# Brisbane City Plan 2014

# Local Government Infrastructure Plan

# Extrinsic Material

# Stormwater network

# December 2021

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## Addendum

Council has undertaken to make an interim amendment to the Local Government Infrastructure Plan to ensure that it accurately reflects Council’s trunk infrastructure priorities. As an interim amendment, the changes are limited in nature and only affect the infrastructure schedules and related costings.

Details on the interim amendment process can be found in the Interim Amendment Extrinsic Material document.

The Stormwater Extrinsic Material document was prepared in June 2018 and has been updated only to reflect the changes made as part of the interim amendment to the infrastructure schedules and costings. A complete review of the document may be undertaken as part of a future LGIP amendment as required.

## Introduction

### Background

Brisbane City Plan 2014 is Council’s planning scheme prepared under the *Sustainable Planning Act [Qld] 2009* (SPA) and in accordance with the *Planning Act 2016*. The planning scheme sets a framework for managing development in Brisbane. In accordance with legislation Council is required to prepare a Local Government Infrastructure Plan (LGIP) to guide the planning of trunk infrastructure over a 10 year horizon. The LGIP forms part of the planning scheme in Part 4 and Schedule 3.

The following documents are extrinsic material and contain supporting material used to draft the LGIP:

* 1. Public parks and land for community facilities network;
  2. Transport network;
  3. Stormwater network;
  4. Planning assumptions; and
  5. Schedule of works model.

This document (extrinsic material) provides supporting material for the stormwater network.

### Purpose

The purpose of this report is to:

1. define and identify trunk infrastructure for the stormwater network;
2. explain the methodology used to plan trunk infrastructure for the stormwater network identified in the LGIP;
3. summarise how the establishment cost for the stormwater network trunk infrastructure identified in the LGIP is calculated; and
4. list relevant background studies and reports used in the preparation of the LGIP.

### Definitions and abbreviations

In this extrinsic material report the following abbreviations are used:

**ALS** Aerial Laser Survey

**BCC** Brisbane City Council

**BPD** Backflow Prevention Device

**BUG Model** Brisbane Urban Growth Model

**BSD** Brisbane Standard Drawing

**DSS** Desired Standards of Service

**DTMR** Department of Transport and Main Roads

**EMP** Environmental Management Plan

**fi** Fraction impervious

**GIS** Geographical Information Systems

**GPT** Gross pollutant trap

**GST** Goods and Services Tax

**IDPSP** Infrastructure design planning scheme policy

**LGIP** Local government infrastructure plan

**LSMP** Local Stormwater Management Plan

**LUAD** Land Use Activity Dataset

**NP** Neighbourhood Plan

**PFTI** Plans for trunk infrastructure

**PIA** Priority infrastructure area

**QUDM** Queensland Urban Drainage Manual

**QPP** Queensland Planning Provision

**SEQCoM** South East Queensland Council of Mayors

**RCBC** Reinforced Concrete Box Culvert

**RCP** Reinforce Concrete Pipe

**SoW** Schedule of works

**SMP** Stormwater Management Plan

**SPA** *Sustainable Planning Act [Qld] 2009*

**SQID** Stormwater Quality Improvement Device

In this extrinsic material report the following definitions apply:

**Brisbane Urban Growth Model**

**Desired Standards of Service**

means Council’s urban supply model. The primary purpose of the model is to determine at site level, the type, location and timeframe of future potential residential dwelling supply.

see the *Minister’s Guidelines and Rules* (Chapter 5, part 4, section 21.2).

**Fraction Impervious** means the part of a catchment which is impervious and expressed as a decimal or percentage.

### LGIP Statutory Guideline 03/14

**Local Government Infrastructure Plan**

**Pervious surface or pervious area**

**Plans for Trunk Infrastructure**

**Priority Infrastructure Area**

means the *Statutory Guideline 03/14 Local government infrastructure plans* prepared by the Queensland government, Department of State Development, Infrastructure and Planning (June 2014).

see the *Planning Act 2016* (Schedule 2).

means a surface or area within a drainage catchment where some of the rainfall will infiltrate thus resulting in a reduced volume and rate of runoff (e.g. grassed playing fields, lawns etc.).

means plans for trunk infrastructure identify the existing and planned trunk infrastructure networks intended to service urban development. Refer to Section 4.6 for further information.

see the *Planning Act 2016* (Schedule 2).

**Runoff** means the fraction of rainfall that is not lost to infiltration, evaporation, transpiration or depression storage.

## Legislative requirements

Under the *Planning Act 2016*, a local government that wishes to levy infrastructure charges or impose conditions about trunk infrastructure is required to prepare a local government infrastructure plan (LGIP).

The LGIP was prepared in accordance with *Statutory guideline 03/14 Local government infrastructure plans* dated 12 June 2014. The guideline sets out the minimum requirements that must be followed by a local government for preparing or amending an LGIP, in accordance with section 117 of the SPA.

The guideline states an LGIP must comprise the following sections:

* 1. assumptions about growth, type, scale, location and timing of development;
  2. priority infrastructure area (PIA);
  3. desired standards of service (DSS);
  4. plans for trunk infrastructure (PFTI) supported by schedule of works (SoW); and
  5. extrinsic material.

Section 724 of the SPA stipulates that a local government must keep available for inspection and purchase, all supporting material used to draft the LGIP. This supporting material forms part of the extrinsic material within the LGIP.

## Stormwater network overview

The stormwater network consists of natural and constructed assets that convey runoff to receiving waterbodies. Common natural assets that Brisbane City Council maintains are waterways, wetlands and flood storage areas. Constructed assets such as pipes and culverts are designed to supplement the existing natural assets and reduce runoff from interfering with everyday activities. Pollution from urban activities impacts the health of our environment, which are mitigated through infrastructure such as Stormwater Quality Improvement Devices (SQID’s). The integration of these assets into the landscape is an art and science called Water Sensitive Urban Design.

The LGIP focuses on ‘trunk infrastructure’, which aims to service multiple landowners, distinct from private connections. Further to this, Council has identified that pipes of 1050mm diameter (or greater) typically service broader stormwater catchments and multiple landowners. This has informed the trunk infrastructure criteria below.

Trunk infrastructure for the stormwater network comprises development infrastructure, land or works or both land and works having met the following criteria:

* 1. the infrastructure is for drainage, conveyance, water quality or stormwater detention purposes which:
     1. includes the following:
        1. water quantity infrastructure being:
           1. closed conduits (pipes and RCBCs) and culverts (pipes and RCBCs) that have a hydraulic capacity equal to or greater than the hydraulic capacity of a 1050 mm diameter pipe. This may include multiple conduits that together provide this hydraulic capacity;
           2. backflow prevention devices; and
           3. concrete lined channels and constructed natural channels.
        2. water quality infrastructure being waterway rehabilitation and SQIDs (bioretention devices, constructed wetlands, gross pollutant traps, sedimentation traps and basins, trash racks, floating litter traps or booms);
     2. excludes the following:
        1. drainage infrastructure associated with upgrading the road works required to service the development of premises;
        2. infrastructure replacing, altering or relocating existing underground drainage, an existing waterway, an existing overland flow path or open channel, existing sheet flow or existing flood storage;
        3. combinations of culverts, pipes or RCBCs with a hydraulic capacity less than the hydraulic capacity of a 1050 mm diameter pipe; and
        4. land and works not for water quantity infrastructure or water quality infrastructure.
  2. the purpose of the infrastructure is to accommodate the existing demand for existing urban development and projected demand for assumed future urban development for each service catchment of the stormwater network stated in the planning assumptions; and
  3. the function of the infrastructure is to deliver the standard of performance for the stormwater network stated in the desired standards of service.

## Network planning



### Preliminary

The methodology for preparing the LGIP for the stormwater network involved the following steps:

* 1. define planning assumptions in terms of:
     1. prediction of growth and demand;
     2. PIA;
     3. demand generation; and
     4. DSS;
  2. infrastructure planning including:
     1. quantifying infrastructure needed to manage stormwater in order to meet the DSS; and
     2. understanding the magnitude of the works required within the planning timeframes;
  3. determining the cost of existing and future trunk infrastructure:
     1. infrastructure valuations and unit rates.

These steps are described in more detail in the following sections.

### Planning assumptions – methodology



#### Existing and projected residential and non-residential growth

The planning assumptions estimate the existing and projected residential and non-residential growth for the Brisbane City Council (BCC) area. This information estimates where and when development will occur and to what scale. This information is provided to infrastructure network partners to aid them with their network planning by estimating demand generated on the network from existing and future growth.

The LGIP Extrinsic Material for the Planning Assumptions contains the full methodology and the assumptions used to derive the existing and projected residential and non-residential growth.

### Planning assumptions – Demand



#### Calculating demand for sizing of infrastructure

Demand in the waterways network has been calculated using hydrologic methods which are appropriate to the type of catchment in accordance with the Queensland Urban Drainage Manual (QUDM) (refer to section 4.0 in the 2013 provisional edition). Where appropriate, the rational method as outlined in QUDM (refer to section 4.03 in the 2013 provisional edition) has been used as a simple means for assessing the peak discharge rate for design storm events. The calculation of the demand for infrastructure is based on the available information at the time of the study. This includes the City’s land use zoning, which affects the impervious areas. Detailed design of the infrastructure proposed in the LGIP is required, and is required to use the current information for the ultimate demand.

#### Calculating demand for reporting on infrastructure demand

For the stormwater network, future and ultimate demand was based on the land use provisions and an assumed fraction of impervious area for that land use. The planning scheme defines the land use for each parcel in Brisbane City Council. Future stormwater network demand calculation are impervious area (hectares) which is correlated to current zoning information and fraction impervious (fi) based on values in the QUDM.

The existing demand for stormwater infrastructure is determined using impervious imagery, assumptions about growth in demand at the planning horizon and assumptions about ultimate demand.

The existing stormwater demand and ultimate level of demand are fixed based on actual values and maximum site demand respectively. The intermediate timeframes use growth forecasting, vacant/developable land and jobs growth to predict the impact on fi area for both residential and non- residential zoned land.

For the purpose of reporting on infrastructure demand, demand has been expressed in “impervious hectares” as reported in the LGIP, Table SC3.1.6 Existing and projected demand for the stormwater network. This was achieved by:

* + - 1. For existing demand at 2016, existing impervious area was processed using the Land Use Activity Dataset (LUAD) Site Base June 2014 version 4, Neighbourhood Plans (NPs) adopted as at 2015 (27 October 2015) Queensland Planning Provision (QPP) Zoning, Stormwater Service Catchment Boundaries feature classes and the 2014 impervious imagery.
      2. Ultimate Demand used (Page 4-10 of the QUDM) as the basis for the ultimate fi with three amendments:
         1. where base, occupied or vacant fi exceeded ultimate fi, that fi was used as ultimate;
         2. Emerging community was defined separately; and
         3. Future industry.
      3. The intermediate future demand (2021-2036) uses growth forecasting, vacant/developable land and jobs growth to predict the impact on fi area. Due to the differences in residential and non-residential forecasting methods, residential and non-residential areas are processed separately along with environmental and roads categories. For sites not flagged as vacant/developable a small uplift, as calculated from an analysis of 2005 and 2014 impervious imagery, was used.

The existing and projected cumulative demand for the stormwater network by catchment area between 2016 and ultimate is stated in the LGIP, Table SC3.1.6 Existing and projected demand for the stormwater network.

Aspects of this method are described in more detail below.

#### Determining the fraction impervious for each lot within its planning scheme designation at ultimate development

To determine the fraction impervious for each lot at ultimate development, an analysis was undertaken of the existing fraction impervious versus the assumed fraction impervious for each planning scheme designation using the QUDM. The fraction impervious provided by QUDM was used except where:

* + - 1. base, occupied or vacant fi exceeded ultimate fi, that fi was used as ultimate;
      2. Emerging community was defined separately; and
      3. Future Industry.

For those unique planning scheme designations which involve a small amount of urban development over otherwise largely undeveloped lots, different fractions impervious were assigned to parts of the lot. The area assumed to be used for urban activities at ultimate was calculated and a fraction impervious assigned to this area, whilst the undeveloped balance was assigned fraction impervious reflective of its undeveloped nature. The assumed fractions impervious used for the LGIP are detailed in Table 4.3.3.1.

### Table 4.3.3.1—City Plan area classification fraction impervious assumptions

| **Column 1**  **City Plan 2014 zone/ zone precinct code** | **Column 2**  **City Plan 2014 zone and precinct** | **Column 3**  **LGIP recommended fraction impervious (fi)** |
| --- | --- | --- |
| CF1 | Community facilities zone - Major health care zone precinct | 0.70 |
| CF2 | Community facilities zone - Major sports venue zone precinct | 0.70 |
| CF3 | Community facilities zone – Cemetery zone precinct | 0.20 |
| CF4 | Community facilities zone – Community purposes zone precinct | 0.90 |
| CF5 | Community facilities zone -Education purposes zone precinct | 0.60 |
| CF6 | Community facilities zone - Emergency services zone precinct | 0.70 |
| CF7 | Community facilities zone - Health care purposes zone precinct | 0.60 |
| CN CN1 CN2 CN3 | Conservation zone  Conservation zone - Local zone precinct Conservation zone - District zone precinct Conservation zone - Metropolitan zone precinct | 0 |
| CR1 CR2 | Character residential - Character zone precinct Character residential - Infill housing zone precinct | 0.60 |
| DC1 DC2 | District centre zone – District zone precinct District centre zone – Corridor zone precinct | 0.90 |
| EC | Emerging community zone | 0.75 |
| EI | Extractive industry zone | 0.10 |
| EM | Environmental management zone | 0 |
| GIB | Industry zone - General industry B zone precinct | 0.90 |
| GIC | Industry zone - General industry C zone precinct | 0.90 |
| HDR1 HDR2 | High density residential zone - Up to 8 storeys zone precinct  High density residential zone - Up to 15 storeys zone precinct | 0.85 |
| II | Industry investigation zone | Use fi for existing site |

|  |  |  |
| --- | --- | --- |
| **Column 1**  **City Plan 2014 zone/ zone precinct code** | **Column 2**  **City Plan 2014 zone and precinct** | **Column 3**  **LGIP recommended fraction impervious (fi)** |
| LDR | Low density residential zone | 0 to 299 m2 lots – 0.85  300 to 450 m2 lots – 0.75  451 to 600 m2 lots – 0.65  601 to 750 m2 lots – 0.60  751 to 1000 m2 lots – 0.55  1001 to 4000 m2 lots – 0.35  >4000 m2 lots – refer to rural residential |
| LII GIA | Low impact industry  Industry zone - General industry A zone precinct | 0.90 |
| LMR1 LMR2 LMR3 | Low-medium density residential zone - 2 storey mix zone precinct  Low-medium density residential zone - 2 to 3 storey mix zone precinct  Low-medium density residential zone - Up to 3 storeys zone precinct | 0.85 |
| MC | Major centre zone | 0.90 |
| MDR | Medium density residential zone | 0.85 |
| MU1 MU2 MU3 | Mixed use zone - Inner city zone precinct Mixed use zone - Centre frame zone precinct Mixed use zone - Corridor zone precinct | 0.90 |
| NC | Neighbourhood centre zone | 0.90 |
| OS OS1 OS2 OS3 | Open space zone  Open space zone - Local zone precinct Open space zone - District zone precinct  Open space zone - Metropolitan zone precinct | 0 |
| PC1 | Principal centre zone – City Centre zone precinct | 0.90 |
| PC2 | Principal centre zone – Regional centre zone precinct | 0.90 |
| RR | Rural residential zone | 1001 to 4000 m2 lots –  0.35  >4000 m2 lots – 0.20 |
| RU | Rural zone | 0.05 |
| SC1 | Specialised centre zone - Major educational and research facility zone precinct | Use fi for existing site |
| SC2 | Specialised centre zone - Entertainment and conference centre zone precinct | Use fi for existing site |
| SC3 | Specialised centre zone - Brisbane Markets zone precinct | 0.70 |

|  |  |  |
| --- | --- | --- |
| **Column 1** | **Column 2** | **Column 3** |
| **City Plan 2014** | **City Plan 2014 zone and precinct** | **LGIP recommended** |
| **zone/ zone precinct** |  | **fraction impervious (fi)** |
| **code** |  |  |
| SC4 | Specialised centre zone - Large format retail zone precinct | 0.90 |
| SC4 | Specialised centre zone - Large format retail zone precinct | 0.90 |
| SC5 | Specialised centre zone - Mixed industry and business zone precinct | 0.90 |
| SC5 | Specialised centre zone - Mixed industry and business zone precinct | 0.90 |
| SC6 | Specialised centre zone - Marina zone precinct | 0.90 |
| SI | Special industry zone | 0.90 |
| SP1 | Special purpose zone - Defence zone precinct | Use fi for existing site |
| SP2 | Special purpose zone - Detention centre zone precinct | Use fi for existing site |
| SP3 | Special purpose - Transport infrastructure zone precinct | 0.70 |
| SP4 | Special purpose zone - Utility services zone precinct | Use fi for existing site |
| SP5 | Special purpose zone - Airport zone precinct | Use fi for existing site |
| SP6 | Special purpose zone - Port zone precinct | Use fi for existing site |
| SP8 | Special purpose zone - Utility services zone precinct | 0.65 |
| SR | Sport and recreation zone | 0.10 |
| SR1 | Sport and recreation zone - Local zone precinct |  |
| SR2 | Sport and recreation zone - District zone precinct |  |
| SR3 | Sport and recreation - Metropolitan zone precinct |  |
| T | Township zone | 0.50 |
| TA | Tourist accommodation zone | 0.90 |

Table Notes:

1. fi values for Low-medium and High density residential zones (this area is designated for mainly multi- unit dwellings) are from Table 4.05.3 (a) in QUDM 2nd Edition 2008 and correspond with the recommended C10 value in Table 7.3.3.1A of the IDPSP.
2. fi values for Low density residential zones (mainly one or two storey single houses, excluding roads) and Rural residential are from Table 4.05.3 (a) in QUDM 2nd Edition 2008 and correspond with the recommended C10 values in Table 7.3.3.1A of the IDPSP.
3. fi values for Community facilities zone – Major health care, Major sports venue, Education purposes and Rural and Special purposes zone -Railways have been interpolated from Table 4.05.1 in QUDM 2nd

Edition 2008 and via reference to Table 3.1 in The Brisbane Priority Infrastructure Plan 2011 Extrinsic Material and Table 3.6 in the Water by Design MUSIC modelling Guidelines.

1. fi values for Character residential, Community facilities zone – Cemetery, Emergency services, Health care purposes, and Emerging community, Extractive industry zone and Special purposes – Defence, Correctional Centre, Utility Services, Airport, Port, Major Educational and Research Facility, Entertainment and Conference Centre, Brisbane Markets, Southbank have been adopted as per Table

3.1 in the Brisbane Priority Infrastructure Plan 2016 Extrinsic Material.

1. fi values for all other classifications have been derived from Table 4.05.3 (a) in QUDM 2nd Edition 2008.

#### Determining the existing demand for each lot within its planning scheme designation

To determine the existing impervious area, impervious mapping was generated by Spatial Information Services (GIS) using the 2014 Digital Globe satellite imagery. This imagery was processed and classified to map impervious and pervious surfaces at site level across the identified catchment areas. For each of the nine impervious types (nine in 2014 and six in 2005) shown in the table below, only the “impervious” type fraction (based on QUDM) was applied.

### Table 4.3.4.1—Impervious type fraction

|  |  |  |  |
| --- | --- | --- | --- |
| **Impervious type** | **Fraction** | **Impervious Type** | **Fraction** |
| Bare | 0.8 | Shrubs | 0.53 |
| Cloud | 0.7 | Trees | 0.4 |
| Grass | 0.66 | Unclassified | 0.7 |
| Impervious (e.g. asphalt, concrete, steel) | 1 | Water | 1 |
| Shadow | 0.7 |  |  |

Existing impervious area was processed in ArcGIS using the LUAD Site Base June 2014 version 4, Neighbourhood Plans (NPs) adopted as at 2015 (27 October 2015) QPP Zoning, Stormwater Service Catchment Boundaries feature classes and the 2014 impervious imagery. The data was processed at site level and then aggregated to QPP Zone and stormwater service catchment.

#### Determining the fraction impervious for each lot within its planning scheme designation at intermediate timeframes (2021-2036)

Demand at Intermediate years (2021-2036) utilises growth forecasting to determine the potential for sites to develop within each 5 year period. As ultimate demand occurs at an unknown point in the future it would not be correct to use a linear increase. In addition, due to the different forecasting methods used for residential and non-residential two methodologies were used.

The existing and ultimate demands are fixed based on actual values and maximum site demand respectively. The intermediate timeframes make use of growth forecasting, vacant/developable land and employment growth to predict the intermediate impact on fi area. Due to the differences in residential and non-residential forecasting methods residential and non-residential areas are processed separately and summed at the end along with environmental and roads. For sites not flagged as vacant/developable a small uplift, as calculated from an analysis of 2005 and 2014 impervious imagery, was used.

|  |  |  |  |
| --- | --- | --- | --- |
| (1) | CF1 – Major health care; | (22) | PC2 – Regional centre; |
| (2) | CF2 – Major sports venue; | (23) | PDA1 – State; |
| (3) | CF3 – Cemetery; | (24) | PDA2 – State; |
| (4) | CF4 – Community purpose; | (25) | PDA3 – State; |
| (5) | CF5 – Education purpose; | (26) | PDA4 – State; |
| (6) | CF6 – Emergency services; | (27) | RU – Rural; |
| (7) | CF7 – Health care purposes; | (28) | SBCA – State; |
| (8) | DC1 – District; | (29) | SC1 – Major education and research; |
| (9) | DC2 – Corridor; | (30) | SC2 – Entertainment and conference; |
| (10) | EI – Extractive industry; | (31) | SC3 – Brisbane Markets; |
| (11) | II – Investigative industry; | (32) | SC4 – Large format retail; |
| (12) | IN1 – General industry A; | (33) | SC5 – Mixed industry/business; |
| (13) | IN2 – General industry B; | (34) | SC6 – Marina; |
| (14) | IN3 – General industry C; | (35) | SI – Special industry; |
| (15) | LII – Low impact industry; | (36) | SP1 – Defence; |
| (16) | MC – Major centre; | (37) | SP2 – Detention facility; |
| (17) | MU1 – Inner city; | (38) | SP3 – Transport infrastructure; |
| (18) | MU2 – Centre frame; | (39) | SP4 – Utility service; |
| (19) | MU3 – Corridor; | (40) | SP5 – Airport; and |
| (20) | NC – Neighbourhood centre; | (41) | SP6 – Port. |
| (21) | PC1 – City centre; |  |  |

As the BUG dataset specifically predicts residential development only, two additional methods were used to predict non-residential development for demand sequencing. The South East Queensland Council of Mayors (SEQCoM) employment projections, November 2014 (Primary scenario, Queensland Treasury and Trade) were used as a base for the proportion of growth, vacant land identified in LUAD (site must be flagged as vacant with only one use) was used to switch on sites with development potential.

Equation 1 was then used to calculate the impervious area for each site for each 5 year period. Equation 1 used the following non-residential preconditions:

1. a site is only classed as vacant if it is flagged as vacant and only has one land use;
2. all sites have an increase in impervious area, the level of which determined by the sites status as occupied (3% see Historical Data) or vacant (formula);
3. two base and ultimate fi are used, one for occupied sites and a second for vacant sites;
4. if the base or growth within a timeframe exceeds the ultimate demand then the site is considered “maxed” therefore there will be no further growth, ultimate fi will be used;
5. if there is negative or no growth then the base or previous fi will be used;
6. if a previous year had negative growth but the current year has positive growth then the current year will use the last increasing growth value unless the current year’s growth exceeds the last increasing growth value. In this case the increase in growth will be calculated on the difference between the last increasing growth value and the current year growth value not the difference between current and previous years; and
7. the fi is only applied to the area of the site occupied by the relevant non-residential zone (if the site is part residential then this part is processed separately as residential).

The environmental zones2 are extracted from this dataset and appended to the relevant BUG growth data. The zones classified as environmental are:

2 For sites that comprised of more than one zone that site was split as part of the base calculation process so that the only residential portion of the site is exported.

1. CN – Conservation;
2. CN1 – Local;
3. CN2 – District;
4. CN3 – Metropolitan;
5. EM – Environmental Management;
6. OS – Open Space;
7. OS1 – Local;
8. OS2 – District;
9. OS3 – Metropolitan;
10. SR – Sport and Recreation;
11. SR1 – Local;
12. SR2 – District; and
13. SR3 – Metropolitan.

To calculate the environmental impervious areas the environmental sites were clipped to the impervious raster. The result was then grouped by stormwater catchment and reported.

Environmental sites were assumed to have no increase in impervious area over time.

The area of fi for roads was added to each stormwater service catchment after the residential and non- residential fi were calculated:

1. closed road (temporarily);
2. esplanade;
3. intersection; and
4. road.

The resulting feature classes were then used to clip {clip} the impervious area raster as for residential and non-residential zones then the rasters converted to polygon feature classes. The total area for each table was compared to build a table of fi per stormwater catchment.

Roads were assumed to have no increase in impervious area over time.

Roads use the road easements that contain significant areas that could be classed as CN/EM in nature and median strips. Although the QUDM states a value of fi of 0.9 should be used, this is thought to only refer to the paved surface as fi based on the 2014 impervious layer is ~0.73 due to the presence of nature areas within the road easements.

Residential, non-residential, environmental and roads were consolidated into the final output table. The data was aggregated to stormwater service catchments. The base and ultimate values were used without modification whilst the intermediate values were summed together for each time frame. For residential and non-residential this meant each non-residential time frame was added to the respective residential time frame. As the environmental and roads values did not change the same value for each was added to the summed residential/non-residential time frame.

Lastly, the values were divided by 10,000 to output hectares.

#### Equivalent impervious hectares

‘Equivalent impervious hectare’ is an area of a catchment that would produce the same runoff characteristics as that estimated for the catchment if that area had a runoff coefficient of 1. Table

4.3.6.1 below provides the Equivalent Impervious hectares by service catchment within the Priority Infrastructure Area.

### Table 4.3.6.1—Equivalent Impervious hectares by service catchment

| **Service Catchment** | **Existing and projected demand (equivalent impervious hectares)** | | | | |
| --- | --- | --- | --- | --- | --- |
| 2016  (base date) | 2021 | 2026 | 2031 | Ultimate development |
| Cabbage Tree Creek | 2,534 | 2,548 | 2,571 | 2,584 | 2,648 |
| Nundah Downfall Creek | 2,562 | 2,572 | 2,578 | 2,581 | 2,703 |
| Kedron Brook | 6,428 | 6,509 | 6,563 | 6,579 | 6,715 |
| Breakfast Creek | 2,102 | 2,111 | 2,118 | 2,124 | 2,153 |
| Albion | 101 | 102 | 102 | 103 | 106 |
| ATCN | 1,431 | 1,443 | 1,463 | 1,478 | 1,537 |
| INES | 562 | 568 | 572 | 580 | 592 |
| Pashen Creek LSMP | 281 | 285 | 289 | 292 | 299 |
| Perrin | 563 | 566 | 570 | 572 | 579 |
| ATC South (a) | 755 | 763 | 770 | 775 | 787 |
| Toowong Creeks | 1,348 | 1,355 | 1,360 | 1,365 | 1,378 |
| Cubberla Creek | 465 | 466 | 467 | 468 | 475 |
| Moggill Creek | 248 | 248 | 249 | 249 | 251 |
| Fig Tree Pocket | 329 | 330 | 331 | 332 | 345 |
| Graceville LSMPS | 126 | 126 | 126 | 126 | 126 |
| Graceville | 189 | 189 | 189 | 189 | 189 |
| BBnePrec3 | 918 | 926 | 932 | 938 | 954 |
| West End (a) | 34 | 35 | 35 | 35 | 35 |
| West End (b) | 36 | 36 | 36 | 36 | 36 |
| Norman Creek | 2,164 | 2,180 | 2,193 | 2,206 | 2,244 |
| ATC South (b) | 558 | 564 | 570 | 577 | 596 |
| ATC South (c) | 211 | 212 | 214 | 215 | 218 |
| Wynnum West (a) | 69 | 70 | 70 | 70 | 71 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Service Catchment** | **Existing and projected demand (equivalent impervious hectares)** | | | | |
| 2016  (base date) | 2021 | 2026 | 2031 | Ultimate development |
| Wakerley (a) | 172 | 172 | 173 | 173 | 178 |
| Wakerley (b) | 167 | 167 | 168 | 168 | 174 |
| Lota | 218 | 219 | 219 | 219 | 222 |
| Tingalpa Creek | 1 | 1 | 1 | 1 | 1 |
| Scrubby Creek | 719 | 723 | 727 | 728 | 751 |
| Calamvale | 463 | 466 | 470 | 471 | 492 |
| Oxley Creek | 7,363 | 7,403 | 7,432 | 7,454 | 7,542 |
| Pullen Pullen Creek | 141 | 141 | 141 | 141 | 141 |
| Farm | 1,433 | 1,438 | 1,440 | 1,441 | 1,451 |
| Wolston | 437 | 439 | 439 | 440 | 445 |
| Richlands (a) | 375 | 379 | 382 | 385 | 395 |
| Richlands (b) | 265 | 268 | 270 | 273 | 278 |
| Richlands (c) | 281 | 282 | 283 | 283 | 285 |
| Richlands (d) | 236 | 240 | 246 | 253 | 284 |
| Richlands (e) | 257 | 258 | 260 | 261 | 282 |
| Doolandella | 249 | 251 | 252 | 253 | 267 |
| Rochedale (a) | 113 | 113 | 120 | 121 | 132 |
| Rochedale (b) | 164 | 166 | 171 | 175 | 195 |
| Rochedale (c) | 44 | 44 | 47 | 47 | 50 |
| Rochedale (d) | 202 | 206 | 211 | 215 | 245 |
| Rochedale (e) | 4 | 4 | 4 | 4 | 4 |
| Wynnum | 792 | 795 | 796 | 797 | 803 |
| Wynnum West (b) | 264 | 265 | 267 | 267 | 269 |
| Wynnum West (c) | 55 | 55 | 55 | 55 | 55 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Service Catchment** | **Existing and projected demand (equivalent impervious hectares)** | | | | |
| 2016  (base date) | 2021 | 2026 | 2031 | Ultimate development |
| Bald Hills Creek | 1,368 | 1,372 | 1,375 | 1,377 | 1,391 |
| BBnePrec1 | 302 | 302 | 305 | 305 | 307 |
| Bulimba Creek | 5,932 | 5,954 | 5,975 | 5,988 | 6,103 |
| Western Creeks LSMPS | 587 | 590 | 592 | 594 | 602 |

### Priority infrastructure area and service catchments

The PIA is the area that a local government has prioritised for the provision of trunk infrastructure.

Council plans to service the 10 year stormwater network demand within the PIA, however it is acknowledged that demand will also be generated and serviced outside the PIA boundary.

In determining appropriate service catchments for infrastructure networks, a number of factors were considered including:

* + - * 1. trunk infrastructure items operating as a system to service both citywide and local catchments;
        2. reasonable apportionment of establishment costs of trunk infrastructure;
        3. clarity of boundary definitions for both open and closed networks;
        4. administration of a financial system supporting the LGIP; and
        5. Council’s DSS, land acquisition, capital works and expenditure program.

The stormwater network service catchments are based on Brisbane’s major catchments and sub- catchments as well as current Local Stormwater Management Plans (LSMPs) and Stormwater Management Plans (SMPs) which provide greater detail in relation to catchments. The service catchments for stormwater reflect the natural catchment boundaries and DSS for stormwater infrastructure.

The PIA and stormwater network service catchments can be found at Map A1 and A3.

### Desired standards of service

The stormwater network DSS can be found at Part 4.4.1 of the planning scheme.

The DSS details the standards that comprise an infrastructure network suitable for the local context. It is a summary of the service standards which are then supported by the detailed network design standards included in planning scheme policies or other published and controlled design standards, codes or manuals.

For standards relating to the appropriate level of flood immunity, refer to the Stormwater code, Flood overlay code and the IDPSP. For water quality objectives, refer to section 7.9 of the IDPSP. For the minimum desired capacity of minor and major drainage infrastructure refer to section 7.2 of the IDPSP. For the maximum total depth of flow in a roadway, refer to section 7.2 of the IDPSP.

### Plans for trunk infrastructure

The stormwater network plans and associated SoW provide indicative layouts and sizing of trunk stormwater quantity and quality infrastructure items which have been prepared for the purposes of providing high level solutions to facilitate ultimate future development of catchments within the PIA.

Trunk stormwater quantity and quality infrastructure items have been determined through local and regional catchment scale network planning studies which have been carried out to varying levels of detail. The types of network planning studies used to determine future infrastructure requirements are briefly described below.

**LSMPs:** These are detailed investigations carried out within fully developed drainage catchments experiencing population growth through intensification of development primarily from conversion of single lot residential to multi-residential or mixed use development. Hydrologic and hydraulic modelling using commercially available industry standard software was carried out to assess stormwater and flooding issues within catchments. Preliminary infrastructure layout options and sizing including locations of manholes and inlets were developed to mitigate flood impacts to facilitate development. Stakeholder engagement, limited site inspection and pipe survey, route alignment, options cost/benefit analysis and prioritisation of infrastructure works were undertaken as part of the options development. Opportunities to improve the quality of stormwater runoff were also identified.

**Stormwater Investigations:** These investigations were carried out following receipt of flooding complaints from residents to investigate the cause of flooding and recommend possible solutions to mitigate flood impacts. The capacity of existing underground infrastructure was investigated using Rational Method spreadsheet analysis to identify size of infrastructure required to meet the DSS. Site inspection, pipe survey, options, route alignment, manhole and inlet locations, and options cost/benefit analysis were considered in the determination of the recommended option. Opportunities to improve the quality of stormwater runoff were generally not considered.

**Sketch Planning:** These investigations were carried out in neighbourhood planning areas. The capacity of existing underground infrastructure was investigated using Rational Method spreadsheet analysis to identify size of infrastructure required to meet the DSS. These investigations did not consider flooding impacts, manhole and inlet locations, options for route alignment, cost/benefit analysis of options or opportunities to improve the quality of stormwater runoff.

Future trunk stormwater infrastructure items identified on the stormwater network plans and associated SoW to meet the DSS and facilitate ultimate development of the catchment include:

1. **New:** New infrastructure at locations where there is no existing infrastructure. Infrastructure is sized to meet the DSS;
2. **Relief**: Infrastructure to augment the capacity of existing infrastructure which does not meet the DSS;
3. **Replacement**: Infrastructure to replace existing infrastructure which does not meet the DSS and which has been identified as being in poor condition through pipe survey. Infrastructure is sized to meet the DSS; and
4. **Rehabilitation:** Works required to improve, repair, stabilise or alter existing infrastructure.

The trunk stormwater infrastructure network plans and associated SoW have been prepared on the following basis:

1. future trunk infrastructure layouts and sizing have been prepared solely on the basis of proposed future land use and neighbourhood plans which outline the high level overall planning schemes identified in *City Plan 2014*;
2. proposed trunk infrastructure layouts and sizing are indicative only and are not intended as a detailed design;
3. proposed trunk infrastructure layouts provide a possible solution to draining catchments. Alternative solutions may be possible;
4. trunk infrastructure layouts have been prepared independent of other infrastructure network and urban design considerations;
5. Aerial Laser Survey (ALS) data and aerial imagery has been used to provide topographical information. No site survey or ‘ground-truthing’ of assumptions has been undertaken unless indicated in documentation supporting the infrastructure items; and
6. infrastructure is required to service future development consistent with planning assumptions in the LGIP at the DSS and that some infrastructure may also be required to address problems in the network servicing existing development.

It should be clearly acknowledged that the final trunk infrastructure layouts and sizing at the time of individual development approval may differ from the indicative future trunk stormwater drainage shown on the stormwater network plans and associated SoW due to factors which include:

1. the actual sequence of development within catchments;
2. individual development characteristics including extent, topography, internal road and allotment configuration, and land shaping to facilitate drainage;
3. availability of access to suitable lawful points of discharge points at the time of individual development approval, particularly where property owner permission is required to construct trunk stormwater infrastructure through adjoining properties;
4. location of other utility services (e.g. sewer, water, gas, electrical, communications) and clearance requirements between services;
5. urban design considerations;
6. outcomes of detailed on-ground investigations; and
7. detailed hydrologic, hydraulic and water quality analysis, modelling and design using industry standard software and associated cost/benefit, constructability and risk management assessments.

The stormwater network PFTI can be found at Part 4.5 the planning scheme.



#### Determination of trunk infrastructure types and sizing

Trunk infrastructure sizes and types for quantity management have been determined through an assessment of capacity using recognised hydrologic and hydraulic analysis methods outlined in the QUDM. Commercially available industry standard software has been used for more detailed capacity assessments. Details of methodology and software used for analysis are outlined in assessment reports for each individual catchment.

Trunk infrastructure sizes and types for quality management have been determined through high level concept water quality treatment train analyses using industry standard software such as MUSIC.

#### Infrastructure scheduling

Stormwater Infrastructure in the LGIP is prioritised to support the needs of development and its ability to relieve flooding to high-growth precincts. There are a number of information sources and circumstances that contribute to the selection of infrastructure for the LGIP. Some of these factors are; the net benefit to the public to increase flood immunity, proximity to development, opportunistic timing of developments, available budget, and development likelihood based on the either the Brisbane Urban Growth Model (BUG) or the development assessment process.

The BUG is used to predict which areas of Brisbane will develop within five, ten, fifteen and twenty year horizons. Depending on the extent and nature of the development, it may influence the priority of the infrastructure needed to service the development. The BUG receives information from development applications, which show accurately the location of development in the short term. The location of stormwater infrastructure is often under buildings or in narrow or busy roads within high- growth precincts. Infrastructure planned in these locations is often prioritised for practical and economic reasons to align with the construction of the building.

Infrastructure is categorised into two delivery date ranges as stipulated by the LGIP Statutory Guidelines; 2016-2021 and 2021-2026. The amount of infrastructure scheduled for the timeframes is based on several factors also, including the budgeted amount for Stormwater Infrastructure as detailed in the Brisbane City Council’s Annual Plan and Budget. Infrastructure projects prioritised within the immediate five year timeframe of 2016-2021 have a higher degree of certainty for construction than those in 2021-2026. Not all of the projects in the LGIP will be constructed in the timeframes indicated. The schedule is revised yearly, as are the priorities and funding availability.

Due to a variety of circumstances, the project delivery date and the project details may change. For example, the BUG uses the best available information to form growth patterns; however development patterns are not entirely predictable, which in turn influences the sequencing of stormwater infrastructure. As information about the project becomes more specific through successive designs and investigations, the details of the project may become more accurate and are therefore updated.

### Schedule of works

SoW is a table including information derived from the Excel based SoW model.

The table states the following for each item of future trunk infrastructure identified on the plans:

* + - 1. unique map reference to cross reference the item shown on the PFTI map(s);
      2. brief description - the description for the item provides a brief overview of the infrastructure’s function (or hierarchy), type and size;
      3. estimated timing - the estimated timing is expressed in terms of specific years or time periods (e.g. 2011–2016); and
      4. establishment cost for land or works. The establishment cost is stated in current cost terms and is consistent with the SPA definition of ‘establishment cost’.

The SoW lists the establishment cost for the delivery of planned trunk infrastructure projects in 30 June 2016 dollars. The cost includes a work component and a separate land component where applicable.

The stormwater network SoW can be found at SC3.2 of the planning scheme and the expanded version in section 5.2 of this report.



#### Establishment costs – standard unit rates – works component

Establishment costs are based on projects being delivered to the requirements set in Council’s IDPSP, Brisbane Standard Drawings (BSD), and Infrastructure Installation and Construction Requirement Manual. Establishment costs for projects in the SoW are based on estimated $/m unit rates for piped, culvert and open channel drainage works, and estimated unit costs for stormwater quality improvement devices (SQID).

The standard unit rate and cost build-ups are based on the following general assumptions:

* + - 1. construction will be undertaken to Council’s current standards, requirements and industry construction practices;
      2. the construction projects will be administered under a traditional form of contract whereby the contractor will undertake to complete the construction phase of the project from already prepared detailed design and project documentation;
      3. construction will be undertaken during normal hours;
      4. the cost estimate is a strategic estimate as per Department of Transport and Main Roads (DTMR) Project Cost Estimating Manual (Sixth Edition): September 2015;
      5. a local qualified suitable construction organisation will construct the project after an open competitive tender process on the open market;
      6. labour will be a combination of permanent and contract labour;
      7. productivity rates are as expected in the industry for a project of this nature; and
      8. no allowance for PUP upgrade. General exclusions include:

1. demolition works;
2. finance and holding costs;
3. Goods and Services Tax (GST) and associated holding costs;
4. Public Authorities Charges, Levies and Contributions, if any; and
5. on-going maintenance

The methodology used to estimate delivery cost of the projects in the SoW includes:

1. direct construction cost of drainage, culvert or SQID infrastructure; plus
2. indirect construction cost allowance; plus
3. project costs, an on cost allowance for professional services to deliver the project (design, supervision, project management); plus
4. allowance for contingency.

It is noted that direct construction costs and indirect construction costs are mutually exclusive. The methodology for calculating the establishment cost for each project type is set out in more detail in Section 5.1.

* + - 1. *Direct construction costs*

Direct construction costs are on site labour, materials and plant costs to deliver the project, and depending on the project generally include, but not limited to:

* + - * 1. site establishment;
        2. site preparation work;
        3. traffic management;
        4. environmental management work;
        5. excavation and earthworks;
        6. supply and installation of drainage works;
        7. bedding and backfilling;
        8. supply and installation of drainage structures;
        9. connection to existing works; and
        10. restoration.

A more detailed list and explanation of the direct cost inclusions for each project is set out in section 5.2.

* + - 1. *Indirect construction costs*

Indirect construction costs are on and off site costs that cover the contractor’s overheads. The cost is applied as an on cost to the direct construction cost to deliver the project works. Indirect construction costs equate to 17% of the direct construction cost. The 17% reflects current Council and market experience.

* + - 1. *Project costs*

Project costs are an allowance for professional fees to provide detailed design, survey, geotechnical investigations, project management, engineering supervision of works, and certification of the works from a Registered Professional Engineer of Queensland. Project costs equate to 13% of the direct and indirect construction costs, and comply with the minimum value set in the LGIP Statutory Guideline.

* + - 1. *Contingency rates*

Contingency rates are based on the project delivery date, and applied to the construction cost plus professional fees plus on costs. Contingencies equate to 7.5% for projects with a delivery date up to 2021 and 15% for projects with a delivery date of up to 2026. The values comply with the LGIP Statutory Guideline.

#### Land valuation rates

The valuation of land in the stormwater network was undertaken by a qualified Council land valuer in accordance with the following approach.

The value of each individual land project was determined as the estimated market value of properties based on sales evidence. Factors considered in this evidence included:

* + - 1. location;
      2. zoning;
      3. surrounding development; and
      4. constraints such as flooding, overland water-flow and topography.

#### Valuation of existing assets

The cost of construction of existing trunk stormwater infrastructure was sourced from Council’s Financial Asset Register at 2015/16.

Since 2001, Council’s infrastructure charges planning scheme policies and subsequent Priority Infrastructure Plan have included trunk stormwater network items. On this basis, the Department of Infrastructure, Local Government and Planning has agreed it is appropriate for Council to only include existing trunk stormwater network waterway corridor land acquisitions since 2001, rather than identifying items before this date.

Council’s financial asset register does not include land values for existing trunk stormwater network waterway corridor land acquisitions. On this basis, the Department of Infrastructure, Local Government and Planning has agreed it is appropriate for Council to apply the equivalent $/m2 land value estimates for future trunk infrastructure items, to existing trunk infrastructure items. The majority of the existing trunk stormwater network waterway corridor land is located in Rochedale and was costed in line with the methodology for costing the future trunk land acquisitions in that area ($15/m2).

## Attachments



### Methodology for determining stormwater network unit rates and costs



#### Piped and culvert drainage

The estimated delivery cost of future drainage and culvert infrastructure has been calculated using unit cost rates of $ per lineal metre.

Rates for the supply and installation of pipe and culvert drainage, have built up from Council’s estimating system and actual cost records for similar works, and take into account current standards, work practices and materials.

The rates include the following:

* + - 1. all works association with supply and construction of pipes or culverts;
      2. excavation in trench, backfill of trench;
      3. bedding material and bedding of pipes;
      4. saw cut of existing asphaltic concrete pavements at depths to 75 mm as required;
      5. supply, place and removal of sandbags as required;
      6. supply, place and removal of shoring of trench box only as required;
      7. dewatering of trenches as required using a flex drive pumps only;
      8. placement of lifting plugs as required;
      9. backfill in roadways which includes supply, placement and compaction of bedding sand or screenings, granular crushed rock or similar, fine crushed rock or similar, and asphaltic concrete surface to 50 mm by hand only;
      10. cut in and make good at existing manholes, chambers and gullies;
      11. cut pipes to length and make mitred ends using standard bandage joints if required; and
      12. disposal of spoil to an approved site including cartage up to 7 km and tip.

Construction costs for piped drainage are based on the supply and construction of drainage using reinforced concrete pipes (RCPs) and reinforced concrete box culverts (RCBCs).

A twenty per cent (20%) allowance for construction of structures was added to the supply and construction cost of the pipework. The allowance reflects current Council and market experience.

A forty per cent (40%) allowance for ancillary works was added to the combined cost (i.e. supply and construction of pipe plus allowance for construction of structures) to arrive at the total construction cost of the pipe or culvert. The allowance reflects current Council and market experience.

Ancillary works include the following items:

1. site establishment;
2. compliance with an environmental management plan (EMP);
3. provision for traffic;
4. locate services;
5. safety fencing;
6. dewatering trenches;
7. traffic barriers;
8. service alteration; and
9. restoration.

### Table 5.1.1.1—Standard Unit Rates RCPs

| **Nom Dia (mm)** | **Construction** | | | | **Overheads** | | **Total Unit Rate**  **$/m** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Supply and Construct Base Unit Rate**  **$/m** | **Structures (20% of Base Unit Rate)** | **Ancillary Costs**  **(40% of Base Unit Rate and Structures)** | **Total Direct Construction Unit Rate (Base Unit Rate, Structures & Ancillary Costs)**  **$/m** | **Indirect Construction Cost (17% of Total Direct Construction Unit Rate)** | **Project Costs (13% of Total Direct and Indirect Construction Rates)** |
| 750 | $742 | $148 | $356 | $1,247 | $212 | $190 | $1,649 |
| 825 | $797 | $159 | $382 | $1,338 | $228 | $204 | $1,769 |
| 900 | $888 | $178 | $426 | $1,493 | $254 | $227 | $1,973 |
| 1050 | $1,043 | $209 | $501 | $1,753 | $298 | $267 | $2,318 |
| 1200 | $1,202 | $240 | $577 | $2,019 | $343 | $307 | $2,670 |
| 1350 | $1,399 | $280 | $671 | $2,350 | $399 | $357 | $3,107 |
| 1500 | $1,666 | $333 | $800 | $2,799 | $476 | $426 | $3,701 |
| 1650 | $1,920 | $384 | $921 | $3,225 | $548 | $490 | $4,264 |
| 1800 | $2,121 | $424 | $1,018 | $3,564 | $606 | $542 | $4,712 |
| 1950 | $2,400 | $480 | $1,152 | $4,031 | $685 | $613 | $5,330 |
| 2100 | $2,704 | $541 | $1,298 | $4,543 | $772 | $691 | $6,007 |
| 2,400 | $2,960 | $592 | $1,421 | $4,973 | $845 | $756 | $6,575 |
| 2,700 | $3,515 | $703 | $1,687 | $5,905 | $1,004 | $898 | $7,807 |
| 3,000 | $4,070 | $814 | $1,954 | $6,838 | $1,162 | $1,040 | $9,040 |

The standard unit rates for RCPs, in the preceding table, are based on the delivery of single barrel drains up to 10 metres in lengths.

The following length allowance has been applied in the SoW, where applicable, to the base unit rates for supply and construction of RCP pipework to arrive at the total construction cost of the drain. The allowance reflects current Council and market experience.

### Table 5.1.1.2—Length allowance RCPs (only)

| **Length** | **Factor** |
| --- | --- |
| 10-30m | 0.94 |
| Greater than 30m | 0.89 |

**Table 5.1.1.3—Standard Unit Rates RCBCs**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Nom Size (mm)** | **Construction** | | | | **Overheads** | | **Total Unit Rate**  **$/m** |
| **Supply and Construct Base Unit Rate**  **$/m** | **Structures (20% of Base Unit Rate)** | **Ancillary Costs (40% of Base Unit Rate and Structures)** | **Total Direct Construction Unit Rate (Base Unit Rate, Structures and Ancillary Costs)**  **$/m** | **Indirect Construction Cost (17% of Total Direct Construction Unit Rate)** | **Project Costs (13% of Total Direct and Indirect Construction Rates)** |
| 1500 x 1500 | $2,433 | $487 | $1,168 | $4,087 | $695 | $622 | $5,403 |
| 1800 x 1200 | $2,619 | $524 | $1,257 | $4,401 | $748 | $669 | $5,818 |
| 2100 x 900 | $2,922 | $584 | $1,403 | $4,909 | $835 | $747 | $6,490 |
| 2100 x 1500 | $3,262 | $652 | $1,566 | $5,481 | $932 | $834 | $7,246 |
| 2100 x 2100 | $3,840 | $768 | $1,843 | $6,451 | $1,097 | $981 | $8,529 |
| 2700 x 900 | $4,073 | $815 | $1,955 | $6,843 | $1,163 | $1,041 | $9,047 |
| 2700 x 1200 | $4,204 | $841 | $2,018 | $7,064 | $1,201 | $1,074 | $9,339 |
| 3000 x 1500 | $5,325 | $1,065 | $2,556 | $8,947 | $1,521 | $1,361 | $11,829 |
| 3000 x 1800 | $5,459 | $1,092 | $2,620 | $9,171 | $1,559 | $1,395 | $12,124 |
| 3000 x 2100 | $5,688 | $1,138 | $2,730 | $9,556 | $1,625 | $1,454 | $12,635 |
| 3000 x 2700 | $6,150 | $1,230 | $2,952 | $10,331 | $1,756 | $1,571 | $13,659 |
| 3300 x 1500 | $5,988 | $1,198 | $2,874 | $10,060 | $1,710 | $1,530 | $13,300 |
| 3300 x 2100 | $6,492 | $1,298 | $3,116 | $10,906 | $1,854 | $1,659 | $14,419 |

The standard unit rates for RCBCs, in the preceding table, are based on the delivery of single barrel drains.

*5.1.1.1 Multiple Barrel Allowance*

The following allowances have been applied in the SoW, where applicable, to the base unit rates for supply and construction of RCP and RCBC drainage to arrive at the total estimated cost of multiple barrel drainage. The allowance reflects current Council and market experience.

### Table 5.1.1.4—Multiple Barrels Factors

| **Barrels** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Factor** | 1 | 1.9 | 2.8 | 3.7 | 4.6 | 5.5 | 6.4 | 7.3 | 8.2 | 9.1 |

#### Open Channel Drainage

The estimated delivery cost of future open channel infrastructure has been calculated using unit cost rates of $ per lineal metre.

Rates for the supply of material and construction of the drain, were derived from Council’s estimating system, actual cost records for similar works and tenders for similar works.

The rates include the following:

* + - 1. the supply of materials;
      2. excavation of channel;
      3. supply and placement of channel lining (reinforced concrete, turf, rock;
      4. channel end treatments;
      5. restoration of adjoining works and land;
      6. an allowance for acid sulphate soil; and
      7. disposal of spoil to an approved site including cartage and tip.
      8. *Pinkenba – Open Channel Drainage*

The estimated construction costs of the future open channel drain are derived from the Trunk Stormwater Infrastructure Review of the Myrtletown Precinct, Pinkenba – Eagle Farm Neighbourhood Plan, dated 25 May 2016.

The Base Unit Rate includes a 10% allowance for acid sulphate soils. The allowance reflects current Council and market experience.

### Table 5.1.2.1—Standard Unit Rates – Constructed Open Channel Drainage

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Channel** | **Description** | **Direct** | **Indirect** | **Project Costs** | **Total** |
| **Type** |  | **Construction**  **Unit Rate**  **$/m** | **Construction Cost**  **(17% of Direct Construction Unit Rate)** | **(13% of Total Direct and Indirect Construction Unit Rates)** | **Unit Rate**  **$/m** |
| Roadside Channel | Concrete lined - 5m width - 3m base width | $499 | $85 | $76 | $659 |
| Marine Road Channel | Concrete lined - 8m width - 6m base width | $640 | $109 | $97 | $846 |
| Natural Channel | Turf lined - 20m top width - 3m terrace - 1 in 3 max sides – Type 1 | $490 | $253 | $226 | $1,968 |
| Natural Channel | Turf lined - 20m top width - 3m terrace - 1 in 3 max sides – Type 2 | $940 | $83 | $74 | $647 |
| Park | Concrete lined - 18m | $1,489 | $160 | $143 | $1,242 |
| Channel | width - grass sides 1 in 6 |  |  |  |  |
|  | max slope - 10m base |  |  |  |  |
|  | width |  |  |  |  |

* + - 1. *Willawong – Open Channel Drain*

The estimated construction cost for the future open drain has been derived from Council’s estimating system and actual cost records for similar works.

The Base Unit Rate includes a 10% allowance for acid sulphate soils. The allowance reflects current Council and market experience.

Table 5.1.2.2—Standard Unit Rates – Constructed Open Channel Drainage

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Channel Type** | **Description** | **Direct Construction Unit Rate ($/m)** | **Indirect Construction Cost (17% of Direct Construction Unit Rate)** | **Project Costs (13% of Total Direct and Indirect Construction Unit Rates)** | **Total Unit Rate ($/m)** |
| Roadside | Natural Channel Improvement | $449 | $76 | $68 | $594 |

* + - 1. *Pallara – Open Channel Drain*

The estimated construction cost for the future natural channels in Pallara has been derived by adjusting the standard unit rates for a 20 metre natural channel to suit the design and additional site preparation costs (e.g. tree clearing) associated with the delivery of natural channels in Pallara.

### Table 5.1.2.3—Standard Unit Rates – Constructed Natural Channel Drainage

| **Channel Type** | **Description** | **Direct Construction Unit Rate ($/m)** | **Indirect Construction Cost (17% of Direct Construction Unit Rate)** | **Project Costs (13% of Total Direct and Indirect Construction Unit Rates)** | **Total Unit Rate ($/m)** |
| --- | --- | --- | --- | --- | --- |
| Natural channel | 15m wide base x 1.5m deep. 1 in 6 batter slopes. 33m top width | $3,018 | $513 | $459 | $3,990 |
| Natural channel | 15m wide base x 1.2m deep. 1 in 6 batter slopes. 29.4m top width | $2,741 | $466 | $417 | $3,624 |
| Natural channel | 15m wide x 0.6m deep | $2,562 | $436 | $390 | $3,387 |

#### Stormwater Quality Improvement Devices (SQIDs)

The estimated costs of future biopods, gross pollutant traps (GPT) and bio-retention basins infrastructure have been calculated as a lump sum for the delivery of the units.

The estimated costs have been calculated by using the construction value in the Brisbane *City Plan 2014*, Priority Infrastructure Plan and escalating the value to 30 June 2016 dollars.

* + - 1. *Biopods*

The unit costs include the following:

* + - * 1. excavation works;
        2. supply of materials;
        3. pipework;
        4. placement of liners, filter medias and materials;
        5. plantings;
        6. restoration of adjoining works and land; and
        7. disposal of spoil to an approved site including cartage and tip.

### Table 5.1.3.1—Standard Unit Cost – Biopods

| **Type** | **Description** | **Direct Construction Unit Cost** | **Indirect Construction Cost (17% of Direct Construction Unit Cost)** | **Project Costs (13% of Total Direct and Indirect Construction Unit Costs)** | **Total Unit Cost** |
| --- | --- | --- | --- | --- | --- |
| SQID | Biopod | $22,025 | $3,744 | $3,350 | $29,119 |

* + - 1. *Gross Pollutant Traps (GPT)*

The unit costs include the following:

* + - * 1. excavation and backfilling of works;
        2. supply of materials including the propriety GPT;
        3. pipework;
        4. restoration of adjoining works and land; and
        5. disposal of spoil to an approved site including cartage and tip.

### Table 5.1.3.2—Standard Unit Costs – GPTs

| **Type** | **Description** | **Direct Construction Unit Cost** | **Indirect Construction Cost (17% of Direct Construction Unit Cost)** | **Project Costs (13% of Total Direct and Indirect Construction Unit Costs)** | **Total Unit Cost** |
| --- | --- | --- | --- | --- | --- |
| GPT | Design to treat 2.65 m3/s flow | $74,958 | $12,743 | $11,401 | $99,102 |
| GPT | Design to treat 3.02 m3/s flow | $798,174 | $135,690 | $121,402 | $1,055,266 |
| GPT | Design to treat 0.15 m3/s flow | $74,829 | $12,721 | $11,381 | $98,931 |
| GPT | Design to treat 0.43 m3/s flow | $141,343 | $24,028 | $21,498 | $186,870 |
| GPT | Design to treat 1.55 m3/s flow | $266,058 | $45,230 | $40,467 | $351,755 |

* + - 1. *Bio-retention basin*

The unit costs include the following:

* + - * 1. site preparation – clearing, removal of weeds and decontamination if necessary;
        2. earthworks; and
        3. supply and planting of selected vegetation.

### Table 5.1.3.3—Standard Unit Costs – Bio-retention Basins

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Type** | **Description** | **Direct Construction Unit Cost** | **Indirect Construction Cost (17% of Direct Construction Unit Cost)** | **Project Costs (13% of Total Direct and Indirect Construction Unit Costs)** | **Total Unit Cost** |
| Bio-retention Basin | Design area 7ha | $56,546 | $9,613 | $8,601 | $74,759 |
| Bio-retention Basin | Design area 10.3ha | $74,398 | $12,648 | $11,316 | $98,362 |

#### Wetland

The estimated construction cost for the future wetland in Pallara has been calculated as a lump sum for the delivery of the wetland.

The cost has been calculated using a first principles estimating approach as this is a unique stormwater project.

The establishment cost for the wetland includes all associated construction costs including direct, indirect, project and contingency costs.

#### Backflow Prevention Devices (BPDs)

There are no planned BDP projects included in the SoW, subsequently no costing methodology or values are included.

### Extrinsic Material Schedule of Works

| **LGIP ID** (1) | | **Map reference** | | **Suburb** | **Project description** | | **Service catchment** | | **Estimated year of completion** (2) | | **Diameter (mm)** | **Height (mm)** | | | **Length (m)** | **Total number of barrels** | **Area (m²)** | | **Land cost ($)** | | **Direct construction cost ($)** | **Indirect construction cost ($) (3)** | | | **Project cost ($) (4)** | **Construction contingency cost ($) (5)** | | | **Total construction cost ($) (6)** | **Value of the trunk infrastructure ($) (7)** | | **Establishment cost ($) (8)** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ACR-PN-001 | | SW271 | | Acacia Ridge | Pipe - New | | Oxley Creek | | 2016 - 2021 | | 1,350 | - | | | 53 | 1 | - | | - | | 110,272 | 18,746 | | | 16,772 | 10,934 | | | 156,724 | 156,724 | | 156,724 | |
| ACR-PN-002 | | SW271 | | Acacia Ridge | Pipe - New | | Oxley Creek | | 2016 - 2021 | | 1,350 | - | | | 208 | 1 | - | | - | | 435,340 | 74,008 | | | 66,215 | 43,167 | | | 618,730 | 618,730 | | 618,730 | |
| ACR-PN-004 | | SW292 | | Acacia Ridge | Pipe - New | | Oxley Creek | | 2016 - 2021 | | 1,200 | - | | | 128 | 1 | - | | - | | 229,886 | 39,081 | | | 34,966 | 22,795 | | | 326,728 | 326,728 | | 326,728 | |
| ACR-PN-005 | | SW292 | | Acacia Ridge | Pipe - New | | Oxley Creek | | 2016 - 2021 | | 1,350 | - | | | 56 | 1 | - | | - | | 117,205 | 19,925 | | | 17,827 | 11,622 | | | 166,579 | 166,579 | | 166,579 | |
| ACR-PN-006 | | SW292 | | Acacia Ridge | Pipe - New | | Oxley Creek | | 2016 - 2021 | | 1,350 | - | | | 146 | 1 | - | | - | | 305,491 | 51,933 | | | 46,465 | 30,292 | | | 434,181 | 434,181 | | 434,181 | |
| ACR-PN-008 | | SW292 | | Acacia Ridge | Pipe - New | | Oxley Creek | | 2016 - 2021 | | 1,050 | - | | | 51 | 1 | - | | - | | 80,003 | 13,601 | | | 12,169 | 7,933 | | | 113,706 | 113,706 | | 113,706 | |
| ACR-PN-009 | | SW292 | | Acacia Ridge | Pipe - New | | Oxley Creek | | 2016 - 2021 | | 1,350 | - | | | 86 | 1 | - | | - | | 180,237 | 30,640 | | | 27,414 | 17,872 | | | 256,163 | 256,163 | | 256,163 | |
| ACR-PN-010 | | SW292 | | Acacia Ridge | Pipe - New | | Oxley Creek | | 2016 - 2021 | | 1,350 | - | | | 129 | 1 | - | | - | | 269,470 | 45,810 | | | 40,986 | 26,720 | | | 382,986 | 382,986 | | 382,986 | |
| ACR-SQ-001 | | SW271 | | Acacia Ridge | SQID | | Oxley Creek | | 2016 - 2021 | | - | - | | | 10 | - | - | | - | | 22,025 | 3,744 | | | 3,350 | 2,184 | | | 31,303 | 31,303 | | 31,303 | |
| ACR-SQ-002 | | SW292 | | Acacia Ridge | SQID | | Oxley Creek | | 2016 - 2021 | | - | - | | | 10 | - | - | | - | | 22,025 | 3,744 | | | 3,350 | 2,184 | | | 31,303 | 31,303 | | 31,303 | |
| ACR-SQ-003 | | SW292 | | Acacia Ridge | SQID | | Oxley Creek | | 2016 - 2021 | | - | - | | | 10 | - | - | | - | | 22,025 | 3,744 | | | 3,350 | 2,184 | | | 31,303 | 31,303 | | 31,303 | |
| ALB-PR-082 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,050 | - | | | 51 | 2 | - | | - | | 151,133 | 25,693 | | | 22,987 | 14,986 | | | 214,799 | 214,799 | | 214,799 | |
| ALB-PR-084 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,050 | - | | | 25 | 1 | - | | - | | 40,910 | 6,955 | | | 6,222 | 4,057 | | | 58,144 | 58,144 | | 58,144 | |
| ALB-PR-085 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,050 | - | | | 66 | 1 | - | | - | | 102,811 | 17,478 | | | 15,638 | 10,195 | | | 146,122 | 146,122 | | 146,122 | |
| ALB-PR-088 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,350 | - | | | 67 | 2 | - | | - | | 264,387 | 44,946 | | | 40,213 | 26,216 | | | 375,762 | 375,762 | | 375,762 | |
| ALB-PR-089 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,350 | - | | | 42 | 2 | - | | - | | 166,953 | 28,382 | | | 25,394 | 16,555 | | | 237,284 | 237,284 | | 237,284 | |
| ALB-PR-092 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2021 - 2026 | | 1,650 | - | | | 16 | 4 | - | | - | | 176,067 | 29,931 | | | 26,780 | 34,917 | | | 267,695 | 267,695 | | 267,695 | |
| ALB-PR-093 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,650 | - | | | 81 | 4 | - | | - | | 863,774 | 146,842 | | | 131,380 | 85,650 | | | 1,227,646 | 1,227,646 | | 1,227,646 | |
| ALB-PR-094 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,650 | - | | | 73 | 4 | - | | - | | 772,447 | 131,316 | | | 117,489 | 76,594 | | | 1,097,846 | 1,097,846 | | 1,097,846 | |
| ALB-PR-095 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,650 | - | | | 12 | 1 | - | | - | | 37,309 | 6,343 | | | 5,675 | 3,700 | | | 53,027 | 53,027 | | 53,027 | |
| ALB-PR-096 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,650 | - | | | 35 | 4 | - | | - | | 372,653 | 63,351 | | | 56,681 | 36,951 | | | 529,636 | 529,636 | | 529,636 | |
| ALB-PR-102 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,800 | - | | | 34 | 3 | - | | - | | 298,383 | 50,725 | | | 45,384 | 29,587 | | | 424,079 | 424,079 | | 424,079 | |
| ALB-PR-103 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,800 | - | | | 47 | 3 | - | | - | | 421,102 | 71,587 | | | 64,050 | 41,755 | | | 598,494 | 598,494 | | 598,494 | |
| ALB-PR-104 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,800 | - | | | 20 | 3 | - | | - | | 192,137 | 32,663 | | | 29,224 | 19,052 | | | 273,076 | 273,076 | | 273,076 | |
| ALB-PR-108 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,500 | - | | | 103 | 2 | - | | - | | 485,999 | 82,620 | | | 73,920 | 48,190 | | | 690,729 | 690,729 | | 690,729 | |
| ALB-PR-109 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 1,650 | - | | | 80 | 2 | - | | - | | 435,115 | 73,970 | | | 66,181 | 43,145 | | | 618,411 | 618,411 | | 618,411 | |
| ALB-PR-125 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2021 - 2026 | | 825 | - | | | 59 | 2 | - | | - | | 133,589 | 22,710 | | | 20,319 | 26,493 | | | 203,111 | 203,111 | | 203,111 | |
| ALB-PR-129 | | SW153 | | Albion | Pipe - Relief | | Albion | | 2016 - 2021 | | 2,700 | 900 | | | 78 | 1 | - | | - | | 531,686 | 90,387 | | | 80,869 | 52,721 | | | 755,663 | 755,663 | | 755,663 | |
| BNE-PR-008 | | SW192 | | Brisbane City | Pipe - Relief | | Citywide | | 2021 - 2026 | | 1,500 | - | | | 124 | 1 | - | | - | | 308,920 | 52,516 | | | 46,987 | 61,263 | | | 469,686 | 469,686 | | 469,686 | |
| BNE-PR-009 | | SW192 | | Brisbane City | Pipe - Relief | | Citywide | | 2021 - 2026 | | 1,350 | - | | | 108 | 2 | - | | - | | 429,136 | 72,953 | | | 65,272 | 85,104 | | | 652,465 | 652,465 | | 652,465 | |
| BNE-PR-010 | | SW192, SW193 | | Brisbane City | Pipe - Relief | | Citywide | | 2021 - 2026 | | 1,500 | - | | | 303 | 2 | - | | - | | 1,434,234 | 243,820 | | | 218,147 | 284,430 | | | 2,180,631 | 2,180,631 | | 2,180,631 | |
| BUL-PR-007 | | SW173 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,800 | - | | | 19 | 2 | - | | - | | 119,199 | 20,264 | | | 18,130 | 11,819 | | | 169,412 | 169,412 | | 169,412 | |
| BUL-PR-008 | | SW173 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,800 | - | | | 134 | 2 | - | | - | | 806,943 | 137,180 | | | 122,736 | 80,014 | | | 1,146,873 | 1,146,873 | | 1,146,873 | |
| BUL-PR-009 | | SW173 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,800 | - | | | 75 | 2 | - | | - | | 449,046 | 76,338 | | | 68,300 | 44,526 | | | 638,210 | 638,210 | | 638,210 | |
| BUL-PR-010 | | SW173 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,800 | - | | | 62 | 2 | - | | - | | 371,829 | 63,211 | | | 56,555 | 36,870 | | | 528,465 | 528,465 | | 528,465 | |
| BUL-PR-011 | | SW173 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,800 | - | | | 77 | 2 | - | | - | | 462,203 | 78,575 | | | 70,301 | 45,831 | | | 656,910 | 656,910 | | 656,910 | |
| BUL-PR-022 | | SW174 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,500 | - | | | 36 | 3 | - | | - | | 247,857 | 42,136 | | | 37,699 | 24,577 | | | 352,269 | 352,269 | | 352,269 | |
| BUL-PR-023 | | SW173, SW174 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,500 | - | | | 44 | 3 | - | | - | | 308,957 | 52,523 | | | 46,992 | 30,635 | | | 439,107 | 439,107 | | 439,107 | |
| BUL-PR-024 | | SW173 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,500 | - | | | 115 | 3 | - | | - | | 805,459 | 136,928 | | | 122,510 | 79,867 | | | 1,144,764 | 1,144,764 | | 1,144,764 | |
| BUL-PR-025 | | SW174 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,500 | - | | | 84 | 3 | - | | - | | 586,984 | 99,787 | | | 89,280 | 58,204 | | | 834,255 | 834,255 | | 834,255 | |
| BUL-PR-026 | | SW173 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,500 | - | | | 55 | 3 | - | | - | | 381,370 | 64,833 | | | 58,006 | 37,816 | | | 542,025 | 542,025 | | 542,025 | |
| BUL-PR-027 | | SW174 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,500 | - | | | 90 | 3 | - | | - | | 628,523 | 106,849 | | | 95,598 | 62,323 | | | 893,293 | 893,293 | | 893,293 | |
| BUL-PR-028 | | SW173 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,500 | - | | | 41 | 3 | - | | - | | 287,724 | 48,913 | | | 43,763 | 28,530 | | | 408,930 | 408,930 | | 408,930 | |
| BUL-PR-029 | | SW173 | | Bulimba | Pipe - Relief | | Pashen Creek LSMP | | 2016 - 2021 | | 1,500 | - | | | 104 | 3 | - | | - | | 724,591 | 123,180 | | | 110,210 | 71,849 | | | 1,029,830 | 1,029,830 | | 1,029,830 | |
| CHE-PR-047 | | SW112 | | Chermside | Pipe - Relief | | Nundah Downfall Creek | | 2021 - 2026 | | 1,350 | - | | | 55 | 1 | - | | - | | 115,230 | 19,589 | | | 17,526 | 22,852 | | | 175,197 | 175,197 | | 175,197 | |
| CHE-PR-049 | | SW113, SW112 | | Chermside | Pipe - Relief | | Nundah Downfall Creek | | 2021 - 2026 | | 1,500 | - | | | 33 | 1 | - | | - | | 83,184 | 14,141 | | | 12,652 | 16,497 | | | 126,474 | 126,474 | | 126,474 | |
| CHE-PR-050 | | SW113 | | Chermside | Pipe - Relief | | Nundah Downfall Creek | | 2021 - 2026 | | 2,100 | 1,500 | | | 210 | 3 | - | | - | | 3,222,798 | 547,876 | | | 490,188 | 639,129 | | | 4,899,991 | 4,899,991 | | 4,899,991 | |
| COO-PR-121 | | SW213 | | Coorparoo | Pipe - Relief | | Norman Creek | | 2021 - 2026 | | 1,800 | - | | | 93 | 1 | - | | - | | 296,549 | 50,413 | | | 45,105 | 58,810 | | | 450,877 | 450,877 | | 450,877 | |
| COO-PR-122 | | SW213 | | Coorparoo | Pipe - Relief | | Norman Creek | | 2021 - 2026 | | 1,800 | - | | | 63 | 1 | - | | - | | 198,732 | 33,784 | | | 30,227 | 39,411 | | | 302,154 | 302,154 | | 302,154 | |
| CVE-CU-001 | | SW313 | | Calamvale | Culvert | | Calamvale | | 2016 - 2021 | | 1,350 | - | | | 68 | 3 | - | | - | | 399,568 | 67,927 | | | 60,774 | 39,620 | | | 567,889 | 567,889 | | 567,889 | |
| CVE-CU-002 | | SW313 | | Calamvale | Culvert | | Calamvale | | 2016 - 2021 | | 2,700 | 3,000 | | | 53 | 3 | - | | - | | 1,530,430 | 260,173 | | | 232,778 | 151,754 | | | 2,175,135 | 2,175,135 | | 2,175,135 | |
| CVE-CU-004 | | SW313 | | Calamvale | Culvert | | Calamvale | | 2016 - 2021 | | 1,200 | 2,700 | | | 75 | 3 | - | | - | | 1,483,479 | 252,191 | | | 225,637 | 147,098 | | | 2,108,405 | 2,108,405 | | 2,108,405 | |
| CVE-PR-005 | | SW313 | | Calamvale | Pipe - Relief | | Calamvale | | 2016 - 2021 | | 1,050 | - | | | 500 | 1 | - | | - | | 780,100 | 132,617 | | | 118,653 | 77,353 | | | 1,108,723 | 1,108,723 | | 1,108,723 | |
| DOO-CU-002 | | SW311 | | Doolandella | Culvert | | Doolandella | | 2016 - 2021 | | 1,500 | 1,500 | | | 16 | 3 | - | | - | | 185,732 | 31,574 | | | 28,250 | 18,417 | | | 263,973 | 263,973 | | 263,973 | |
| DOO-PR-009 | | SW311 | | Doolandella | Pipe - Relief | | Doolandella | | 2016 - 2021 | | 1,500 | - | | | 76 | 1 | - | | - | | 188,763 | 32,090 | | | 28,711 | 18,717 | | | 268,281 | 268,281 | | 268,281 | |
| DOO-PR-016 | | SW311 | | Doolandella | Pipe - Relief | | Doolandella | | 2016 - 2021 | | 1,050 | - | | | 162 | 1 | - | | - | | 252,175 | 42,870 | | | 38,356 | 25,005 | | | 358,406 | 358,406 | | 358,406 | |
| DOO-PR-018 | | SW311 | | Doolandella | Pipe - Relief | | Doolandella | | 2016 - 2021 | | 1,650 | - | | | 282 | 1 | - | | - | | 809,471 | 137,610 | | | 123,121 | 80,265 | | | 1,150,467 | 1,150,467 | | 1,150,467 | |
| DOO-PR-025 | | SW311 | | Doolandella | Pipe - Relief | | Doolandella | | 2016 - 2021 | | 1,050 | - | | | 81 | 1 | - | | - | | 127,107 | 21,608 | | | 19,333 | 12,604 | | | 180,652 | 180,652 | | 180,652 | |
| DOO-PR-030 | | SW311 | | Doolandella | Pipe - Relief | | Doolandella | | 2016 - 2021 | | 1,200 | - | | | 24 | 1 | - | | - | | 44,782 | 7,613 | | | 6,811 | 4,440 | | | 63,646 | 63,646 | | 63,646 | |
| DOO-PR-031 | | SW311 | | Doolandella | Pipe - Relief | | Doolandella | | 2016 - 2021 | | 1,050 | - | | | 51 | 1 | - | | - | | 79,271 | 13,476 | | | 12,057 | 7,860 | | | 112,664 | 112,664 | | 112,664 | |
| DOO-PR-036 | | SW311 | | Doolandella | Pipe - Relief | | Doolandella | | 2016 - 2021 | | 1,200 | - | | | 177 | 1 | - | | - | | 318,318 | 54,114 | | | 48,416 | 31,564 | | | 452,412 | 452,412 | | 452,412 | |
| DOO-PR-037 | | SW311 | | Doolandella | Pipe - Relief | | Doolandella | | 2016 - 2021 | | 1,650 | - | | | 101 | 1 | - | | - | | 291,028 | 49,475 | | | 44,265 | 28,858 | | | 413,626 | 413,626 | | 413,626 | |
| DOO-PR-039 | | SW311 | | Doolandella | Pipe - Relief | | Doolandella | | 2016 - 2021 | | 1,350 | - | | | 46 | 1 | - | | - | | 97,092 | 16,506 | | | 14,768 | 9,627 | | | 137,993 | 137,993 | | 137,993 | |
| DOO-PR-041 | | SW311 | | Doolandella | Pipe - Relief | | Doolandella | | 2016 - 2021 | | 1,050 | - | | | 46 | 1 | - | | - | | 72,435 | 12,314 | | | 11,017 | 7,182 | | | 102,948 | 102,948 | | 102,948 | |
| DUR-SQ-001 | | SW291 | | Durack | SQID | | Oxley Creek | | 2016 - 2021 | | - | - | | | - | - | - | | - | | 22,025 | 3,744 | | | 3,350 | 2,184 | | | 31,303 | 31,303 | | 31,303 | |
| EVP-PR-024 | | SW111 | | Everton Park | Pipe - Relief | | Nundah Downfall Creek | | 2021 - 2026 | | 1,650 | - | | | 17 | 1 | - | | - | | 52,618 | 8,945 | | | 8,003 | 10,435 | | | 80,001 | 80,001 | | 80,001 | |
| EVP-PR-025 | | SW111 | | Everton Park | Pipe - Relief | | Nundah Downfall Creek | | 2021 - 2026 | | 1,650 | - | | | 33 | 1 | - | | - | | 94,050 | 15,989 | | | 14,305 | 18,652 | | | 142,996 | 142,996 | | 142,996 | |
| EVP-PR-026 | | SW111 | | Everton Park | Pipe - Relief | | Nundah Downfall Creek | | 2021 - 2026 | | 1,650 | - | | | 13 | 1 | - | | - | | 38,116 | 6,480 | | | 5,797 | 7,559 | | | 57,952 | 57,952 | | 57,952 | |
| EVP-PR-027 | | SW111 | | Everton Park | Pipe - Relief | | Nundah Downfall Creek | | 2021 - 2026 | | 1,650 | - | | | 50 | 1 | - | | - | | 143,111 | 24,329 | | | 21,767 | 28,381 | | | 217,588 | 217,588 | | 217,588 | |
| FTP-CU-005 | | SW250 | | Fig Tree Pocket | Culvert | | Fig Tree Pocket | | 2021 - 2026 | | 1,350 | - | | | 13 | 4 | - | | - | | 106,391 | 18,086 | | | 16,182 | 21,099 | | | 161,758 | 161,758 | | 161,758 | |
| FVA-PR-005 | | SW173 | | Fortitude Valley, Bowen Hills | Pipe - Relief | | INES | | 2021 - 2026 | | 2,100 | - | | | 93 | 1 | - | | - | | 377,283 | 64,138 | | | 57,385 | 74,821 | | | 573,627 | 573,627 | | 573,627 | |
| FVA-PR-015 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,050 | - | | | 36 | 1 | - | | - | | 55,993 | 9,519 | | | 8,517 | 11,104 | | | 85,133 | 85,133 | | 85,133 | |
| FVA-PR-016 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,200 | - | | | 30 | 1 | - | | - | | 54,294 | 9,230 | | | 8,258 | 10,767 | | | 82,549 | 82,549 | | 82,549 | |
| FVA-PR-017 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,350 | - | | | 60 | 1 | - | | - | | 125,353 | 21,310 | | | 19,066 | 24,859 | | | 190,588 | 190,588 | | 190,588 | |
| FVA-PR-018 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,200 | - | | | 39 | 1 | - | | - | | 70,152 | 11,926 | | | 10,670 | 13,912 | | | 106,660 | 106,660 | | 106,660 | |
| FVA-PR-019 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,350 | - | | | 150 | 1 | - | | - | | 313,134 | 53,233 | | | 47,628 | 62,099 | | | 476,094 | 476,094 | | 476,094 | |
| FVA-PR-020 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,200 | - | | | 35 | 1 | - | | - | | 63,360 | 10,771 | | | 9,637 | 12,565 | | | 96,333 | 96,333 | | 96,333 | |
| FVA-PR-021 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,200 | - | | | 91 | 1 | - | | - | | 163,052 | 27,719 | | | 24,800 | 32,336 | | | 247,907 | 247,907 | | 247,907 | |
| FVA-PR-022 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,800 | - | | | 51 | 1 | - | | - | | 161,124 | 27,391 | | | 24,507 | 31,953 | | | 244,975 | 244,975 | | 244,975 | |
| FVA-PR-023 | | SW173 | | Fortitude Valley, Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 1,800 | - | | | 89 | 1 | - | | - | | 281,091 | 47,785 | | | 42,754 | 55,745 | | | 427,375 | 427,375 | | 427,375 | |
| FVA-PR-024 | | SW173 | | Fortitude Valley, Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 2,100 | - | | | 142 | 1 | - | | - | | 576,027 | 97,925 | | | 87,614 | 114,235 | | | 875,801 | 875,801 | | 875,801 | |
| FVA-PR-025 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,800 | - | | | 16 | 1 | - | | - | | 52,579 | 8,938 | | | 7,997 | 10,427 | | | 79,941 | 79,941 | | 79,941 | |
| FVA-PR-026 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 2,100 | - | | | 109 | 1 | - | | - | | 442,158 | 75,167 | | | 67,252 | 87,687 | | | 672,264 | 672,264 | | 672,264 | |
| FVA-PR-027 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,050 | - | | | 105 | 1 | - | | - | | 164,435 | 27,954 | | | 25,011 | 32,610 | | | 250,010 | 250,010 | | 250,010 | |
| FVA-PR-028 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 2,400 | - | | | 119 | 1 | - | | - | | 528,585 | 89,859 | | | 80,398 | 104,826 | | | 803,668 | 803,668 | | 803,668 | |
| FVA-PR-029 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 3,000 | - | | | 76 | 1 | - | | - | | 465,288 | 79,099 | | | 70,770 | 92,274 | | | 707,431 | 707,431 | | 707,431 | |
| FVA-PR-032 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,800 | - | | | 32 | 1 | - | | - | | 101,984 | 17,337 | | | 15,512 | 20,225 | | | 155,058 | 155,058 | | 155,058 | |
| FVA-PR-033 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,800 | - | | | 119 | 1 | - | | - | | 378,381 | 64,325 | | | 57,552 | 75,039 | | | 575,297 | 575,297 | | 575,297 | |
| FVA-PR-034 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,050 | - | | | 32 | 1 | - | | - | | 49,631 | 8,437 | | | 7,549 | 9,843 | | | 75,460 | 75,460 | | 75,460 | |
| FVA-PR-035 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,050 | - | | | 175 | 1 | - | | - | | 273,123 | 46,431 | | | 41,542 | 54,164 | | | 415,260 | 415,260 | | 415,260 | |
| FVA-PR-036 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2016 - 2021 | | 1,200 | - | | | 26 | 1 | - | | - | | 48,910 | 8,315 | | | 7,439 | 4,850 | | | 69,514 | 69,514 | | 69,514 | |
| FVA-PR-037 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2016 - 2021 | | 1,200 | - | | | 65 | 2 | - | | - | | 221,038 | 37,576 | | | 33,620 | 21,918 | | | 314,152 | 314,152 | | 314,152 | |
| FVA-PR-038 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2016 - 2021 | | 1,200 | - | | | 41 | 2 | - | | - | | 140,927 | 23,958 | | | 21,435 | 13,974 | | | 200,294 | 200,294 | | 200,294 | |
| FVA-PR-039 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2016 - 2021 | | 2,100 | - | | | 158 | 2 | - | | - | | 1,214,447 | 206,456 | | | 184,717 | 120,422 | | | 1,726,042 | 1,726,042 | | 1,726,042 | |
| FVA-PR-040 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2016 - 2021 | | 2,100 | - | | | 50 | 2 | - | | - | | 384,666 | 65,393 | | | 58,508 | 38,143 | | | 546,710 | 546,710 | | 546,710 | |
| FVA-PR-041 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 2,100 | - | | | 133 | 1 | - | | - | | 538,390 | 91,526 | | | 81,889 | 106,771 | | | 818,576 | 818,576 | | 818,576 | |
| FVA-PR-042 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,800 | - | | | 10 | 1 | - | | - | | 34,072 | 5,792 | | | 5,182 | 6,757 | | | 51,803 | 51,803 | | 51,803 | |
| FVA-PR-043 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,800 | - | | | 55 | 1 | - | | - | | 175,903 | 29,904 | | | 26,755 | 34,884 | | | 267,446 | 267,446 | | 267,446 | |
| FVA-PR-044 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2016 - 2021 | | 1,050 | - | | | 186 | 1 | - | | - | | 289,990 | 49,298 | | | 44,107 | 28,755 | | | 412,150 | 412,150 | | 412,150 | |
| FVA-PR-051 | | SW173 | | Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 1,050 | - | | | 3 | 1 | - | | - | | 5,927 | 1,008 | | | 902 | 1,176 | | | 9,013 | 9,013 | | 9,013 | |
| GAP-PN-001 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,800 | 1,500 | | | 56 | 1 | - | | - | | 177,635 | 30,198 | | | 27,018 | 35,228 | | | 270,079 | 270,079 | | 270,079 | |
| GAP-PN-002 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,500 | - | | | 31 | 2 | - | | - | | 146,736 | 24,945 | | | 22,319 | 29,100 | | | 223,100 | 223,100 | | 223,100 | |
| GAP-PN-003 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,500 | - | | | 10 | 2 | - | | - | | 53,185 | 9,041 | | | 8,089 | 10,547 | | | 80,862 | 80,862 | | 80,862 | |
| GAP-PN-004 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,050 | - | | | 10 | 2 | - | | - | | 33,308 | 5,662 | | | 5,066 | 6,605 | | | 50,641 | 50,641 | | 50,641 | |
| GAP-PN-005 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,200 | - | | | 55 | 2 | - | | - | | 187,816 | 31,929 | | | 28,567 | 37,247 | | | 285,559 | 285,559 | | 285,559 | |
| GAP-PN-006 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,200 | - | | | 17 | 2 | - | | - | | 61,313 | 10,423 | | | 9,326 | 12,159 | | | 93,221 | 93,221 | | 93,221 | |
| GAP-PN-007 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,200 | - | | | 13 | 2 | - | | - | | 46,887 | 7,971 | | | 7,132 | 9,299 | | | 71,289 | 71,289 | | 71,289 | |
| GAP-PN-008 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,050 | - | | | 16 | 2 | - | | - | | 50,094 | 8,516 | | | 7,619 | 9,934 | | | 76,163 | 76,163 | | 76,163 | |
| GAP-PN-009 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,050 | - | | | 40 | 2 | - | | - | | 118,574 | 20,158 | | | 18,035 | 23,515 | | | 180,282 | 180,282 | | 180,282 | |
| GAP-PN-010 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,800 | - | | | 9 | 2 | - | | - | | 60,945 | 10,361 | | | 9,270 | 12,086 | | | 92,662 | 92,662 | | 92,662 | |
| GAP-PN-011 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,050 | - | | | 38 | 2 | - | | - | | 112,646 | 19,150 | | | 17,133 | 22,339 | | | 171,268 | 171,268 | | 171,268 | |
| GAP-PN-012 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,050 | - | | | 12 | 2 | - | | - | | 37,572 | 6,387 | | | 5,715 | 7,451 | | | 57,125 | 57,125 | | 57,125 | |
| GAP-PN-013 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,050 | - | | | 18 | 2 | - | | - | | 56,357 | 9,581 | | | 8,572 | 11,177 | | | 85,687 | 85,687 | | 85,687 | |
| GAP-PN-014 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,050 | - | | | 11 | 2 | - | | - | | 34,440 | 5,855 | | | 5,238 | 6,830 | | | 52,363 | 52,363 | | 52,363 | |
| GAP-PN-015 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,050 | - | | | 38 | 2 | - | | - | | 112,646 | 19,150 | | | 17,133 | 22,339 | | | 171,268 | 171,268 | | 171,268 | |
| GAP-PN-016 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,500 | 1,200 | | | 25 | 1 | - | | - | | 65,780 | 11,183 | | | 10,005 | 13,045 | | | 100,013 | 100,013 | | 100,013 | |
| GAP-PN-017 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,500 | 1,200 | | | 26 | 1 | - | | - | | 68,413 | 11,630 | | | 10,406 | 13,567 | | | 104,016 | 104,016 | | 104,016 | |
| GAP-PN-018 | | SW170 | | The Gap | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,650 | - | | | 23 | 2 | - | | - | | 132,468 | 22,520 | | | 20,148 | 26,270 | | | 201,406 | 201,406 | | 201,406 | |
| HEM-CU-005 | | SW176 | | Hemmant | Culvert | | ATC South (a) | | 2016 - 2021 | | 1,700 | 3,000 | | | 25 | 4 | - | | - | | 861,820 | 146,509 | | | 131,083 | 85,456 | | | 1,224,868 | 1,224,868 | | 1,224,868 | |
| HEM-CU-008 | | SW176 | | Hemmant | Culvert | | Bulimba Creek | | 2021 - 2026 | | 1,200 | - | | | 29 | 3 | - | | - | | 153,806 | 26,147 | | | 23,394 | 30,502 | | | 233,849 | 233,849 | | 233,849 | |
| HEM-PR-013 | | SW176 | | Hemmant | Pipe - Relief | | ATC South (a) | | 2016 - 2021 | | 1,350 | - | | | 89 | 1 | - | | - | | 186,126 | 31,641 | | | 28,310 | 18,456 | | | 264,533 | 264,533 | | 264,533 | |
| HEM-PR-014 | | SW176 | | Hemmant | Pipe - Relief | | Bulimba Creek | | 2016 - 2021 | | 1,200 | - | | | 209 | 1 | - | | - | | 375,631 | 63,857 | | | 57,133 | 37,247 | | | 533,868 | 533,868 | | 533,868 | |
| INA-CU-001 | | SW290 | | Inala, Richlands | Culvert | | Richlands (b) | | 2021 - 2026 | | 1,350 | - | | | 15 | 3 | - | | - | | 92,770 | 15,771 | | | 14,110 | 18,398 | | | 141,049 | 141,049 | | 141,049 | |
| IND-PR-034 | | SW211 | | Indooroopilly, Taringa | Pipe - Relief | | Toowong Creeks | | 2021 - 2026 | | 1,500 | - | | | 51 | 1 | - | | - | | 128,219 | 21,797 | | | 19,502 | 25,428 | | | 194,946 | 194,946 | | 194,946 | |
| MGE-PR-001 | | SW254 | | Mount Gravatt East | Pipe - Relief | | Norman Creek | | 2016 - 2021 | | 1,950 | - | | | 60 | 1 | - | | - | | 214,993 | 36,549 | | | 32,700 | 21,318 | | | 305,560 | 305,560 | | 305,560 | |
| MGE-PR-002 | | SW254 | | Mount Gravatt East | Pipe - Relief | | Norman Creek | | 2016 - 2021 | | 1,050 | - | | | 49 | 1 | - | | - | | 76,339 | 12,978 | | | 11,611 | 7,570 | | | 108,498 | 108,498 | | 108,498 | |
| MGE-PR-006 | | SW254 | | Mount Gravatt East | Pipe - Relief | | Bulimba Creek | | 2016 - 2021 | | 1,500 | - | | | 35 | 1 | - | | - | | 85,949 | 14,611 | | | 13,073 | 8,522 | | | 122,155 | 122,155 | | 122,155 | |
| NUN-PN-001 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,200 | - | | | 13 | 1 | - | | - | | 24,678 | 4,195 | | | 3,753 | 4,894 | | | 37,520 | 37,520 | | 37,520 | |
| NUN-PN-002 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,200 | - | | | 57 | 1 | - | | - | | 102,445 | 17,416 | | | 15,582 | 20,316 | | | 155,759 | 155,759 | | 155,759 | |
| NUN-PN-003 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,200 | - | | | 26 | 1 | - | | - | | 49,355 | 8,390 | | | 7,507 | 9,788 | | | 75,040 | 75,040 | | 75,040 | |
| NUN-PN-004 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,200 | - | | | 18 | 1 | - | | - | | 34,168 | 5,809 | | | 5,197 | 6,776 | | | 51,950 | 51,950 | | 51,950 | |
| NUN-PN-005 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,200 | - | | | 162 | 1 | - | | - | | 291,159 | 49,497 | | | 44,285 | 57,741 | | | 442,682 | 442,682 | | 442,682 | |
| NUN-PN-006 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,200 | - | | | 8 | 1 | - | | - | | 16,155 | 2,746 | | | 2,457 | 3,204 | | | 24,562 | 24,562 | | 24,562 | |
| NUN-PN-007 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,200 | - | | | 19 | 1 | - | | - | | 36,066 | 6,131 | | | 5,486 | 7,152 | | | 54,835 | 54,835 | | 54,835 | |
| NUN-PN-008 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,200 | - | | | 155 | 1 | - | | - | | 278,578 | 47,358 | | | 42,372 | 55,246 | | | 423,554 | 423,554 | | 423,554 | |
| NUN-PN-009 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,050 | - | | | 31 | 1 | - | | - | | 48,366 | 8,222 | | | 7,356 | 9,592 | | | 73,536 | 73,536 | | 73,536 | |
| NUN-PN-010 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,800 | 600 | | | 17 | 1 | - | | - | | 56,954 | 9,682 | | | 8,663 | 11,295 | | | 86,594 | 86,594 | | 86,594 | |
| NUN-PN-011 | | SW134 | | Nundah | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,050 | - | | | 45 | 1 | - | | - | | 70,209 | 11,936 | | | 10,679 | 13,924 | | | 106,748 | 106,748 | | 106,748 | |
| NUN-PR-017 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,500 | - | | | 78 | 1 | - | | - | | 193,269 | 32,856 | | | 29,396 | 38,328 | | | 293,849 | 293,849 | | 293,849 | |
| NUN-PR-018 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,500 | - | | | 65 | 1 | - | | - | | 162,474 | 27,621 | | | 24,712 | 32,221 | | | 247,028 | 247,028 | | 247,028 | |
| NUN-PR-019 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,800 | - | | | 50 | 1 | - | | - | | 159,219 | 27,067 | | | 24,217 | 31,575 | | | 242,078 | 242,078 | | 242,078 | |
| NUN-PR-021 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,500 | - | | | 93 | 1 | - | | - | | 231,650 | 39,381 | | | 35,234 | 45,940 | | | 352,205 | 352,205 | | 352,205 | |
| NUN-PR-025 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,800 | - | | | 40 | 1 | - | | - | | 126,685 | 21,536 | | | 19,269 | 25,124 | | | 192,614 | 192,614 | | 192,614 | |
| NUN-PR-029 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,800 | - | | | 58 | 1 | - | | - | | 184,138 | 31,303 | | | 28,007 | 36,517 | | | 279,965 | 279,965 | | 279,965 | |
| NUN-PR-047 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,500 | - | | | 4 | 1 | - | | - | | 11,626 | 1,976 | | | 1,768 | 2,306 | | | 17,676 | 17,676 | | 17,676 | |
| NUN-PR-126 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,800 | - | | | 16 | 1 | - | | - | | 54,274 | 9,227 | | | 8,255 | 10,763 | | | 82,519 | 82,519 | | 82,519 | |
| NUN-PR-127 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,800 | - | | | 41 | 1 | - | | - | | 129,578 | 22,028 | | | 19,709 | 25,697 | | | 197,012 | 197,012 | | 197,012 | |
| NUN-PR-128 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,800 | - | | | 36 | 1 | - | | - | | 114,828 | 19,521 | | | 17,465 | 22,772 | | | 174,586 | 174,586 | | 174,586 | |
| NUN-PR-129 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,800 | - | | | 56 | 1 | - | | - | | 178,587 | 30,360 | | | 27,163 | 35,417 | | | 271,527 | 271,527 | | 271,527 | |
| NUN-PR-130 | | SW134 | | Nundah | Pipe - Relief | | Kedron Brook | | 2021 - 2026 | | 1,800 | - | | | 32 | 1 | - | | - | | 102,774 | 17,472 | | | 15,632 | 20,382 | | | 156,260 | 156,260 | | 156,260 | |
| NWS-PR-004 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 2,100 | - | | | 145 | 1 | - | | - | | 586,112 | 99,639 | | | 89,148 | 58,117 | | | 833,016 | 833,016 | | 833,016 | |
| NWS-PR-005 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 2,700 | - | | | 6 | 1 | - | | - | | 33,146 | 5,635 | | | 5,042 | 3,287 | | | 47,110 | 47,110 | | 47,110 | |
| NWS-PR-006 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,500 | - | | | 40 | 1 | - | | - | | 100,743 | 17,126 | | | 15,323 | 9,989 | | | 143,181 | 143,181 | | 143,181 | |
| NWS-PR-007 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 2,700 | - | | | 23 | 2 | - | | - | | 244,166 | 41,508 | | | 37,138 | 48,422 | | | 371,234 | 371,234 | | 371,234 | |
| NWS-PR-008 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 2,100 | - | | | 58 | 1 | - | | - | | 233,271 | 39,656 | | | 35,481 | 46,261 | | | 354,669 | 354,669 | | 354,669 | |
| NWS-PR-009 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 2,700 | - | | | 241 | 2 | - | | - | | 2,403,097 | 408,526 | | | 365,511 | 238,285 | | | 3,415,419 | 3,415,419 | | 3,415,419 | |
| NWS-PR-010 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 2,700 | - | | | 170 | 1 | - | | - | | 891,697 | 151,588 | | | 135,627 | 176,837 | | | 1,355,749 | 1,355,749 | | 1,355,749 | |
| NWS-PR-011 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 2,100 | - | | | 53 | 2 | - | | - | | 404,003 | 68,681 | | | 61,449 | 80,120 | | | 614,253 | 614,253 | | 614,253 | |
| NWS-PR-012 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 2,100 | - | | | 86 | 1 | - | | - | | 346,512 | 58,907 | | | 52,704 | 68,718 | | | 526,841 | 526,841 | | 526,841 | |
| NWS-PR-013 | | SW173 | | Newstead, Fortitude Valley | Pipe - Relief | | INES | | 2021 - 2026 | | 2,400 | - | | | 81 | 2 | - | | - | | 683,392 | 116,177 | | | 103,944 | 135,527 | | | 1,039,040 | 1,039,040 | | 1,039,040 | |
| NWS-PR-017 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,950 | - | | | 26 | 1 | - | | - | | 99,816 | 16,969 | | | 15,182 | 9,898 | | | 141,865 | 141,865 | | 141,865 | |
| NWS-PR-018 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,950 | - | | | 15 | 1 | - | | - | | 58,726 | 9,983 | | | 8,932 | 5,823 | | | 83,464 | 83,464 | | 83,464 | |
| NWS-PR-019 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,950 | - | | | 73 | 1 | - | | - | | 260,592 | 44,301 | | | 39,636 | 25,840 | | | 370,369 | 370,369 | | 370,369 | |
| NWS-PR-020 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,950 | - | | | 45 | 1 | - | | - | | 163,143 | 27,734 | | | 24,814 | 16,177 | | | 231,868 | 231,868 | | 231,868 | |
| NWS-PR-021 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,950 | - | | | 79 | 1 | - | | - | | 283,256 | 48,154 | | | 43,083 | 28,087 | | | 402,580 | 402,580 | | 402,580 | |
| NWS-PR-022 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,950 | - | | | 47 | 1 | - | | - | | 167,531 | 28,480 | | | 25,481 | 16,612 | | | 238,104 | 238,104 | | 238,104 | |
| NWS-PR-023 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,950 | - | | | 11 | 1 | - | | - | | 41,321 | 7,025 | | | 6,285 | 4,097 | | | 58,728 | 58,728 | | 58,728 | |
| NWS-PR-024 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,950 | - | | | 34 | 1 | - | | - | | 122,040 | 20,747 | | | 18,562 | 12,101 | | | 173,450 | 173,450 | | 173,450 | |
| NWS-PR-025 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,950 | - | | | 7 | 1 | - | | - | | 29,973 | 5,095 | | | 4,559 | 2,972 | | | 42,599 | 42,599 | | 42,599 | |
| NWS-PR-026 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 1,200 | - | | | 72 | 1 | - | | - | | 128,552 | 21,854 | | | 19,553 | 25,494 | | | 195,453 | 195,453 | | 195,453 | |
| NWS-PR-027 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 1,350 | - | | | 61 | 1 | - | | - | | 127,804 | 21,727 | | | 19,439 | 25,346 | | | 194,316 | 194,316 | | 194,316 | |
| NWS-PR-028 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 1,350 | - | | | 86 | 1 | - | | - | | 179,244 | 30,471 | | | 27,263 | 35,547 | | | 272,525 | 272,525 | | 272,525 | |
| NWS-PR-029 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2021 - 2026 | | 1,200 | - | | | 71 | 1 | - | | - | | 127,339 | 21,648 | | | 19,368 | 25,253 | | | 193,608 | 193,608 | | 193,608 | |
| NWS-PR-033 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,500 | - | | | 35 | 1 | - | | - | | 87,800 | 14,926 | | | 13,354 | 8,706 | | | 124,786 | 124,786 | | 124,786 | |
| NWS-PR-034 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,500 | - | | | 135 | 1 | - | | - | | 336,047 | 57,128 | | | 51,113 | 33,322 | | | 477,610 | 477,610 | | 477,610 | |
| NWS-PR-036 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,050 | - | | | 68 | 1 | - | | - | | 106,161 | 18,047 | | | 16,147 | 10,527 | | | 150,882 | 150,882 | | 150,882 | |
| NWS-PR-037 | | SW173 | | Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,500 | - | | | 27 | 1 | - | | - | | 70,548 | 11,993 | | | 10,730 | 6,995 | | | 100,266 | 100,266 | | 100,266 | |
| OXY-PR-027 | | SW270 | | Oxley | Pipe - Relief | | Richlands (b) | | 2021 - 2026 | | 1,350 | 1,500 | | | 35 | 2 | - | | - | | 250,900 | 42,653 | | | 38,162 | 49,757 | | | 381,472 | 381,472 | | 381,472 | |
| OXY-PR-040 | | SW271 | | Oxley | Pipe - Relief | | Oxley Creek | | 2021 - 2026 | | 1,950 | - | | | 18 | 2 | - | | - | | 128,355 | 21,820 | | | 19,523 | 25,455 | | | 195,153 | 195,153 | | 195,153 | |
| OXY-PR-046 | | SW271 | | Oxley | Pipe - Relief | | Oxley Creek | | 2021 - 2026 | | 1,650 | - | | | 86 | 1 | - | | - | | 245,414 | 41,720 | | | 37,327 | 48,669 | | | 373,130 | 373,130 | | 373,130 | |
| OXY-PR-053 | | SW271 | | Oxley | Pipe - Relief | | Oxley Creek | | 2021 - 2026 | | 2,100 | - | | | 61 | 1 | - | | - | | 245,451 | 41,727 | | | 37,333 | 48,677 | | | 373,188 | 373,188 | | 373,188 | |
| OXY-PR-056 | | SW271 | | Oxley | Pipe - Relief | | Oxley Creek | | 2021 - 2026 | | 1,050 | - | | | 116 | 1 | - | | - | | 180,671 | 30,714 | | | 27,480 | 35,830 | | | 274,695 | 274,695 | | 274,695 | |
| PAL-CU-005 | | SW312 | | Pallara | Culvert | | Oxley Creek | | 2021 - 2026 | | 2,700 | - | | | 20 | 2 | - | | - | | 304,505 | 51,766 | | | 46,315 | 60,388 | | | 462,974 | 462,974 | | 462,974 | |
| PAL-CU-008 | | SW312 | | Pallara | Culvert | | Oxley Creek | | 2021 - 2026 | | 2,700 | - | | | 20 | 3 | - | | - | | 373,157 | 63,437 | | | 56,757 | 74,003 | | | 567,354 | 567,354 | | 567,354 | |
| PAL-CU-010 | | SW312 | | Pallara | Culvert | | Oxley Creek | | 2021 - 2026 | | 1,500 | 900 | | | 17 | 3 | - | | - | | 166,226 | 28,258 | | | 25,283 | 32,965 | | | 252,732 | 252,732 | | 252,732 | |
| PAL-CU-011 | | SW312 | | Pallara | Culvert | | Oxley Creek | | 2021 - 2026 | | 1,800 | 600 | | | 20 | 3 | - | | - | | 218,928 | 37,218 | | | 33,299 | 43,417 | | | 332,862 | 332,862 | | 332,862 | |
| PAL-NC-001 | | SW312 | | Pallara | Natural channel | | Oxley Creek | | 2021 - 2026 | | - | - | | | 400 | - | 11,885 | | 1,009,867 | | 1,207,200 | 205,224 | | | 183,615 | 239,406 | | | 1,835,445 | 2,845,312 | | 2,845,312 | |
| PAL-NC-002 | | SW312 | | Pallara | Natural channel | | Oxley Creek | | 2021 - 2026 | | - | - | | | 475 | - | 26,500 | | 494,880 | | 1,301,975 | 221,336 | | | 198,030 | 258,201 | | | 1,979,542 | 2,474,422 | | 2,474,422 | |
| PAL-NC-003 | | SW312 | | Pallara | Natural channel | | Oxley Creek | | 2021 - 2026 | | - | - | | | 423 | - | 25,100 | | 468,735 | | 1,083,726 | 184,233 | | | 164,835 | 214,919 | | | 1,647,713 | 2,116,448 | | 2,116,448 | |
| PAL-PN-001 | | SW312 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,050 | - | | | 200 | 1 | - | | - | | 312,040 | 53,047 | | | 47,461 | 61,882 | | | 474,430 | 474,430 | | 474,430 | |
| PAL-PN-002 | | SW312 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 200 | 1 | - | | - | | 418,261 | 71,104 | | | 63,617 | 82,947 | | | 635,929 | 635,929 | | 635,929 | |
| PAL-PN-003 | | SW312 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 200 | 2 | - | | - | | 794,695 | 135,098 | | | 120,873 | 157,600 | | | 1,208,266 | 1,208,266 | | 1,208,266 | |
| PAL-PN-004 | | SW312 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 15 | 3 | - | | - | | 92,770 | 15,771 | | | 14,110 | 18,398 | | | 141,049 | 141,049 | | 141,049 | |
| PAL-PN-005 | | SW312 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 104 | 3 | - | | - | | 608,988 | 103,528 | | | 92,627 | 120,771 | | | 925,914 | 925,914 | | 925,914 | |
| PAL-PN-006 | | SW312 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 110 | 3 | - | | - | | 644,122 | 109,501 | | | 97,971 | 127,739 | | | 979,333 | 979,333 | | 979,333 | |
| PAL-PN-007 | | SW312 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,500 | 900 | | | 60 | 3 | - | | - | | 418,537 | 71,151 | | | 63,659 | 83,002 | | | 636,349 | 636,349 | | 636,349 | |
| PAL-PN-008 | | SW312 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 20 | 2 | - | | - | | 83,934 | 14,269 | | | 12,766 | 16,645 | | | 127,614 | 127,614 | | 127,614 | |
| PAL-PN-009 | | SW312 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 195 | 2 | - | | - | | 774,828 | 131,721 | | | 117,851 | 153,660 | | | 1,178,060 | 1,178,060 | | 1,178,060 | |
| PAL-PN-010 | | SW312, SW332 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 111 | 1 | - | | - | | 232,134 | 39,463 | | | 35,308 | 46,036 | | | 352,941 | 352,941 | | 352,941 | |
| PAL-PN-011 | | SW312, SW332 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 340 | 1 | - | | - | | 711,043 | 120,877 | | | 108,150 | 141,011 | | | 1,081,081 | 1,081,081 | | 1,081,081 | |
| PAL-PN-012 | | SW312,SW332 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 120 | 1 | - | | - | | 250,957 | 42,663 | | | 38,171 | 49,769 | | | 381,560 | 381,560 | | 381,560 | |
| PAL-PN-013 | | SW312, SW332 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 25 | 2 | - | | - | | 104,918 | 17,836 | | | 15,958 | 20,807 | | | 159,519 | 159,519 | | 159,519 | |
| PAL-PN-014 | | SW312,SW332 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 80 | 2 | - | | - | | 317,878 | 54,039 | | | 48,349 | 63,040 | | | 483,306 | 483,306 | | 483,306 | |
| PAL-PN-015 | | SW312, SW332 | | Pallara | Pipe - New | | Oxley Creek | | 2021 - 2026 | | 1,350 | - | | | 45 | 2 | - | | - | | 178,806 | 30,397 | | | 27,196 | 35,460 | | | 271,859 | 271,859 | | 271,859 | |
| PAL-WL-001 | | SW312 | | Pallara | Wetland | | Oxley Creek | | 2021 - 2026 | | - | - | | | - | - | 16,800 | | 423,542 | | 1,411,850 | - | | | - | - | | | 1,411,850 | 1,835,392 | | 1,835,392 | |
| PIN-CC-001 | | SW116 | | Pinkenba | Concrete Lined Channel | | ATCN | | 2021 - 2026 | | - | - | | | 205 | - | - | | - | | 102,277 | | 17,387 | | 15,556 | 20,283 | | | 155,503 | 155,503 | | 155,503 | |
| PIN-CC-002 | | SW116 | | Pinkenba | Concrete Lined Channel | | ATCN | | 2021 - 2026 | | - | - | | | 231 | - | - | | - | | 147,904 | | 25,144 | | 22,496 | 29,332 | | | 224,876 | 224,876 | | 224,876 | |
| PIN-CC-004 | | SW116 | | Pinkenba | Concrete Lined Channel | | ATCN | | 2021 - 2026 | | - | - | | | 256 | - | - | | - | | 127,495 | | 21,674 | | 19,392 | 25,284 | | | 193,845 | 193,845 | | 193,845 | |
| PIN-CC-006 | | SW116 | | Pinkenba | Concrete Lined Channel | | ATCN | | 2021 - 2026 | | - | - | | | 218 | - | - | | - | | 108,682 | | 18,476 | | 16,531 | 21,553 | | | 165,242 | 165,242 | | 165,242 | |
| PIN-CC-009 | | SW116 | | Pinkenba | Concrete Lined Channel | | ATCN | | 2021 - 2026 | | - | - | | | 157 | - | - | | - | | 233,758 | | 39,739 | | 35,555 | 46,358 | | | 355,410 | 355,410 | | 355,410 | |
| PIN-CC-010 | | SW116 | | Pinkenba | Concrete Lined Channel | | ATCN | | 2021 - 2026 | | - | - | | | 247 | - | - | | - | | 123,328 | | 20,966 | | 18,758 | 24,458 | | | 187,510 | 187,510 | | 187,510 | |
| PIN-CU-002 | | SW116 | | Pinkenba | Culvert | | ATCN | | 2021 - 2026 | | 2,100 | 900 | | | 35 | 3 | - | | - | | 481,071 | | 81,782 | | 73,171 | 95,404 | | | 731,428 | 731,428 | | 731,428 | |
| PIN-NC-001 | | SW116 | | Pinkenba | Natural Channel | | ATCN | | 2021 - 2026 | | - | - | | | 144 | - | - | | - | | 135,213 | | 22,986 | | 20,566 | 26,815 | | | 205,580 | 205,580 | | 205,580 | |
| PIN-NC-002 | | SW116 | | Pinkenba | Natural Channel | | ATCN | | 2021 - 2026 | | - | - | | | 71 | - | - | | - | | 34,961 | | 5,943 | | 5,318 | 6,933 | | | 53,155 | 53,155 | | 53,155 | |
| PIN-NC-003 | | SW116 | | Pinkenba | Natural Channel | | ATCN | | 2021 - 2026 | | - | - | | | 92 | - | - | | - | | 44,835 | | 7,622 | | 6,819 | 8,891 | | | 68,167 | 68,167 | | 68,167 | |
| PIN-NC-004 | | SW116 | | Pinkenba | Natural Channel | | ATCN | | 2021 - 2026 | | - | - | | | 176 | - | - | | - | | 86,240 | | 14,661 | | 13,117 | 17,103 | | | 131,121 | 131,121 | | 131,121 | |
| RHI-PN-001 | | SW172 | | Red Hill | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,500 | - | | | 85 | 1 | - | | - | | 211,759 | | 35,999 | | 32,209 | 41,995 | | | 321,962 | 321,962 | | 321,962 | |
| RHI-PN-002 | | SW172 | | Red Hill | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,500 | - | | | 76 | 1 | - | | - | | 189,338 | | 32,187 | | 28,798 | 37,548 | | | 287,871 | 287,871 | | 287,871 | |
| RHI-PN-003 | | SW172, SW171 | | Red Hill | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,500 | - | | | 44 | 1 | - | | - | | 109,617 | | 18,635 | | 16,673 | 21,739 | | | 166,664 | 166,664 | | 166,664 | |
| RHI-PN-004 | | SW171 | | Red Hill | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,500 | - | | | 69 | 1 | - | | - | | 171,899 | | 29,223 | | 26,146 | 34,090 | | | 261,358 | 261,358 | | 261,358 | |
| RHI-PN-005 | | SW171 | | Red Hill | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,500 | - | | | 7 | 1 | - | | - | | 19,594 | | 3,331 | | 2,980 | 3,886 | | | 29,791 | 29,791 | | 29,791 | |
| RHI-PN-006 | | SW172 | | Red Hill | Pipe - New | | Breakfast Creek | | 2021 - 2026 | | 1,500 | - | | | 53 | 1 | - | | - | | 132,038 | | 22,446 | | 20,083 | 26,185 | | | 200,752 | 200,752 | | 200,752 | |
| RIC-CU-001 | | SW290 | | Richlands | Culvert | | Richlands (a) | | 2021 - 2026 | | 1,200 | 1,800 | | | 18 | 4 | - | | - | | 293,079 | | 49,823 | | 44,577 | 58,122 | | | 445,601 | 445,601 | | 445,601 | |
| RIC-CU-002 | | SW290 | | Richlands | Culvert | | Richlands (a) | | 2021 - 2026 | | 1,050 | - | | | 35 | 1 | - | | - | | 54,911 | | 9,335 | | 8,352 | 10,890 | | | 83,488 | 83,488 | | 83,488 | |
| RIC-PR-004 | | SW290 | | Richlands, Wacol | Pipe - Relief | | Richlands (d) | | 2021 - 2026 | | 1,200 | - | | | 128 | 1 | - | | - | | 230,511 | | 39,187 | | 35,061 | 45,714 | | | 350,473 | 350,473 | | 350,473 | |
| RIC-PR-007 | | SW290 | | Richlands | Pipe - Relief | | Richlands (a) | | 2021 - 2026 | | 1,050 | - | | | 53 | 1 | - | | - | | 82,463 | | 14,019 | | 12,543 | 16,354 | | | 125,379 | 125,379 | | 125,379 | |
| RIC-PR-008 | | SW290 | | Richlands | Pipe - Relief | | Richlands (a) | | 2021 - 2026 | | 1,050 | - | | | 103 | 1 | - | | - | | 160,569 | | 27,297 | | 24,423 | 31,843 | | | 244,132 | 244,132 | | 244,132 | |
| RIC-PR-009 | | SW290 | | Richlands | Pipe - Relief | | Richlands (a) | | 2021 - 2026 | | 1,350 | - | | | 48 | 1 | - | | - | | 100,160 | | 17,027 | | 15,234 | 19,863 | | | 152,284 | 152,284 | | 152,284 | |
| RIC-PR-129 | | SW290 | | Richlands | Pipe - Relief | | Richlands (a) | | 2016 - 2021 | | 1,200 | - | | | 41 | 1 | - | | - | | 73,105 | | 12,428 | | 11,119 | 7,249 | | | 103,901 | 103,901 | | 103,901 | |
| RIC-PR-148 | | SW290 | | Richlands | Pipe - Relief | | Richlands (a) | | 2021 - 2026 | | 1,050 | - | | | 49 | 1 | - | | - | | 76,450 | | 12,997 | | 11,628 | 15,161 | | | 116,236 | 116,236 | | 116,236 | |
| RIC-PR-149 | | SW290 | | Richlands | Pipe - Relief | | Richlands (a) | | 2021 - 2026 | | 1,500 | - | | | 49 | 1 | - | | - | | 122,074 | | 20,753 | | 18,568 | 24,209 | | | 185,604 | 185,604 | | 185,604 | |
| RIC-PR-150 | | SW290 | | Richlands | Pipe - Relief | | Richlands (a) | | 2021 - 2026 | | 1,950 | - | | | 317 | 1 | - | | - | | 1,137,373 | | 193,353 | | 172,994 | 225,558 | | | 1,729,278 | 1,729,278 | | 1,729,278 | |
| RIC-PR-176 | | SW290 | | Richlands | Pipe - Relief | | Richlands (a) | | 2021 - 2026 | | 1,200 | - | | | 46 | 1 | - | | - | | 81,776 | | 13,902 | | 12,438 | 16,217 | | | 124,333 | 124,333 | | 124,333 | |
| RIC-PR-183 | | SW290 | | Richlands | Pipe - Relief | | Richlands (b) | | 2021 - 2026 | | 1,200 | - | | | 183 | 1 | - | | - | | 328,902 | | 55,913 | | 50,026 | 65,226 | | | 500,067 | 500,067 | | 500,067 | |
| ROC-BS-002 | | SW276, SW275 | | Rochedale | Bioretention Swale | | Rochedale (d) | | 2016 - 2021 | | - | - | | | 854 | - | - | | - | | 197,459 | | 33,568 | | 30,034 | 19,580 | | | 280,641 | 280,641 | | 280,641 | |
| ROC-CU-021 | | SW275 | | Rochedale | Culvert | | Rochedale (d) | | 2021 - 2026 | | 2,100 | 3,000 | | | 40 | 2 | - | | - | | 731,012 | | 124,272 | | 111,187 | 144,971 | | | 1,111,442 | 1,111,442 | | 1,111,442 | |
| ROC-LA-003 | | SW275 | | Rochedale | Land Acquisition - waterway corridor | | Rochedale (b) | | 2016 - 2021 | | - | - | | | - | - | 8,656 | | 129,833 | | - | | - | | - | - | | | - | 129,833 | | 129,833 | |
| ROC-LA-004 | | SW295, SW275 | | Rochedale | Land Acquisition - waterway corridor | | Rochedale (b) | | 2021 - 2026 | | - | - | | | - | - | 99,651 | | 1,494,765 | | - | | - | | - | - | | | - | 1,494,765 | | 1,494,765 | |
| ROC-PR-144 | | SW276 | | Rochedale | Pipe - Relief | | Rochedale (d) | | 2021 - 2026 | | 1,050 | - | | | 28 | 1 | - | | - | | 46,875 | | 7,969 | | 7,130 | 9,296 | | | 71,270 | 71,270 | | 71,270 | |
| ROC-PR-147 | | SW276 | | Rochedale | Pipe - Relief | | Rochedale (d) | | 2021 - 2026 | | 1,650 | - | | | 36 | 1 | - | | - | | 102,924 | | 17,497 | | 15,655 | 20,411 | | | 156,487 | 156,487 | | 156,487 | |
| ROC-PR-153 | | SW276 | | Rochedale | Pipe - Relief | | Rochedale (d) | | 2021 - 2026 | | 2,400 | - | | | 60 | 3 | - | | - | | 741,463 | | 126,049 | | 112,777 | 147,043 | | | 1,127,332 | 1,127,332 | | 1,127,332 | |
| ROC-PR-154 | | SW276 | | Rochedale | Pipe - Relief | | Rochedale (d) | | 2021 - 2026 | | 2,400 | - | | | 92 | 2 | - | | - | | 772,316 | | 131,294 | | 117,469 | 153,162 | | | 1,174,241 | 1,174,241 | | 1,174,241 | |
| ROC-PR-157 | | SW276 | | Rochedale | Pipe - Relief | | Rochedale (d) | | 2021 - 2026 | | 2,400 | - | | | 158 | 2 | - | | - | | 1,324,991 | | 225,248 | | 201,531 | 262,766 | | | 2,014,536 | 2,014,536 | | 2,014,536 | |
| ROC-PR-161 | | SW276 | | Rochedale | Pipe - Relief | | Rochedale (d) | | 2016 - 2021 | | 1,200 | - | | | 131 | 1 | - | | - | | 235,052 | | 39,959 | | 35,751 | 23,307 | | | 334,069 | 334,069 | | 334,069 | |
| ROC-PR-162 | | SW275, SW276 | | Rochedale | Pipe - Relief | | Rochedale (d) | | 2016 - 2021 | | 1,350 | - | | | 199 | 1 | - | | - | | 416,793 | | 70,855 | | 63,394 | 41,328 | | | 592,370 | 592,370 | | 592,370 | |
| ROC-PR-175 | | SW275 | | Rochedale | Pipe - Relief | | Rochedale (d) | | 2021 - 2026 | | 1,200 | - | | | 24 | 2 | - | | - | | 88,274 | | 15,007 | | 13,427 | 17,506 | | | 134,214 | 134,214 | | 134,214 | |
| ROC-PR-179 | | SW275 | | Rochedale | Pipe - Relief | | Rochedale (D) | | 2016 - 2021 | | 1,350 | - | | | 200 | 1 | - | | - | | 418,179 | | 71,090 | | 63,605 | 41,466 | | | 594,340 | 594,340 | | 594,340 | |
| ROC-SQ-033 | | SW276 | | Rochedale | SQID | | Rochedale (d) | | 2021 - 2026 | | - | - | | | - | - | - | | - | | 74,398 | | 12,648 | | 11,316 | 14,754 | | | 113,116 | 113,116 | | 113,116 | |
| SBR-PR-040 | | SW192 | | South Brisbane | Pipe - Relief | | BBnePrec3 | | 2016 - 2021 | | 2,400 | - | | | 92 | 2 | - | | - | | 773,553 | | 131,504 | | 117,657 | 76,704 | | | 1,099,418 | 1,099,418 | | 1,099,418 | |
| SBR-PR-041 | | SW192 | | South Brisbane | Pipe - Relief | | BBnePrec3 | | 2016 - 2021 | | 2,400 | - | | | 47 | 2 | - | | - | | 395,123 | | 67,171 | | 60,098 | 39,179 | | | 561,571 | 561,571 | | 561,571 | |
| SBR-PR-045 | | SW192 | | South Brisbane | Pipe - Relief | | BBnePrec3 | | 2021 - 2026 | | 1,200 | - | | | 33 | 2 | - | | - | | 111,562 | | 18,966 | | 16,969 | 22,125 | | | 169,622 | 169,622 | | 169,622 | |
| SBR-PR-050 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,350 | - | | | 16 | 1 | - | | - | | 34,541 | | 5,872 | | 5,254 | 3,425 | | | 49,092 | 49,092 | | 49,092 | |
| SBR-PR-051 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,200 | - | | | 64 | 1 | - | | - | | 115,030 | | 19,555 | | 17,496 | 11,406 | | | 163,487 | 163,487 | | 163,487 | |
| SBR-PR-053 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,650 | - | | | 42 | 1 | - | | - | | 120,925 | | 20,557 | | 18,393 | 11,991 | | | 171,866 | 171,866 | | 171,866 | |
| SBR-PR-054 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 2,400 | - | | | 39 | 2 | - | | - | | 329,658 | | 56,042 | | 50,141 | 32,688 | | | 468,529 | 468,529 | | 468,529 | |
| SBR-PR-055 | | SW192 | | South Brisbane | Pipe - Relief | | BBnePrec3 | | 2016 - 2021 | | 2,400 | - | | | 71 | 2 | - | | - | | 598,241 | | 101,701 | | 90,992 | 59,320 | | | 850,254 | 850,254 | | 850,254 | |
| SBR-PR-056 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 2,400 | - | | | 53 | 2 | - | | - | | 444,382 | | 75,545 | | 67,591 | 44,064 | | | 631,582 | 631,582 | | 631,582 | |
| SBR-PR-057 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 2,400 | - | | | 93 | 2 | - | | - | | 784,778 | | 133,412 | | 119,365 | 77,817 | | | 1,115,372 | 1,115,372 | | 1,115,372 | |
| SBR-PR-058 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 2,400 | - | | | 49 | 2 | - | | - | | 413,992 | | 70,379 | | 62,968 | 41,050 | | | 588,389 | 588,389 | | 588,389 | |
| SBR-PR-059 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 2,400 | - | | | 71 | 2 | - | | - | | 600,697 | | 102,118 | | 91,366 | 59,564 | | | 853,745 | 853,745 | | 853,745 | |
| SBR-PR-060 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 2,400 | - | | | 66 | 2 | - | | - | | 551,109 | | 93,689 | | 83,824 | 54,647 | | | 783,269 | 783,269 | | 783,269 | |
| SBR-PR-068 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2021 - 2026 | | 1,050 | - | | | 54 | 2 | - | | - | | 161,028 | | 27,375 | | 24,492 | 31,934 | | | 244,829 | 244,829 | | 244,829 | |
| SBR-PR-069 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2021 - 2026 | | 1,200 | - | | | 21 | 2 | - | | - | | 76,860 | | 13,066 | | 11,690 | 15,242 | | | 116,858 | 116,858 | | 116,858 | |
| SBR-PR-070 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2021 - 2026 | | 1,200 | - | | | 42 | 2 | - | | - | | 144,460 | | 24,558 | | 21,972 | 28,649 | | | 219,639 | 219,639 | | 219,639 | |
| SBR-PR-071 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2021 - 2026 | | 1,200 | - | | | 67 | 2 | - | | - | | 229,122 | | 38,951 | | 34,849 | 45,438 | | | 348,360 | 348,360 | | 348,360 | |
| SBR-PR-072 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2021 - 2026 | | 1,200 | - | | | 46 | 2 | - | | - | | 158,644 | | 26,969 | | 24,130 | 31,461 | | | 241,204 | 241,204 | | 241,204 | |
| SBR-PR-074 | | SW192 | | South Brisbane | Pipe - Relief | | BBnePrec3 | | 2016 - 2021 | | 2,400 | - | | | 42 | 2 | - | | - | | 350,656 | | 59,612 | | 53,335 | 34,770 | | | 498,373 | 498,373 | | 498,373 | |
| SBR-PR-075 | | SW192 | | South Brisbane | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,050 | - | | | 14 | 1 | - | | - | | 23,196 | | 3,943 | | 3,528 | 2,300 | | | 32,967 | 32,967 | | 32,967 | |
| TRF-PR-001 | | SW173 | | Teneriffe, Newstead | Pipe - Relief | | INES | | 2016 - 2021 | | 1,950 | - | | | 152 | 1 | - | | - | | 544,812 | | 92,618 | | 82,866 | 54,022 | | | 774,318 | 774,318 | | 774,318 | |
| TRF-PR-003 | | SW173 | | Teneriffe | Pipe - Relief | | INES | | 2016 - 2021 | | 1,050 | - | | | 7 | 1 | - | | - | | 12,845 | | 2,184 | | 1,954 | 1,274 | | | 18,257 | 18,257 | | 18,257 | |
| TRF-PR-006 | | SW173 | | Teneriffe | Pipe - Relief | | INES | | 2016 - 2021 | | 1,050 | - | | | 11 | 1 | - | | - | | 17,326 | | 2,945 | | 2,635 | 1,718 | | | 24,624 | 24,624 | | 24,624 | |
| UMG-PR-023 | | SW274 | | Upper Mount Gravatt | Pipe - Relief | | Bulimba Creek | | 2021 - 2026 | | 1,200 | - | | | 88 | 1 | - | | - | | 158,048 | | 26,868 | | 24,039 | 31,343 | | | 240,298 | 240,298 | | 240,298 | |
| UMG-PR-024 | | SW274 | | Upper Mount Gravatt | Pipe - Relief | | Bulimba Creek | | 2021 - 2026 | | 2,100 | - | | | 6 | 1 | - | | - | | 28,446 | | 4,836 | | 4,327 | 5,641 | | | 43,250 | 43,250 | | 43,250 | |
| UMG-PR-033 | | SW274 | | Upper Mount Gravatt | Pipe - Relief | | Bulimba Creek | | 2021 - 2026 | | 1,200 | - | | | 12 | 1 | - | | - | | 23,666 | | 4,023 | | 3,600 | 4,693 | | | 35,982 | 35,982 | | 35,982 | |
| VIR-PN-001 | | SW114 | | Virginia | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,500 | 900 | | | 24 | 1 | - | | - | | 63,150 | | 10,736 | | 9,605 | 12,524 | | | 96,015 | 96,015 | | 96,015 | |
| VIR-PN-002 | | SW114 | | Virginia | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,500 | 1,200 | | | 33 | 1 | - | | - | | 82,212 | | 13,976 | | 12,504 | 16,304 | | | 124,996 | 124,996 | | 124,996 | |
| VIR-PN-003 | | SW114 | | Virginia | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,500 | 1,200 | | | 10 | 1 | - | | - | | 27,992 | | 4,759 | | 4,258 | 5,551 | | | 42,560 | 42,560 | | 42,560 | |
| VIR-PN-004 | | SW114 | | Virginia | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 2,100 | 1,300 | | | 33 | 2 | - | | - | | 253,530 | | 43,100 | | 38,562 | 50,279 | | | 385,471 | 385,471 | | 385,471 | |
| VIR-PN-005 | | SW114 | | Virginia | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,800 | 1,800 | | | 19 | 1 | - | | - | | 63,655 | | 10,821 | | 9,682 | 12,624 | | | 96,782 | 96,782 | | 96,782 | |
| VIR-PN-006 | | SW114 | | Virginia | Pipe - New | | Kedron Brook | | 2021 - 2026 | | 1,650 | - | | | 10 | 1 | - | | - | | 32,248 | | 5,482 | | 4,905 | 6,395 | | | 49,030 | 49,030 | | 49,030 | |
| WCL-LA-001 | | SW289 | | Wacol | Land Acquisition - waterway corridor | | Richlands (d) | | 2021 - 2026 | | - | - | | | 1,831 | - | 105,071 | | 461,358 | | - | | - | | - | - | | | - | 461,358 | | 461,358 | |
| WCL-LA-002 | | SW290, SW270 | | Wacol, Darra | Land Acquisition - waterway corridor | | Richlands (a) | | 2021 - 2026 | | - | - | | | 1,428 | - | 44,377 | | 99,692 | | - | | - | | - | - | | | - | 99,692 | | 99,692 | |
| WCL-PR-019 | | SW290 | | Wacol | Pipe - Relief | | Richlands (d) | | 2021 - 2026 | | 1,950 | - | | | 108 | 1 | - | | - | | 388,925 | | 66,117 | | 59,155 | 77,130 | | | 591,327 | 591,327 | | 591,327 | |
| WCL-PR-120 | | SW289 | | Wacol | Pipe - Relief | | Richlands (c) | | 2016 - 2021 | | 1,800 | - | | | 76 | 1 | - | | - | | 241,077 | | 40,983 | | 36,668 | 23,905 | | | 342,633 | 342,633 | | 342,633 | |
| WCL-PR-129 | | SW290 | | Wacol | Pipe - Relief | | Richlands (d) | | 2021 - 2026 | | 1,500 | - | | | 135 | 2 | - | | - | | 639,015 | | 108,633 | | 97,194 | 126,726 | | | 971,568 | 971,568 | | 971,568 | |
| WCL-PR-173 | | SW310 | | Wacol | Pipe - Relief | | Richlands (d) | | 2016 - 2021 | | 1,350 | - | | | 34 | 1 | - | | - | | 70,686 | | 12,017 | | 10,751 | 7,009 | | | 100,463 | 100,463 | | 100,463 | |
| WCL-PR-174 | | SW310 | | Wacol | Pipe - Relief | | Richlands (d) | | 2016 - 2021 | | 3,300 | 1,500 | | | 13 | 1 | - | | - | | 125,750 | | 21,378 | | 19,127 | 12,469 | | | 178,724 | 178,724 | | 178,724 | |
| WCL-PR-175 | | SW310 | | Wacol | Pipe - Relief | | Richlands (d) | | 2016 - 2021 | | 3,600 | 1,500 | | | 171 | 1 | - | | - | | 1,919,054 | | 326,239 | | 291,888 | 190,289 | | | 2,727,470 | 2,727,470 | | 2,727,470 | |
| WES-PN-023 | | SW192 | | West End | Pipe - New | | West End (a) | | 2021 - 2026 | | 1,200 | - | | | 23 | 1 | - | | - | | 43,280 | | 7,358 | | 6,583 | 8,583 | | | 65,804 | 65,804 | | 65,804 | |
| WES-PN-024 | | SW192 | | West End | Pipe - New | | West End (a) | | 2021 - 2026 | | 1,500 | - | | | 56 | 1 | - | | - | | 139,512 | | 23,717 | | 21,220 | 27,667 | | | 212,116 | 212,116 | | 212,116 | |
| WES-PN-025 | | SW192, SW191 | | West End | Pipe - New | | West End (a) | | 2021 - 2026 | | 1,500 | - | | | 24 | 1 | - | | - | | 63,150 | | 10,736 | | 9,605 | 12,524 | | | 96,015 | 96,015 | | 96,015 | |
| WES-PN-026 | | SW192 | | West End | Pipe - New | | West End (a) | | 2021 - 2026 | | 1,500 | - | | | 26 | 1 | - | | - | | 68,413 | | 11,630 | | 10,406 | 13,567 | | | 104,016 | 104,016 | | 104,016 | |
| WES-PN-027 | | SW192 | | West End | Pipe - New | | West End (a) | | 2021 - 2026 | | 1,200 | - | | | 56 | 1 | - | | - | | 100,647 | | 17,110 | | 15,308 | 19,960 | | | 153,025 | 153,025 | | 153,025 | |
| WES-PR-022 | | SW192 | | West End | Pipe - Relief | | BBnePrec3 | | 2021 - 2026 | | 900 | - | | | 96 | 2 | - | | - | | 241,189 | | 41,002 | | 36,685 | 47,831 | | | 366,707 | 366,707 | | 366,707 | |
| WES-PR-088 | | SW192 | | West End, South Brisbane | Pipe - Relief | | BBnePrec3 | | 2021 - 2026 | | 2,400 | - | | | 28 | 2 | - | | - | | 248,591 | | 42,260 | | 37,811 | 49,299 | | | 377,961 | 377,961 | | 377,961 | |
| WES-PR-111 | | SW192 | | West End | Pipe - Relief | | West End (a) | | 2016 - 2021 | | 1,050 | - | | | 12 | 2 | - | | - | | 37,088 | | 6,305 | | 5,641 | 3,678 | | | 52,712 | 52,712 | | 52,712 | |
| WES-PR-112 | | SW192 | | West End | Pipe - Relief | | West End (a) | | 2021 - 2026 | | 1,050 | - | | | 37 | 2 | - | | - | | 110,398 | | 18,768 | | 16,792 | 21,894 | | | 167,852 | 167,852 | | 167,852 | |
| WES-PR-113 | | SW192 | | West End | Pipe - Relief | | West End (a) | | 2016 - 2021 | | 1,050 | - | | | 6 | 2 | - | | - | | 20,365 | | 3,462 | | 3,098 | 2,019 | | | 28,944 | 28,944 | | 28,944 | |
| WES-PR-116 | | SW192 | | West End | Pipe - Relief | | West End (a) | | 2021 - 2026 | | 1,050 | - | | | 18 | 2 | - | | - | | 56,357 | | 9,581 | | 8,572 | 11,177 | | | 85,687 | 85,687 | | 85,687 | |
| WES-PR-117 | | SW192 | | West End | Pipe - Relief | | West End (a) | | 2021 - 2026 | | 1,200 | - | | | 27 | 1 | - | | - | | 51,806 | | 8,807 | | 7,880 | 10,274 | | | 78,767 | 78,767 | | 78,767 | |
| WES-PR-118 | | SW192 | | West End | Pipe - Relief | | West End (a) | | 2021 - 2026 | | 1,050 | - | | | 8 | 2 | - | | - | | 25,741 | | 4,376 | | 3,915 | 5,105 | | | 39,137 | 39,137 | | 39,137 | |
| WES-PR-119 | | SW192 | | West End | Pipe - Relief | | West End (a) | | 2021 - 2026 | | 1,050 | - | | | 33 | 2 | - | | - | | 96,823 | | 16,460 | | 14,727 | 19,202 | | | 147,212 | 147,212 | | 147,212 | |
| WES-PR-120 | | SW191 | | West End | Pipe - Relief | | West End (a) | | 2021 - 2026 | | 1,500 | - | | | 93 | 2 | - | | - | | 439,380 | | 74,695 | | 66,830 | 87,136 | | | 668,041 | 668,041 | | 668,041 | |
| WES-PR-122 | | SW192 | | West End, South Brisbane | Pipe - Relief | | West End (b) | | 2021 - 2026 | | 1,200 | - | | | 36 | 1 | - | | - | | 64,310 | | 10,933 | | 9,782 | 12,754 | | | 97,779 | 97,779 | | 97,779 | |
| WES-PR-141 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,050 | - | | | 25 | 1 | - | | - | | 41,168 | | 6,999 | | 6,262 | 4,082 | | | 58,511 | 58,511 | | 58,511 | |
| WES-PR-157 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,050 | - | | | 10 | 1 | - | | - | | 16,829 | | 2,861 | | 2,560 | 1,669 | | | 23,919 | 23,919 | | 23,919 | |
| WES-PR-158 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,050 | - | | | 13 | 1 | - | | - | | 21,257 | | 3,614 | | 3,233 | 2,108 | | | 30,212 | 30,212 | | 30,212 | |
| WES-PR-160 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,050 | - | | | 53 | 1 | - | | - | | 83,315 | | 14,164 | | 12,672 | 8,261 | | | 118,412 | 118,412 | | 118,412 | |
| WES-PR-162 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,050 | - | | | 75 | 1 | - | | - | | 117,172 | | 19,919 | | 17,822 | 11,618 | | | 166,531 | 166,531 | | 166,531 | |
| WES-PR-164 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,050 | - | | | 85 | 1 | - | | - | | 132,461 | | 22,518 | | 20,147 | 13,134 | | | 188,260 | 188,260 | | 188,260 | |
| WES-PR-166 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 1,050 | - | | | 18 | 1 | - | | - | | 30,321 | | 5,155 | | 4,612 | 3,007 | | | 43,095 | 43,095 | | 43,095 | |
| WES-PR-167 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 750 | - | | | 16 | 2 | - | | - | | 35,211 | | 5,986 | | 5,356 | 3,491 | | | 50,044 | 50,044 | | 50,044 | |
| WES-PR-168 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 825 | - | | | 11 | 2 | - | | - | | 27,248 | | 4,632 | | 4,144 | 2,702 | | | 38,726 | 38,726 | | 38,726 | |
| WES-PR-169 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 750 | - | | | 7 | 2 | - | | - | | 16,659 | | 2,832 | | 2,534 | 1,652 | | | 23,677 | 23,677 | | 23,677 | |
| WES-PR-170 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 750 | - | | | 30 | 2 | - | | - | | 63,418 | | 10,781 | | 9,646 | 6,288 | | | 90,133 | 90,133 | | 90,133 | |
| WES-PR-171 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 825 | - | | | 5 | 2 | - | | - | | 11,720 | | 1,992 | | 1,783 | 1,162 | | | 16,657 | 16,657 | | 16,657 | |
| WES-PR-172 | | SW192 | | West End | Pipe - Relief | | West End (b) | | 2016 - 2021 | | 825 | - | | | 5 | 2 | - | | - | | 11,800 | | 2,006 | | 1,795 | 1,170 | | | 16,771 | 16,771 | | 16,771 | |
| WIL-NC-001 | SW291 | | Willawong | | Natural Channel | Oxley Creek | | 2016 - 2021 | | - | | | - | 192 | | 1 | | - | - | 86,208 | | 14,655 | | 13,112 | | | 8,548 | 122,523 | | | 122,523 | | 122,523 |
| WIL-PN-014 | SW292 | | Willawong | | Pipe - New | Oxley Creek | | 2021 - 2026 | | 1,650 | | | - | 61 | | 1 | | - | - | 175,600 | | 29,852 | | 26,709 | | | 34,824 | 266,985 | | | 266,985 | | 266,985 |
| WIL-PN-015 | SW292 | | Willawong | | Pipe - New | Oxley Creek | | 2021 - 2026 | | 1,500 | | | - | 40 | | 1 | | - | - | 100,150 | | 17,026 | | 15,233 | | | 19,861 | 152,270 | | | 152,270 | | 152,270 |
| WIL-PN-016 | SW292 | | Willawong | | Pipe - New | Oxley Creek | | 2021 - 2026 | | 1,350 | | | - | 40 | | 1 | | - | - | 83,635 | | 14,218 | | 12,721 | | | 16,586 | 127,160 | | | 127,160 | | 127,160 |
| WIL-PN-017 | SW292 | | Willawong | | Pipe - New | Oxley Creek | | 2021 - 2026 | | 1,350 | | | - | 39 | | 1 | | - | - | 81,997 | | 13,939 | | 12,472 | | | 16,261 | 124,669 | | | 124,669 | | 124,669 |
| WIL-PN-018 | SW292 | | Willawong | | Pipe - New | Oxley Creek | | 2021 - 2026 | | 1,200 | | | - | 41 | | 1 | | - | - | 73,055 | | 12,419 | | 11,112 | | | 14,488 | 111,074 | | | 111,074 | | 111,074 |
| WIL-PN-027 | SW292 | | Willawong | | Pipe - New | Oxley Creek | | 2021 - 2026 | | 1,500 | | | - | 214 | | 1 | | - | - | 533,516 | | 90,698 | | 81,148 | | | 105,804 | 811,166 | | | 811,166 | | 811,166 |
| WIL-PN-028 | SW292 | | Willawong | | Pipe - New | Oxley Creek | | 2016 - 2021 | | 1,350 | | | - | 64 | | 1 | | - | - | 133,656 | | 22,722 | | 20,329 | | | 13,253 | 189,960 | | | 189,960 | | 189,960 |
| WIL-PN-029 | SW292 | | Willawong | | Pipe - New | Oxley Creek | | 2016 - 2021 | | 1,350 | | | - | 57 | | 1 | | - | - | 118,894 | | 20,212 | | 18,084 | | | 11,789 | 168,979 | | | 168,979 | | 168,979 |
| WIL-PN-030 | SW292 | | Willawong | | Pipe - New | Oxley Creek | | 2016 - 2021 | | 1,200 | | | - | 56 | | 1 | | - | - | 100,074 | | 17,013 | | 15,221 | | | 9,923 | 142,231 | | | 142,231 | | 142,231 |
| WIL-PN-031 | SW292 | | Willawong | | Pipe - New | Oxley Creek | | 2016 - 2021 | | 1,050 | | | - | 57 | | 1 | | - | - | 88,292 | | 15,010 | | 13,429 | | | 8,755 | 125,486 | | | 125,486 | | 125,486 |
| WIL-PR-025 | SW292 | | Willawong | | Pipe - Relief | Oxley Creek | | 2021 - 2026 | | 1,650 | | | - | 10 | | 1 | | - | - | 32,164 | | 5,468 | | 4,892 | | | 6,379 | 48,903 | | | 48,903 | | 48,903 |
| WIL-PR-026 | SW292 | | Willawong | | Pipe - Relief | Oxley Creek | | 2021 - 2026 | | 1,500 | | | - | 20 | | 1 | | - | - | 51,348 | | 8,729 | | 7,810 | | | 10,183 | 78,070 | | | 78,070 | | 78,070 |
| WIL-PR-027 | SW292 | | Willawong | | Pipe - Relief | Oxley Creek | | 2021 - 2026 | | 1,350 | | | - | 76 | | 1 | | - | - | 159,660 | | 27,142 | | 24,284 | | | 31,663 | 242,749 | | | 242,749 | | 242,749 |
| WIL-PR-028 | SW292 | | Willawong | | Pipe - Relief | Oxley Creek | | 2021 - 2026 | | 1,350 | | | - | 83 | | 1 | | - | - | 173,106 | | 29,428 | | 26,329 | | | 34,329 | 263,192 | | | 263,192 | | 263,192 |
| WIL-PR-029 | SW292 | | Willawong | | Pipe - Relief | Oxley Creek | | 2021 - 2026 | | 1,200 | | | - | 82 | | 1 | | - | - | 146,568 | | 24,917 | | 22,293 | | | 29,067 | 222,845 | | | 222,845 | | 222,845 |
| WIL-PR-030 | SW292 | | Willawong | | Pipe - Relief | Oxley Creek | | 2021 - 2026 | | 1,050 | | | - | 83 | | 1 | | - | - | 129,226 | | 21,968 | | 19,655 | | | 25,627 | 196,476 | | | 196,476 | | 196,476 |
| WIL-RH-001 | SW292 | | Willawong | | Rehabilitation | Oxley Creek | | 2021 - 2026 | | - | | | - | 240 | | - | | - | - | 217,226 | | 36,928 | | 33,040 | | | 43,079 | 330,273 | | | 330,273 | | 330,273 |
| WOO-PR-009 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,050 | | | - | 31 | | 1 | | - | - | 48,554 | | 8,254 | | 7,385 | | | 9,629 | 73,822 | | | 73,822 | | 73,822 |
| WOO-PR-010 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,050 | | | - | 27 | | 1 | | - | - | 43,751 | | 7,438 | | 6,655 | | | 8,677 | 66,521 | | | 66,521 | | 66,521 |
| WOO-PR-017 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,200 | | | - | 80 | | 1 | | - | - | 142,955 | | 24,302 | | 21,743 | | | 28,350 | 217,350 | | | 217,350 | | 217,350 |
| WOO-PR-018 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,800 | | | - | 137 | | 1 | | - | - | 432,985 | | 73,607 | | 65,857 | | | 85,867 | 658,316 | | | 658,316 | | 658,316 |
| WOO-PR-019 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,800 | | | - | 33 | | 1 | | - | - | 104,995 | | 17,849 | | 15,970 | | | 20,822 | 159,636 | | | 159,636 | | 159,636 |
| WOO-PR-020 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,800 | | | - | 14 | | 1 | | - | - | 47,808 | | 8,127 | | 7,272 | | | 9,481 | 72,688 | | | 72,688 | | 72,688 |
| WOO-PR-086 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 53 | | 1 | | - | - | 212,933 | | 36,199 | | 32,387 | | | 42,228 | 323,747 | | | 323,747 | | 323,747 |
| WOO-PR-087 | SW193 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 27 | | 1 | | - | - | 114,882 | | 19,530 | | 17,474 | | | 22,783 | 174,669 | | | 174,669 | | 174,669 |
| WOO-PR-114 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,500 | | | - | 35 | | 1 | | - | - | 87,145 | | 14,815 | | 13,255 | | | 17,282 | 132,497 | | | 132,497 | | 132,497 |
| WOO-PR-119 | SW213 | | Woolloongabba, East Brisbane | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,400 | | | - | 95 | | 1 | | - | - | 418,459 | | 71,138 | | 63,648 | | | 82,987 | 636,232 | | | 636,232 | | 636,232 |
| WOO-PR-120 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,400 | | | - | 31 | | 1 | | - | - | 135,297 | | 23,000 | | 20,579 | | | 26,831 | 205,707 | | | 205,707 | | 205,707 |
| WOO-PR-125 | SW193 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 21 | | 1 | | - | - | 90,112 | | 15,319 | | 13,706 | | | 17,871 | 137,008 | | | 137,008 | | 137,008 |
| WOO-PR-126 | SW193 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 21 | | 1 | | - | - | 90,112 | | 15,319 | | 13,706 | | | 17,871 | 137,008 | | | 137,008 | | 137,008 |
| WOO-PR-128 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,200 | | | - | 37 | | 1 | | - | - | 67,272 | | 11,436 | | 10,232 | | | 13,341 | 102,281 | | | 102,281 | | 102,281 |
| WOO-PR-142 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 40 | | 1 | | - | - | 162,145 | | 27,565 | | 24,662 | | | 32,156 | 246,528 | | | 246,528 | | 246,528 |
| WOO-PR-143 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,800 | | | - | 37 | | 1 | | - | - | 116,096 | | 19,736 | | 17,658 | | | 23,024 | 176,514 | | | 176,514 | | 176,514 |
| WOO-PR-148 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,800 | | | - | 34 | | 1 | | - | - | 108,167 | | 18,388 | | 16,452 | | | 21,451 | 164,458 | | | 164,458 | | 164,458 |
| WOO-PR-149 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 28 | | 1 | | - | - | 118,299 | | 20,111 | | 17,993 | | | 23,460 | 179,863 | | | 179,863 | | 179,863 |
| WOO-PR-150 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 62 | | 1 | | - | - | 249,688 | | 42,447 | | 37,978 | | | 49,517 | 379,630 | | | 379,630 | | 379,630 |
| WOO-PR-151 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,800 | | | - | 61 | | 1 | | - | - | 193,114 | | 32,829 | | 29,373 | | | 38,297 | 293,613 | | | 293,613 | | 293,613 |
| WOO-PR-154 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 22 | | 1 | | - | - | 92,718 | | 15,762 | | 14,102 | | | 18,387 | 140,969 | | | 140,969 | | 140,969 |
| WOO-PR-155 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 36 | | 1 | | - | - | 144,920 | | 24,636 | | 22,042 | | | 28,740 | 220,338 | | | 220,338 | | 220,338 |
| WOO-PR-156 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 10 | | 1 | | - | - | 43,818 | | 7,449 | | 6,665 | | | 8,690 | 66,622 | | | 66,622 | | 66,622 |
| WOO-PR-159 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,800 | | | - | 27 | | 1 | | - | - | 89,050 | | 15,139 | | 13,545 | | | 17,660 | 135,394 | | | 135,394 | | 135,394 |
| WOO-PR-160 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,800 | | | - | 26 | | 1 | | - | - | 86,806 | | 14,757 | | 13,203 | | | 17,215 | 131,981 | | | 131,981 | | 131,981 |
| WOO-PR-161 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,800 | | | - | 8 | | 1 | | - | - | 27,229 | | 4,629 | | 4,142 | | | 5,400 | 41,400 | | | 41,400 | | 41,400 |
| WOO-PR-169 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 1,050 | | | - | 77 | | 1 | | - | - | 119,823 | | 20,370 | | 18,225 | | | 23,763 | 182,181 | | | 182,181 | | 182,181 |
| WOO-PR-171 | SW213 | | Woolloongabba | | Pipe - Relief | Norman Creek | | 2021 - 2026 | | 2,100 | | | - | 64 | | 1 | | - | - | 257,290 | | 43,739 | | 39,134 | | | 51,024 | 391,187 | | | 391,187 | | 391,187 |
| WYN-PR-001 | SW177 | | Wynnum | | Pipe - Relief | Wynnum | | 2021 - 2026 | | 1,950 | | | - | 157 | | 1 | | - | - | 564,725 | | 96,003 | | 85,895 | | | 111,993 | 858,616 | | | 858,616 | | 858,616 |
|  |  | |  | |  |  | |  | |  | | |  |  | |  | | Total | 4,582,672 | 92,917,529 | | 15,555,968 | | 13,918,012 | | | 14,195,995 | 136,587,504 | | | 141,170,176 | | 141,170,176 |

Notes-

1. Refer to the Local government infrastructure plan identifier (LGIP ID) when identifying the infrastructure projects on the plans for trunk infrastructure maps.
2. The estimated year of completion is an estimate of the earliest need for the project.
3. Indirect construction costs are on costs or overheads applied to the direct construction cost, to deliver the project. Indirect construction costs equate to 17% of the direct construction cost.
4. Project costs are on costs to undertake detailed design, survey, geotechnical investigations, project management, and supervision of construction works and obtain certification from a Registered Professional Engineer of Queensland. Project costs equate to 13% of the direct and indirect construction costs.
5. Contingency costs are based on the project delivery date, and applied to the direct construction cost, indirect construction cost and project cost. Contingencies equate to 7.5% for projects with a delivery date up to 2021 and 15% for projects with a delivery date up to 2026.
6. Total construction cost is the sum of direct construction cost, indirect construction cost, project cost and construction contingency cost, at 30 June 2016. For PAL-WL-001, the total construction cost reflects the lump sum for constructing the project, based on a first principles estimate.
7. Value of the trunk infrastructure is the sum of land cost and total construction cost, at 30 June 2016.
8. Establishment cost is the total value of the trunk infrastructure item, comprising the total infrastructure cost, at 30 June 2016.

(-) A dash denotes that the field is not applicable.