



6F DRAINAGE INFILL CONTRIBUTIONS PROVISIONS

INTRODUCTION

Stormwater management is critical in areas where intensification of land use is occurring through redevelopment or further development of land. A consequence of this form of development – termed infill development, is an increase in the extent of roofed and paved areas resulting in additional volumes of water needing to be managed. Some flows can be managed at source within the private lots, and this approach is addressed in *Local Planning Policy 8C Stormwater Management Provisions*. However it is the remaining and cumulative effect of surplus stormwater that is not managed within the private lot which will continue to place pressure on the City's drainage system in established areas.

This is critical in the established areas of the City where the drainage system is operating at or beyond capacity or without the treatment systems necessary to treat the stormwater before it enters drains, waterways and wetlands.

To address this problem, contributions can be made to the City at the time development or subdivision occurs. Contributions received can then be applied to upgrade, augment or extend stormwater and water quality measures off site within the City's streets and reserves.

These provisions set out the City's approach to assessing the need for and scale of contributions required from developers towards the upgrading of the City's stormwater and drainage management infrastructure from infill development and infill subdivision. The provisions provide for an efficient, equitable and measured approach to the assessment, securing and application of developer contributions to the upgrading of the City's drainage infrastructure. Contributions will ensure that drainage infrastructure is upgraded in areas required as a consequence of subdivision and development and that infrastructure continues to operate in a safe and efficient manner, despite the significant infill urban growth being experienced in the City.

These provisions replace former *Council Policy 182/3 – Vasse Diversion Drain Policy and Guidelines* and former *Council Policy 184/3 – Development Contribution Drainage (Main) Policy*. Unspent contributions remaining at the time these policies are rescinded will be applied to provide for and supplement the upgrading or augmentation of the City's stormwater drainage systems in the areas identified by these provisions.

These provisions need to be read in conjunction with the rest of the relevant planning framework, especially the other aspects of this *Local Planning Policy 6: Development Contribution Policy Provisions* and particularly *Local Planning Policy 8C: Stormwater Management Provisions*.

The provisions have also been prepared with due regard to principles relating to developer contributions established in common law and as set out in *State Planning Policy 3.6: Development Contributions for Infrastructure (SPP3.6)*. Users of these provisions should also be aware of other requirements that may arise from the local planning scheme and/or development guide plans or detailed areas plans, as well as the potential for contribution requirements related to roads, footpaths and community facilities infrastructure as well as other basic infrastructure, such as power, water, sewer and telecommunications.

INTERPRETATION

For the purposes of these provisions:

Residential Infill - means the use of land for grouped or multiple dwelling units and/or ancillary buildings within a lot through either the development approval process or the land subdivision process including strata title. The term includes the development or redevelopment of grouped and multiple dwellings, retirement dwellings, tourist accommodation and aged and dependent persons homes.

Commercial and Industrial Infill - means the use of land for development, redevelopment, expansion or intensification of commercial, industrial and other non-residential land uses and ancillary developments within a lot through either the development approval process or the land subdivision process including strata title.

Contribution – means a financial contribution payable to the City of Busselton for the purposes of stormwater and drainage works and includes the term ‘cost contribution’ and ‘contribution to works’.

Impervious Surfaces – means built surfaces that prevent absorption of water into the ground, such as roads, parking areas, paved areas and rooftops and has the same meaning as impermeable surface.

ARI–(Average Recurrence Interval) means the average or expected value of the periods between exceedances of a given rainfall total accumulated over a given duration (for the purpose of this policy should be taken as one hour duration unless otherwise specified).

1 year ARI means the one year average recurrence interval, of a one hour duration, which for Busselton and Dunsborough areas equates to 16.5mm of rainfall. The volume of stormwater runoff from impervious surfaces equates to 1m³ per 60.5m², however to achieve a rounded and consistent rate, the City has applied a rate of 1m³ per 65m² at *8C Stormwater Management Provisions*.

5 Year ARI means the five year average recurrence interval, of a one hour duration, which for Busselton and Dunsborough areas equates to 25mm of rainfall. The volume of stormwater runoff from impervious surfaces equates to 1m³ per 40m².

METHODOLOGY

The rationale for, and the preferred approach to the new local planning policy provisions is set out, as follows.

General Approach – Rationale

1. New development in greenfields areas is generally occurring in accordance with a local water management strategy and/or urban water management plan. In these areas stormwater management systems are in place to accommodate the quality and flow of excess stormwater from private lots to the street drainage system. This stormwater is then safely and efficiently managed prior to it entering a receiving water body. The need to extend or augment the City’s drainage system does not arise as a consequence of development in these areas and therefore there is no need to consider a contribution payment to works to upgrade infrastructure as a

result of these developments unless a greenfield development discharges into existing development drainage.

2. Infill developments other than single residential and new developments in greenfields areas are generally required to manage stormwater generated by the 5 year Annual Recurrence Interval (ARI) rainfall event on site pursuant to the City's stormwater management policy provisions.
3. Unlike single residential developments, infill developments are generally occurring in older designed and constructed subdivisions where the stormwater design for the subdivision has not anticipated the increased impervious areas and runoff into the street systems from infill developments. Similarly urban water management plans may not be in place in these areas to manage stormwater to contemporary standards. The street drainage system would need to be augmented or additional works undertaken to treat and/or manage water quality and additional flows prior to it entering a receiving water body.
4. Because development in these areas will contribute significantly more impervious area than that anticipated at the time the subdivision was designed, it follows that it is appropriate for a contribution to works to be made at the time of subdivision or development for this shortfall. Further to this there are generally very limited water quality treatment measures in place to manage and treat that water prior to it entering a receiving water body via the City's drainage system.
5. Without either the management of this stormwater within the lot, or the development making a contribution to the City to upgrade its stormwater system to manage the stormwater offsite, the City would need to upgrade the system at ratepayers' expense as a result of infill subdivision and development.
6. Given the above, developments could be given the option to either manage this water (stormwater generated by the 5 year ARI rainfall event) on site, in accordance with the design principles set out in the City's stormwater management policy provisions *8C Stormwater Water Management Provisions* or alternatively make a contribution to the upgrading of the City's drainage infrastructure in accordance with these policy provisions. This retains reasonableness and equity within the design of this policy provision and avoids the policy applying a mandatory upgrading charge on all infill developments.
7. The policy provisions will not apply single dwellings in in-fill areas. This is due to the low risks associated with managing stormwater for single dwellings, the availability of land within lots to manage stormwater, and the low demands these developments place on the public drainage system.

In broad terms the contribution to works for infill development will be based on stormwater generated by the 5 year ARI rainfall event which is approximately 25mm of rainfall in one hour. The 5 year ARI rainfall event has been selected for the following reasons:

- Serviceability of roads is a key element of drainage design.
- Road serviceability is based upon the 5 year ARI.
- Development will be required to manage as a minimum the 1 year ARI rainfall event (this is the minimum standard set out in the City's Stormwater Management planning policy provisions; Local Planning Policy 8C) within the lot, but will generally contribute additional storm water above the 1 year ARI rainfall

event and up to the 5 year ARI rainfall event (and greater) within the street system.

- Management of larger quantities of stormwater within lots – for instance management of the 100 year ARI or the 50 year ARI would place an unreasonable imposition on infill development, or limit the potential for lots to realise their full infill potential, particularly for smaller lots or in instances where it would be impractical to manage this stormwater due to locality constraints or physical impediments.
- Increases in impervious areas in residential infill areas are typically localized within street blocks coded for infill, where existing 5 year ARI design infrastructure is at capacity or has exceeded capacity.

Principles for the Quantum of Charges

In terms of formulating a general contribution rate, the City's preference has been to keep the formula and the quantum simple and efficient for the purposes of implementation. The City's preference has been to adopt a rate of contribution per square metre of impervious area based upon the square metre of impervious area that is being added to the site.

The City also seeks to ensure that the contribution rate per square metre should be struck so that it is cost neutral to the developer and the City, and does not provide a positive incentive to the developer to avoid retaining stormwater that should otherwise be retained 'on lot'. This means that the charge should not be so low that there is a positive incentive to the developer to make a payment and not retain the 5 year ARI on site. If the cost to retain the stormwater for the 5 year ARI on site is significantly higher than the cost to make a payment then there will be an incentive to choose to make a payment to the City for the works.

Similarly the contribution should be largely cost neutral to the City. As the infrastructure provider, and as far as is practicable, the City should not be disadvantaged by the choice of a developer to make a payment to works. This means that the charges should meet the reasonable costs to the City to provide drainage and stormwater treatment measures within the street and reserve system that would otherwise be provided on site.

If the moneys received by the City are too low, the City will either be unable to fund works; shortfalls will need to be made from general rates revenue; or alternatively the City will need to source supplementary funding which may delay or postpone works.

Calculation of Charges

If a developer chooses not to manage the 5 year ARI on site and instead chooses to make a contribution for the 5 year ARI event to the City, it is the difference in retention between the 1 year and 5 year ARI that provides the basis for determining the contribution rate under these provisions.

According to the Australian Bureau of Meteorology in the *Design Rainfall Intensity Chart*, a 1year ARI storm event will generate 16.5mm of rainfall per hour whilst a 5 year storm event will generate 25mm of rainfall.

To calculate what a property should pay as a contribution, to the City for upgrading the urban stormwater drainage system for this "difference", the method is set out as follows:

- a. If retention of up to the 5 year ARI (25 mm of rainfall) is provided onsite no charge applies.

- b. On current estimates it costs approximately \$2,500 for a standard single residential dwelling to meet the current standard of on-site stormwater retention for a 1 year ARI or 16.5 mm of rainfall.
- c. For a standard single dwelling of approximately 250m² of impervious area this equates to \$10/ m² of impervious area. To cater for the 5 year ARI, retention needs to retain an additional 36% of capacity i.e. 16.5mm of rainfall equates to 64% of 25mm of rainfall. Based upon relevant examples and estimates the cost to provide this additional capacity on site is \$450. Therefore the total cost to manage the 5 year ARI on site is \$2,950.
- d. Using the example above and assuming that the additional cost to provide 36% more capacity is estimated at \$450, for a standard 250 m² dwelling it would cost \$2,950 to manage 25 mm of rainfall in a one hour period. Therefore, the cost per square metre for the 5 year ARI is an additional \$1.80/sqm which is determined as: [$\$2,950 \div 250\text{m}^2 = \$11.80/\text{m}^2$, $\$11.80/\text{m}^2 - \$10/\text{m}^2 = \$1.80/\text{m}^2$].

Therefore, where developments cannot practically meet the requirements on site and/or developers choose to make a contribution to the City to meet the requirement off site, a drainage contribution should be made which is based on the difference between a 1 year ARI and 5 year ARI rainfall events which is \$1.80 per square metre of impervious area.

Contributions for residential strata and subdivision approvals are referenced to Table 1. The methodology behind the dollar values set out in Table 1 is as follows:

- a. In order to provide for effective administration of the contributions, the contribution rates for residential subdivision have been grouped according to the residential density coding.
- b. To calculate the contribution rate, the maximum permissible site coverage (in m²) of the average lot size of the applicable residential density coding is multiplied by \$1.80. Contributions are rounded to the nearest whole dollar.
- c. For lots coded at a density below R10 (ie. R5, R2.5, R2), the contribution will be capped at \$720 reflecting that it is usual for development on these lots not to reach the maximum site coverage allowed under the R-Codes and generally having a higher capability to manage stormwater on site.
- d. *For R12.5 lots, the contribution is \$640 to maintain consistency with the contribution rate advertised in these provisions. All other contributions are equal to or less than the contribution rate when these provisions were advertised in draft form.*
- e. For commercial and industrial strata and subdivision applications, lots have been grouped according to average size and the site coverage value is taken to be 90%. This value reflects the assumption that landscaping usually comprises 10% of the site area and therefore the balance of the site is available to be developed with impervious surfaces.

POLICY PROVISIONS

1.0 Liability for contributions

These provisions are to be read in conjunction with *8C Stormwater Water Management Provisions* which sets minimum standards for the retention and infiltration of stormwater on site before any surplus water is directed to the City's stormwater drainage system and/or street drainage system and only apply in the areas illustrated in Schedule 1.

- 1.1 A liability for payment of a contribution toward the management of stormwater only arises where:
- i) The proposal involves Residential 'infill'; or
 - ii) Commercial or Industrial 'infill', and
 - iii) The proposal is situated within an area illustrated in Schedule 1, and
 - iv) The proposal does not require an urban water management plan to be prepared for the subdivision or development for the purposes of managing urban stormwater, and
 - v) The proposal will manage the 1 year ARI on site but not the 5 year ARI on site.

Development

- 1.2 Development Applications shall satisfy these policy provisions by making a contribution to the upgrading of the City's stormwater and drainage systems at a rate of \$1.80 per square metre of additional impervious area.

Subdivision and Strata

- 1.3 In the case of strata and subdivision applications the City will request the WAPC to apply a condition of approval requiring upgrading of the City's drainage infrastructure as a consequence of the proposal. The condition shall be satisfied through payment to the City for stormwater and drainage systems upgrading in accordance with Table 1 for each proposed lot.

TABLE 1 – Infill Subdivision and Strata per Lot Contribution Rates

Residential Infill	
R2, R2.5 and R5	\$720
R10	\$720
R12.5	\$648
R15	\$599
R17.5	\$514
R20	\$405
R25	\$315
R30	\$297
R35	\$257
R40	\$218
R50	\$194
R60	\$162
R80	\$151
Commercial and Industrial Infill	
Area of lot/Strata	Contribution/lot
0 - 250m ²	\$400
251 –750m ²	\$1,200
751 – 1200m ²	\$1,940
1201 +	\$2,200

General Requirements

- 1.4 A liability to make a contribution arises only once and at the earliest stage of subdivision or strata or development in accordance with the following.
- i) Where a subdivision is proposed, a contribution will be sought on a per lot basis at the subdivision approval stage; or
 - ii) Where dwellings/units and/or commercial/industrial developments are proposed without concurrent subdivision, a contribution will be sought on an impervious square metre rate pursuant to 1.2 above at the development approval stage; and
 - iii) Where a lot may have further subdivision or development potential (for example, as a grouped dwelling site or conventional freehold subdivision), a contribution will be assessed and may also be required at the next development stage where additional dwellings or lots are proposed.

The liability of developers to satisfy their contribution arises prior to whichever of the following two events occurs first -

- i) In the case of subdivision, where a contribution has not already been paid in relation to dwelling/s developed on the lot/s, the City endorsing a deposited plan for clearance of the relevant condition prior to the WAPC endorsing its approval on the deposited plan relating to the subdivision of the developer's land; or
 - ii) In the case of development, where a contribution has not already been paid in relation to the subdivision of the lot/s on which dwelling/s are to be developed, prior to the commencement of the development (and the City shall apply conditions to planning consent notices requiring that a contribution is made prior to the commencement of the development).
- 1.5 Small increases in impervious areas will be exempt from the need to comply with these provisions. In cases where there is an ability to manage the 5 year ARI stormwater on site and the risks to the City's drainage infrastructure or water quality are low, an exemption from the need to comply with a contribution pursuant to these provisions will apply. These circumstances are set out as follows:
- i) A contribution arising from an assessment of the application in accordance with these provisions would be less than \$50.00.
 - ii) The application is for a residential outbuilding associated with a lawfully approved grouped dwelling, or a minor addition to a lawfully approved grouped dwelling whereby the additional aggregate impervious area would not exceed the maximum site coverage set out in column 6 of Table 1 of the R Codes.

1.6 The calculation of the value of any contribution shall be based on the total area of all additional impervious areas but will not include the impervious areas of any structures removed or demolished to make way for the new development.

1.7 The contributions collected through these policy provisions [including those unspent and collected under the former policies namely *Council Policy 182/3 – Vasse Diversion Drain Policy and Guidelines* and former *Council Policy 184/3 – Development Contribution Drainage (Main)*] will be used to provide water quality improvements and upgrades to the City's stormwater and drainage system. Contributions collected and expended for this purpose shall include the planning, designing, administration and construction of these works but shall not extend to the maintenance of these works.

2.0 Administration of funds

The City will establish and maintain an account in accordance with the *Local Government Act 1995* into which contributions will be credited. All contributions, including any interest earned thereon, shall only be applied to the purposes set out in these provisions.

The contribution amounts set out in these provisions will be adjusted in accordance with a three year rolling average of quarterly movements in the Local Government Cost Index (LGCI) for WA (ABS) commencing 1 September 2014.