to this clause.

The Amendment is also consistent with the objectives and strategies outlined in the Local Planning Policy Framework (LPPF) of the Manningham Planning Scheme, in particular:

- Clause 21.03 Key Influences: encourages higher density housing in close proximity to activity centres, major roads and transport routes that address changing demographic needs.
- Clause 21.04 Vision Strategic Framework: depicts the subject sites as being within a
 preferred location for medium and higher density housing.
- Clause 21.05-2 *Housing*: identifies that a substantial level of change is anticipated in Precinct 2, which applies to the subject sites, with these areas being a focus for higher density development.

The removal of the restrictive covenants will allow for a greater density and diversity of housing opportunities for the sites, as envisaged by the LPPF.

Manningham City Council's *Residential Strategy* (2012) is identified as a reference document under Clause 21.05 of the Manningham Planning Scheme. The Strategy notes that "given that Manningham has an ageing population and the household size is becoming smaller (with a significant increase in smaller households, including lone person, mature family, retirees, one parent and couples without children) an ideal opportunity exists to significantly increase the residential density around existing activity centres..."

The Strategy further highlights that redeveloping residential areas, with single detached, or medium density housing, requires a balance to be achieved between meeting the needs of the developer, or prospective homeowner and respecting the neighbourhood character of an area and the residential amenity of adjoining property owners.

Does the Amendment make proper use of the Victoria Planning Provisions?

Amendment C114 makes proper use of the Victoria Planning Provisions.

How does the Amendment address the views of any relevant agency?

The exhibition of the Amendment will provide the opportunity for relevant agencies to comment on the Amendment. The Amendment does not propose to create any new referral authority or referral requirements. Additionally, all interested parties will have the opportunity to comment and make submissions through the statutory exhibition process.

Does the Amendment address relevant requirements of the Transport Integration Act 2010?

The Amendment will not have a significant impact on or undermine the functionality of the existing transport system.

Resource and administrative costs

 What impact will the new planning provisions have on the resource and administrative costs of the responsible authority?

The amendment will not have a noticeable impact on the resource and administrative costs of the responsible authority.

Where you may inspect this Amendment

The Amendment is available for public inspection, free of charge, during office hours at the following places:

- during office hours, at the office of the planning authority, Manningham City Council, 699 Doncaster Road, Doncaster
- · at the Manningham website at www.yoursaymanningham.com.au/amendment-C114
- · at the Doncaster branch library

The Amendment can also be inspected free of charge at the Department of Environment, Land, Water and Planning website at <u>www.delwp.vic.gov.au/public-inspection</u>

Submissions

Any person who may be affected by the Amendment may make a submission to the planning authority. Submissions about the Amendment must be received by 28 July 2017.

A submission must be sent to:

Manager City Strategy Manningham City Council PO Box 1 DONCASTER VIC 3108

or submitted online at www.yoursaymanningham.com.au.

Panel hearing dates

In accordance with clause 4(2) of Ministerial Direction No.15, the following panel hearing dates have been set for this amendment:

- directions hearing: to commence in the week of 4 September 2017
- panel hearing: to commence in the week of 25 September 2017

18/12/2008 C72 Encound C114

18/12/2008 G72 Proposed C118

1.0

MANNINGHAM PLANNING SCHEME

SCHEDULE TO CLAUSE 52.02

Under Section 23 of the Subdivision Act 1988

Land	Easement or restriction	Requirement
9 Murndal Drive, Donvale being Lot 1 LP 115808 and being the land described in Certificate of Title Volume 9176 Folio 633 and 11-13 Murndall Drive, Donvale being Lot 2 LP 115808 and being the land described in Certificate of Title Volume 9193 Folio 088	instrument of transfer Number E885405 dated 20	Vary by deleting "other than a single dwelling house with outbuildings and" and deleting "single" before the word "dwelling"
Doncaster East being Lot 42 LP 145759 and being the	Number L912396H registered on 30 September	
16 Hepburn Road, Doncaster being Lot 10 PS 056685 and further being the land described in Certificate of Title Volume 08458 Folio 832		The whole of the restriction is authorised for removal
18 Hepburn Road, Doncaster being Lot 9 PS 056685 and further being the land described in Certificate of Title Volume 08420 Folio 975	CALCULATION CONTRACTOR CONTRACTOR CONTRACTOR OF	The whole of the restriction is authorised for removal
20 Hepburn Road, Doncaster being Lot 4 PS 056685 and further being the land described in Certificate of Title Volume 08420 Folio 970		The whole of the restriction is authorised for removal
22 Hepburn Road, Doncaster being Lot 5 PS 056685 and further being the land described in Certificate of Title Volume 08420 Folio 971		The whole of the restriction is authorised for removal

PARTICULAR PROVISIONS - CLAUSE 52.02 - SCHEDULE

PAGE 1 OF 2

MANNINGHAM PLANNING SCHEME

Land	Easement or restriction	Requirement
24 Hepburn Road, Doncaster being Lot 6 PS 056685 and further being the land described in Certificate of Title Volume 08420 Folio 972	The restriction contained in instrument of transfer Number C687853	The whole of the restriction is authorised for removal
	The restriction contained in instrument of transfer Number B531223	
	The restriction contained in instrument of transfer Number B416105 and B771605.	

2.0

Under Section 24A of the Subdivision Act 1988

18/12/2008 C72

Land	Person	Action
None specified		
Lanas (Cardellar Statistics)	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	

3.0 18/12/2008 672 Under Section 36 of the Subdivision Act 1988

11692-1177-1177-000
Easement or right of way

PARTICULAR PROVISIONS - CLAUSE 52.02 - SCHEDULE

PAGE 2 OF 2

Planning and Environment Act 1987

MANNINGHAM PLANNING SCHEME

AMENDMENT C114 INSTRUCTION SHEET

The planning authority for this amendment is the Manningham City Council.

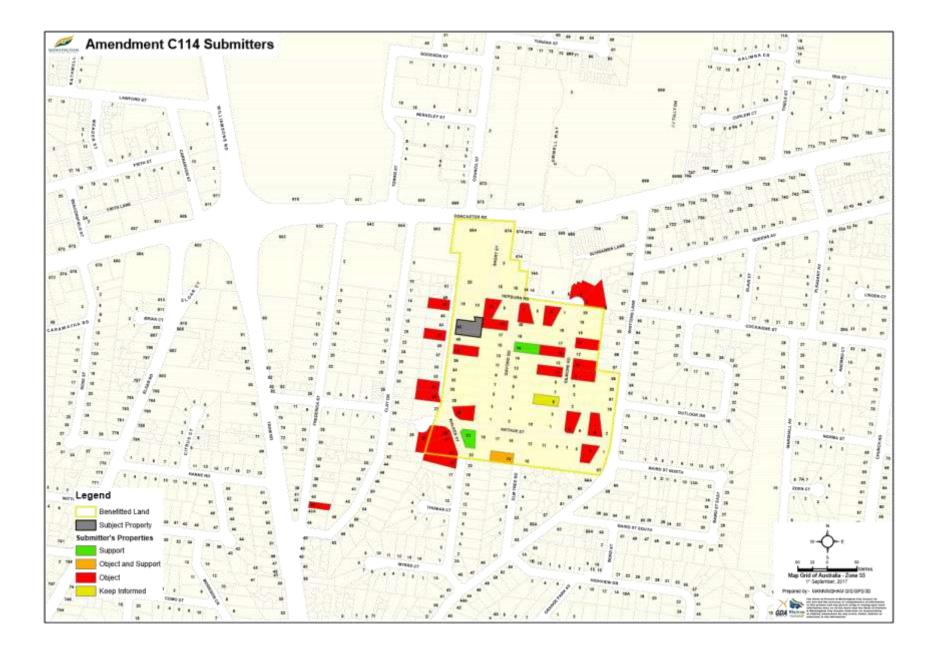
The Manningham Planning Scheme is amended as follows:

Planning Scheme Ordinance

The Planning Scheme Ordinance is amended as follows:

 In Particular Provisions – Clause 52.02, replace the Schedule with a new Schedule in the form of the attached document.

End of document



AMENDMENT C114 - SUMMARY OF SUBMISSIONS

D17/49034

No	Address	Summary of Submission	Officers' Response
1	21 Arthur Street DONCASTER <u>CI17/22739</u>	 Supports the Amendment. Notes that the covenant is out of date. 	Support noted.
2a	15 Edina Close PORT MELBOURNE <u>Cl17/24595</u>	 Suggests that it is general practice in a planning scheme amendment process to ascertain how many of the benefitted lands are also burdened by the same covenant. This is done to rule out the existence of a "building scheme" or a "scheme of mutually enforceable covenants". 	 A building scheme is a distinct method to establish the right to the benefit of the covenant, and whether or not a building scheme exists is a question of fact. Restrictions are often imposed on the purchasers of each lot for the benefit of the total subdivision. The covenants which are entered into as all part of a scheme form part of the law for the particular subdivision. The concept of a building scheme was referred to in the decision of <i>Fitt v Luxury Developments Pty Ltd</i> [2000] VSC 258 (20 June 2000). The case referred to the principle that "covenants made by the various purchasers from a common vendor are mutually enforceable, and may thus be enforced by every purchaser of an allotment and his successors in title against every other purchaser of an allotment or his successors in title, taking with notice of the covenant. The basis of the doctrine is that the purchasers have a common interest in maintaining the restrictions and that 'this community of interests necessarily requires and imports reciprocity of obligation." The consideration of a building scheme process has been referred to by Mr Voumard QC in The Law Relating to the Sale of Land in Victoria, 2nd ed. at p.592:"To meet this position a further principle has evolved whereby, upon the scheme of development, covenants made by the various purchaser of an allotment and his successors in title against every of an allotment and his successors in title against every of a land in Victoria, 2nd ed. at p.592:"To meet this position a further principle has evolved whereby, upon the scheme of development, covenants made by the various purchaser of an allotment and his successors in title against every other purchaser of an allotment and his successors in title against every other purchaser of an allotment and his successors in title against every other purchaser of an allotment and his successors in the scheme of development, covenants made by the various purchaser of an allotment and his successors in title against every other pu

No	Address	Summary of Submission	Officers' Response
		 Questions whether a map similar to the one presented in Amendment C112 by Best Hooper was available. Notes that 42 Walker is part of the Glen Towers Estate where each lot in the subdivision is burdened by the covenant. 	 The assessment required in the case at hand relates solely to the acceptable tests for covenant <u>removal</u> by way of a scheme amendment and the enforcement of the covenant against beneficiaries is not one of the considerations. Response provided to submitter indicating that Council has not received a map from the proponent as the one identified for C112 as there is no statutory requirement to submit such map.
2b	CI17/24630	Objects to the amendment.	Objection noted.
		 The amendment will create an undesirable precedent by developers using scheme amendments to remove covenants. 	• Precedent: This concern has been considered in a number of Planning Panel Reports. In Yarra Ranges C161 (PSA) [2017] PPV 40 (4 May 2017) the Panel discussed the precedent issues and noted: the precedent issue has been considered by other panels, including the panel for Manningham Amendment C72 which proposed to remove covenants in the Doncaster Hill Activity Centre. This Panel mentioned that it "agrees with the reasoning of the C72 Panel. The law allows covenants to be removed in appropriate circumstances. Each application to remove a covenant (by whatever method) will be assessed on its merits, and assessed against the relevant statutory tests or criteria that apply. Removal of one covenant in a subdivision does not automatically justify removal of other similar covenants."
			The C72 Panel commented in its September 2008 report: Nor can the removal of covenants be forever prevented. The law currently allows their removal and/or variation by a number of means, first by application to the Supreme Court, second by permit application to council (which can ultimately be determined on review by the Victorian Civil and Administrative Tribunal), and third by planning scheme amendment. Each application is determined on its individual merits depending on the different applicable tests, the impact on the owners and occupiers of the land enjoying the benefit of the covenant and whether anyone objects to the removal and/or variation.
			The Panel commented that "Any future applications to remove other covenants in the subdivision must be assessed on their merits, and against the relevant statutory tests or criteria."

No	Address	Summary of Submission	Officers' Response
			In the Supreme Court in Oostermeyer v Powell and Ors, the Court refused to vary the covenant on the basis that substantial injury would arise from the precedent effect. This decision was referred to in the Yarra Ranges Report which said that: "the Panel notes that the precedent issue was a significant factor for the Supreme Court in Oostermeyer v Powell and Ors. However as noted above, the tests that a Court must apply when considering an application to remove a covenant under the Property Law Act are different to the criteria that a panel must apply when considering a planning scheme amendment"
		 The site is part of the Glen Towers Estate with 83 lots burdened by a single dwelling covenant which has maintained the neighbourhood character. The disbenefits outweigh the benefits of the covenant as the removal will erode the neighbourhood 	 <u>Character</u>: In the Yarra Ranges panel report, it was noted that "difficulties can arise where covenants restrict use or development of land that is otherwise permitted or encouraged under the planning controls. As noted in the Reformed Zones Ministerial Advisory Committee's report in 2009: The extent to which a private planning treaty (such as a single dwelling covenant) could undermine public planning policy of urban consolidation is a concern.
		character. Noted that Council should abandon the amendment as there is not strategic justification.	Having said that, covenants (particularly long standing covenants) can result in an identifiable neighbourhood character developing, which in turn can influence the choice of the appropriate residential zone to be applied to the land.
			The site at 42 Walker Street is identified as being within a substantial change area with a focus in higher density development in the <i>Residential Strategy 2012</i> . High density development is consistent with the strategic objectives for the area as set out by the local policy framework, in particular Clause 21.05 of the Manningham Planning Scheme. Nevertheless, any development will need to meet the requirements of the zone and the particular provisions of the scheme.
			As noted in the Panel Report for C72: "that the submitters rely on the covenant to protect the character of the area they bought into 30 to 40 years ago is to ignore the inevitability of change, and it is the purpose of well-considered Planning Scheme and amendments to manage the pressures of change in a way that produces a net community benefit and minimises detriment."
		 Refers to Amendment C112 (removal of covenants on properties on Doncaster Road) and the distinction with the current 	Refer to Submission 2a.

No	Address	Summary of Submission	Officers' Response
		 amendment in that a large proportion of the properties in that subdivision were not burdened with covenants. The covenant offered no real protection to the neighbourhood character. Notes that, in contrast, the area surrounding the site at 42 Walker Street is part of the Glen Tower Estate where 84 lots are burdened by the covenant, thus creating a building scheme or scheme by covenants. Argues that a building scheme of covenants brings significant benefits and notes that a building scheme raises above planning law. It creates a local law that imparts a community of interest and obligations into the neighbourhood. The concept of a building scheme was not raised in C72. The subject site is surrounded by a network single dwelling covenants. Argues that there is no net community benefit. Identifies the disbenefits associated with the removal of the covenant and the impact of removal on the neighbourhood character. 	 <u>Community Benefit</u>: Apart from the officer's comments relating to building schemes as noted above, in response to the argument that the building scheme restriction raises above the law, it is noted that it is a widely accepted principle that "planning controls by their nature, interfere with proprietary rights. Most planning controls impact, often quite severely, on property rights because the legislation is made for the general benefit of the community: Mornington Peninsula Planning Scheme Amendment C46 & Planning permit Application CP 02/004 Report of Panel, April 2004. In Boroondara c123 (PSA) [2012] PPV 29 (5 March 2012) the Panel commented that "the property rights conferred by covenants do not have any special status by virtue of them being conferred by a restrictive covenant. Rather the interest of the beneficiaries are to be considered according to the general principles of how the interest of individual persons are considered under the planning scheme when assessing net community benefit and the benefit is part of the accepted test in considering the removal of covenants by way of a scheme amendment. The existence of a "network of single dwellings covenants" is however not in itself sufficient to conclude that the removal of the covenants are removed, as concluded in the Panel report for Yarra Ranges C161, it is considered that the amendment will allow for the more efficient use of the land, and this has a broader community benefit in light of the strategic objectives for the area.

No	Address	Summary of Submission	Officers' Response
		 Notes that the arguments that the proposal will improve housing choice is misleading. There is already an adequate supply of townhouses and apartments and many blocks are not burdened by a covenant. Argues that the single dwelling neighbourhood of offered by the Glen Towers Estate provides an improved housing choice. 	 Housing Choice: It is noted that the covenants have assisted in keeping a predominantly single dwellings on lots in the area. As indicated above, there is a conflict between the preservation of single dwelling house forms by the covenants and the strategic framework for the area which promotes medium density housing. As noted in the Panel report for C72, the fact that the removal of the covenant would facilitate higher density dwellings, "does not mean that it is contrary to the objectives and policy of the planning scheme." Further, in light of the scale of any proposed redevelopment on the site, the impact on housing choice would be negligible, but as mentioned above the removal would enable the most efficient use of the land.
		 Refers to other negative amenity impacts, increased population density, parking issues and increased noise levels. 	• Detriment: In the Yarra Ranges C161 Panel report, it was noted that "previous panels have found that while potential detriment to landowners who benefit from the covenant is a relevant consideration, the detriment test that applies under section 60(5) for a permit application should not be applied to an amendment." The Panel noted that "the fact that detriment could occur is not, in itself, a reason to recommend against the Amendment. The task of the Panel is to weigh these potential impacts on surrounding landowners against (among other things) the broader benefits that removal of the covenants of the covenants might achieve. "The potential for more intensive development on the site is likely to impact on surrounding landowners and, as noted in the Panel report for Mornington Peninsula Planning Scheme Amendment C137 & Planning Permit application No. CP09/004 'Heronswood" Panel report 21 June 2011. "All the implications of future proposals, including traffic, parking, amenity implications, would be subject to scrutiny within the context of the Site's location within a residential area."
		 Claims that there has already been a breach of the covenant by the construction of a two dwellings as 42 and 42A Walker Street are not justified as original lots have been consolidated. 	 <u>Breach of covenant</u>: It is noted that the two dwellings were constructed prior to the registration of the consolidated lot on 6 August 1965 created as Lot 2 by instrument C283302. However, the Council records of the building permits denote that each of the dwellings/residential flat were constructed on Lot 69. Potential breach of the covenant is not a matter which would be taken into consideration as part of Council's assessment of the proposed amendment.
2c	<u>CI17/29185</u>	 Submitted copy of letter to another beneficiary from Manningham CEO on 22 June 2006 and notes that this letter as an 	<u>CEO Letter</u> : The letter from the CEO which is referred to by some submitters is dated 22 June 2006. It confirmed previous officer advice relating to "properties within Doncaster Hill precinct where it would be beneficial for the property owners by consent

No	Address	Summary of Submission	Officers' Response
		open assurance to a beneficiary. Suggests that the letter is legally binding on the Council, especially as the subject site is not situated within the Doncaster Hill precinct. Further states that it would be unconscionable conduct on Council to proceed with the amendment.	or agreement to meet the objectives of the Doncaster Hill Strategy and under these circumstances <u>only</u> Council is likely to support the removal of the covenants."
			The letter goes on to state that "save for specific sites and examples within the Doncaster Hill precinctCouncil has never discussed any intent; holds no plan or desire and has nor foreshadowed any intention or interest at any time to take any action that would interfere with the protection of that beneficiaries enjoy with Restrictive Covenants."
			One interpretation of that letter is that it is simply indicating Council's lack of intention to initiate the removal of covenants on private properties. Notwithstanding that however, and particularly in light of the major changes with planning controls since 2006, Council's power to consider the removal of restrictive covenants initiated by the request of a private land holder is a statutory power under section 6(2) (g) of the <i>Planning and Environment Act 1987</i> which could not be fettered by an undertaking.
			It is also noted that on 14 July 2008 Council's Mayor at the time Cr Geoff Gough wrote to the Hon Justin Madden MLC, Minister for Planning in relation to the removal of covenants in the Glen Tower Estate and indicated that Council has consistently advised the current petitioners that Council would not take action via a planning scheme amendment to remove the covenants unless the owners first request Council to take that action.
			As indicated in the Panel report for Amendment C72, " whilst the request that Council declare that it will never allow the removal of covenants from the estate in the future is understood, no Council can bind itself forever to any course of action, to do so would unlawfully fetter the powers and discretions of the Council the future."
3a	13 Elm Tree Road	 Does not support the amendment. 	Refer to Submission 2b (Character; Precedent; Detriment)
	DONCASTER <u>CI17/26011</u> • Residents have chosen to live in this area with a single dwelling covenant, being a green area within walking distance to the shops.		
		 The proposal should not be approved as it will set a precedent that will destroy the area. 	

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No	Address	Summary of Submission	Officers' Response
		 The proposal will negatively affect all owners of the estate in terms of property values, amenity, safety and local character. 	
3b	<u>CI17/29387</u>	 Further submission pointing out previous letter from CEO. Current Council should hold to the advice. 	Refer to Submission 2c (CEO Letter).
	5 Gilmore Road DONCASTER <u>CI17/26008</u>	 Not a submission. Request to be kept informed. 	 Noted. Details will be added to the list of persons to be kept informed of the amendment.
4	4 Hepburn Road	 Objection to the amendment. 	
	DONCASTER <u>CI17/25794</u>	 Bought the property as was attracted by the single dwelling covenant restriction. 	
		 Referred to previous letter from the CEO indicating that Council had no intention to take any action which would interfere with the protection of the beneficiaries. 	Refer to Submission 2c (CEO Letter).
		 Comments on the March minutes suggested that Council officers have inappropriately influenced its councillors in favour of the applicant. There was no notice to beneficiaries that the amendment was to occur and beneficiaries have to contest the amendment at a panel hearing. Unlikely that the amendment be abandoned as it has progressed through exhibition. 	 The March Council report presented to Council at the meeting on March included the facts pertaining to the proposed amendment and followed the statutory process relating to amendment. The formal exhibition period has been undertaken in accordance with the requirements of the Act. The initial assessment of the proposal does not restrict or pre-empt Council's prerogative to make a decision in relation to the amendment and it is solely based on an independent assessment of the strategic background of the proposal. It consisted of an initial assessment pending consideration of any issues raised during the public exhibition period which are the nature of the current report. The recommendation to proceed to exhibition does not indicate a decision to support
		 Suggests that it is unacceptable that Council should recommend its councillors approve this amendment application when assurance were given by Council that 	the amendment.

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No	Address	Summary of Submission	Officers' Response
		would not be involved in the removal of covenants.Application will open a floodgate.	Refer to Submission 2b (Precedent).
5	10 Gilmore Road DONCASTER <u>CI17/26606</u>	 The removal of the covenant will open the floodgates for other applications to remove the covenant. The increase in multi dwelling units will destroy the area's character. 	Refer to Submission 2b (Character; Precedent).
		 There is no need to increase density, the State government's goal to increase density has already been met. 	 The proposal is consistent with the goals of <i>Plan Melbourne, 2017-2050</i> in that to remain liveable and become more productive and sustainable, Melbourne must build on the current trend of 70 per cent of new housing to be provided within Melbourne's established areas.
		 Multi dwellings will affect the traffic and parking in the area with increased on-street parking and resulting congestion, noise, and safety concerns for residents. The surrounding area is already accommodating high density development, the amendment will exacerbate this situation and encourage development in an 	 The concerns relating to parking and traffic are noted. The potential removal of the covenant on the land could potentially result in the development of units on the site. Any likely amenity concern will be considered in the assessment of any permit application. Manningham's adopted <i>Residential Strategy 2012</i> identifies the subject site as an area suited for high density residential development.
		 Increased density will result in local streets being used as through roads in order to avoid increased traffic congestion at Doncaster road. 	 This same concern was previously raised by submitters to Scheme Amendment C50 which introduced the overlays in this area. The Panel report noted that "residents of the Doncaster Hill south area indicated that there were already problems with through traffic affecting the amenity of the area as well as the character strongly defined by single dwellings on large lots that should not be degraded as a result of the proposed amendment."
			It was further noted that, in relation to Doncaster Hill South, the GTA traffic report, which sits separately to the <i>Doncaster Hill Strategy</i> , indicates that traffic south of Doncaster Road will be directed through a new collector street that will traverse Hepburn Road to Frederick Street with appropriate closures of streets at Clay Drive, Walker, Gifford and Gilmore Streets. This would seem to reinforce the role of these

No	Address	Summary of Submission	Officers' Response
			areas, south of the road closures as local streets with minimal linkage or interaction with the core of the activity centre.
			Further, any application for prospective development will need to address a site assessment of the potential impact on traffic and parking in the area and also identify any special measures required.
		 Application is not consistent with the character of the area. 	Refer to Submission 2b (Character)
		 If application is allowed it will result in more applications allowed under the covenant or removed by the covenant. 	
		 Amendment is not consistent with the character of the area. 	
		 The retention of the covenant demonstrates that it is reasonable and appropriate for this area in terms of neighbourhood character, traffic, and safety. 	
		 Almost all the properties surrounding the subject land have a restrictive covenant, the residents selected this area due to its covenant and the desire to retain the existing character of the area. 	
		 The removal of the covenant is against the spirit of the subdivision as it is expected that all title holders will honour and respect the covenant. 	 The Planning and Environment Act 1987 allows land owner to seek an amendment to the relevant Planning Scheme to remove a restrictive covenant.
		 Refers to the test under section 60 (5) of the Planning and Environment Act 1987. 	 Section 60(5) Test: The test referred to is that which applies in relation to consideration of an application for a planning permit to remove a covenant and is not applicable to an amendment to a Planning Scheme seeking to remove a covenant.

No	Address	Summary of Submission	Officers' Response
6	4 Arthur Street DONCASTER <u>CI17/27468</u> and <u>CI17/27468</u>	 The parties object to the amendment as beneficiaries. 	 The beneficiaries' objections relating to the likely loss of amenity and change in the character of the area are two considerations that must be assessed according to the general principles of how the interest of individual persons are considered under the planning scheme when assessing net community benefit and the benefits and dis- benefits of a proposal: Boroondara C123 (PSA)[2012]PPV 29 (5 March 2012)
		 Main reason for objecting is the loss of amenity due to the fundamental change in the character of the area. The covenant was a feature that they sought after and a condition of the contract of sale. Removing the amendment will open the gate to the type of development that is not within the character of the neighbourhood. Streets have already been impacted on the apartment style development. Removal of the covenant will encourage developments that would bring more traffic, noise and air pollution, and end to open space. 	 <u>Amenity</u>: The potential loss of amenity could only be assessed adequately by way of the planning permit process for any future development proposal. The main issue is considered to be whether allowing the removal of the restrictive covenant would enable the redevelopment of the land in a manner that is inconsistent with the planning strategy for the area. As noted in the officer's response to submission 2(a), it is argued by objectors that the placement of the covenant has resulted in an identifiable neighbourhood character. This consideration must be taken into account in the context of Council's approved Council's <i>Residential Strategy 2012</i> and the planning controls for the area which identify the area as "being within the substantial change areas with a focus in higher density development. As noted in the Panel Report in Yarra Ranges C161 (PSA) [2017] "the fact that detriment could occur is not, in itself, a reason to recommend against the Amendment. The task of the Panel is to weigh these potential impacts on surrounding landowners against (among other things) the broader benefits that removal of the covenants might achieve".
		 There is no net community benefit from the proposed amendment. Identifies the following negative impacts:- increased traffic volume due to higher density housing making it less safe for pedestrians as there are no footpaths. restrictive access to the neighbourhood via three primary road networks entry/exit points, being short Street, Frank Street and 	 The benefits of removing the covenant could be identified as enabling the implementation of the objectives of the Residential Strategy, however the amenity impacts can only appropriately be assessed when considering any future planning proposal. The negative impacts identified are valid concerns, however it is a question of the extent of these negative impacts. The removal of the covenant if approved would enable the construction of higher density development on the site, however the provisions currently in place under DDO8 note that the controls envisage that the "land would be developed in a way that respects neighbourhood character of the area". Possible impacts such as increased traffic, parking considerations, safety concerns for pedestrian are relevant considerations that need to be adequately assessed with reference to any development proposal.

No	Address	Summary of Submission	Officers' Response
		Whittens Lane a lot more difficult especially during peak times.	
		 -the commencement of the destruction of the single dwelling neighbourhood character of the interior of the Glen Towers Estate. 	
		 the removal of the covenant does not offer any discernible difference in housing choice that would result in any community benefit. 	
7	8 Arthur Street DONCASTER <u>CI17/27494</u>	 Does not support the amendment. Requests that Council abandon the amendment for the following reasons: 	 The request to abandon the amendment is noted. It will be open for Council to consider this option following consideration of the submissions. The grounds of objection to the planning permit are also noted as still being a concern. Issues relating
		 Owner of Glen Towers Estate, thus a beneficiary to the current single dwelling covenant. 	to neighbourhood character and impact on traffic have been raised by other submissions.
		 Objected to the planning permit PL15/025679 for the removal of the covenant for the site. The objection lodged was based on the ground that the removal of the covenant will be detrimental based on loss of amenity and indirectly by the loss arising from the change to the character of the neighbourhood. Copy of the submission attached as grounds still stand. The initial objection to the permit application for the covenant removal is included in the objection. 	
		 Noted that in 2006 received a letter from Manningham Chief Executive Council, John Bennie advising that "Council "holds no plans or desire; and has not foreshadowed any intention or interest at any time to take 	Refer to Submission 2c (CEO Letter).

No	Address	Summary of Submission	Officers' Response
		action that would interfere with the protection that beneficiaries enjoy with restrictive covenant." Queries whether current Council officers and sitting Councillors have done a backflip on the prior Councillors position of supporting its residents on protecting their covenant and ultimately their neighbourhood.	
		 Biggest concern is that if the covenant is removed it will set an unfortunate precedent of opening floodgates to encourage future developers to bypass VCAT and the Supreme Court and use the planning amendment process in removing the covenant from other properties from the Glen Towers estate. 	Refer to Submission 2b (Precedent).
		• The removal of the covenants by way of amendment C72 is different to the current amendment. The main difference being that Council required those properties to have the covenant removed to fall in line with the new zoning allowing the development of high rise apartments. The impact of those properties on the remaining subdivision compared to 42 and 42a Walker Road is that there is a clear demarcation line between the high density/high rise zone, north of Hepburn Road and the remaining Glen Towers Estate. The removal of the covenant at 42 Walker will be seem by the Glen Tower Estate beneficiaries as a backflip by Council from the original activity area	 It is agreed that the removal of the covenant considered as part of Amendment C72 is different to the current proposal. Every proposed removal of a covenant must be considered on its merits. The relevance of the previous considerations by Panels on the removal of covenants is in the application of tests and criteria. The current planning provisions applying to the site reinforce the identification of this area as the preferred location for medium and higher density housing and an area where it is expected to have a substantial level of change.

No	Address	Summary of Submission	Officers' Response
		 strategy and subsequent promises and a betrayal to its long standing residents. The properties south of Hepburn Road, bounded by Walker and Gifford Road had been earmarked by the Doncaster Hill Activity area strategy as future open space reinforcing the principle that a clear demarcation line should be created between high density living to the north and existing single dwelling blocks. Any form of higher density development that will result from properties at 42 and 42 a Walker Road will be totally unacceptable. Beneficiaries at the Glen Towers Estate have for the past 15 years communicated to Council that they would like the spacious single dwelling character of the neighbourhood preserved. Objection also represents views of the elderly neighbours unable to lodge submissions. 	 The strategic framework for the area notes that the properties immediately north of the subject site are within the Doncaster Hill Activity centre Zone. Council's approved <i>Residential Strategy 2012</i> encourages higher density residential development due to its proximity to an activity centre(Doncaster Hill) and main road (main road) The views received from beneficiaries and other residents in relation to the current amendment, identify the neighbourhood character for this area as characterised by single dwellings being the legacy from the restrictive covenants restrictions applicable in the last 50 years. In contrast Council's perceived vision for the area, as approved by the adopted <i>Residential Strategy</i> and current planning controls is for an area of substantial change. Council's role in assessing the removal of the covenant is not to enforce the rights conferred by the original covenants applicable to the land, but rather to assess the net community benefit arising from the removal of the covenant.
		 The covenants on the site have not been breached as there is still one dwelling on each lot, and this was demonstrated in 1965 when the second dwelling was constructed in Lot 68. 	 Refer to Submission 2b (Breach of Covenant; Community Benefit; Housing Choice; Precedent).
		 There is no community benefit should Amendment C114 be adopted. In relation to the housing choice, the options that will be available should the covenant be removed would be insignificant, if anything 	

No	Address	Summary of Submission	Officers' Response
		 it will do the opposite of providing single dwelling homes in close proximity to the Activity areas and ultimately erode the neighbourhood character. The removal of the covenants will open the flood attent to covenants will open the 	
		floodgates to construction of town houses and apartments, with higher demand on existing infrastructure, resulting in further traffic parking, privacy and safety issues.	
8	38 Walker Street	 Does not support the amendment. 	
	DONCASTER <u>CI17/27501</u>	 There is no net benefit to the community and Council has no way of anticipating the detrimental effect of the amendment. 	Refer to Submission 2b (Community Benefit).
		 The covenant exists to protect the amenity and neighbourhood character of an area and prohibit overdevelopment. 	 Overdevelopment of land and protection of amenity considerations are controlled by the current zoning provisions and planning overlay.
		 Requests that Council upholds the rights of the 90+ beneficiaries and abandons the amendment. 	
9	28 Larne Avenue	 Does not support the amendment. 	
	DONVALE <u>CI17/27507</u>	 This is an attempt to circumvent the Council zoning that provides certainty for all. 	 The amendment does not propose any rezoning of land which it is agreed provide a degree of certainty. Refer to Submission 8.
		 To allow rezoning piecemeal will remove any structured planning and remove the boundaries that residents make decisions upon. 	
		 The covenant exists to protect the amenity and neighbourhood character of the area and prohibit overdevelopment. 	

No	Address	Summary of Submission	Officers' Response
		 Requests Council to uphold the present conditions and the rights of the 90 beneficiaries. 	
		 There is no net benefit to the community and Council has no way of anticipating the detrimental effect pf the amendment. 	
10	1/6 Hepburn Road DONCASTER <u>CI17/27521</u>	 Objects to the proposed amendment. There are already more than enough developments in this area. 	 The removal of the covenant, if supported, will enable consideration of proposals in line with the planning controls for the area, and consequently amenity and traffic will also be given consideration in assessment of development proposals.
		 Further developments will affect the neighbourhood, crowd the area and negatively affect traffic conditions. 	
11	27 Arthur Street DONCASTER <u>CI17/27523</u>	 Does not support the amendment because the covenant exists to protect the amenity and neighbourhood character of an area and prohibit overdevelopment 	Refer to Submission 8.
		 Requests Council to uphold the present conditions and the rights of the 90 beneficiaries. 	
		 There is no net benefit to the community and Council has no way of anticipating the detrimental effect pf the amendment. 	
12a	42 Frederick Street DONCASTER <u>CI17/27094</u>	 Objects to the removal of the covenant. Quoted excerpt of letter from former Manningham CEO John Bennie (22 June 2006) in response to community concerns after a rally by beneficiaries from the Glen Tower Estate: "save for specific sites and examples within the Doncaster Hill precinct,I can advise that Council has 	• Refer to Submission 2c (CEO Letter).

No	Address	Summary of Submission	Officers' Response
		 never discussed any intent, holds no plan or desire; and has not foreshadowed any intention or interest at any time to take any action that would interfere with the protection that beneficiaries enjoy wit Restrictive covenants" The proposal is not the usual removal of covenants by way of a planning permit where the number of encumbered lots is lower than the upencumbered land. 	 Removal of a restrictive covenant by way of a planning permit is only one of the ways available. The <i>Planning and Environment Act 1987</i> also enables the removal of site specific covenants by way of a Planning Scheme amendment.
		 Notes that the Council report 28 March 2017, relating to C114 referenced C50 but did not include the Panel's findings which might have influenced the Councillors and selectively quoted from the C50 Panel report. Noted that the Panel recommended that the zoning of the Glen Towers estate area be changed from high density sub precinct A to lower scale sub precinct B. Notes that the Panel commented that too broad an approach had been taken in applying prescriptive controls of issues of 	 Amendment C50 Panel Report: The Council report dated 28 March 2017 made reference to the Panel report for Amendment C50 as far as its conclusion regarding general planning principles relating to covenants and the strategic planning for the area. The points noted in the submission which related to the Panel's findings of the desired character for the area must be considered in the context of the regulatory planning changes at that time. Since that panel report, Council has introduced further strategic directions for the area, primarily the <i>Residential Strategy</i> adopted by Council in 2012; and Design and Development Overlay Schedule 8 (DDO8) 2007; Amendment C105 (2014); Amendment C96 (2014), and the recent Amendment C110 27 March 2017. In addition, in the State context, <i>Plan Melbourne 2017-2050</i> notes in policy direction 2.1.2 the "need to facilitate an increased percentage of new housing in established areas to create a city of 20 minute neighbourhood close to existing services, jobs and public transport."
		appying prescriptive controls of issues of neighbourhood character where such character requires specific reference to local site conditions. Quotes that the Panel indicated that: based on the current character, it is difficult to envisage the appropriateness of 11 metre high dwellings in the Walker Street area. Notes that Manningham Council did not accept the findings.	It is acknowledged that Council did not support the Panel's comments in relation to this area. In the officer's response to the Panel recommendation as adopted by Council on 28 March 2006, it was indicated that "AM C50 does not constitute a neighbourhood character study, where neighbourhoods are broken down into small areas based on similarities with the existing built form. AM 50 adopts a more complex approach whereby the character precincts are determined on the ability to manage developmental change in the municipality. Accordingly, the character precincts are of a significantly larger scale compared to neighbourhood character studies undertaken by other Councils. Factors influencing the precinct boundaries of AM C50 include the scale and form of the built form, topography, street layout, proximity to activity centres, road

No	Address	Summary of Submission	Officers' Response
		 Further notes that the Council report dated 28 March 2017 did not make reference to Amendment C50 Panel's comments that the area south of 	widths, and existing planning controls." As noted in the comments above, the current strategic planning framework identifies the desired built form for the area. However, as also previously noted, the neighbourhood character consideration are relevant in assessing the removal of the covenant as it relates to this specific site.
		Doncaster Road (Glen Towers estate) is not an area that should or needs to support substantial changes (precinct A) as proposed by the residential Guidelines. This is due to the topography, existing and proposed access arrangements and physical impediments to easily walking to the core of the activity centre, being Westfield Shoppingtown.	The findings of the Panel report for Amendment C50 are relevant in so far as the reasoning and principles applied by the Panel. The conclusion made by the Panel at the time, that the area relating to the Glen Towers Estate south of Doncaster Road is not an area that should support substantial change, is not a proposition that is open to challenge, as the strategic framework for the area has already been adopted by Council and State Government. Notwithstanding, the comments relating to the area's character are still relevant consideration for Council to consider in the assessment of the restrictive covenant.
		 Queries whether Council has already arranged the dates for the Panel hearing even though a decision by Councillors has not been made. Comments on the option for Council to abandon the amendment and that the recommendations of the Panel report for Amendment C50 be adopted. 	 Council is required to apply to Planning Panels Victoria and agree on the hearing dates for consideration of submissions before notice of an amendment is given as required by Ministerial Direction No.15. In considering the submissions received it is within Council's authority to resolve to abandon the amendment. With reference to any recommendations by Planning Panels on Amendment C50, that amendment has already been approved and as mentioned above the planning controls for the area have changed.
12b	<u>Cl17/29859</u>	 Additional submission refers to the assurance by Manningham CEO noting that the letter indicated that Council will only support removal of covenants where they relate to properties within the Doncaster Hill area. Notes that the access arrangements are even worse today because the Hepburn Road extension will not be proceeding because the route is blocked by a major development site. 	 Refer to Submission 2c (CEO Letter). Access and Traffic: The subject site directly abuts the Development Contributions Plan Overlay-Schedule 1, which identifies a future road extension from Hepburn Road through to Frederick Street. A number of properties have been purchased by Council in Walker Street to facilitate the road extension. Timing of the proposed extension has not yet been determined and a future review of Doncaster Hill Development

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			Contributions Plan 2005 infrastructure items is currently being undertaken by Council. The review will assess the viability of all current transport infrastructure projects.
		 Submits that it seems incredible that Council would proceed with this planning permit application without first notifying the residents of the Glen Towers Estate that they were about to trash assurances written and accepted from such high profile and respected executives. 	 The notification requirements for the removal of a restrictive covenant by way of a planning scheme amendment are set out by the <i>Planning and Environment Act 1987</i>. As noted in the Council report relating to this amendment, public exhibition of the amendment been in accordance with the Act.
13	19 Gifford Road DONCASTER <u>CI17/27307</u>	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	 It is acknowledged that the restrictive covenant is an instrument designed to maintain the existing single dwelling nature of the area. Overdevelopment of land and protection of amenity considerations is controlled by the current zoning provisions and planning overlay.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	 The request is noted and following the assessment of submissions to the amendment Council may choose to refer the submissions to an independent panel or abandon the amendment.
		 There is no net benefit to the community in pursuing the amendment and Council has no way of anticipating the detrimental effect of the amendment. 	Refer to Submission 2b (Community Benefit).
14	7 Hepburn Road DONCASTER <u>CI17/27308</u>	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	Refer to Submission 13.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	
		 There is no net benefit to the community in pursuing the amendment ad Council has 	

No	Address	Summary of Submission	Officers' Response
		no way of anticipating the detrimental effect of the amendment.	
15	21 Walker Street DONCASTER <u>CI17/27536</u>	 Does not support the amendment and requests that the amendment be abandoned. Question the reasons for enabling the owner to exempt himself from the conditions which were accepted on the purchase of the land. Beneficiaries to the covenant have been given various assurances. Noted the statement from Manningham's CEO on 22 June 2006. Refers to the Panel report for amendment C50 which suggests that it is not an area that should support substantial change, due to the topography; access arrangements; and physical impediments to easily walking. Despite the potential benefits that could result to the beneficiaries in removing the covenant many owners in the area choose to rebuild the single homes to preserve the neighbourhood character. Previous application to remove the covenant have been rejected i.e. to the support from the beneficiaries to keep the covenant intact. 	 The <i>Planning and Environment Act</i> allows removal of a restrictive covenant by way of an amendment to the relevant Planning Scheme. The private landowner's personal obligations are not part of the criteria in assessing the adequacy of the covenant removal. Refer to Submission 2c (CEO Letter). Refer to Submission 12a (C50 Panel Report) Refer to Submission 12a (C50 Panel Report) Noted.

No	Address	Summary of Submission	Officers' Response
		 There is no net benefit to the community to pursue Amendment C114. Argues that there are overwhelming dis-benefits and detriment on the removal. Personal financial gain of a single landowner cannot be argued as community benefit. 	 Refer to Submission 2b (Community Benefit).
		 Argues the proposal does not improve housing choice but rather the retention of a single dwelling responds to the need for a variety of houses. 	
		 The ramifications of proceeding with this amendment are impossible to anticipate. The removal would create a precedent and it is essential that to ensure variety of housing choice single dwellings need to be protected. 	
16	41 Walker Street DONCASTER <u>CI17/27537</u>	 The covenant exists to protect the amenity and neighbourhood character of the area and prohibits overdevelopment. 	Refer to Submission 13.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	
17	41 Walker Street DONCASTER D17/51589	 Objects to the amendment. The covenant exists to protect the amenity and neighbourhood character and prohibit overdevelopment. Already many high rise 	Refer to Submission 13.

No	Address	Summary of Submission	Officers' Response
		 apartments in the area and don't need another one. Would like to see Council keep the promise of keeping the area as is now. Asks Council to uphold the present conditions and uphold the rights of the beneficiaries by abandoning the amendment. There is no net benefit to the community and Council has no way of anticipating the detrimental effect of the amendment. 	
DC	5 Walker Street ONCASTER <u>117/27540</u>	 detrimental effect of the amendment. Strongly objects to the Amendment. Notes that finds it inexplicable that Council is even contemplating permitting such a concession. The removal of the covenant will open the floodgates. Requests Councillors to abandon the amendment as it would be setting a dangerous precedent and Councillors should have the residents' interest before any business interest. The character of the area is likely to be affected. There are currently traffic issues for to the high rise apartments in Hepburn Road and it is difficult to exit Short Street as Residents park along Hepburn Road. There are also no sidewalks in Walker Street. Overcrowding with apartments will add to the problem and potential safety issues. 	 The request to remove the restrictive covenant was submitted by the private landowner. Council is required to give due consideration to a request for a scheme amendment. Refer to Submission 2b (Precedent). Refer to Submission 2b (Character). Refer to Submission 12b (Access & Traffic)

No	Address	Summary of Submission	Officers' Response
18b	<u>017/51690</u>	 Previous Councils have maintained that policy to safeguard the covenants restricting the building of commercial and high rise properties on the area bounded by Walker, Hepburn, Gilmore and Arthurs Street. Finds it inconceivable that current Council would seek to overturn the residents. 	 Council must consider the request to remove the covenant on its merits and in a case by case basis.
		 Urges Councillors to walk along Walker Street and observe how the infrastructure impacts on the locals, primarily due to cars being parked along Hepburn Road reducing traffic to a single lane impacting on access and visibility. 	Noted.
		 If the amendment is allowed it will set a precedent for other developments, and result in increased population, more pressure in the infrastructure and potential hazards to residents. 	Refer to Submission 2b (Precedent).
19	11 Gilmore Road DONCASTER <u>CI17/27476</u>	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	 It is acknowledged that the restrictive covenant is an instrument designed to maintain the existing single dwelling nature of the area. Overdevelopment of land and protection of amenity considerations is controlled by the current zoning provisions and overlays.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	 The request is noted and following the assessment of submissions to the amendment Council may choose to refer the submissions to an independent panel or abandon the amendment.
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	Refer to Submission 2b (Community Benefit).

No	Address	Summary of Submission	Officers' Response
20	26 Walker Street DONCASTER <u>CI17/27479</u>	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	 It is acknowledged that the restrictive covenant is an instrument designed to maintain the existing single dwelling nature of the area. Overdevelopment of land and protection of amenity considerations is controlled by the current zoning provisions and planning overlay.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	 The request is noted and following the assessment of submissions to the amendment Council may choose to refer the submissions to an independent panel or abandon the amendment.
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	Refer to Submission 2b (Community Benefit).
21	11 Hepburn Road DONCASTER <u>CI17/27587</u>	Tenant of Council owned land.	
		 Does not support the amendment. 	
		 Queries how is this possible? Doncaster is a beautiful place to live and to over condense the area will take away the prestigious feel that is to live in the area. 	 Amenity and neighbourhood character issues are assessed as part of the consideration of any potential redevelopment proposal.
22	31 Walker Street DONCASTER <u>CI17/27589</u>	 Does not support the amendment. The covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	Refer to Submission 8.
		 Requests that Council uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	

No	Address	Summary of Submission	Officers' Response
23	2 Hepburn Road DONCASTER <u>CI17/27598</u>	 Objects to the amendment. If the amendment is allowed it will alter the character, amenity and quite enjoyment of the area bounded by Tram Road, Whitten's Lane, Walker Street and Hepburn Roads. The proposal if approved will open the flood gates of over development and destroy the character of the area. Council has no accurate way of assessing the future impact of approving the amendment and the future problems relating to traffic congestion traffic management and danger to children will be made worse. Implores Council to abandon the amendment. 	 Refer to Submission 6 (Amenity). Refer to Submission 2b (Precedent). The current planning controls applicable to the site enable the consideration and assessment of these issues.
24	2 Hepburn Road DONCASTER <u>CI17/27599</u>	 Objects on the grounds that the applicant has not complied with the law relating to advertising of the application Claims that there was no notice on the property, either standing or knocked down. Suggests that the erection of the notice was deliberately substandard in the hope and expectation that it would not be noticed by residents or others passing by. The application should be rejected due to non-compliance with the conditions. 	 Under section 19 (2A) of the Planning and Environment Act 1987 the planning authority "must cause notice of an amendment providing for the removal or variation of a registered restrictive covenant to be given by placing a sign on the land." The required sign was placed on the land on 20 June by a Council officer. The sign was re inspected on 24 July and 28 July and subsequently removed on 7 August. At the second inspection it was noted that the sign was on the ground face up quite a distance away from its original placement. It was subsequently re-erected and displayed for an extended period before being removed.

No	Address	Summary of Submission	Officers' Response
25	47 Walker Street Doncaster <u>CI17/27973</u>	 Does not support the amendment. The covenant exists to protect the amenity and neighbourhood character of the area and prohibit overdevelopment. 	Refer to Submission 8.
		 Requests Council to abandon the amendment and uphold the rights of the 90+ beneficiaries. 	
		 There is no net benefit to the community and Council has no way of anticipating the detrimental effect of the amendment. 	
26	19 Walker Street	 Does not support the amendment. 	Refer to Submission 2b (Character and Precedent).
	DONCASTER <u>CI17/27975</u>	 Wants Council to reject the amendment as the character of the neighbourhood is fundamentally dependent on the covenants with single dwellings. 	
		 If the amendment is approved it will result in a flood of similar applications and massive destruction to the family friendly neighbourhood. 	
27	13 Elm Tree Road	Supports the amendment.	Submission in support noted.
	DONCASTER CI17/27981	 Would like to see footpath constructed so kids can walk to school safely. 	Request noted,
28a	14 Gilmore Road DONCASTER	 Does not support the amendment as one of the beneficiaries. 	
	<u>CI17/27989</u>	 There is no strategic justification for the amendment as a single lot application, unlike a Council driven amendment as C72 and not within the Doncaster Hill Activity Zone. 	 The application to remove the covenant was initiated by the owner of a single under the provisions of the <i>Planning and Environment Act 1987</i>. As outlined in the report, there are a number of criteria which apply to the consideration of such requests.

No	Address	Summary of Submission	Officers' Response
		 There is no net community benefit from the removal of the covenant. There will be a greater community benefit derived from retaining the single dwelling character. This will in turn result in increased housing alternatives, and higher quality of living with larger open space and lower densities. Further benefits relate to reduced noise, traffic, and overlooking. 	 With reference to the strategic justification for the removal, this must take into account the planning direction for the area which support higher density development. Refer to Submission 2b (Community Benefit)
		The approval will encourage other site specific amendments resulting in unpredictable changes to the area. It would further increase traffic, noise, and parking, change the character of the area and result in a precedent for other covenant removals.	
		 Approval of the amendment will result in an undesirable precedent that will encourage developers to bypass VCAT and the Supreme Court to remove covenants on a site by site basis. 	Refer to Submission 2b (Precedent)
		 The submission refers to section 60 (5) of the Planning and Environment Act. This provision sets out the test for considering the removal of a restrictive covenant by way of a planning permit. It is noted in the submission that if the removal of the covenant is allowed it will cause material detriment as other owners 	 Refer to Submission 5 (Section 60(5) Test) Refer to Submission 2b (Detriment)

No	Address	Summary of Submission	Officers' Response
		will apply for the removal of single dwelling covenants on their lots.	
		 The development of the land into multiple dwellings will result in increased density, traffic, noise, overlooking and parking issues. Further as there are no footpath, the increased traffic and parking will make the streets more dangerous, and reduce the quality of life. 	 Refer to Submission 2b (Character) and Submission 12b (Access & Traffic)
		The residents selected this area as their place of residence due to the desire to retain its existing current single dwelling character and landscape. Multi dwellings will spoil the character of the area.	
		Younger residents selected the area due to the single dwelling landscape, open space and lifestyle.	
		 Removal of the covenant will result in reduction in the value of properties. 	 Impact on property values is not a valid planning considerations.
		 The covenant is a condition of the purchase of land and all owners on the Plan of subdivision should abide. 	 The Planning and Environment Act allows for a person to seek an amendment to the Planning Scheme to remove a restrictive covenant.
		 Notes that even if no objections were received from the owners of land benefitted by the covenant their interest must still be considered. The lack of any objections would not result in a conclusion that they are unlikely to suffer any 	 The proposed amendment is still required to be considered by Council regardless of whether submissions are received.

No	Address	Summary of Submission	Officers' Response
		 detriment. It is unlikely that the initial objections to the covenant removed in 2000 has changed. This is a site specific amendment for the benefit of a single land owner with no regard to the strategic intent or net community benefit. Urges Council to consider abandoning the amendment as there is no community benefit and as Council provided previous written assurances after considering legal advice that it would not interfere with the protection that beneficiaries enjoy with the covenant. 	 Refer to Submission 2b (Community Benefit). Refer to Submission 2c (CEO Letter).
28b	<u>CI17/27816</u>	 Additional point included to the initial submission: Council previously advised in writing that it would not interfere with the protection that beneficiaries enjoy with restrictive covenant. It refers to former CEO letter on 22 June 2006 which provided a written assurance that Council holds no plans that would interfere with the protection beneficiaries enjoy with restrictive covenants. It further notes that the letter is legally binding on the Council and Council is now estopped from going back on its assurances to beneficiaries. The submission indicates that it would be unconscionable conduct on the part of Council to proceed with the amendment. It noted that it would be unethical for Council to go back on the CEO's assurances. It also indicates that the report presented to Council on March 	Refer to Submission 2c (CEO Letter)

No	Address	Summary of Submission	Officers' Response
		2017, did not include reference to the written assurance in the letter by the CEO and previous legal advice and as such failed to provide full disclosure to Council, which results in wondering whether there is bias and lack of integrity on Council to recommend and have Councillors approve the amendment.	
28c	CO17/42159	 Updated version of submission including reference to the former CEO's letter. 	
29a	14 Gilmore Road DONCASTER <u>CI17/27792</u>	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	Refer to Submission 13.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	
29b	14 Gilmore Road DONCASTER D17/52519	 Asks Council to consider whether it is appropriate and desirable for this amendment to proceed in the face of immense community opposition. Noted that although does not oppose the development on Doncaster Hill, believes that the scale of Council's vision for Doncaster Hill and the proposed density is excessive. 	 Council gives due consideration to both the amendment and submissions received. The development of Doncaster Hill is outside the scope of Council's consideration of this amendment.

No	Address	Summary of Submission	Officers' Response
		 Notes that if the covenant is removed and more than one dwelling is approved he beneficiaries will suffer detriment. 	Refer to Submission 2b (Detriment).
		The removal of the covenant will cause detriment to the beneficiaries.	
		 The removal of the covenant will create a precedent and other owners will apply to have the covenants removed from their land. 	Refer to Submission 2b (Precedent).
		 The development of multiple dwellings on the land will result in increased population density and increase in traffic, noise, overlooking and traffic issues. Multiple dwellings will reduce the quality of life. 	Refer to Submission 12b (Access and Traffic).
		As there are no footpath in the area, and increase in traffic and parking will make the streets more dangerous for residents and visitors and especially for the elderly.	
		The subject site is not suitable for multiple dwellings as it will affect the flow of traffic and create traffic issues. The current street frontages will not allow for on street parking creating detriment regarding traffic, noise and traffic issues. Development will make vehicle access entering into the neighbourhood more difficult, especially for emergency services vehicles.	
		 Residents have selected this area as residence and desire to retain its existing single dwelling character and landscape. 	Refer to Submission 2b (Character).

No	Address	Summary of Submission	Officers' Response
		Younger families have selected this area due to single dwelling landscape, open space and lifestyle. The residents wish to retain the safe and single dwelling environment.	
		The character of the area will be changed to a typical inners city, concrete; noise and busy neighbourhood.	
		 The removal of the covenant will reduce the value of their property. 	Refer to Submission 28b.
		Would like to protect single dwelling covenants as it make the area quite unique, and ensuring that the property values are sustained and quality of life is maintained.	
		 Reference to section 60(5) test for removal of a restrictive covenant including perceived detriment. 	Refer to Submission (Section 60(5) Test)
		 Refers to original contract of sale for all the properties in the plan of subdivision and the restrictive to build more than one dwelling on the land. All residents require all owners to abide by these provisions. 	 Separate enforcement mechanisms outside the planning scheme amendment process are open to the beneficiaries.
		 Refers to previous objections to the covenant removal and indicates that the opposition to the removal of the covenant continues. 	• Noted.
30	3 Arthurs Street	 Does not support the amendment. 	
	DONCASTER <u>CI17/27979</u>	 Main reason for the objection is the loss of amenity due to the fundamental change in the character of the neighbourhood. The 	Refer to Submission 2b (Character).

No	Address	Summary of Submission	Officers' Response
		area is a suburban street with single dwellings, with no footpaths, trees and grassed backyards. The covenant was a feature that was sought and it was a condition of the contract of sale.	
		 The approval of the covenant removal will open the gate for other type of the development that is not within the character of the neighbourhood. The streets have already been impacted by the apartment style development, traffic has increased and street parking has been restricted and reduced. Removal of the covenant will encourage development that will bring more traffic and with air and noise pollution. 	 Refer to Submission 2b (Precedent). See officer's response to submission 2(a) 2nd dot point.
		 Notes that 42 Walker is a consolidation of two lots. Each lot is burdened by a single dwelling covenant. It thus allows the owner to build one dwelling on each lot. The removal is merely for personal gain. 	Noted.
		 There is no net community benefit. There are many negatives: increased traffic, less safe for pedestrians, restrictive access to the neighbourhood via the three primary road entry/exit points, the commencement of the destruction of single dwelling neighbourhood character. 	 Refer to Submission 2b (Community Benefit) See discussion in the main body of the report section 3 C.
		 As there are already two houses on the land, the removal of the covenant does not offer any discernible difference in 	Refer to Submission 2b (Housing Choice).

No	Address	Summary of Submission	Officers' Response
		housing choice that would result in any community benefit.	
31	4 Hepburn Road DONCASTER <u>CI17/27990</u>	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	Refer to Submission 13.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	
32	3 Hepburn Road DONCASTER <u>CI17/27793</u>	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	Refer to Submission 13.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	
33a	29 Walker Street DONCASTER <u>CI17/28017</u>	 Does not support the amendment. Would like to keep the neighbourhood character of the street. 	Refer to Submission 2b (Character).

No	Address	Summary of Submission	Officers' Response
33b	29 Walker Street DONCASTER <u>D17/52259</u>	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	Refer to Submission 13.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	
34	15 Gilmore Road DONCASTER <u>CI17/28023</u>	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	Refer to Submission 13.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	
35a	8 Gilmore Road DONCASTER <u>CI17/27991</u>	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	Refer to Submission 13.
		 Asks Council to uphold the present conditions and the rights of the 	

No	Address	Summary of Submission	Officers' Response
		beneficiaries by abandoning the amendment.	
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	
35b	8 Gilmore Road DONCASTER CI17/27992	 Objects to Amendment C114 on the basis that the covenant protects the amenity and neighbourhood character of the area and prohibits overdevelopment. 	Refer to Submission 13.
		 Asks Council to uphold the present conditions and the rights of the beneficiaries by abandoning the amendment. 	
		 There is no net benefit to the community in pursuing the amendment ad Council has no way of anticipating the detrimental effect of the amendment. 	
36	16 Gifford Road DONCASTER <u>CI17/28031</u>	 Supports the amendment. Old constraints are not suitable for the development of the community now days. Doncaster needs more vitality and it will be positive for everyone. 	Support noted.