28 February 2020

Mr Michael Lennon
Planning Commission
DPTI.PlanningReformSubmissions@sa.gov.au

Dear Mr Lennon

Submission - Planning and Design Code, Phase 3

Please find following an overview submission response to the Planning and Design Code, Phase 3, on behalf of Stormwater SA.

Stormwater SA is an independent, not-for-profit industry group that promotes innovative and sustainable practices, standards and policies that minimise adverse environmental, social and economic impacts resulting from the management of stormwater in South Australia. Our membership comprises of approximately 150 individual and corporate members from across the private and public sectors, including manufacturers, contractors, consultants, researchers, and all levels of government. Stormwater South Australia is part of the national industry group Stormwater Australia which has chapters in most mainland Australian states.

Stormwater SA is aware of, agreement and in total support of the response submission provided to this phase of the code by Water Sensitive SA. Many Stormwater SA members and executive were involved in assisting to shape the Water Sensitive SA submission.

For the most part, this submission will aim to not repeat and duplicate the Water Sensitive SA submission, and will address issues on a broad nature rather than commentary on a clause by clause basis.


Many presentations on changes to stormwater related management in association with the new code have included commentary indicating that parallel to the new code process, there was consideration for the alteration of the BCA.

These alterations specifically being to remove reference to what is known as the 'compulsory rainwater tank' requirements. The rational given behind this being a consideration that the new policy was seeking to more strongly encourage rainwater tanks
at the planning stage of assessment and that master planned of the like of 'Lightsview',
which present alternate methods of precinct scale harvest and delivery of recycled water
to dwellings, should not be hamstrung by the compulsory requirement.

There is no argument that the scale and associated performance of the existing
compulsorily rainwater tank requirements, introduced as a water conservation measure at
the end of the millennium drought, are due for review and reconsideration in context with
current era understanding of the water and stormwater needs and requirements of our
community and supporting infrastructure management.

The importance of rainwater harvest and use tanks in our current developing urban
environments now goes well beyond just water conservation. Rainwater harvest and use
tanks in most urban infill scenarios provide for the most efficient, practical, effective and
economic manner of managing the desired performance outcomes for the multiple facets
of good stormwater management. Performance outcomes which are supported and called
for by the State Government Water Sensitive Urban Design (WSUD) Policy.

Stormwater quality improvements and stormwater volume reduction are very difficult to
achieve in small to medium scale urban infill development via techniques other than
stormwater harvest and use tanks. The amount and frequency of use of the harvested
water back within toilets, laundries and hot water systems of residential development are
pivotal in achieving the targeted performance in these areas.

Relocating rainwater tanks and associated technical performance requirements from the
BCA to the planning phases of the development process, severely limits the ability to
ensure the technical integrity of the design and arrangements of these systems.

Further based on the 'on balanced consideration' approach of planning assessment and
decision making, it will always at the discretion of the planning assessment office or
culture of a planning organisation, as to the level of importance or weighting to be
provided to stormwater management and hence tank installation within new
developments.

The retention in the BCA of better considered rainwater harvest and use tanks, cognisant
of the role they play in the greater stormwater management picture, is considered
imperative.

It is agreed that for master planned developments of nature of 'Lightview' which
accommodate an appropriate precinct scale stormwater management approach, as well
as, harvesting and delivery of recycled water back to individual development sites, should
justifiably be accommodated provisions within the BCA which exclude them from the individual property bases rainwater tanks and associated features.

**Loopholes and Compliance**

One of the biggest current barriers to the effective implementation of site based stormwater management and rainwater tank measures within new development, are the mechanisms and timing allowances associated with the occupancy and completion of developments post the granting of development approval.

At present developers are well within their rights to hand over to new home purchasers properties which are deficient of the rainwater tanks and stormwater management measures approved and required in association with these developments.

Similarly to driveways and landscaping, 'stormwater by owner' is a common exclusion to the home building contract. Where the absence of completed landscaping or a driveway is evidently obvious to the new home owner, the requirement of the new home owner to implement elaborate stormwater management measure or rainwater harvest and use tanks is quite commonly not obvious or clearly highlighted to the new homeowner.

Under current arrangements, the ability for Local Government to undertake development compliance action on the non-conformance of stormwater management or rainwater harvest and re-use tanks, is not possible until the new home owner has taken over the property.

This current arrangement does not result in positive outcomes for the customers and community or for the management of the impacts of development on the public stormwater networks.

It cannot be more strongly recommended that measures be implemented in association with the new planning policy which require the 'installation and functional operation of all stormwater management and rainwater collection and use measures, to occur prior to occupation of the development'.

It is believed that a mechanism of this nature, which required stormwater management and rainwater harvest and use measure to be implemented at the time of construction of the dwelling would act to genuinely deliver the expected and approved performance of the development.
Flood Protection - Non Residential Properties

It is our understanding that under the new code many or all non-residential developments would be excluded from provisions calling for the consideration of flood protection or flood related impacts, and this is at complete odds with the current consideration under most development plans.

We would consider it of extremely high importance to ensure that appropriate provisions in relation to flood protection and flood related impacts were preserved and included within the new code, and am aware of no reasonable justification as to why these provisions or protections would be proposed to be removed in the first place.

During the late 90/early 2000s, one of Adelaide’s leading Hydrologists within many years’ experience in the Government flood monitoring and prediction sector, undertook a detailed investigation and study into the impacts and cost flooding on the industrial and commercial area of Mile End. This study outlined the extreme costs and impact on these businesses and associated economy and was a large impetus behind the commencement of the Brown Hill and Keswick Creek Flood Mapping and Stormwater Master Plan project.

Since the release of the flood mapping for this area in 2003, many new development have been undertaken in this Mile End area and all have been afforded not only flood protection measures, but also design considerations to ensure the developments do not adversely impact the predicated behaviour of the flooding. These developments include the Mile End Homemaker Centre, Bunnings Mile End and numerous other Bulky Goods, motor vehicle servicing facilities, retail and industry sites.

One only needs to look at the sensitive on impacts to businesses and industries effected by the recently bushfires in regional Adelaide. The recognition of the importance of mitigating natural disaster impacts on businesses, employment and the associated economy has been a critical conversation in the aftermath of these fires. It would be considered that to a large part the some conversation would relate to the natural disaster of flooding and as such, reinforce the importance of mitigating the impacts of flooding when the opportunity arises at new development stage.

Flood Mapping

There are concerns that based on the varied manner in which different types of existing and historical flood mapping is either reference in or utilised in parallel with existing
development plans, the proposed new plan will not offer the same ability to capture all these plans and hence enable provision of appropriate measures.

Having said this, we also recognise the desire for the new planning system to have consistent approaches across all of the region, for simplification of use, assessment and implementation of the system.

Stormwater SA has recommendations in relation to how the referencing and utilisation of flood mapping could transition with the new plan. A proposal which not only provide over time the consistency principles which are sort from the new system, but at the same time advance and benefit the stormwater management sector in updating and bring current standards relevance to stormwater and catchment management practices. We would be more than willing and interested in further discussing this with the DPTI Code team, and to this point, reached out to the Code team around the beginning of the year.

**Technical Requirement for Flood Considerations**

In relation to the objectives and design requirements outlined in association with flood protection for new development, there appears to be many areas of substantial variance from the existing policy library and requirements outlined in many existing development plans.

We are again unsure of where many of these requirements have come from, any in many cases are unsure as to what is actually being desired from new provisions.

Again, we would encourage and welcome the opportunity to discuss this further with DPTI Code staff, in the aim of providing assistance in developing meaningful, practical, consistent and technically appropriate guidance in this area.

Overall Stormwater SA is supportive of developing a new planning system which provides for an improved, streamlined and more consistent process and outcome for applicants and customers; however we are strongly of the opinion that this must and can be done without the necessary for compromising or demonising sound and relevant technical considerations.

We would welcome further discussion with the DPTI Code team on any of the above or related information, and offer to work collaborately and respectfully with the Code team to develop further improvements.
Kind Regards

Andrew King  
Chair, Stormwater South Australia