5.1. PROPOSED DOUGLAS SHIRE PLANNING SCHEME AMENDMENT - LOCAL GOVERNMENT INFRASTRUCTURE PLAN

REPORT AUTHOR(S) Jenny Elphinstone, Senior Planning Officer

GENERAL MANAGER Michael Kriedemann, Acting General Manager Operations

DEPARTMENT Sustainable Communities

RECOMMENDATION

That Council resolves:

- 1. To consider the submissions as raised in the Submission Review report and for each submission adopt the respective action as outlined in the Submission Review Report;
- 2.To note that the publicly exhibited proposed Local Government Infrastructure Plan included changes as required by the Minister's advice, received by letter dated 7 March 2018;
- 3. To not adopt any changes to the Local Government Infrastructure Plan, other than those as required by the Minister's advice, received by letter dated 7 March 2018, and amend the Local Government Infrastructure Plan Maps to delete the reference to "public notification issue only" and consider such amendment not to result in a significantly different version to that released for public notification;
- 4. To advise each submitter in writing about how Council has dealt with their submission, and also advise each submitter of part 10 below;
- 5.To appoint a pre-approved LGIP panel reviewer to undertake a second compliance check of the Local Government Infrastructure Plan, as required under the *Minister's Guidelines and Rules* under the *Planning Act 2016*, and provide the reviewer of all material as required under the *Minister's Guidelines and Rules*;
- 6. That on the receipt of the appointed Reviewer's Checklist and Statement, write to the Minister for State Development, Manufacturing, Infrastructure and Planning, seeking approval to adopt the proposed Local Government Infrastructure Plan and provide the Minister with the information as nominated under the Minister's Rules and Guidelines;
- 7. That on receipt of responding advice from the Minister, delegate to the Mayor and Chief Executive Officer, the decision under section 10, *Minister's Guidelines and Rules*, and sections 17-21 inclusive of the *Planning Act 2018*, to:
 - a. Adopt the proposed Local Government Infrastructure Plan, subject to the conditions or requirements as nominated by the Minister, publish notices and undertake any further steps necessary for the adoption, including the decision to nominate a date of effect, or
 - b. Not adopt the proposed Local Government Infrastructure Plan. Where a decision is made not to adopt the proposed Local Government Infrastructure Plan, a further report is to be provided to Council;

8. To adopt the following:

- a. Douglas Shire Council Infrastructure Charges Resolution 2018 made under sections 113 and 114 of the *Planning Act 2016*;
- b. The infrastructure charges for development are as the "Levied Charges" as listed in the LGIP Table 3.1.4 Existing and projected residential dwellings, including nominated Levied Charges; and LGIP Tabled 3.1.4 Existing and projected non-residential floor space, including nominated

- Levied Charges and have regard to the Priority Infrastructure Areas of the proposed Local Government Infrastructure Plan;
- c. Delegate to the Chief Executive Officer the date from which the Adopted Infrastructure Charges will have effect, whereby the adopted charges are to read in conjunction with the adopted proposed Local Government Infrastructure Plan;
- 9. That other than specifically stated above, delegates authority to the Chief Executive Officer in accordance with the *Local Government Act 2009* and the *Planning Act 2016* to finalise any and all matters associated with the implementation of the above items.
- 10. That after the adoption of the Local Government Infrastructure Plan, require the preparation of a further report to amend the Local Government Infrastructure Plan and Planning Scheme to clarify existing infrastructure, consider the timing of the provision of future infrastructure, include consistency with current land zone types, clarify priority infrastructure areas (PIA) boundaries having regard to current approvals, a review of nominated charges and other pertinent matters as identified in undertaking the report.

EXECUTIVE SUMMARY

The Local Government Infrastructure Plan (LGIP) and the associated resolution that nominates charges will replace Council's current Adopted Infrastructure Charges Resolution (AICR) which is the current mechanism for collecting infrastructure charges in the Douglas Shire.

BACKGROUND

Under State Government planning legislation Council is required to prepare a Local Government Infrastructure Plan (LGIP). The LGIP is a section of the Council's Planning Scheme which identifies and outlines the type, size, location and cost of trunk infrastructure which is required to service the expected population and non-residential sector envisaged by the Planning Scheme.

At the Ordinary Council Meeting held on 19 April 2016, Council resolved to prepare a LGIP for the Douglas Shire. The resolution to commence work on preparing the LGIP occurred under the now repealed *Sustainable Planning Act 2009*. The current *Planning Act 2016* requires continuing work on the LGIP to follow provisions of the *Ministerial Guidelines* under the *Planning Act 2016*, rather than the *Statutory Guideline 04/14 – Making and amending local planning instruments*.

At the Ordinary Council Meeting held on 31 October 2017 Council resolved to:

- 1. Endorse the draft LGIP as Council's proposed LGIP;
- 2. Appoint a pre-approved external panel reviewer to undertake a review of the proposed LGIP, as required under the Ministerial Guidelines;
- 3. Following the external review, refer the LGIP to the State Government for the *First State Interest Check*; and
- 4. Following completion of the State Interest Check, undertake public notification of the LGIP.

The proposed LGIP considers trunk infrastructure for reticulated water, reticulated sewerage, parks and road networks and maps priority infrastructure areas. The proposed LGIP has been prepared on Council's behalf by Trinity Engineering and Consulting.

COMMENT

External Reviewer

The external reviewer found the LGIP sufficient and reviewer's assessment formed part of the information forwarded to the Minister for the First State Interest Check.

First State Interest Check

On the weekend preceding the Council's Ordinary Meeting in October 2017, the State Government called for a State election and the Government went into caretaker responsibilities. The LGIP was referred to the State Government on the 18 December 2017.

On the 7 March 2108 the Minister for State Development, Manufacturing, Infrastructure and Planning, the Hon Cameron Dick, advised Council that the LGIP had been assessed and that Council could proceed to publicly consult the proposed LGIP. The Minister's correspondence included advice to assist Council in revising and refining the proposed LGIP. The refinements sought minor changes focusing on the need to adjust the SoW (Schedule of Works) and the proposed charges to respect the prescribed amounts in the *Planning Regulation 2017* (i.e., the maximum charge). The advice also suggested the inclusion of the Technical Briefing report in the extrinsic section of the LGIP.

Public Notification

The minor refinements, as nominated by the Minister, were included and the LGIP underwent public notification from Tuesday 27 March 2018 to Monday 14 May 2018 inclusive. The public notification period met the minimum, statutory, business day requirement having regard to the non-business days of the Easter Holiday period. The LGIP was publicly exhibited for thirty-one (31) business days.

Submissions

Council received four (4) properly made submissions.

In accordance with Chapter 5 Minister's rules for reviewing, making or amending a Local Government Infrastructure Plan (LGIP), of the *Minister's Guidelines and Rules*, prescribed by the *Planning Regulation 2017*, Council must consider every properly made submission.

- "7.5 After considering the submissions, the local government
 - a) may make changes to the proposed LGIP or amendment or interim LGIP amendment to
 - i. address the issue raised in the submission;
 - ii. amend a drafting error; or
 - iii. address new or changed planning circumstances or information;
 - b) must ensure any changes continue to comply with and address the requirements identified in Part 4 of this chapter; and
 - c) must advise each person in writing who made a properly made submission about how the local government has dealt with their submission."
- 7.6 The local government must update the Review checklist to reflect any changes made to the proposed LGIP, LGIP amendment or interim LGIP amendment.
- 7.7 If the local government makes changes under 7.5(a) and the local government considers the changes result in the proposed LGIP, LGIP amendment or interim LGIP amendment being significantly different to the version released for public consultation, the local government must repeat the public consultation process.

- 7.8 The local government may choose to limit the public consultation to those aspects of the proposed LGIP, LGIP amendment or interim LGIP amendment that have changed.
- 7.9 After complying with sections 7.4 to 7.7 for the proposed LGIP, LGIP amendment or interim LGIP amendment, the local government must decide to
 - a) proceed with no change;
 - b) proceed with changes if it reasonably believes the changes do not result in the proposed LGIP, LGIP amendment or interim LGIP amendment being significantly different to the version released for public consultation; or
 - c) not proceed with the proposed LGIP, LGIP amendment or interim LGIP amendment."

As detailed in the Submissions Review Report, included in Attachment 1, the concerns raised with the stormwater in the Reef Park Estate at Port Douglas have been previously identified by Council to be further investigated and options identified to resolve this matter.

The consideration of future development to the west of the Captain Cook Highway, west of Port Douglas, is identified on the Strategic Framework Map, of the current Planning Scheme as an Investigation Area. Significant research is necessary prior to further consideration to develop this area.

The considerations of clarifying the status of infrastructure, the timing of the provision of future infrastructure, the inclusion of the current land zone types, the clarification of priority infrastructure areas (PIA) boundaries (having regard to current approvals) can be undertaken through a separate planning scheme and LGIP amendment.

It is recommended that Council complete a further report regarding these issues giving confidence to the community that these issues are to be resolved expediently. The review can also consider the nominated adopted charges and other pertinent matters as identified in undertaking the report.

Next Steps

Where Council proceeds with the proposed LGIP, Council must engage an approved reviewer to conduct a second compliance check. The appointed reviewer undertakes a review as per Section 8.3 of Chapter 5, Minister's Guidelines, and provides Council with an updated Review checklist and Reviewer statement. Upon the completion of the external Reviewer's actions, Council must give written notice to the Minister seeking approval to adopt the proposed LGIP and furnishes the Minister with a copy of the proposed LGIP and other documentation. After the Minister receives the written notice and reviews the lodged documentation the Minister must write to Council, under Chapter 5, section 9.7, advising that Council may-

- "a) adopt the proposed LGIP or amendment;
- b) adopt the proposed LGIP or amendment subject to conditions; or
- c) not adopt the proposed CIP or amendment."

The adoption process is outlined under the *Minister's* Guidelines as follows.

"10. Adoption

- 10.1. If the local government is notified by the Minister that it may adopt the proposed LGIP or amendment, or after making a decision under section 7.9 for an interim LGIP amendment, the local government must
 - a) decide to adopt the proposed LGIP or amendment; or
 - b) decide not to proceed with the proposed LGIP or amendment; and

- c) publish a notice in accordance with the requirements prescribed in Schedule 5.
- 10.2. If the local government decides to adopt an LGIP, amendment or interim LGIP amendment under section 10.1(a), the local government must also
 - a) comply with any conditions imposed by the Minister that must be undertaken prior to adoption; and
 - b) include on its website—
 - i a copy of the LGIP, amendment or interim LGIP amendment, including the SOW model (the content, function and calculations of the SOW model must remain visible and accessible to all stakeholders);
 - ii the Review checklist:
 - iii. the Appointed reviewer statement; and
 - iv. extrinsic material.
- 10.3. The local government must, as soon as possible after adopting the LGIP, amendment or interim LGIP amendment, give the chief executive
 - a) a copy of the public notice; and
 - b) a certified copy of the LGIP or amendment."

FINANCIAL/RESOURCE IMPLICATIONS

A budget allocation has been included in the 2017/18 financial year to complete the LGIP. Once adopted, the LGIP will give Council a mechanism to collect developer contributions towards the upgrade of trunk infrastructure.

RISK MANAGEMENT IMPLICATIONS

Whereby Council resolves not to proceed with the proposed planning scheme amendment, Council would be unable to issue Infrastructure Charges Notices in relation to Development Approvals post 30 June 2018. There is a significant risk in modifying the LGIP beyond what has been identified by the Minister's advice at this point in time, undertaking a second external review and achieving a Second State Interest Check prior to the 30 June 2018.

If Council resolves to adopt the LGIP then some time in the future Council has the ability to commence a separate, new amendment to the Planning Scheme to clarify existing infrastructure, consider the timing of the provision of future infrastructure, include consistency with current land zone types, clarify priority infrastructure areas (PIA boundaries) having regard to current approvals and a review of nominated charges.

SUSTAINABILITY IMPLICATIONS

Economic: The proposed planning scheme LGIP amendment has significant

implications for the future economic prosperity of the Shire.

Environmental: The proposed planning scheme LGIP amendment has significant

implications for the future environmental sustainability of the Shire.

Social: The proposed planning scheme LGIP amendment has significant

implications for the future social and community development of the

Shire.

CORPORATE/OPERATIONAL PLAN, POLICY REFERENCE

This report has been prepared in accordance with the following:

Corporate Plan 2014-2019 Initiatives:

Theme 2 - Building a Sustainable Economic Base

2.1.1 - Develop management plans for all Council assets and adequately resource their implementation.

Theme 3 - Improve Environmental Performance

3.1.3 - Develop management plans for Council's parks and reserves including coastal reserves and foreshore areas.

Theme 5 - Governance

- 5.1.1 Establish and develop long term financial, resource and infrastructure planning to ensure ongoing capacity to fund operations and capital works programs.
- 5.2.1 Provide Councillors and community with accurate, unbiased and factual reporting to enable accountable and transparent decision-making.

Operational Plan 2017-2018 Actions:

5.1.5 - Finalise Local Government Infrastructure Plan including preparation, forecasting, mapping, public notifications, independent consultant review, state review, adoption

COUNCIL'S ROLE

Council can play a number of different roles in certain circumstances and it is important to be clear about which role is appropriate for a specific purpose or circumstance. The implementation of actions will be a collective effort and Council's involvement will vary from information only through to full responsibility for delivery.

The following areas outline where Council has a clear responsibility to act:

Asset-Owner Meeting the responsibilities associated with owning or being the

custodian of assets such as infrastructure; and

Regulator Meeting the responsibilities associated with regulating activities

through legislation or local law.

CONSULTATION

Internal: In developing the LGIP documentation, the following teams were consulted:

- Finance Manager Accounting.
- Water and Wastewater Operations
- Infrastructure
- Public Spaces
- Development Assessment and Coordination

External:

In developing the LGIP documentation, the following external stakeholders were consulted:

 Appointed External Reviewer and the Department of State Development, Manufacturing, Infrastructure and Planning for the First State Interest Check. The proposed LGIP must also undergo a second assessment by the External Reviewer and a further review by the Department of State Development, Manufacturing, Infrastructure and Planning.

COMMUNITY ENGAGEMENT

The proposed LGIP was places on public exhibition for a six week period from the Tuesday 27 March 2018 to Monday 14 May 2018 inclusive. Four submissions were received, all of which were properly made.

ATTACHMENTS

- 1. Attach 1 Submissions Review Report [5.1.1]
- 2. Attach 2 Planning Scheme Wording [5.1.2]
- 3. Attach 3 LGIP Planning Localities [5.1.3]
- 4. Attach 4 LGIP Priority Infrastructure Areas [5.1.4]
- 5. Attach 5 LGIP Water Trunk Infrastructure [5.1.5]
- 6. Attach 6 LGIP Sewerage Trunk Infrastructure [5.1.6]
- 7. Attach 7 LGIP Transport Trunk Infrastructure [5.1.7]
- 8. Attach 8 LGIP Trunk Footpath Infrastructure [5.1.8]
- 9. Attach 9 LGIP Stormwater Trunk Infrastructure [5.1.9]
- 10. Attach 10 LGIP Parks and Reserves Infrastructure [5.1.10]
- 11. Attach 11 Schedule of Works **[5.1.11]**
- 12. Attach 12 Technical Briefing Report [5.1.12]
- 13. Attach 13 LGIP Proposed Levied Charges [5.1.13]
- 14. Attach 14 External Reviewer Checklist [5.1.14]
- 15. Attach 15 External Reviewer Statement [5.1.15]
- 16. Attach 16 Minister's correspondence and advice [5.1.16]

Attachment 5.1.1 12 of 406

Submission Review Report

Response to submissions on the proposed Local Government Infrastructure Plan for the Douglas Shire Planning Scheme (Statutory consultation 27 March 218 to 14 May 2018).

Planning commentary No Action Property/ Grounds Location 1. Properties off 1.1 Residential Investigation Area 1.1 No application has been lodged or determined by 1.1 No change to the Council for the Residential Investigation Area. Ferrero Road, proposed Local The submitter advises that it is Craiglie, in which Government undertaking technical assessments IPDG (84) Pty Infrastructure Plan and a Structure Plan for the growth Ltd has an in regards to the area and intends to lodge a draft interest as Residential Structure Plan in the coming Investigation Area. included in the months and that the Planning Residential Scheme nominates the land as a Investigation Residential Investigation Area. Area on the Strategic The submitter notes that the life of the infrastructure nominated in the Framework LGIP exceeds the life of the Mapping within the Douglas Planning Scheme, yet the LGIP Shire Planning mapping disregards the Residential Investigation Area. Scheme 2018. No infrastructure is nominated for the Area. The submitter seeks the LGIP mapping reasonably and Residential Investigation Area appropriately give regard to The LGIP applies data relative to existing and infrastructure planning in this Area. planned infrastructure. There is no specific infrastructure as yet identified or planned to service the Residential Investigation Area. There is sufficient reference, at this point in time, to the Area, by inclusion in the Strategic Framework map. Inclusion, as suggested by the submitter, is precipitate at this point in time.

Attachment 5.1.1 13 of 406

No	Property/ Location	Grounds	Planning commentary	Action
		The submitter notes the zonings in the LGIP mapping reflects those of the superseded Planning Scheme. Some land previously included within residential and other urbanised designations has been removed from those designations, therefore impacting ultimately infrastructure demand and other assumptions from which infrastructure planning has been completed.	 1.2 Planning Zones Research and development of the LGIP commenced under the 2006 Douglas Shire Planning Scheme (as amended). Council adopted the proposed LGIP while the 2006 Planning Scheme was still in effect. To undertake changes, to reflect current zones, urban areas may produce a different LGIP to the version that has undergone public exhibition. A different LGIP would require a new public notification. These considerations are worthy of separate investigation and review. 	 1.2.2 No change to the Local Government Infrastructure Plan at this point in time in regards to the Planning Zones. 1.2.2 Investigate further and report to Council on a separate amendment to utilise current planning zones, urban areas and development approvals.
		The LGIP mapping does not appropriately include or reference the 20ML reservoir currently undertaken in the Schedule of Works (SoW). The infrastructure is included in the Future Supply Trunk Infrastructure Plans, but not listed on the SoW for the Future Trunk Assets. Given the infrastructure is under construction and due for completion in July 2018, the submitter requests the infrastructure be fully included.	The water reservoir project is unfinished and supply is not as yet online. The LGIP documentation can be clarified to include the infrastructure in all respective areas as a Future Asset.	1.3 Clarify all components of the LGIP documentation to reflect the 20Ml water reservoir as a Future Asset. This clarification is not considered to result in a different version of the LGIP to the version that was publically exhibited.

Attachment 5.1.1 14 of 406

No	Property/ Location	Grounds	Planning commentary	Action
		Discussion with Council officers has identified deficiencies with the port Douglas / Craiglie Waste Water Treatment Plant insofar as peak season is concerned. No reference or mention of any planned upgrades or assessments to resolve or respond to this known issue have been included within the LGIP. The submitter requests the LGIP be amended to contemplate future management or action to respond to this issue.	There is no specific infrastructure as yet identified or planned to service the <i>Residential Investigation Area</i> . The detailed assessment of the <i>Residential Investigation Area</i> will be undertaken by the applicant/ submitter to research this issue. There is sufficient reference, at this point in time, to the <i>Area</i> , by inclusion in the Strategic Framework map. Inclusion, as suggested by the submitter, is precipitate at this point in time. Council is completing a separate report investigating the current capacity of the Port Douglas Waste Water treatment Plant, the Upgrade Status and Reuse report. The report considers current capacity to service demand and includes consideration of using recycled water. The outcomes from this report, together with a current status on network capacity, are considerations are worthy of separate investigation and review.	 1.4.1 No change to the Local Government Infrastructure Plan at this point in time in regards to the waste water components of the LGIP. 1.4.2 Investigate further and report to Council on a separate amendment to the LGIP considering outcomes of the Upgrade Status and Reuse report of the Port Douglas Waste Water Treatment Plant and further clarification of network capacity.
		1.5 Population Projections and Assumptions The submitter notes the methodology used to determine population and dwelling projections and asserts that these are underestimated and a wider scope of methodology should be applied, in particular given the high proportion of tourist accommodation in the catchment.	Population Projections and Assumptions Various data was used to estimate future population and dwellings, following prescribed methodology that was reviewed by the External Reviewer and the State Government. The methodology is considered sufficient.	1.5 No change to the Local Government Infrastructure Plan in regards to the population project and assumption methodology.

Attachment 5.1.1 15 of 406

No	Property/ Gro Location	ounds	Pla	nning	commentary	Action
2 & 3	Development of Port Gardens and impact on Jewel Close and Opal Street, Reef Park Residential Area as submitted by david Kinnear and supported by submitters J & L Pesersen.	2-3 Port Gardens and Reef Park Stormwater Concern is raised by the residents regarding existing stormwater concerns and flooding in the Reef Park Residential Area as a result of the development of the Port Gardens residential area. The submission suggests a number of issues has resulted in downstream stormwater flooding and identifies possible actions to mitigate these flooding events.	2-3	The L due to natural The C 2018 storm Coun "1.	Gardens and Reef Park Stormwater GIP has minimal inclusion of stormwater to the vast area of the Shire and extent of al drainage systems. Concerns raised by the submitters follow the at greater than 1% AEP rainfall incident. At ouncil's Ordinary Meeting held on 15 May through a closed session report regarding that at Ribbon and St Crispins Avenues cil resolved to note the recommendations of the Concept Design Report – Stormwater Upgrades for Ribbon Avenue; adopt Option 8 as the preferred upgrade option; and proceed to final detailed design and documentation for construction." concerns raised by the submitters are cular to the safety of persons and property disting development and are better essed through separate investigation by cil's Engineers.	 2.1 No change to proposed Local Government Infrastructure Plan in regards to stormwater infrastructure to the Reef Park / Port Gardens residential areas. 2.2 Advise the submitter's that the concerns are noted, that Council has undertaken initial investigation of the area following the recent greater than 1% AEP rainfall event and that Council will include the concerns in a broader investigation of the stormwater in the area.

Attachment 5.1.1 16 of 406

No	Property/ Gr Location	ounds	Planning commentary	Action
4	Council's own submission	Remove all state infrastructure form the LGIP Future Transport Plans, as these reflect the State infrastructure and are not Council's responsibility. Remove ISF001 – Priority Intersection. Intersection identified on State Controlled Road (TMR infrastructure requirement) SCF011 - Upgrade of Existing Sub-standard Culvert Structures to meet flow requirements: Removed from Mapping – as Council does not expect to replace existing culvert TRF009 -> TRF011: Upgrade Wabul Street, Millman Drive and Downing Street respectively: Removed from Mapping – as Council does not expect to upgrade infrastructure links to Major Collector FPBF001 – Junction Creek Pedestrian Bridge: Included in the Transport Mapping – as Infrastructure Item is noted in the Future Transport SoW Table.	The changes are considered appropriate, however, are likely to result in a different version of the LGIP that was publically exhibited. A different LGIP would require a new public notification. These considerations are worthy of separate investigation and review.	 4.1.1 No change to the Local Government Infrastructure Plan at this point in time in regards to Transport considerations. 4.1.2 Investigate further and report to Council on a separate amendment in regards to the transport considerations.

Attachment 5.1.1 17 of 406

No	Property/ Gr Location	ounds	Planning commentary	Action
	Council's own submission (continued).	Modified Timings of TRF043 – Changed date of expected delivery from 2026 to 2031, to align with the expected continued development from the Northern Section of the Development South TRF044 – Changed date of expected delivery from 2031 to 2026, to align with the expected continued development from the Northern		
		Section of the Development South. 4.2 Water Infrastructure Exclusion of Trunk Water Infrastructure Items Remove all Proposed Infrastructure to beyond the life of the LGIP (beyond 2031+) including but not limited to WMF004_Water Main_450 mm dia Finlayvale Raw water intake line duplication (Currently an investigate underway as to the required need. Insufficient evidence to support the inclusion in the current LGIP - expected 2045 WMF008_Water Main_225 mm dia -Water Main extension to Mossman WTP - expected 2031+	4.2 Water Infrastructure The changes are considered appropriate, however, are likely to result in a different version of the LGIP that was publically exhibited. A different LGIP would require a new public notification. These considerations are worthy of separate investigation and review.	 4.2.1 No change to the Local Government Infrastructure Plan at this point in time in regards to water infrastructure considerations. 4.2.2 Investigate further and report to Council on a separate amendment in regards to the water infrastructure considerations.

Attachment 5.1.1 18 of 406

No	Property/ Location	Grounds		Planning commentary	Action
	Council's own submission (continued).	0	WMF010_Water Main_450 mm dia -Wyanbeel – Miallo Water Main Connection - expected 2031+		
		0	WMF011_Water Main_450 mm dia -Wyanbeel – Miallo Water Main Connection - expected 2031+		
		Fir un Fe de 20: Tru inc co: the infu	ere is also the Drumsara- nleyvale line – which is currently der review (Modelling and asibility Study). If this line is termined to be required prior to 31- then it would form part of the unk Water network, and should be cluded in the LGIP. (expected sts ~\$8M). Consider whether ere is insufficient supporting ormation for the inclusion of this nk network element into the DSC SIP.		

Attachment 5.1.1 19 of 406

No	Property/ Gr Location	ounds	Planning commentary	Action
	Council's own submission (continued).	Inclusion of Trunk Water Infrastructure Items In the original PFTI WRF002 — identified the Wyanbeel reservoir (unused), but was labelled and costed in the SoW as the Future Port Douglas Resevoir (20+ ML). In the attached PFTI — the correct location of the reservoir has been identified. The infrastructure items WMF002_(i) and WMF002_(ii) refer to the dedicated inlet and outlet mains — which are required to connect the resevoir to the wider Trunk Water Network.		
		 WMF002_(i)_Water Main_450 mm dia_dedicated water inlet main (the Wyanbeel Resevoir was incorrectly identified as the Port Douglas Resevoir, WMF002_(ii)_Water Main_450 mm dia_dedicated water inlet main. 		

Attachment 5.1.1 20 of 406

No	Property/ (Location	Ground	s	PI	anning commentary	Act	ion
	Council's own submission (continued).	4.3	Waste Water Infrastructure Exclusion of Trunk Infrastructure Items Remove all Proposed Infrastructure to beyond the life of the LGIP (beyond 2031+). With the Exception of the Trunk Infrastructure Items SPSF001: SPSF001: SPSF001-Andreassen Road Pump Station STPF001: STPF001_Interim Mossman WWTP Upgrade - Regulate flows UPGRADE STPF002: STPF002_Interim Mossman WWTP Upgrade - Alternative sludge infrastructure UPGRADE RMF068: RMF068_Rising Mains_150 mm dia_Craiglie_Trunk. The exclusions of significant portions of the Waste water infrastructure Trunk plans are to reflect the Councils re- consideration of timing for the provision of trunk waste water infrastructure to the more remote communities of the shire.	4.3	Waste Water Infrastructure The changes are considered appropriate, however, are likely to result in a different version of the LGIP that was publically exhibited. A different LGIP would require a new public notification. These considerations are worthy of separate investigation and review.		No change to the Local Government Infrastructure Plan at this point in time in regards to waste water infrastructure considerations. Investigate further and report to Council on a separate amendment in regards to the waste water infrastructure considerations.

Attachment 5.1.1 21 of 406

No	Property/ Location	Grounds	Planning commentary	Action
		This re-consideration has been based on a rational assessment of Council's financial position and the focus of the delivery of infrastructure to the expected growth hubs of Port Douglas, Mossman and Cooya Beach. The change reflects the Council's position to become a Financially Sustainable Council by expending public funds in a efficient and fiscally responsible manner.		
		Modified Timings RMF068: Timings have been modified from 2031 to 2026 to Align with the expected timings for the provision of the Andreassen Road Pump Station.		

Part 4 Local government infrastructure plan

4.1 Preliminary

- (1) This local government infrastructure plan has been prepared in accordance with the requirements of the *Planning Act 2016*.
- (2) The purpose of the local government infrastructure plan is to:
 - integrate infrastructure planning with the land use planning identified in the planning scheme
 - provide transparency regarding a local government's intentions for the provision of trunk infrastructure
 - enable a local government to estimate the cost of infrastructure provision to assist its long term financial planning
 - ensure that trunk infrastructure is planned and provided in an efficient and orderly manner.
 - provide a basis for the imposition of conditions about infrastructure on development approvals.
- (3) The local government infrastructure plan:
 - (a) states in Section 4.2 (planning assumptions) the assumptions about future growth and urban development including the assumptions of demand for each trunk infrastructure network
 - (b) identifies in Section 4.3 (priority infrastructure area) the prioritised area to accommodate urban growth up to 15 years
 - (c) states in Section 4.4 (desired standards of service) for each trunk infrastructure network the desired standard of performance
 - (d) identifies in Section 4.5 (plans for trunk infrastructure) the existing and future trunk infrastructure for the following networks:
 - (i) water supply
 - (ii) sewerage
 - (iii) transport
 - (iv) parks and land for community facilities
 - (e) provides a list of supporting documents that assist in the interpretation of the local government infrastructure plan in the Editor's note – Extrinsic material at the end of Section 4

4.2 Planning assumptions

- (1) The planning assumptions state the assumptions about:
 - (a) population and employment growth
 - (b) the type, scale, location and timing of development including the demand for each trunk infrastructure network
- (2) The planning assumptions together with the desired standards of service form a basis for the planning of the trunk infrastructure networks and the determination of the priority infrastructure area.
- (3) The planning assumptions have been prepared for:
 - (a) the base date 2011 and the following projection years to accord with future Australian Bureau of Statistics census years:
 - (i) mid (2016);
 - (ii) mid (2021);
 - (iii) mid (2026);
 - (iv) mid (2031).
 - (b) the LGIP development types in column 2 that include the uses in column 3 of Table .
 - (c) the projection areas identified on Local Government Infrastructure Plan, Priority Infrastructure Area plan, Drawing numbers 1100-010 to 1100-017" in Schedule 3—Local government infrastructure plan mapping and tables.

Table 4.2.1—Relationship between LGIP development categories, LGIP development types and uses

Column 1	Column 2	Column 3
LGIP development category	LGIP development type	Uses
Residential	Attached dwelling	Dual occupancy
development		Dwelling unit
		Multiple dwelling
		Short term accommodation
		Retirement Facility
	Detached dwelling	Caretaker's accommodation
		Dwelling house
	Other dwelling	Home based business
		Relocatable home park and Tourist Park
		Rooming Accommodation
		Community Residence #
		Residential care facility
Non-residential	Retail	Centre Facilities
development		Food and drink outlet
		Nightclub entertainment facility
		Parking Station
		Shop

Column 1	Column 2	Column 3
LGIP development category	LGIP development type	Uses
		Shopping centre
		Showroom
		Service Station
	Commercial	Relevant uses may include:
		Office
		Sales Office
	Community purpose	Relevant uses may include:
		Child Care Centre
		Community care centre
		Place of worship
		Educational establishment
		Hospital
	Industry	Relevant uses may include:
		Industry Activities
		Extractive Industries
	Other	Relevant uses may include:
		Animal husbandry
		Animal keeping
		Cropping
		Rural Activities
		Sport and Recreation activities
		Telecommunications Facility
		Forestry for wood production code #

[#]State-wide development code definition

(4) Details of the methodology used to prepare the planning assumptions are stated in the extrinsic material.

4.2.1 Population and employment growth

(1) A summary of the assumptions about population and employment growth for the planning scheme area is stated in Table 4.2.2—Population and employment assumptions summary.

Table 4.2.2—Population and employment assumptions summary

COLUMN 1	COLUMN 2						
DESCRIPTION	ASSUMPTIONS						
	Base date 2016 2021 2026 2031 Ultimate						
	2011					development ¹	
POPULATION	15,546	17,591	18,785	19,875	21,022	27,122	
EMPLOYMENT	3,179	3,205	3,370	3,560	3,759	4,857	

- (2) Detailed assumptions about growth for each projection area and LGIP development type category are identified in the following tables in Schedule 3 Local government infrastructure plan mapping and tables:
 - (a) for population, Table SC3.1.1 Existing and projected population
 - (b) for employment, Table SC3.1.2 Existing and projected employees

Error! Reference source not found.

4.2.2 Development

- (1) The developable area is identified on Local Government Infrastructure Plan Drawings 1100-010 to 1100-017 in Schedule 3—Local government infrastructure plan mapping and tables.
- (2) The planned density for future development is stated in Table SC3.1.3 in Schedule 3—Local government infrastructure plan mapping and tables.
- (3) A summary of the assumptions about future residential and non-residential development for the planning scheme area is stated in Table 4.2.1—
 Residential dwellings and non-residential floor space assumptions summary.

Table 4.2.1—Residential dwellings and non-residential floor space assumptions summary

Column 1 Description	Column 2 Assumptions					
	Base date (2011)	2016	2021	2026	2031	Ultimate development
Residential dwellings ²	7779	8,330	8,925	9,549	10,161	14,328
Non-residential floor space (m ² GFA) ³	136,860	143,690	150,670	157,290	164,205	205,157

(1) Detailed assumptions about future development for each projection area and LGIP development type are identified in the following tables in Schedule 3 Local government infrastructure plan mapping and tables:

¹ Ultimate Development occurs in the year 2061 (approximately)

² Total number of residential dwellings

³ Total non-residential floor space (m2 GFA)

- (a) for residential development, Table SC3.1.4.
- (b) for non-residential development, Table SC3.1.5.

4.2.3 Infrastructure demand

- (1) The demand generation rate for a trunk infrastructure network is stated in Column 4 of Table SC 3.1.2 in Schedule 3 Local government infrastructure plan mapping and tables.
- (2) A summary of the projected infrastructure demand for each service catchment is stated in:
 - (a) for the water supply network, Table 4.2.3.1 Water Supply Network Demand Summary
 - (b) for the sewerage network, Table 4.2.3.2 Waste water Supply Network Demand Summary
 - (c) for the transport network, Table 4.2.3.3 Transport (Road and Path) Network Demand Summary
 - (d) for the parks and land for community facilities network, Table 4.2.3.4 and Table 4.2.3.5 Public Parks and Land for Community Land Network Demand Summary.

Table 4.2.3.1 - Water Supply Network Demand Summary

Column 1	Column 2						
Service catchment ⁴ Existing and projected				cted dem	and (EP)		
	2011					Ultimate	
	(Base date)	2016	2021	2026	2031	5	
PORT DOUGLAS (W1)	16,328	18,752	21,195	23,535	25,969	31,673	
MOSSMAN (W2)	6,278	6,572	6,888	7,214	7,519	10,323	
WHYANBEEL (W3)	1,702	1,975	2,241	2,492	2,762	4,151	
DAINTREE (W4)	192	223	257	301	334	620	
SHARED TREATMENT (W1&W2)	22,605	25,324	28,083	30,749	33,488	41,996	

-

⁴ Column 1 The service catchments for the sewerage network are identified on Local Government Infrastructure Plan Map LGIP Drawing Number 1100-101 (Plan for trunk sewerage infrastructure) in Schedule 3 (local government infrastructure mapping and tables).

⁵ Ultimate demand occurs in the year 2061 (approximately)

Table 4.2.3.2 - Waste Water Supply Network Demand Summary

Column 1 Column 2						
Service catchment ⁶	Existing and projected demand (EP)					
	2011 (Rase 2		2021	2026	2031	Ultimate ⁷
	(Base date)	25.5				
PORT DOUGLAS (S1)	15,073	16,591	18,135	19,622	21153	23,224
MOSSMAN (S2)	5,544	5,847	6,179	6,523	6841	7,640
COOYA BEACH (S3)	267	1,117	1,244	1,361	1850	1,415
NEWELL BEACH (S4)		488	533	570	612	551
WONGA BEACH / ROCKY POINT (S5)		965	1,401	1,815	2,244	2,840
SHARED TREATMENT (S2-S5)	5,811	8,417	9,357	10,269	11,546	12,446

Table 4.2.3.3 - Transport (Roads & Paths) Network Demand Summary

Column 1	Column 2					
Service catchment ⁸	Existing and projected demand (vpd)					
	2011 (base date) 2016 2021 2026 2031 Ultimate ⁹					
Douglas Shire South (TR1)	93,412	102,917	112,600	121,945	131,539	169,192
Douglas Shire North (TR2)	3,970	3,793	3,616	3,438	3,261	4,934

Ordinary Council Meeting - 5 June 2018

^{3.} Table 4.2.3.2 Column 1 The service catchments for the sewerage network are identified on Local Government Infrastructure Plan Map LGIP Drawing Number 1100-201 (Plan for trunk sewerage infrastructure) in Schedule 3 (local government infrastructure mapping and tables).
7Ultimate demand occurs in the year 2061 (approximately)

^{3.} Table 4.2.3.4 Column 1 The service catchments for the Transport network are identified on Local Government Infrastructure Plan Map LGIP Drawing Number 1100-301 and 401 (Plans for Road and Path Network infrastructure respectively) in Schedule 3 (local government infrastructure mapping and tables)

⁹Ultimate demand occurs in the year 2061 (approximately)

Attachment 5.1.2 28 of 406

Table 4.2.3.4 - Public Parks and Land for Community Land Network Demand Summary

Column 1	Column 2								
Service		Existing a	and proje	ected den	nand (pei	nand (persons)			
catchment ¹⁰	2011								
	(base date)	2016	2021	2026	2031	Ultimate			
Port Douglas (PPLC1)	9,757	11,041	11,789	12,474	13194	17,022			
Mossman (PPLC2)	1,531	1,733	1,850	1,958	2071	2,672			
Cooya Beach (PPLC3)	667	754	806	852	902	1,163			
Newell Beach (PPLC4)	329	373	398	421	445	575			
Wonga Beach (PPLC5)	751	849	907	960	1015	1,310			
Rural Area - South of Mowbray River (PPLC6)	382	432	462	488	516	666			
Rural Area - Mowbray River to Mossman River (PPLC7)	418	473	505	535	565	730			
Rural Area - Mossman River to Daintree River (PPLC8)	968	1,095	1,170	1,237	1309	1,688			
Rural Area - North of Daintree River (PPLC9)	743	841	898	950	1005	1,297			
District Shared Catchments (1,2,3,4,6&7)	13,084	14,806	15,810	16,728	17,693	22,827			
District Shared Catchments (5,8&9)	2,462	2,785	2,975	3,147	3,329	4,295			
Regional Shared Catchments (1-9)	15,546	17,591	18,785	19,875	21,022	27,122			

NOTES: Values reflect provision of public parks and Land for Community Purposes for total single and multi-catchment parks (excluding Pre-1990 Land).

6. Table 4.2.3. Column 1 The service catchments for the parks and land for community facilities network are identified on Local Government Infrastructure Plan Map LGIP Drawing Numbers 1100-601 to 1100-601 (Plan for trunk parks and land for community facilities infrastructure) in Schedule 3 (local government infrastructure mapping and tables).

Ordinary Council Meeting - 5 June 2018

- 7 -

4.3 Priority infrastructure area

- (1) The priority infrastructure area identifies the area prioritised for the provision of trunk infrastructure to service the existing and assumed future urban development up to 2031.
- (2) The priority infrastructure area is identified on Local Government Infrastructure Plan Map LGIP—Drawings **1100-130 to 1100-137**.

4.4 Desired standards of service

- (1) This section states the key standards of performance for a trunk infrastructure network.
- (2) Details of the standard of service for a trunk infrastructure networks are identified in the extrinsic material.

4.4.1 Water supply network

The Desired Standards for water supply trunk infrastructure are shown in Table

4.4.1.1 - Desired Standards of Service - Water Supply.

Table 4.4.1.1 — Desired Standards of Service – Water Supply

Planning Standard	Community Outcomes
Ensure drinking water complies with the NHMRC Australian Drinking Water Guidelines for colour, turbidity and microbiology.	 Provides uniform quality of water monitored in relation to recognised standards. Provide a safe and reliable water supply. Safeguards community health.
Water infrastructure provides for system operation and monitoring in accordance with recognised standards.	 Ensures environmental controls are maintained. Ensures potable water is provided in a manner consistent with environmental standards.
Reduce non-revenue water.	 Extend asset life. Improve environmental flows. Reduced greenhouse gas emissions. Reduce extraction of water from source.
Provide infrastructure which minimises power usage.	Reduced cost of energy.Cost effective service for community.Reduced greenhouse gas emission.
Develop and maintain excellence in appropriate new technologies.	 Reduced cost of energy and chemicals. Cost effective service for community. Reduced greenhouse gas emissions. Reduced environmental effects from chemical production.

Planning Standard	Community Outcomes		
Provide infrastructure which minimises whole of life costs.	 Cost effective service for community. Reduced energy cost. Reduced maintenance costs. Reduced overall operation costs. Reduced replacement costs. Reduction in disposal of waste. Reduced environmental effects from chemical production. 		
Design Standards	Community Outcome		
Design water supply infrastructure to comply with: FNQROC Development Manual; EPA Requirements; DNR Requirements; SAMP Customer Service Standards; Water Act 2000; Plans for Trunk Infrastructure – Water Supply.	 Provides uniform quality of water monitored in relation to recognised standards. Provide a safe and reliable water supply. Safeguards community health. 		

4.4.2 Sewerage network

The Desired Standards for water supply trunk infrastructure are shown in Table 4.4.2.1 – Desired Standards of Service – Sewerage.

Table 4.4.2.1— Desired Standards of Service – Sewerage

Planning Standard	Community Outcomes
Ensure wastewater collection, transportation and treatment system	Reduced impact from blockages, overflows and spills.
remains effective.	Reduced impact on residents.
	Reduced lease of Nitrogen and phosphorous to aquatic ecosystems.
	Improved community health.
	Reduced greenhouse gas emissions.
Provide infrastructure which minimises	Reduced cost of energy.
energy usage.	Cost effective service for community.
	Greenhouse gas reduction.

Planning Standard	Community Outcomes
Provide infrastructure which minimises	Cost effective service for community.
whole of life costs.	Reduced energy cost.
	Reduced maintenance costs.
	Reduced overall operation costs.
	Reduced replacement costs.
	Reduction in disposal of waste.
	Reduced greenhouse gas emissions.
	 Reduced environmental effects from chemical production.
Achieve excellence in appropriate new	Reduced cost of energy and chemicals.
technologies.	Cost effective service for community.
	Reduced greenhouse gases.
	 Reduced environmental effects from chemical production.
Maximise opportunities for re-use of effluent.	Beneficial use of reclaimed water and biosolids.
	 Opportunity for cost recovery for reclaimed water treatment.
	Reduction in use of potable water supply and treatment.
	 Reduced release of nitrogen and phosphorous to aquatic ecosystems.
	Reduction of raw water extraction from source.
Design Standards	Community Outcome
Design wastewater infrastructure to comply	Noise control.
with:	No adverse visual effect.
FNQROC Development Manual;	Control of overflows from system.
EPA Requirements;	Improves community health.
DNR Requirements;	Reduction in contaminated discharges.
SAMP Customer Service Standards;	Reduced odour emissions.
Water Act 2000	
Plans for Trunk Infrastructure - Wastewater	
Ensure infiltration and inflow in new wastewater	Reduced cost of energy for effluent transport, treatment and disposal.
collection and transportation systems remain within	Minimise customer overflow issues.
industry acceptable limits (compliance with	Maximise life of system.
Environmental licences, IEMS and associated EMPs)	Reduced overflows to local waterways.
and is minimised to a practical extent in existing	
systems.	

4.4.3 Transport network

The Desired Standards for water supply trunk infrastructure are shown in Table 4.4.3.1 – Desired Standards of Service – Transport.

Table 4.4.3.1— Desired Standards of Service – Transport

Planning Standard	Community Outcomes
Road Network	
Define the road network as a functional road hierarchy of State Controlled Roads, Sub-arterial Roads, and Major and Minor Urban and Rural Collectors which support the Local government's urban and rural settlement patterns as well as commercial and economic activities.	 Protects the amenity of residential communities by removing non-local traffic. Improves local safety by removing "through" traffic. Reduces fuel consumption and emission levels by sustaining efficient operating speeds. Maintains travel speeds in off-peak periods. Reduces vehicle operating costs. Improves public transport operation by improving travel speeds. Supports economic growth by developing efficient and integrated transport networks. Minimises through traffic and heavy vehicles in residential areas. Limits community severance.
Path Network	
Define the trunk path network which provide improved access and alternative options for the travel mode.	 Protects the amenity of residential communities by providing an alternative mode of transport between locations Provides a network of paths for recreational and commuter use Provides facilities and access within the LGA which are not accessible by alternative transport options. Provides a basis for a healthy and active community.
Design Standards	Community Outcome
Road Network	
Road network system is designed and provided in accordance with: • Queensland Streets, Queensland Residential Design Guidelines, FNQROC Development Manual, TMR and Australian Standards; and • Plans for Trunk Infrastructure – Road Network.	 Reduce delays during peak periods. Improve safety by reducing vehicle speed differentials. Supports efficient and integrated freight movement network.

Planning Standard	Community Outcomes
Path Network	
Path network system is designed and provided in accordance with: • Queensland Streets, Queensland Residential Design Guidelines, FNQROC Development Manual, TMR and Australian Standards; and • Plans for Trunk Infrastructure –Path Network.	 Provide a choice in mode of transport Improve safety by providing dedicated Path networks. Supports efficient, integrated and diverse modes of movement across the Path network.

4.4.4 Public parks and land for community facilities network

The Desired Standards for water supply trunk infrastructure are shown in *Table 4.4.4.1*– Desired Standards of Service – Transport.

Table 4.4.4.1— Desired Standards of Service – Public Parks and land for Community Facilities

Planning Standard	Community Outcomes
Provide a connected and accessible network of parks, open space, and	Provides opportunities for access and increased usage of open space, recreational and community facilities.
community facilities that meet the needs of the Local government's residents and visitors.	Provides for an appropriate balance of land uses and ensures high levels of amenity in the urban form.
	Provides a basis for a healthy and active community.
Ensure strong linkages and, where possible, co-location of existing and future parks, open space and community facilities.	Ensures utilisation of existing and future assets while maintaining maximum access.
Provide embellishments to public parks, commensurate with the range of activities envisaged.	Provides open space embellishments that meet the needs of the community by providing a range of facilities for social activities and/or fitness/recreational pursuits.
	Ensures activities are met and contained within designated areas - reducing potential off-site impacts to other more sensitive areas in the Local government.
Ensure that existing and future parks, open space and community facilities with significant environmental, waterway or cultural heritage value are managed	Protects and enhances items of cultural interest in the Local government for the benefit of current and future communities in the Local government.
appropriately.	 Provides a basis for tourism opportunities.
	Protection of the natural landscape ensures maintenance of quality of air, water and land resources reducing negative impacts requiring amelioration.
	Recreational and sporting parks promote the health and wellbeing of the Local government's residents.

34 01 400			
Design Standards	Community Outcome		
Public parks and land for community facilities areas are provided in accordance with the preferred quantity, distribution (ShireWide, district, local, sporting, community), quality and level of development specified in Council's 'Public Parks and Land for Community Purposes Trunk Infrastructure Planning Study' and Plans for Trunk Infrastructure — Public Parks and Land for Community Facilities.	 Provides a standard of service reflecting the communities' needs as identified by the local government's adopted strategies. Provides recreation and sporting parks with a diverse range of activity opportunities and landscape settings to encourage healthy lifestyles and maximise opportunities for activity. Recreation and open space facilities are managed in the most efficient and cost-effective way. Recreation and open space facilities can be safely and conveniently accessed by all existing and potential users. 		
Land provided for parks, recreation, and sport is not constrained by physical, environmental or other hazards.	Ensure adequate provision of safe, accessible and usable facilities.		
Ensure land is accessible, of suitable quality and integrated with the urban and open space networks. Provide an accessible network of parks, open space, and community facilities that meets the needs of residents and visitors in accordance with the rate of provision identified in Table 4.4.4.2 and accessibility standards outlined in Table 4.4.4.3. Ensure land for public parks and community facilities has minimum land size as identified in Table 4.4.4.4.	of park, open space and community facilities.		
Public park embellishments are provided in accordance with Council's 'Public Parks and Land for Community Purposes Trunk Infrastructure Planning Study' and the Plans for Trunk Infrastructure – Public Parks and Land for Community Facilities. Embellish public parks to complement the type and purpose of the public park as identified in Table 4.4.4.5.	purpose within the park hierarchy.		

Table 4.4.4.2— Rate of Land Provision for Public Parks and Land for Community Facilities

Infrastructure Item	Rate of Provision (Ha / 1000 people)			
	Local	District	Local Government Wide	
Recreation park (2.5 Ha/1000)	1 Ha/1000	1.3 Ha/1000	0.2 Ha/1000	
Sport park (2 Ha/1000)	0	1.6 Ha/1000	0.4 Ha/1000	
Land for community facilities (0.3 Ha/1000)	0	0.15 Ha/1000	0.15 Ha/1000	

Table 4.4.4.3— Accessibility standards for Public Parks and Land for Community Facilities

Infrastructure Item	Accessibility Standard (km)		
_	Local	District	Local Government Wide
Recreation park	500m	2-3km	10-15km
Sport park	N/A	2-5km	15km
Land for community facilities	N/A	5km	20km

Table 4.4.4.4— Size of public parks and land for community facilities

Infrastructure Item	Minimum size (Ha)		
	Local	District	Local Government Wide
Recreation park	1 Ha pref – 0.5 Ha min	2-5 Ha	2-5 Ha
Sport park	N/A	10 Ha Minimum 7 Ha (allows for 3 fields and ancillary)	20 Ha
Land for community facilities	N/A	Cultural Activity Space (CAS) 1500m2	CAS 1 Ha
		Community Meeting & Activity Space (CMS) 2000m2	CMS 1 Ha
		Community Service Facility (CSF) 1000m2	CSF 1 Ha
		Formal Memorial Space (FMS) 1000m2	FMS 10 Ha

Table 4.4.4.5— Standard facilities/embellishments for public parks

Embellishment Type	R	ecreation P	Sports Park		
	Local	District	LGA - wide	District	LGA - wide
Water connection/tap	✓	✓	✓	✓	✓
Drinking Fountain	✓	✓	✓		
Lighting	✓	✓	✓	✓	✓
Fencing (bollard/post and top rail)	✓	✓	✓	✓	✓
Playground equipment (incl. Soft fall)	✓	✓	✓		
Seating	✓	✓	✓	✓	
Picnic Shelter	✓	✓	✓		
BBQ	✓	✓	✓		
Earthworks – Field preparation/Kickabout	✓	✓	✓	✓	✓
Spectator facilities	✓	✓	✓	✓	✓
Landscaping	✓	✓	✓	✓	✓
Power	✓	✓	✓	✓	✓
Irrigation (new parks)	✓	✓		✓	✓
Public Toilet	✓	✓	✓	✓	✓
Path/bikeways	✓	✓	✓	✓	✓
Car parking and access works	✓	✓	✓	✓	✓

4.5 Plans for trunk infrastructure

(1) The plans for trunk infrastructure identify the trunk infrastructure networks intended to service the existing and assumed future urban development at the desired standard of service.

4.5.1 Plans for trunk infrastructure maps

- (1) The existing and future trunk infrastructure networks are shown on the following maps in Schedule 3—Local government infrastructure plan mapping and tables:
 - (a) Local Government Infrastructure Plan drawings 1100-100 to 1100-126 - LGIP Plans for frunk water supply infrastructure;
 - (b) Local Government Infrastructure Plan drawings 1100-200 to 1100-211 Plans for trunk waste water infrastructure;
 - (c) Local Government Infrastructure Plan drawings for trunk transport infrastructure, including:
 - 1. Drawings 1100-300 to 1100-316 (Trunk Road Infrastructure)
 - 2. Drawings 1100-400 to 1100-417 (Trunk Path Infrastructure)
 - (d) Local Government Infrastructure Plan Drawings 1100-600 to 1100-623 LGIP Plan for trunk parks and land for community facilities infrastructure

(2) The State infrastructure forming part of transport trunk infrastructure network has been identified using information provided by the relevant State infrastructure supplier.

4.5.2 Schedules of works

- (1) Details of the existing and future trunk infrastructure networks are identified in the electronic Excel schedule of works model which can be viewed here: <insert link to the website where the file can be found>.
- (2) The future trunk infrastructure is identified in the following tables <in Schedule 3—Local government infrastructure plan mapping and tables>:
 - (a) for the water supply network, Table SC3.2.1;
 - (b) for the sewerage network, Table SC3.2.2;
 - (c) for the transport network, Table SC3.2.3;
 - (d) for the parks and land for community facilities network, Table SC3.2.4.

Editors note — Extrinsic material

The below table identifies the documents that assist in the interpretation of the local government infrastructure plan and are extrinsic material under the *Statutory Instruments Act 1992*.

List of extrinsic material

Column 1	Column 2	Column 3
Title of document	Date	Author
Planning		
Douglas Shire Council Planning Scheme	2006	Douglas Shire Council & Cairns Regional Council
Proposed Douglas Shire Council Planning	2016	Douglas Shire Council
CRC Asset Registers and Data (During	Various	Cairns Regional Council
amalgamation	(circa 2009)	
DSC Asset Registers and Data	2016 (part)	Douglas Shire Council
QGSO Estimated Residential Population and	2013	QGSO
Population Forecasts by LGA, 2011 – 2036		
FNQROC Development Manual – Issue 6	2014	FNQROC
Review of Owners Project Cost and	2009	Evans and Peck
Contingency Allowances, Evans and Peck		
Douglas Shire Council (DRAFT) Priority	2010	Integran – Infrastructure
Infrastructure Plan and associated briefing		Management
notes		
Douglas Shire Council - Technical briefing	2017	Trinity Engineering and
report – LGIP key assumptions and		Consulting Pty Ltd
methodology		

Column 1	Column 2	Column 3
Title of document	Date	Author
Water		
DNRM Planning guidelines for water supply and	2014	Department of Energy and Water Supply
sewerage		
NHMRC Australian Drinking Water Guidelines, V6	2011	Australian Government,
Guidelines, vo		National Health and
		Medical Research
		Council
FNQROC Development Manual – Issue 6	2014	FNQROC
Works Design Guidelines D6 – Water Reticulation,		
WSAA Codes,	2011	Water Services Association of Australia.
Planning Guidelines for Water and Sewage,	2014	QLD Department of Energy and Water Supply
Mossman WWTP Interim Upgrade Report	2009	Maunsell Australia
Mossman WWTP Supplementary Report		Pty Ltd
Mossman WWTP Supplementary Report –		(Now AECOM)
Addendum		
Division 10 (Former Douglas Shire) Water	2009	MWH
Supply Planning Report		(now Stantec)
Division 10 (Former Douglas Shire) Water	2010	MWH
Supply Planning Report		(now Stantec)
Water and Wastewater As Constructed Plans	various	Douglas Shire Council
Water Supply and Sewerage Asset Register and Capital Works Programs	2017	Douglas Shire Council
Water and Sewerage Asset Valuations Report	2006	Cardno
	2016 (part)	
Douglas Shire Council – Total Management Plan	2007	Douglas Shire Council
Douglas Shire Council – Water Treatment	1999	GHD
Plants – Planning Report		
Douglas Shire Council – Water Treatment	1999	Kinhill Cameron
Plants – Planning Report		McNamara
Far North Queensland (DRAFT) Regional	2007	Qld Government
Water		Department of Natural
Supply Strategy		Resources and Water

Column 1	Column 2	Column 3
Title of document	Date	Author
Douglas Shire Council (DRAFT)	2010	Integran :
Priority Infrastructure Plan		Infrastructure
(Population and Demand Model)		Management
Desired Standards of Service		
Douglas Shire Council	2017	GHD
Rex Creek Intake Upgrade		
Options Assessment Report		
Waste Water		
DNRM Planning guidelines for water supply and	2014	Department of Energy and Water Supply
sewerage		
Mossman and Port Douglas WWTP – Catchments	2013	MWH
Sewerage Infrastructure – Growth Management Plan		(now Stantec
Douglas Shire Council	2016	GHD
Mossman Water Security Planning Report		
Reliability Assessment		
Maunsell (2007) Mossman Sewerage Treatment	2007	Maunsell Australia
Planning Report		Pty Ltd (Now AECOM)
FNQROC Development Manual – Issue 6	2014	FNQROC
Works Design Guidelines D6 – Water	2014	FNQROC
Reticulation,		
WSAA Codes,	2011	Water Services Association of Australia.
Planning Guidelines for Water and Sewage,	2014	QLD Department of Energy and Water Supply
Mossman WWTP Interim Upgrade Report	2009	Maunsell Australia
Mossman WWTP Supplementary Report		Pty Ltd
Mossman WWTP Supplementary Report –		(Now AECOM)
Addendum		
Division 10 (Former Douglas Shire) Water Supply Planning Report	2009	MWH (now Stantec)
Water and Wastewater As Constructed Plans	various	Douglas Shire Council
Water Supply and Sewerage Asset Register and Capital Works Programs	2017	Douglas Shire Council
Water and Sewerage Asset Valuations Report	2006	Cardno
	2016 (part)	
	1	T. Control of the Con

	06	
Column 1	Column 2	Column 3
Title of document	Date	Author
Douglas Shire Council (DRAFT)	2010	Integran:
Priority Infrastructure Plan		Infrastructure
(Population and Demand Model)		Management
Desired Standards of Service		
Transport		
Douglas Shire Council (DRAFT)	2010	Integran:
Priority Infrastructure Plan		Infrastructure Management
FNQROC Development Manual – Issue 6	2014	FNQROC
Works Design Guidelines		
D1 – Road Geometry		
D3 – Road Pavements		
D8 – Utilities		
D9 – Landscaping		
FNQROC - Standard Drawings		
Douglas Shire Council Critical Bridge	2007	Texcel
Information		
DSC GIS Asset Data sets	2016	Douglas Shire Council
Douglas Shire Council Report on Bitumen Sealing he		
Cape Tribulation Road Through World Heritage		
Listed Property.		
Unit Rate Book for Council Assets (#646604-	2009	Cairns Regional
v6)		Council
Unit Rates for Transport Network Plans	2009	Cairns Regional
(#854357)		Council
	2009	Cairns Regional
	2000	Council / Douglas
DSC Bridges Strategy		Regional Council (Amalgamated)
CDC Designator of Bridge	2009	Cairns Regional
CRC Register of Bridges		Council
Bridge Data	various	Department of Transport and Main Roads

Column 1	Column 2	Column 3
Title of document	Date	Author
TMR Bridge Cost Information (#2432888)	2009	Department of Transport and Main Roads (TMR)
Junction Creek Pedestrian Bridge –	2017	GHD
Detailed Design and Costing Report		
LGIP Wharf St Intersection Preliminary Cost Schedule	2017	Trinity Engineering and Consulting
(Future) Area of Investigation:	To be	TBA
The area of land to the West of the Highway, shown on Drawing 110-317, identifies an area currently under investigation.	completed	
Far North Queensland	2016	Department of Transport
Principal Cycle Network Plan		and Main Roads (TMR)
Far North Queensland	2017	Department of Transport
Principal Cycle Network Plan		and Main Roads (TMR)
Addendum - Priority Route Maps		
Strategy Report (DRAFT)	2017	Point 8 (in association with
Port Douglas to Newell Beach Cycle Route		Zwart Transport Planning)
Public Parks and Land for Community Purposes P		
Douglas Shire Council (DRAFT)	2010	Integran :
Priority Infrastructure Plan		Infrastructure Management
Former Douglas Shire Public	2009	Strategic Leisure
Parks and Land for Community Purposes		
Trunk Infrastructure Planning Study		
FNQROC Development Manual – Issue 6	2014	FNQROC
Works Design Guidelines		
D9 – Landscaping		
FNQROC - Standard Drawings		
DSC GIS Asset Data sets	2016	Douglas Shire Council
PDSLive – Extract of Property Sale	2017	PDS Live
DSC Park Embellishment Data	2010	CRC
Modelling		
Appendix C – Schedule of Works Model user manual	2016	DILGP

42 of 406

Column 1	Column 2	Column 3
Title of document	Date	Author
Queensland Department of Local Government and Planning, "Update on National Competition Policy Issues", Local Government Bulletin Ref 06/01; 6 th June 2001	June 2001	Queensland Department of Local Government and Planning

Attachment 5.1.2 43 of 406

Schedule 3 – Local government infrastructure plan mapping and tables SC3.1 Planning assumption tables

Table SC3.1.1 — Existing and projected population

Column 1	Column 2	Column 3					
Projection area	LGIP development	Existing and pro	ojected popula	ation			
	type	Base date					Ultimate
		2011	2016	2021	2026	2031	development
Port Douglas and Environs	Separate House	4,823	5,071	5,316	5,552	5799	6,777
	Semi, Detached, Flats	4,065	4,273	4,479	4,679	4886	5,733
	Other	1,189	1,249	1,312	1,369	1431	1,671
	Total	10,077	10,593	11,107	11,600	12,115	14,181
Mossman and Environs	Separate House	743	778	819	860	898	1,056
	Semi, Detached, Flats	626	656	691	726	759	896
	Other	182	191	201	212	222	260
	Total	1,551	1,625	1,711	201 212 222 1,711 1,798 1878	2,212	
	Separate House	280	326	369	411	456	636
pastal Suburbs, Villages and	Semi, Detached, Flats	235	275	312	348	387	541
Townships (Cooya Beach)	Other	68	81	91	101	113	157
	Total	583	682	772	860	954.5	1,334
	Separate House	39	40	44	49	52	66
Coastal Suburbs, Villages and	Semi, Detached, Flats	33	34	37	42	44	57
Townships (Daintree Township)	Other	10	11	11	12	13	16
	Total	82	85	92	103	108	139
Coastal Suburbs, Villages and	Separate House	197	201	202	204	207	215
Townships (Newell Beach)	Semi, Detached, Flats	167	168	171	171	173	179

Attachment 5.1.2 44 of 406

Column 1	Column 2	Column 3					
Projection area	LGIP development	Existing and pr	ojected popula	ation			
	type	Base date					Ultimate
		2011	2016	2021	2026	2031	development
	Other	49	50	50	50	51	50
	Total	413	419	423	425	430	444
Coastal Suburbs, Villages and	Separate House	334	361	389	416	444	555
Townships (Wonga Beach)	Semi, Detached, Flats	282	305	329	350	374	467
	Other	82	90	96	103	110	139
	Total 698 756 814 869	927	1,161				
Inside priority infrastructure area	Separate House	6,416	6777	7139	7,492	7854	9305
(total)	Semi, Detached, Flats	5408	5711	6019	6316	6622	7873
	Other	1580	1672	1761	1847	1938	2293
	Total	13,404	14,160	14,919	15,655	16,413	19,471
Outside priority infrastructure area	Separate House	1,025	1,642	1,851	2,020	2,206	3,662
(total)	Semi, Detached, Flats	864	1,384	1,559	1,702	1,859	3,086
	Other	253	406	456	498	544	904
	Total	2,142	3,431	3,866	4,220	4,609	7,651
	Separate House	7,441	8,419	8,990	9,512	10,059	12,967
Davidas Chira Caunail	Semi, Detached, Flats	6,272	7,095	7,578	8,018	8,480	10,959
Douglas Shire Council	Other	1,833	2,078	2,217	2,345	2,482	3,197
	Total	15,546	17,591	18,785	19,875	21,022	27,122

Attachment 5.1.2 45 of 406

Table SC3.1.2 — Existing and projected employees

Column 1 Projection area	Column 2 LGIP development	Column 3 Existing and projected employees								
	type	2011	2016	2021	2026	2031	Ultimate development			
Port Douglas and	Industry	211	213	224	238	252	334			
Environs	Commercial	902.57	910	956	1,010	1,066	1,376			
	Retail	192.04	194	204	215	228	299			
	Community Services	76.81	77	81	86	91	119			
	Other (incl. home based business, mining, construction, agriculture etc.) -	-	-	-	-	-				
	Total	1,383	1,394	1,466	1,549	1,637	2,128			
Mossman and Environs	Industry	246	248	260	274	288	357			
	Commercial	360	363	382	404	428	563			
	Retail	76	76	80	85	90	118			
	Community Services	38	38	40	43	45	59			
	Other (incl. home based business, mining, construction, agriculture etc.) -									
	Total	719	725	763	806	851	1,098			
Coastal Suburbs,	Industry									
Villages and Townships	Commercial	322	324	341	359	378	476			
	Retail	76	76	80	85	90	118			

Attachment 5.1.2 46 of 406

Column 1	Column 2			Colu	ımn 3					
Projection area	LGIP development	Existing and projected employees								
	type	2011	2016	2021	2026	2031	Ultimate development			
	Community Services	38	38	40	43	45	59			
	Other (incl. home based business, mining, construction, agriculture etc.) -									
	Total	435	439	461	487	513	653			
Rural Areas & Rural	Industry									
Settlements	Commercial									
	Retail									
	Community Services									
	Other (incl. home based business, mining, construction, agriculture etc.) -									
	Total	584	589	619	654	690	888			
Settlement Areas North	Industry									
of the Daintree River	Commercial									
Retail Community Services	Retail									
	Other (incl. home based business, mining,	58	58	62	65	69	90			

Attachment 5.1.2 47 of 406

Column 1	Column 2				ımn 3					
Projection area	LGIP development type	Existing and projected employees								
	туре	2011	2016	2021	2026	2031	Ultimate development			
	construction, agriculture etc.) -									
	Total	58	58	62	65	69	90			
Inside priority	Industry	457	461	484	511	539	691			
infrastructure area (total)	Commercial	1,584	1,597	1,679	1,773	1,872	2,415			
(total)	Retail	343	346	364	386	408	536			
	Community Services	153	154	162	171	181	238			
	Other (incl. home based business, mining, construction, agriculture etc.) -									
	Total	2,537	2,558	2,690	2,842	3,000	3,879			
Outside priority	Industry									
infrastructure area (total)	Commercial									
(total)	Retail									
	Community Services									
	Other (incl. home based business, mining, construction, agriculture etc.) -	642	647	681	719	759	978			
	Total	642	647	681	719	759	978			
Douglas Shire Council	Industry	457	461	484	511	539	691			
	Commercial	1,584	1,597	1,679	1,773	1,872	2,415			

Attachment 5.1.2 48 of 406

Projection area I	Column 2 LGIP development	Column 3 Existing and projected employees							
	type	2011	2016	2021	2026	2031	Ultimate development		
	Retail	343	346	364	386	408	536		
	Community Services	153	154	162	171	181	238		
	Other (incl. home based business, mining, construction, agriculture etc.) -	642	647	681	719	759	978		
	Total	3,179	3,205	3,370	3,560	3,759	4,857		

Attachment 5.1.2 49 of 406

Table SC3.1.3 —Planned density and demand generation rate for a trunk infrastructure network

Column 1 Area classification	Column 2 LGIP development type	Developable Ha	Column 3 Planned density		Column 4 Demand generation rate for a trunk infrastructure network					
			Non- residential plot ratio	Residential density (dwellings/ dev ha)	Water supply network (EP/dev ha)	Sewerage network (EP/dev ha)	Transport network (vpd/dev ha)	Parks and land for community facilities network (ha/1000 persons)	Stormwater network (imp ha/dev ha)	
(Broad			Reside	ential develo	pment	ı	ı	ı		
Hectare Rates)	Rural	22,113.78	N/A	0.02	0.5	0.5	10	4.8	0.05	
,	Rural Settlement	982.56	N/A	2	5.2	5.2	10	4.8	0.2	
	Residential 1	480.63	N/A	10	25.9	25.9	100	4.8	0.6	
	Residential 2	83.75	N/A	40	44.0	44.0	150	4.8	0.8	
	Non-residential development and mixed development ¹¹									
	Tourist and Residential	115.98	0.51	40	88.8	88.8	300	4.8	0.8	
	Commercial/ Retail	36.62	0.75	40	25.9	25.9	400	4.8	0.9	
	Industry	72.45	0.50	12	31.1	31.1	200	4.8	0.9	
	Community and Recreational Facilities	355.40	0.5	10	25.9	25.9	120	4.8	0.2	
	Conservation	187,722.42	N/A	1.5	3.9	3.9	10	4.8	0.0	
Coastal		1	Reside	ential develo	pment	1	1	1	1	
Suburbs,	Rural	49.14	N/A	0.02	0.0518	0.0518	0.2	4.8	0.05	
Villages and Townships	Rural Settlement	13.90	N/A	2	5.18	5.18	20	4.8	0.2	

Note—111. Mixed development is development that includes residential development and non-residential development.

Attachment 5.1.2 50 of 406

Column 1	Column 2	Developable	Colu	ımn 3		Column 4					
Area classification	LGIP development type	На	Planned	d density	Demand generation rate for a trunk infrastructure network						
			Non- residential plot ratio	Residential density (dwellings/ dev ha)	Water supply network (EP/dev ha)	Sewerage network (EP/dev ha)	Transport network (vpd/dev ha)	Parks and land for community facilities network (ha/1000 persons)	Stormwater network (imp ha/dev ha)		
	Residential 1	148.59	N/A	7	18.13	18.13	70	4.8	0.6		
	Residential 2	4.08	N/A	7	18.13	18.13	70	4.8	0.8		
		Non-resid	dential deve	lopment and	mixed de	velopment	J	ı			
Toui	Tourist and Residential	11.89	0.35	6	15.54	13.3	45	4.8	0.8		
	Commercial/ Retail	4.25	0.75	40	103.6	103.6	400	4.8	0.9		
	Industry	-	0.50	12	31.08	31.08	120	4.8	0.9		
	Community and Recreational Facilities	69.17	0.5	10	25.9	25.9	100	4.8	0.2		
	Conservation	16.98	N/A	1.5	3.885	3.885	15	4.8	0.0		
Mossman &			Reside	ential develo	pment		1				
Environs	Rural	147.12	N/A	0.02	0.0518	0.0518	0.2	4.8	0.05		
	Rural Settlement	33.99	N/A	2	5.18	5.18	20	4.8	0.2		
	Residential 1	158.61	N/A	9	23.31	23.31	90	4.8	0.6		
	Residential 2	26.64	N/A	9	23.31	23.31	90	4.8	0.8		
		Non-resid	dential deve	lopment and	mixed de	velopment	1				
	Tourist and Residential	0	0.51	40	88.8	88.8	300	4.8	0.8		
	Commercial/ Retail	12.28	0.75	40	103.6	103.6	400	4.8	0.9		

Attachment 5.1.2 51 of 406

Column 1 Area classification	Column 2 LGIP development type	Developable Ha		ımn 3 I density	Column 4 Demand generation rate for a trunk infrastructure network						
			Non- residential plot ratio	Residential density (dwellings/ dev ha)	Water supply network (EP/dev ha)	Sewerage network (EP/dev ha)	Transport network (vpd/dev ha)	Parks and land for community facilities network (ha/1000 persons)	Stormwater network (imp ha/dev ha)		
	Industry	48.66	0.50	12	31.08	31.08	120	4.8	0.9		
	Community and Recreational Facilities	50.65	0.5	10	25.9	25.9	100	4.8	0.2		
	Conservation	93.74	N/A	1.5	3.885	3.885	15	4.8	0.0		
Port Douglas	Residential development										
& Environs	Rural	0.26	N/A	0.02	0.0518	0.0518	0.2	4.8	0.05		
	Rural Settlement		N/A	2	5.18	5.18	20	4.8	0.2		
	Residential 1 (Low Scale - Special Management Area_Flagstaff Hill) 12		N/A	7	17.094	17.094	66	4.8	0.4		
	Residential 1 (Low Scale - Special Management Area Residential Growth Area) 14		N/A	12	31.08	31.08	120	4.8	0.4		
	Residential 1 (Low Scale - Specific Overlay Reef Park Residential Estate) 14		N/A	10	25.9	25.9	100	4.8	0.4		
	Residential 1 (Low Scale - Specific Overlay Solander Residential Estate) 14		N/A	10	25.9	25.9	100	4.8	0.4		

¹² Special Planning Overlay requirement

Attachment 5.1.2 52 of 406

Column 1	Column 2	Developable	Colu	ımn 3			Column	4		
Area classification	LGIP development type	На	Planned	d density	Demand generation rate for a trunk infrastructure network					
			Non- residential plot ratio	Residential density (dwellings/ dev ha)	Water supply network (EP/dev ha)	Sewerage network (EP/dev ha)	Transport network (vpd/dev ha)	Parks and land for community facilities network (ha/1000 persons)	Stormwater network (imp ha/dev ha)	
	Residential 1 (High Scale) 14		N/A	12	31.08	31.08	120	4.8	0.6	
	Residential 1 (Other) 14	170.36	N/A	9	23.31	23.31	90	4.8	0.6	
	Residential 2 (Medium Scale) 14	53.03	N/A	34	88.8	76.1	257.1	4.8	0.75	
	Non-residential development a	nd mixed deve	lopment							
	Tourist and Residential (High Scale) 14		0.8	51	133.2	114.2	385.7	4.8	1	
	Tourist and Residential (Medium Scale) 14	100.73	0.45	26	66.6	57.1	192.9	4.8	0.9	
	Tourist and Residential (Other) 14	20.08	0.45	34	88.8	76.1	257.1	4.8	0.8	
	Commercial (High Scale - Tourist Centre) 14	23.18	1	51	133.2	114.2	385.7	4.8	1	
	Industry	171.94	N/A	0.5	31.08	31.08	120	4.8	0.9	
	Community and Recreational Facilities	44.21	0.5	0.8	2.072	2.072	8	4.8	0.2	
	Conservation	100.73		1	2.59	2.59	10	4.8	0.0	
Rural Areas	Residential development					1				
and Rural Settlement	Rural	19,871.93	N/A	0.02	0.0518	0.0518	0.2	4.8	0.05	
Jettiement	Rural Settlement	544.76	N/A	2	5.18	5.18	20	4.8	0.2	

Attachment 5.1.2 53 of 406

Column 1	Column 2	Developable	Colu	ımn 3			Column	4		
Area classification	LGIP development type	На		d density	Dema	and generat	ion rate for networ	a trunk infra k	structure	
			Non- residential plot ratio	Residential density (dwellings/ dev ha)	Water supply network (EP/dev ha)	Sewerage network (EP/dev ha)	Transport network (vpd/dev ha)	Parks and land for community facilities network (ha/1000 persons)	Stormwater network (imp ha/dev ha)	
	Residential 1	3.07	N/A	7	18.13	18.13	70	4.8	0.6	
	Residential 2	-		9	23.31	23.31	90	4.8	0.8	
	Non-residential development	and mixed deve	lopment		-					
	Tourist and Residential	3.36	0.35	6	15.54	13.3	45	4.8	0.8	
	Commercial/ Retail	-	0.75	40	103.6	103.6	400	4.8	0.9	
	Industry	0.61	0.50	12	31.08	31.08	120	4.8	0.9	
	Community and Recreational Facilities	63.64	0.5	10	25.9	25.9	100	4.8	0.2	
	Conservation	684.56	N/A	1.5	3.885	3.885	15	4.8	0.0	
Settlement	Residential development	'			-					
Areas North of the	Rural	2,045.32	N/A	0.25	0.6475	0.6475	2.5	4.8	0.05	
Daintree	Rural Settlement	389.91	N/A	2.5	6.475	6.475	25	4.8	0.2	
	Residential 1		N/A	7	18.13	18.13	70	4.8	0.6	
	Residential 2		N/A	9	23.31	23.31	90	4.8	0.8	
	Non-residential development	Non-residential development and mixed development								
	Tourist and Residential		0.51	40	103.6	88.8	300	4.8	0.8	
	Commercial/ Retail		0.75	40	103.6	103.6	400	4.8	0.9	
	Industry		0.50	12	31.08	31.08	120	4.8	0.9	

Attachment 5.1.2 54 of 406

Column 1 Area classification	Column 2 LGIP development type	Developable Ha	Column 3 Planned density		Column 4 Demand generation rate for a trunk infrastructure network					
			Non- residential plot ratio	Residential density (dwellings/ dev ha)	Water supply network (EP/dev ha)	Sewerage network (EP/dev ha)	Transport network (vpd/dev ha)	Parks and land for community facilities network (ha/1000 persons)	Stormwater network (imp ha/dev ha)	
	Community and Recreational Facilities		0.5	10	25.9	25.9	100	4.8	0.2	
	Conservation	2,441.17	N/A	1.5	3.885	3.885	15	4.8	0.0	
World	Residential development									
Heritage Areas and	Rural		N/A	0	0	0	0	4.8	0.05	
Environs Environs	Rural Settlement		N/A	2.5	6.475	6.475	25	4.8	0.2	
	Residential 1		N/A	7	18.13	18.13	70	4.8	0.6	
	Residential 2		N/A	9	23.31	23.31	90	4.8	0.8	
	Non-residential development and mixed development									
	Tourist and Residential									
	Commercial/ Retail									
	Industry									
	Community and Recreational Facilities									
	Conservation	184,441.76								

Attachment 5.1.2 55 of 406

Column 1	Column 2				Column 3		
Projection area	LGIP		E	Existing and pro	jected reside	ntial dwelling	gs
	development type	Base Date					
		2011	2016	2021	2026	2031	Ultimate development
Port Douglas and Environs	Separate House	1,862	2,020	2,188	2,362	2545	3,709
	Semi, Detached, Flats	1,831	1,987	2,154	2,328	2509	3,669
	Other	626	679	737	796	852	1,256
	Total	4,319	4,686	5,079	5,486	5905	8,634
Mossman and Environs	Separate House	287	310	337	366	391	582
	Semi, Detached, Flats	282	305	332	361	386	577
	Other	96	104	113	123	132	197
	Total	665	719	782	850	909	1,356
Coastal Suburbs,	Separate House	108	130	152	175	197	354
/illages and - - ownships (Cooya	Semi, Detached, Flats	106	128	150	173	195	352
Beach)	Other	36	44	51	59	67	119
	Total	250	302	353	407	459	825
Coastal Suburbs, /illages and	Separate House	15	16	18	21	23	39
Townships (Daintree Township)	Semi, Detached, Flats	15	16	18	21	23	39
	Other	5	6	6	7	8	11

Attachment 5.1.2 56 of 406

Column 1	Column 2				Column 3					
Projection area	LGIP		Existing and projected residential dwellings							
	development type	Base Date 2011	2016	2021	2026	2031	Ultimate development			
	Total	35	38	42	49	53	88			
Coastal Suburbs, Villages and Townships (Newell Beach)	Separate House	76	80	83	87	91	115			
	Semi, Detached, Flats	75	78	82	85	89	113			
	Other	26	27	28	29	30	37			
	Total	177	185	193	201	209	265			
Coastal Suburbs, Villages and Townships (Wonga Beach)	Separate House	129	144	160	177	193	307			
	Semi, Detached, Flats	127	142	158	174	190	301			
	Other	43	49	54	60	66	104			
	Total	299	335	372	411	448	711			
Inside priority infrastructure area	Separate House	2,477	2,700	2,938	3,188	3439	5,105			
(total)	Semi, Detached, Flats	2,436	2,656	2,894	3,142	3390	5,050			
	Other	832	909	989	1,074	1153	1,724			
	Total	2,034	2,066	2,103	2,145	7981	11879			
Outside priority infrastructure area	Separate House	877	890	906	924	939	1,054			
(total)	Semi, Detached, Flats	862	876	892	910	925	1,041			
	Other	295	300	305	311	316	354			

Attachment 5.1.2 57 of 406

Column 1	Column 2	Column 3 Existing and projected residential dwellings						
Projection area	LGIP							
	development type	Base Date 2011	2016	2021	2026	2031	Ultimate development	
	Total	2,034	2,066	2,103	2,145	2180	2,449	
Douglas Shire Council	Separate House	3,354	3,590	3,844	4,112	4377	6,159	
	Semi, Detached, Flats	3,298	3,532	3,786	4,052	4315	6,091	
	Other	1,127	1,209	1,294	1,385	1469	2,078	
	Total	7,779	8,331	8,924	9,549	10161	14,328	

Attachment 5.1.2 58 of 406

Table SC3.1.5Existing and projected non-residential floor space

Column 1	Column 2	Column 3					
Projection	LGIP development	Existing and proje	ected non-resident	tial floor space (m²	² GFA)		
area	type	2011	2016	2021	2026	2031	Ultimate development
Port Douglas	Industrial	35,064	36,714	38,514	40,164	41,892	52,149
and Environs	Commercial	27,895.81	29,306	30,716	32,096	33,508	41,912
	Retail	6,339.47	6,639	6,939	7,239	7,539	9,339
	Community Services	2,166.67	2,267	2,367	2,467	2,567	3,167
	Others (incl. home based business)	-	-	-	-	-	-
	Total	71,466	74,926	78,536	81,966	85,506	106,567
Mossman and Environs	Industrial	37,986	39,936	41,886	43,686	45,639	57,066
	Commercial	11,386.05	11,956	12,526	13,096	13,667	17,086
	Retail	2,305.26	2,425	2,545	2,665	2,785	3,505
	Community Services	866.67	917	967	1,017	1,067	1,367
	Others (incl. home based business)	-	-	-	-	-	-
	Total	52,544	55,234	57,924	60,464	63,158	79,024
Coastal	Industrial	-	-	-	-	-	-
Suburbs, Villages and	Commercial	9,678.14	10,188	10,698	11,178	11,689	14,694
Townships	Retail	2,305.26	2,425	2,545	2,665	2,785	3,505
	Community Services	866.67	917	967	1,017	1,067	1,367
	Others (incl. home based business)	-	-	-	-	-	-
	Total	12,850	13,530	14,210	14,860	15,541	19,566
	Industrial	73,050	76,650	80,400	83,850	87,530	109,215

Attachment 5.1.2 59 of 406

Table SC3.1.5Existing and projected non-residential floor space

Column 1	Column 2	Column 3					
Projection	LGIP development	Existing and proj	ected non-resident	ial floor space (m²	² GFA)		
area	type	2011	2016	2021	2026	2031	Ultimate development
Inside priority	Commercial	48,960	51,450	53,940	56,370	58,864	73,692
infrastructure area (total)	Retail	10,950	11,490	12,030	12,570	13,109	16,349
	Community Services	3,900	4,100	4,300	4,500	4,702	5,901
	Others (incl. home based business)	-	-	-	-	0	0
	Total	136,860	143,690	150,670	157,290	164,205	205,157
Outside priority infrastructure area (total)	Industrial	-	-	-	-		
	Commercial	-	-	-	-		
	Retail	-	-	-	-		
	Community Services	-	-	-	-		
	Others (incl. home based business)	-	-	-	-		-
	Total	-	-	-	-		-
Douglas Shire	Industrial	73,050	76,650	80,400	83,850	87,530	109,215
Council	Commercial	48,960	51,450	53,940	56,370	58,864	73,692
	Retail	10,950	11,490	12,030	12,570	13,109	16,349
-	Community Services	3,900	4,100	4,300	4,500	4,702	5,901
	Others (incl. home based business)	-	-	-	-	0	-
	Total	136,860	143,690	150,670	157,290	164,205	205,157

Attachment 5.1.2 60 of 406

SC3.2 Schedules of works

Table SC3.2.1—Water supply network schedule of works

Column 1	Column 2	Column 3	Column 4
Map reference	Trunk infrastructure	Estimated timing	Establishment cost ¹³
WIF001	WIF001_Raw Water Intake_Existing Mossman Intake 2-Stage 1 (Upgrade)	2016	\$ 242,298
WIF001	WIF001_Raw Water Intake_Existing Mossman Intake 2-Stage2 (Upgrade)	2018	\$ 1,296,011
WRF001	WRF001_Reservoir_Cooya Reservoir 2 (1.8 ML)	2009	\$ 2,854,125
WRF002	WRF002_Reservoir_Future Reservoir (20+ ML)	2015	\$ 16,770,000
WRF003	WRF003_Reservoir_Wonga Beach (1.3 ML)	2014	\$ 560,381
WRF004	WRF004_Reservoir_Mossman Reservoir (3.3 ML)	2031	\$ 2,001,732
WMF001	WMF001_Water Main_225 mm dia_UPVC	2011	\$ 631,798
WMF002	WMF002_Water Main_225 mm dia_DICL	2011	\$ 155,902
WMF003(i)	WMF003(i)_Water_Main_Interim_150 mm dia_UPVC_Teamster Park to Caravan Park	2014	\$ 27,482
WMF003(ii)	WMF003(ii)_Water_Main_Interim_150 mm dia_UPVC_Caravan Park to Creek	2017	\$ 196,009
WMF003(iii)	WMF003(iii)_Water_Main_Interim_150 mm dia_UPVC_Creek to Resevoir	2019	\$ 270,489
WMF003	WMF003_Water Main_225 mm dia_UPVC (Ultimate Upgrade)	2011	\$ 618,193
WMF004	WMF004_Water Main_450 mm dia_DICL	2011	\$ 943,147
WMF005	WMF005_Water Main_225 mm dia_UPVC	2014	\$ 317,021
WMF006	WMF006_Water Main_225 mm dia_UPVC	2017	\$ 200,393
WMF007(i)	WMF007_Water Main_150 mm dia_UPVC	2019	\$ 1,001,689
WMF007(ii)	WMF007A_Water Main_225 mm dia_UPVC	2012	\$ 323,996
WMF008	WMF008_Water Main_225 mm dia_DICL	2026	\$ 1,195,903
WMF009	WMF009_Water Main_300 mm dia_DICL	2011	\$ 1,402
WMF010	WMF010_Water Main_450 mm dia_DICL	2011	\$ 2,641,785
WMF011	WMF011_Water Main_450 mm dia_DICL	2011	\$ 5,100,774
WMF012	WMF012_Water Main_225 mm dia_DICL	2011	\$ 71,343
WMF013	WMF013_Water Main_225 mm dia_DICL	2011	\$ 67,029
WMF014	WMF014_Water Main_225 mm dia_DICL	2026	\$ 529,927
WMF015	WMF015_Water Main_225 mm dia_DICL	2026	\$ 99,366

Note—The establishment cost is expressed as gross cost

Attachment 5.1.2 61 of 406

Table SC3.2.1—Water supply network schedule of works

Column 1	Column 2	Column 3	Column 4
Map reference	Trunk infrastructure	Estimated timing	Establishment cost ¹³
	TOTAL	,	\$38,118,195

Table SC3.2.2—Sewerage network schedule of works

Column 1	Column 2	Column 3	Column 4
Map reference	Trunk infrastructure	Estimated timing	Establishment cost
SPSF001	SPSF001_Andreassen Road Pump Station	2021	\$ 549,887
SPSF004	SPSF004_Newell Road Pump Station	2021	\$ 549,887
SPSF006	SPSF006_Mossman WWTP Reuse Pump Station Stage 2	2031	\$ 573,795
SPSF007	SPSF007_Mossman Golf Course Reuse Pump Station	2031	\$ 573,795
SPSF008	SPSF008_Existing Mossman WWTP PS Upgrade	2031	\$ 573,795
SSFF001	SSFF001_Mossman Golf Club Reuse Storage Facility - 3 ML	2031	\$ 491,824
SSFF002	SSFF002_Mossman WWTP reuse Storage Facility - 1 ML	2031	\$ 1,639,415
STPF001	STPF001_Interim Mossman WWTP Upgrade - Regulate flows UPGRADE	2011	\$ 345,061
STPF002	STPF002_Interim Mossman WWTP Upgrade - Alternative sludge infrastructure UPGRADE	2015	\$ 1,305,324
STPF003	STPF003_Mossman WWTP Upgrade Stage 1 including Effluent reuse PS Stage 1UPGRADE	2027	\$ 23,234,332
STPF004	STPF004_Mossman WWTP Upgrade Stage 2UPGRADE	2031	\$ 5,885,893
EMF001	EMF001_Effluent Rising Main_100 mm dia_Trunk	2031	\$ 1,113,350
RMF004	RMF004_Rising Main_100 mm dia_Trunk	2017	\$ 58,231
RMF068	RMF068_Rising Mains_150 mm dia_Craiglie_Trunk	2021	\$ 303,604
RMF067	RMF067_Rising Mains_250 mm dia_Wonga_Trunk	2021	\$ 2,376,766
RMF068	RMF068_Rising Mains_150 mm dia_Wonga_Trunk	2021	\$ 380,168

Attachment 5.1.2 62 of 406

Table SC3.2.2—Sewerage network schedule of works

Column 1	Column 2	Column 3	Column 4
Map reference	Trunk infrastructure	Estimated timing	Establishment cost
RMF069	RMF069_Rising Mains_150 mm dia_Wonga_Trunk	2026	\$ 83,945
TOTAL			\$40,039,074

Attachment 5.1.2 63 of 406

Table 3.2.3—Transport network schedule of works

Column 1	Column 2	Column 3	Column 4
Map reference	Trunk infrastructure	Estimated timing	Establishment cost
TRANSPOR	T (FUTURE TRUNK ROADS)		
TRF006	TRF006_Andreassen Road_Future_Urban Major Collector	2026	\$ 1,673,655
TRF007	TRF007_Wabul Street_Future_Urban Major Collector	2028	\$ 1,537,991
TRF008	TRF008_Wabul Street_Future_Urban Major Collector	2030	\$ 1,586,270
TRF009	TRF009_Wabul Street_Upgrade_Urban Major Collector	2031	\$ 1,187,617
TRF010	TRF010_Milman Drive_Upgrade_Urban Major Collector	2026	\$ 1,410,087
TRF011	TRF011_Downing Street_Upgrade_Urban Major Collector	2026	\$ 1,622,480
TRF012	TRF012_Wharf Street_Upgrade_Urban Major Collector	2022	\$ 4,092,235
TRF013	TRF013_Wharf Street_Upgrade_Urban Major Collector	2022	\$ 3,639,233
TRF032	TRF032_Melaleuca Dr & Bougainvillea Street_Upgrade_Rural Major Collector	2031	\$ 2,543,741
TRF033	TRF033_Bougainvillea Street_Upgrade_Urban Major Collector	2021	\$ 686,357
TRF034	TRF034_Bougainvillea Street_Upgrade_Urban Major Collector	2021	\$ 2,502,455
TRF036	TRF036_Palm Street_Upgrade_Urban Major Collector	2021	\$ 500,304
TRF037	TRF037_Palm Street_Upgrade_Urban Major Collector	2021	\$ 367,382
TRF038	TRF038_Palm Street_Upgrade_Urban Major Collector	2021	\$ 324,582
TRF039	TRF039_Cooya Beach Road_Upgrade_Urban Major Collector	2021	\$ 1,137,134

Attachment 5.1.2 64 of 406

TRF043	TRF043_Forest Glen Drive_Future_Urban Major Collector	2026	\$1,937,987
TRF044	TRF044_Daintree Horizon Drive_Future_Urban Major Collector	2031	\$2,840,005
TRF075	TRF075_Snapper Island Drive_Upgrade_Rural Minor Collector	2031	\$ 912,435
TRF076	TRF076_Snapper Island Drive_Future_Urban Minor Collector	2031	\$ 2,902,445
TRF077	TRF077_Vixies Road_Upgrade_Urban Minor Collector	2031	\$ 5,361,125
TRANSPO	RT (FUTURE TRUNK STRUCTURE - RO	ADS)	<u>'</u>
SCF011	SCF011_Culvert Crossing - Cnr Millman Drive and Downing Street Upgrade of Existing Sub-standard Culvert Structures to meet flow requirements Structures: Culverts (RCBC: 5x 1200*1800)	2031	\$ 854,840
SCF012	SCF012_Culvert Crossing - Trunk Drainage Line (Wabul Street)Structures: Culverts (RCBC: 16x 1200*900)	2022	\$ 949,822
SCF013	SCF013_Craiglie - Trunk Drainage LineTrunk Drainage Line	2011	\$ 580,500
TRANSPO	RT (FUTURE TRUNK PATH)	I	
FPF001	TRUNK_PATH_Port Douglas Road	2016	\$ 31,722
FPF002	TRUNK_PATH_CAPT COOK HIGHWAY	2017	\$ 42,006
FPF003	TRUNK_PATH_OFF OLD PORT ROAD	2017	\$ 183,387
FPF004	TRUNK_PATH_OFF ULYSSES AVENUE	2017	\$ 9,385
FPF005	TRUNK_PATH_OFF ULYSSES AVENUE	2017	\$ 13,349
FPF006	TRUNK_PATH_OFF ULYSSES AVENUE	2017	\$ 10,666
FPF007	TRUNK_PATH_Oriole Street	2017	\$ 49,694
FPF008	TRUNK_PATH_Brolga Street	2017	\$ 50,047
FPF009	TRUNK_PATH_NAUTILUS STREET	2016	\$ 22,376
FPF010	FPF001_Port Douglas Road _TRUNK_PATH_Port Douglas Road _Concrete_Path	2016	\$ 12,529
FPF011	FPF002_CAPT COOK HIGHWAY_TRUNK_PATH_CAPT COOK HIGHWAY_Concrete_Path	2017	\$ 41,853

Attachment 5.1.2 65 of 406

	EDECOS OFF OLD DODT		
FPF015	FPF003_OFF OLD PORT ROAD_TRUNK_PATH_OFF OLD PORT ROAD_Concrete_Path	2017	\$ 9,662
FPF016	FPF004_OFF ULYSSES AVENUE_TRUNK_PATH_OFF ULYSSES AVENUE_Concrete_Path	2017	\$ 23,089
FPF017	FPF005_OFF ULYSSES AVENUE_TRUNK_PATH_OFF ULYSSES AVENUE_Concrete_Path	2017	\$ 21,453
FPF018	FPF006_OFF ULYSSES AVENUE_TRUNK_PATH_OFF ULYSSES AVENUE_Concrete_Path	2017	\$ 13,216
FPF019	FPF007_Oriole Street_TRUNK_PATH_Oriole Street_Concrete_Path	2017	\$ 11,245
FPF020	FPF008_Brolga Street _TRUNK_PATH_Brolga Street _Concrete_Path	2017	\$ 6,317
FPF021	FPF009_NAUTILUS STREET_TRUNK_PATH_NAUTILU S STREET_Concrete_Path	2016	\$ 23,274
FPF022	FPF010_NAUTILUS STREET_TRUNK_PATH_NAUTILU S STREET_Concrete_Path	2016	\$ 39,970
FPF024	FPF015_REEF STREET_TRUNK_PATH_REEF STREET_Concrete_Path	2016	\$ 6,885
FPF025	FPF016_REEF STREET_TRUNK_PATH_REEF STREET_Concrete_Path	2016	\$ 47,169
FPF026	FPF017_REEF STREET_TRUNK_PATH_REEF STREET_Concrete_Path	2016	\$ 37,220
FPF027	FPF018_REEF STREET_TRUNK_PATH_REEF STREET_Concrete_Path	2016	\$ 65,388
FPF028	FPF019_REEF STREET_TRUNK_PATH_REEF STREET_Concrete_Path	2016	\$ 15,380
FPF029	FPF020_REEF STREET_TRUNK_PATH_REEF STREET_Concrete_Path	2016	\$ 12,413
FPF030	FPF021_OFF MURPHY STREET_TRUNK_PATH_OFF MURPHY STREET_Concrete_Path	2018	\$ 126,603
FPF031	FPF022_OFF MURPHY STREET_TRUNK_PATH_OFF MURPHY STREET_Concrete_Path	2018	\$ 29,845
FPF032	FPF023_OFF OWEN STREET_TRUNK_PATH_OFF OWEN STREET_Concrete_Path	2018	\$ 344,721

Attachment 5.1.2 66 of 406

	FPF024_OFF OWEN STREET_TRUNK_PATH_OFF		
FPF033	OWEN STREET_Concrete_Path	2018	\$ 379,580
FPF034	FPF025_OFF WARNER STREET_TRUNK_PATH_OFF WARNER STREET_Concrete_Path	2019	\$ 241,873
FPF035	FPF026_OFF MURPHY STREET_TRUNK_PATH_OFF MURPHY STREET_Concrete_Path	2018	\$ 616,091
FPF036	FPF027_OFF MURPHY STREET_TRUNK_PATH_OFF MURPHY STREET_Concrete_Path	2018	\$ 28,810
FPF037	FPF028_OFF MURPHY STREET_TRUNK_PATH_OFF MURPHY STREET_Concrete_Path	2018	\$ 24,066
FPF038	FPF029_OFF WARNER STREET_TRUNK_PATH_OFF WARNER STREET_Concrete_Path	2019	\$ 26,621
FPF039	FPF030_Port Douglas Sports Reserve_TRUNK_PATH_Port Douglas Sports Reserve_Concrete_Path	2022	\$ 67,935
FPF040	FPF031_OFF WHARF STREET_TRUNK_PATH_OFF WHARF STREET_Concrete_Path	2022	\$ 185,321
FPF041	FPF032_BONNIE DOON ROAD_TRUNK_PATH_BONNIE DOON ROAD_Concrete_Path	2021	\$ 10,010
FPF042	FPF033_BONNIE DOON ROAD_TRUNK_PATH_BONNIE DOON ROAD_Concrete_Path	2021	\$ 257,656
FPF044	FPF034_MELALEUCA DRIVE_TRUNK_PATH_MELALEUC A DRIVE_Concrete_Path	2021	\$ 66,240
FPF045	FPF035_OFF COOYA BEACH RD_TRUNK_PATH_OFF COOYA BEACH RD_Concrete_Path	2021	\$ 133,004
FPF046	FPF036_BOUGAINVILLEA STREET_TRUNK_PATH_BOUGAIN VILLEA STREET_Concrete_Path	2021	\$ 42,751
FPF047	FPF037_BOUGAINVILLEA STREET_TRUNK_PATH_BOUGAIN VILLEA STREET_Concrete_Path	2021	\$ 28,519
FPF048	FPF038_BOUGAINAVILLEA STEET_TRUNK_PATH_BOUGAINA VILLEA STEET_Concrete_Path	2021	\$ 20,476
FPF049	FPF039_BOUGAINVILLEA STREET_TRUNK_PATH_BOUGAIN VILLEA STREET_Concrete_Path	2021	\$ 32,855

Attachment 5.1.2 67 of 406

TOTAL			\$47,525,832
FPBF001	FPBF001_JUNCTION CREEK PEDESTRIAN BRIDGE	2020	\$ 703,800
FPF070	FPF070_Coral Sea _TRUNK_PATH_Birdwing Street_Concrete_Path	2017	\$ 25,798
FPF069	FPF058_SNAPPER ISLAND DRIVE_TRUNK_PATH_SNAPPER ISLAND DRIVE_Concrete_Path	2031	\$ 23,420
FPF068	FPF057_SNAPPER ISLAND DRIVE_TRUNK_PATH_SNAPPER ISLAND DRIVE_Concrete_Path	2031	\$ 9,187
FPF067	FPF056_GIBLIN STREET_TRUNK_PATH_GIBLIN STREET_Concrete_Path	2031	\$ 24,818
FPF066	FPF055_FOREST GLEN ROAD_TRUNK_PATH_FOREST GLEN ROAD_Concrete_Path	2026	\$ 56,632
FPF065	FPF050_Manjal Dimbi (Middlemiss Park)_TRUNK_PATH_Manjal Dimbi (Middlemiss Park)_Concrete_Path	2021	\$ 19,255
FPF063	FPF049_ENID MAY LANE_TRUNK_PATH_ENID MAY LANE_Concrete_Path	2021	\$ 31,361
FPF062	FPF048_BOW STREET_TRUNK_PATH_BOW STREET_Concrete_Path	2021	\$ 28,418
FPF061	FPF047_OWEN STREET_TRUNK_PATH_OWEN STREET_Concrete_Path	2021	\$ 16,978
FPF060	FPF046_OWEN STREET_TRUNK_PATH_OWEN STREET_Concrete_Path	2021	\$ 17,496
FPF058	FPF045_OFF CORAL SEA DRIVE_TRUNK_PATH_OFF CORAL SEA DRIVE_Concrete_Path	2026	\$ 173,736
FPF057	FPF044_FOREST GLEN ROAD_TRUNK_PATH_FOREST GLEN ROAD_Concrete_Path	2026	\$ 84,956
FPF056	FPF042_DAINTREE HORIZON DRIVE_TRUNK_PATH_DAINTREE HORIZON DRIVE_Concrete_Path	2026	\$ 18,186
FPF055	FPF041_Res_pathway_TRUNK_PA TH_Res_pathway_Concrete_Path	2022	\$ 12,116
FPF050	FPF040_BOUGAINVILLEA STREET_TRUNK_PATH_BOUGAIN VILLEA STREET_Concrete_Path	2021	\$ 9,235

Attachment 5.1.2 68 of 406

Table 3.2.4—Parks and land for community facilities schedule of works

Column 1	Column 2	Column 3	Column 4
Map reference	Trunk infrastructure	Estimated timing	Establishment cost ¹⁴
PPLC061	PPLC061_Lou Prince Park_UPGRADE (Local Recreation Park-Bonnie Doon)	2020	\$ 89,558
PPLC062	PPLC062_Cooya Beach/Mossman River_UPGRADE (Land for Drainage Purposes-Bonnie Doon)	2020	\$ -
PPLC063	PPLC063_New Local Park_New Park (Local Recreation Park- Mossman)	2020	\$ 1,114,937
PPLC064	PPLC064_New Local Park_New Park (Local Recreation Park-Craiglie)	2015	\$ 1,163,412
PPLC065	PPLC065_New Local Park_New Park (Local Recreation Park-Craiglie)	2024	\$ 251,246
PPLC066	PPLC066_Jim Holdsworth Park_UPGRADE (District Recreation Park-Cooya Beach)	2020	\$ 817,416
PPLC067	PPLC067_Newell Beach Esplanade_UPGRADE (District Recreation Park-Newell)	2021	\$ 490,450
PPLC068	PPLC068_Wonga Community Park_UPGRADE (District Recreation Park-Wonga)	2022	\$ 511,773
PPLC069	PPLC069_George Davis Park_UPGRADE (Local Government Wide Recreation Park-Mossman)	2023	\$ 852,956
PPLC070	PPLC070_4 Mile Park_UPGRADE (District Recreation Park-Port Douglas)	2024	\$ 852,956
PPLC071	PPLC071_Rex Smeal Park_UPGRADE (District Recreation Park-Port Douglas)	2025	\$ 852,956
PPLC085	PPLC085_New District Sports Park (Future)_New Park (District Sports Park-Cooya Beach)	2021	\$ 1,593,424
PPLC086	PPLC086_Coronation Park/Show Grounds - Upgrade_UPGRADE (Local Government Wide Sports Park-Mossman)	2024	\$ 2,062,176

Note—11. Table 3.2.4 Column 4 The establishment cost is expressed in current cost terms as at the base date.

Attachment 5.1.2 69 of 406

Table 3.2.4—Parks and land for community facilities schedule of works

Column 1	Column 2	Column 3	Column 4
Map reference	Trunk infrastructure	Estimated timing	Establishment cost ¹⁴
PPLC087	PPLC087_Port Douglas Sports Reserve -Upgrade_UPGRADE (District Sports Park-Port Douglas)	2026	\$ 2,288,399
PPLC092	PPLC092_New District Sports Park (Future)_New Park (District Sports Park-Wonga Beach)	2026	\$ 941,105
PPLC093	PPLC093_Daintree Sports Oval - Upgrade_Upgrade (District Sports Park-Daintree)	2025	\$ 712,707
PPLC094	PPLC094_Diwan Sports Reserve - Upgrade_Upgrade (District Sports Park-Diwan)	2025	\$ 649,719
TOTAL		'	\$15,245,189



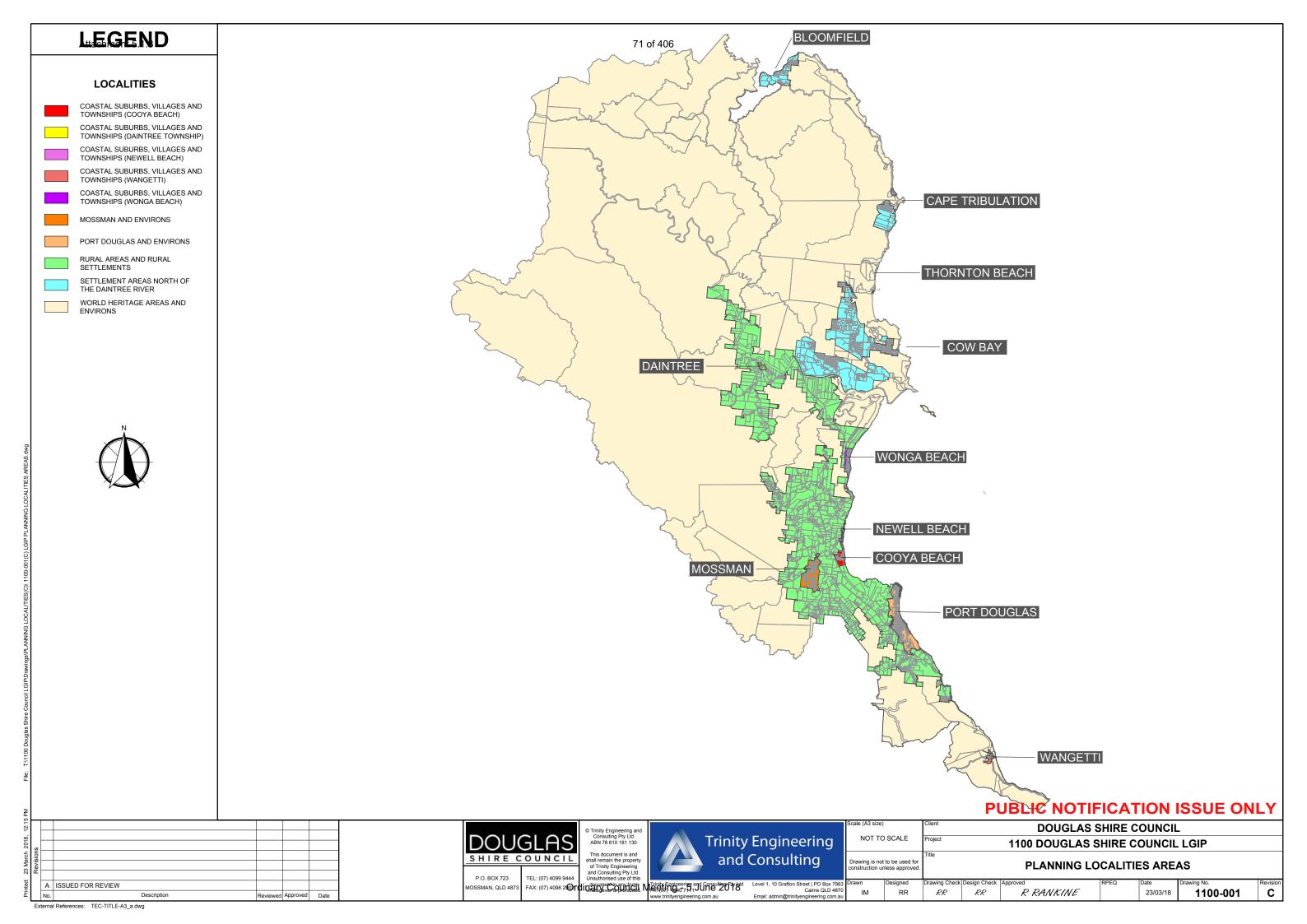


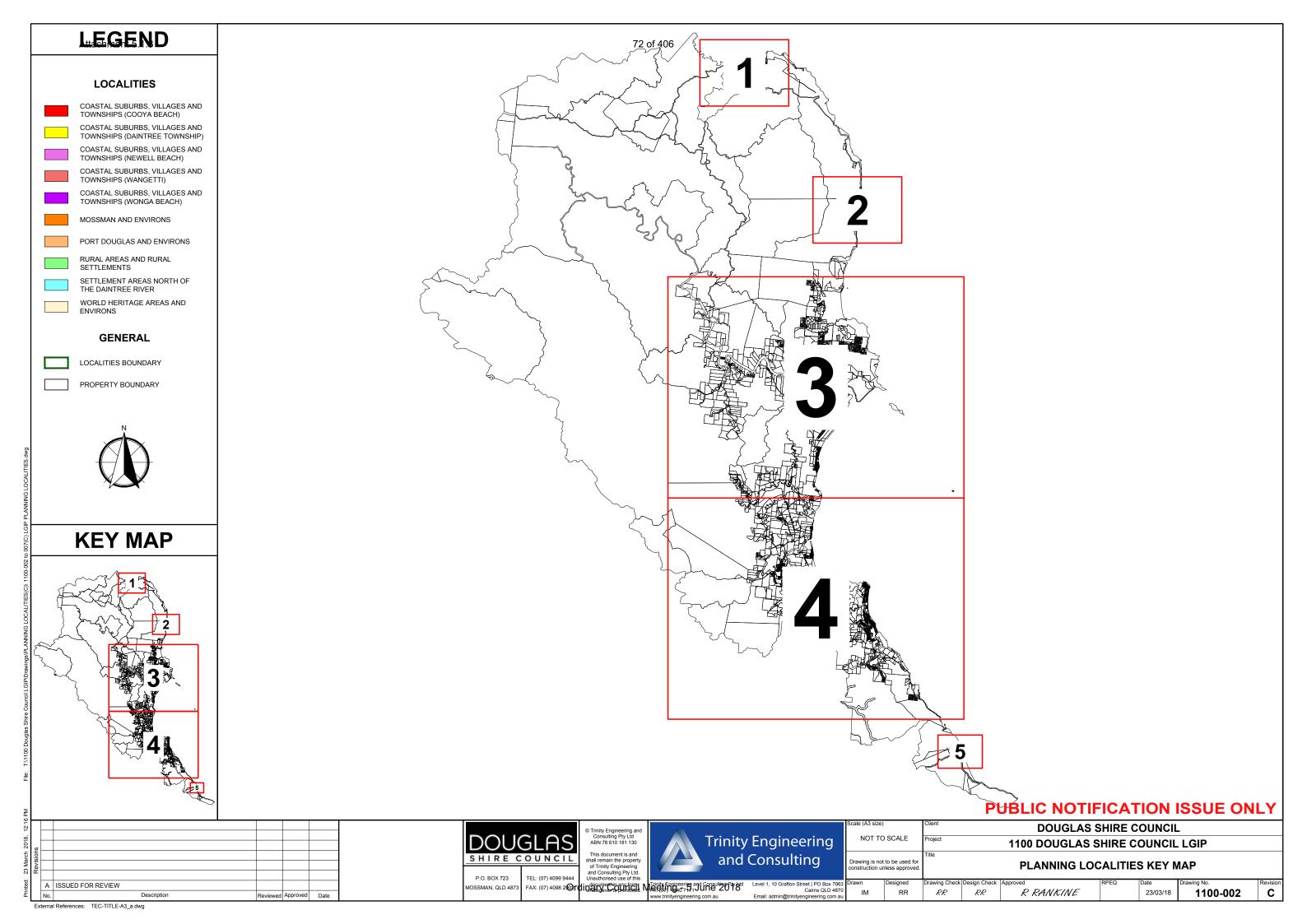
LOCAL GOVERNMENT INFRASTRUCTURE PLANS (PLANNING LOCALITIES) for

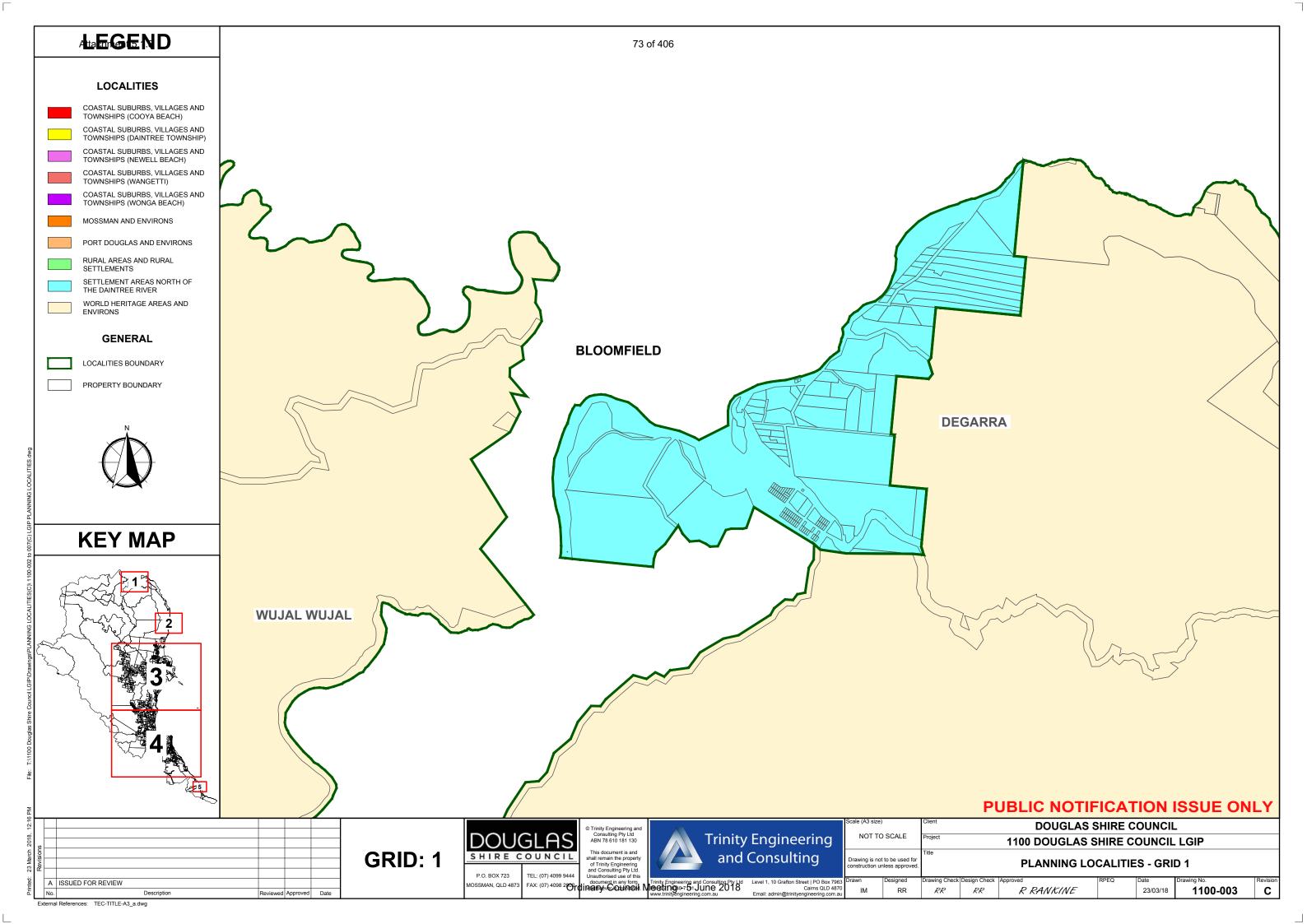
DOUGLAS SHIRE COUNCIL

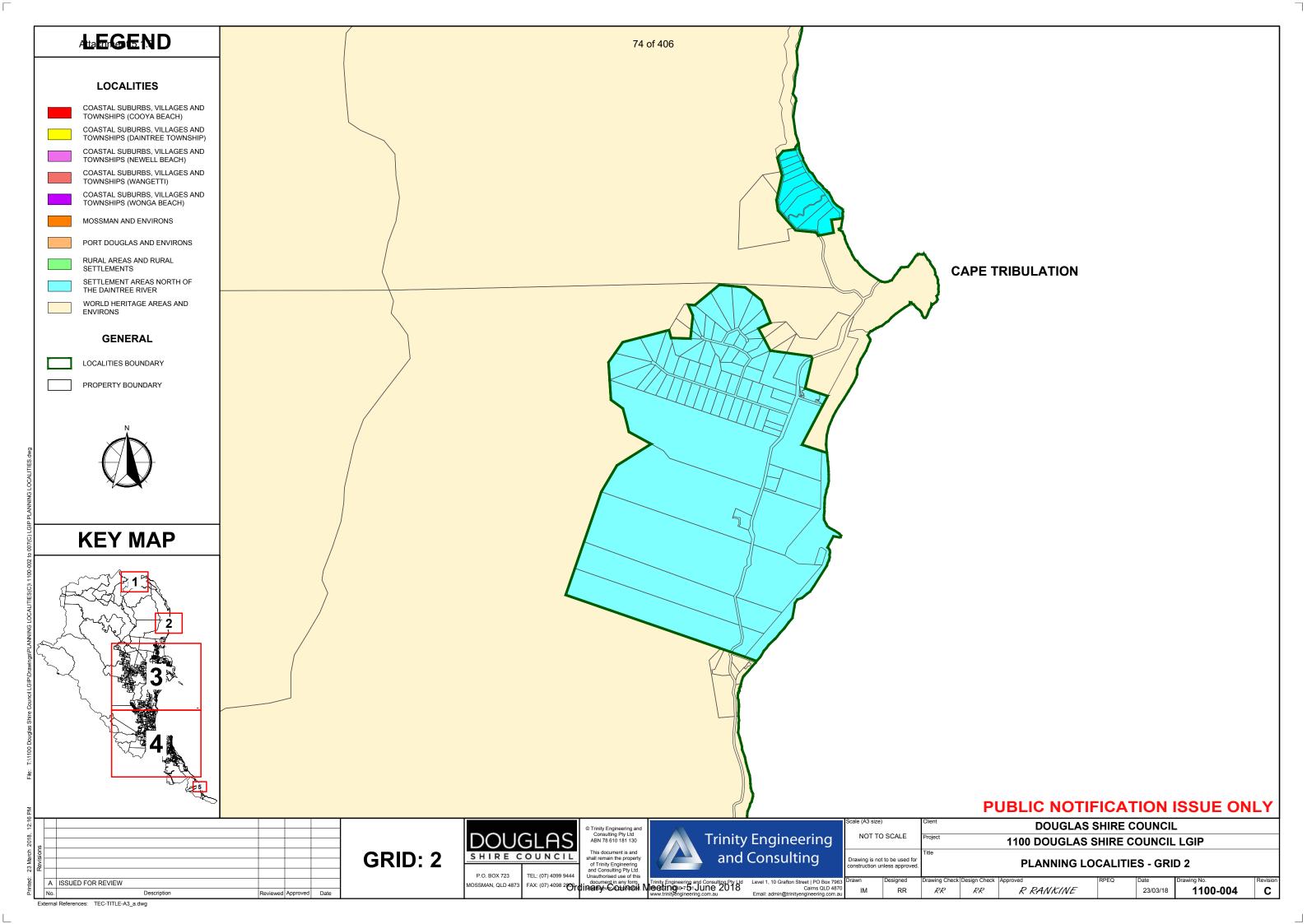
SCHEDULE OF PROJECT DRAWINGS

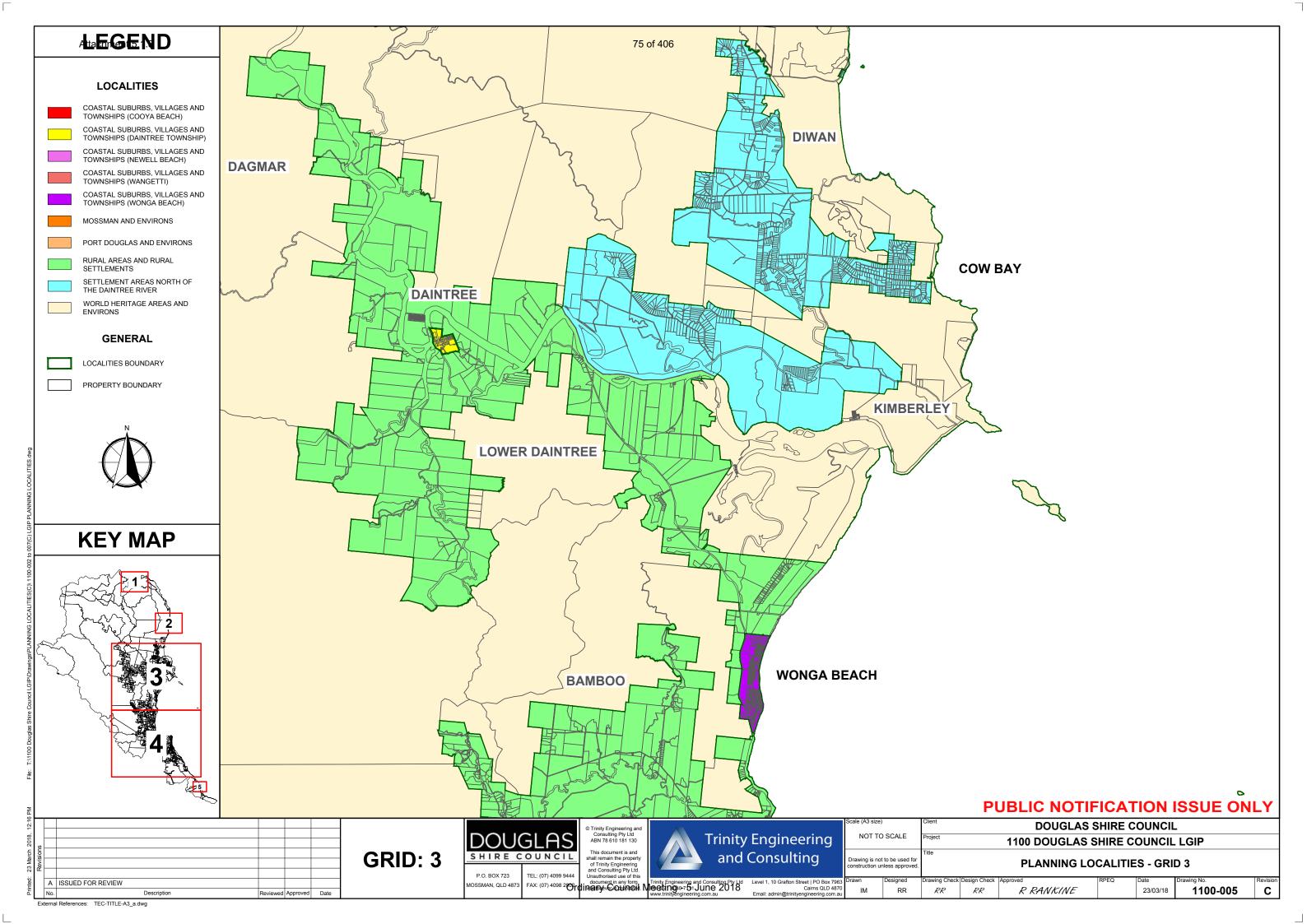
1100-000	DRAWING INDEX
1100-001	PLANNING LOCALITIES AREAS
1100-002	PLANNING LOCALITIES KEY MAP
1100-003	PLANNING LOCALITIES — GRID
1100-004	PLANNING LOCALITIES - GRID
1100-005	PLANNING LOCALITIES - GRID .
1100-006	PLANNING LOCALITIES - GRID
1100-007	PLANNING LOCALITIES - GRID

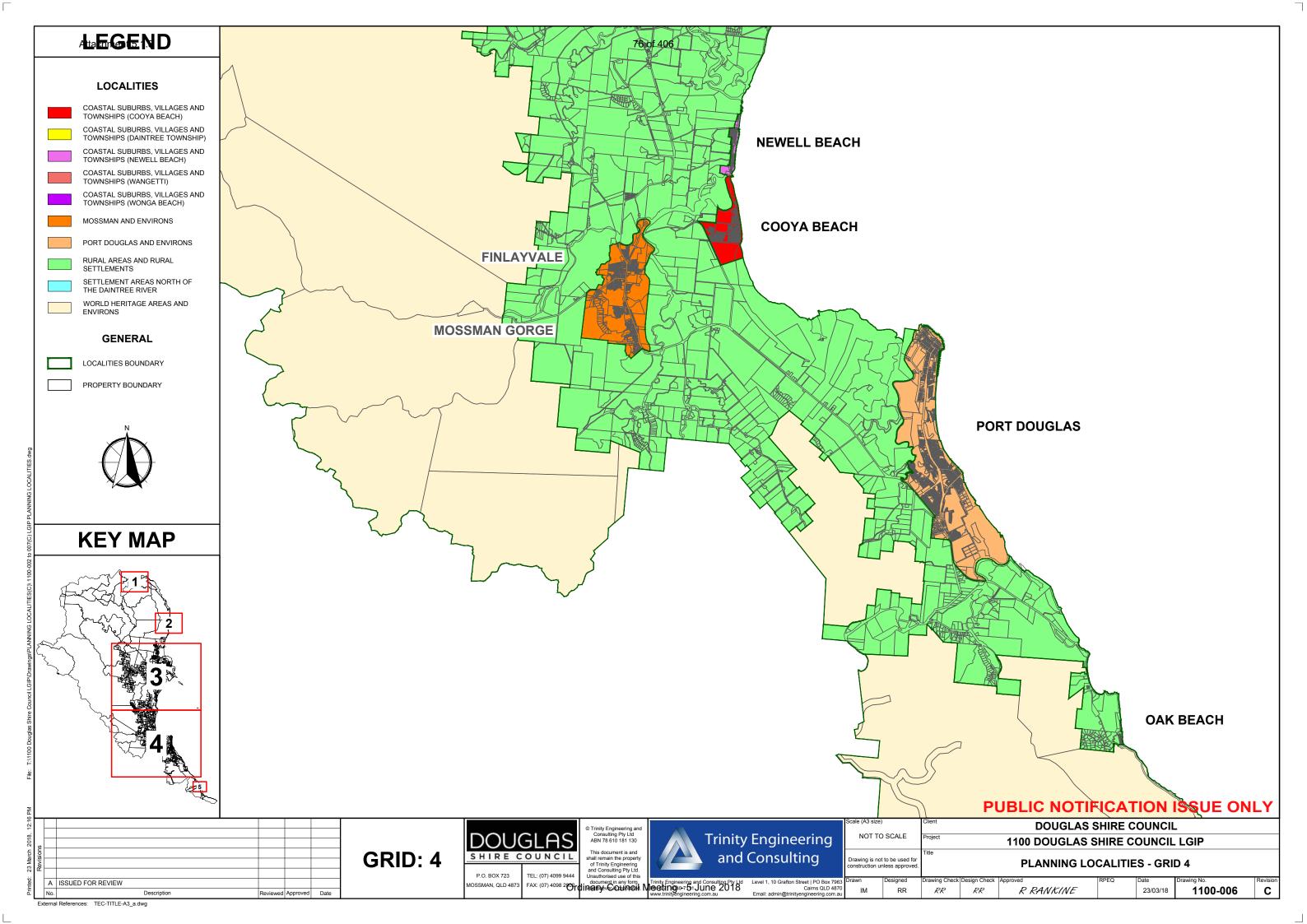


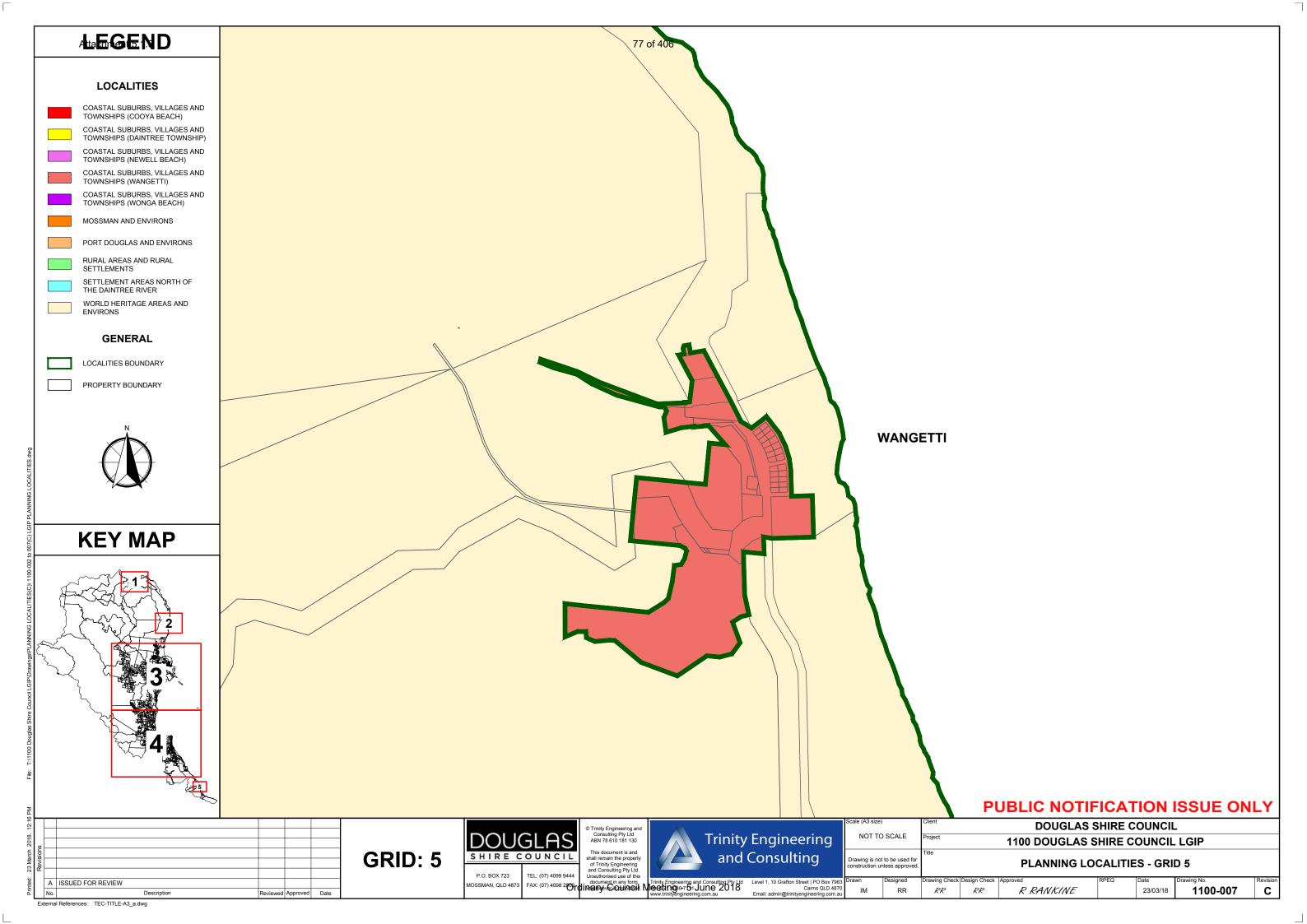














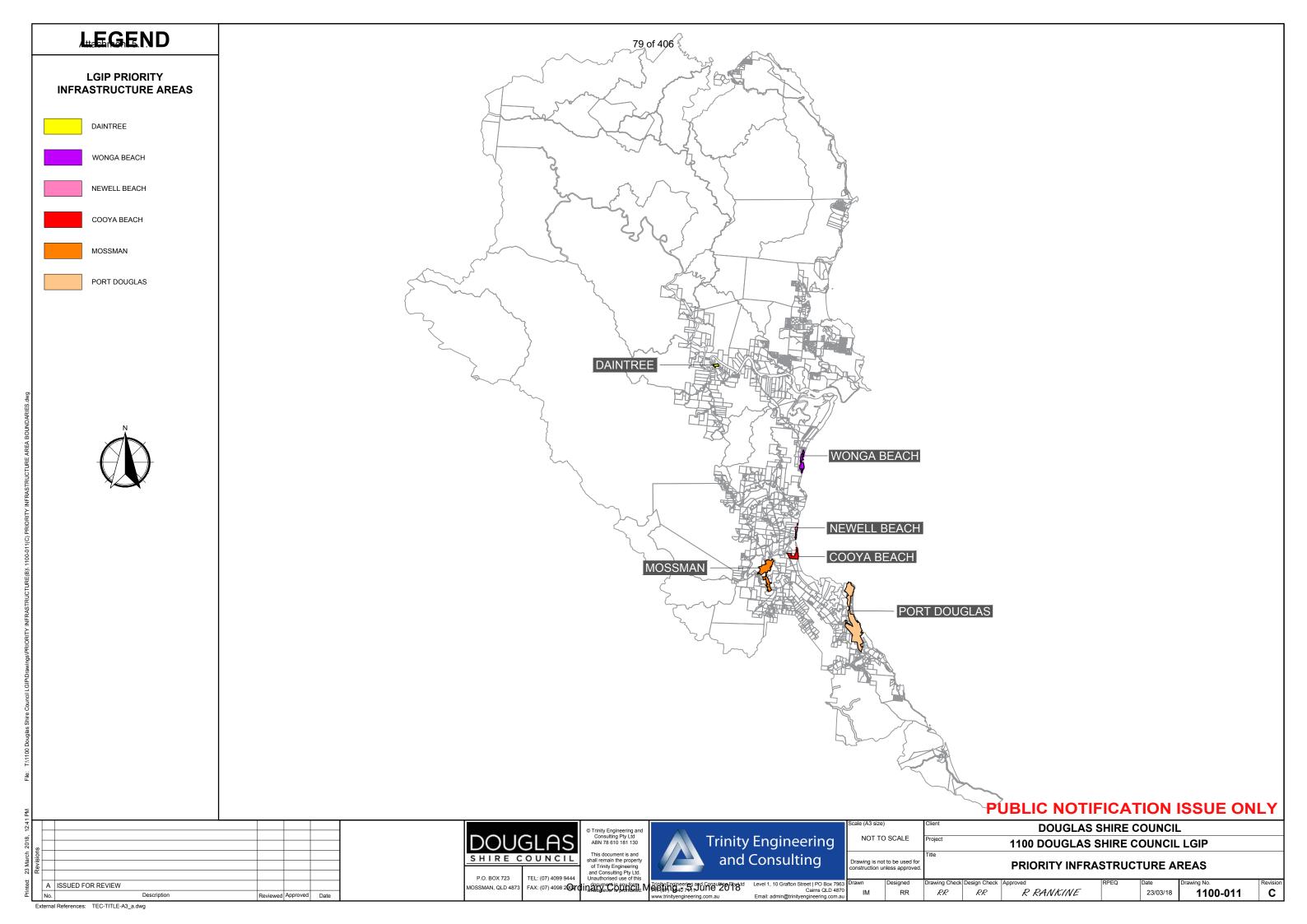


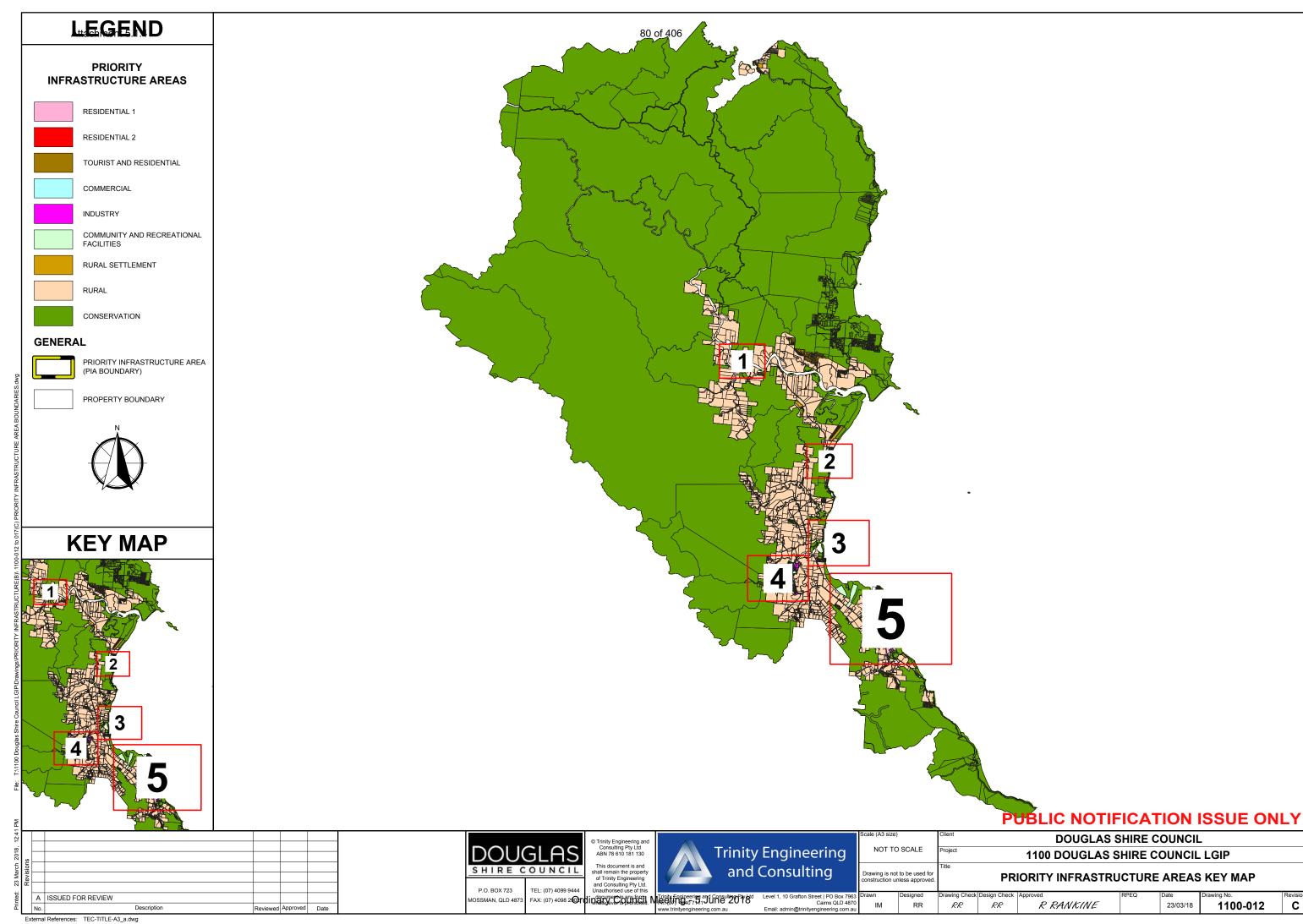
LOCAL GOVERNMENT INFRASTRUCTURE PLANS (PRIORITY INFRASTRUCTURE AREAS) for

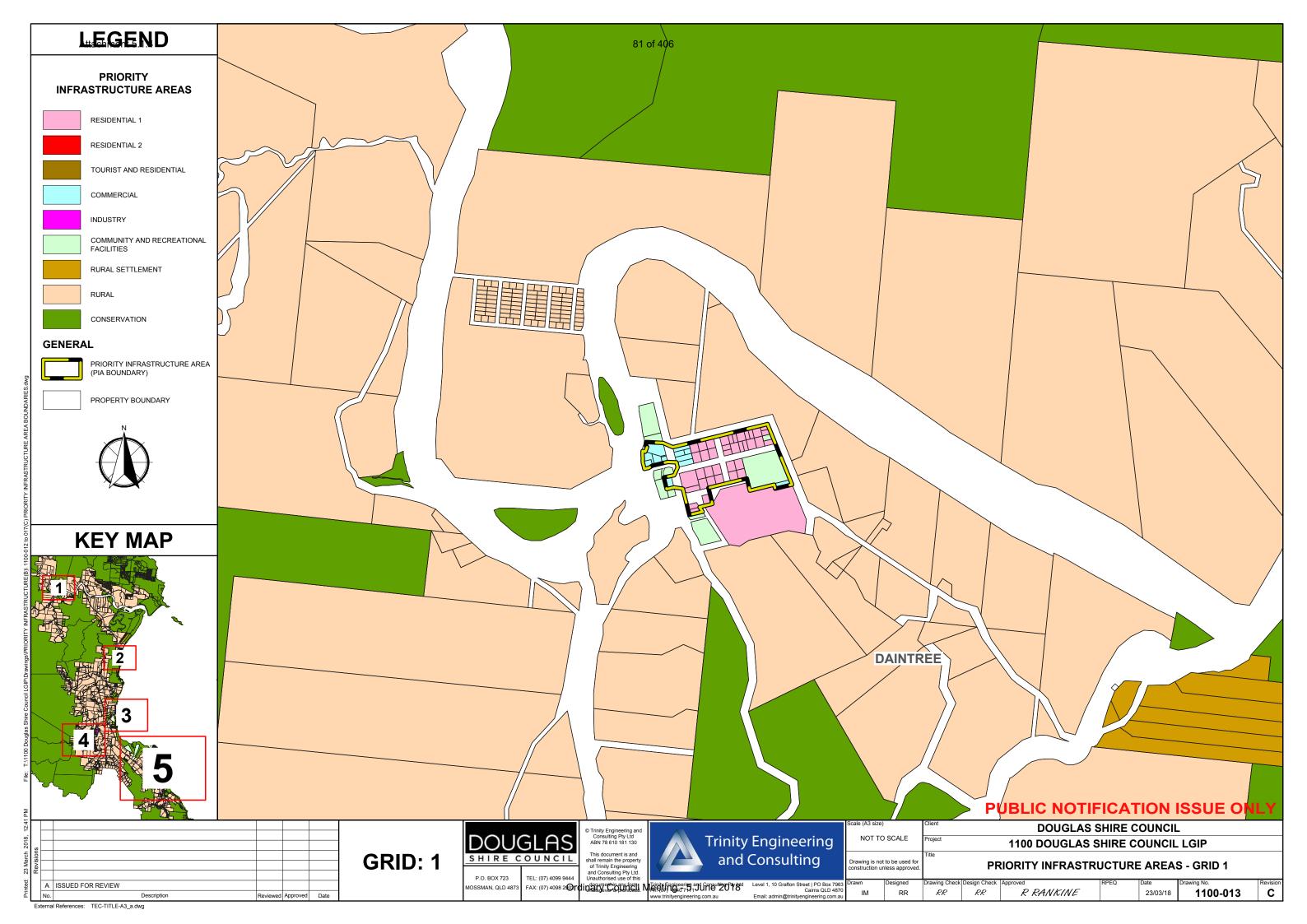
DOUGLAS SHIRE COUNCIL

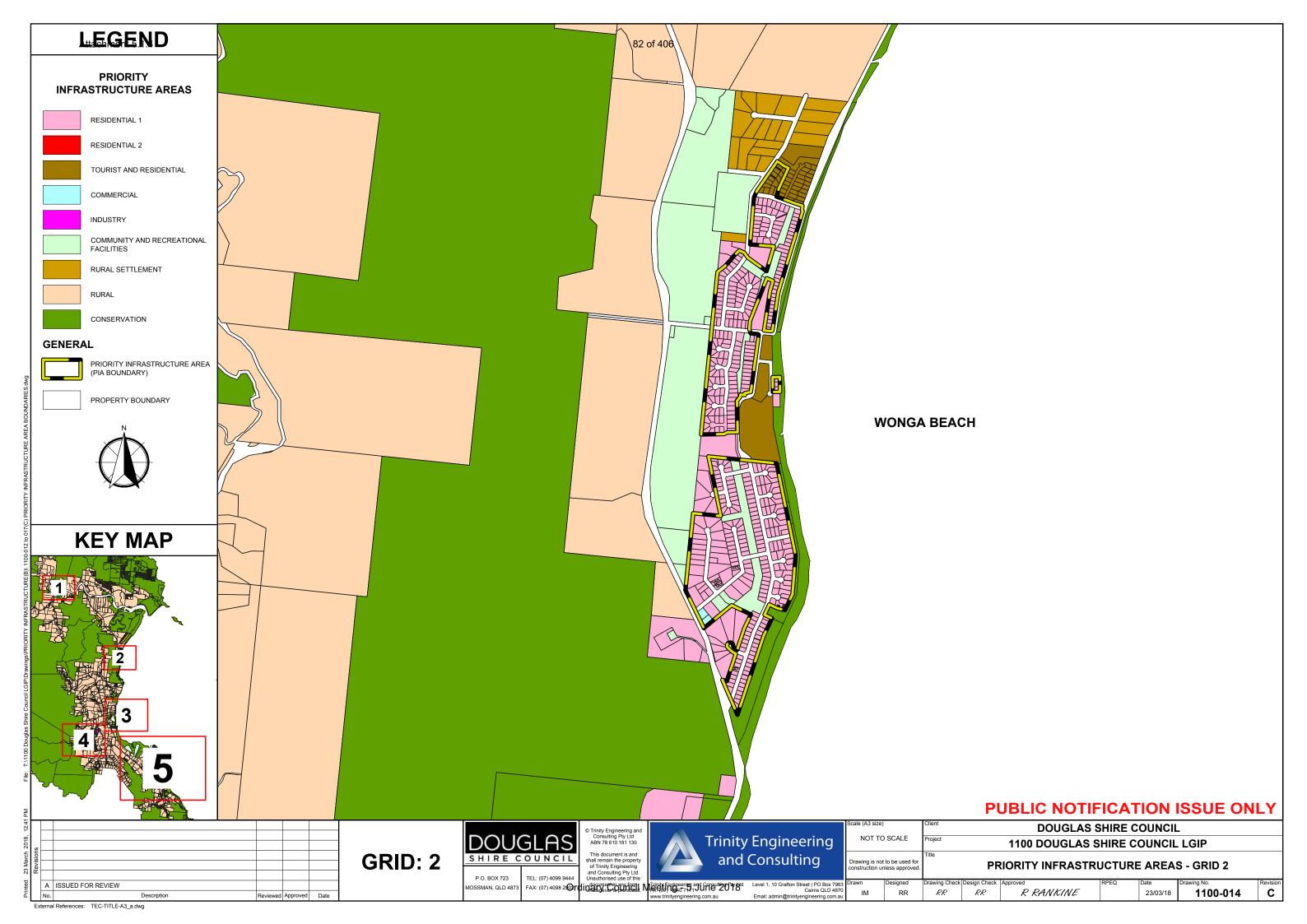
SCHEDULE OF PROJECT DRAWINGS

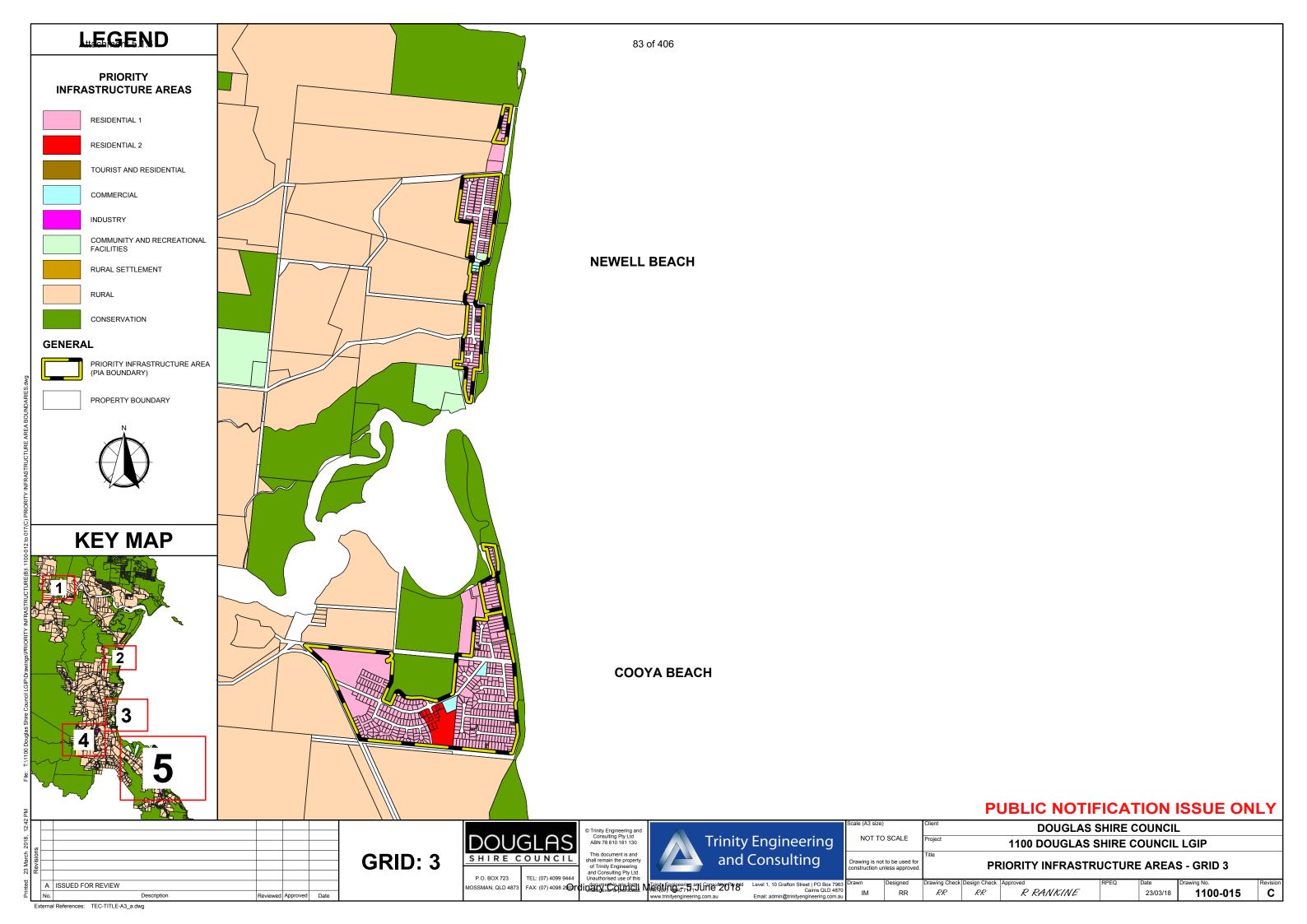
1100-010	DRAWING	INDEX		
1100-011	PRIORITY	INFRASTRUCTURE	AREAS	
1100-012	PRIORITY	INFRASTRUCTURE	AREAS	KEY MAP
1100-013	PRIORITY	INFRASTRUCTURE	AREAS	- GRID
1100-014	PRIORITY	INFRASTRUCTURE	AREAS	- GRID 2
1100-015	PRIORITY	INFRASTRUCTURE	AREAS	- GRID 3
1100-016	PRIORITY	INFRASTRUCTURE	AREAS	- GRID 4
1100-017	PRIORITY	INFRASTRUCTURE	AREAS	- GRID 5

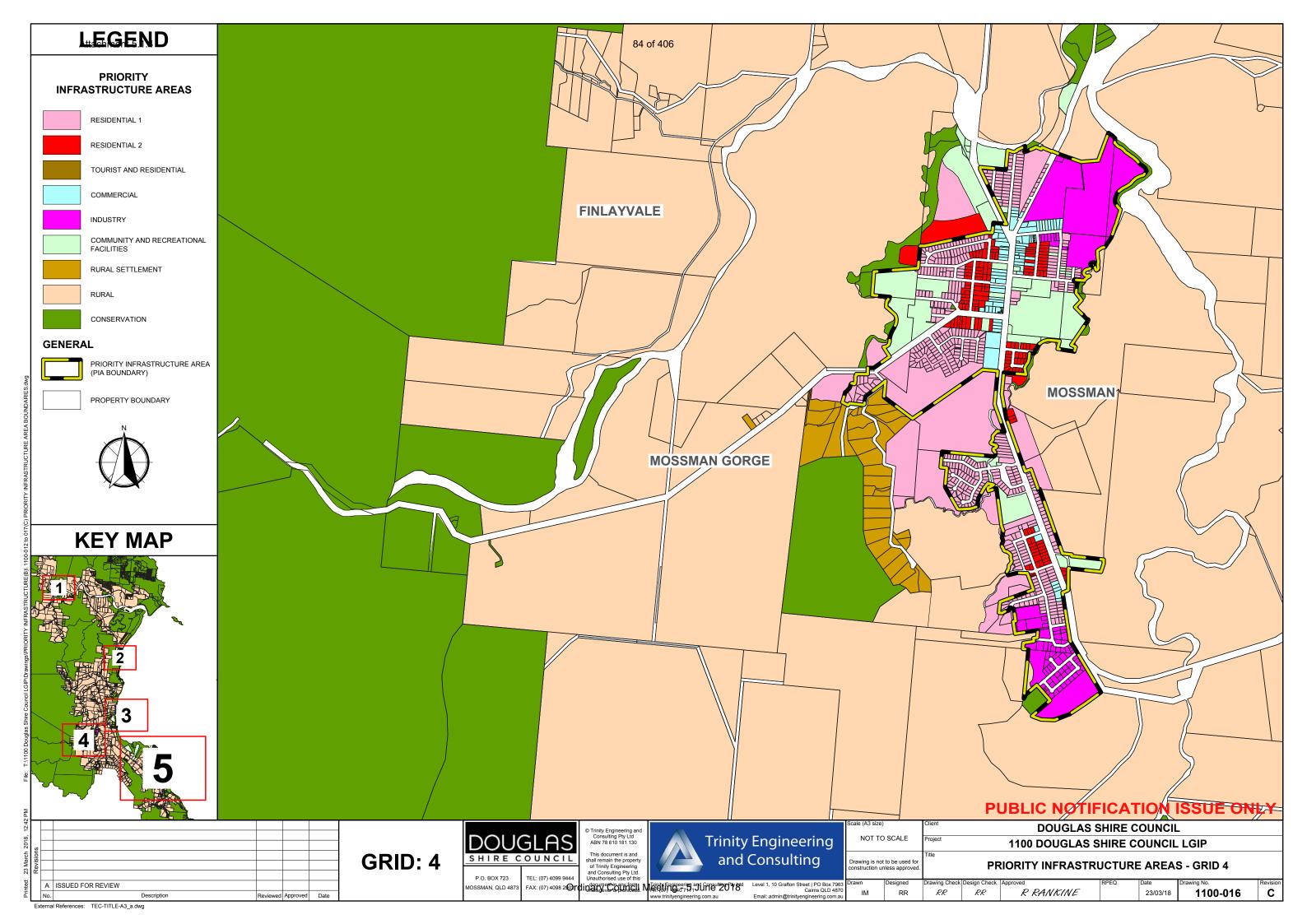


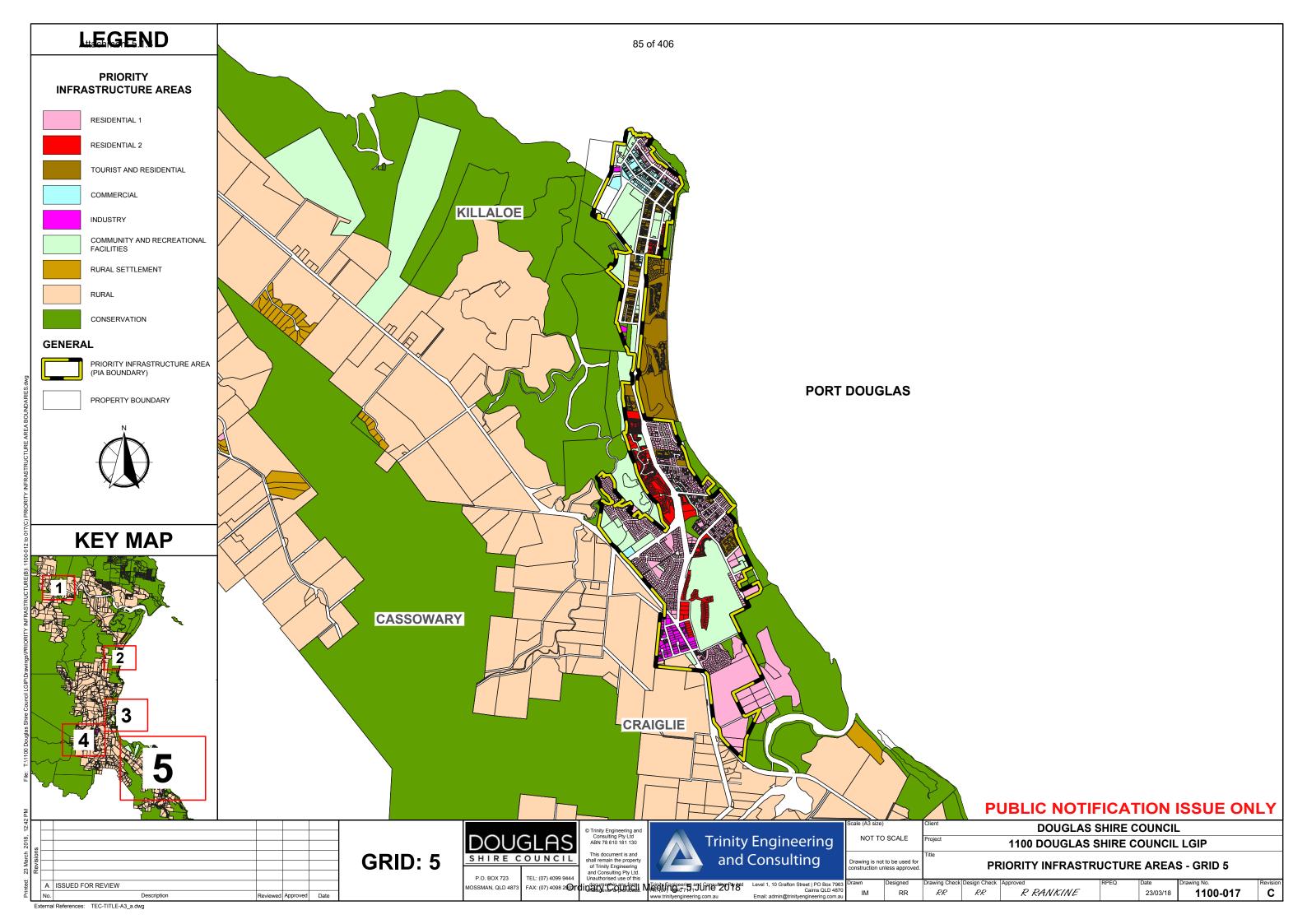














LOCAL GOVERNMENT INFRASTRUCTURE PLANS (WATER TRUNK INFRASTRUCTURE)

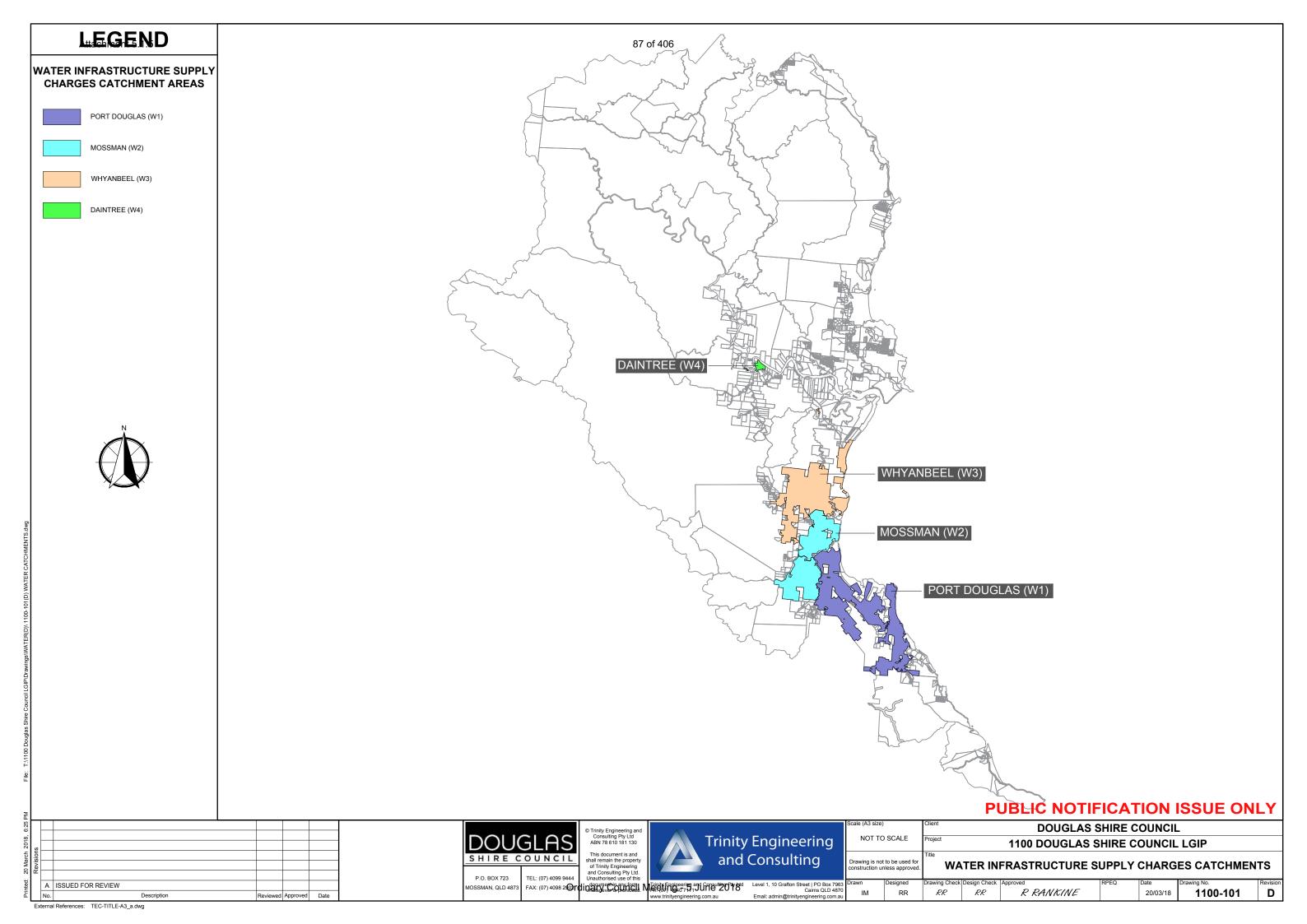
86 of 406

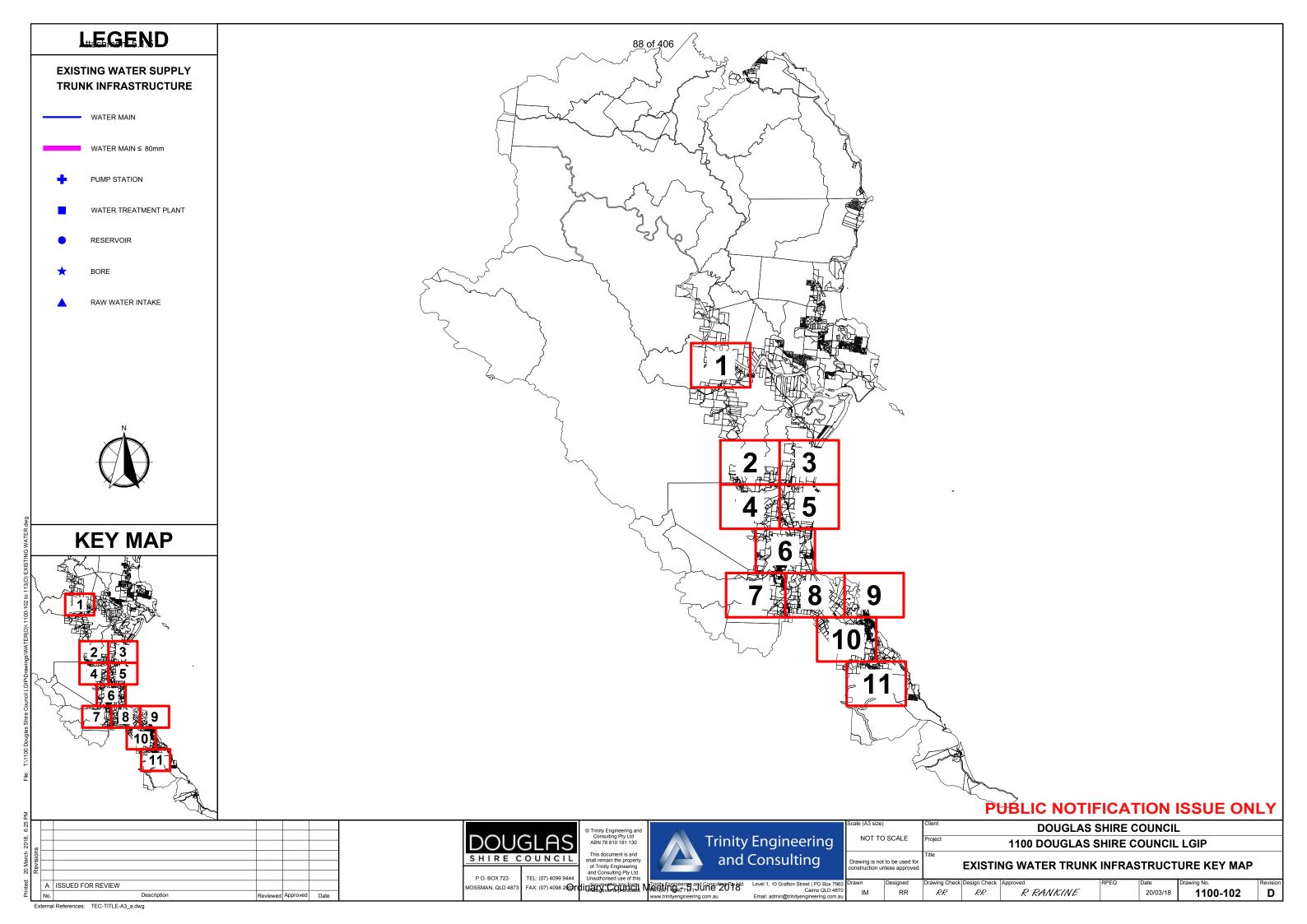
for

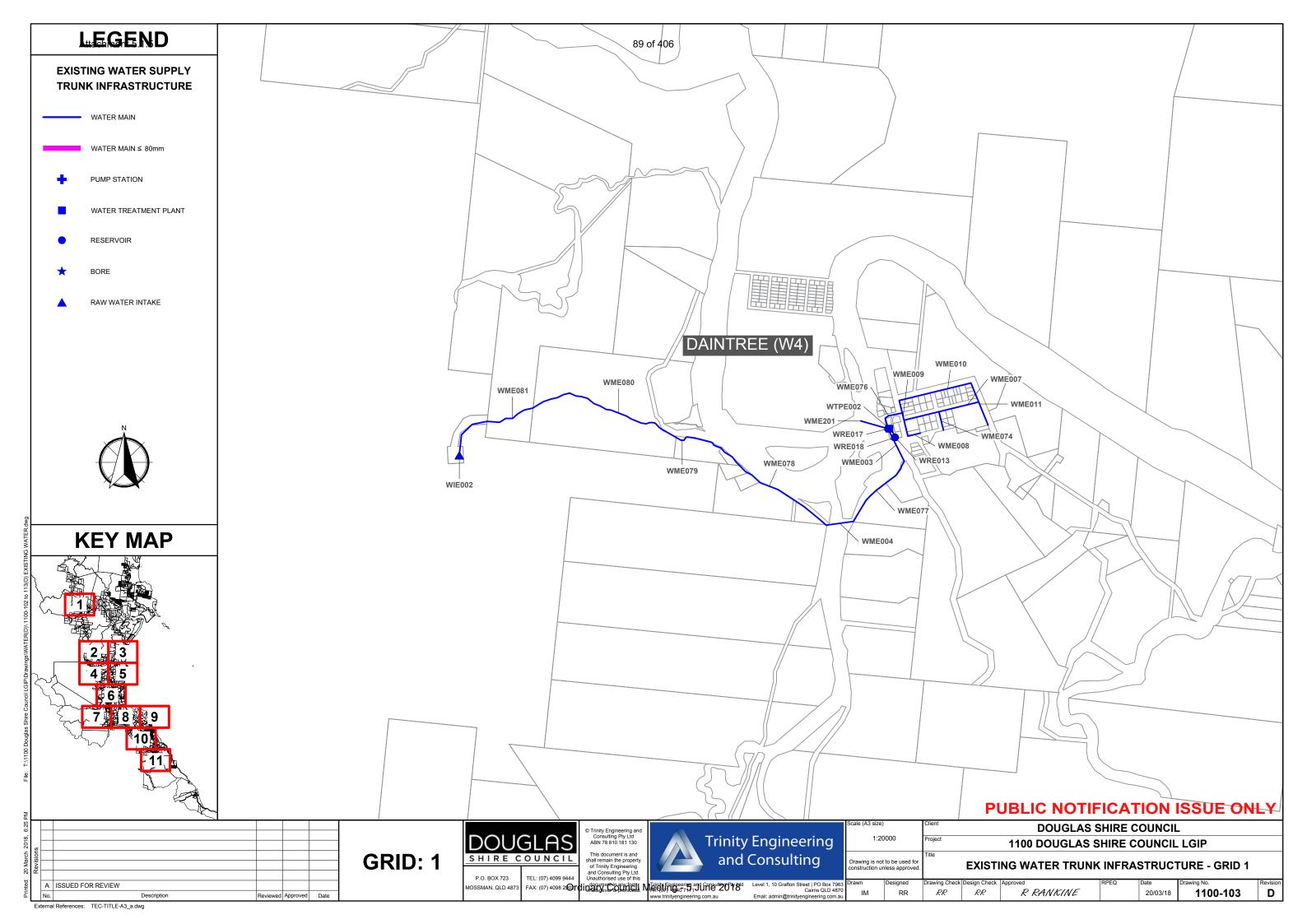
DOUGLAS SHIRE COUNCIL

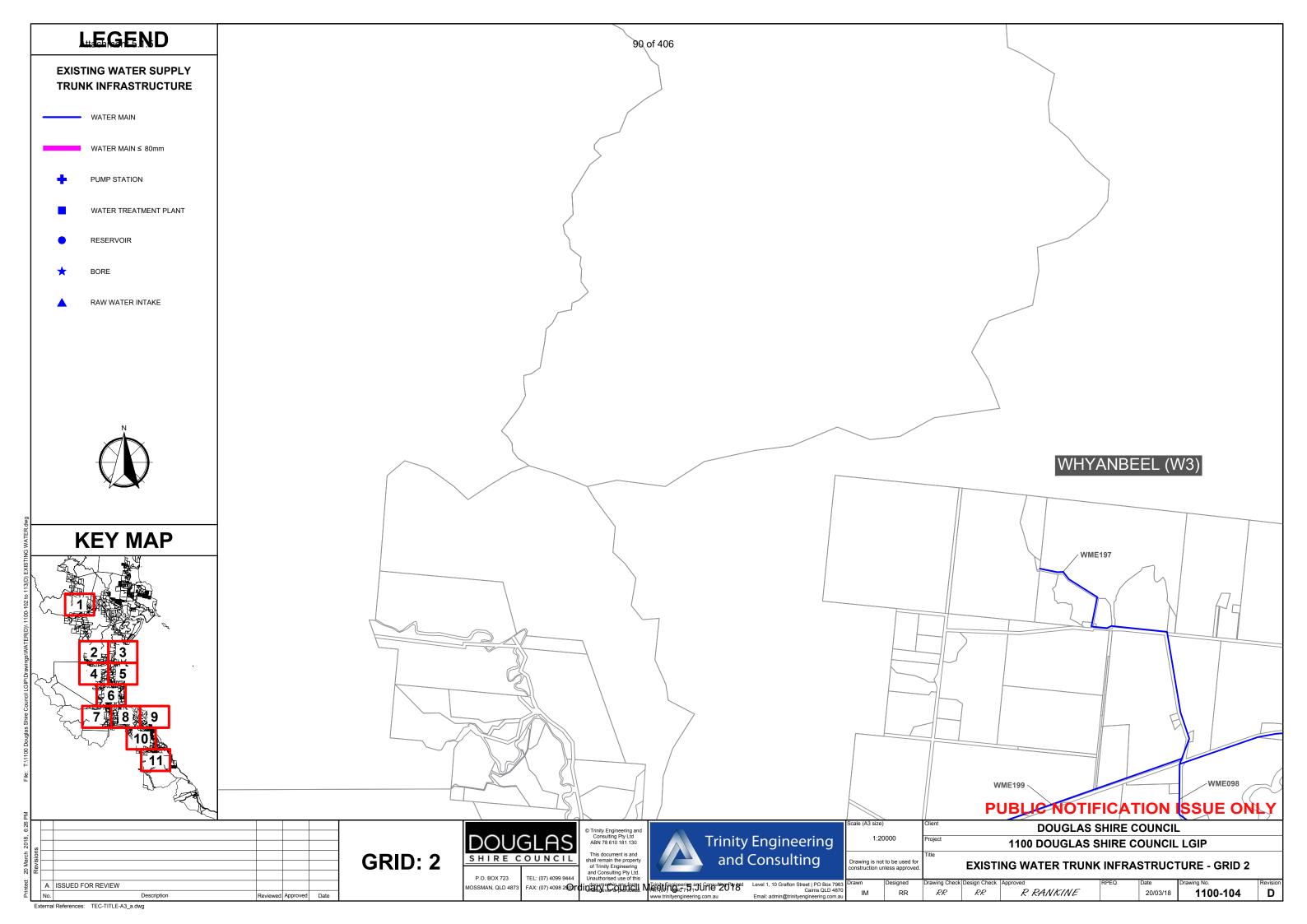
SCHEDULE OF PROJECT DRAWINGS

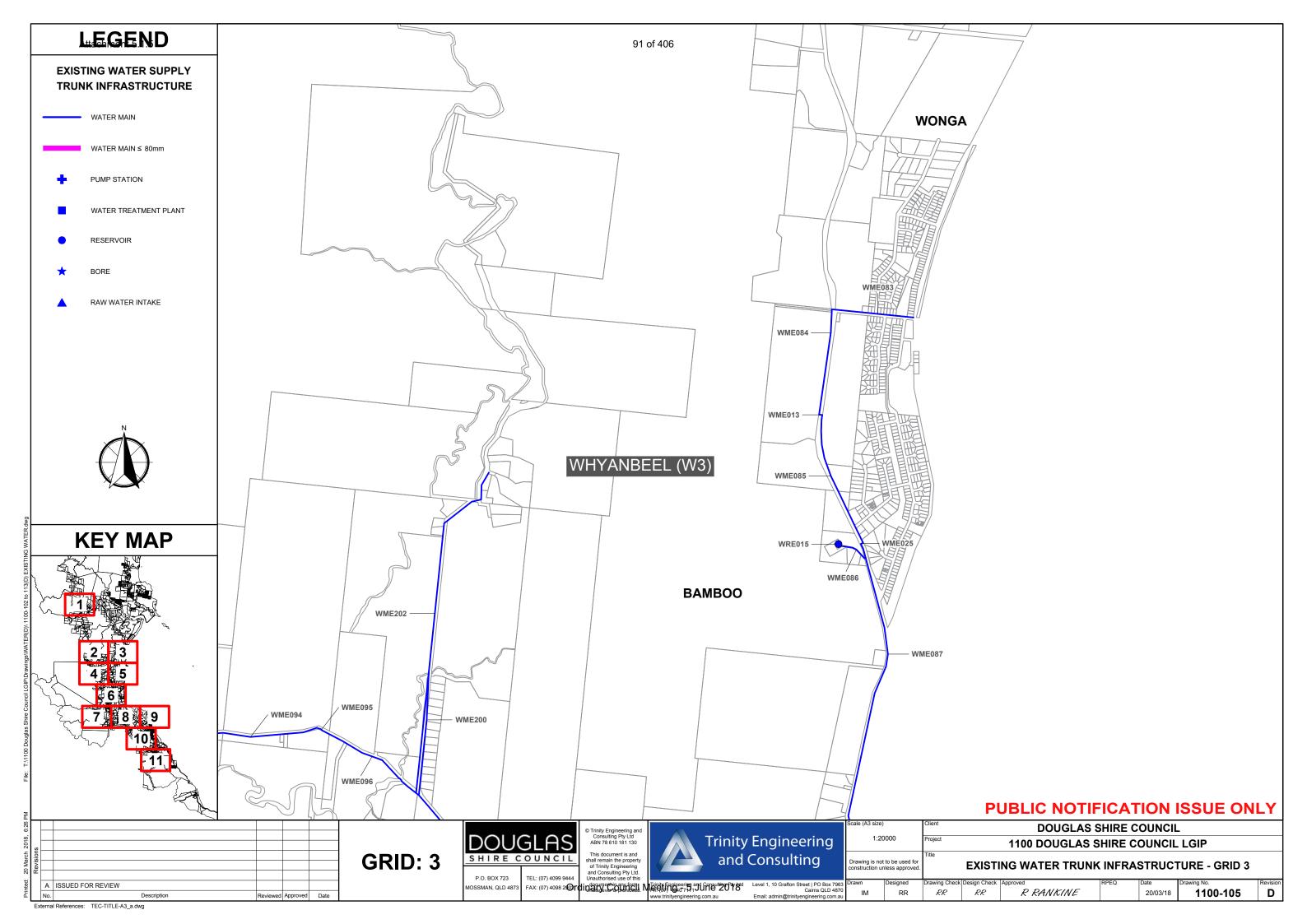
1100-100	DRAWING INDEX	1100-114	EXISTING RECYCLED WATER TRUNK INFRASTRUCTUR
1100-101	WATER INFRASTRUCTURE SUPPLY CHARGES CATCHMENTS	1100-115	EXISTING RECYCLED WATER TRUNK INFRASTRUCTUR
1100-102	EXISTING WATER TRUNK INFRASTRUCTURE KEY MAP	1100-116	EXISTING RECYCLED WATER TRUNK INFRASTRUCTUR
1100-103	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 1	1100-117	EXISTING RECYCLED WATER TRUNK INFRASTRUCTUR
1100-104	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 2	1100-118	EXISTING RECYCLED WATER TRUNK INFRASTRUCTUR
1100-105	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 3	1100-119	EXISTING RECYCLED WATER TRUNK INFRASTRUCTUR
1100-106	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 4	1100-120	EXISTING RECYCLED WATER TRUNK INFRASTRUCTUR
1100-107	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 5	1100-121	FUTURE WATER TRUNK INFRASTRUCTURE KEY MAP
1100-108	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 6	1100-122	FUTURE WATER TRUNK INFRASTRUCTURE - GRID 1
1100-109	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 7	1100–123	FUTURE WATER TRUNK INFRASTRUCTURE - GRID 2
1100-110	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 8	1100-124	FUTURE WATER TRUNK INFRASTRUCTURE - GRID 3
1100-111	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 9	1100-125	FUTURE WATER TRUNK INFRASTRUCTURE - GRID 4
1100-112	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 10		
1100-113	EXISTING WATER TRUNK INFRASTRUCTURE — GRID 11		

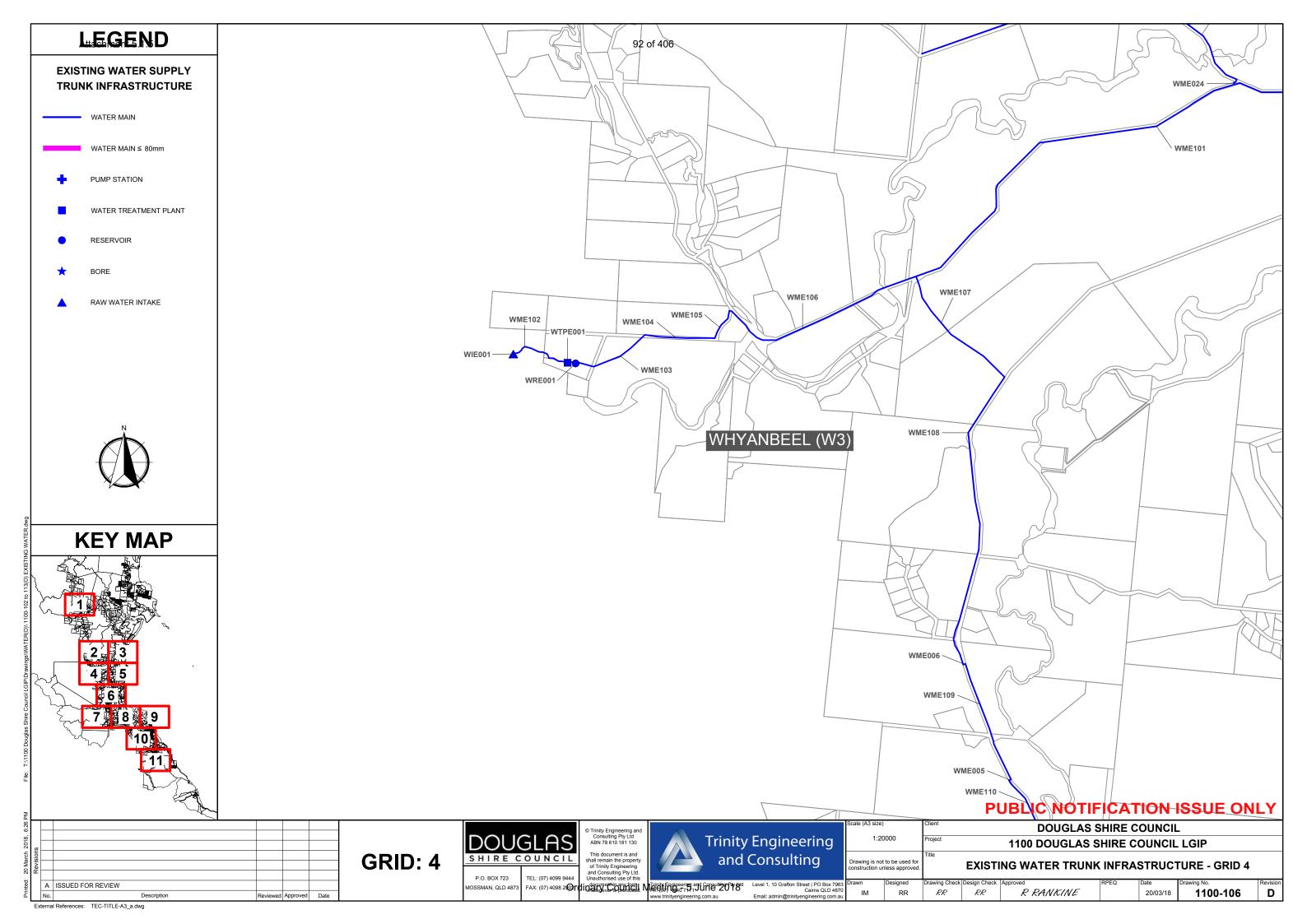


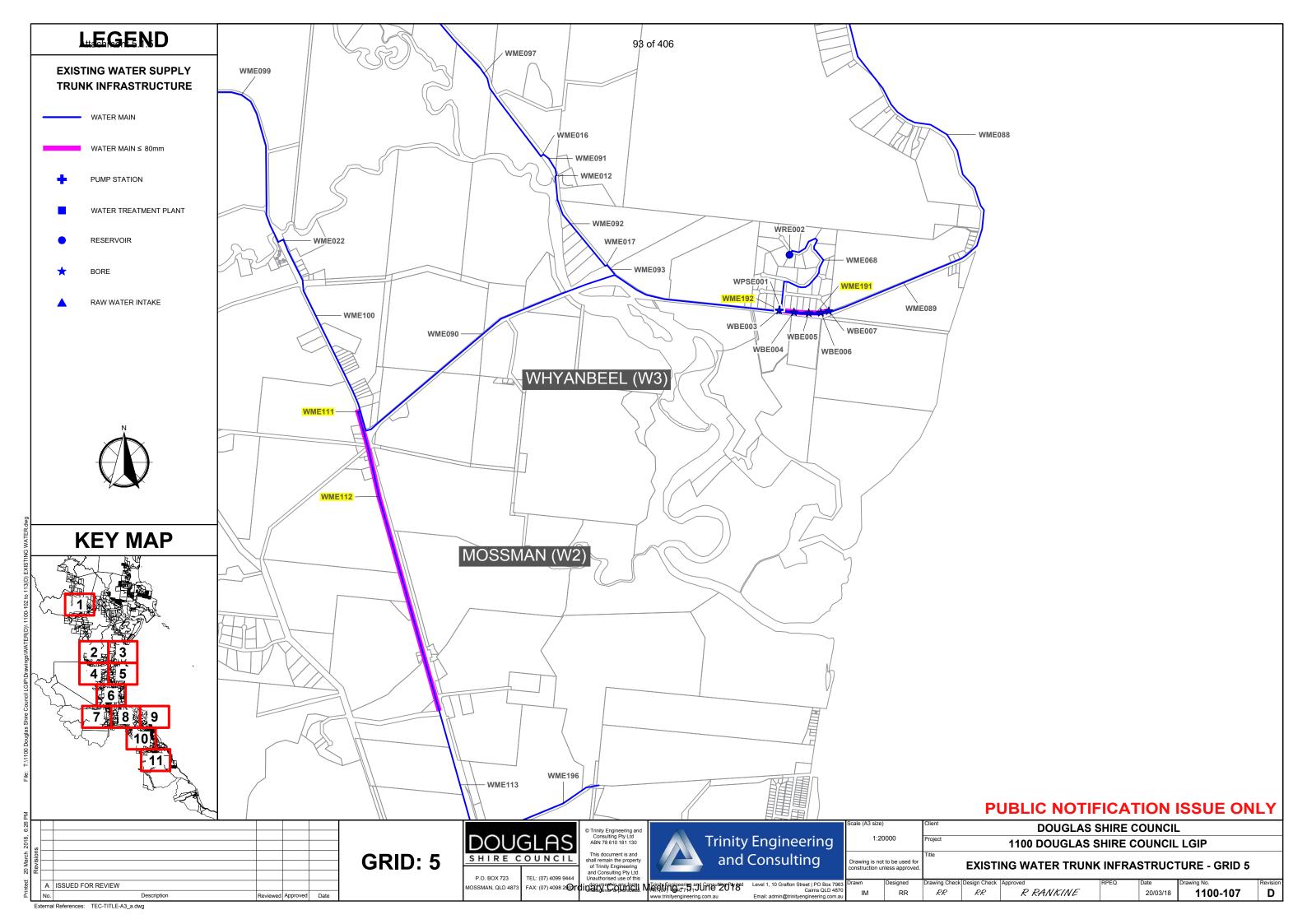


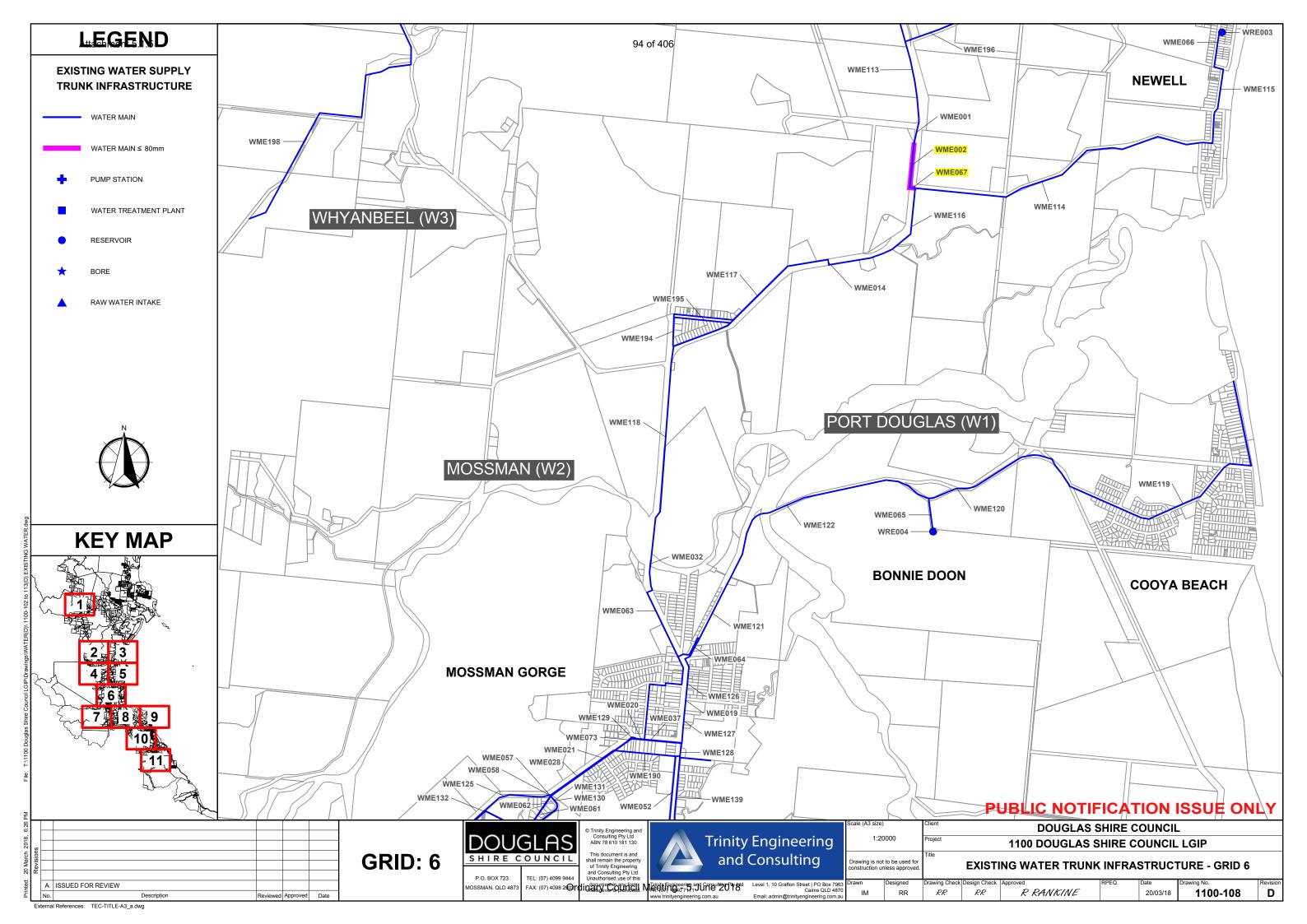


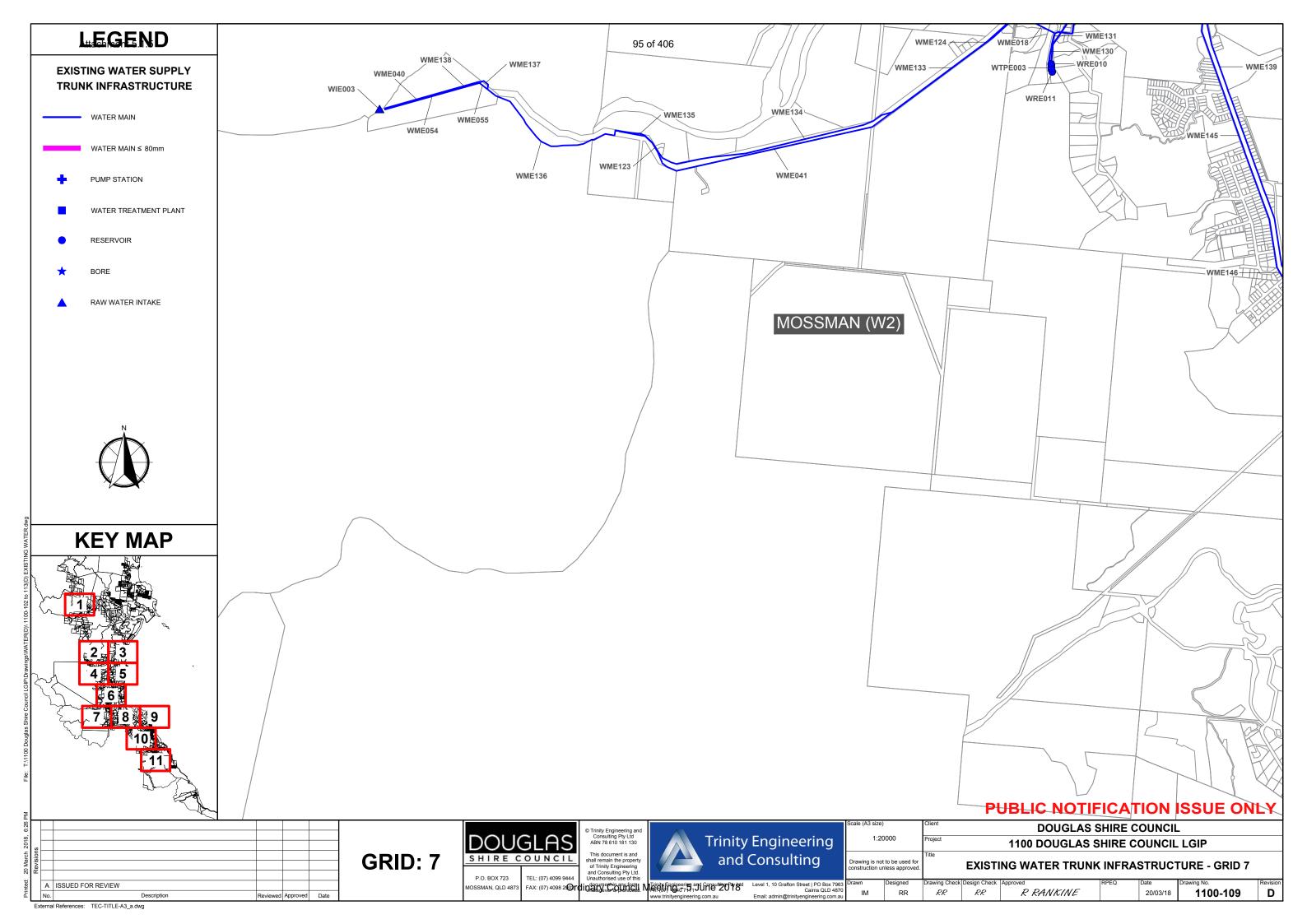


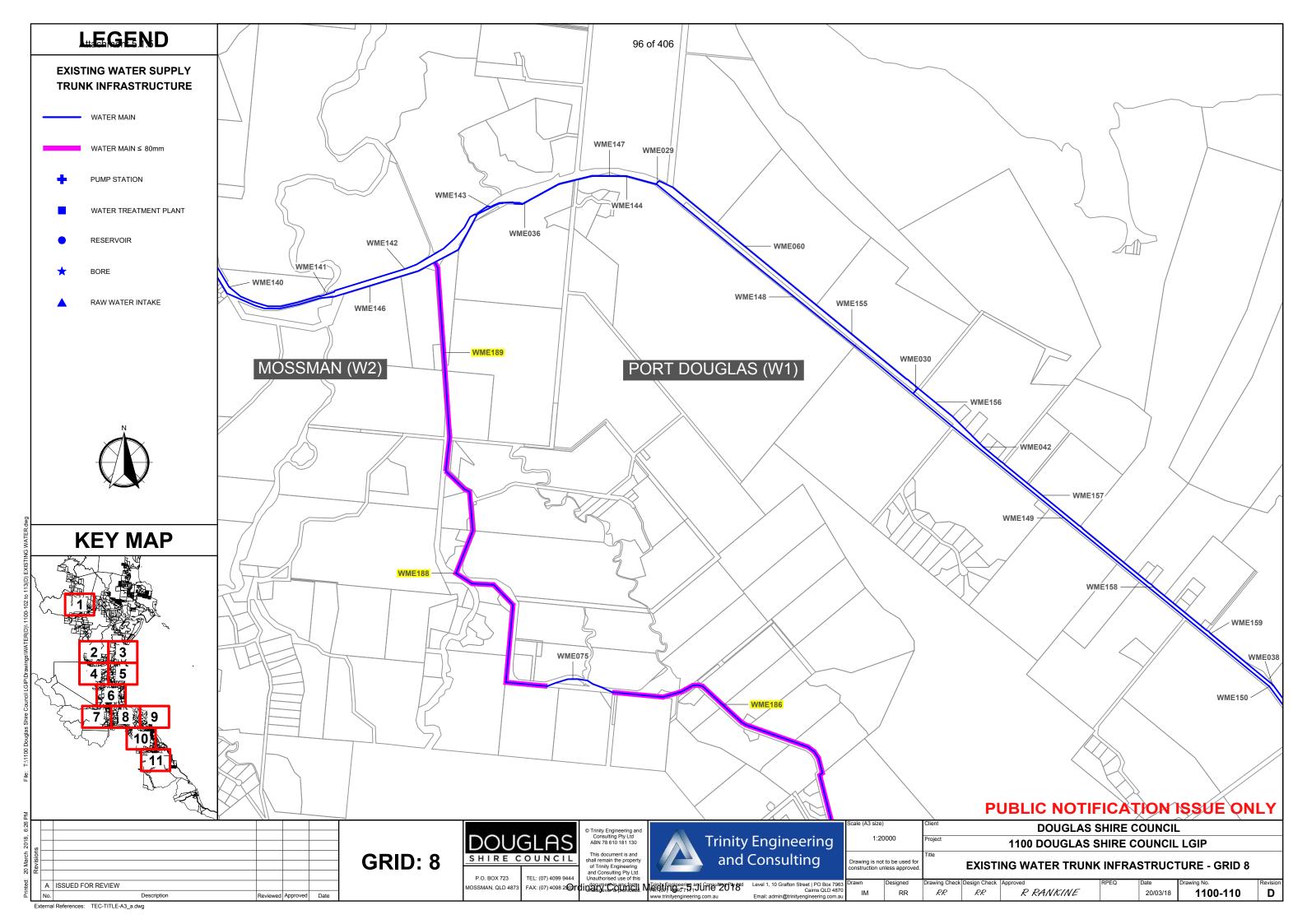


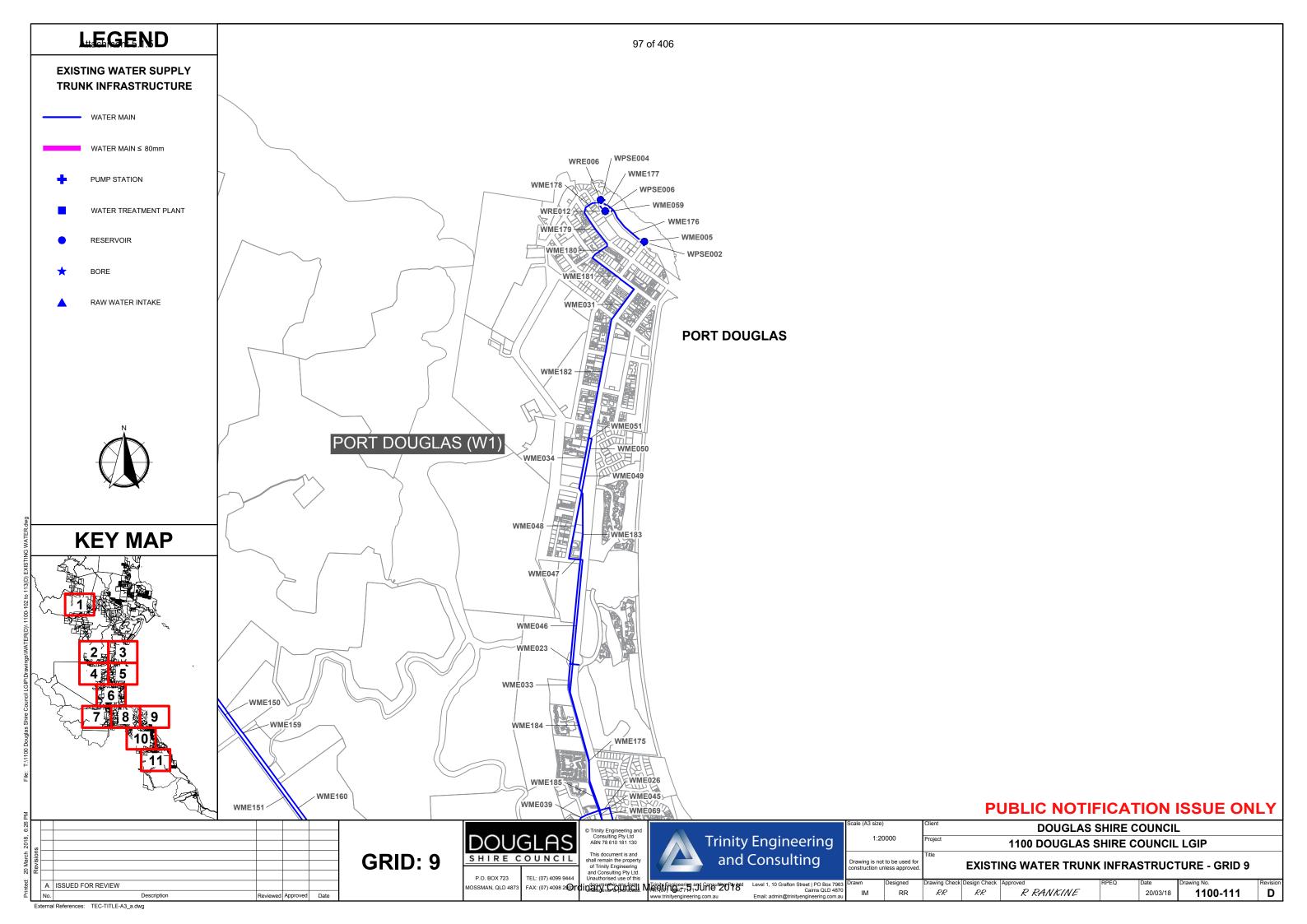


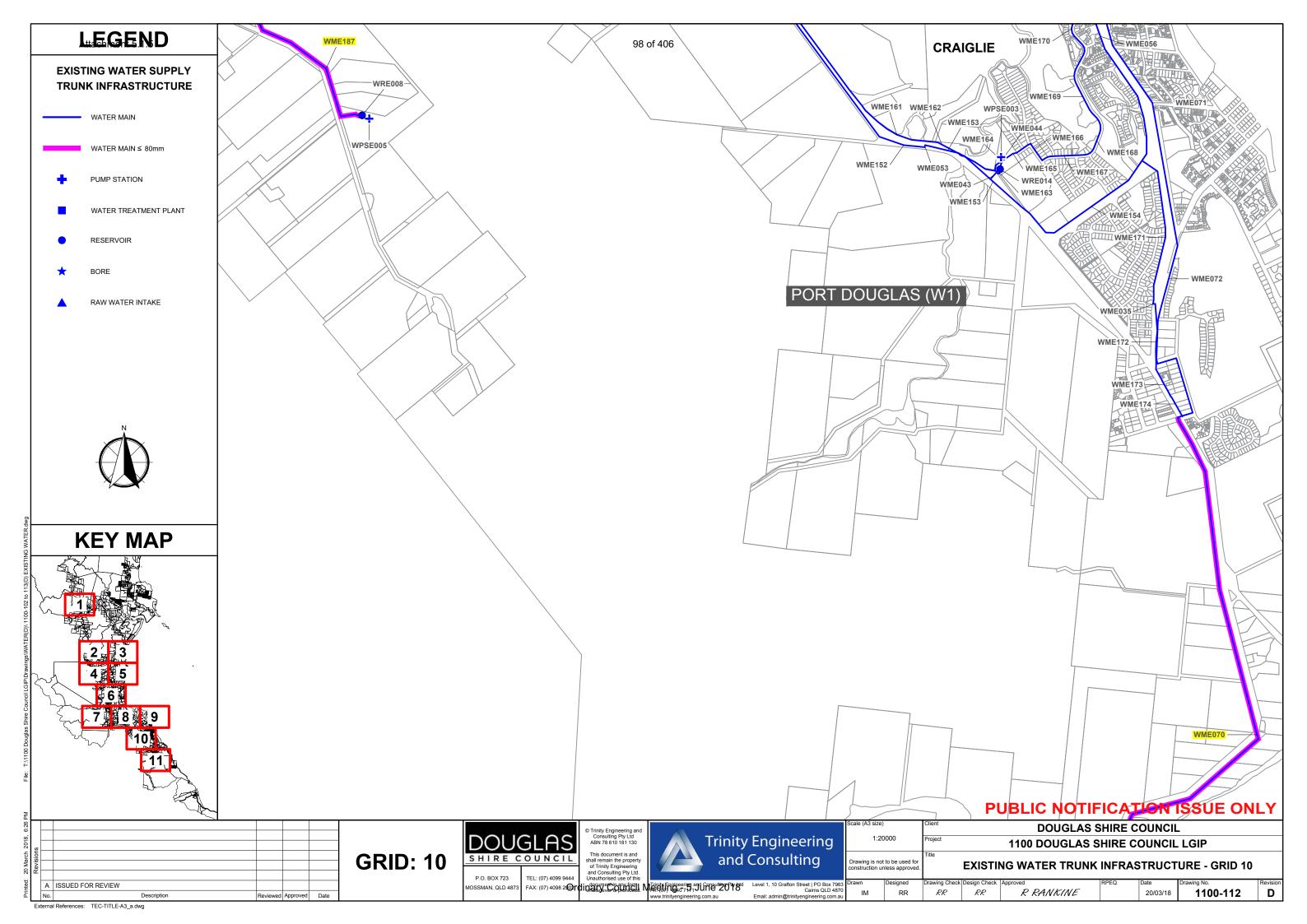


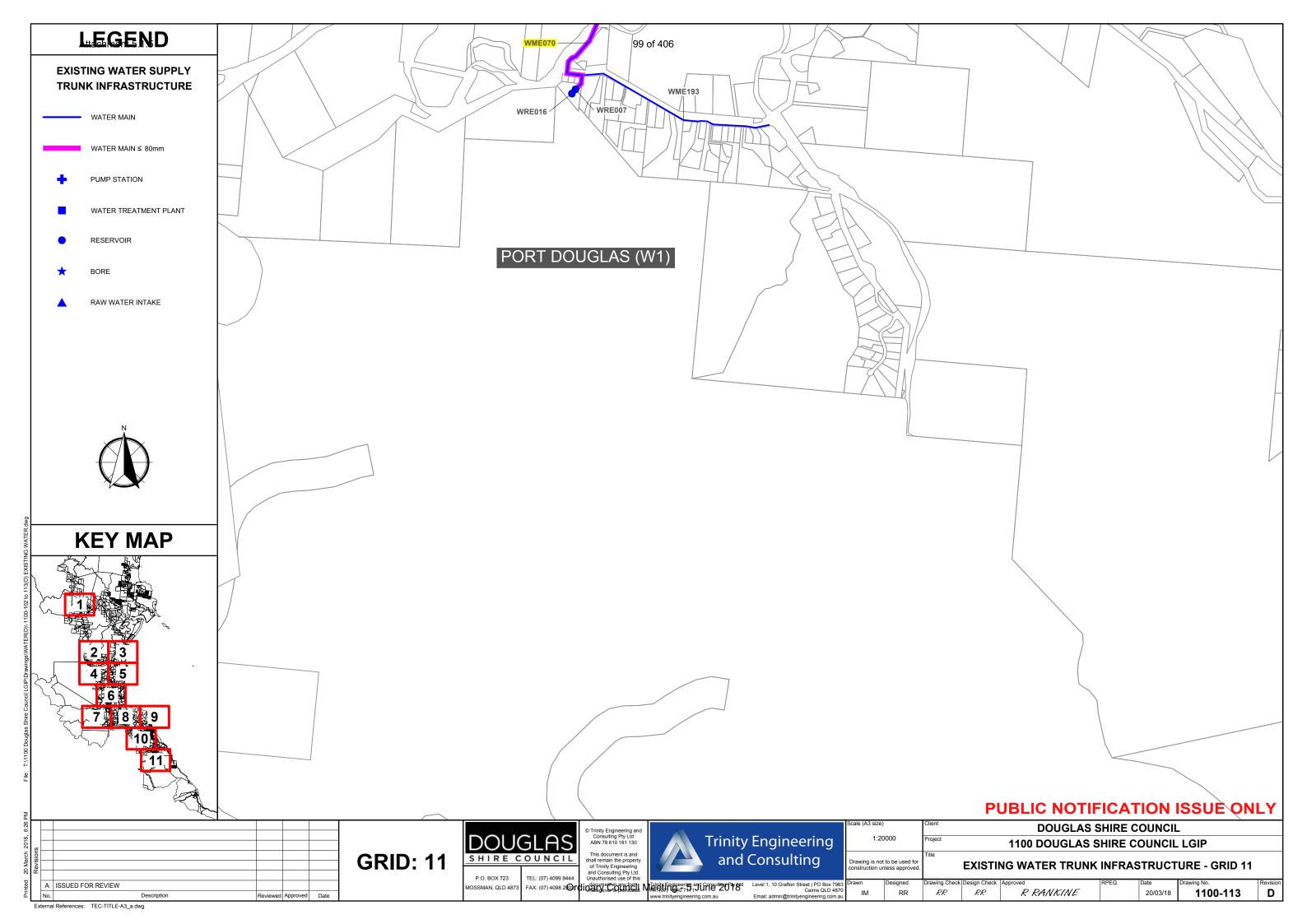


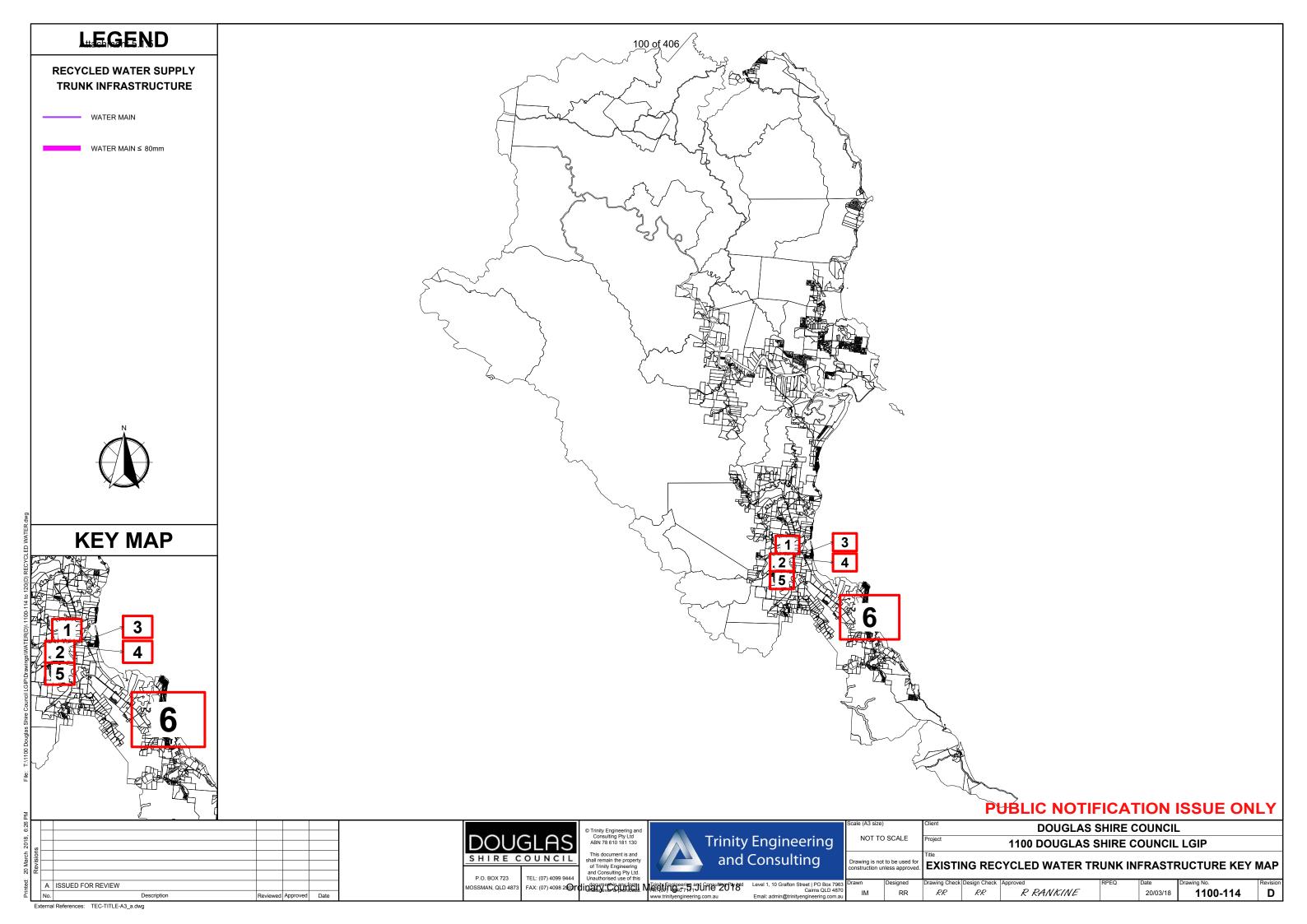


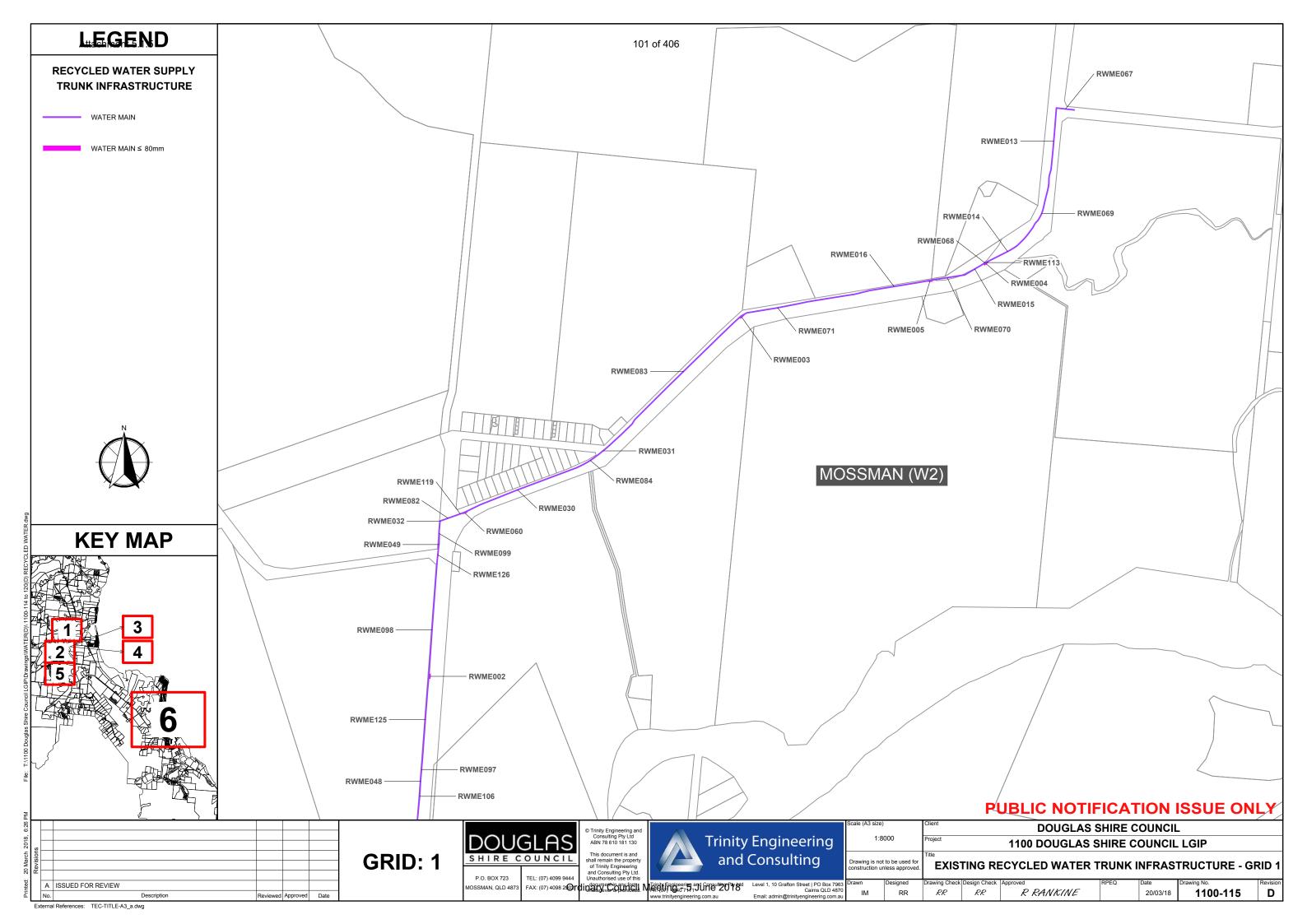


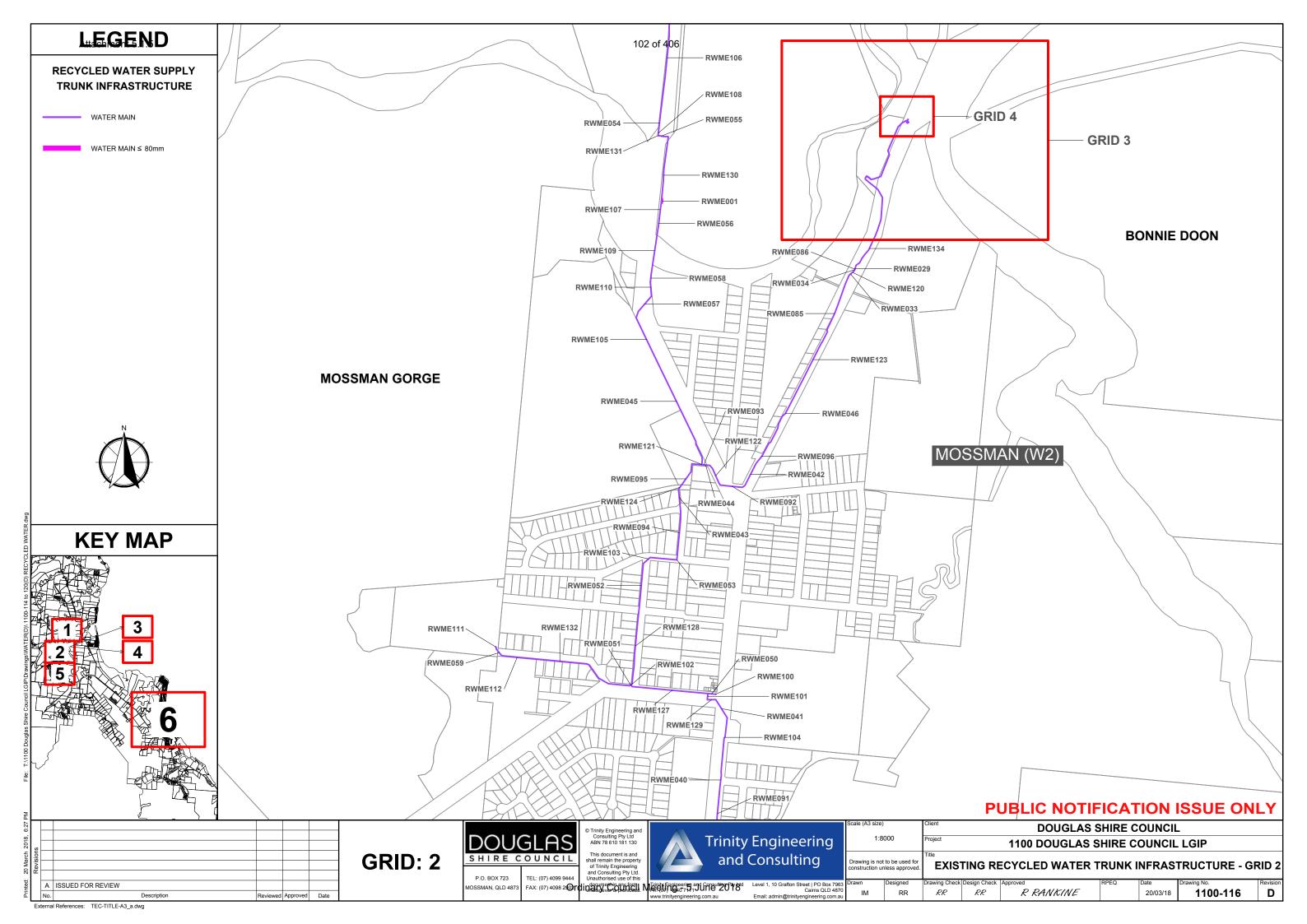


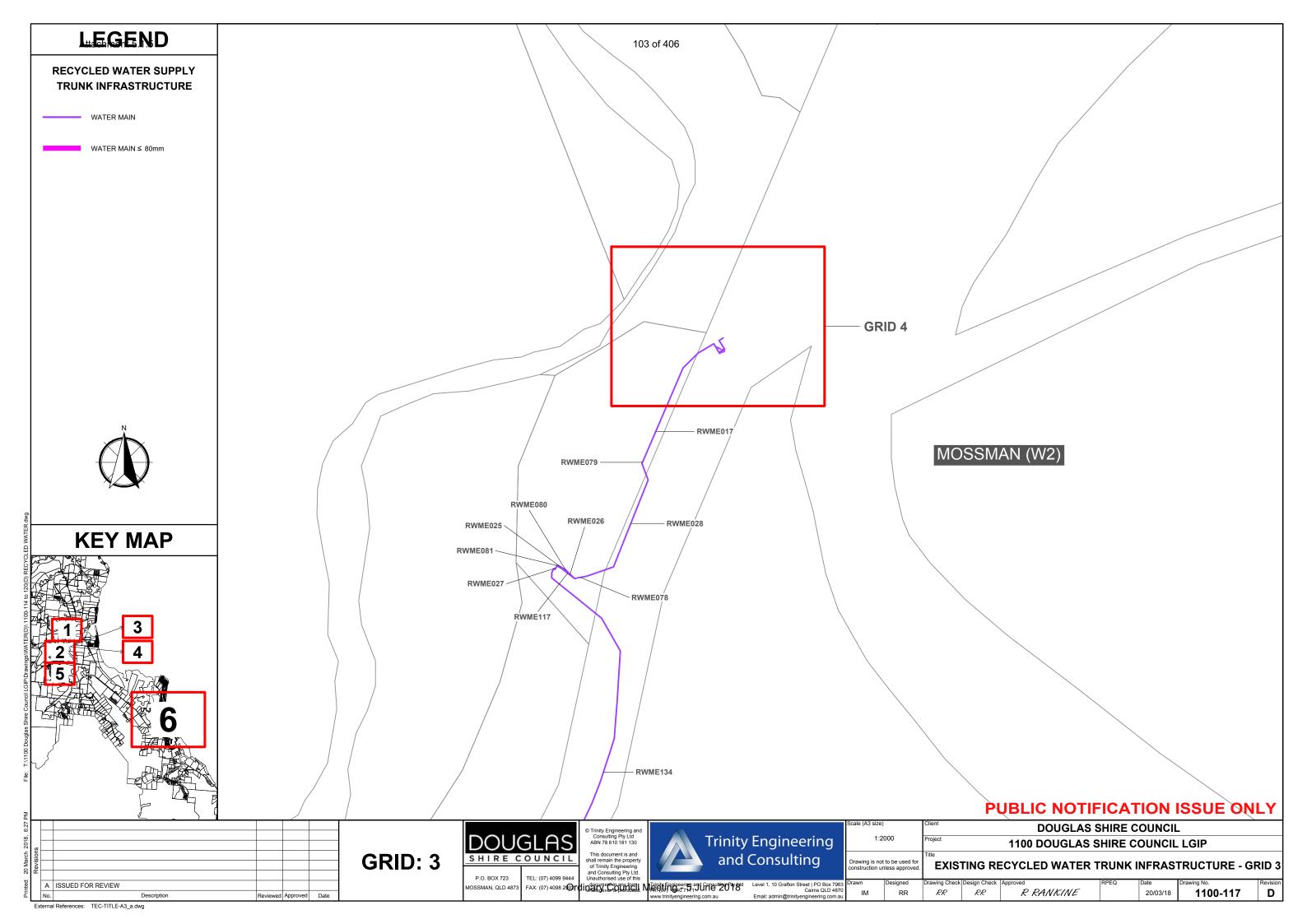


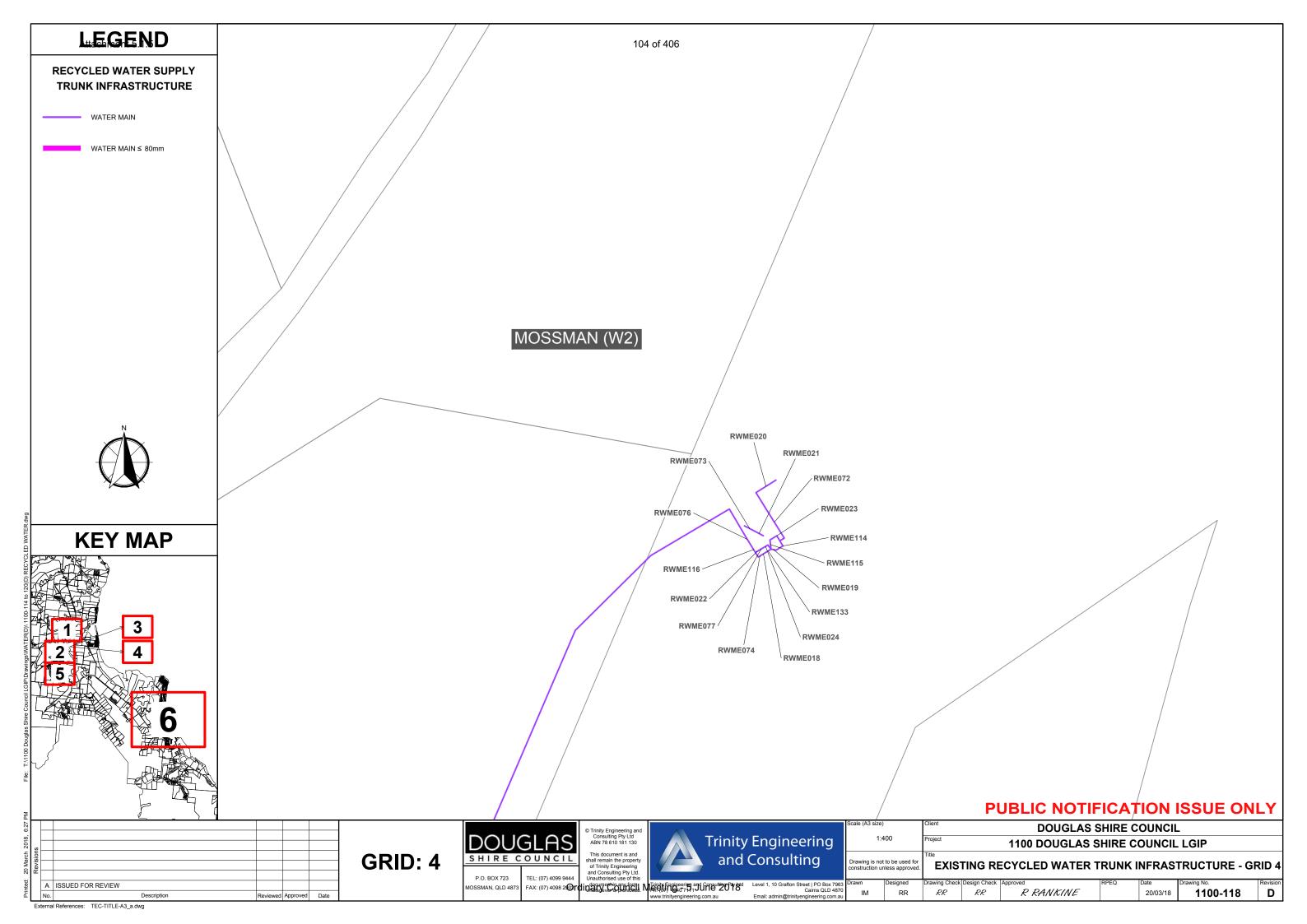


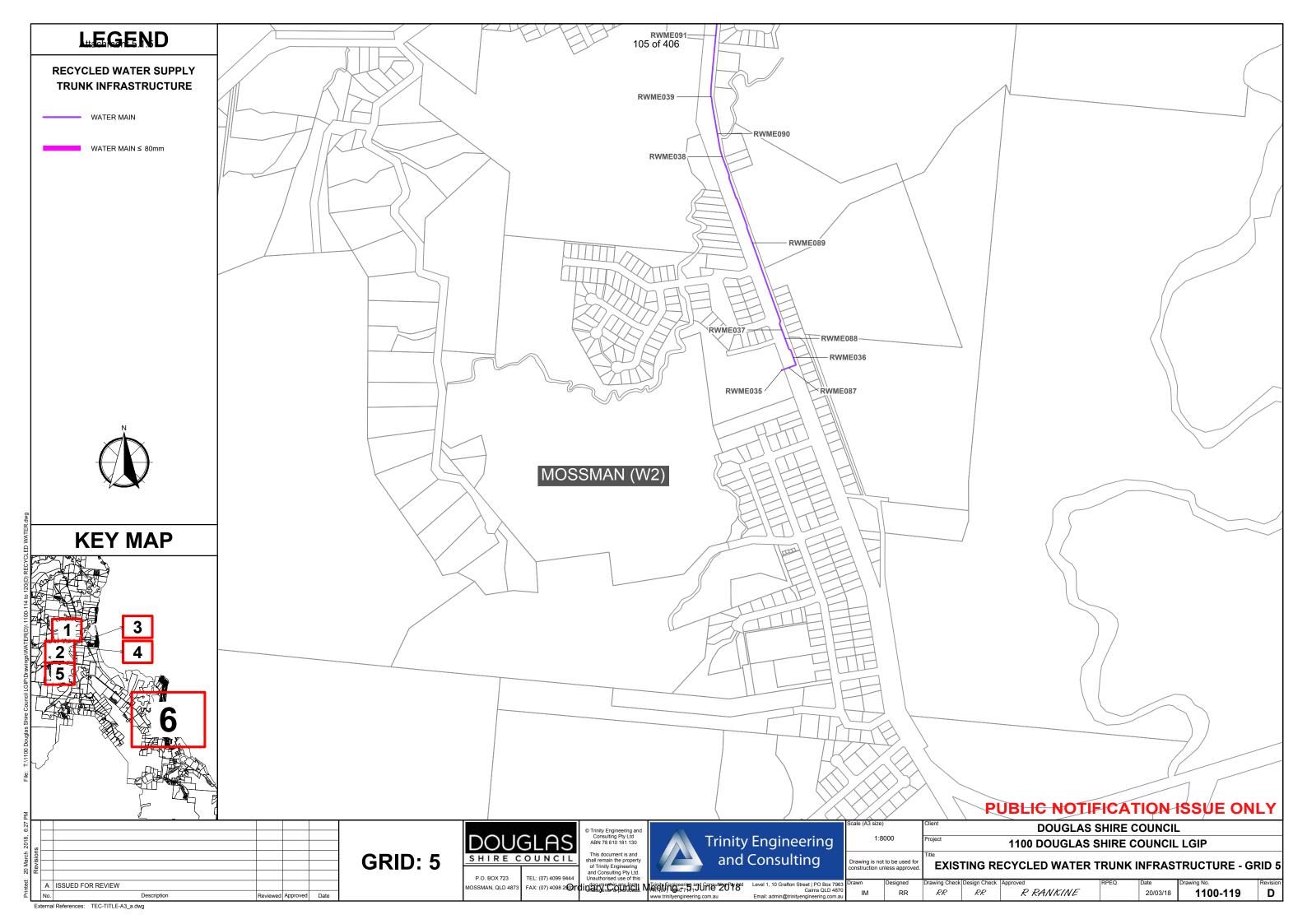


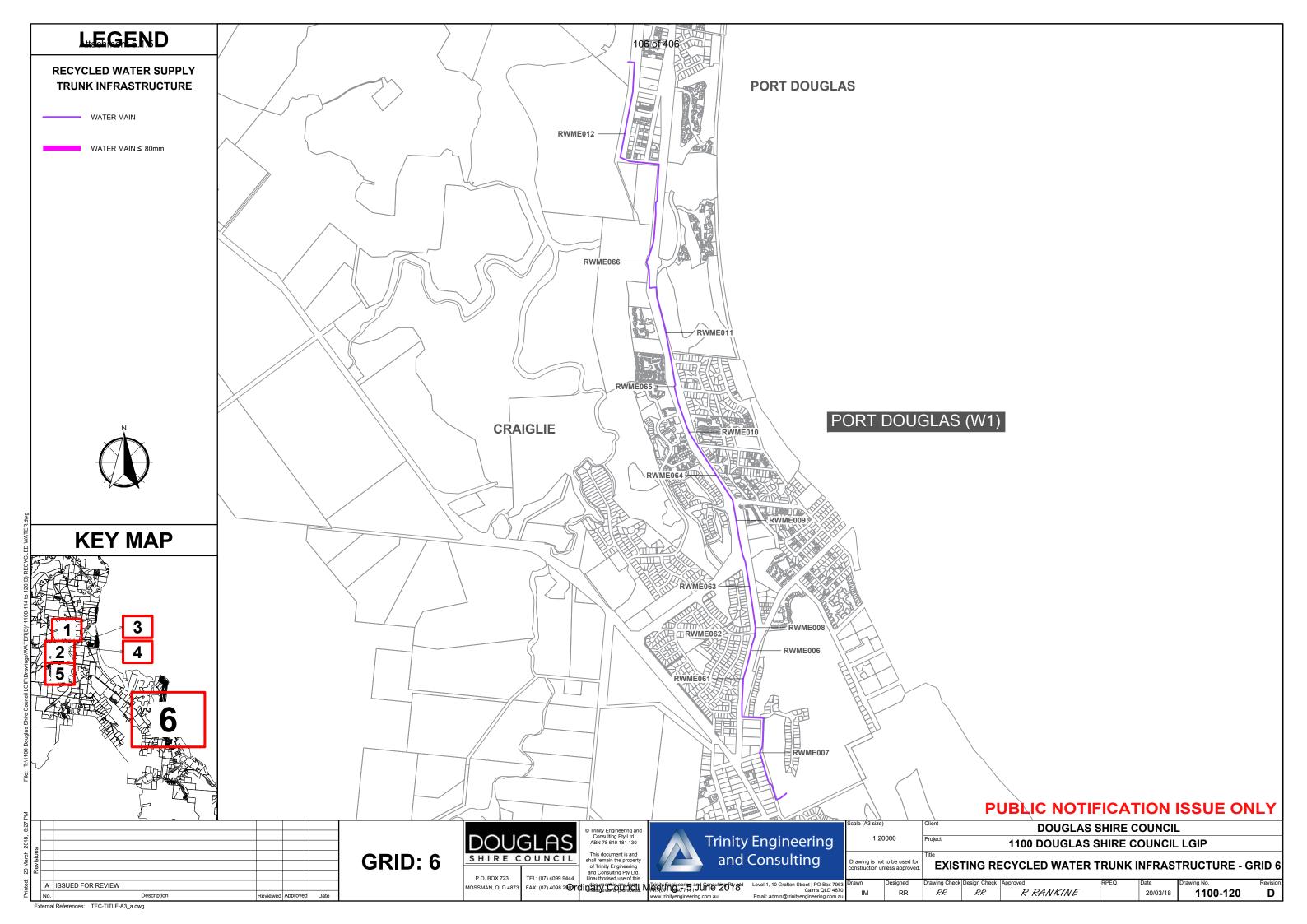


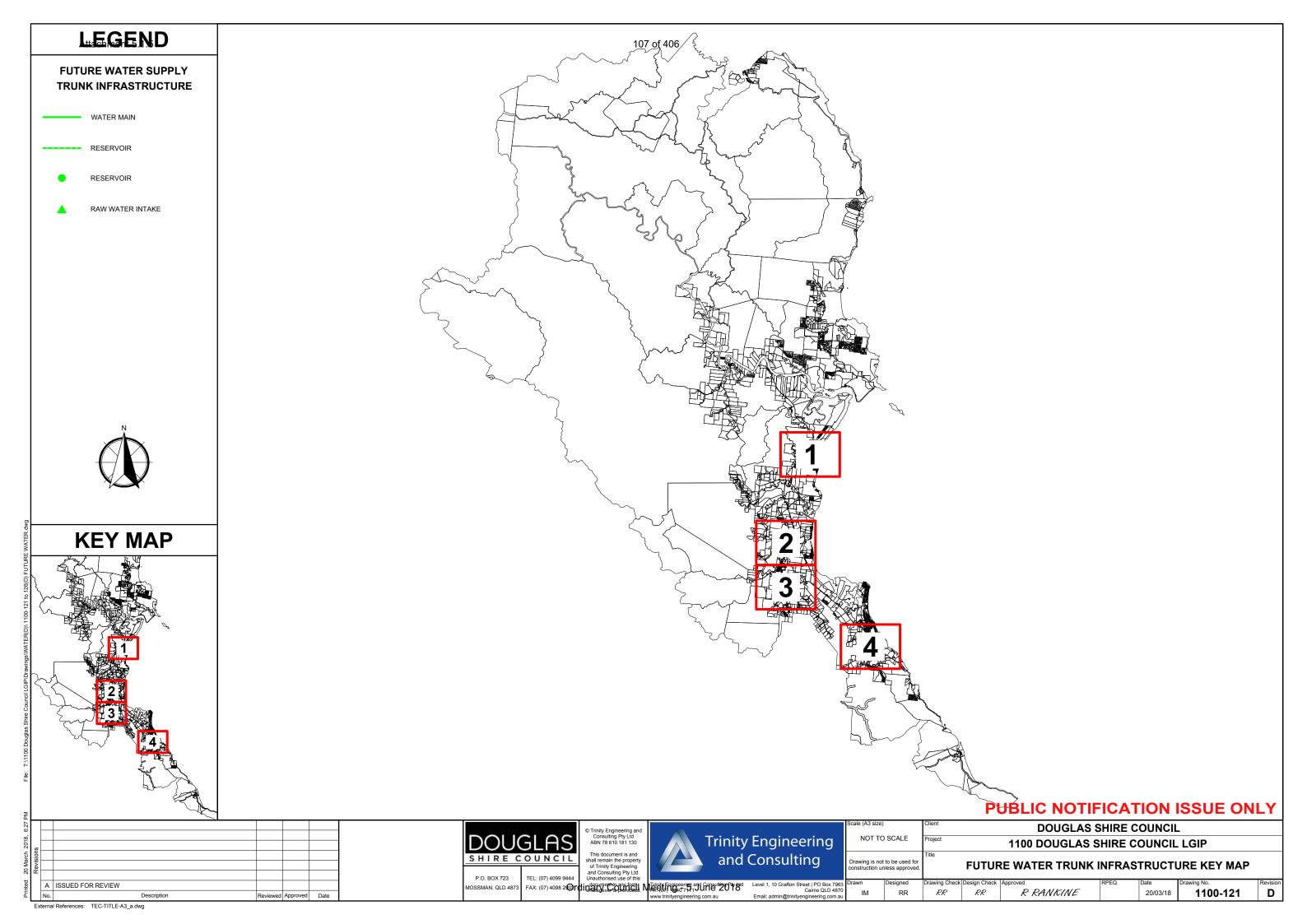


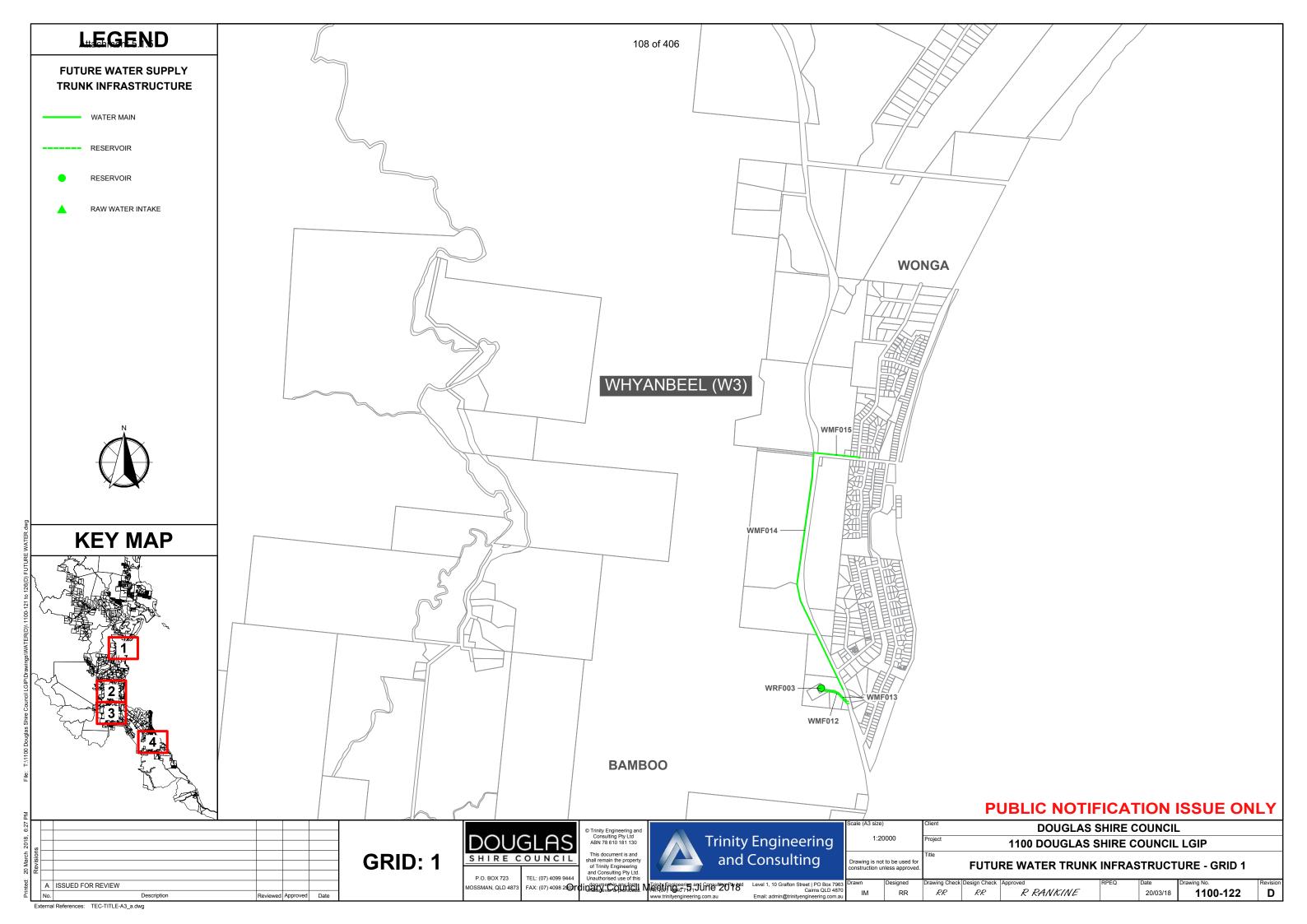


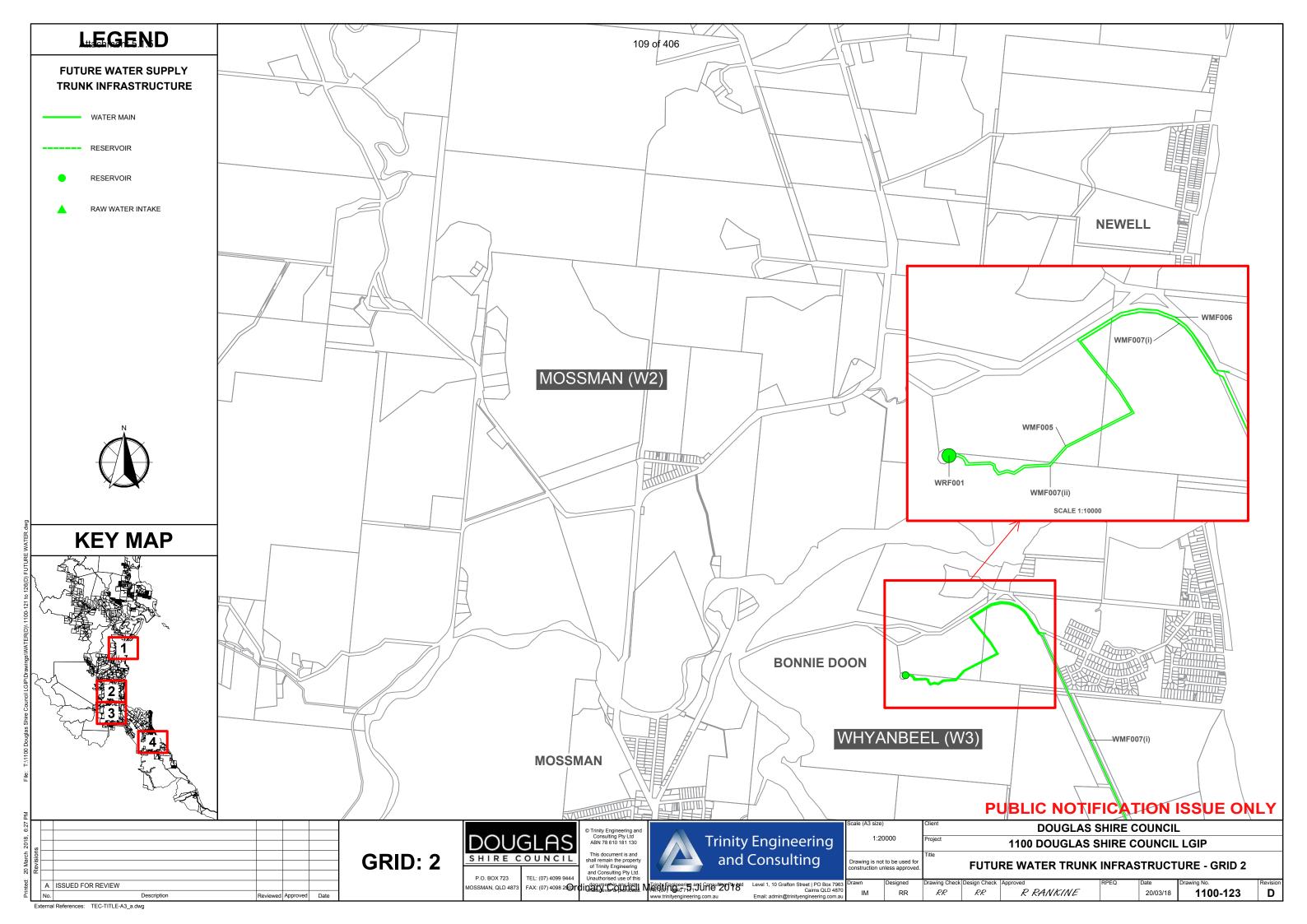


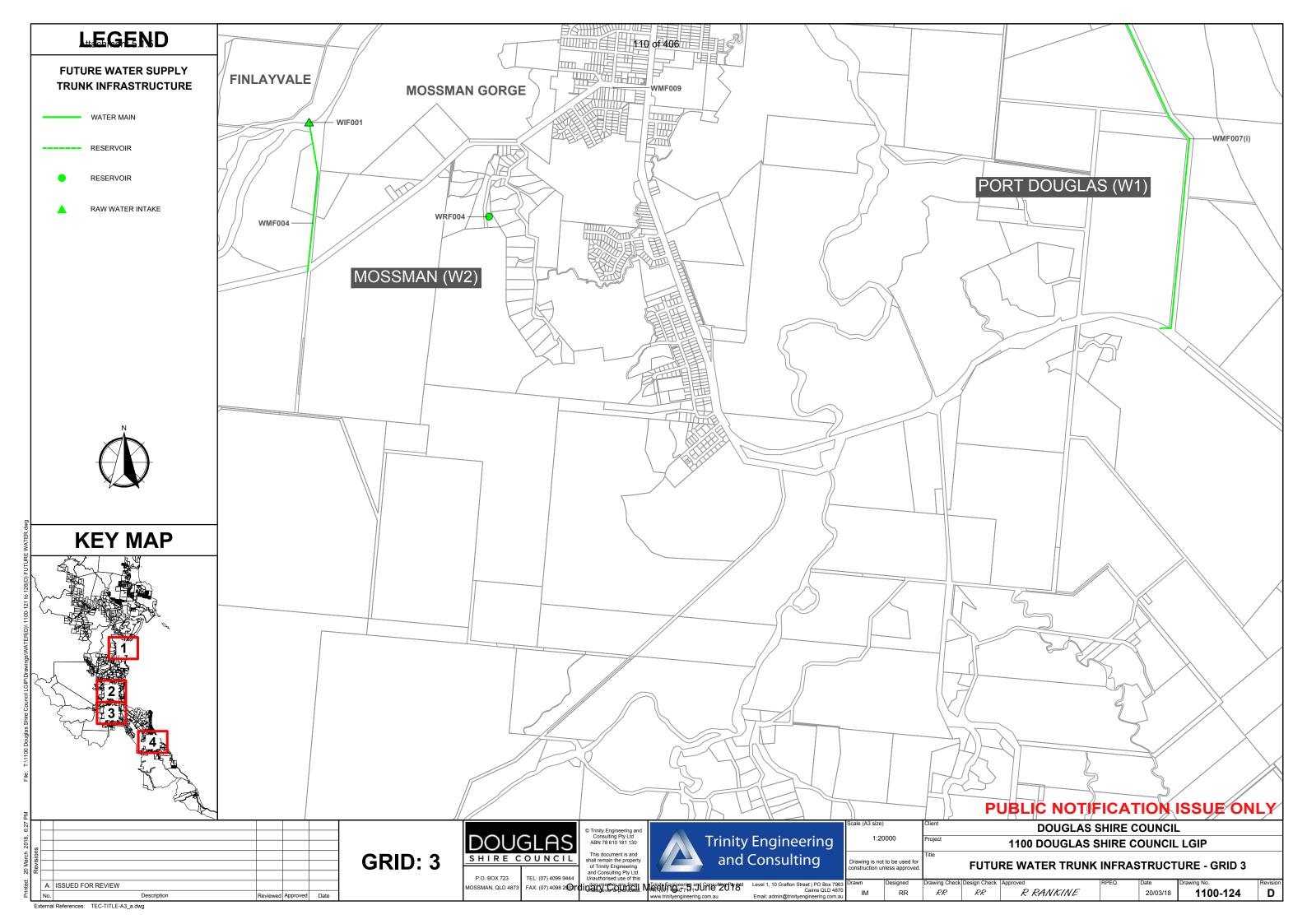


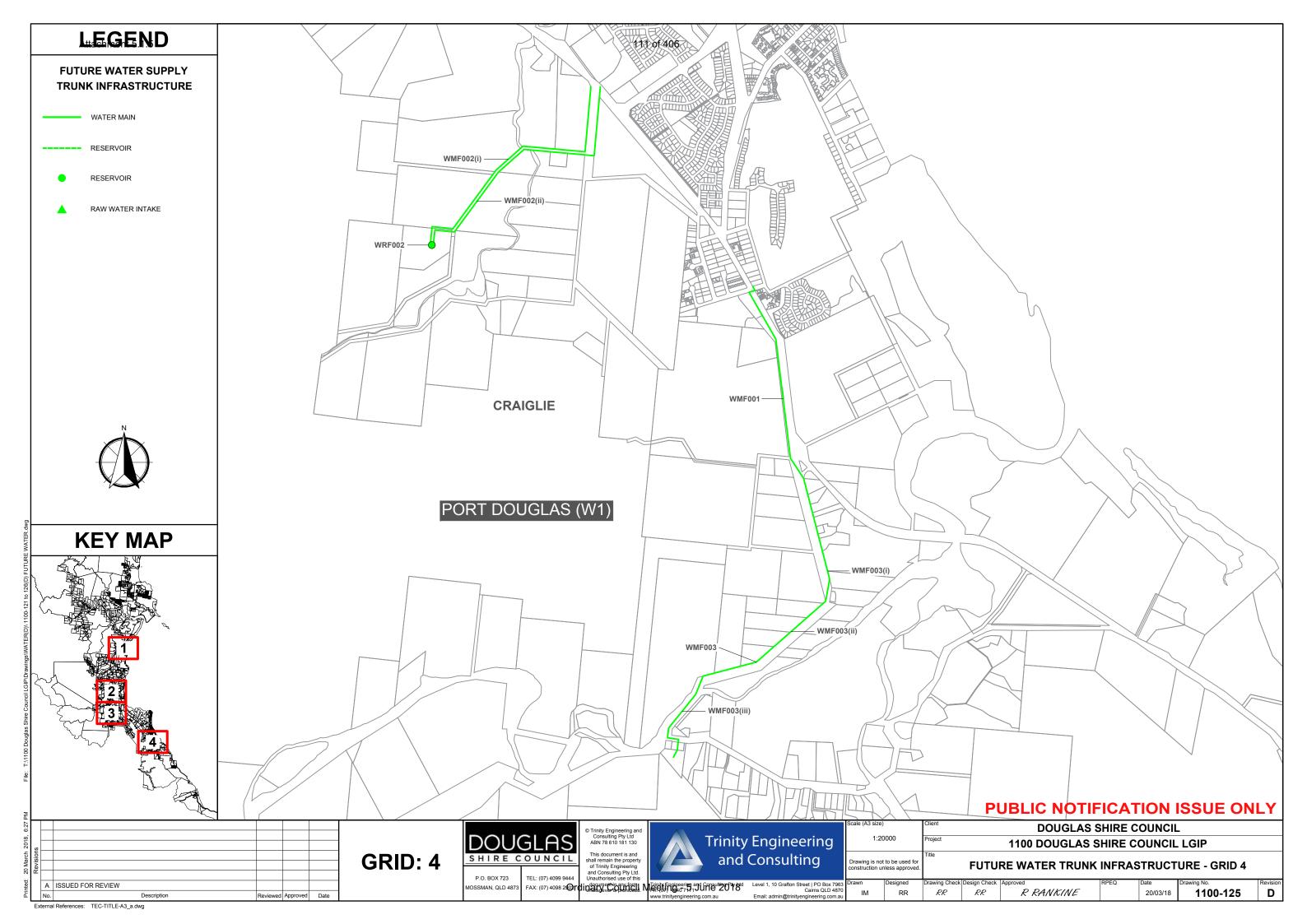
















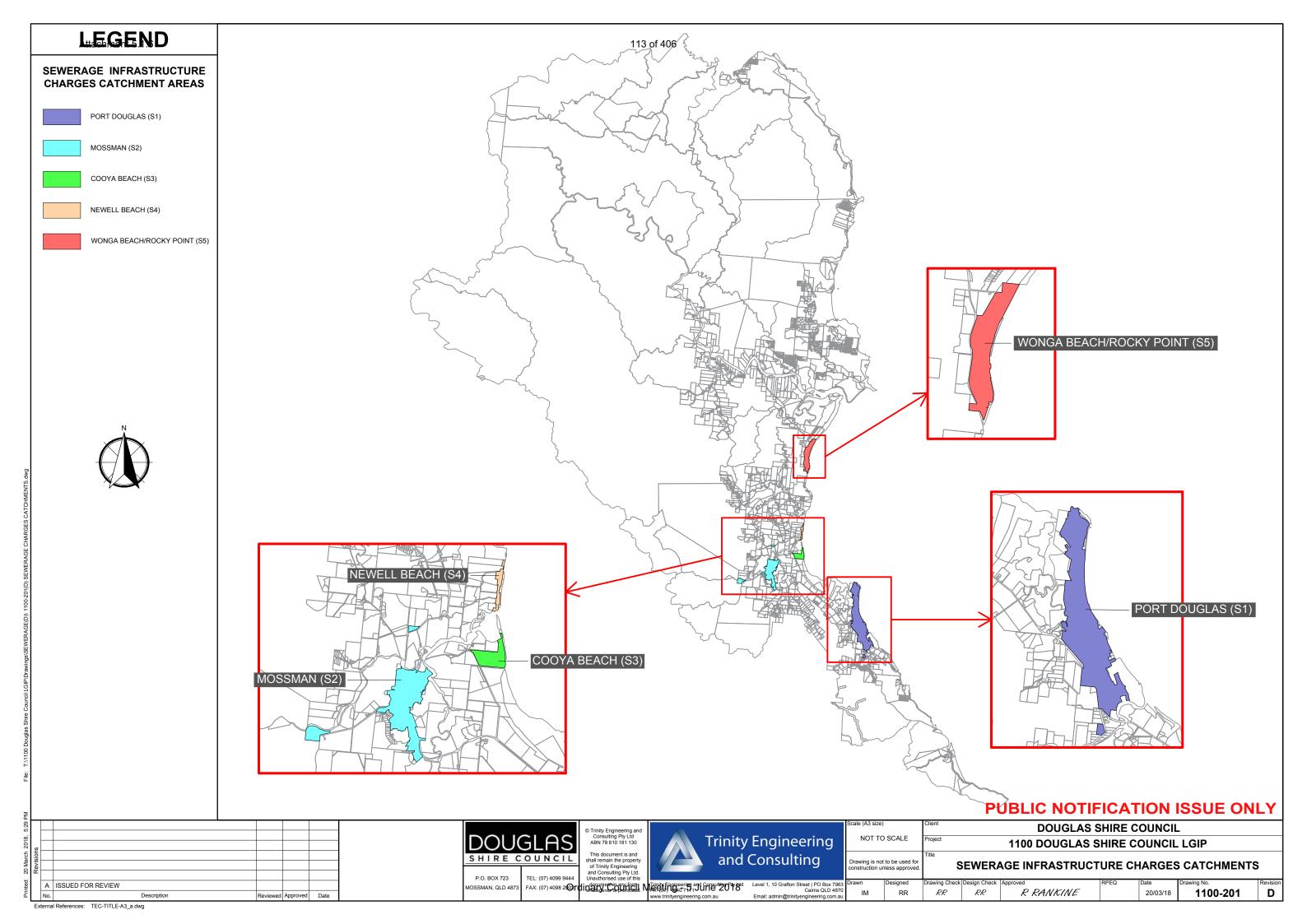
LOCAL GOVERNMENT INFRASTRUCTURE PLANS (SEWERAGE TRUNK INFRASTRUCTURE)

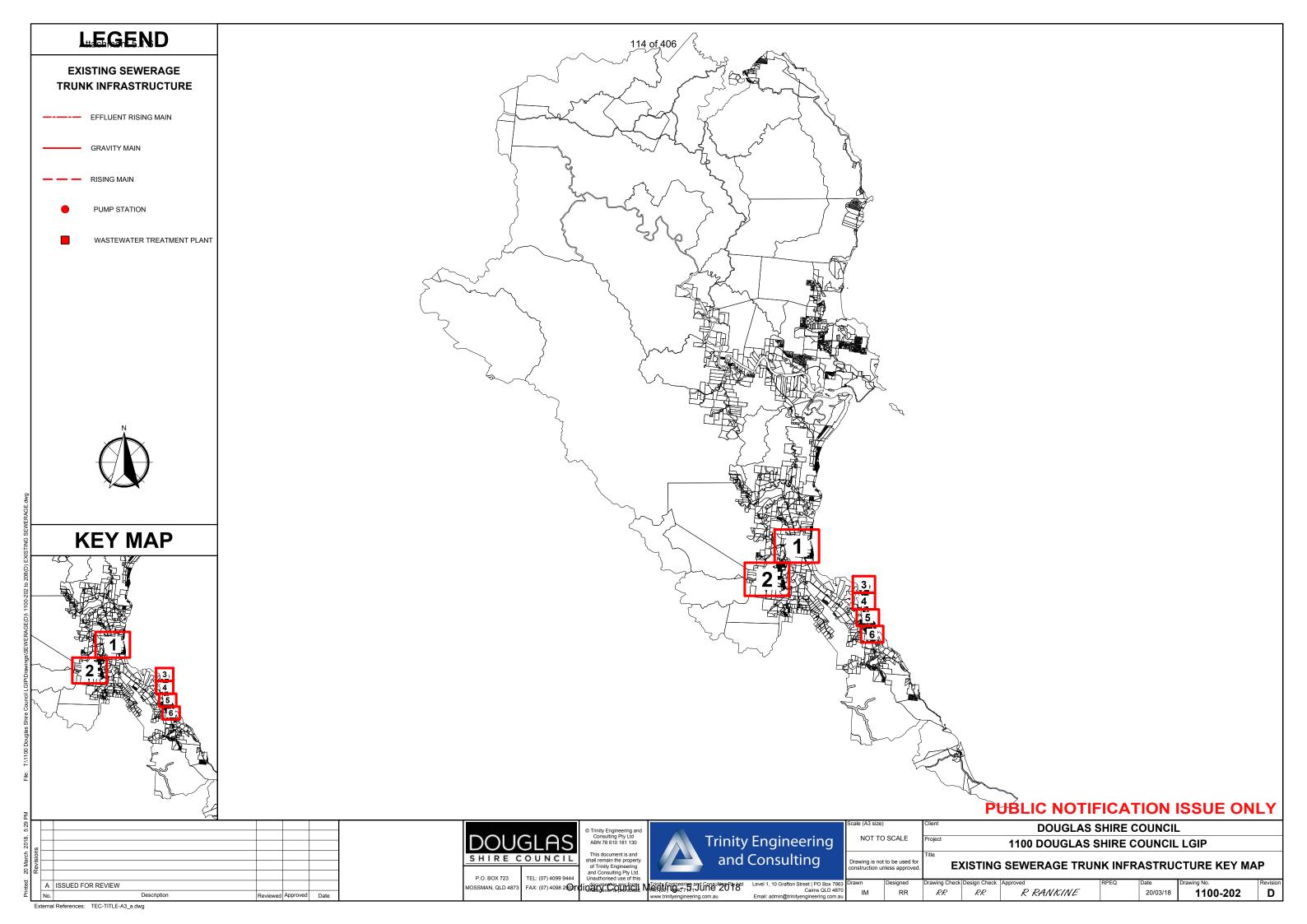
for

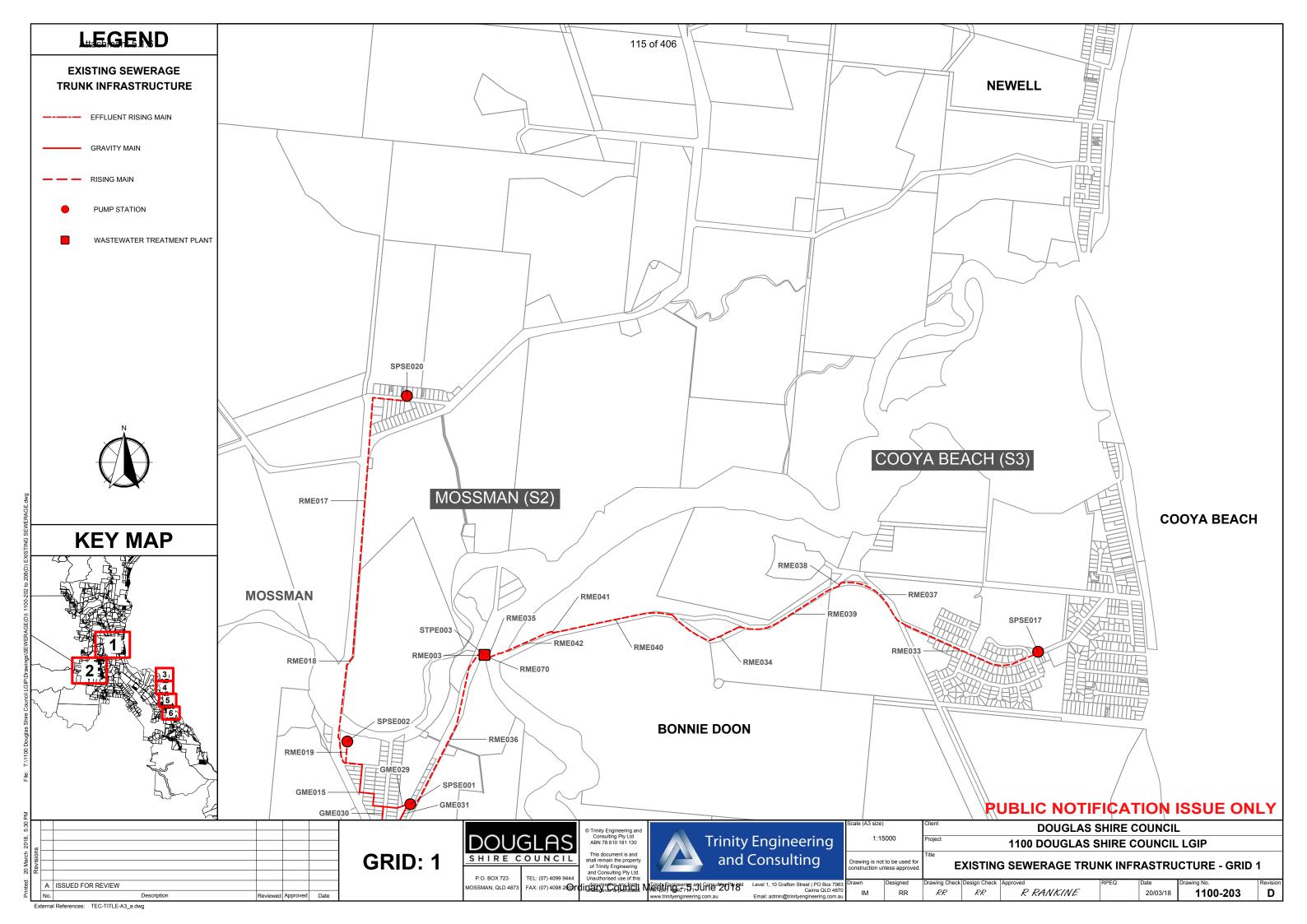
DOUGLAS SHIRE COUNCIL

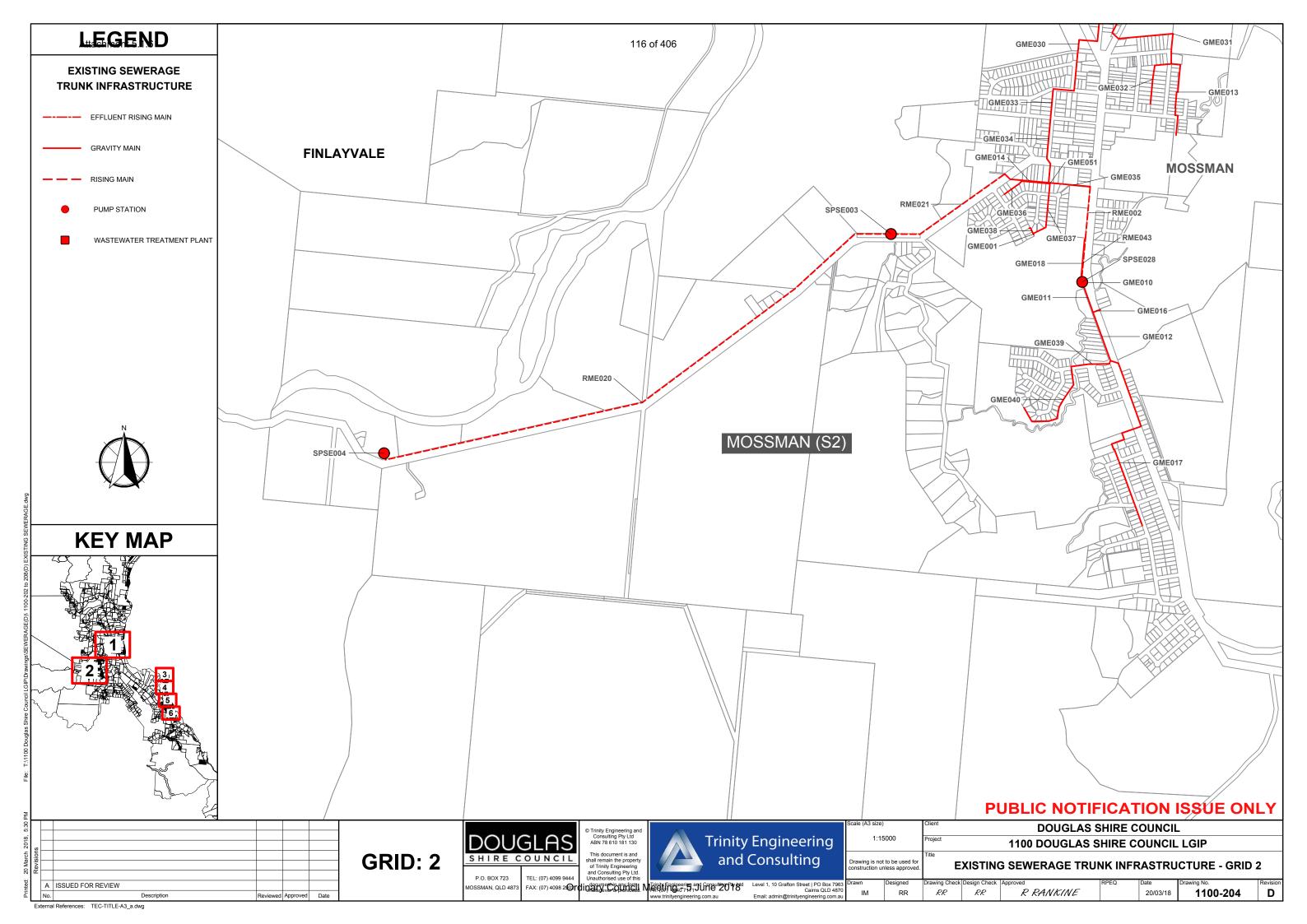
SCHEDULE OF PROJECT DRAWINGS

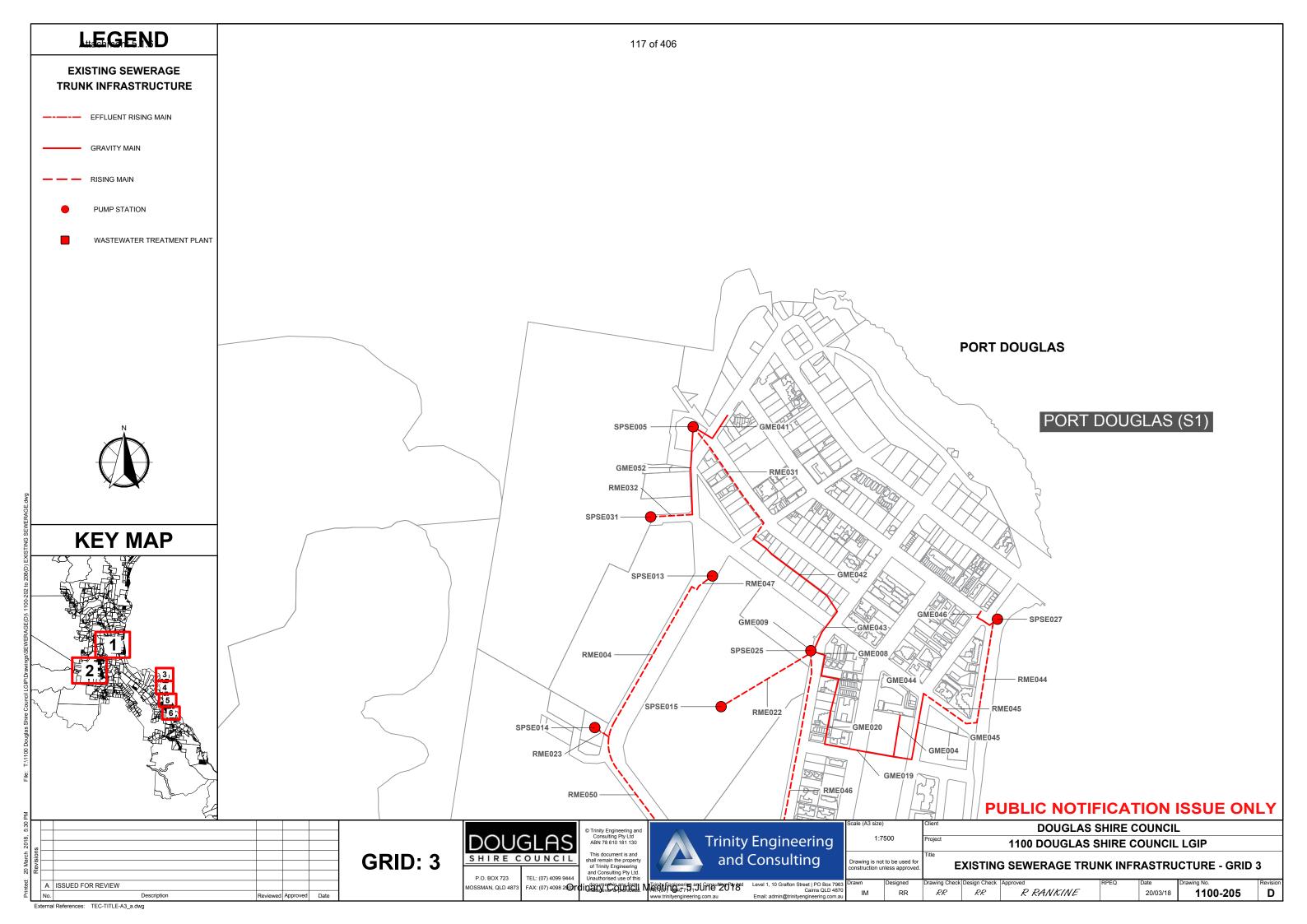
1100-200 1100-201 1100-202 1100-203 1100-204 1100-205 1100-206 1100-207 1100-208 1100-209 1100-210	DRAWING INDEX SEWERAGE INFRASTRUCTURE CHARGES CATCHMENTS EXISTING SEWERAGE TRUNK INFRASTRUCTURE KEY MAP EXISTING SEWERAGE TRUNK INFRASTRUCTURE — GRID 1 EXISTING SEWERAGE TRUNK INFRASTRUCTURE — GRID 2 EXISTING SEWERAGE TRUNK INFRASTRUCTURE — GRID 4 EXISTING SEWERAGE TRUNK INFRASTRUCTURE — GRID 5 EXISTING SEWERAGE TRUNK INFRASTRUCTURE — GRID 5 EXISTING SEWERAGE TRUNK INFRASTRUCTURE — GRID 6 FUTURE SEWERAGE TRUNK INFRASTRUCTURE KEY MAP FUTURE SEWERAGE TRUNK INFRASTRUCTURE — GRID 1

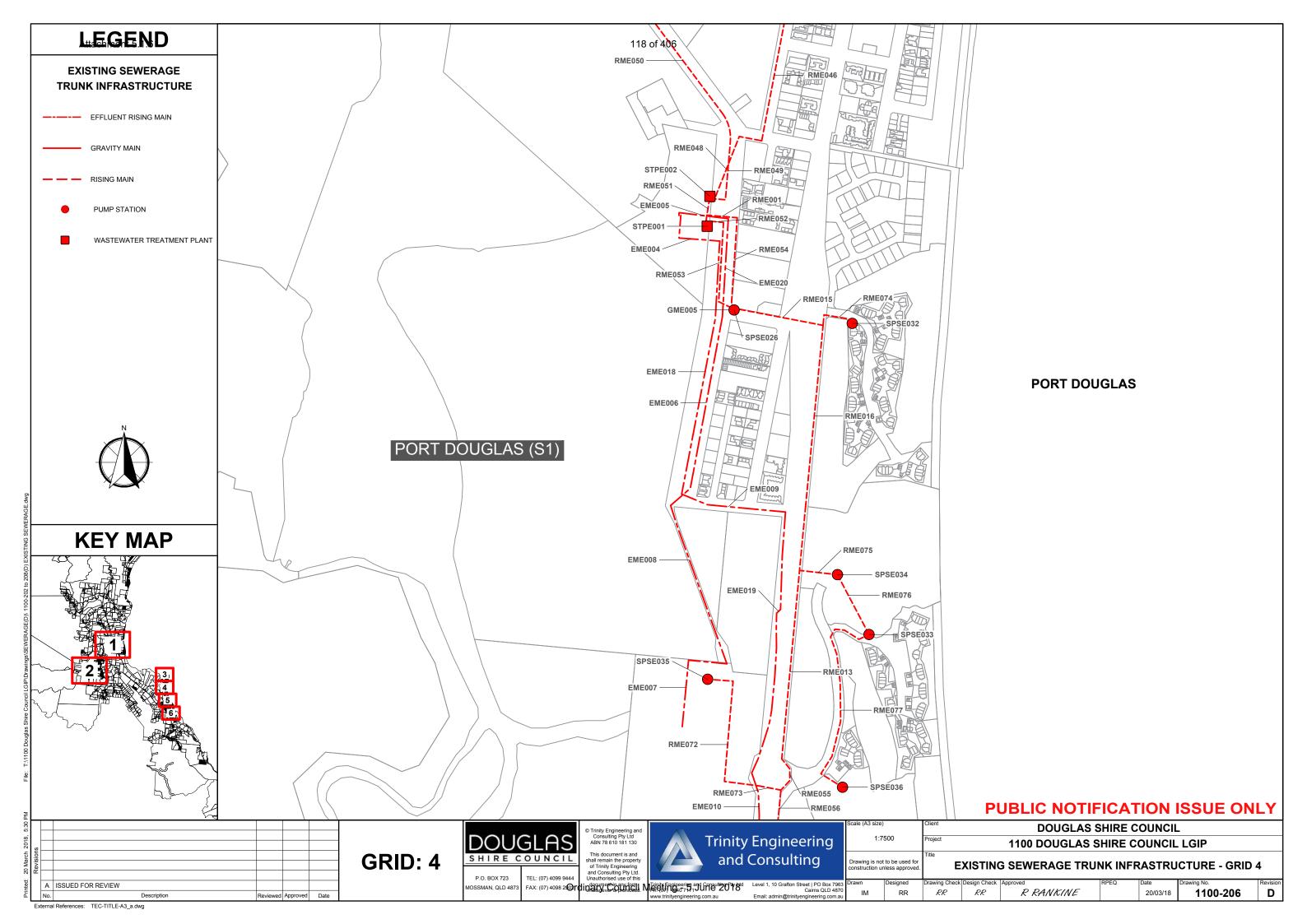


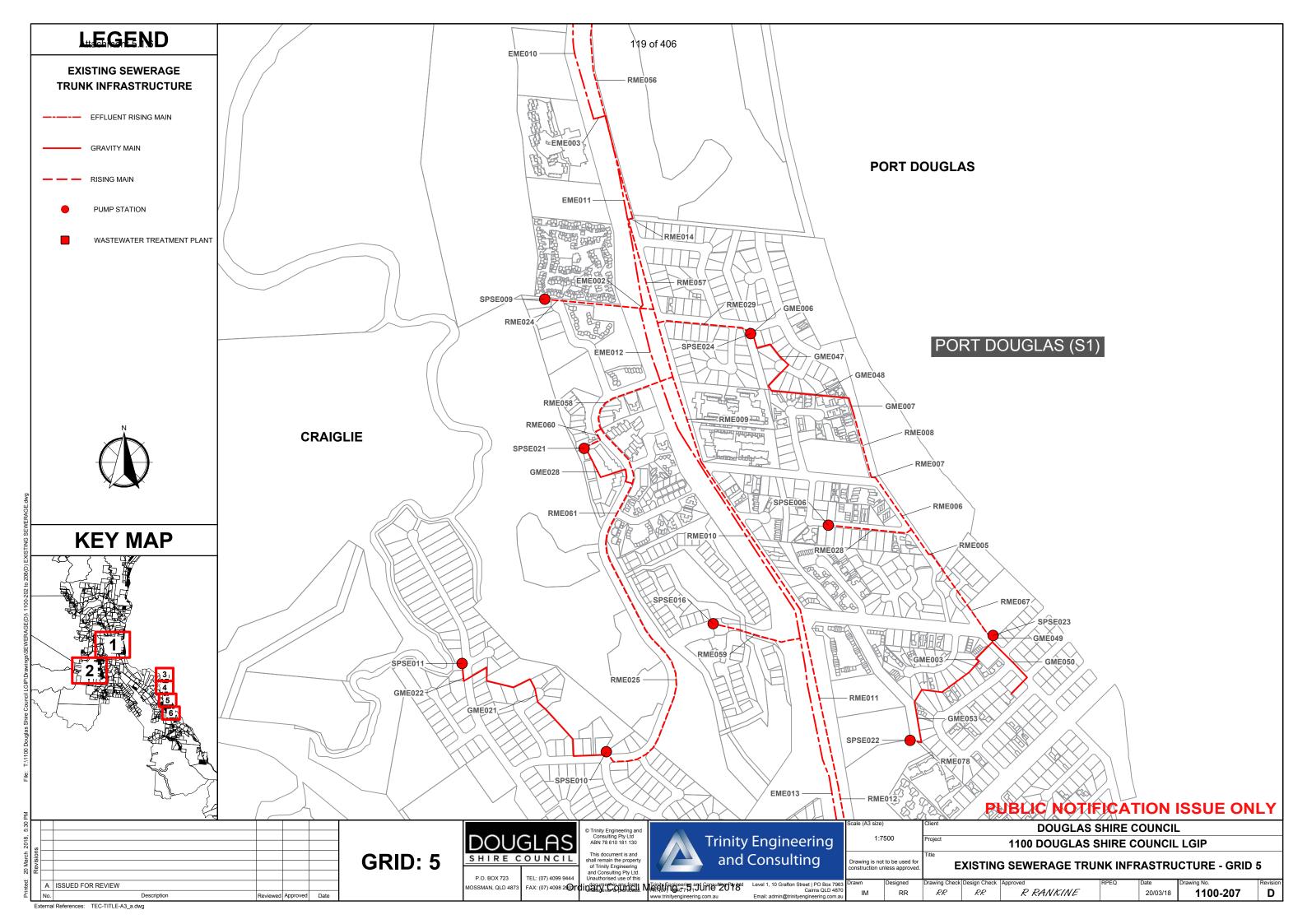


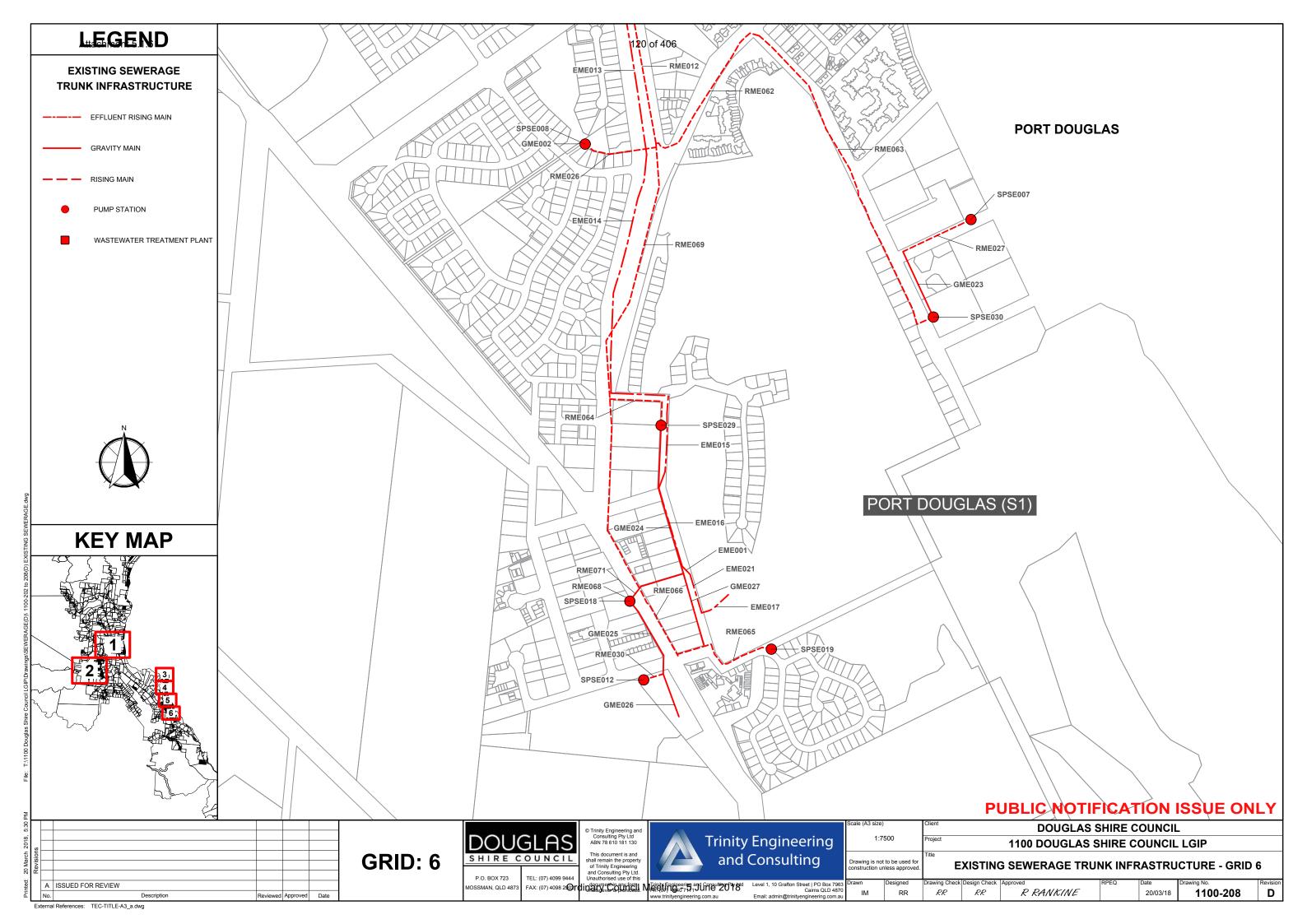


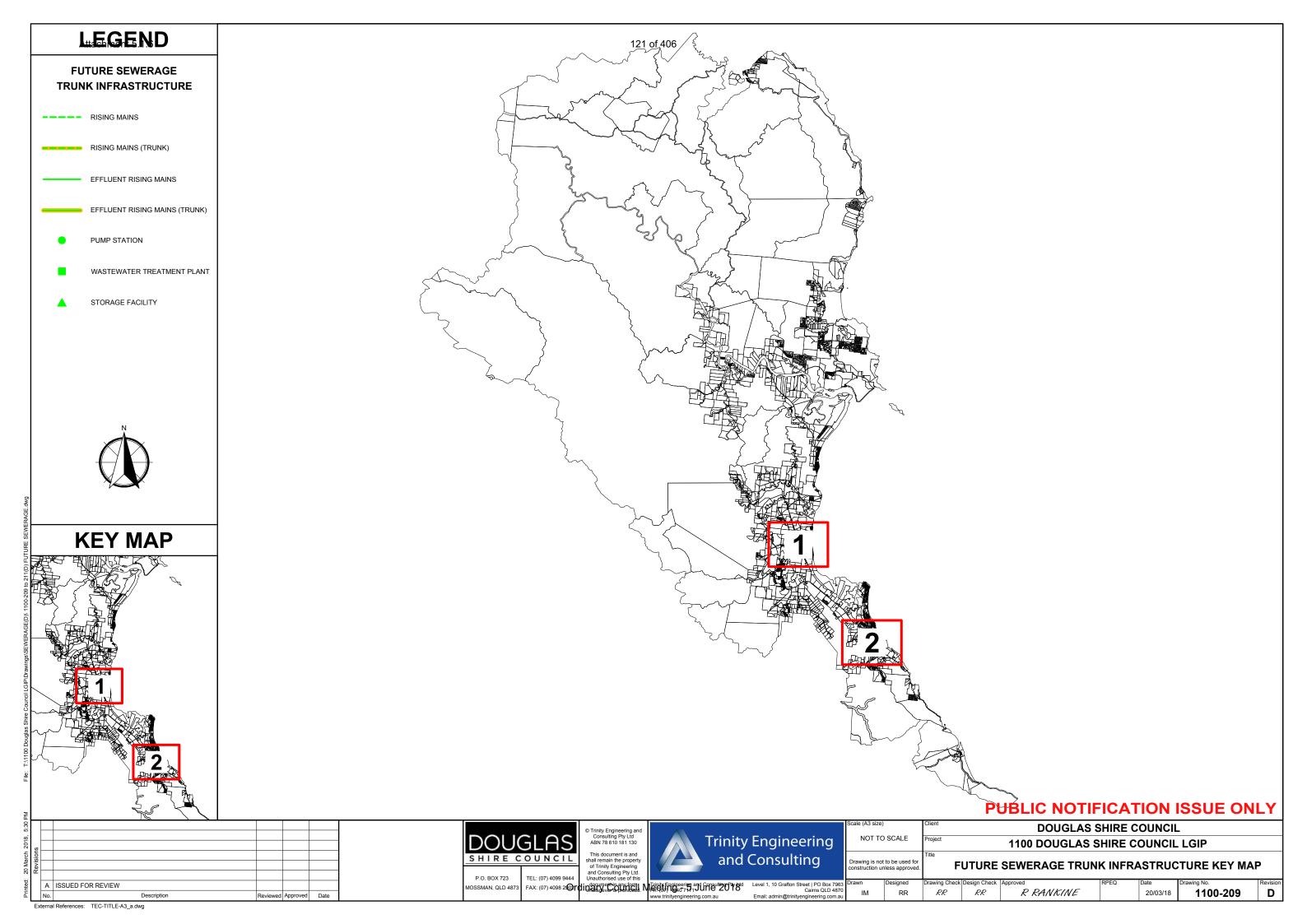


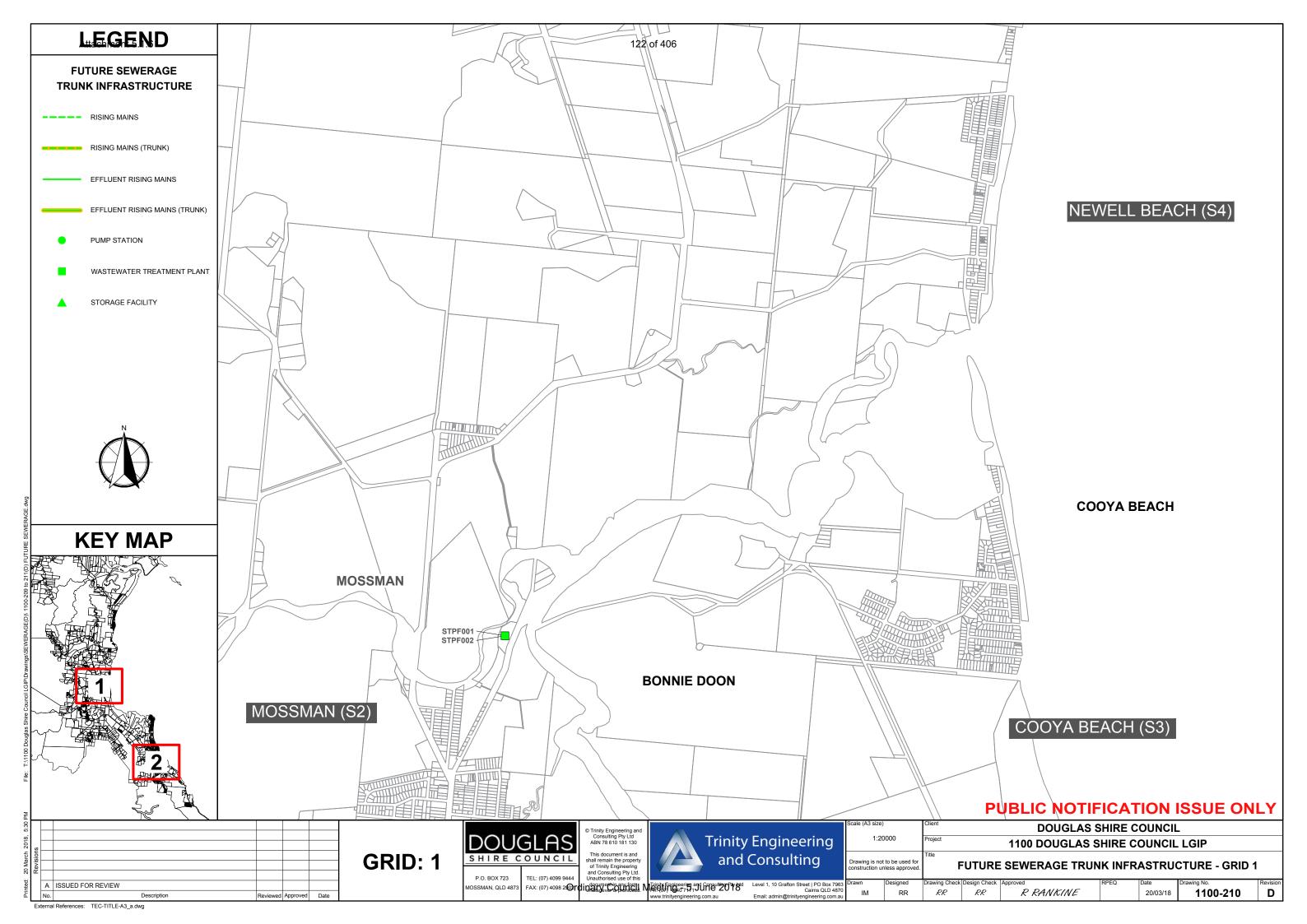


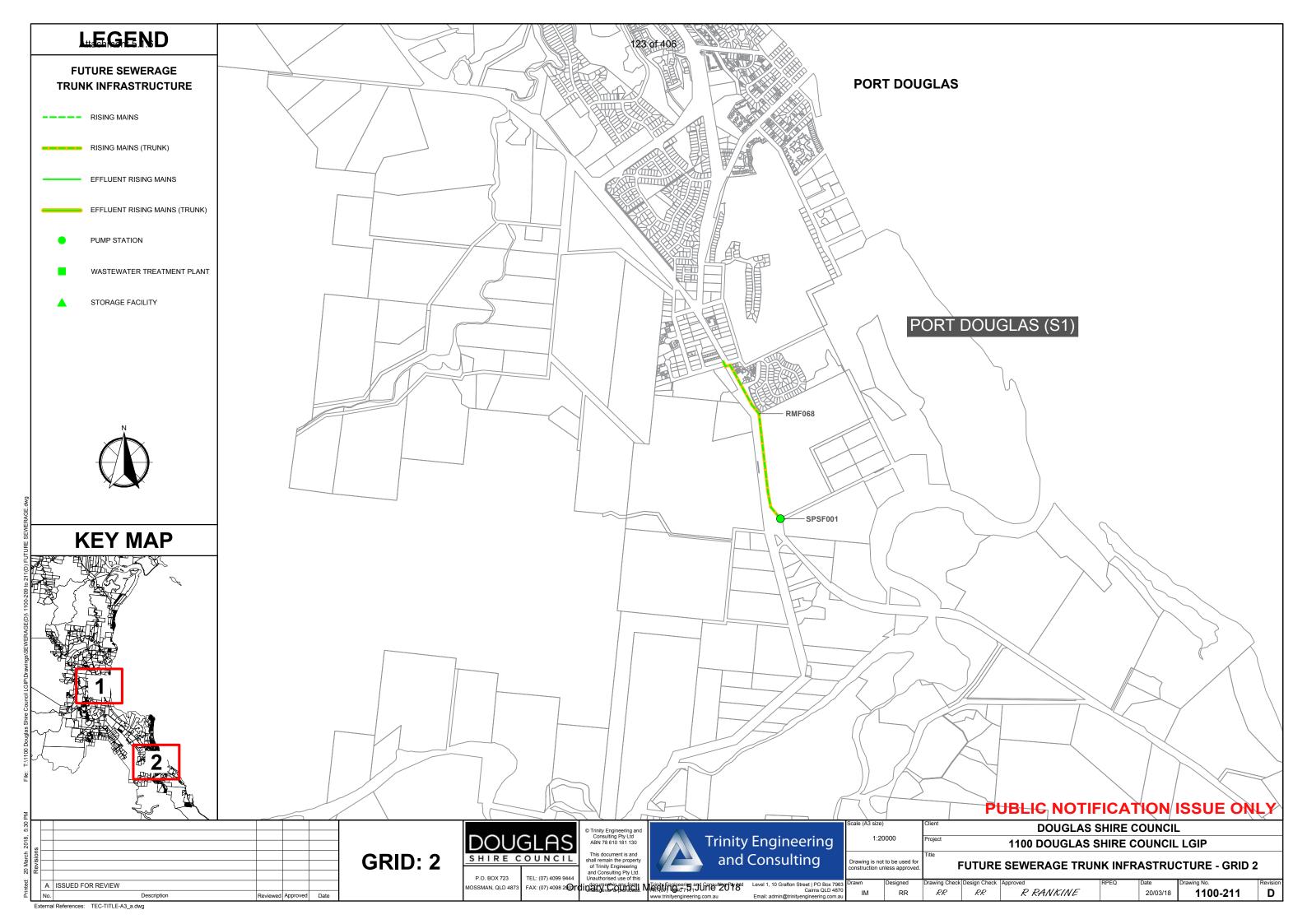












Attachment 5.1.7 124 of 406



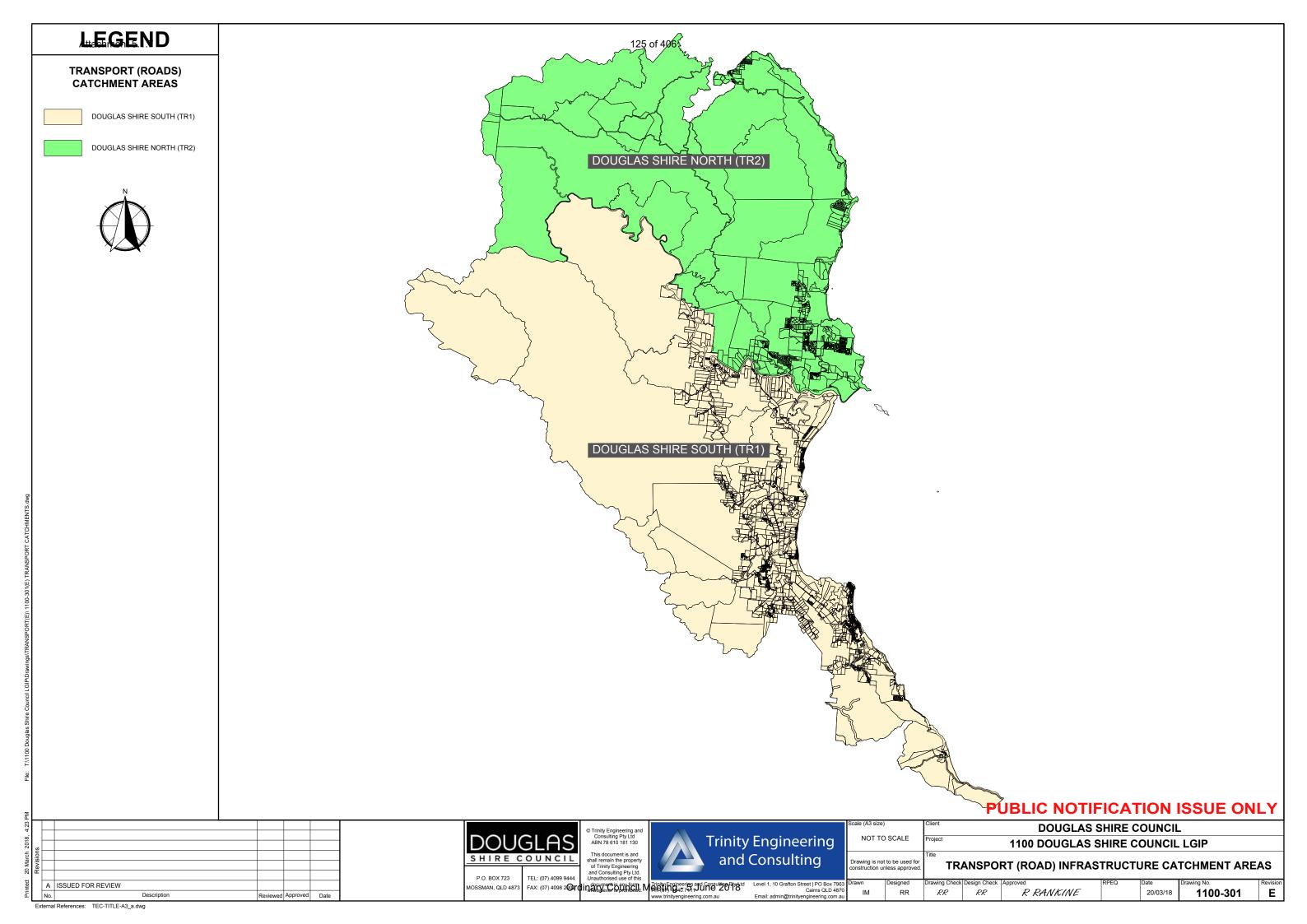


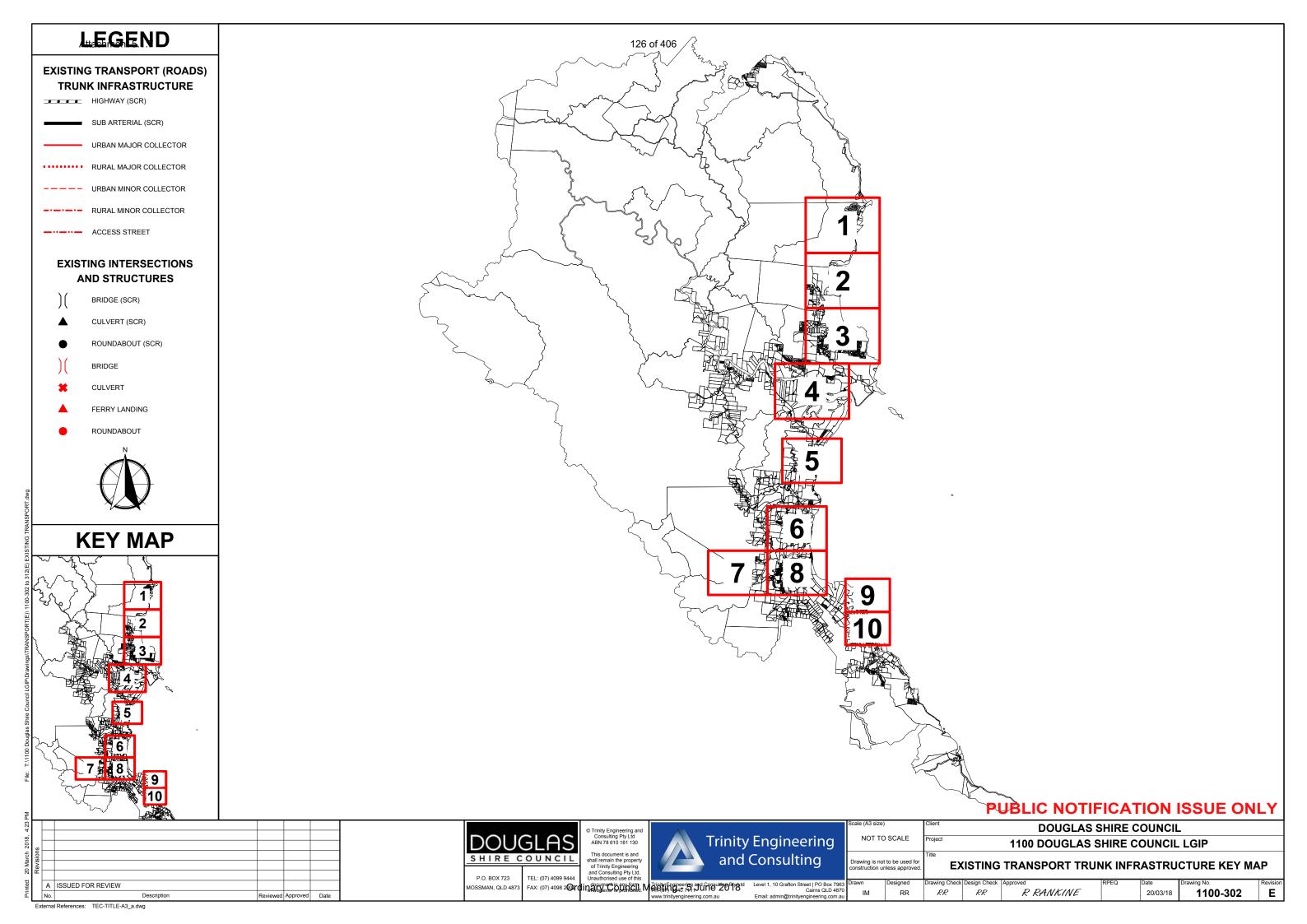
LOCAL GOVERNMENT INFRASTRUCTURE PLANS TRANSPORT (ROAD) TRUNK INFRASTRUCTURE for

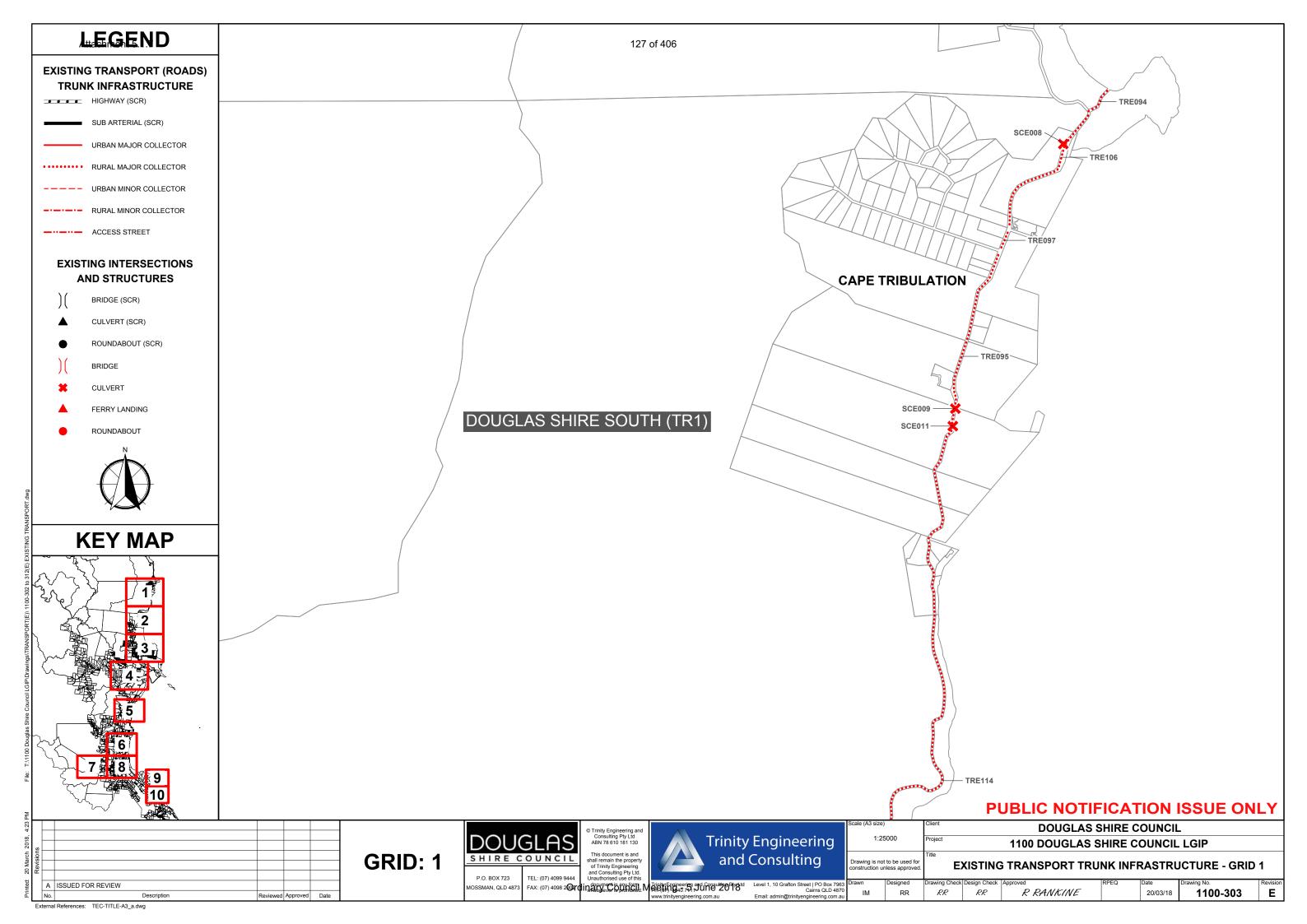
DOUGLAS SHIRE COUNCIL

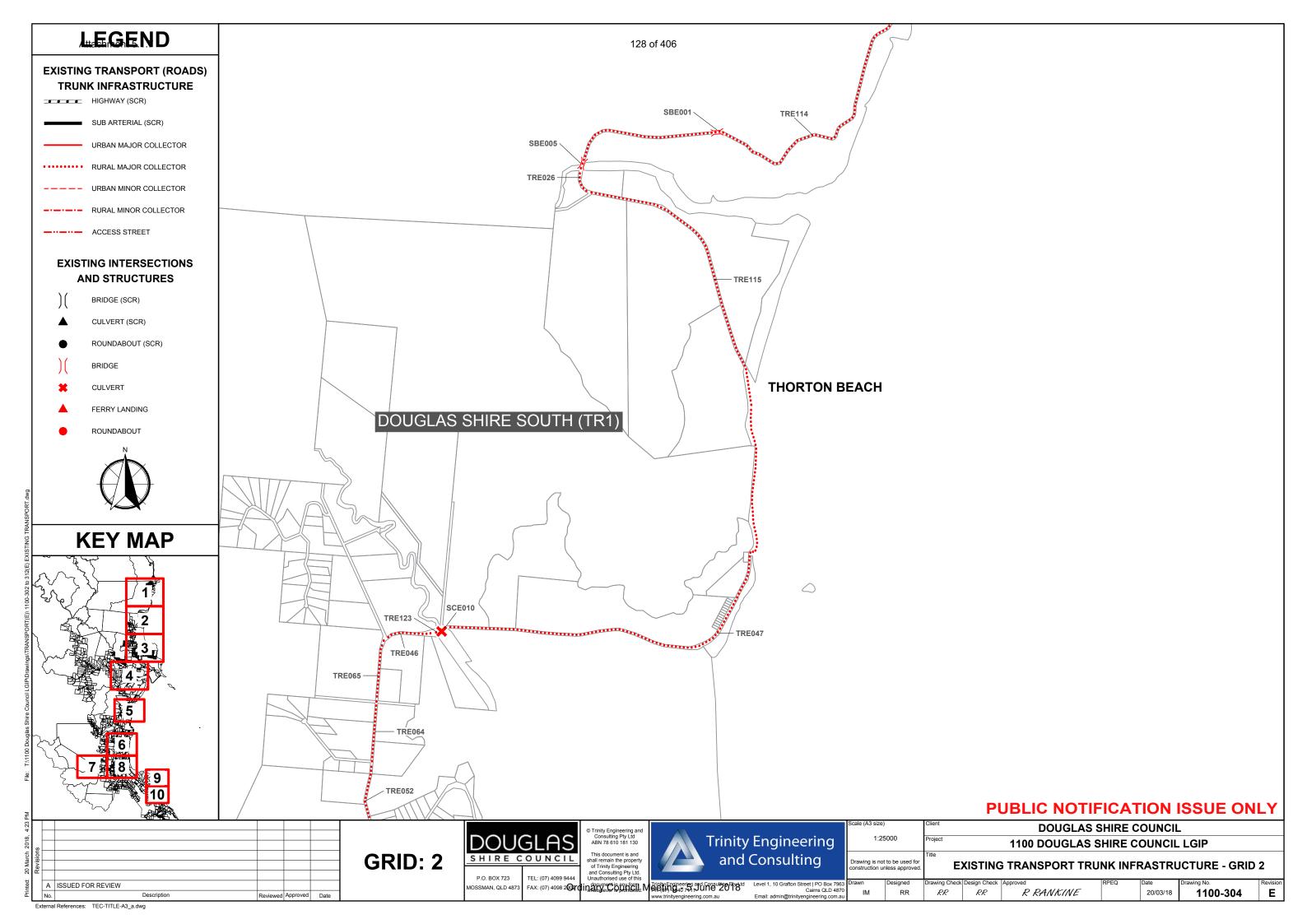
SCHEDULE OF PROJECT DRAWINGS

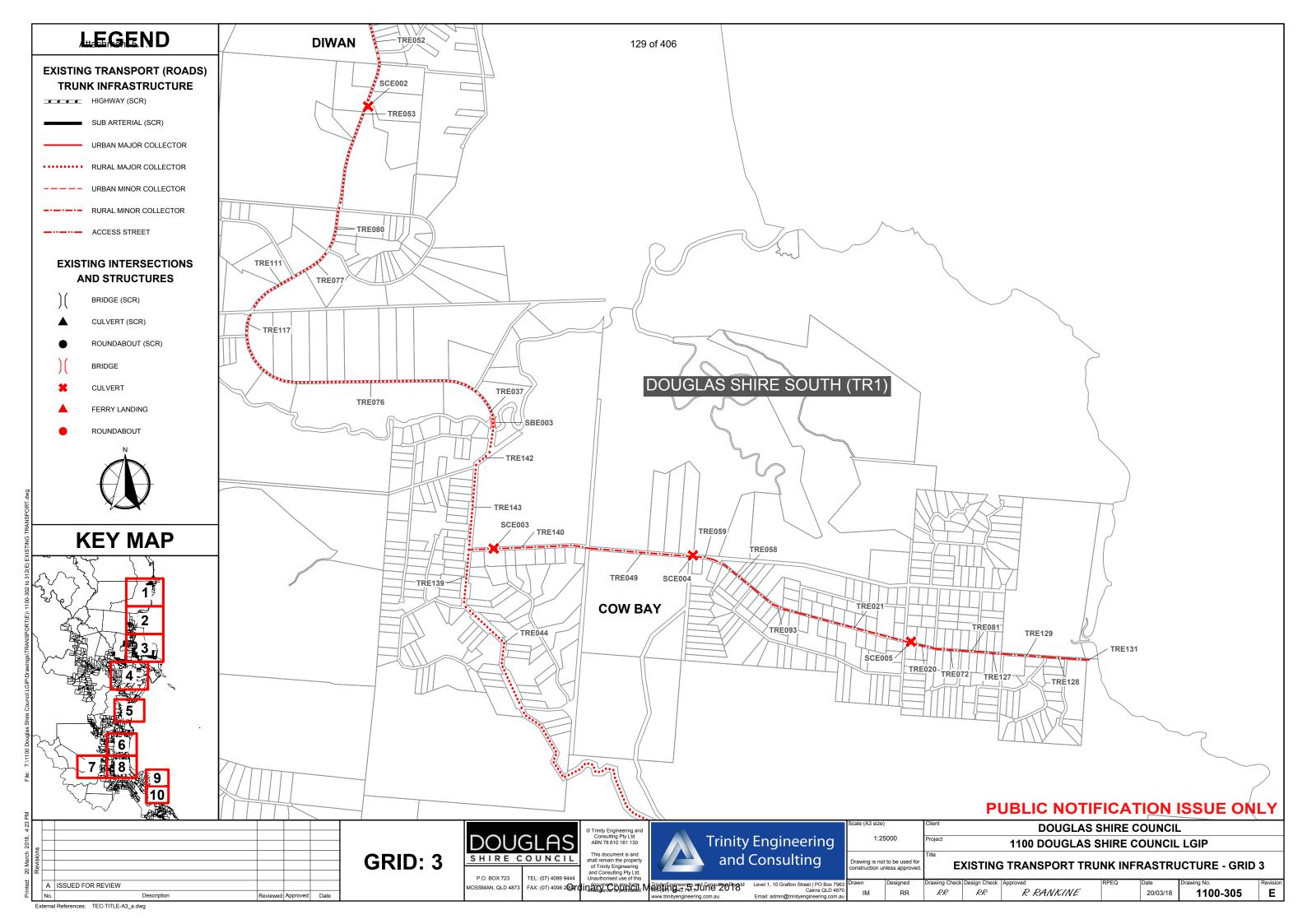
1100-300	DRAWING INDEX
1100-301	TRANSPORT (ROAD) INFRASTRUCTURE CATCHMENT AREAS
1100-302	EXISTING TRANSPORT TRUNK INFRASTRUCTURE KEY MAP
1100-303	EXISTING TRANSPORT TRUNK INFRASTRUCTURE - GRID 1
1100-304	EXISTING TRANSPORT TRUNK INFRASTRUCTURE - GRID 2
1100-305	EXISTING TRANSPORT TRUNK INFRASTRUCTURE - GRID 3
1100-306	FXISTING TRANSPORT TRUNK INFRASTRUCTURE - GRID 4
1100-307	EXISTING TRANSPORT TRUNK INFRASTRUCTURE - GRID 5
1100-308	FXISTING TRANSPORT TRUNK INFRASTRUCTURE - GRID 6
1100-309	FXISTING TRANSPORT TRUNK INFRASTRUCTURE - GRID 7
1100-310	EXISTING TRANSPORT TRUNK INFRASTRUCTURE - GRID 8
1100-311	EXISTING TRANSPORT TRUNK INFRASTRUCTURE - GRID 9
1100-312	FXISTING TRANSPORT TRUNK INFRASTRUCTURE - GRID 10
1100-313	FUTURE TRANSPORT TRUNK INFRASTRUCTURE KEY MAP
1100-314	FUTURE TRANSPORT TRUNK INFRASTRUCTURE - GRID 1
1100-315	FUTURE TRANSPORT TRUNK INFRASTRUCTURE – GRID 2
1100-316	FUTURE TRANSPORT TRUNK INFRASTRUCTURE – GRID 3
1100-317	FUTURE TRANSPORT TRUNK INFRASTRUCTURE – GRID 4
1100 017	TOTOIL TIVITOLORY TROUBLE OND T

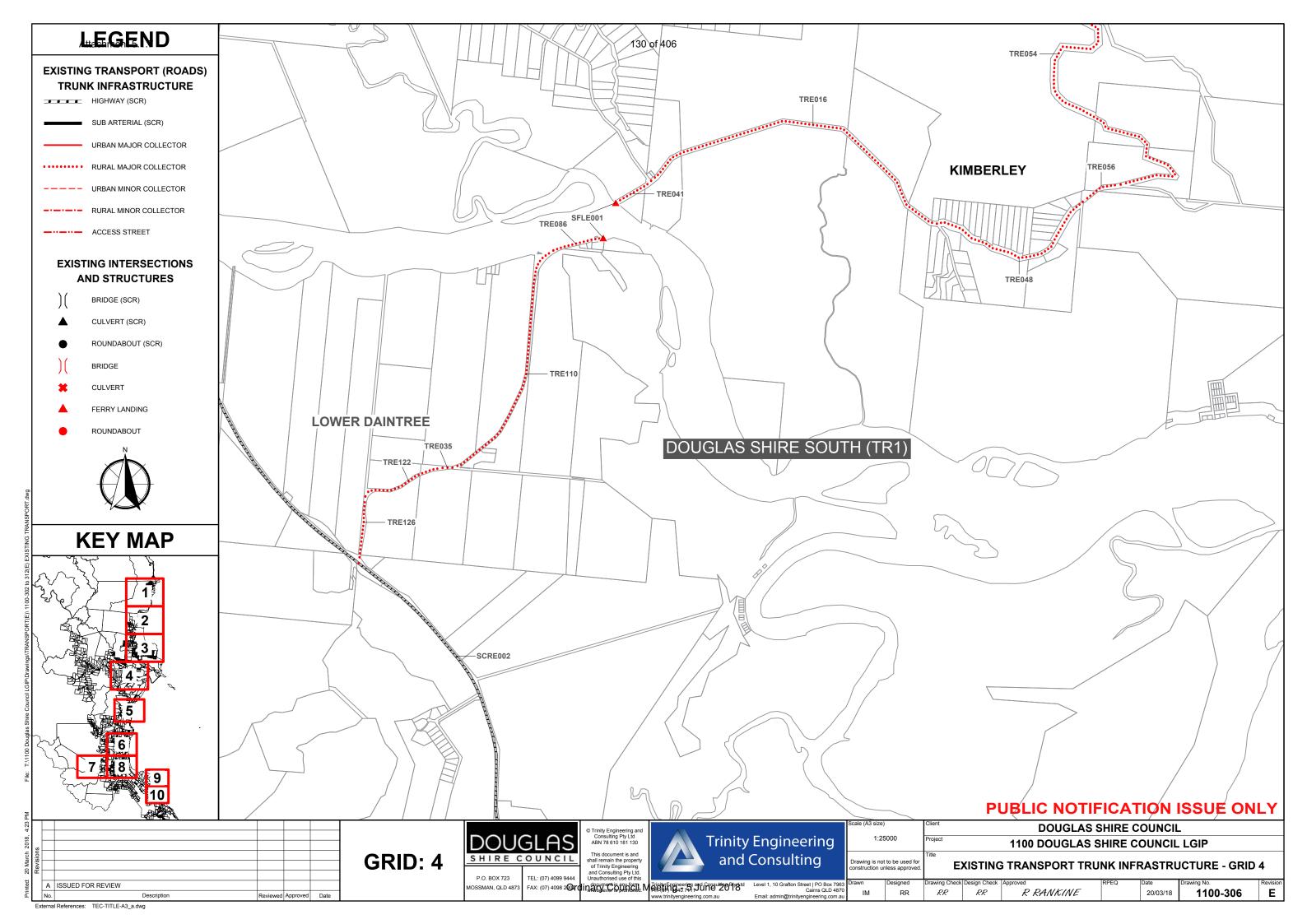


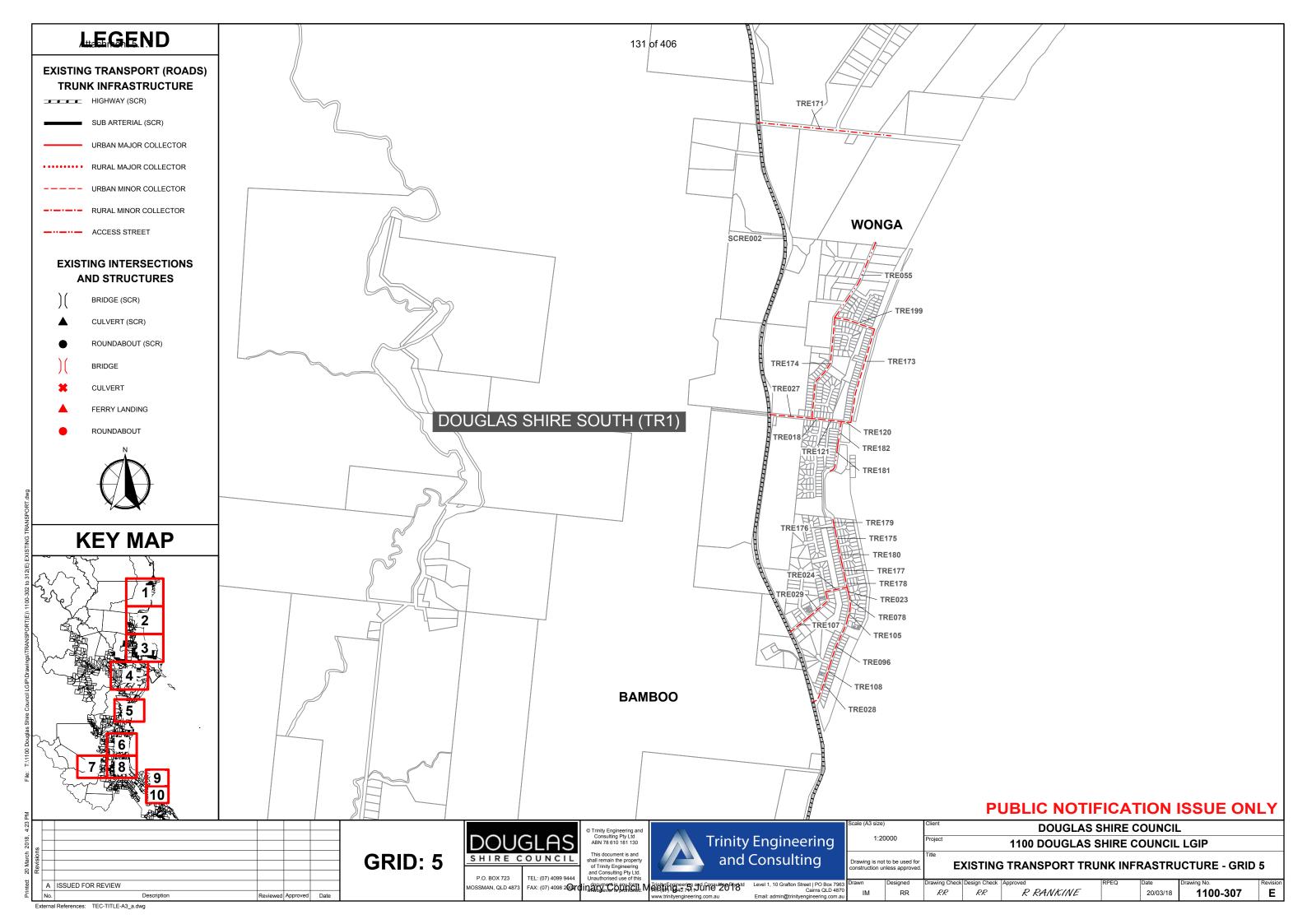


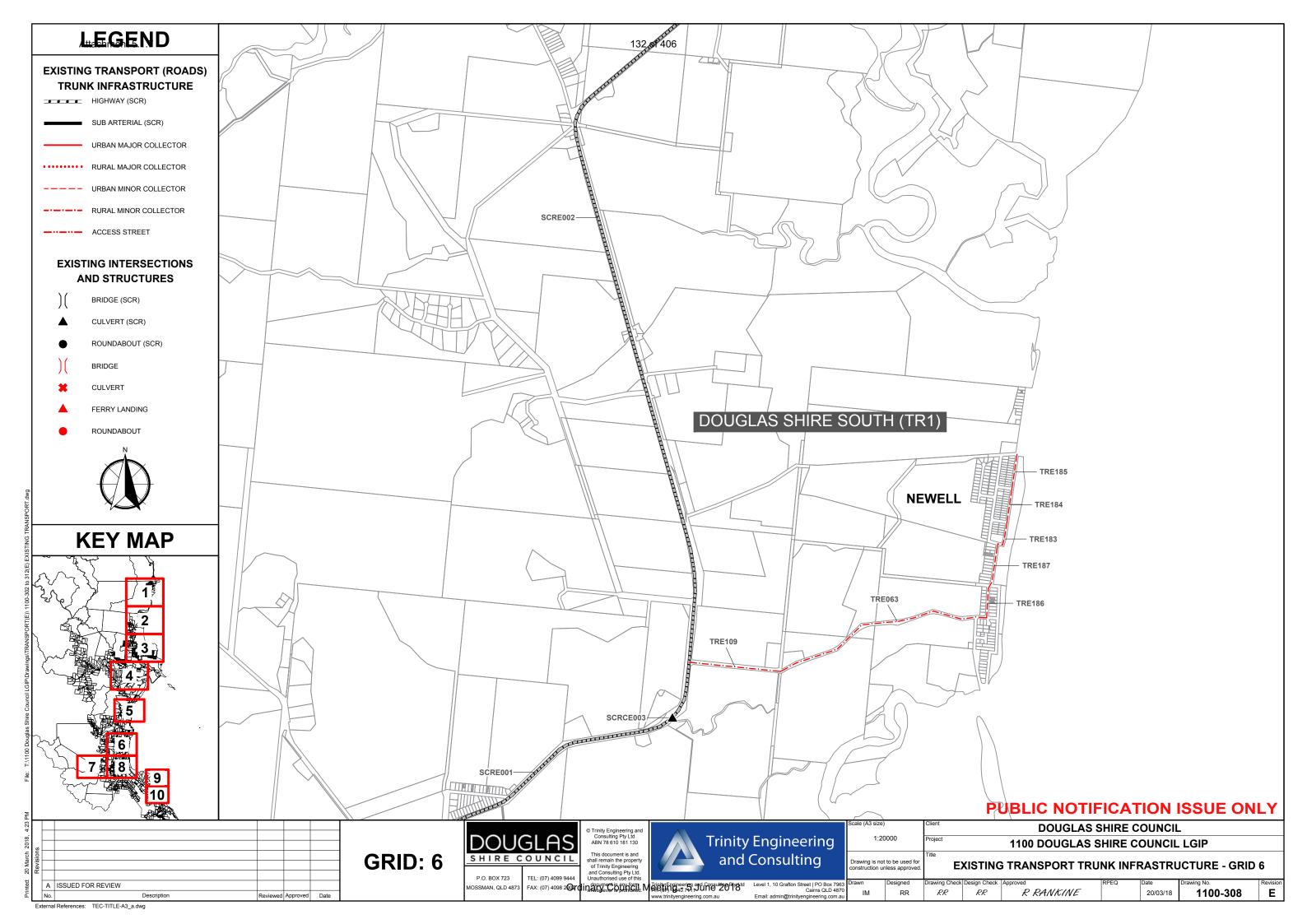


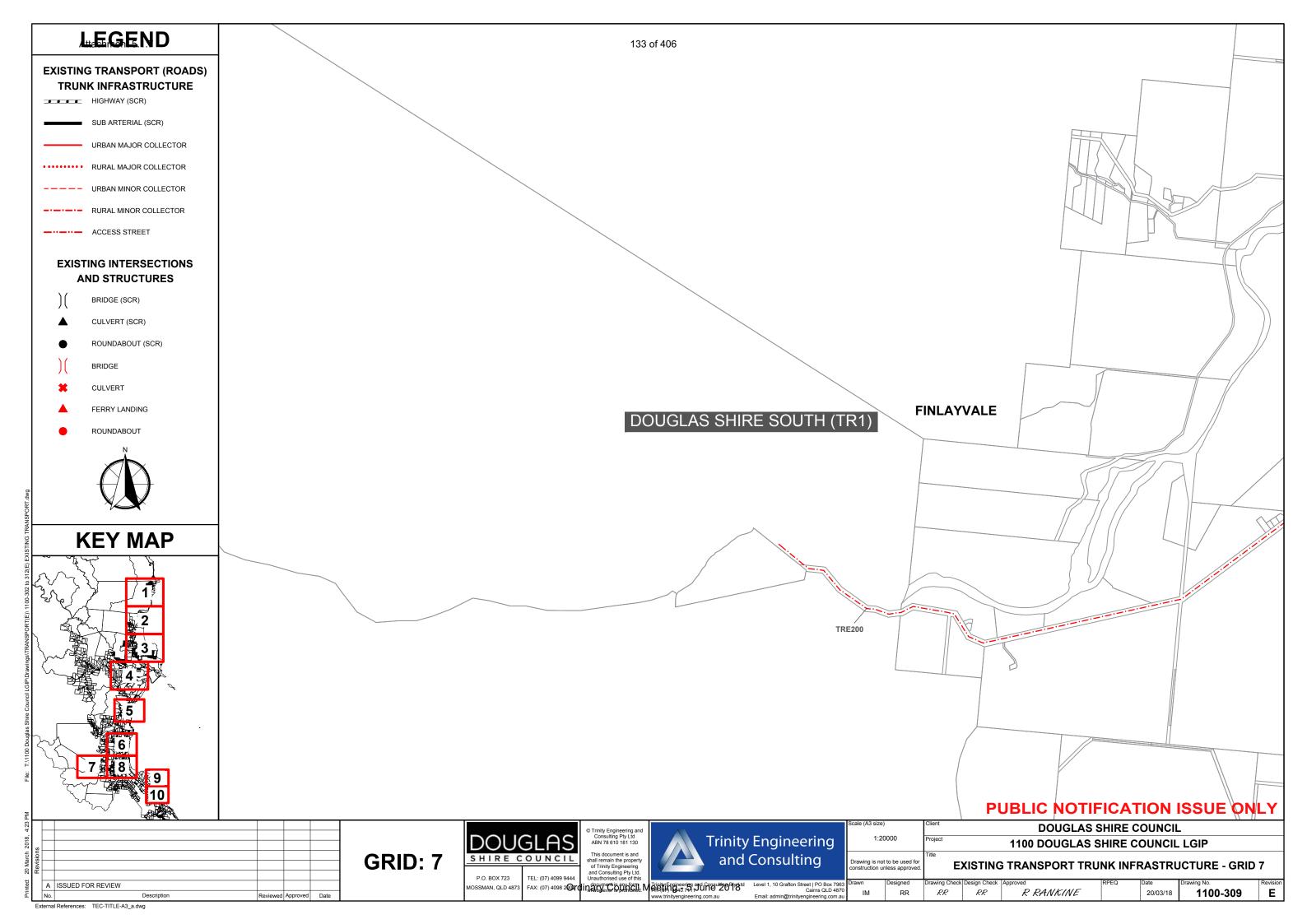


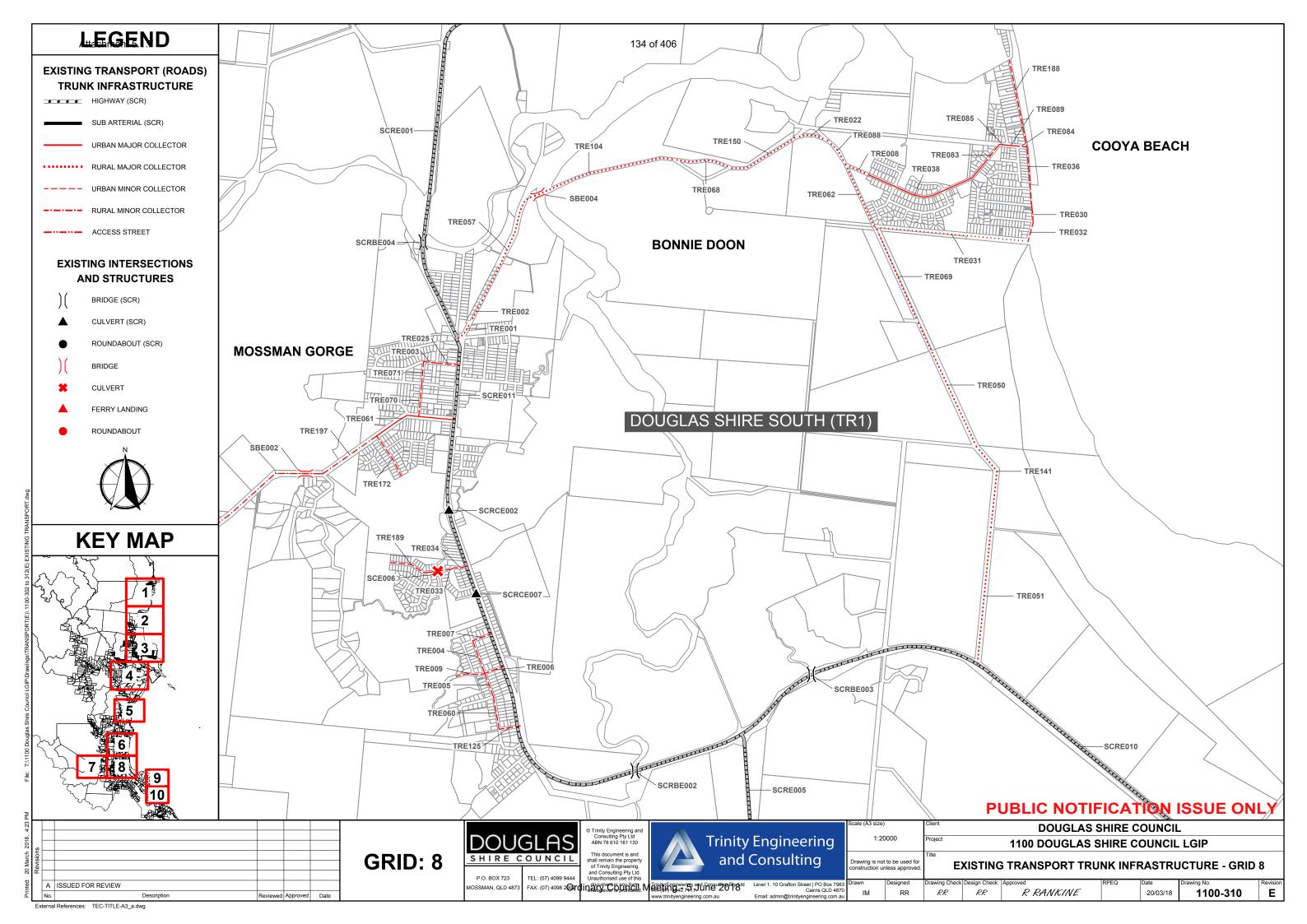


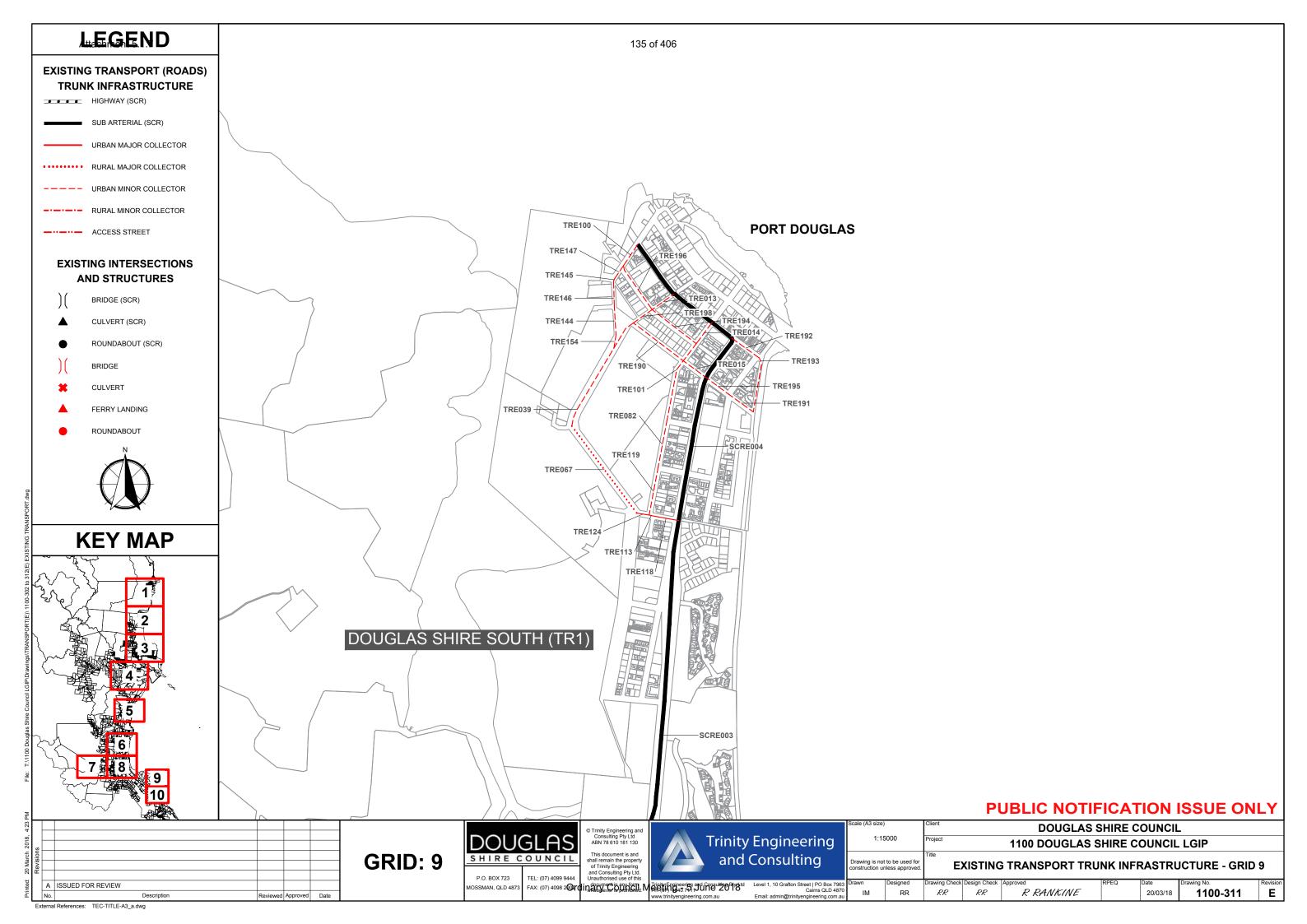


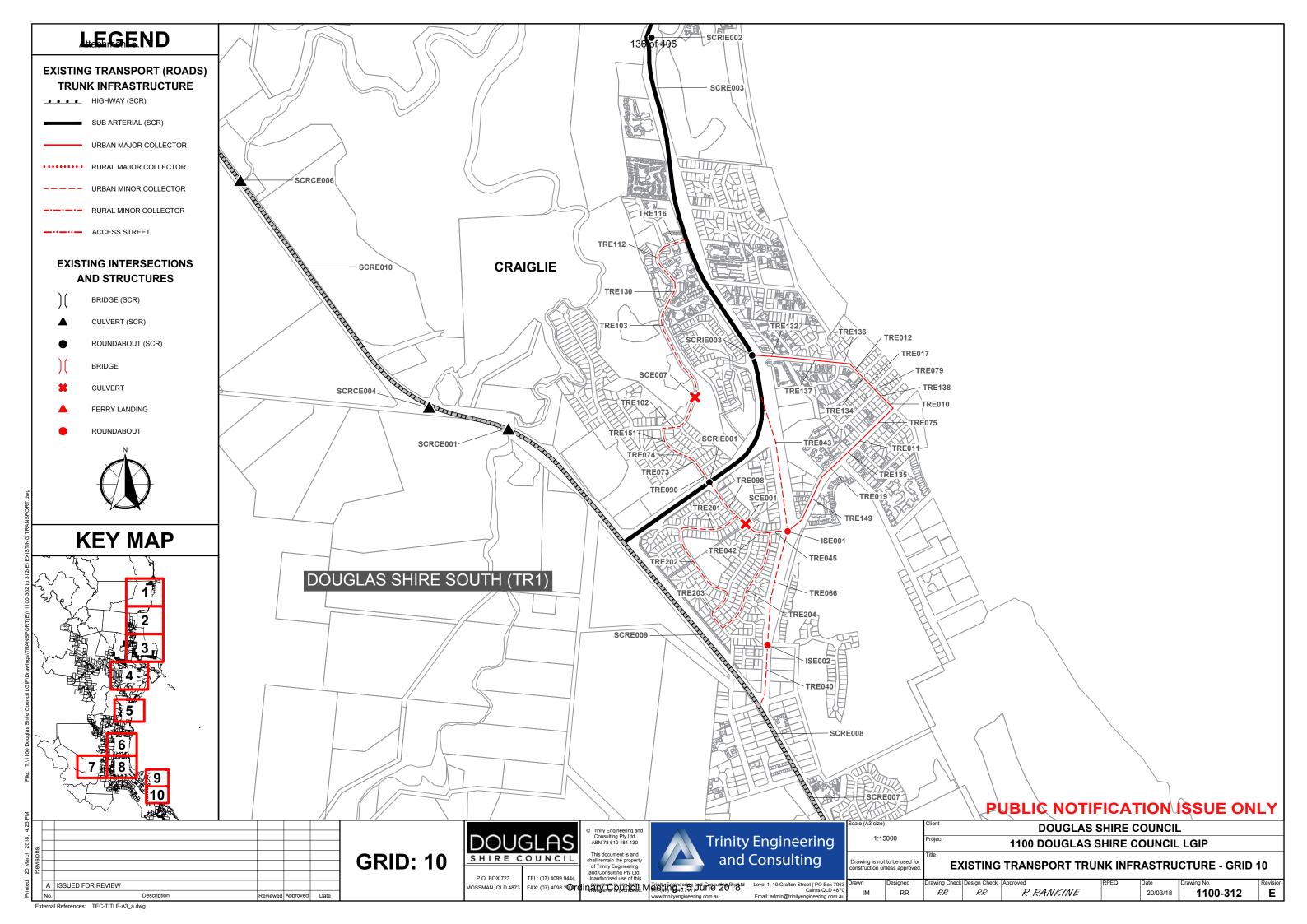


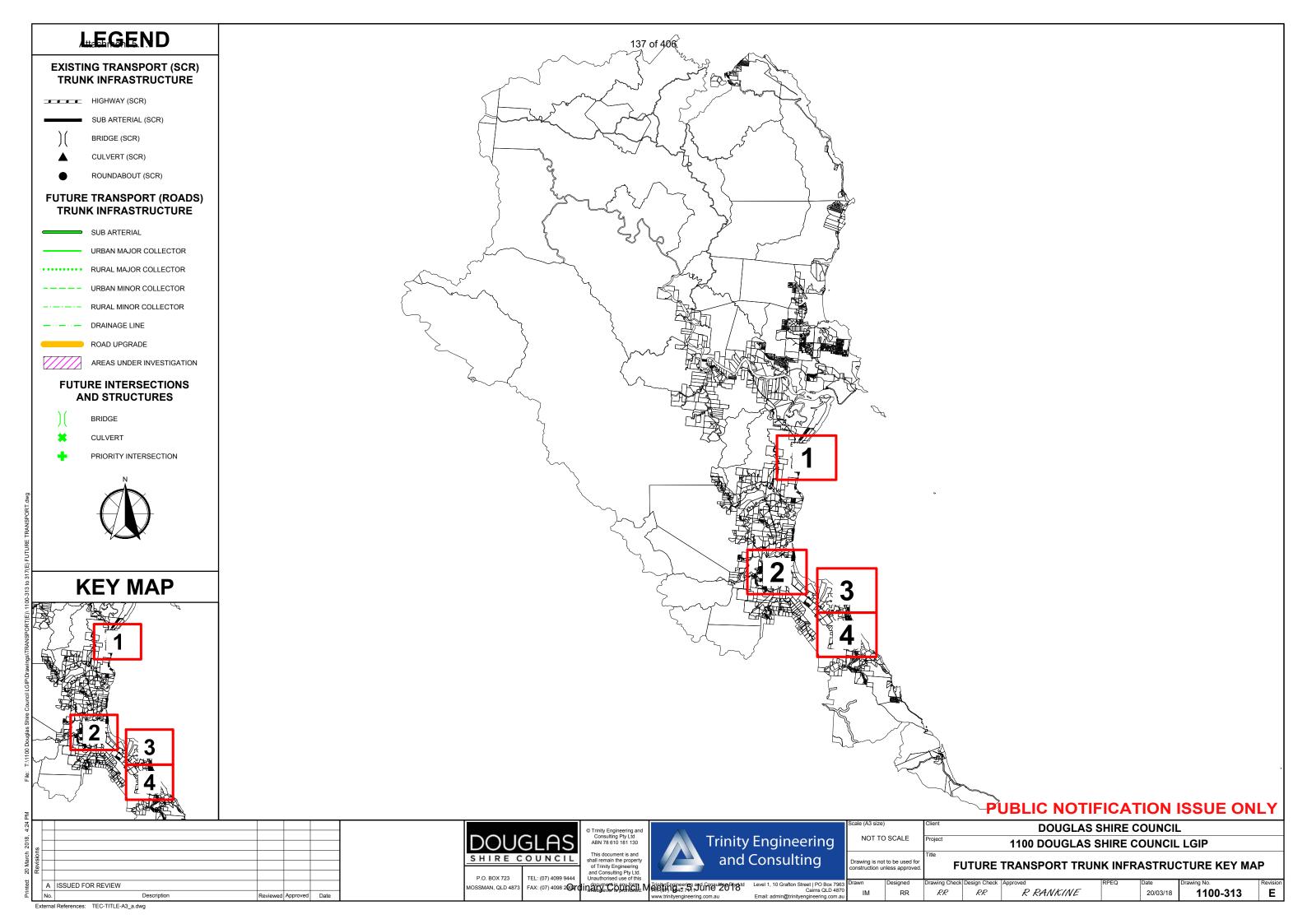


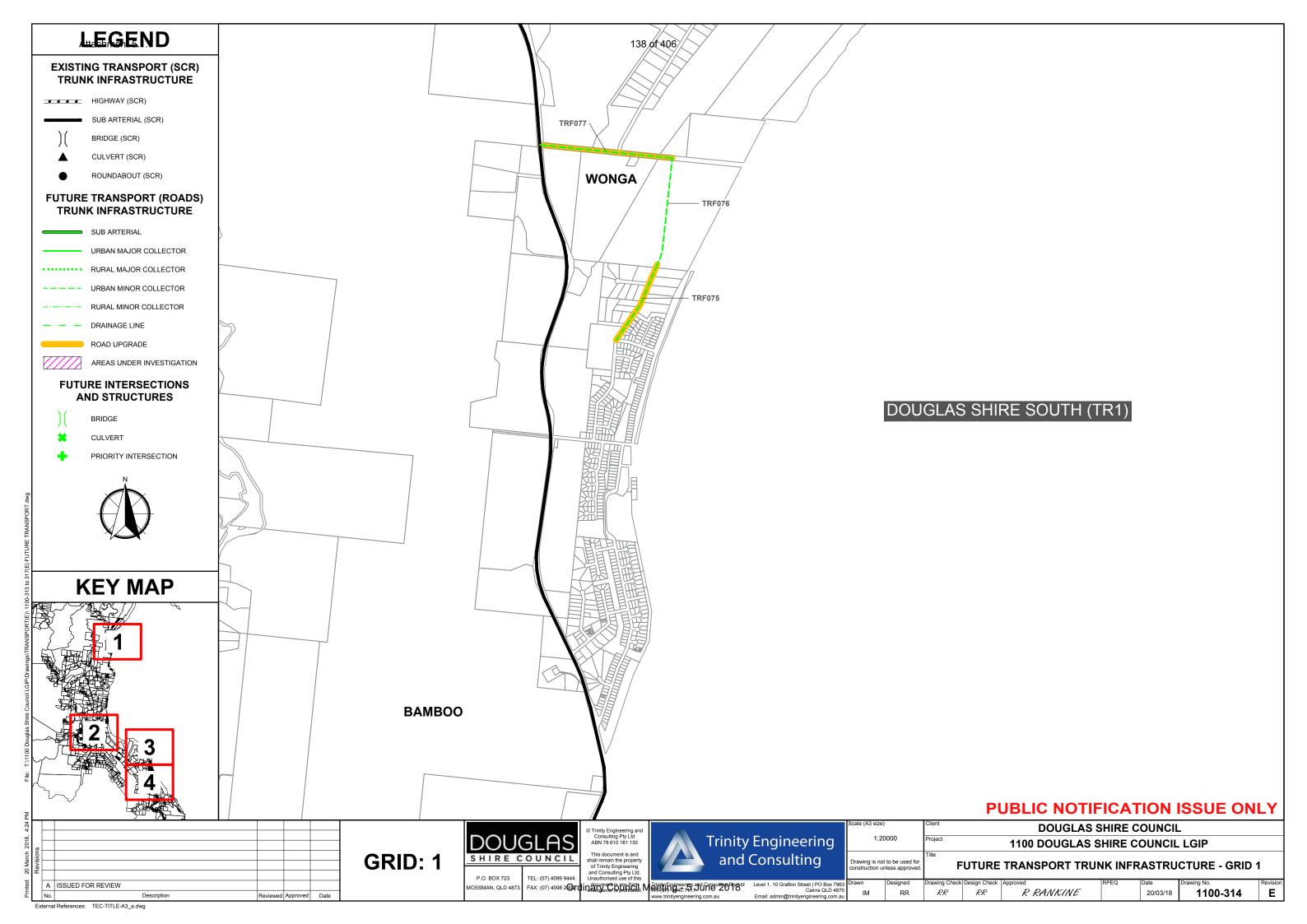


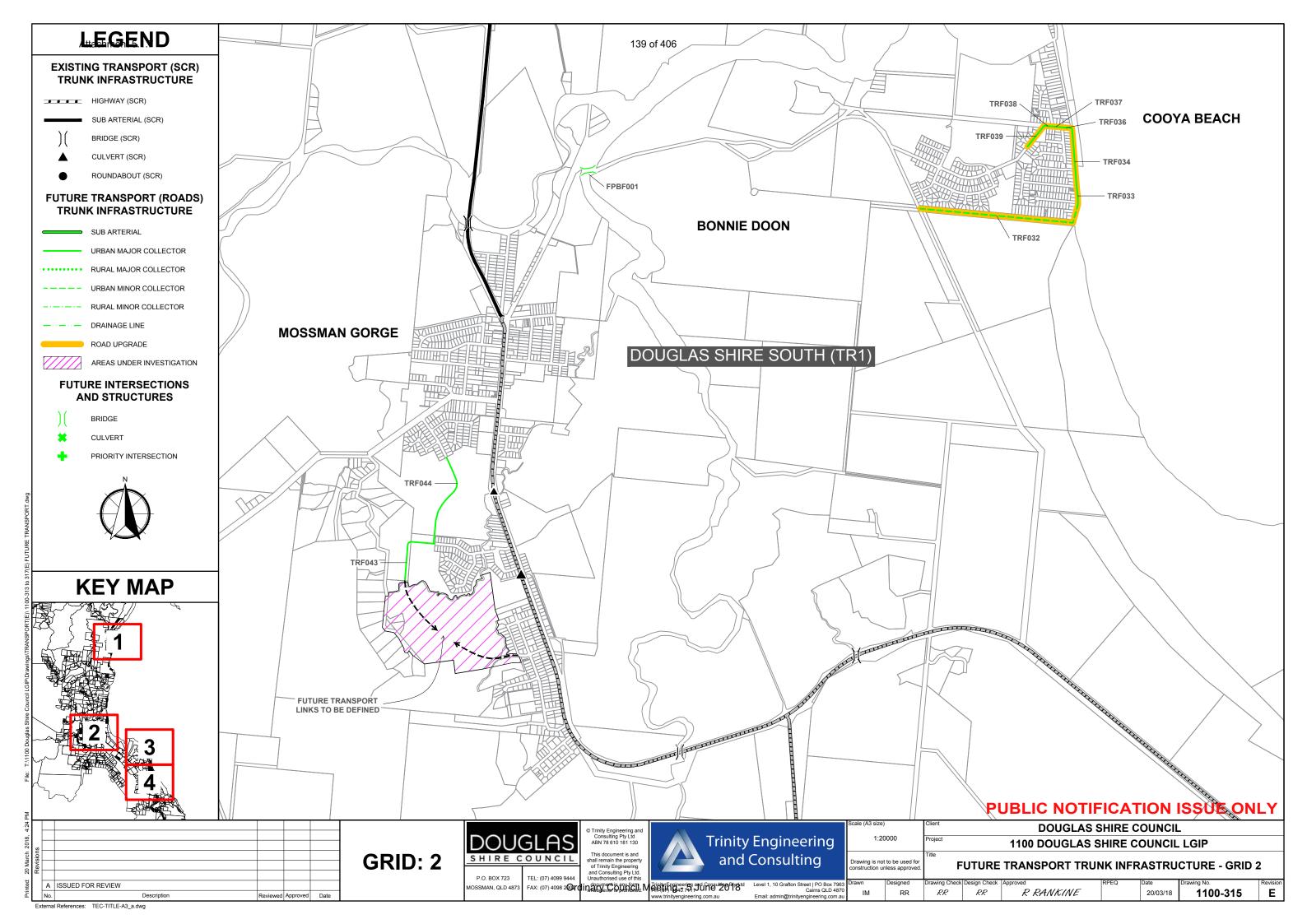


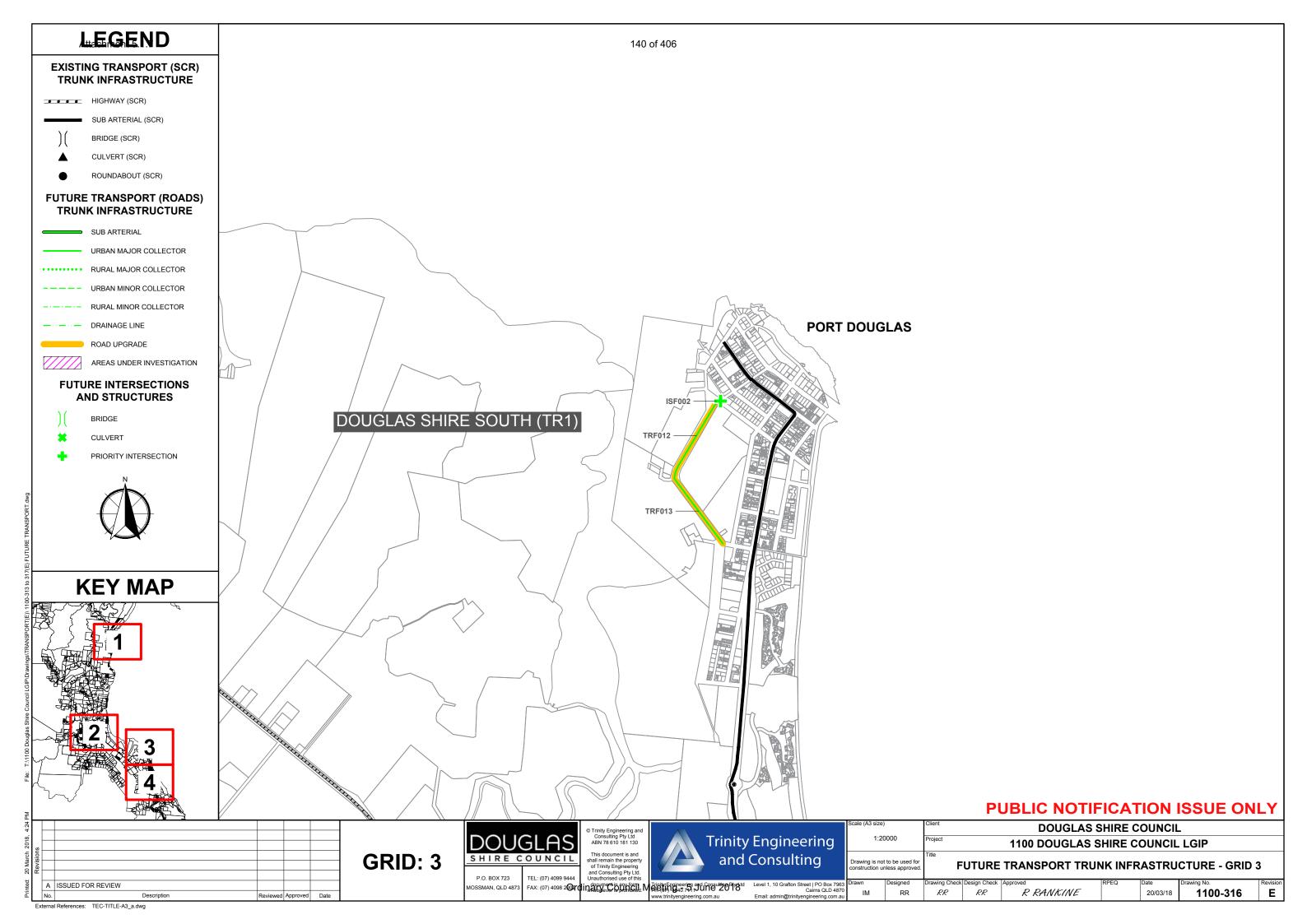


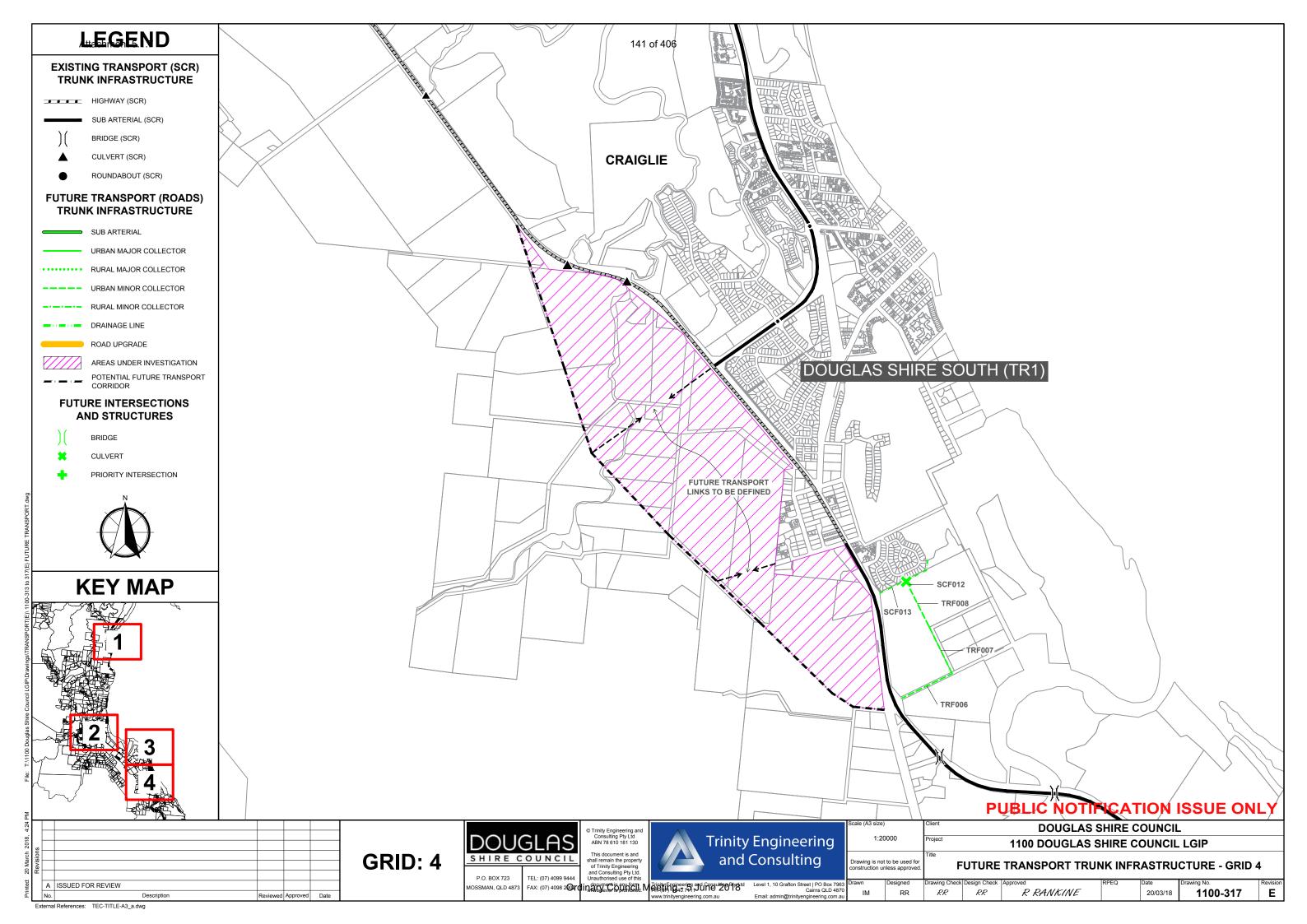
















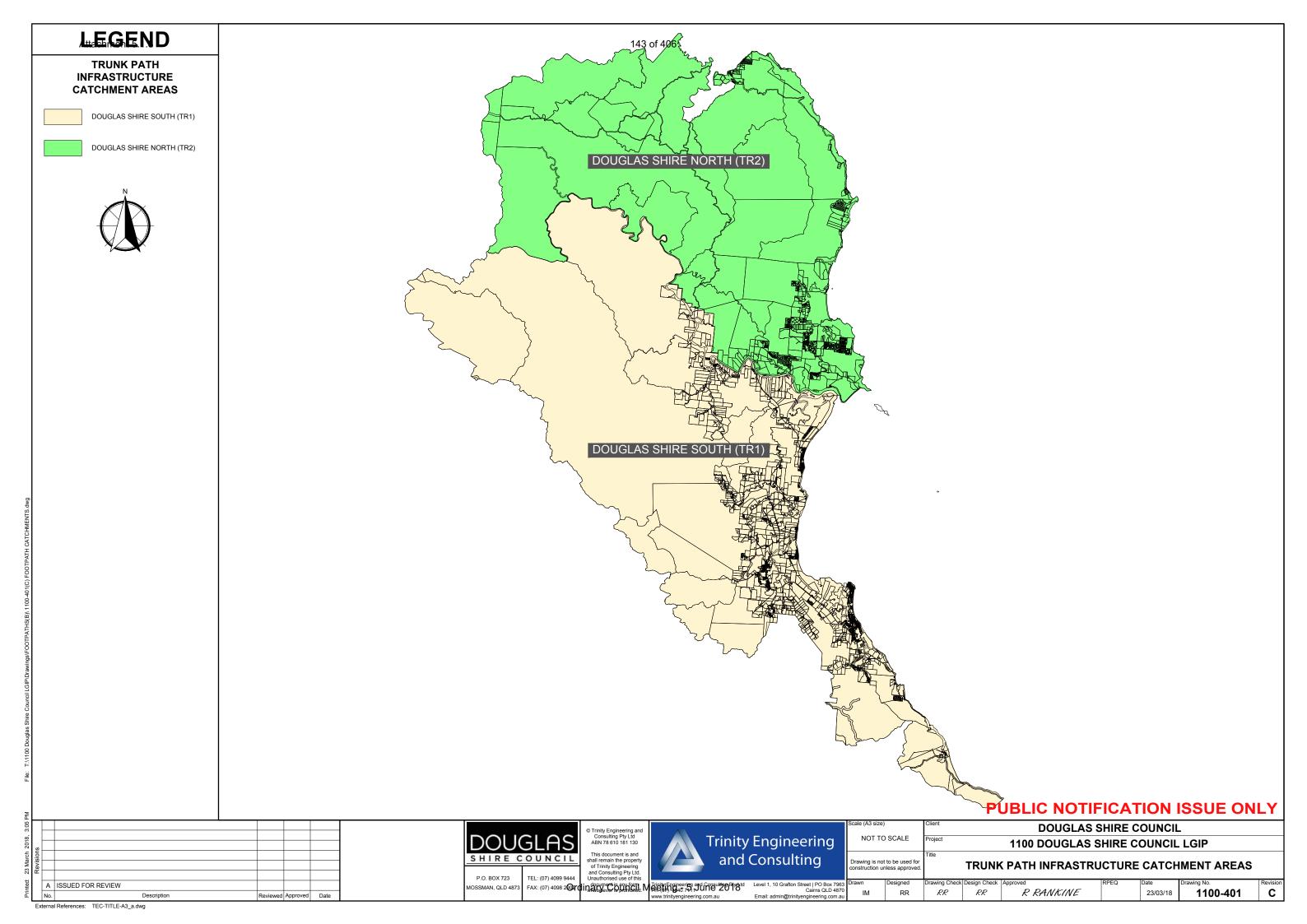
LOCAL GOVERNMENT INFRASTRUCTURE PLANS (TRUNK PATH INFRASTRUCTURE)

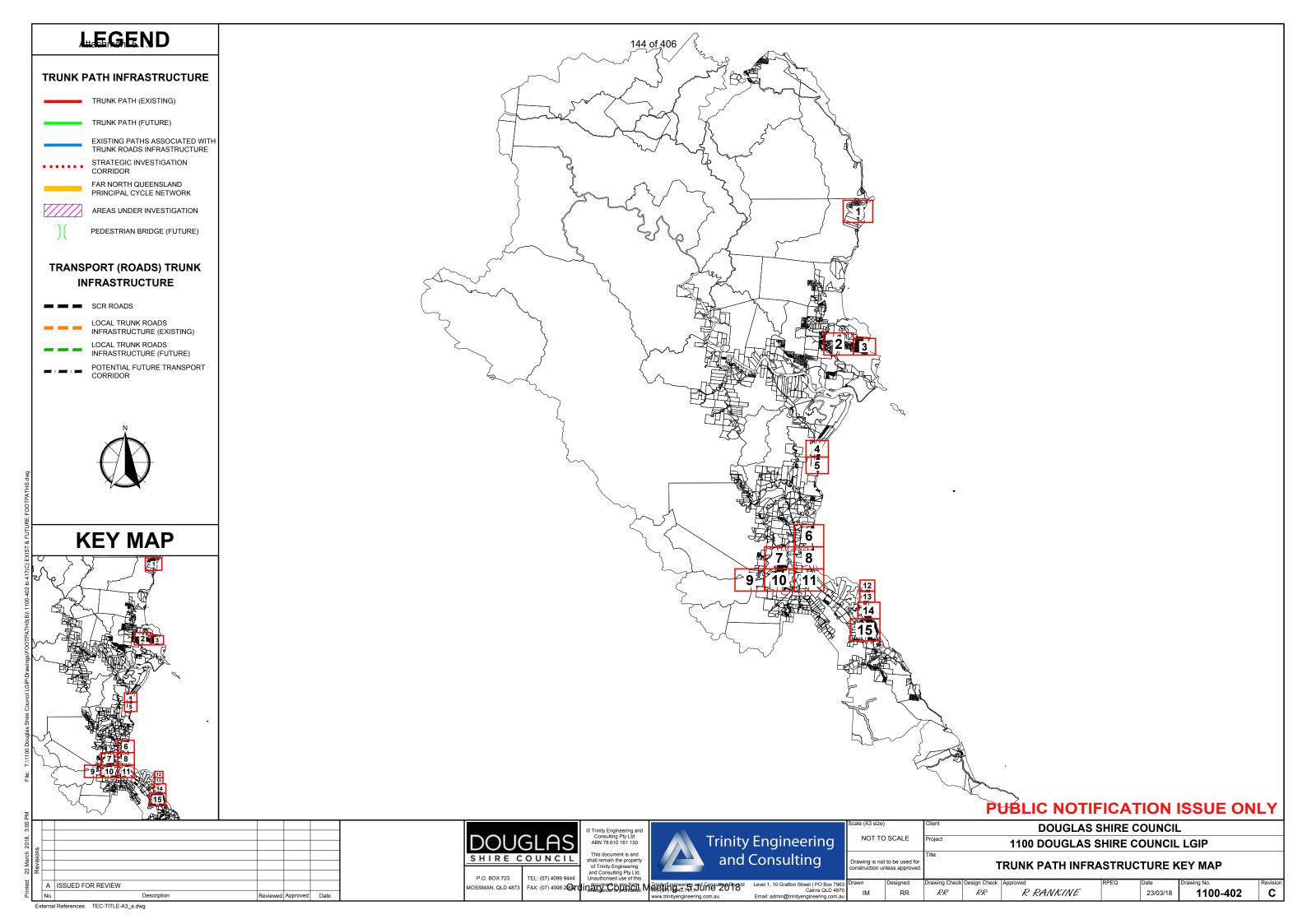
for

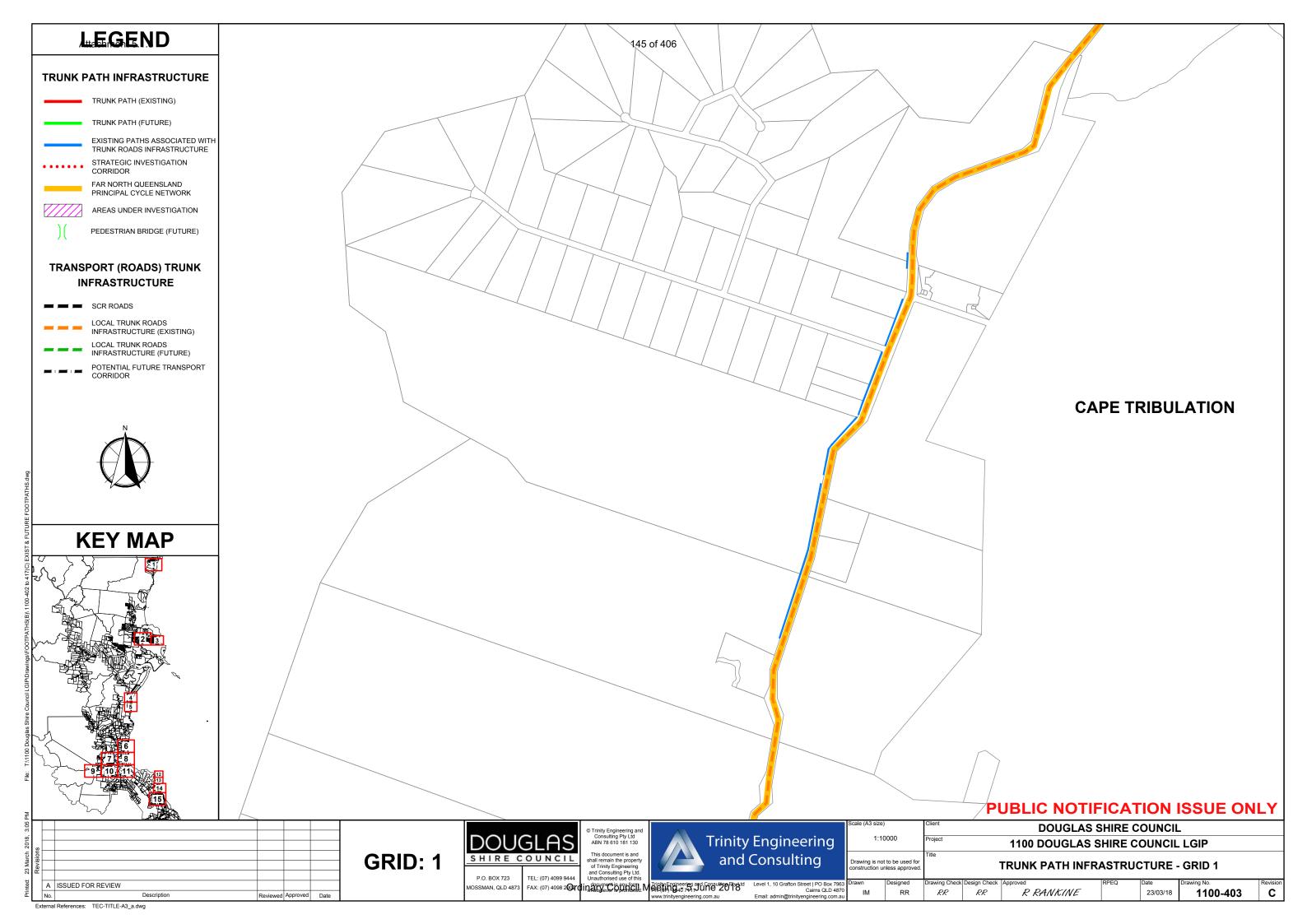
DOUGLAS SHIRE COUNCIL

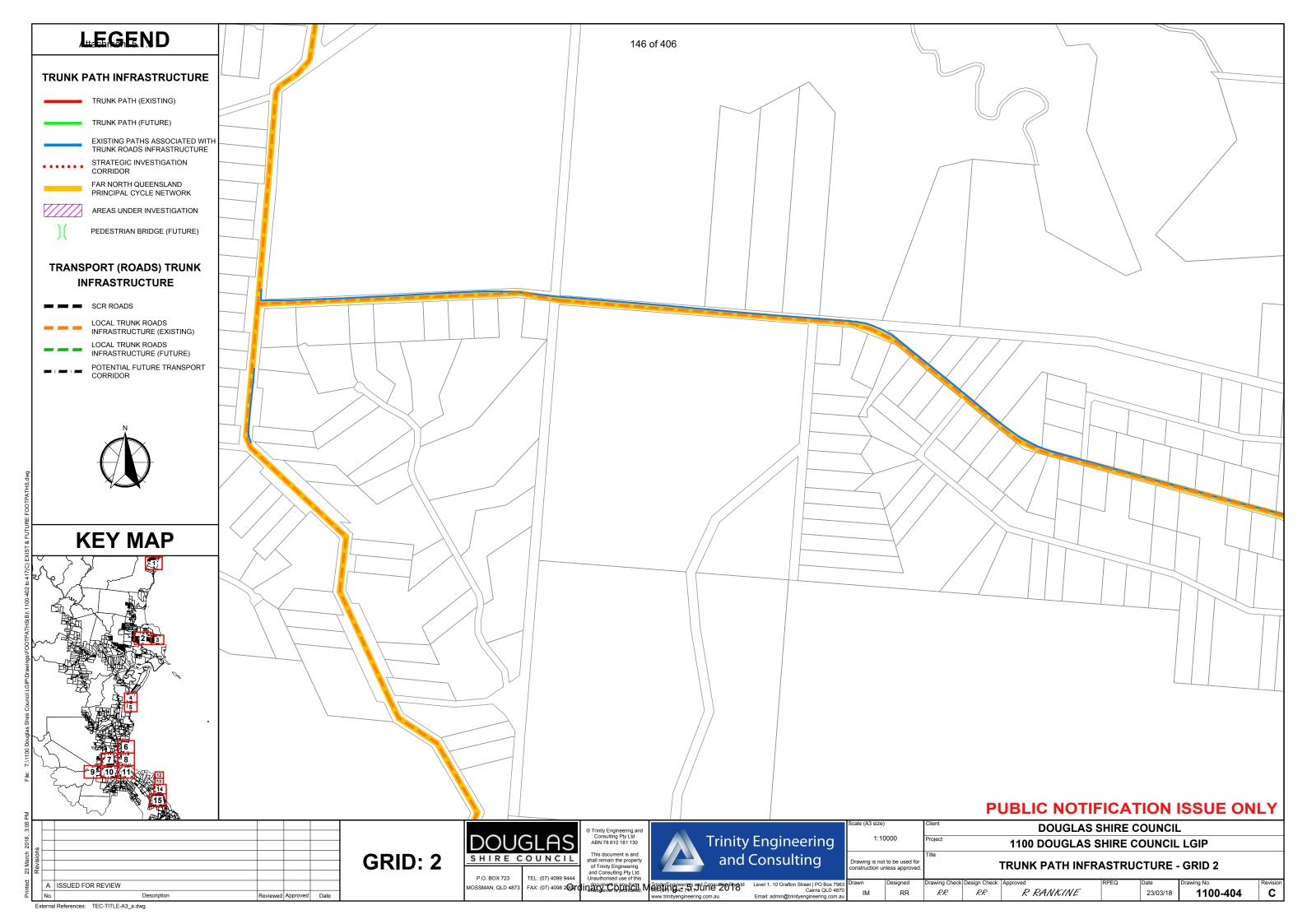
SCHEDULE OF PROJECT DRAWINGS

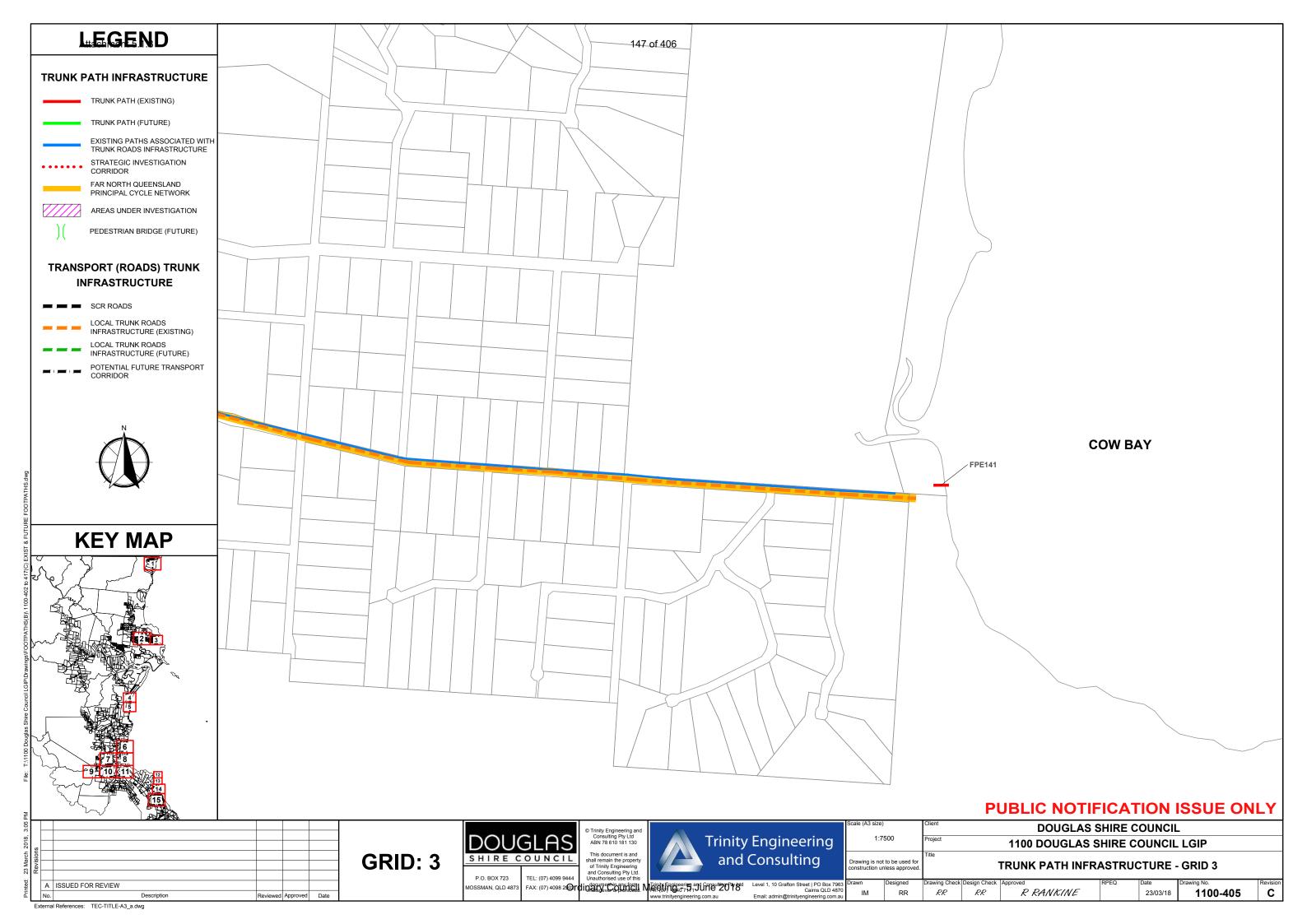
1100-400 1100-401	DRAWIN TRUNK		ex Infrastructur	F CA	АТСНМІ	-NT	ARFAS
1100-402			INFRASTRUCTUR				71112710
1100-403			INFRASTRUCTUR				
1100-404	TRUNK	PATH	INFRASTRUCTUR	Ε –	GRID	2	
1100-405	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	3	
1100-406	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	4	
1100-407	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	5	
1100–408	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	6	
1100-409	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	7	
1100-410	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	8	
1100-411	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	9	
1100-412	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	10	
1100-413	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	11	
1100-414	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	12	
1100-415	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	13	
1100-416	TRUNK	PATH	INFRASTRUCTUR	E –	GRID	14	
1100-417	TRUNK	PATH	INFRASTRUCTUR	Ε –	GRID	15	

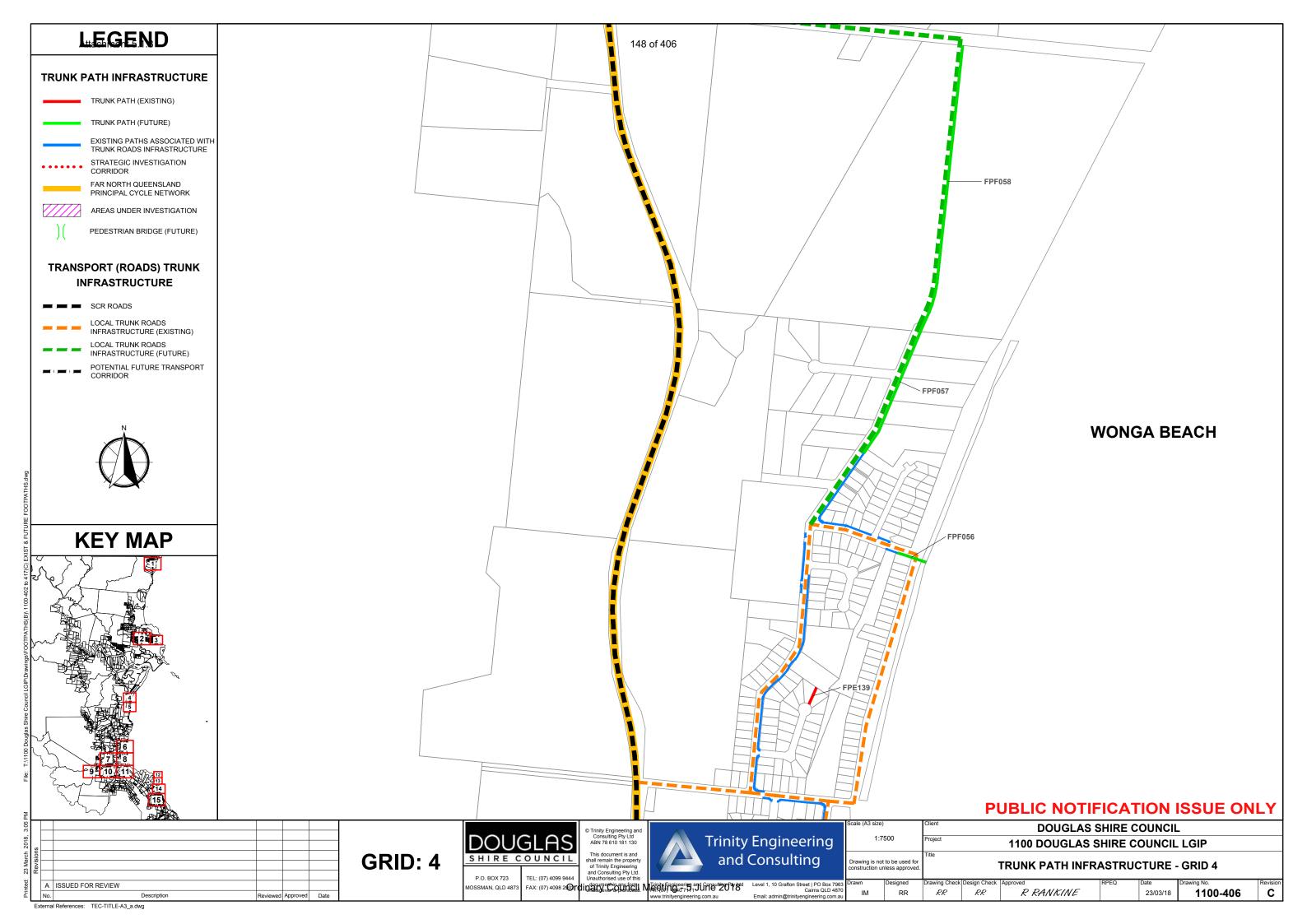


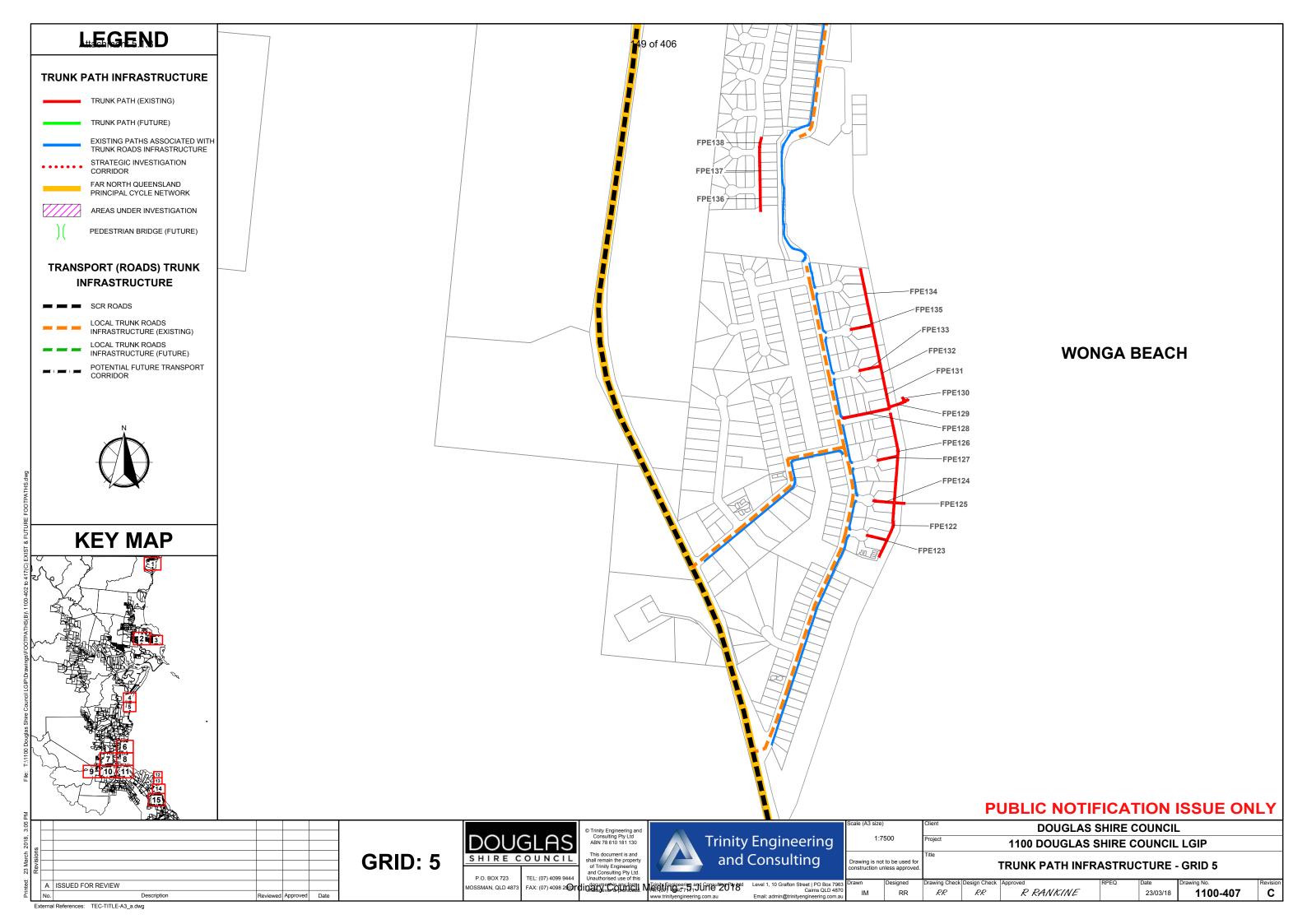


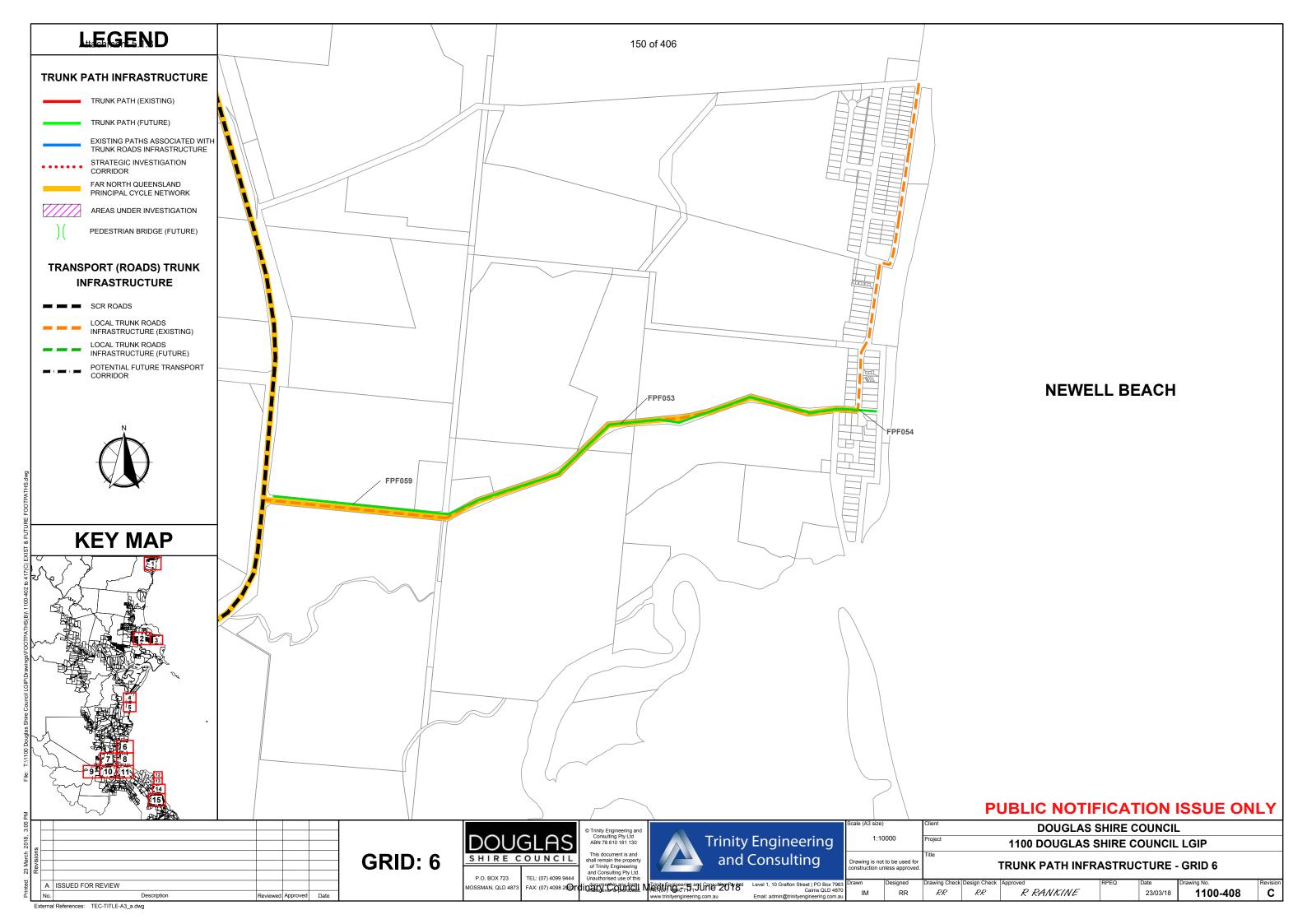


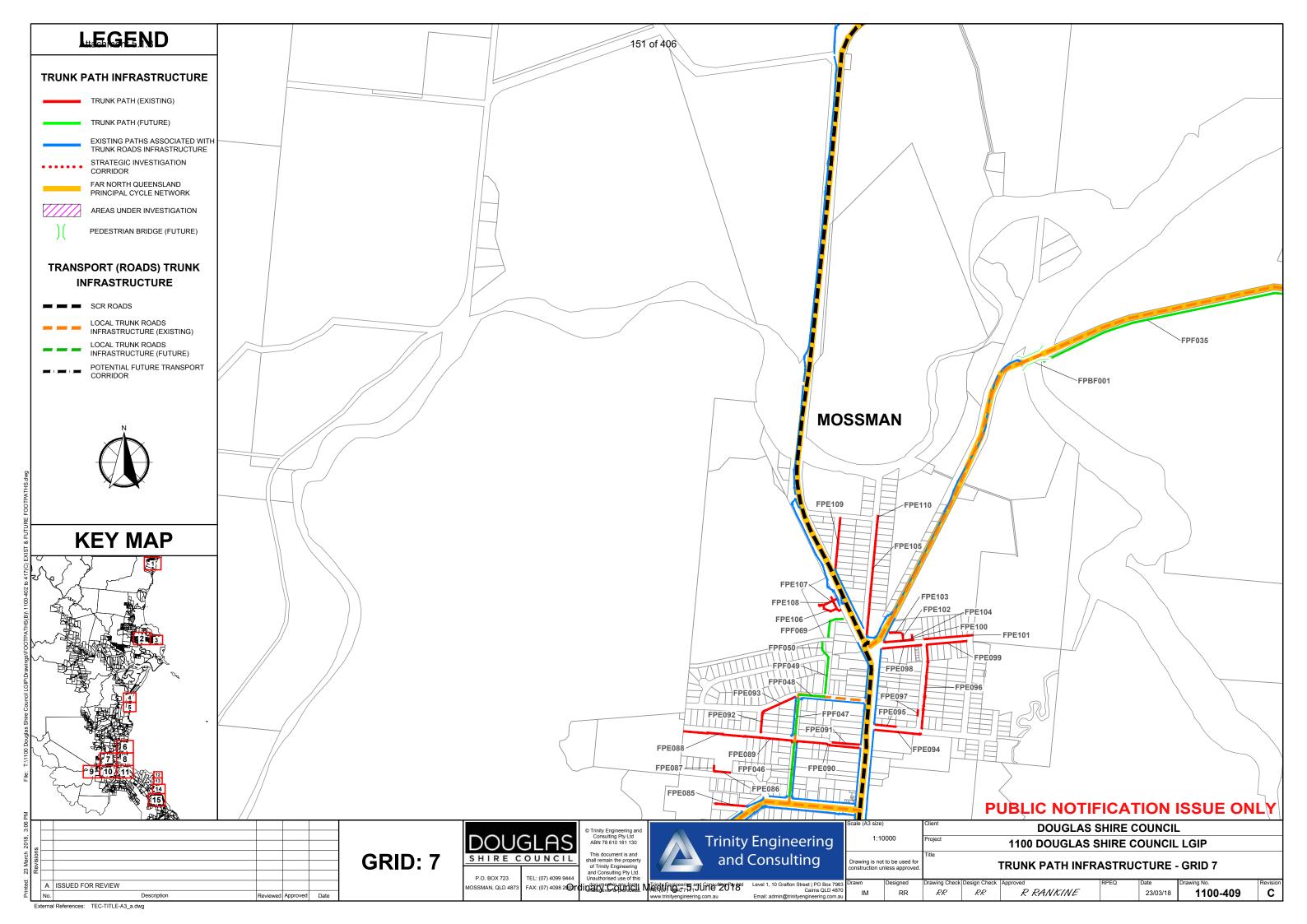


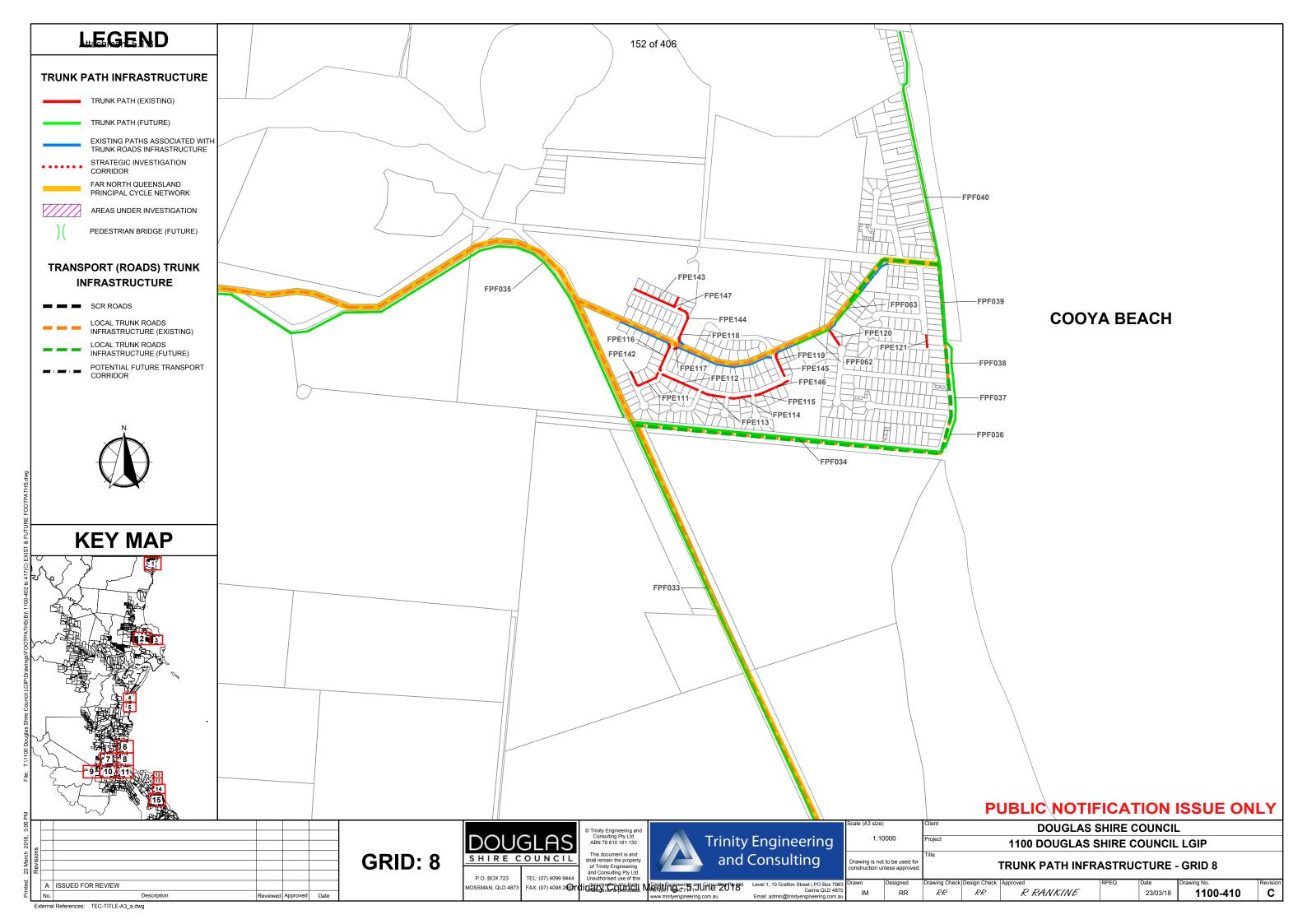


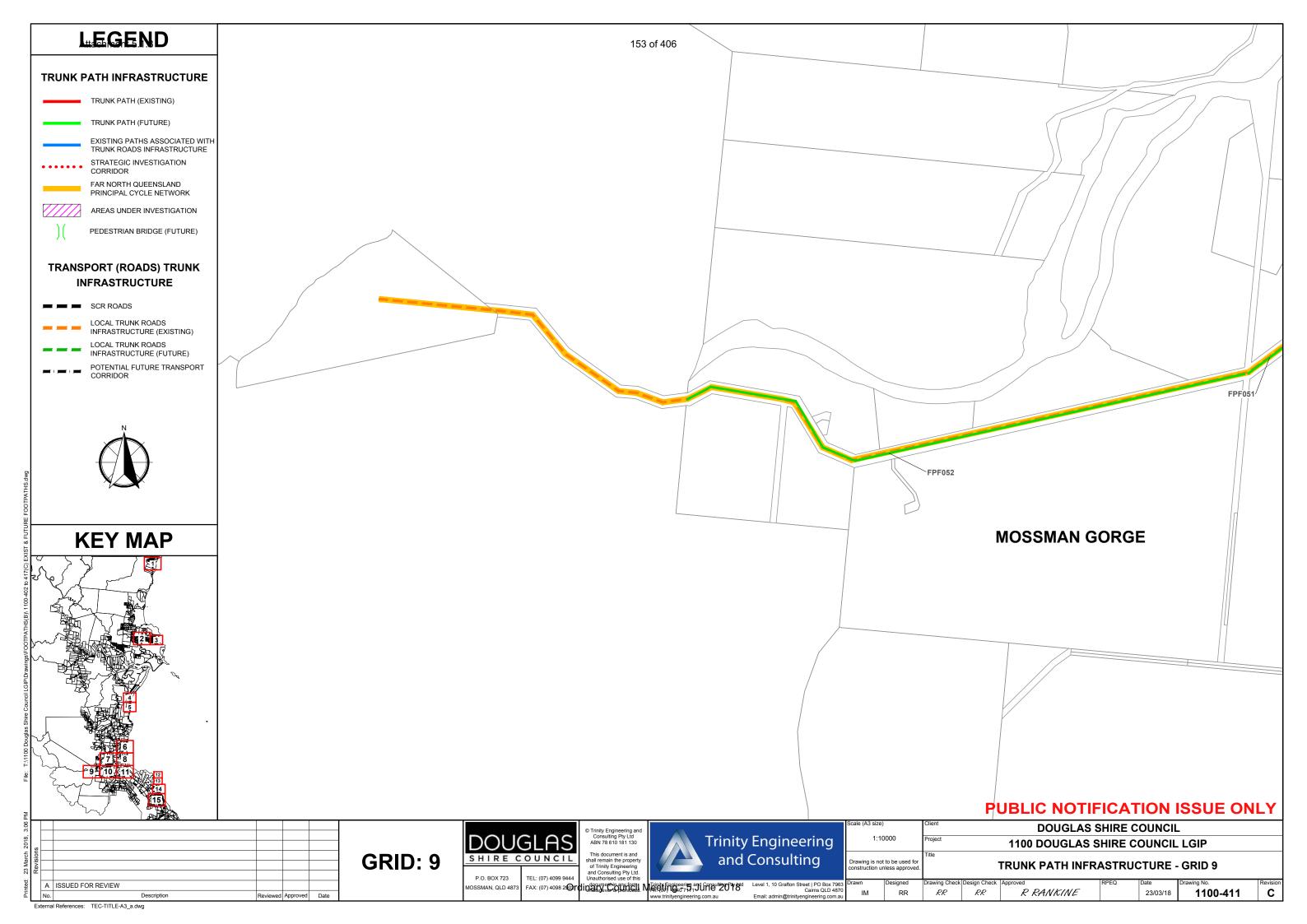


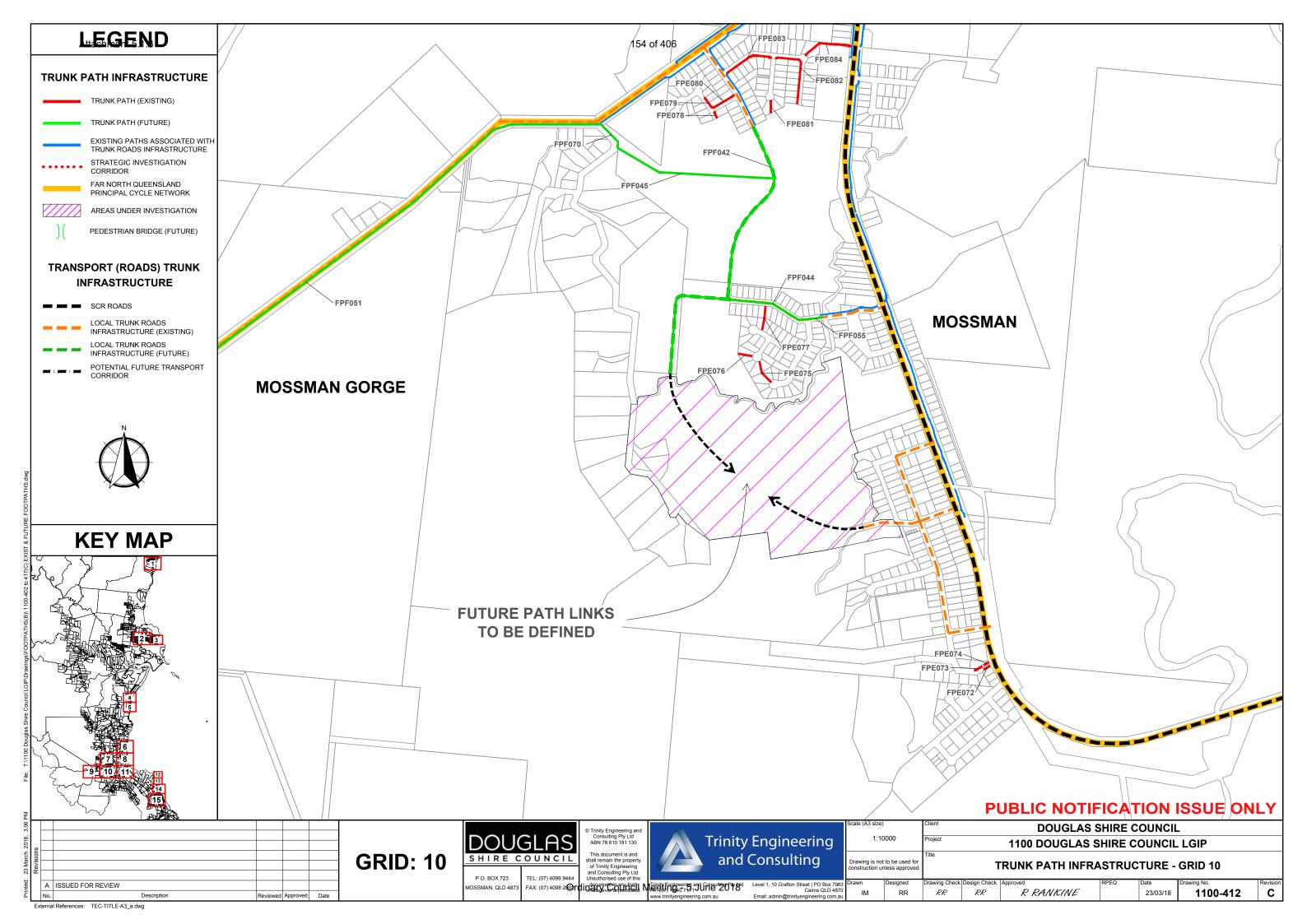


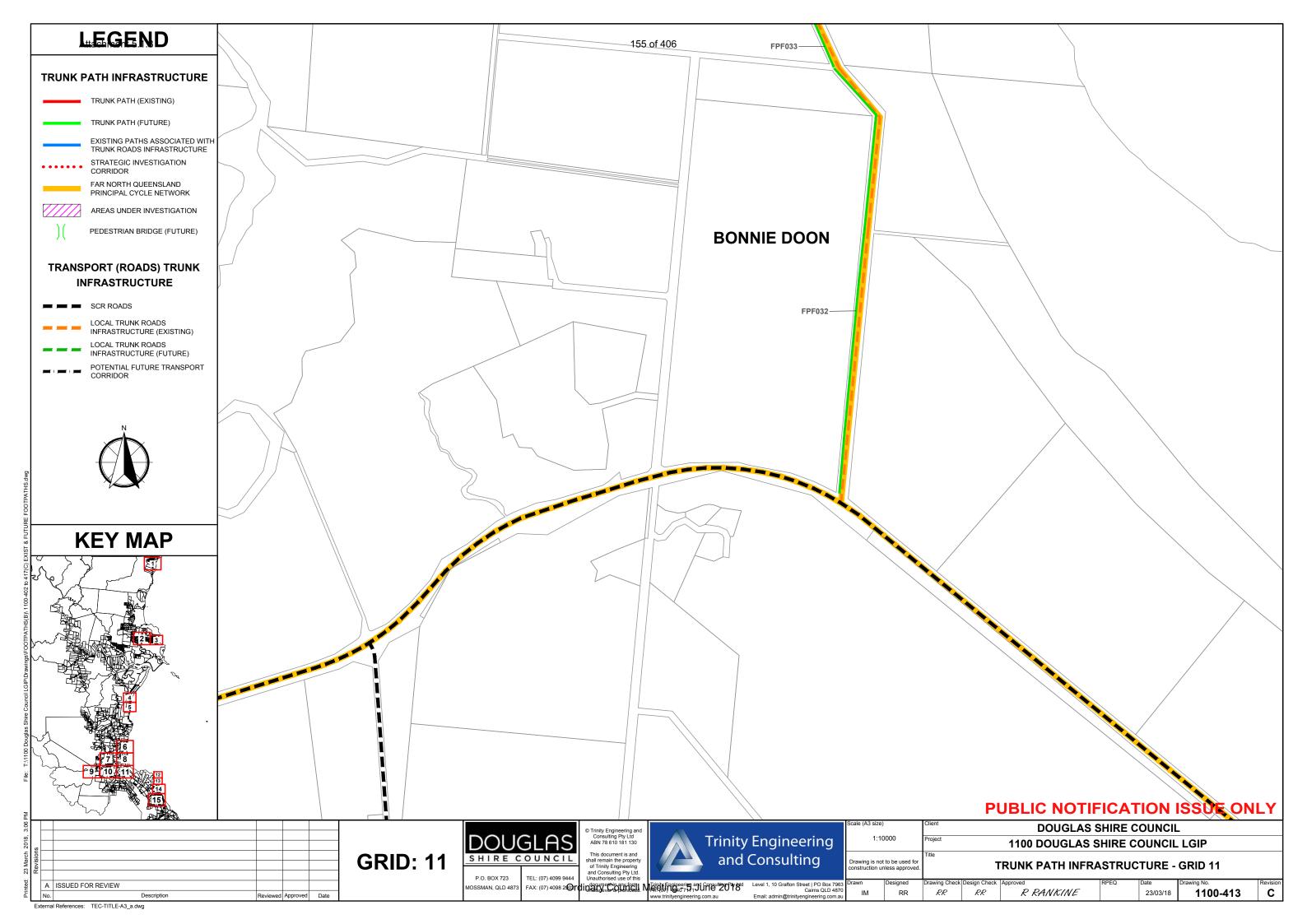


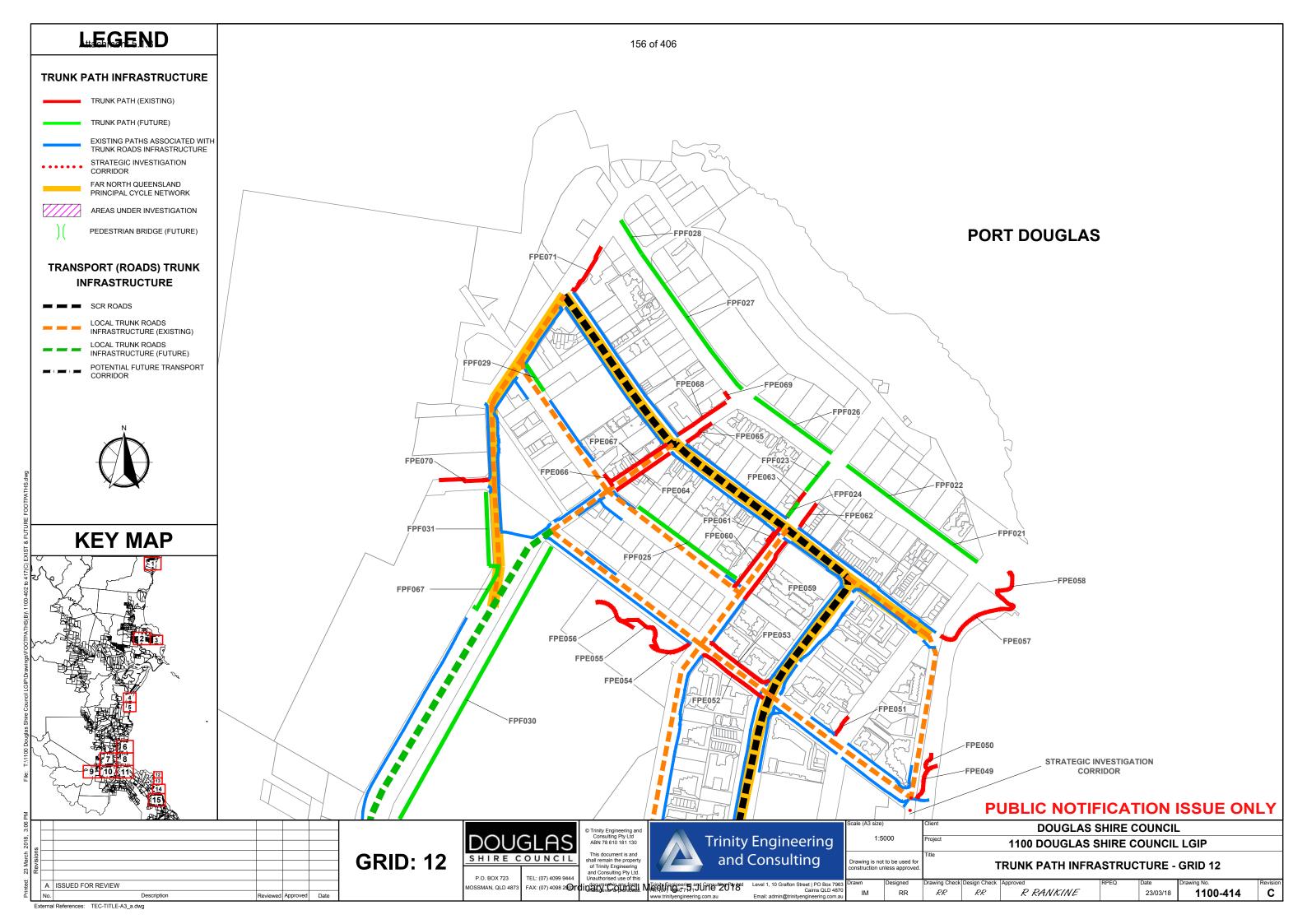


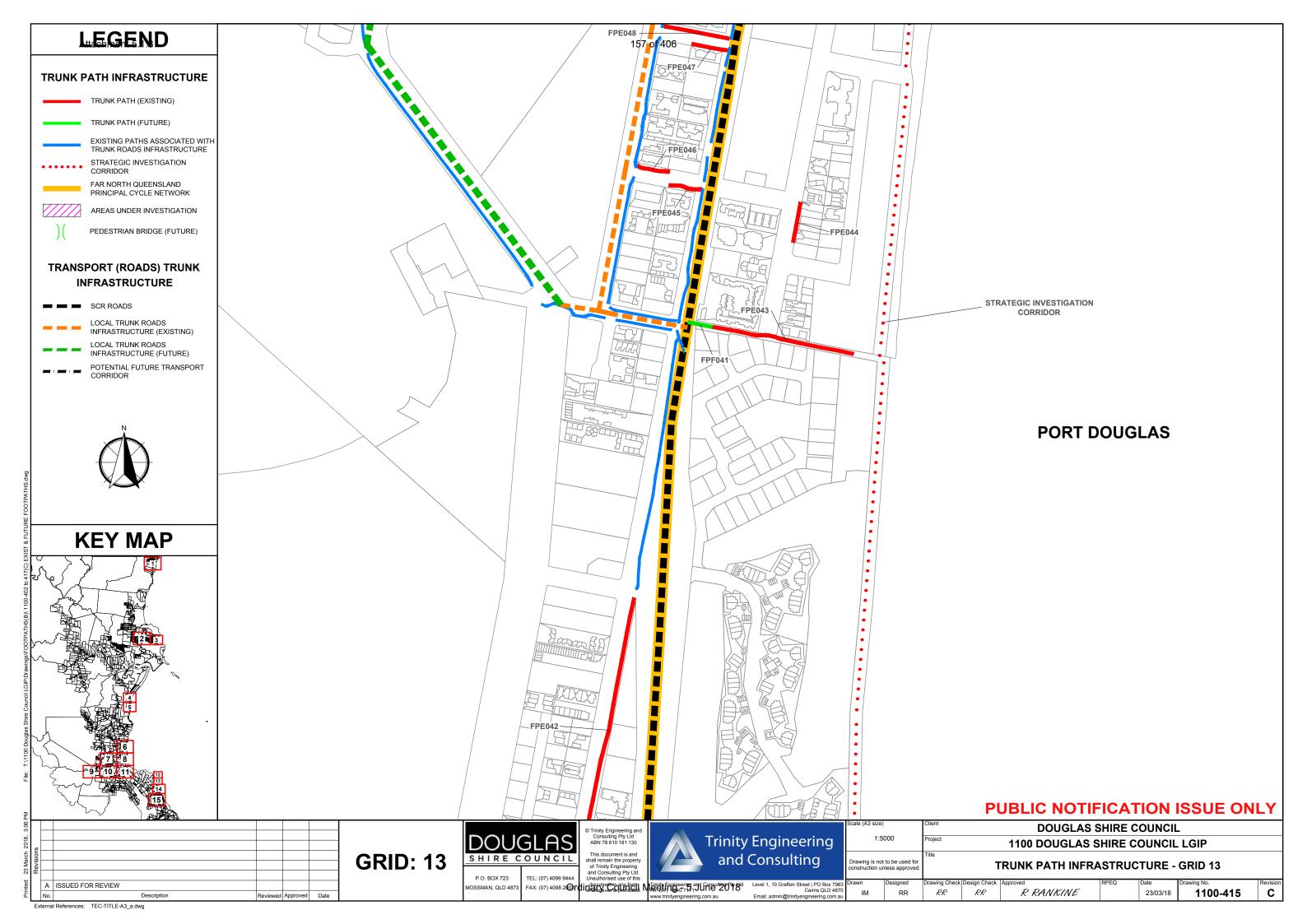


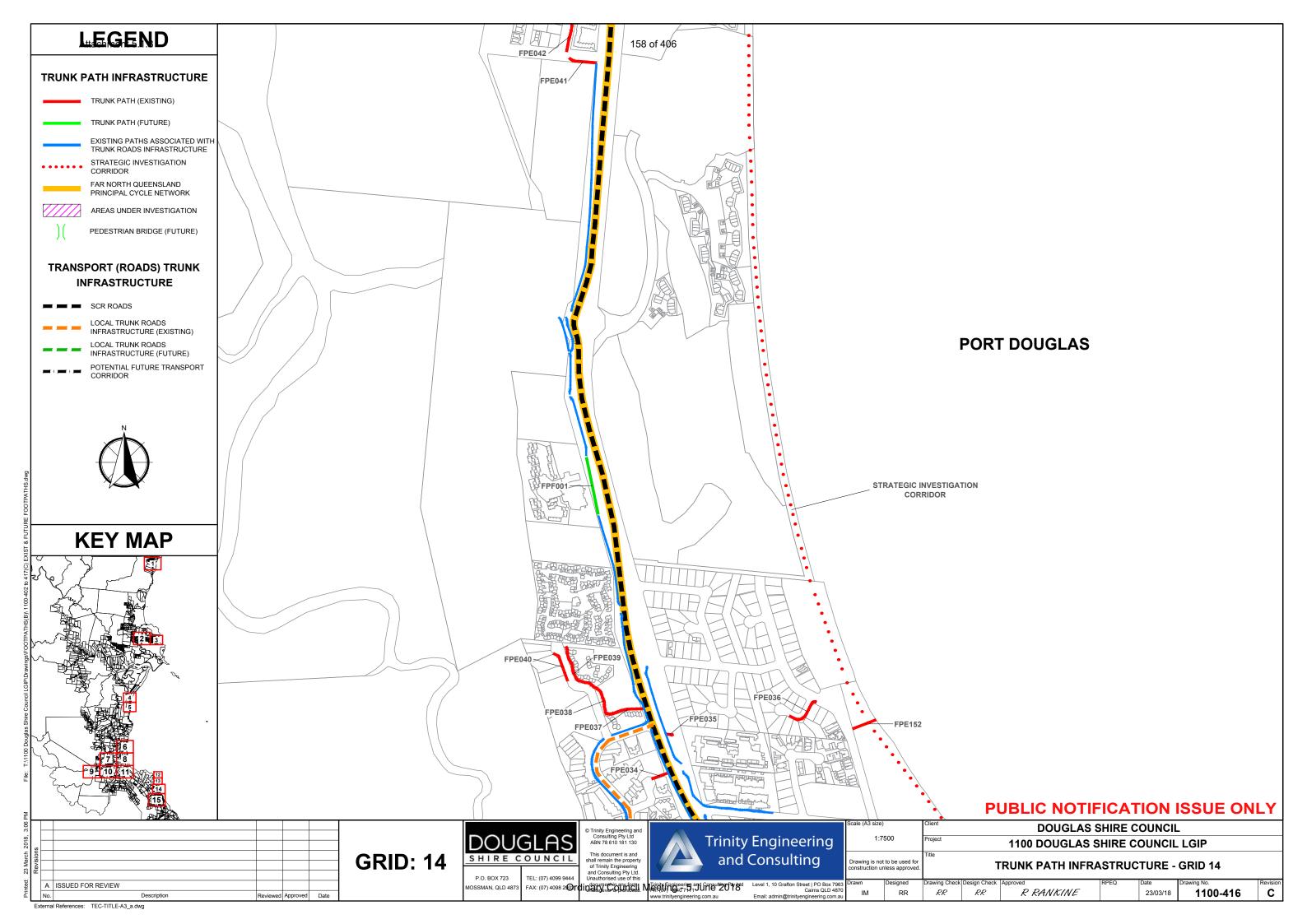


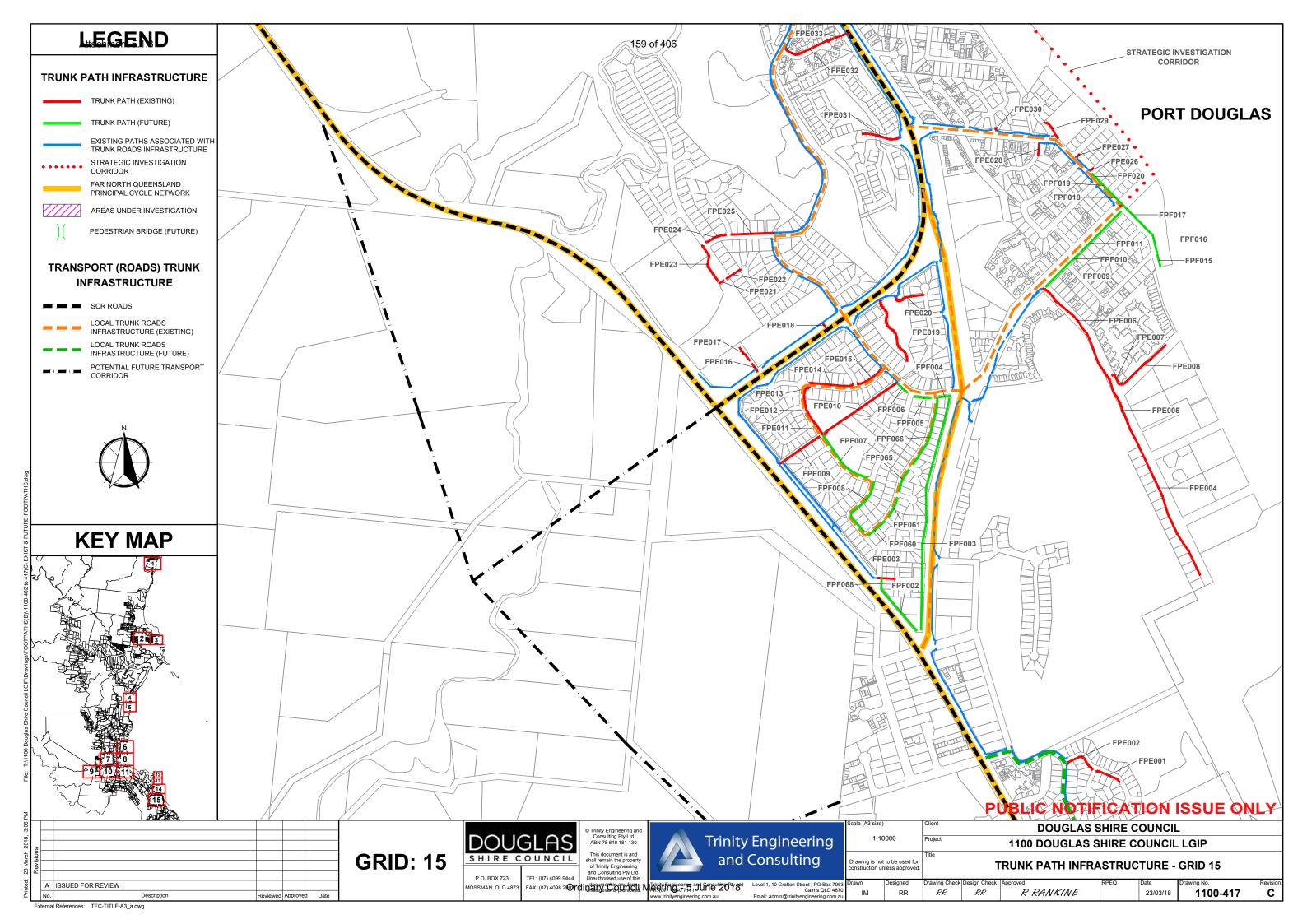
















LOCAL GOVERNMENT INFRASTRUCTURE PLANS (STORMWATER TRUNK INFRASTRUCTURE)

for

DOUGLAS SHIRE COUNCIL

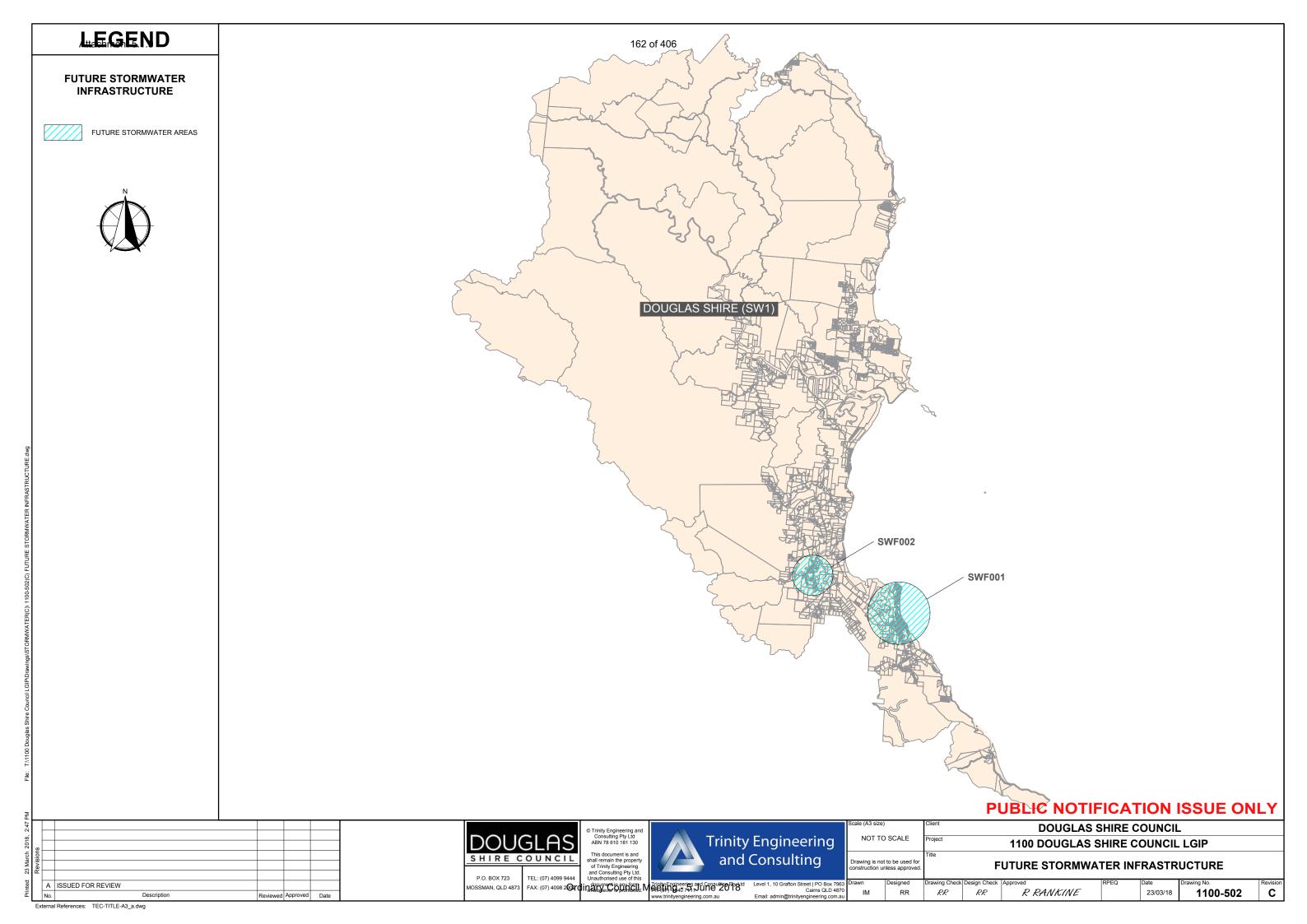
SCHEDULE OF PROJECT DRAWINGS

1100-500 DRAWING INDEX

1100-501 STORMWATER INFRASTRUCTURE SUPPLY CHARGES CATCHMENT AREAS

1100-501 FUTURE STORMWATER INFRASTRUCTURE

LEGEND 161 of 406 STORMWATER INFRASTRUCTURE **SUPPLY CHARGES CATCHMENT AREAS** DOUGLAS SHIRE (SW1) DOUGLAS SHIRE (SW1) PUBLIC NOTIFICATION ISSUE ONLY **DOUGLAS SHIRE COUNCIL** DOUGLAS SHIRE COUNCIL Trinity Engineering NOT TO SCALE 1100 DOUGLAS SHIRE COUNCIL LGIP This document is and shall remain the property of Trinity Engineering and Consulting Pty Ltd. Unauthorised use of this document in any form. and Consulting STORMWATER INFRASTRUCTURE SUPPLY CHARGES CATCHMENTS AREAS A ISSUED FOR REVIEW R RANKINE RR RR 1100-501 RR 23/03/18







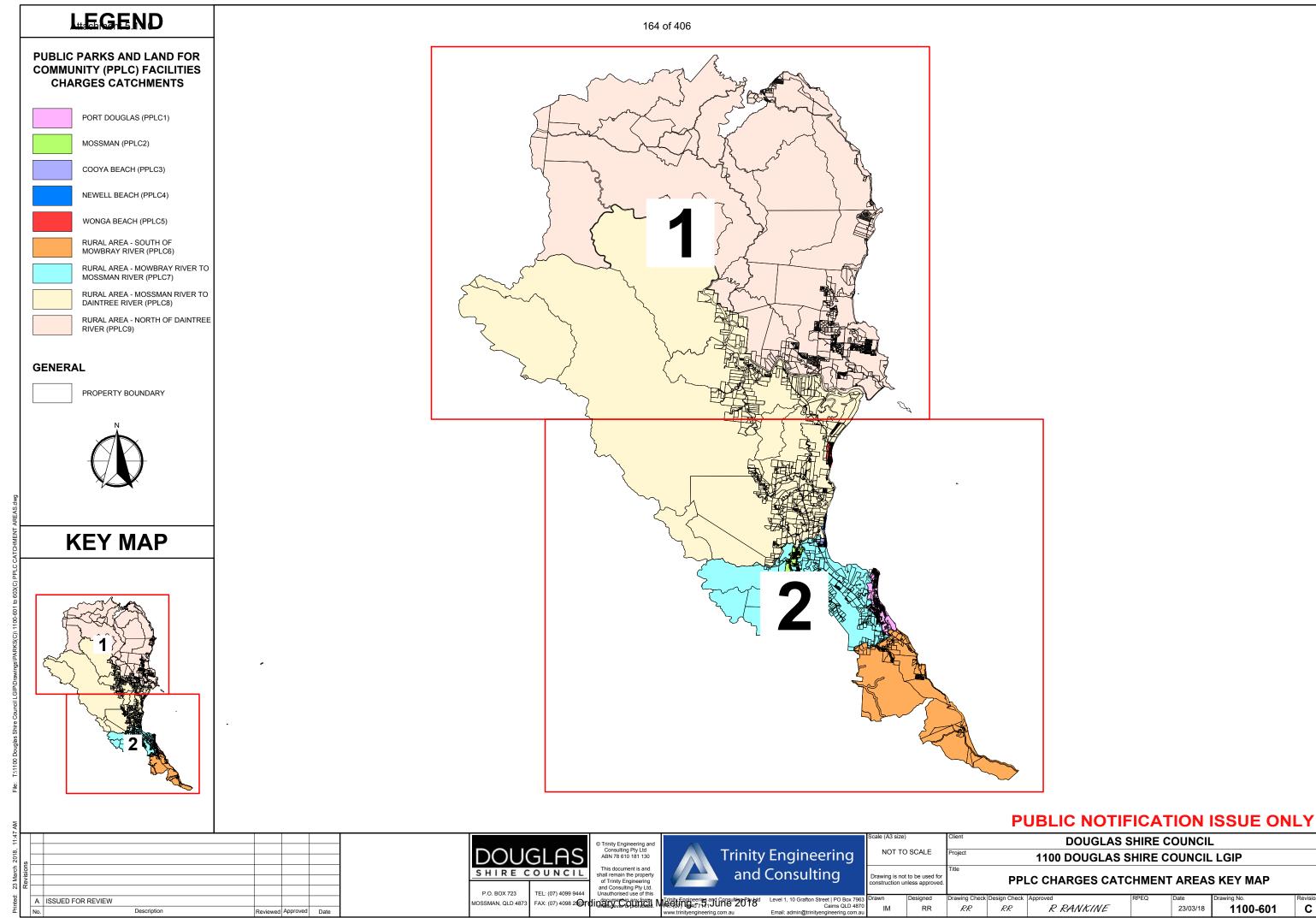
LOCAL GOVERNMENT INFRASTRUCTURE PLANS (PARKS AND RESERVES TRUNK INFRASTRUCTURE) for

DOUGLAS SHIRE COUNCIL

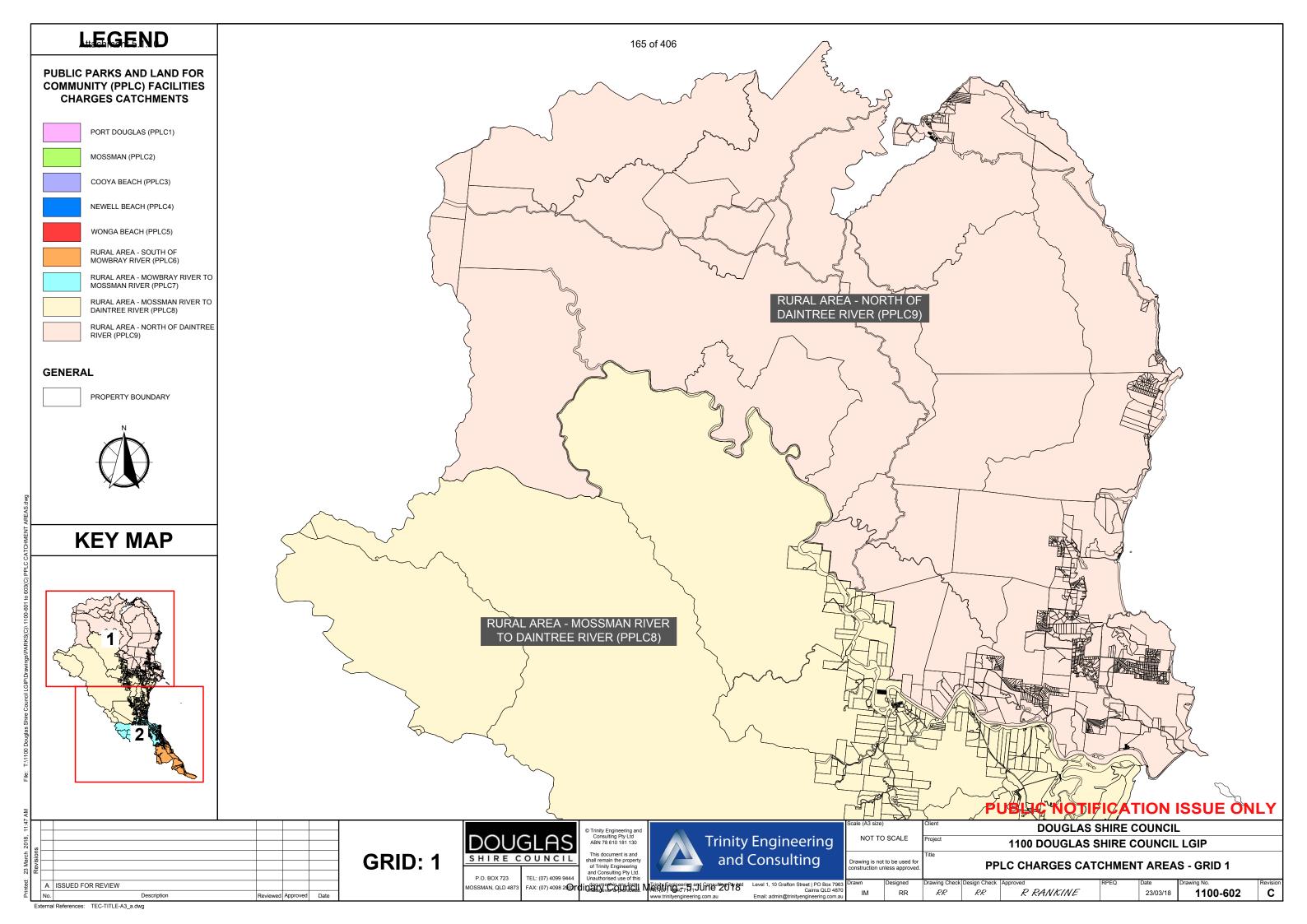
SCHEDULE OF PROJECT DRAWINGS

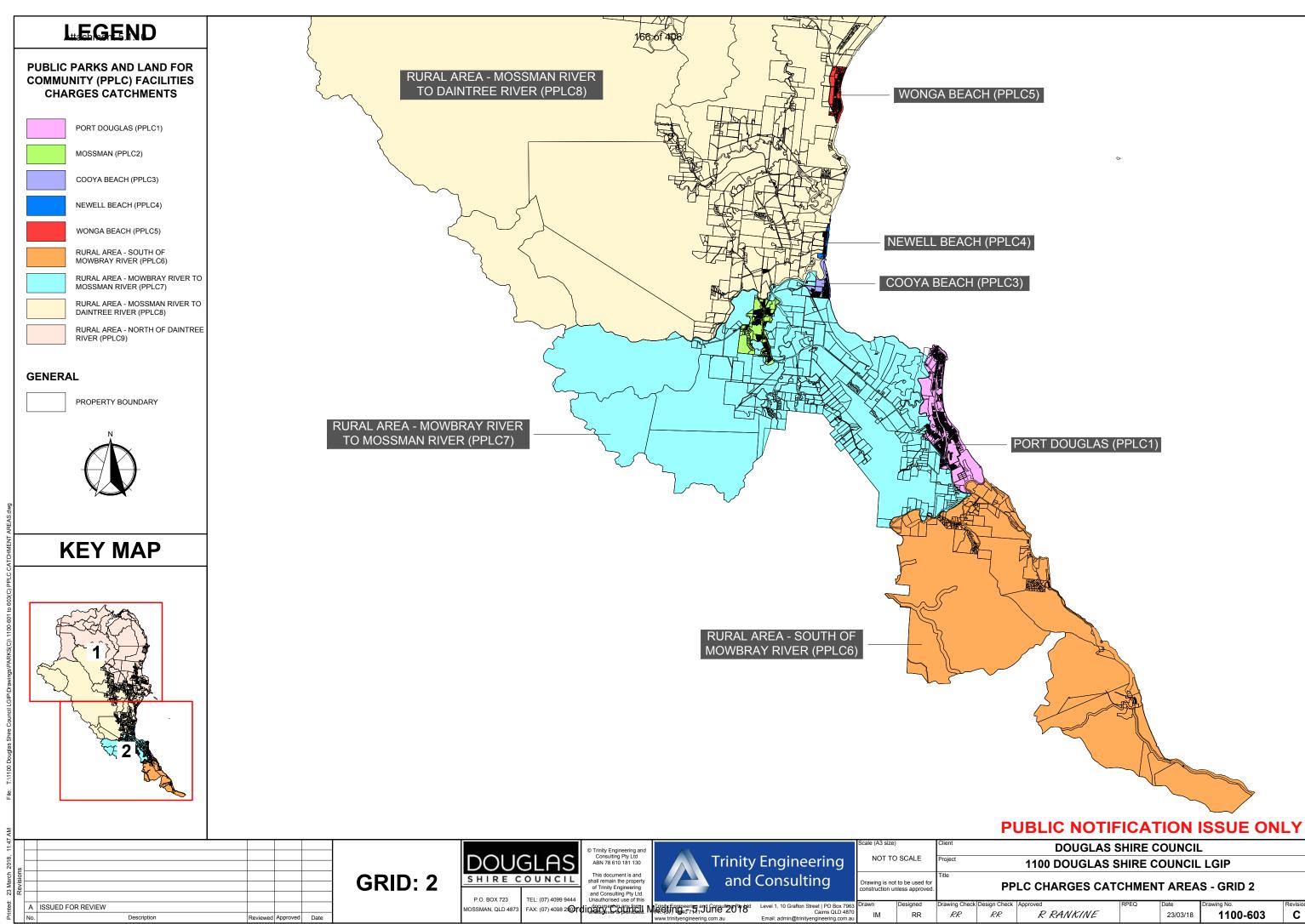
1100-600	DRAWING INDEX
1100-601	PPLC CHARGES CATCHMENT AREAS KEY MAP
1100-602	PPLC CHARGES CATCHMENT AREAS — GRID 1
1100-603	PPLC CHARGES CATCHMENT AREAS — GRID 2
1100-604	EXISTING PPLC TRUNK INFRASTRUCTURE KEY MAP
1100-605	EXISTING PPLC TRUNK INFRASTRUCTURE - GRID 1
1100-606	EXISTING PPLC TRUNK INFRASTRUCTURE - GRID 2
1100-607	EXISTING PPLC TRUNK INFRASTRUCTURE — GRID 3
1100-608	EXISTING PPLC TRUNK INFRASTRUCTURE — GRID 4
1100-609	EXISTING PPLC TRUNK INFRASTRUCTURE — GRID 5
1100-610	EXISTING PPLC TRUNK INFRASTRUCTURE — GRID 6
1100-611	EXISTING PPLC TRUNK INFRASTRUCTURE — GRID 7
1100-612	EXISTING PPLC TRUNK INFRASTRUCTURE — GRID 8
1100-613	EXISTING PPLC TRUNK INFRASTRUCTURE — GRID 9
1100-614	EXISTING PPLC TRUNK INFRASTRUCTURE — GRID 10
1100-615	EXISTING PPLC TRUNK INFRASTRUCTURE - GRID 11
1100-616	EXISTING PPLC TRUNK INFRASTRUCTURE — GRID 12
1100-617	EXISTING PPLC TRUNK INFRASTRUCTURE — GRID 13

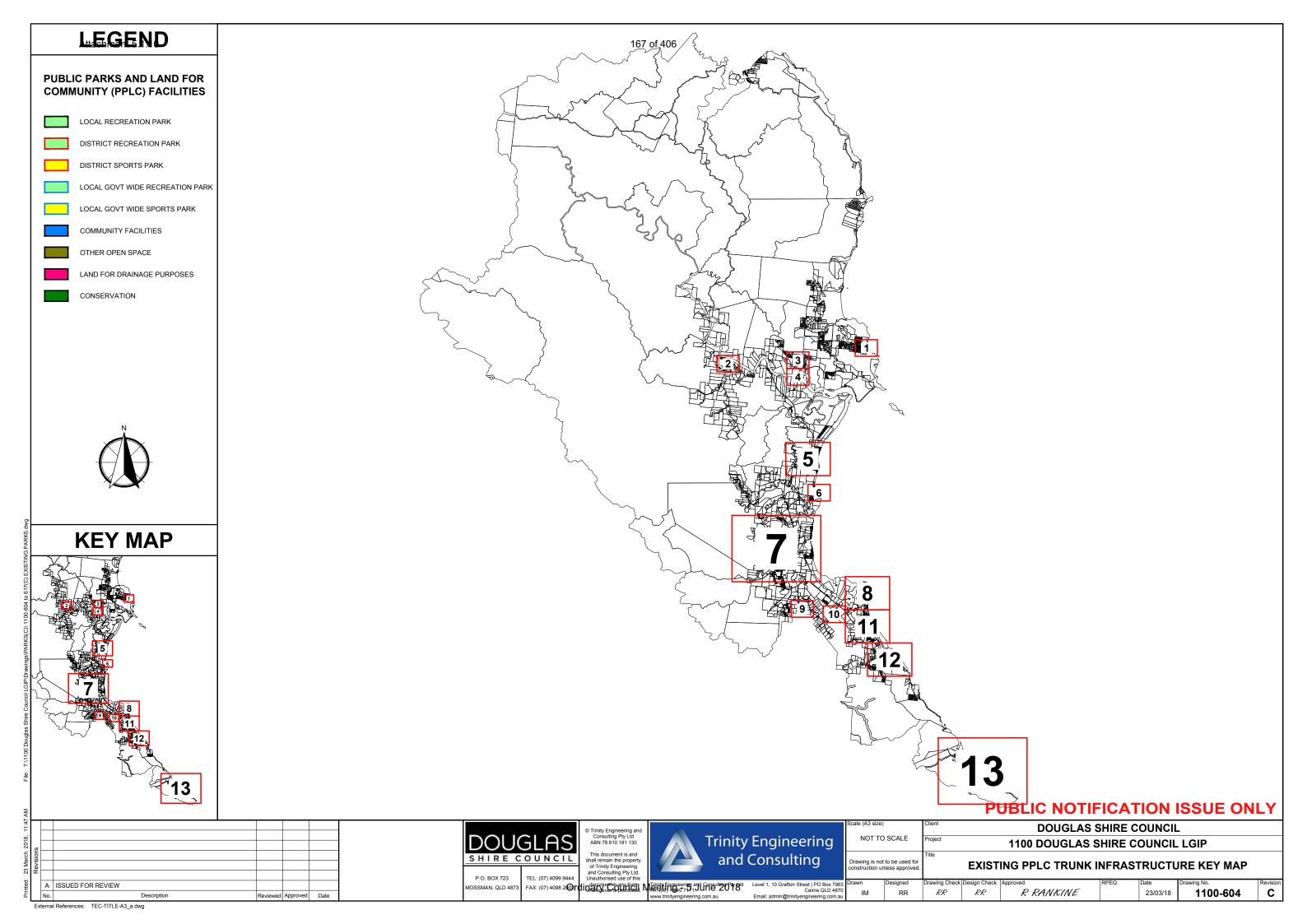
1100-618	FUTURE	PPLC	TRUNK	INFRASTRUCTURE KEY MAP	
1100-619	FUTURE	PPLC	TRUNK	INFRASTRUCTURE - GRID 1	
1100-620	FUTURE	PPLC	TRUNK	INFRASTRUCTURE - GRID 2	
1100-621	FUTURE	PPLC	TRUNK	INFRASTRUCTURE - GRID 3	
1100-622	FUTURE	PPLC	TRUNK	INFRASTRUCTURE - GRID 4	
1100-623	FUTURE	PPLC	TRUNK	INFRASTRUCTURE - GRID 5	

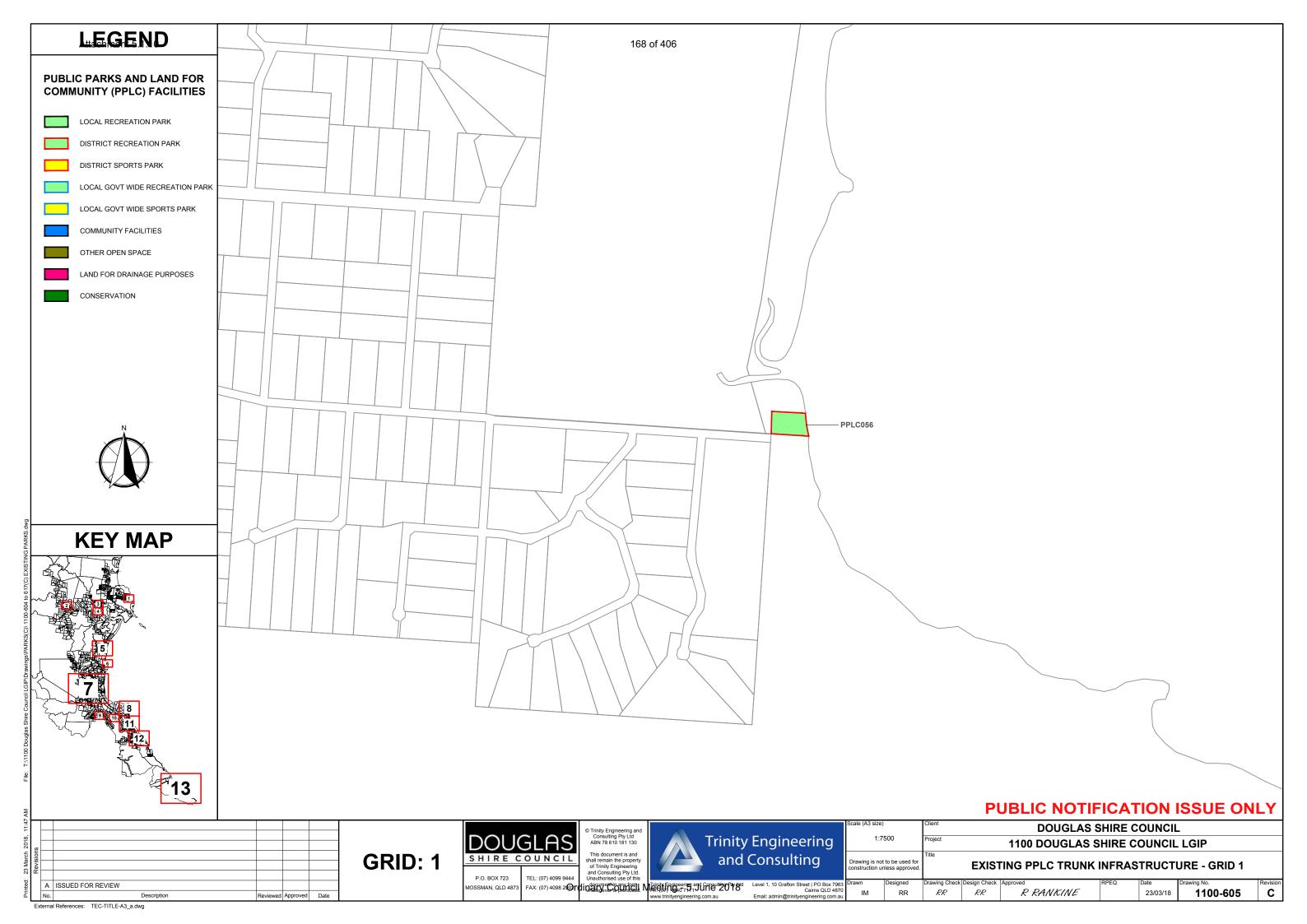


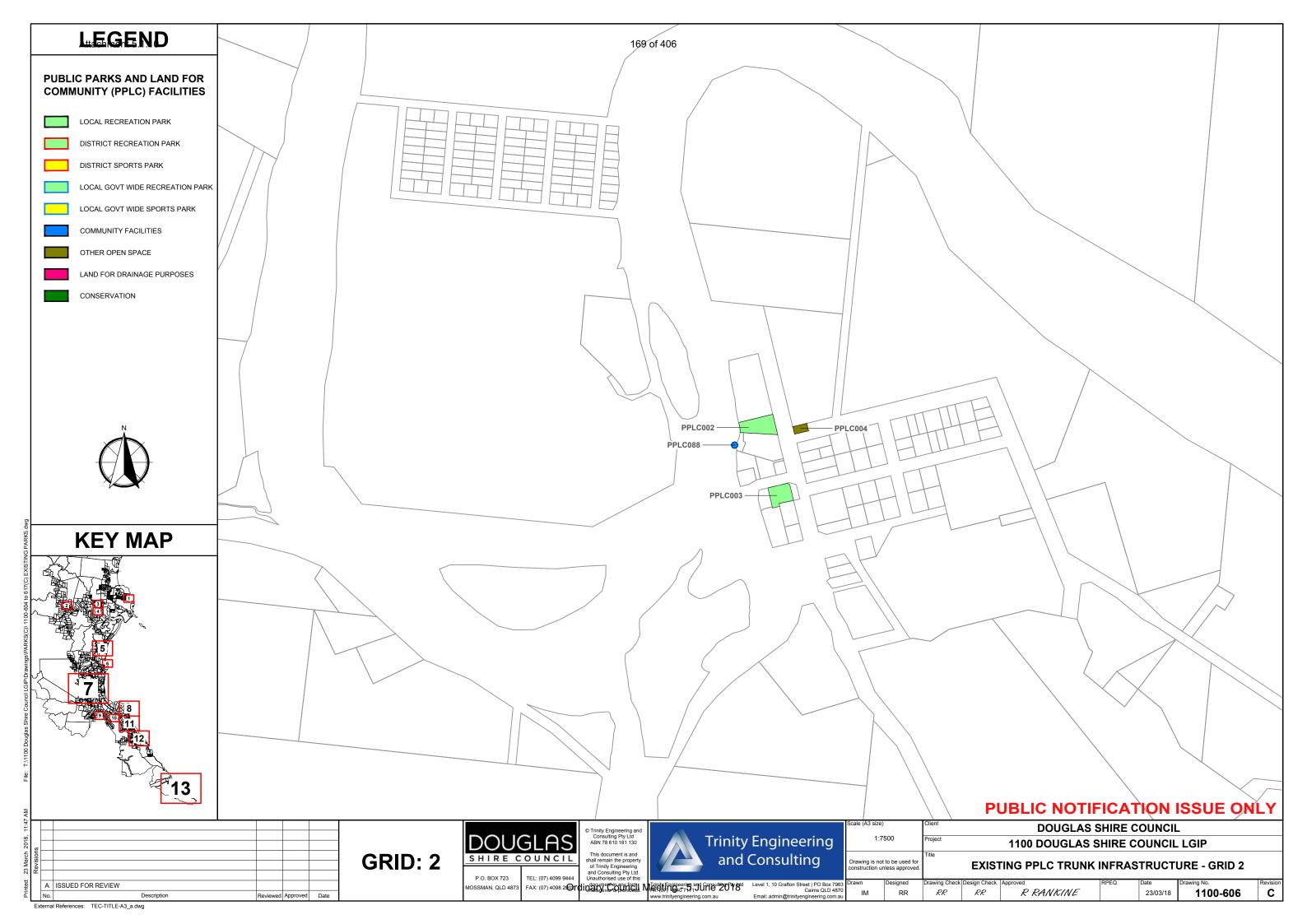
С

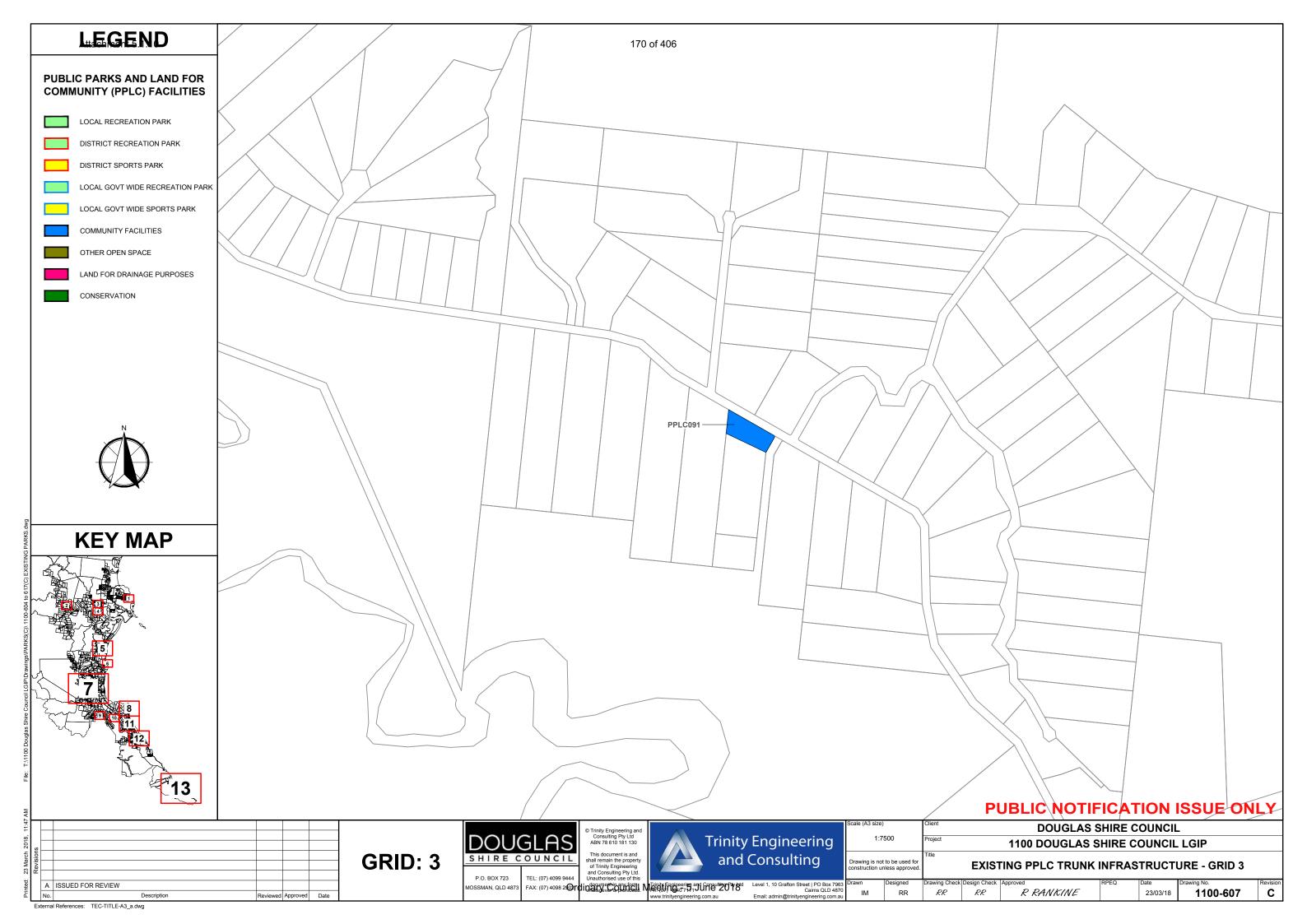


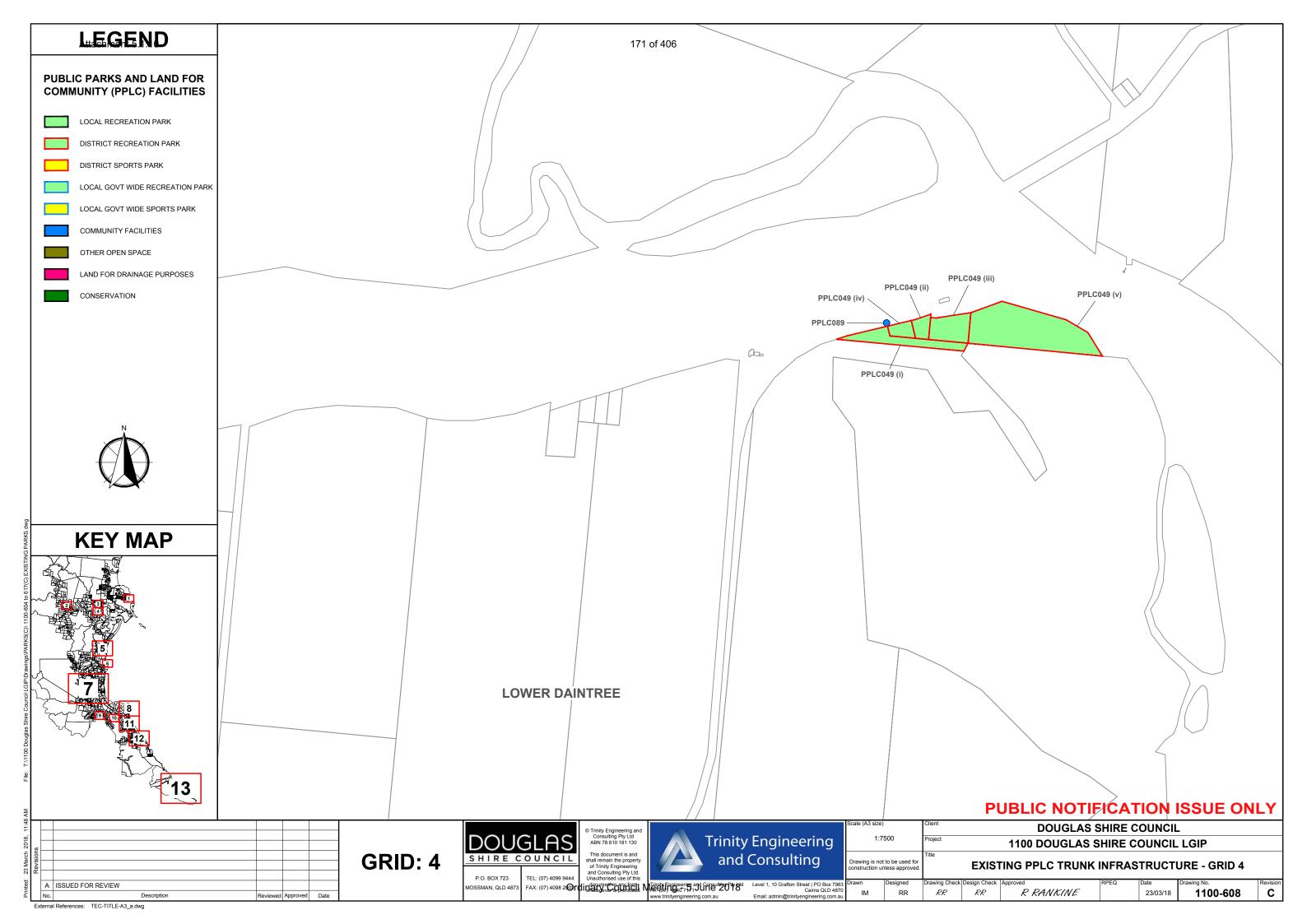


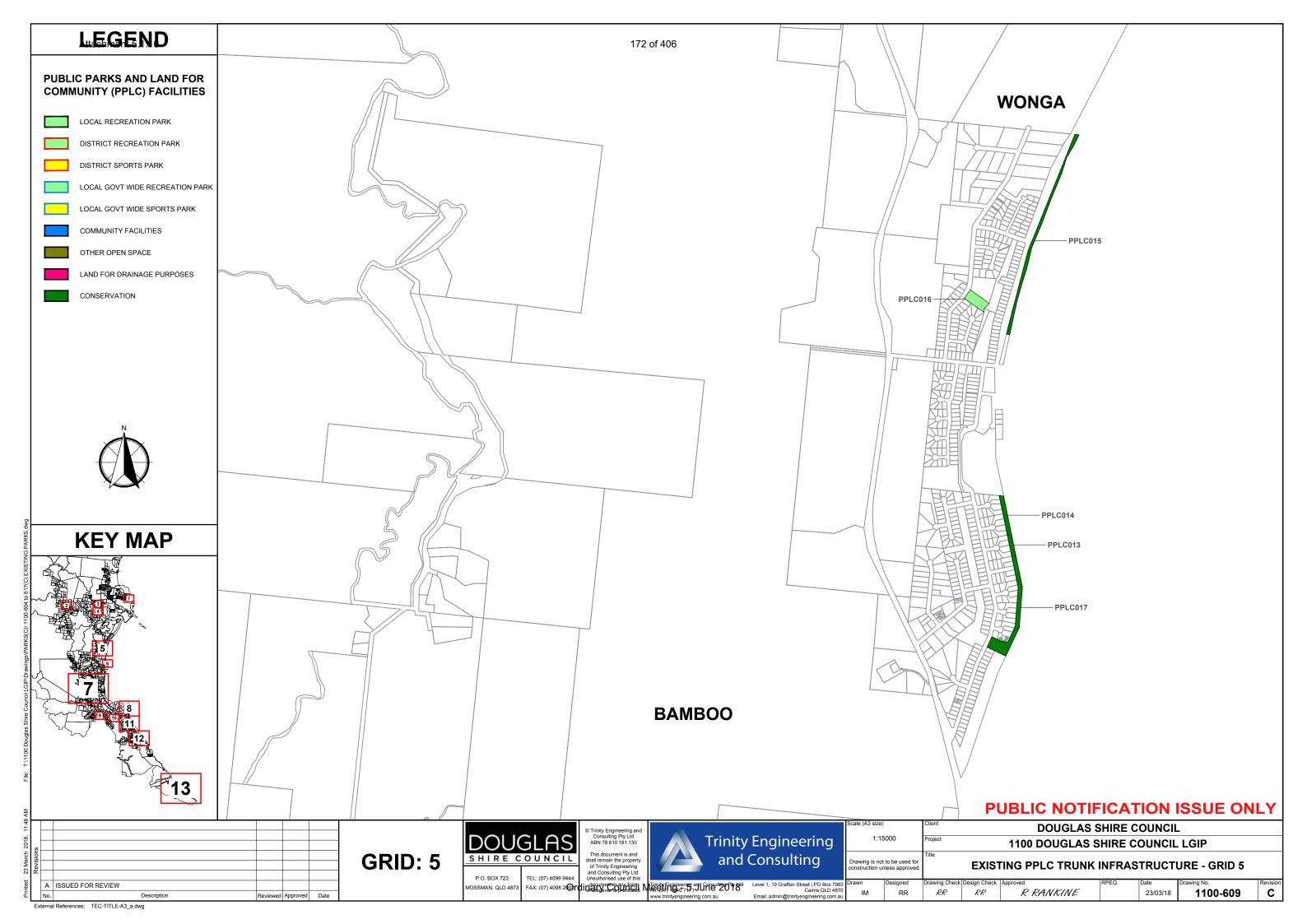


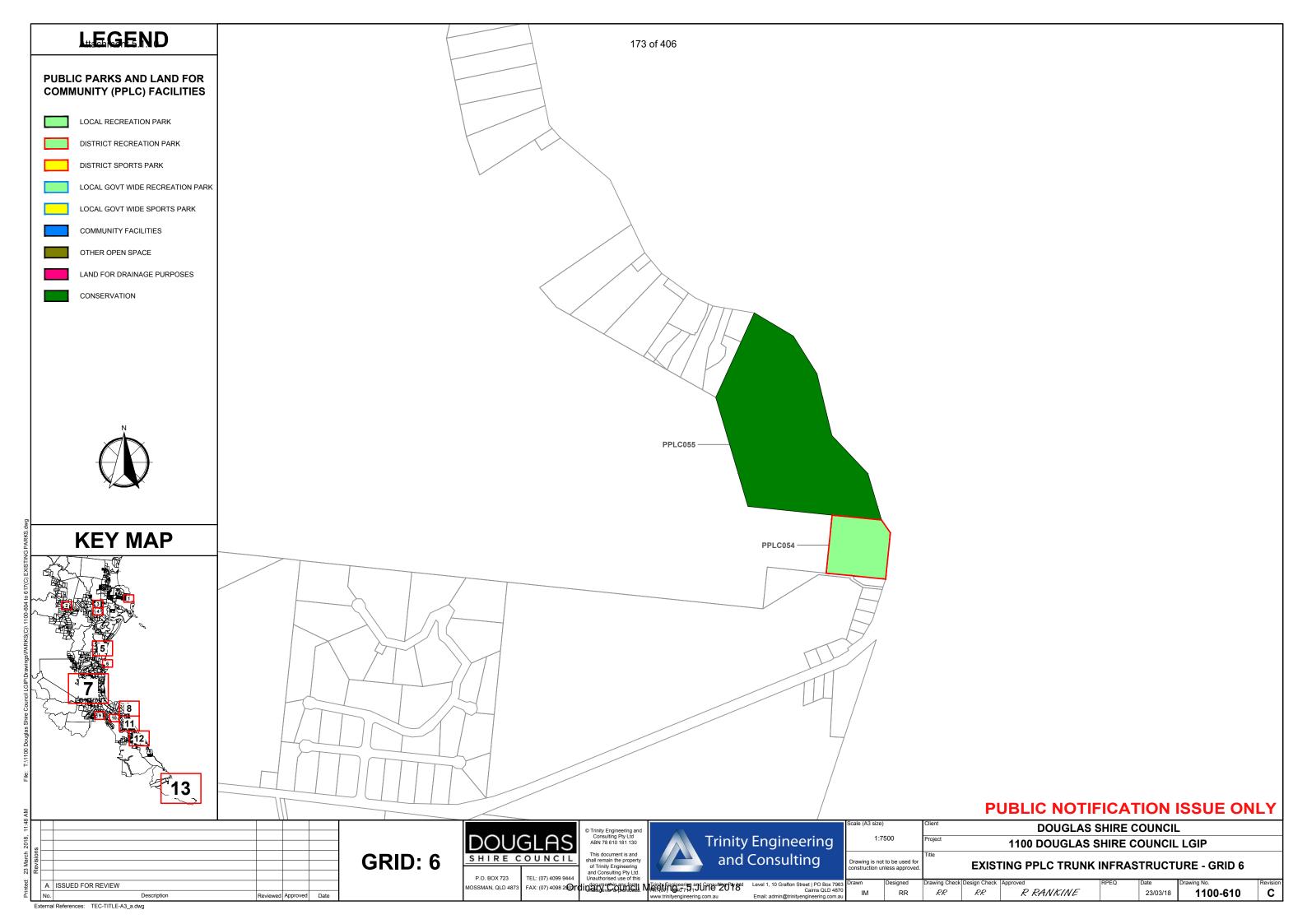


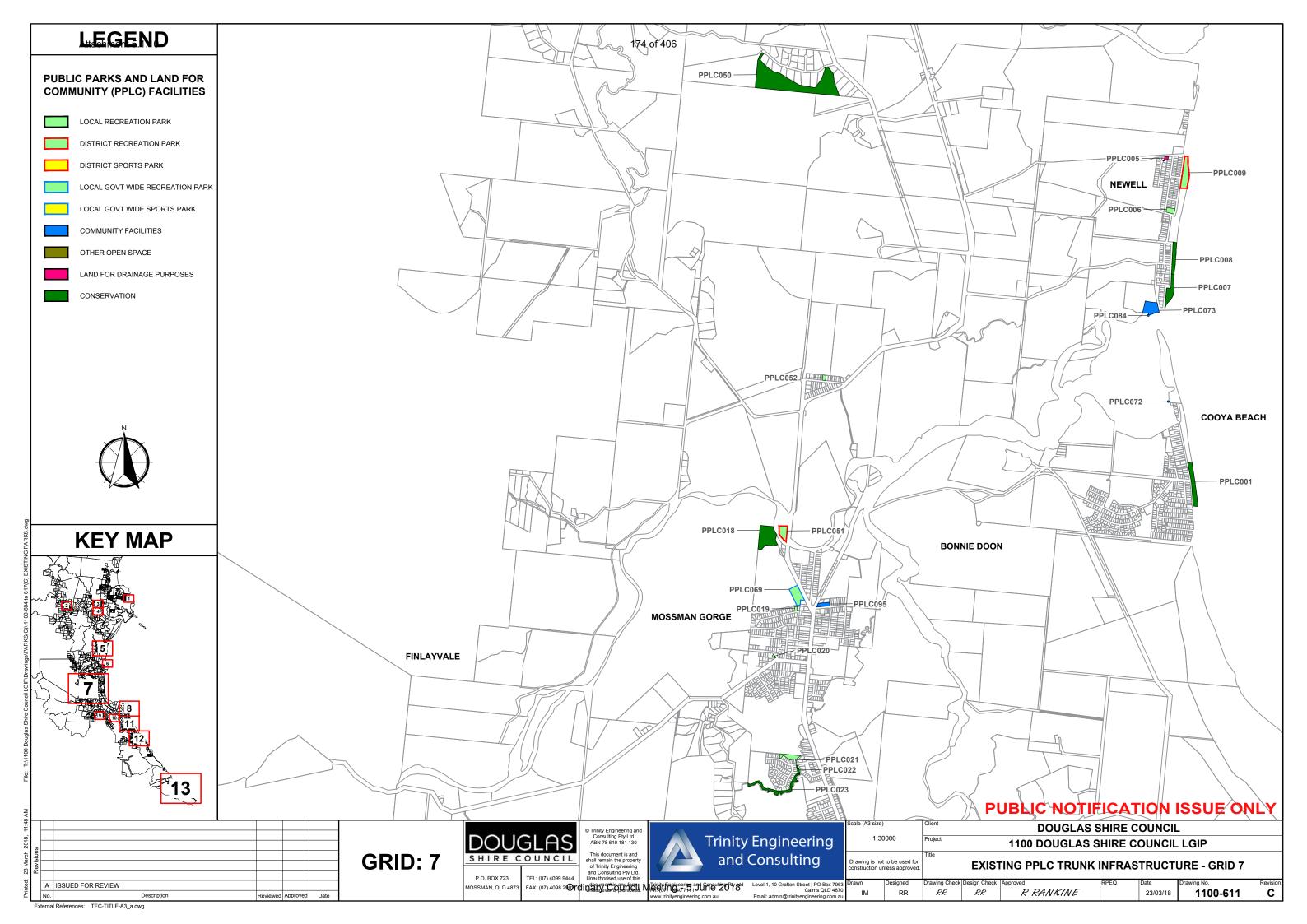


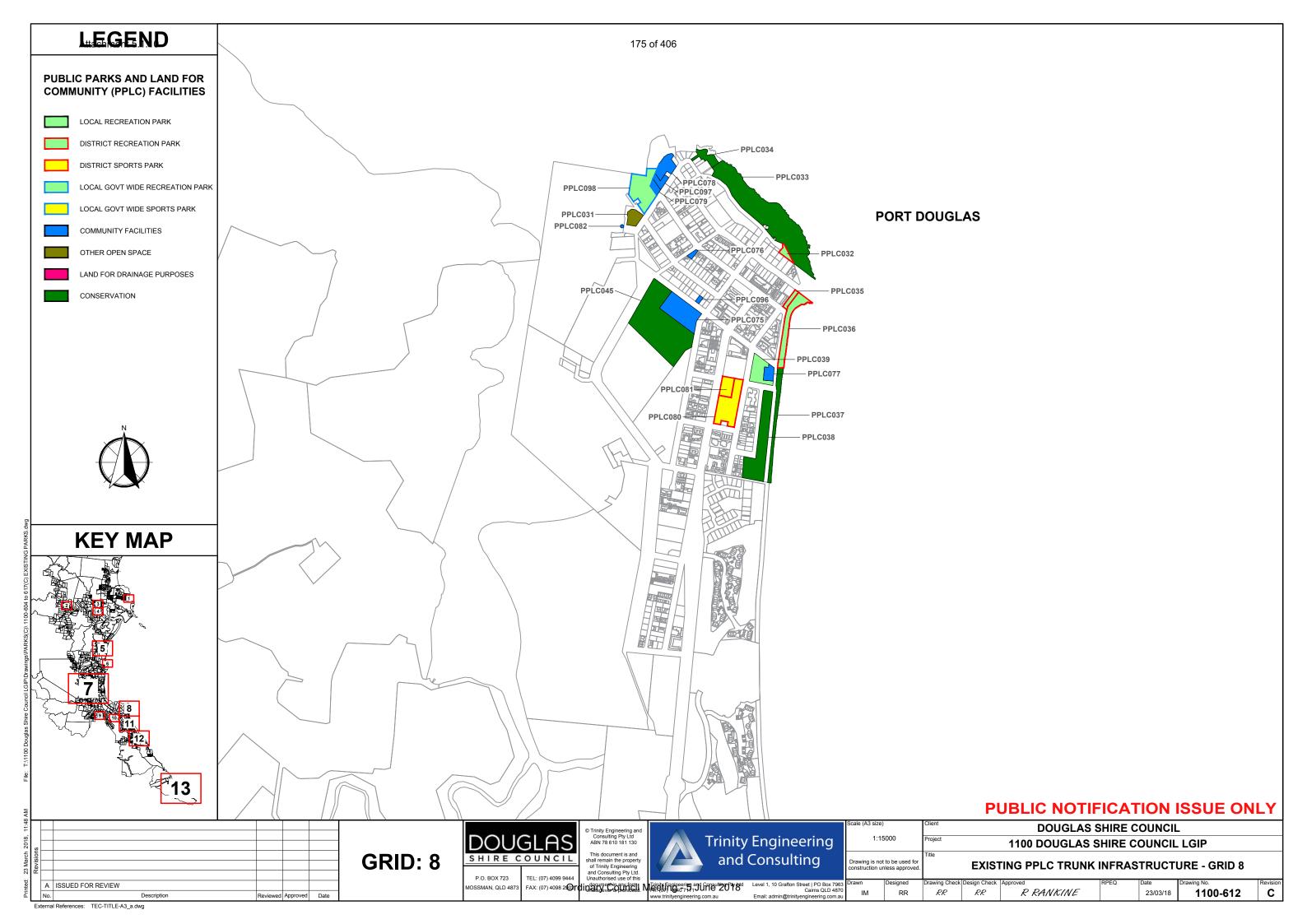


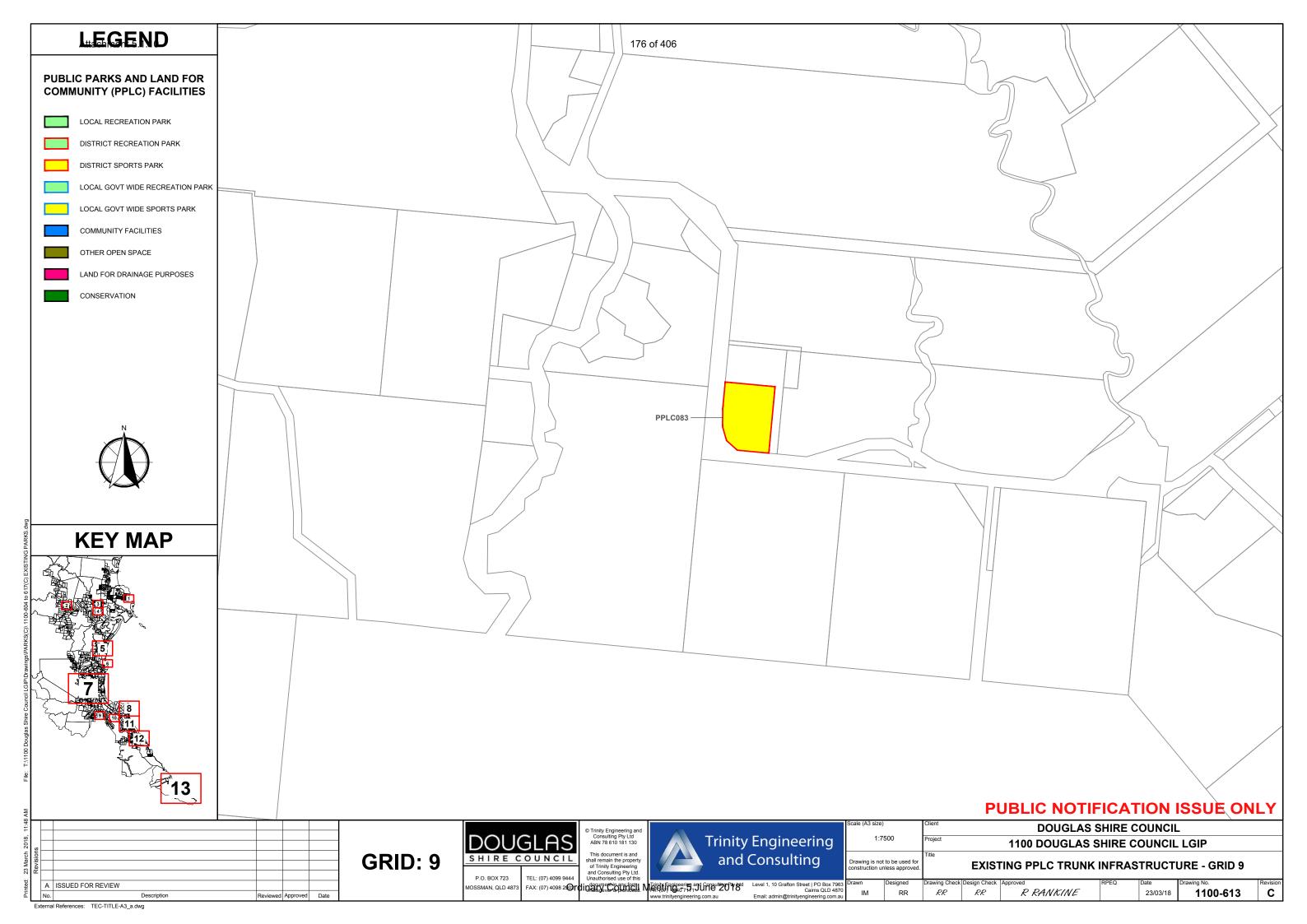


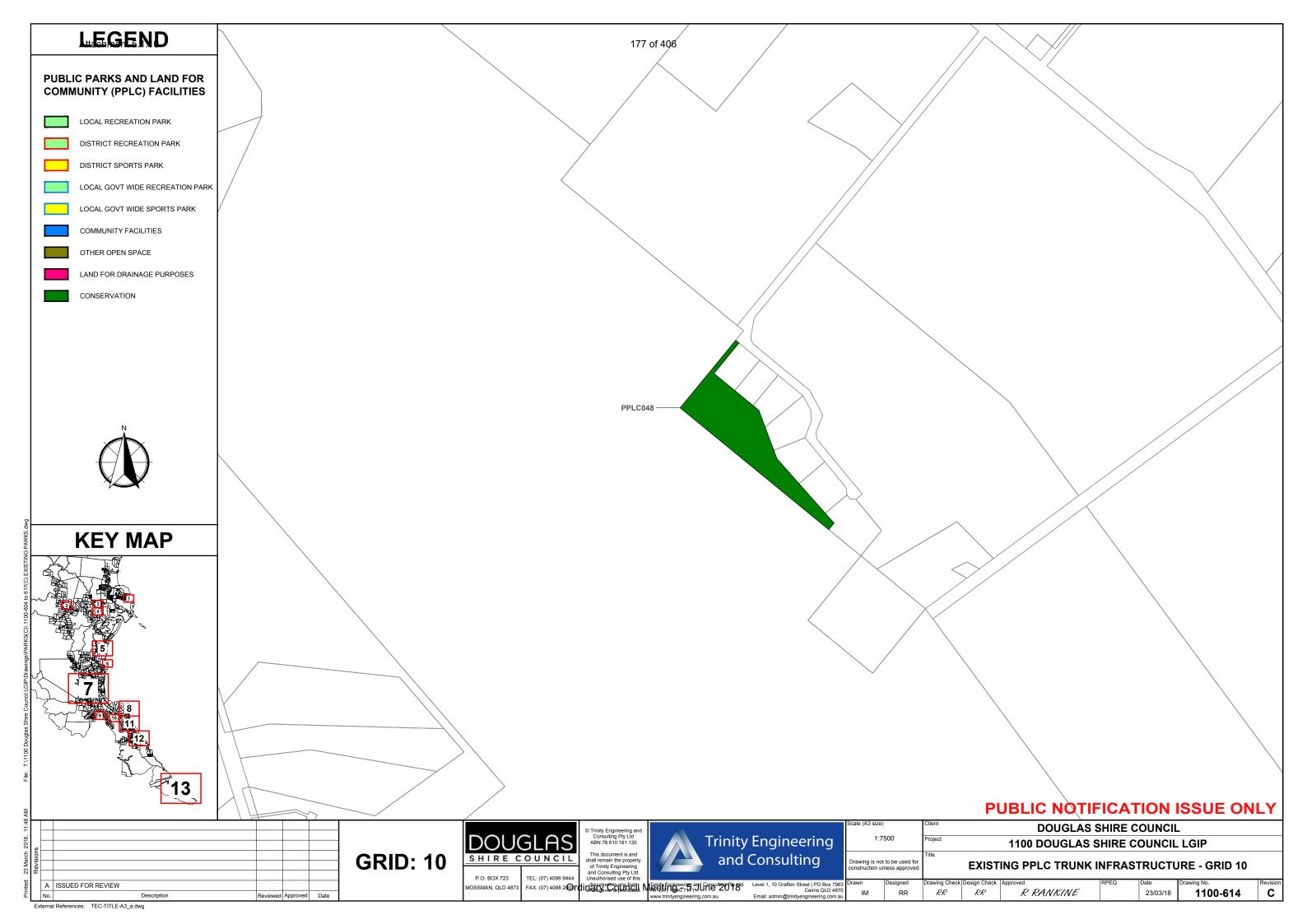


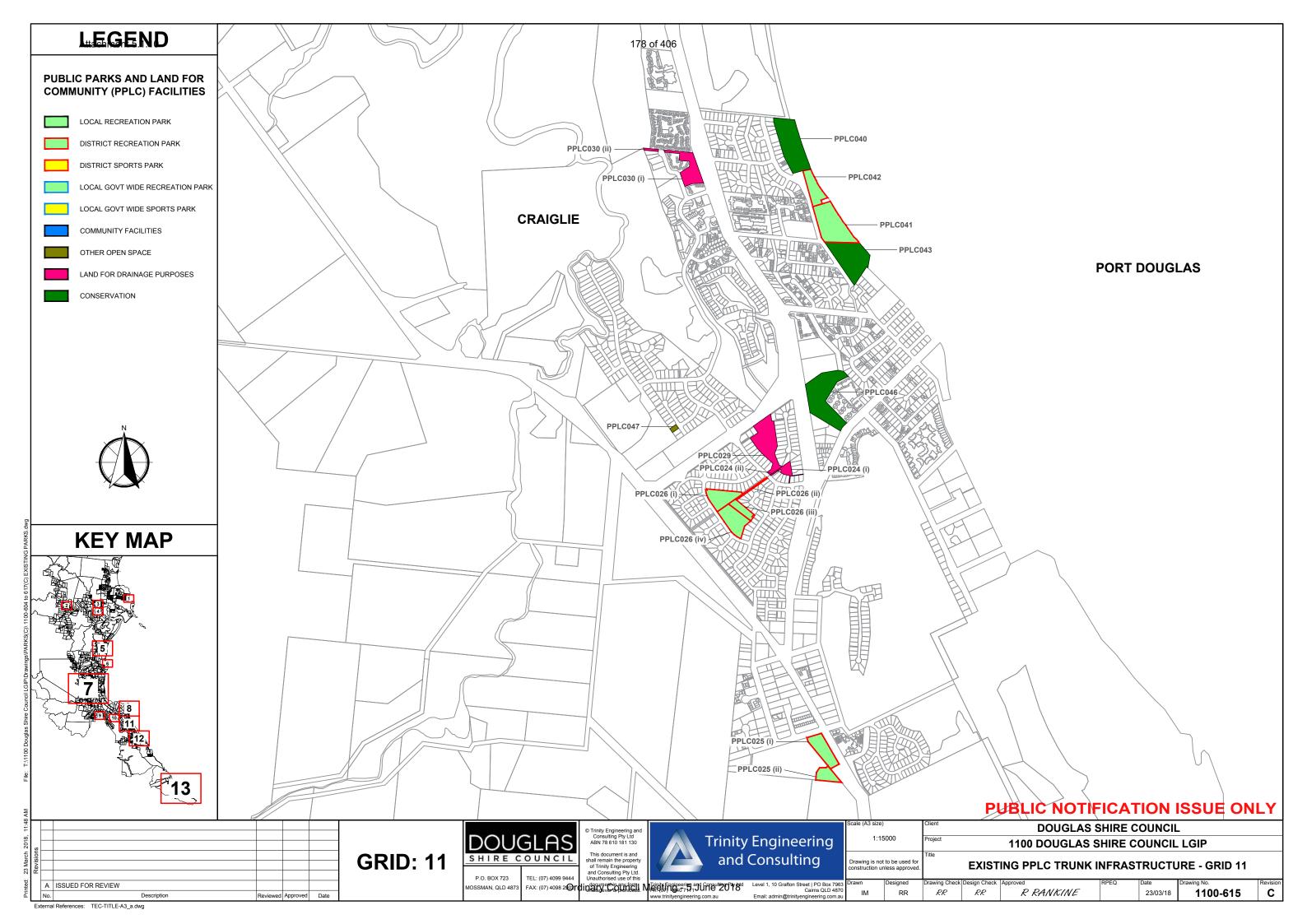


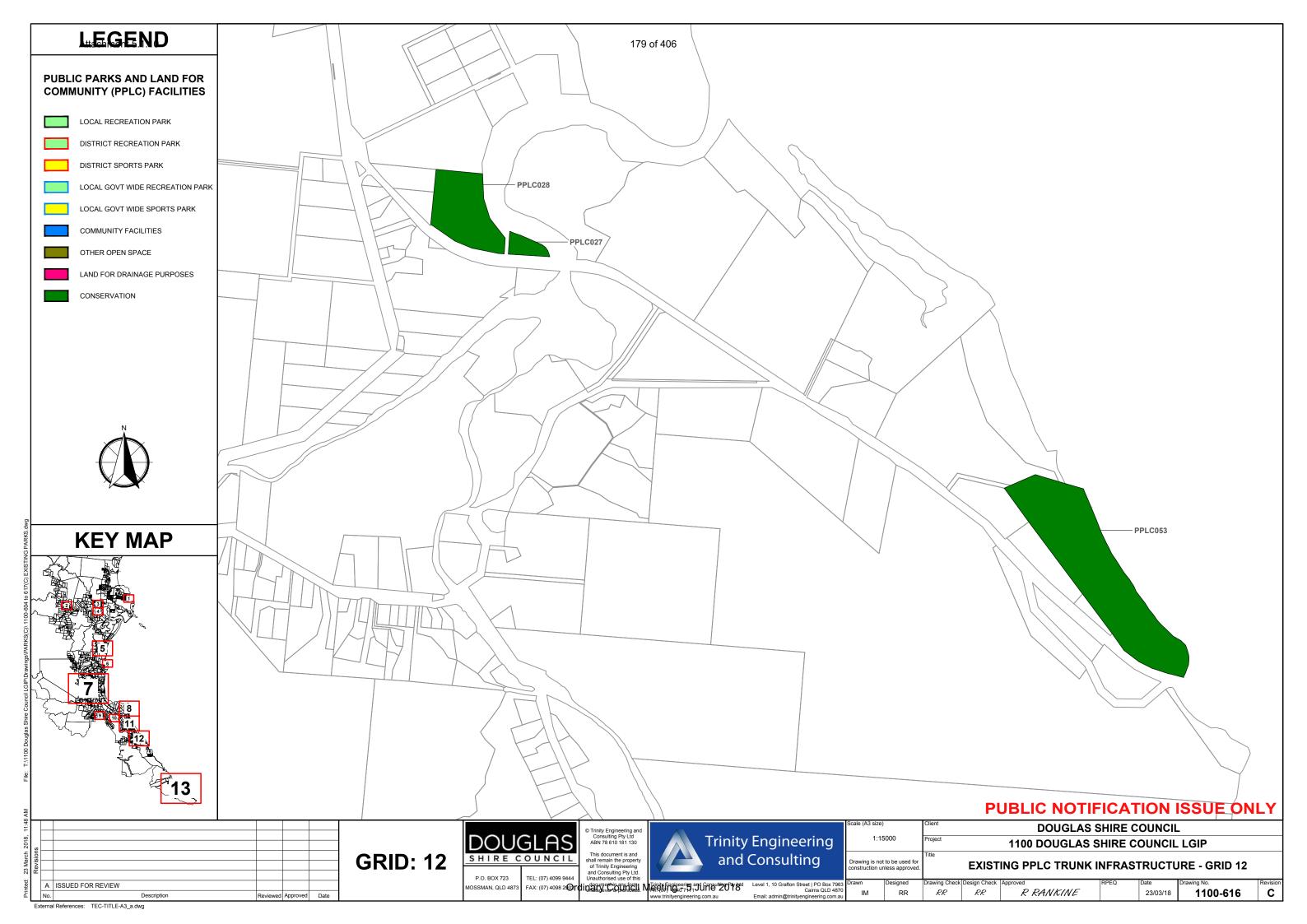


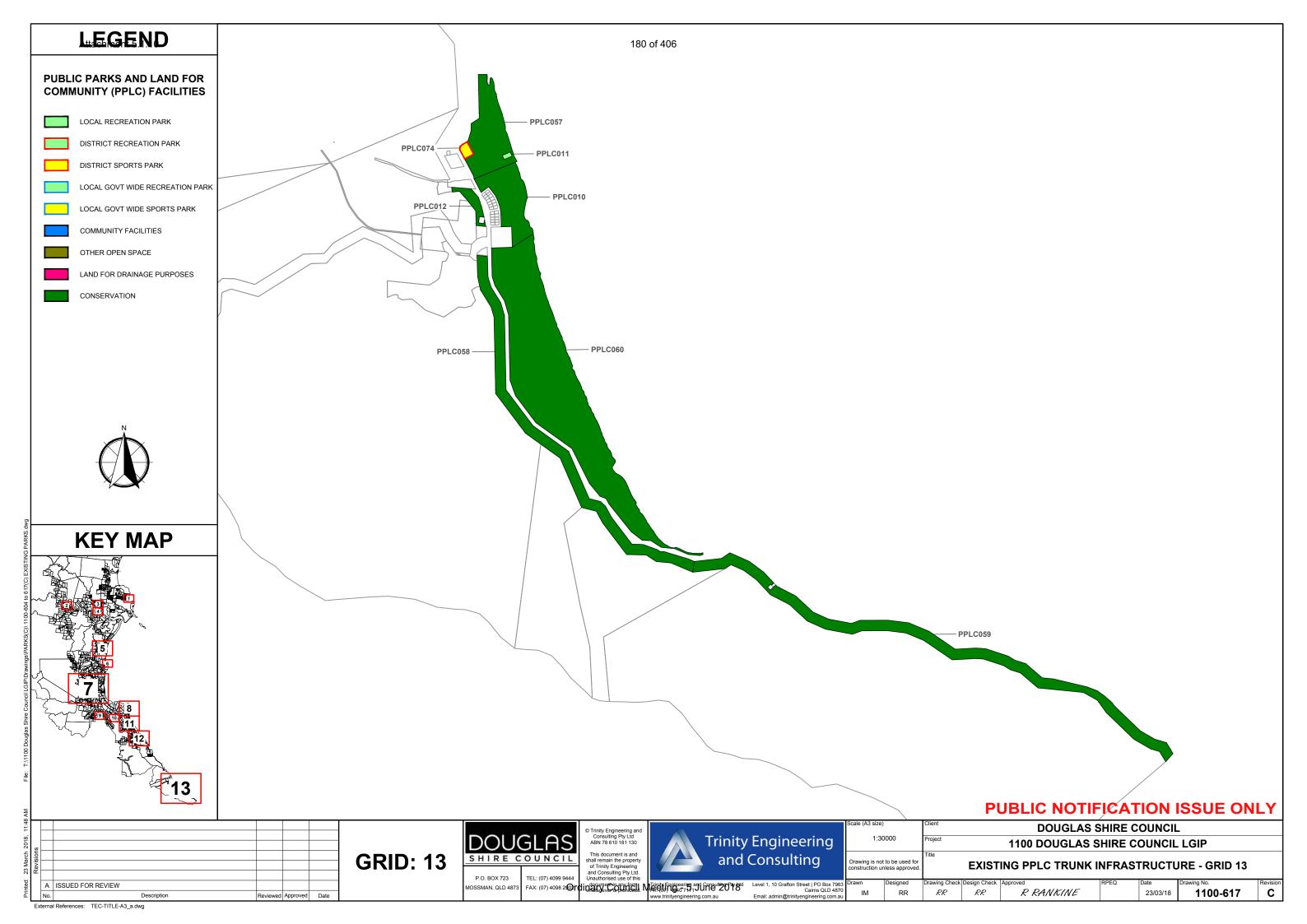


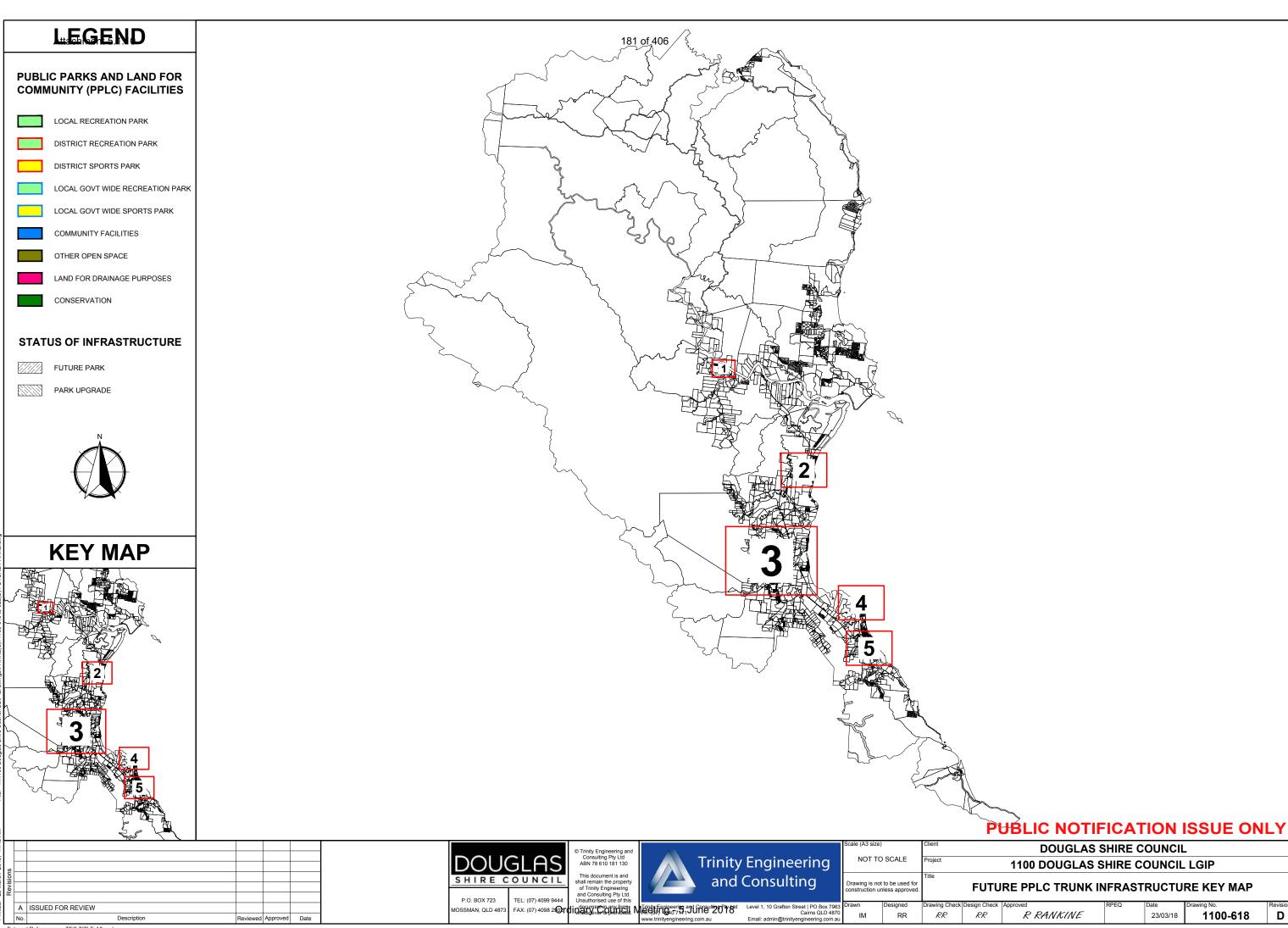


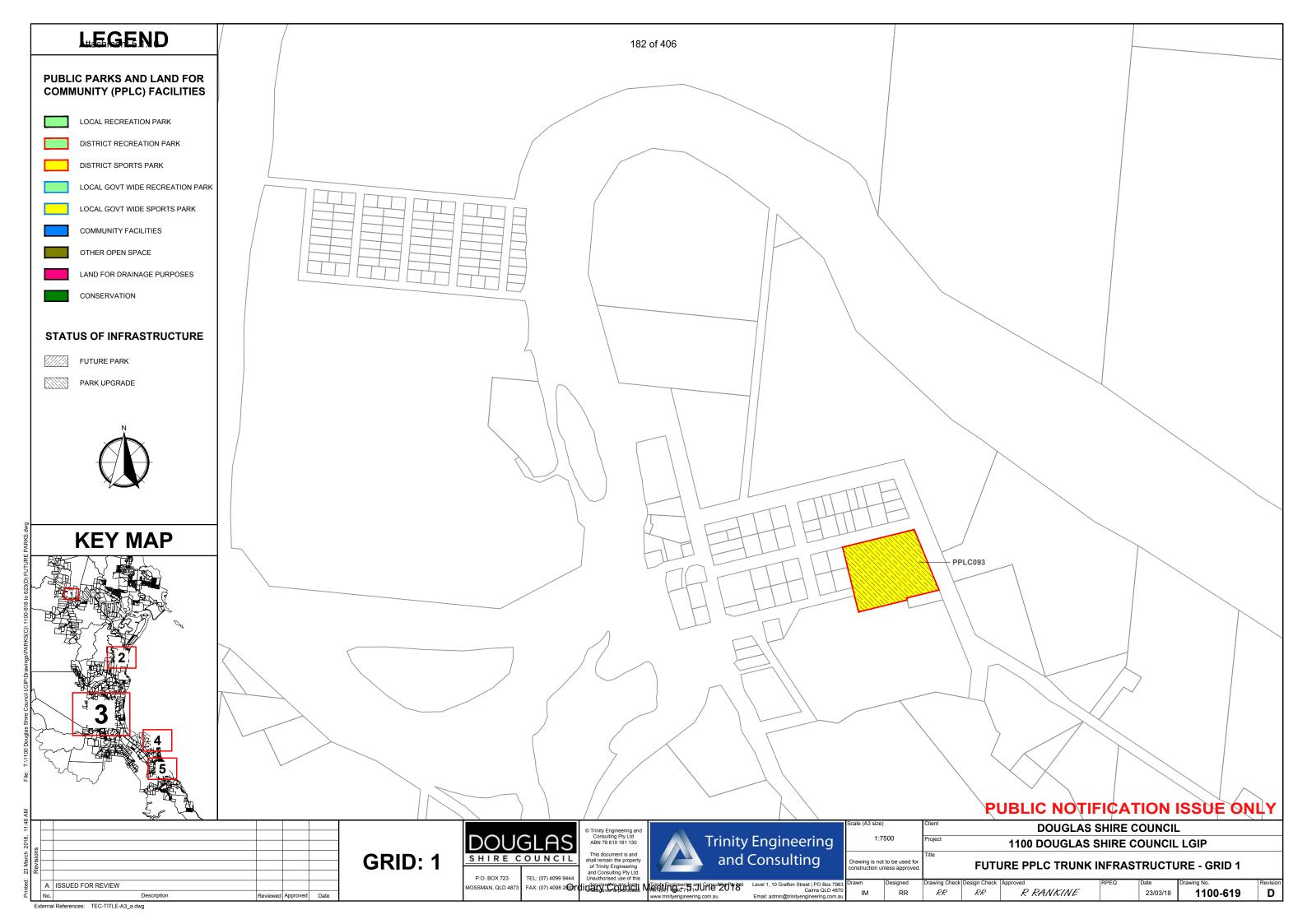


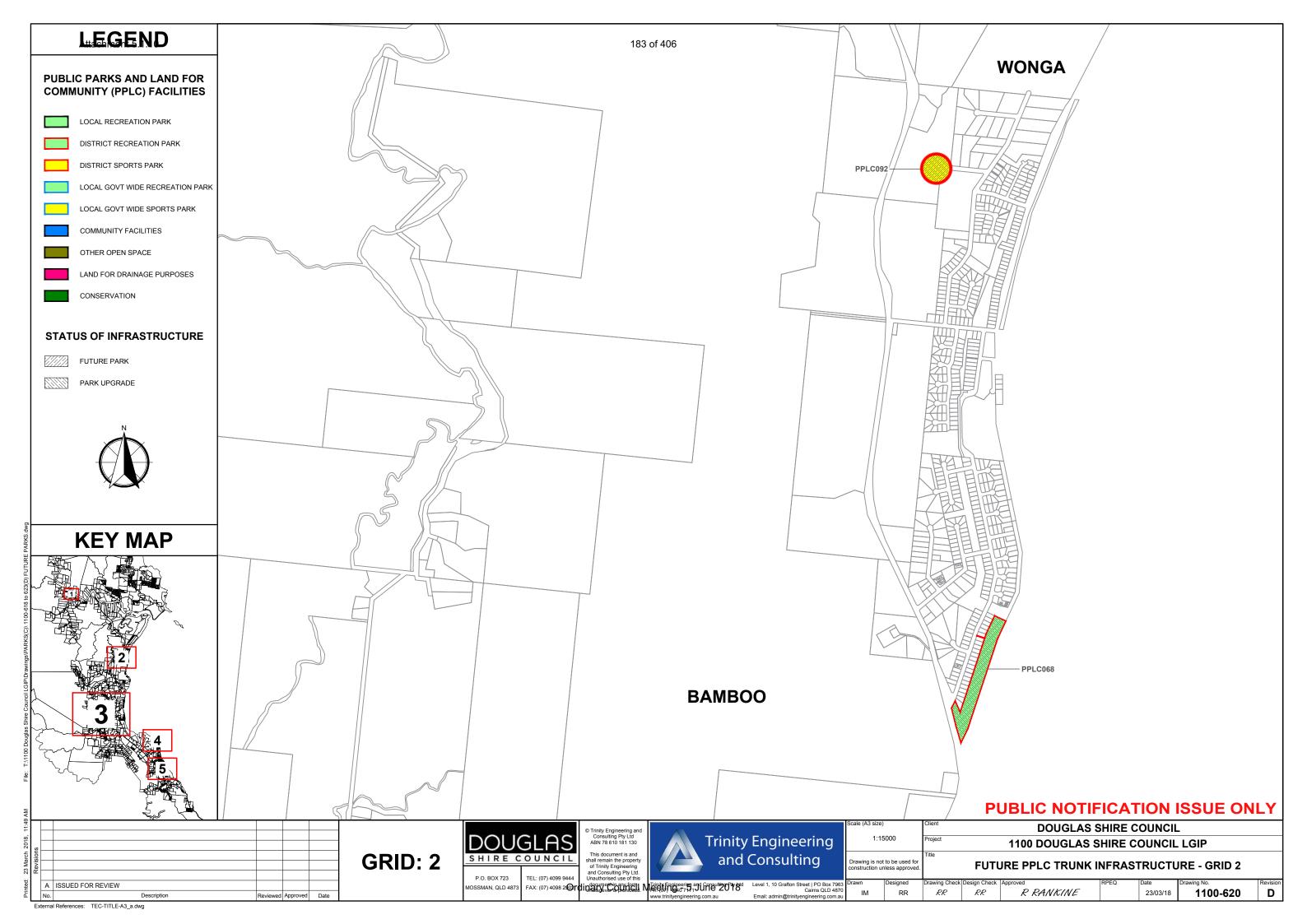


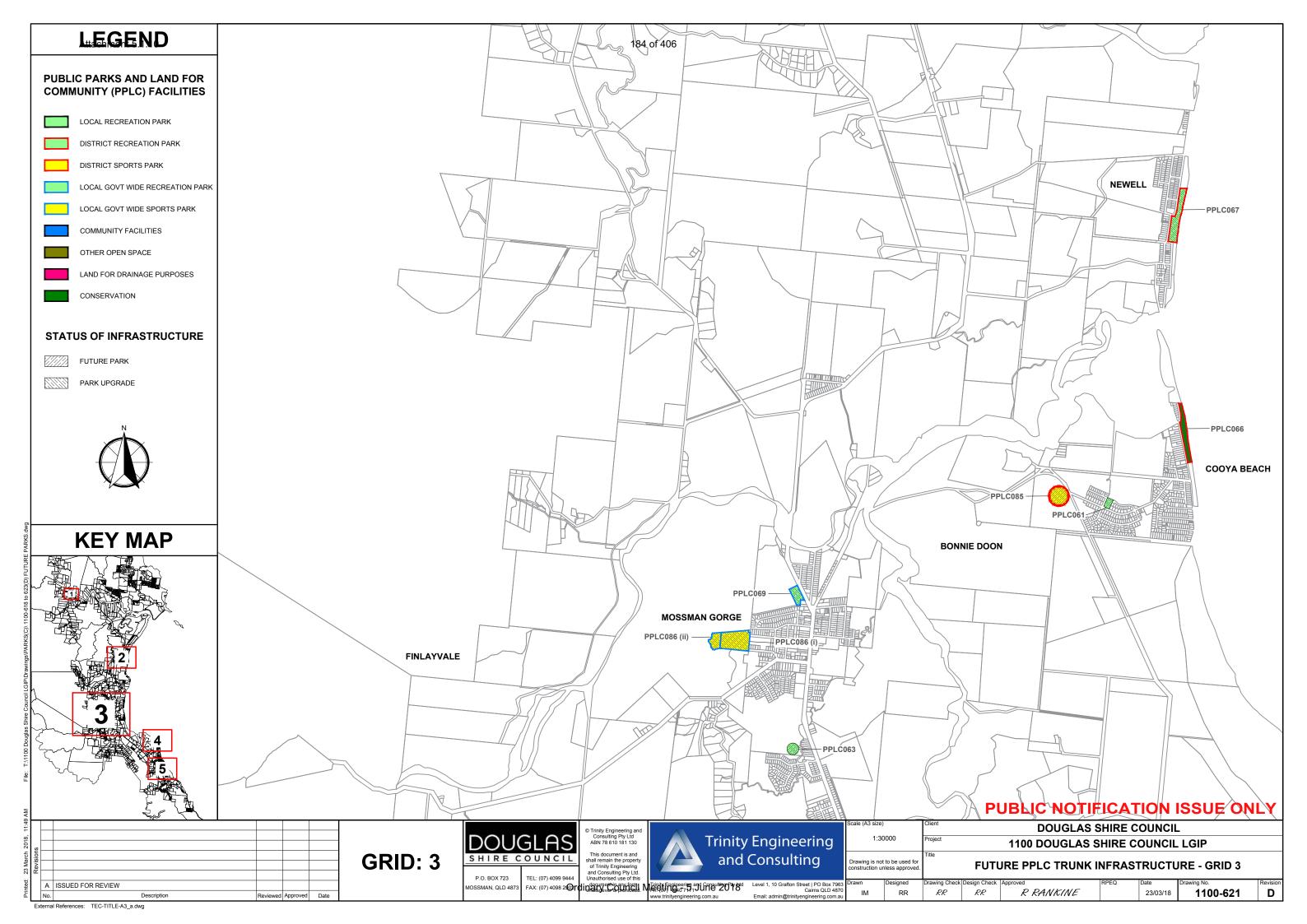


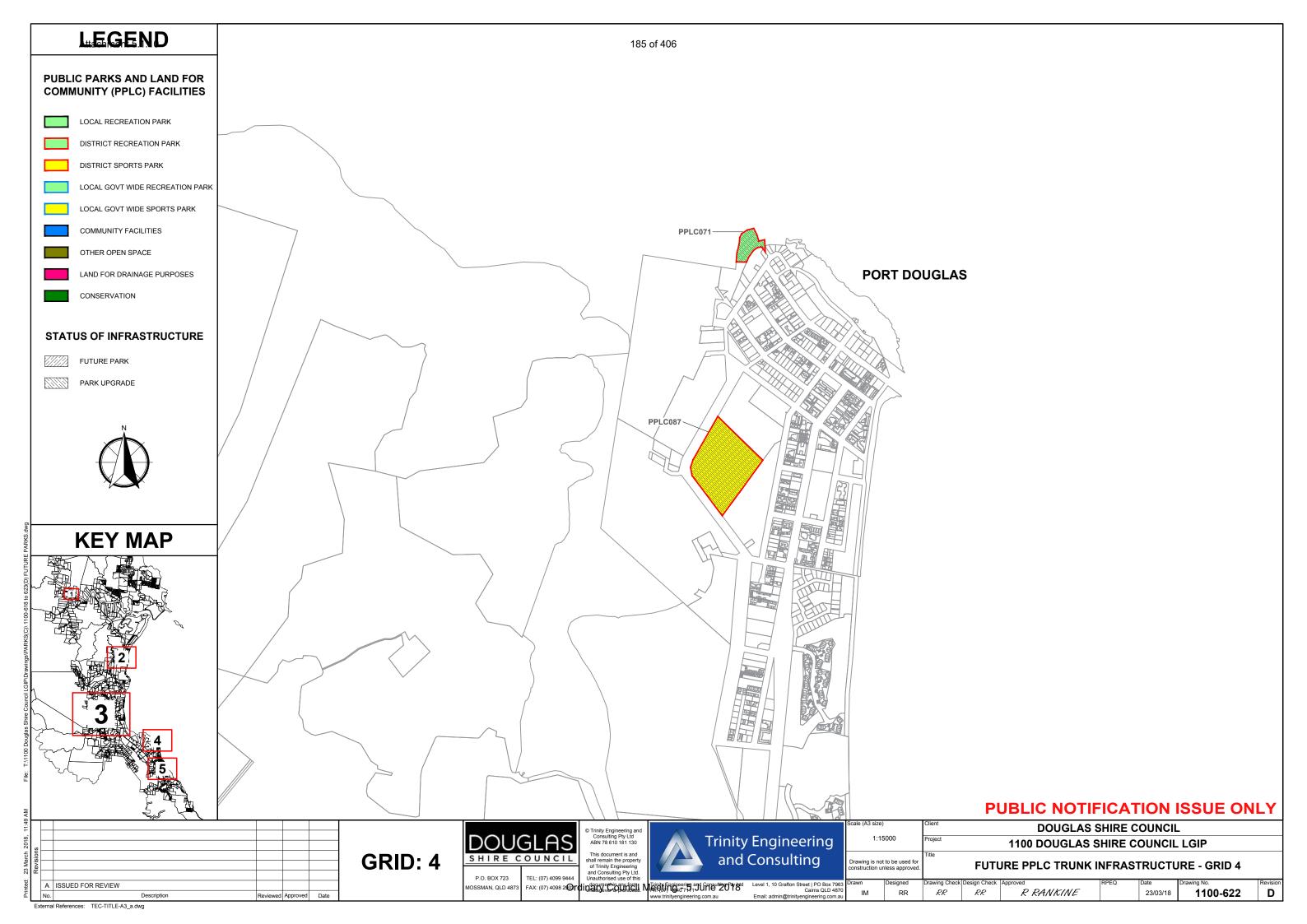


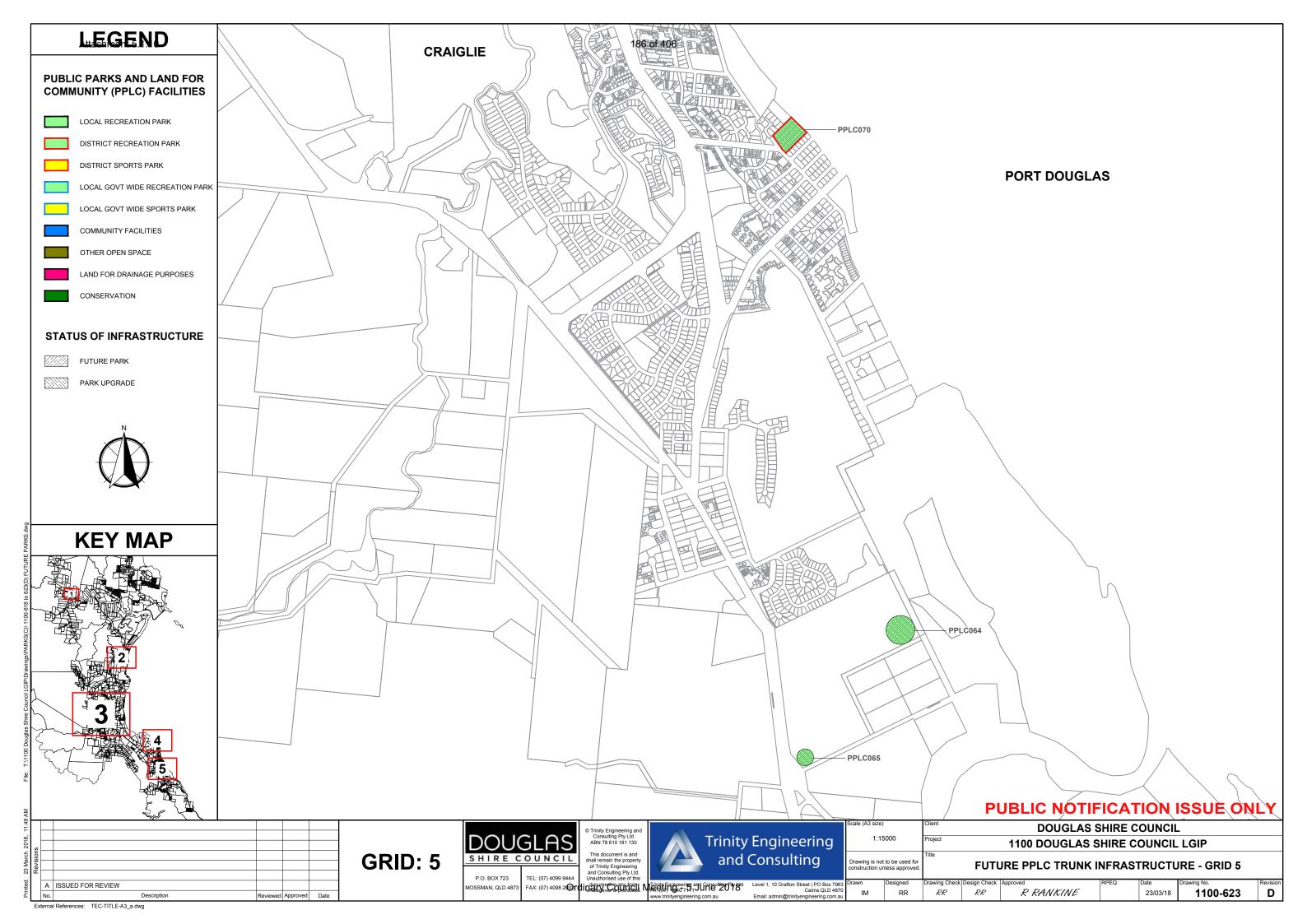


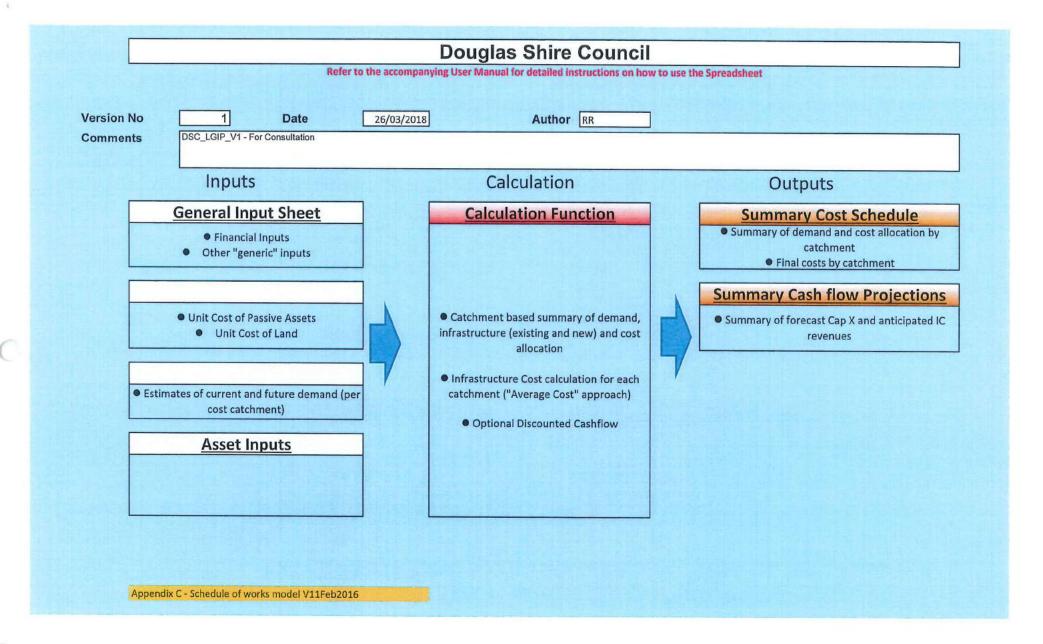












Attachment 5.1.11 188 of 406

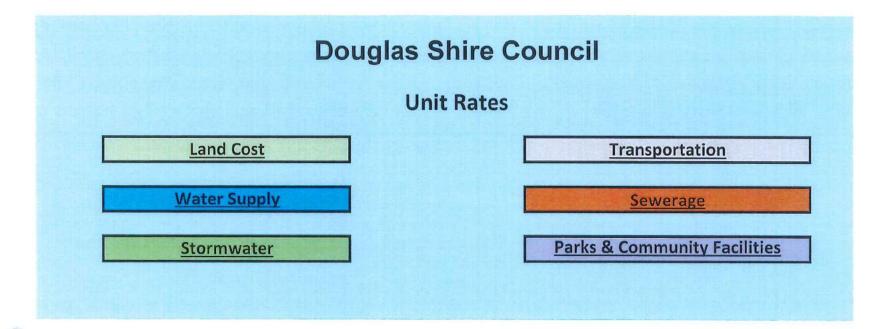
Douglas Shire Council

Return to Navigation Pane

General Input Sheet

	General Inputs	Reference	Value	Comments
	Base Year	YEAR	2011	Aligns with release of ABS data (2016 data not released prior to completion of LGIP)
	Term (between 15 and 30 years)	TERM	15	
	Application of Discounted Cash flow			
	Calculate charges using Discounted Cash flow? (Y/N)	DCFTRIGGER	Yes	DCF Mtdology used to recognise inherent uncertainty in long term financial projections
	General Financial Inputs			
Disco	unt Rate (WACC):			
	Average 10 Year Bond Rate	TenYr	2.75%	Currently 10yr Bond Rate = 2.75%; (15 year bond rate = 3.02%). Adopt 2.75%
n 1	Basic Margin on 10 Yr. Bond Rate	Margin	3.50%	3.5% is the baseline figure quoted in LG Bulletin 06/01
Option 1	WACC:	WACC1	6.25%	
	Capital Structure (% Debt)	Capstr		
7	Market Risk Premium	Risk	6.00%	
Option 2	Asset Beta	AssetBeta		
Opt	Cost of Debt	Debt		
	WACC:	WACC2	2.75%	
	WACC Option to be applied in the calculation?	WACC1	6.25%	More Appropriate for DSC as (Small-Medium Council)
Escala	ition Rates			
	Capital Escalation - Future Cap X	PPI	3.84%	ten (10) yr. average Roads and Bridges Index (ABS 6427, Table 17, Index 3101)
	Capital Indexation Rates - Historical (June Qtr.)			
		2011	100.30	Roads and Bridges Index (ABS 6427, Table 17, Index 3101)
		2010	96.60	
		2009	95.20	
		2008	91.80	
		2007	83.20 80.10	
		2005	73.30	
	Land Escalation	LandInd	2.72%	ten (10) yr. average Consumer Price Index (ABS 640101, Series A2325817T, Series ID A2325820F : June Qtr - from base year)
	Charges Escalation Rate	Chargeind	3.00%	As adopted by Council under it's infrastructure charges resolution

Attachment 5.1.11 189 of 406



Douglas Shire Council Demand Forecast Anticpated Growth Residential Mater Supply Transportation Sewerage Parks & Community Facilities

Douglas Shire Council

Existing Trunk Assets

Water Supply

Transportation

Sewerage

Parks & Community Facilities

Stormwater

Douglas Shire Council
Water Supply
EXISTING TRUNK ASSETS

Return to "Existing Trunk Assets"

WME044

Water Main

WME044 - Water Main - 450mm dia (HOBAS)

Water Main - 450mm dia (HOBAS

Asset Data 1 2 E t 5 ncils ID (from GIS, Fa AMA etc.) alues can be direc CTIVE ASSETS 1.00 1.00 ort Douglas Views Bore 2 ort Douglas Views Bore 2 t Douglas Views Bore 33241 Port Douglas Views Bore 4 ort Douglas Views Bore 4 5,322 1.00 5,32 ort Douglas Views Bore 5 hyanbeel Intake Structure hyanbeel Intake Structure 91,23 197,683 Raw Water Intake lex Creek Intake ex Creek Intake 20 197,68 ump Station lagstaff Pump Station 3 lagstaff Pump Station 3 73,25 73,25 422.73 53,222 53,222 33142 ump Station Flagstaff Pump Station 1 lagstaff Pump Station 1 2011 1.00 36,496 36,49 Flagstaff Pump Station 2 (Cost included in Flagstaff Pump Station Pump Station lagstaff Pump Station 2 (Cost included in Flagstaff Pump Statio 1,412,56 1.412.56 ort Douglas Views Reservoir (1.0 M rt Douglas Views Reservoir (1.0 well Reservoir (0.135 ML) well Reservoir (0.135 ML) 304,12 304,12 284,176 Cooya Reservoir 1 (1.8 ML) ooya Reservoir 1 (1.8 ML) 284,17 lagstaff Reservoir 3 (0.135 ML) lagstaff Reservoir 3 (0.135 ML) 728,464 728.464 284,544 lagstaff Reservoir 1 (0.45 ML) Flagstaff Reservoir 1 (0.45 ML) 284,544 33120 WRE006 eservoir \$ 20 2011 Mowbray Reservoir 1 (0.28 ML) owbray Reservoir 1 (0.28 ML) 213,73 213,73 176,09 176,09 assowary Reservoir (0.2 ML) ssowary Reservoir (0.2 ML) Mossman Reservoir 2 (5.0 ML) sman Reservoir 2 (5.0 ML) 2,428,346 2,428,34 lagstaff Reservoir 2 (2.2 ML) lagstaff Reservoir 2 (2.2 ML) 153,61 RE013 eservoir aintree Reservoir 2 (0.4 ML) intree Reservoir 2 (0.4 ML) 263,969 263,96 eservoir Wonga Reservoir (2.0 ML) Vonga Reservoir (2.0 ML) 675,696 675,69 115,93 362,37 362,37 300,710 3,528,283 3,528,28 Vater Treatment Plant Whyanbeel Water Treatment Plant Vhyanbeel Water Treatment Plant 1.00 1,939,578 11,647,05 11,647,05 138.1 291 24,06 Water Main WME001 - Water Main - 100mm dia (PVC) Water Main - 100mm dia (PVC) 24,06 Vater Main /ME003 - Water Main - 100mm dia (AC Water Main - 100mm dia (AC) 40,963 40,96 40,96 30,642 2,481 2,48 Vater Main ME005 - Water Main - 100mm dia (AC) Vater Main - 100mm dia (AC) 14.24 Water Main VME007 - Water Main - 100mm dia (AC) Water Main - 100mm dia (AC) assive 493.84 86,042 86,042 \$ 20 1.00 86,042 Vater Main VME009 - Water Main - 100mm dia (AC) Water Main - 100mm dia (AC) 237.24 41,334 41,334 1.00 41,33 VME010 - Water Main - 100mm dia (AC) 474.42 Water Main VME011 - Water Main - 100mm dia (AC) Water Main - 100mm dia (AC) 292.83 51,02 \$ 20 1.00 51,02 VME012 - Water Main - 150mm dia (A /ME013 Vater Main VME013 - Water Main - 150mm dia (AC) Water Main - 150mm dia (AC) 20.16 193 3,889 3,889 20 2011 1.00 3,88 Vater Main VME014 - Water Main - 150mm dia (AC) Water Main - 150mm dia (AC) 34.75 6,70 3,870 3,870 WME016 Water Main WME016 - Water Main - 150mm dia (AC) Water Main - 150mm dia (AC) ssive 20.06 193 2011 1.00 3,870 13.43 2.591 /ME018 - Water Main - 200mm dia (AC) Vater Main - 200mm dia (AC) 259.92 2011 Water Main WME019 - Water Main - 200mm dia (AC) Water Main - 200mm dia (AC) 231 231 2011 320.51 74,054 74,054 WME020 Water Main WME020 - Water Main - 200mm dia (AC) Water Main - 200mm dia (AC) ssive 74,054 \$ 20 2011 1.00 Vater Main WME021 - Water Main - 200mm dia (AC Vater Main - 200mm dia (AC) 642.73 148,503 148,50 148,50 35.93 9,242 Water Main WME022 - Water Main - 225mm dia (PVC) Water Main - 225mm dia (PVC 9,242 \$ 20 2011 1.00 9,242 Water Main WME023 - Water Main - 225mm dia (AC) Water Main - 225mm dia (AC) 60.24 15,496 15.496 15.496 3,390 3,390 Water Main WME025 - Water Main - 225mm dia (DICL Water Main - 225mm dia (DICI 15.87 4,082 4,082 4,08 17,901 34,548 17,90: 34,54 Vater Main /ME027 - Water Main - 100mm dia (PVC) Water Main - 100mm dia (PVC 198.29 34,548 29.2 46.65 Water Main WME029 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 9,476 9,476 1.00 9,476 ater Main /ME031 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 243.88 79,144 79,144 79,144 ME033 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 129.84 ater Main /ME035 - Water Main - 300mm dia (DICL Vater Main - 300mm dia (DICI 14.16 4,59 4,59 VME036 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 33.15 94,104 Water Main VME037 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 289.98 94,104 1.00 94,10 /ater Main - 375mm dia (AC) 426.46 1289.46 287,954 870,669 287,954 870,669 287,95 870,66 Vater Main WME040 - Water Main - 450mm dia (DICL Vater Main - 450mm dia (DIC Vater Main WMF042 Vater Main WMF042 - Water Main - 450mm dia (AC Vater Main - 450mm dia (AC) Water Main

192 of 406

23.079

Douglas Shire Council Water Supply EXISTING TRUNK ASSETS

Return to "Existing Trunk Assets"

WME126

Water Main

WME126 - Water Main - 150mm dia (AC)

Water Main - 150mm dia (AC)

Asset Data 1 2 E t 5 cils ID (from GIS, F AMA etc.) Water Main WME045 - Water Main - 450mm dia (DICL Water Main - 450mm dia (DIC 49.17 49.176 49.176 Vater Main - 450mm dia (DICL 579,00 579,00 Water Main VME046 - Water Main - 450mm dia (DICL) 857.51 2011 579,00 Vater Main WME047 - Water Main - 450mm dia (DICL Vater Main - 450mm dia (DIC 88.84 675 59,987 59.987 2011 59,987 Vater Main VME048 - Water Main - 450mm dia (DICL) 431.75 291,526 291,52 Water Main - 450mm dia (DICL) 291,52 Vater Main WME049 - Water Main - 450mm dia (DICI Vater Main WME051 - Water Main - 450mm dia (DICL) Vater Main - 450mm dia (DICI 19.59 675 13,228 13,22 13,22 Vater Main VME052 - Water Main - 450mm dia (DICL) Water Main - 450mm dia (DICL 312,47 312,47 312,47 Vater Main ME053 - Water Main - 450mm dia (DICL Vater Main - 450mm dia (DIC 13.82 425,94 Vater Main WME055 - Water Main - 450mm dia (DICL) Water Main - 450mm dia (DICI 33,795 33,79 33,79 /ater Main 173.67 117,265 117,26 117,26 Vater Main VME057 - Water Main - 600mm dia (AC) Water Main - 600mm dia (AC) 841 Vater Main VME059 - Water Main - 150mm dia (PVC) Water Main - 150mm dia (PVC 63.78 12,304 12,304 1.00 12,304 1291.43 Vater Main /ME061 - Water Main - 200mm dia (AC) Water Main - 200mm dia (AC) 474.67 109,67 109,67 109,67 154,510 474,591 1462.44 Vater Main VME063 - Water Main - 300mm dia (DICL) Water Main - 300mm dia (DICL) 474,593 20 1.00 474,59 68,29 68,29 /ME065 - Water Main - 150mm dia (AC) Vater Main - 150mm dia (AC) 216.7 41,806 41,806 41,806 VME066 - Water Main - 100mm dia (AC) 307.26 VME067 Water Main VME067 - Water Main - 75mm dia (AC) Water Main - 75mm dia (AC) 35.39 103 3,658 3,658 2011 1.00 3,658 VME068 - Water Main - 100mm dia (PV 947.45 64.3 165,074 43,417 165,074 43,417 165,074 43,417 VME069 - Water Main - 450mm dia (DICL) Vater Main - 450mm dia (DICL) Vater Main (Asset to be WME070 - Water Main (Asset to be replaced & Augmented) - 80mm dia (AC) Water Main (Asset to be replaced & Augmented) - 80mm dia (AC) 407,868 407,868 Water Main WMF072 - Water Main - 150mm dia (PVC) (ater Main - 150mm dia (PVC) 1373.18 193 264,914 264,914 264,914 Water Main WME073 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 61.01 19,799 19,79 2011 19,79 Water Main WME074 - Water Main - 100mm dia (AC) Vater Main - 100mm dia (AC) 445.31 77,58 77,586 Vater Main WME076 - Water Main - 150mm dia (AC) Vater Main - 150mm dia (AC) 261.97 50,539 50,53 50,53 /ater Main Vater Main - 100mm dia (AC) 89,941 89,94 89,941 WME078 Vater Main WME078 - Water Main - 100mm dia (AC Vater Main - 100mm dia (AC 917.62 159,877 159,87 159,87 WME080 Water Main WME080 - Water Main - 100mm dia (AC) Water Main - 100mm dia (AC) 596.2 103.876 103.876 1.00 103.876 /ater Main 155,58 155,58 VME081 - Water Main - 100mm dia (AC) Water Main - 100mm dia (AC) 155,58 Vater Main VME084 - Water Main - 150mm dia (AC) Water Main - 150mm dia (AC) 685.51 132,249 132,24 132,24 Vater Main /ME086 - Water Main - 150mm dia (AC) Vater Main - 150mm dia (AC) 209.53 40,423 40,42 40,42 495,61 Vater Main VME088 - Water Main - 225mm dia (DICL) Water Main - 225mm dia (DICL) 1926.72 257 495,61 1.00 495,61 612,23 492,93 /ME090 - Water Main - 225mm dia (PVC) Water Main - 225mm dia (PVC 1916.3 492,93 164.07 682.99 31,653 131,763 31,65 131,76 Vater Main - 150mm dia (AC) VME093 - Water Main - 150mm dia (AC) Vater Main - 150mm dia (AC) 80.99 Water Main VME094 - Water Main - 150mm dia (AC) Water Main - 150mm dia (AC) ssive 1342.23 258,943 258,94 \$ 20 258,94 VME095 - Water Main - 150mm dia (AC 90.45 17.45 Vater Main VME096 - Water Main - 150mm dia (AC) Water Main - 150mm dia (AC) 619.97 119,605 119,605 20 2011 1.00 119,60 WME097 - Water Main - 150mm dia (AC) Water Main - 150mm dia (AC) 1379.67 266,16 266,16 266,16 Water Main VME098 - Water Main - 150mm dia (AC) Water Main - 150mm dia (AC) 919.96 177,479 177,47 ssive 193 \$ 20 2011 1.00 177,47 Vater Main ME099 - Water Main - 225mm dia (PV 375.82 375.82 347,489 VME100 VME100 - Water Main - 225mm dia (PVC) 1350.89 347,489 347,489 Vater Main Vater Main - 225mm dia (PVC 2011 2792.4 242.47 718,289 62,371 Water Main WME101 - Water Main - 225mm dia (PVC Water Main - 225mm dia (PVC 718,289 718,28 62,37 62,37 WME102 - Water Main - 225mm dia (DICL) Vater Main Water Main - 225mm dia (DICL) Vater Main WME103 - Water Main - 225mm dia (PVC) Vater Main - 225mm dia (PVC 714.75 183,855 183,85 183,85 /ater Main 116,40 116,40 Vater Main WME105 - Water Main - 225mm dia (PVC) Water Main - 225mm dia (PVC 206.99 53.244 53.24 53.24 301,44 Vater Main WME107 - Water Main - 100mm dia (AC) Water Main - 100mm dia (AC) 887.73 154,669 154,66 154,66 Vater Main WME108 - Water Main - 100mm dia (AC) 1967.67 342,827 342,827 1.00 342,827 Water Main - 100mm dia (AC ssive Water Main WME109 - Water Main - 100mm dia (AC) Water Main - 100mm dia (AC) ssive 803.63 140,016 140,01 1.00 140,01 149,02 Vater Main VME111 - Water Main - 75mm dia (AC) Water Main - 75mm dia (AC) 15.86 1,63 206,713 240,617 1381.03 240,61 Vater Main VME113 - Water Main - 100mm dia (PVC) Water Main - 100mm dia (PVC 240,61 2029.89 VME115 Water Main WME115 - Water Main - 225mm dia (PVC) Water Main - 225mm dia (PVC) ssive 487.11 125,299 125,299 1.00 125,29 VME116 - Water Main - 150mm dia (AC) 872.89 168,398 168,398 Vater Main - 150mm dia (AC 1178.26 227,31 227,31 227,31 269,779 490,482 269,779 490,482 VME118 - Water Main - 150mm dia (AC) 1398.4 VME119 Water Main VME119 - Water Main - 200mm dia (AC) Water Main - 200mm dia (AC) 2122.84 \$ 20 490,482 VME120 - Water Main - 150mm dia (A VME121 VME121 - Water Main - 150mm dia (AC) 560.76 108,18 /ater Main /ater Main - 150mm dia (AC) 108,182 108,182 276,146 345,132 276,146 345,132 276,146 345,132 Vater Main WME122 - Water Main - 150mm dia (AC) Water Main - 150mm dia (AC) 1431.4 WME123 Water Main WME123 - Water Main - 450mm dia (DICL) 511.14 1.00 Water Main - 450mm dia (DICL) 2011 Vater Main WMF124 - Water Main - 450mm dia (DIC Vater Main - 450mm dia (DIC 800.244 800.24 800.244 306,26

193 of 406

52,798

52,798

Douglas Shire Council Water Supply EXISTING TRUNK ASSETS

Return to "Existing Trunk Assets"

Asset Data 1 2 E t 5 cils ID (from GIS, F AMA etc.) Water Main WME127 - Water Main - 200mm dia (AC Water Main - 200mm dia (AC 63,428 63,428 29,47 29,47 Water Main WME128 - Water Main - 300mm dia (AC) Vater Main - 300mm dia (AC) 90.82 29,473 2011 22,330 536,421 Vater Main WME129 - Water Main - 300mm dia (AC Vater Main - 300mm dia (AC) 68.81 325 841 22,330 2011 22,33 WME130 - Water Main - 600mm dia (DICL) Vater Main 637.67 536,42 536,42 Water Main - 600mm dia (DICL) Vater Main WME131 - Water Main - 600mm dia (DICI Vater Main - 600mm dia (DIC 635.38 534.494 534.49 534,494 WME133 Vater Main WME133 - Water Main - 200mm dia (AC) Vater Main - 200mm dia (AC) 876.82 202,589 202,589 202,58 515,640 Vater Main WME134 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 515,64 Vater Main WME135 - Water Main - 300mm dia (AC Vater Main - 300mm dia (AC 154,28 154,28 154,28 831,903 831,90 WME137 Vater Main WME137 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 306.36 99,420 99,42 99,42 ater Main 214.36 55,140 55,14 WME139 Vater Main WME139 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 1471.01 477,37 477,37 477,37 Vater Main WME141 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 110.84 35,97 35,97 VME143 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 371.47 120,54 120,54 1606.2 1,084,538 1,084,538 Vater Main VME145 - Water Main - 450mm dia (DICL) Water Main - 450mm dia (DICL) 20 1.00 1,084,53 1,576,59 VME147 - Water Main - 450mm dia (DICL) Water Main - 450mm dia (DICL) 908.77 613,620 613,62 613,62 VME148 - Water Main - 450mm dia (DICL) Water Main - 450mm dia (DICI 2454.43 1,657,280 1,657,28 WME149 Water Main WME149 - Water Main - 450mm dia (DICL) Water Main - 450mm dia (DICL) 1939.08 675 1,309,306 1,309,306 2011 1.00 1,309,306 WME150 - Water Main - 450mm dia (DICL) WME151 - Water Main - 450mm dia (DICL) 1071.21 723,302 1,087,124 723,302 1,087,124 Vater Main - 450mm dia (DICL) 1,087,12 Vater Main Vater Main WME152 - Water Main - 450mm dia (DICL Water Main - 450mm dia (DIC 300.81 WMF154 Vater Main WMF154 - Water Main - 450mm dia (DICI) Vater Main - 450mm dia (DICI 1596.41 675 1.077.928 1.077.928 1.077.92 274,291 274,291 WME155 - Water Main - 300mm dia (AC) 845.22 Water Main Water Main - 300mm dia (AC) 2011 274,291 WME156 Vater Main WME156 - Water Main - 375mm dia (AC) Water Main - 375mm dia (AC) 569.88 357.52 732,681 1167.88 732,68 732,681 WME158 Vater Main WME158 - Water Main - 375mm dia (AC) Water Main - 375mm dia (AC) 686.06 430,407 430,407 430,407 /ater Main 845,662 845,66 845,662 WME160 Vater Main WME160 - Water Main - 375mm dia (AC Vater Main - 375mm dia (AC 951.87 597,165 597,16 597,16 WME162 Water Main WME162 - Water Main - 375mm dia (AC) Water Main - 375mm dia (AC) 416.37 627 261,214 261.214 1.00 261.214 ater Main VME164 - Water Main - 525mm dia (HOBAS Vater Main - 525mm dia (HOBA 50,33 50,33 Vater Main VME166 - Water Main - 450mm dia (HOBAS Vater Main - 450mm dia (HOBA 131.76 88,967 88,96 88,96 Vater Main VME168 - Water Main - 375mm dia (AC) Vater Main - 375mm dia (AC) 334.46 209,82 209,82 209,827 Vater Main VME170 - Water Main - 375mm dia (AC) Water Main - 375mm dia (AC) 326.36 627 204,745 204,745 1.00 204,745 321,369 138,119 321,369 138,119 VME172 - Water Main - 300mm dia (DICL) Water Main - 300mm dia (DICL) 425.61 138,119 66,942 46,082 VME174 - Water Main - 300mm dia (DICL) Vater Main - 300mm dia (DICL VME175 - Water Main - 450mm dia (DICL) Vater Main - 450mm dia (DIC 783.29 528,893 528,893 528,89 WME176 Water Main WME176 - Water Main - 100mm dia (AC) Water Main - 100mm dia (AC) ssive 410.36 71,497 71,497 \$ 20 71,497 WME177 - Water Main - 300mm dia (AC Vater Main - 300mm dia (AC 6,818 6,818 6,818 VME178 Vater Main VME178 - Water Main - 375mm dia (AC) Water Main - 375mm dia (AC) 173.76 627 109,010 109,01 20 2011 109,010 WME179 - Water Main - 375mm dia (AC) Water Main - 375mm dia (AC) 263.39 165,240 165,24 165,24 WME180 WME180 - Water Main - 375mm dia (AC) Water Main - 375mm dia (AC) 76,801 76,801 Water Main ssive 122.42 627 76,801 \$ 20 2011 1.00 Vater Main WME181 - Water Main - 300mm dia (A 108.91 108.91 108.91 VME182 VME182 - Water Main - 300mm dia (AC) 230,558 230,55 230,55 Vater Main Vater Main - 300mm dia (AC) 710.46 WME183 Vater Main WME183 - Water Main - 300mm dia (AC) Water Main - 300mm dia (AC) 1320.26 428,451 428,451 428,451 631.63 204,97 204,97 204,97 WME184 - Water Main - 300mm dia (AC) Vater Main Water Main - 300mm dia (AC) WME185 Vater Main WME185 - Water Main - 300mm dia (AC Water Main - 300mm dia (AC) 164.49 53,380 53,380 53,380 202,712 WME187 Vater Main WME187 - Water Main - 75mm dia (AC Water Main - 75mm dia (AC) 929.49 96.07 96.07 96.07 VME189 Vater Main WME189 - Water Main - 75mm dia (AC) Water Main - 75mm dia (AC) 1357.99 140,367 140,36 140,367 Vater Main VME190 - Water Main - 450mm dia (DICL) Water Main - 450mm dia (DICI 627,576 1.00 ssive 627,57 VME191 Water Main WME191 - Water Main - 50mm dia (PVC) Water Main - 50mm dia (PVC) ssive 321.16 25,455 25,45 1.00 25,45 Vater Main VME193 - Water Main - 100 mm dia (DICL) Water Main - 100 mm dia (DICL 1291 224,931 224,93 224,93 592.9 366.33 103,301 63,826 Vater Main VME195 - Water Main - 100 mm dia (AC) Water Main - 100 mm dia (AC 63,826 63,82 871.59 VME197 Water Main VME197 - Water Main - 100 mm dia (AC) Water Main - 100 mm dia (AC) assive 1990 346,718 346,718 346,718 VME198 - Water Main - 100 mm dia (AC) 247,407 247,407 308,73 308,73 Vater Main - 100 mm dia (AC 308,73 137,370 31,638 VME200 - Water Main - 100 mm dia (AC) 788.44 137,370 137,37 Water Main 181.59 174 31,638 ssive 31,638 \$ 20 1.00 WME202 - Water Main - 100 mm dia (AC Water Main - 100 mm dia (AC 386,268 386,26 386,26

RWME081 - Recycled Water Main - 200 mm (DICL)

Douglas Shire Council Water Supply EXISTING TRUNK ASSETS

Return to "Existing Trunk Assets"

Asset Data AMA etc.) CYCLED WATER Pipe_ID: 117283 WME001 - Recycled Water Main - 80 mm (PVC)_PN16 OPV ecycled Water Main - 80 mm (PVC)_PN16 OPVC 3.630018 pipe_ID: 117263 Vater Main VME003 - Recycled Water Main - 80 mm (PVC)_PN16 OPV cycled Water Main - 80 mm (PVC)_PN16 OPVC WME004 - Recycled Water Main - 80 mm (PVC) PN16 OPV WME005 - Recycled Water Main - 80 mm (PVC) PN16 OPV cycled Water Main - 80 mm (PVC)_PN16 OPV pe_ID: 115088 Vater Main RWME006 - Recycled Water Main - 200 mm (PVC) ycled Water Main - 200 mm (PVC) 30.558 30.55 30,55 Pipe_ID: 115091 /ME007 - Recycled Water Main - 200 mm (PVC)_ ecycled Water Main - 200 mm (PVC) 193,462 193,46 193,462 Vater Main RWME008 - Recycled Water Main - 200 mm (PVC) cled Water Main - 200 mm (PVC) 11,504 Vater Main Pipe_ID: 115084 WME009 - Recycled Water Main - 200 mm (PVC) ecycled Water Main - 200 mm (PVC) 80,67 80,67 80,673 \$ 20 pe ID: 115082 /ater Main WME010 - Recycled Water Main - 200 mm (PVC) cled Water Main - 200 mm (PVC 83.20 83.20 83.20 ME011 - Recycled Water Main - 200 mm (PVC) Pipe_ID: 115080 ecycled Water Main - 200 mm (PVC 73,97 320.1703 Vater Main RWME012 - Recycled Water Main - 200 mm (PVC) ycled Water Main - 200 mm (PVC) 268,806 268,80 268,806 ater Main WME013 - Recycled Water Main - 150 mm (PVC)_PN16 OPV cycled Water Main - 150 mm (PVC)_PN16 OPV 30,841 30,84 30,84 pe ID: 117267 ater Main RWME014 - Recycled Water Main - 180 mm (HDPE) PN16 PE100 cled Water Main - 180 mm (HDPE)_PN16 PE100 88.94219 19,194 19,19 19,19 /ME015 - Recycled Water Main - 150 mm (PVC)_PN16 OPVC cycled Water Main - 150 mm (PVC)_PN16 OPV Vater Main WME016 - Recycled Water Main - 150 mm (PVC) PN16 OPV cycled Water Main - 150 mm (PVC) PN16 OPV /ME017 - Recycled Water Main - 200 mm (DICL) ipe ID: 118603 ater Main WME018 - Recycled Water Main - 200 mm (DICL) cycled Water Main - 200 mm (DICL Vater Main WME020 - Recycled Water Main - 200 mm (DICL) ecycled Water Main - 200 mm (DICL 1,18 WME021 - Recycled Water Main - 200 mm (DICL) ecycled Water Main - 200 mm (DICL) Pipe_ID: 118583 /ater Main WME022 - Recycled Water Main - 200 mm (DICL) ecycled Water Main - 200 mm (DICL) 0.56356 1.00 WME024 - Recycled Water Main - 200 mm (DICL) cycled Water Main - 200 mm (DICL) 7.824857 Pipe_ID: 118596 WME026 - Recycled Water Main - 200 mm (DICL)_ ecycled Water Main - 200 mm (DICL)_ 1,80 WME027 - Recycled Water Main - 200 mm (DICL) ycled Water Main - 200 mm (DICL) Pipe_ID: 118627 Vater Main RWME028 - Recycled Water Main - 250 mm (DICL) ecycled Water Main - 250 mm (DICL) ssive 90.64957 24,809 24,809 1.00 24,80 WME029 - Recycled Water Main - 200 mm (DICL) cled Water Main - 200 mm (DICL 63,59 Pipe_ID: 117312 Vater Main WME030 - Recycled Water Main - 150 mm (PVC)_PN16 OPVC ecycled Water Main - 150 mm (PVC)_PN16 OPVC ssive 193 63,593 63,59 \$ 20 1.00 WME031 - Recycled Water Main - 180 mm (HDPE) PN16 PE100 cled Water Main - 180 mm (HDPE)_PN16 PE100 WME032 - Recycled Water Main - 150 mm (PVC)_PN16 OPVC Pipe_ID: 117253 Vater Main tecycled Water Main - 150 mm (PVC)_PN16 OPVC ssive 1.818938 193 351 2011 1.00 Vater Main RWME033 - Recycled Water Main - 100 mm (DICL ycled Water Main - 100 mm (DICL 1.488199 Water Main RWME034 - Recycled Water Main - 200 mm (DICL)_ tecycled Water Main - 200 mm (DICL) Pipe_ID: 118622 1.328399 231 2011 1.00 pe_ID: 118643 ater Main WME035 - Recycled Water Main - 200 mm (PVC) vcled Water Main - 200 mm (PVC) 0.628737 /ater Main ME036 - Recycled Water Main - 200 mm (PVC) Recycled Water Main - 200 mm (PVC) 13,628 13,62 Vater Main RWME037 - Recycled Water Main - 200 mm (PVC ycled Water Main - 200 mm (PVC ME038 - Recycled Water Main - 200 mm (PVC) pe ID: 118634 Vater Main RWME039 - Recycled Water Main - 200 mm (PVC) ycled Water Main - 200 mm (PVC) 42,865 42,865 42,86 Vater Main WME040 - Recycled Water Main - 200 mm (DICL) tecycled Water Main - 200 mm (DICL Pipe ID: 118630 Water Main RWME041 - Recycled Water Main - 250 mm (HDPE) ecycled Water Main - 250 mm (HDPE) 53.79499 14.72 14.72 14.72 Pipe ID: 118523 Vater Main WME042 - Recycled Water Main - 200 mm (PVC) cycled Water Main - 200 mm (PVC) 100.6446 23,254 23,25 23,25 ssive Pipe ID: 118531 Vater Main RWME043 - Recycled Water Main - 200 mm (PVC) PN16 cycled Water Main - 200 mm (PVC) PN16 39.14369 9,044 1.00 9,04 WME044 - Recycled Water Main - 100 mm (DICL)_ pipe_ID: 118528 Vater Main WME045 - Recycled Water Main - 150 mm (PVC) cycled Water Main - 150 mm (PVC) 291.561 56,248 56,24 56,24 Pipe_ID: 118598 Vater Main RWME047 - Recycled Water Main - 200 mm (PVC)_ Recycled Water Main - 200 mm (PVC)_ 0.985398 231 1.00 WME048 - Recycled Water Main - 150 mm (PVC)_PN16 Pipe ID: 117297 Vater Main RWME049 - Recycled Water Main - 150 mm (PVC) PN16 ecycled Water Main - 150 mm (PVC) PN16 3.315604 1.00 Pipe_ID: 118552 Vater Main WME051 - Recycled Water Main - 200 mm (PVC)_PN16 cycled Water Main - 200 mm (PVC)_PN16 \$ 20 WME052 - Recycled Water Main - 200 mm (PVC)_PN16 ycled Water Main - 200 mm (PVC)_PN16 34,69 Pipe_ID: 118533 VME053 - Recycled Water Main - 200 mm (PVC)_PN16 cycled Water Main - 200 mm (PVC)_PN16 19,211 19,21 19,21 RWME054 - Recycled Water Main - 180 mm (HDPE)_PN16 PE100 ecycled Water Main - 180 mm (HDPE)_PN16 PE100 Water Main RWME055 - Recycled Water Main - 180 mm (HDPE)_PN16 PE100 Pipe_ID: 117231 ecycled Water Main - 180 mm (HDPE)_PN16 PE100 11.85776 216 2,559 2,55 \$ 20 2011 1.00 2,55 WME056 - Recycled Water Main - 150 mm (PVC) PN16 3,985 3,985 3,98 11,47 Pipe_ID: 118545 Vater Main /ME057 - Recycled Water Main - 150 mm (HDPE)_PN16 ecycled Water Main - 150 mm (HDPE)_PN16 11,470 11,47 RWME058 - Recycled Water Main - 150 mm (PVC) PN16 RWME059 - Recycled Water Main - 200 mm (PVC) PN16 cycled Water Main - 150 mm (PVC) PN16 cycled Water Main - 200 mm (PVC) PN16 Vater Main e ID: 117280 ater Main RWME060 - Recycled Water Main - 80 mm (PVC) PN16 OPV0 rcled Water Main - 80 mm (PVC) PN16 OPVC 2.3434 ME061 - Recycled Water Main - 200 mm (PVC) cycled Water Main - 200 mm (PVC) ipe ID: 115087 Water Main RWME062 - Recycled Water Main - 200 mm (PVC) cycled Water Main - 200 mm (PVC) 48.01721 11.094 11.094 Vater Main RWME063 - Recycled Water Main - 200 mm (PVC) 114,987 114,987 114,987 Pipe_ID: 115085 cycled Water Main - 200 mm (PVC) 497.6728 20 2011 ipe ID: 115083 Vater Main RWME064 - Recycled Water Main - 200 mm (PVC) cycled Water Main - 200 mm (PVC) 233.589 53,971 53,97 53,971 WME065 - Recycled Water Main - 200 mm (PVC) Vater Main RWME066 - Recycled Water Main - 200 mm (PVC) ycled Water Main - 200 mm (PVC) 183,78 183,78 183,78 /ME067 - Recycled Water Main - 180 mm (HDPE)_PN16 PE100 ycled Water Main - 180 mm (HDPE)_PN16 PE10 ater Main RWME068 - Recycled Water Main - 150 mm (PVC) PN16 cycled Water Main - 150 mm (PVC) PN16 42,80 Pipe ID: 117334 Vater Main RWME070 - Recycled Water Main - 150 mm (PVC) PN16 OPV cycled Water Main - 150 mm (PVC) PN16 OPVC 91.04815 17,56 Pipe_ID: 118591 Vater Main WME072 - Recycled Water Main - 200 mm (DICL) cycled Water Main - 200 mm (DICL) 1,27 Pipe ID: 118582 WME074 - Recycled Water Main - 200 mm (DICL) ecycled Water Main - 200 mm (DICL) Pipe_ID: 118609 /ater Main WME076 - Recycled Water Main - 200 mm (DICL) ecycled Water Main - 200 mm (DICL) 1.18713 Pipe_ID: 118594 /ater Main WME078 - Recycled Water Main - 250 mm (DICL) cycled Water Main - 250 mm (DICL) 2,128 2,12 1.00 RWME079 - Recycled Water Main - 250 mm (DICL) Pipe_ID: 118569 Vater Main WME080 - Recycled Water Main - 220 mm (DICL) ecycled Water Main - 220 mm (DICL)

Recycled Water Main - 200 mm (DICL)

Attachment 5.1.11 196 of 406

Douglas Shire Council Water Supply EXISTING TRUNK ASSETS

Return to "Existing Trunk Assets"

Asset Data 1 2 E t 5 Pipe_ID: 117251 Water Main RWME082 - Recycled Water Main - 180 mm (HDPE) PN16 cycled Water Main - 180 mm (HDPE)_PN16 9.288 Pipe_ID: 117308 Water Main RWME083 - Recycled Water Main - 150 mm (PVC)_PN16 OPVC cycled Water Main - 150 mm (PVC)_PN16 OPVC 482.5802 93,09 2011 ipe_ID: 117306 Vater Main RWME084 - Recycled Water Main - 150 mm (PVC) PN16 OPVC cled Water Main - 150 mm (PVC)_PN16 OPVC 47.0294 193 9.07 2011 9,07 Water Main RWME085 - Recycled Water Main - 200 mm (PVC)_PN16 Recycled Water Main - 200 mm (PVC)_PN16 52,10 Pipe_ID: 118519 52,100 52,10 Vater Main RWME086 - Recycled Water Main - 200 mm (DICL cled Water Main - 200 mm (DIC ME087 - Recycled Water Main - 250 mm (HDPE) ipe ID: 118639 RWME088 Vater Main RWME088 - Recycled Water Main - 250 mm (PVC) cycled Water Main - 250 mm (PVC) 35.62298 274 9,749 9,74 9,74 Pipe_ID: 118637 Vater Main RWME089 - Recycled Water Main - 200 mm (PVC) Recycled Water Main - 200 mm (PVC) 103,062 103,06 103,06 pipe_ID: 118635 Vater Main RWME090 - Recycled Water Main - 250 mm (PVC) ycled Water Main - 250 mm (PVC /ME091 - Recycled Water Main - 200 mm (PVC) Pipe ID: 118562 Water Main RWME092 - Recycled Water Main - 250 mm (HDPE) Recycled Water Main - 250 mm (HDPE) 47.51435 13,004 13,00 1.00 13,00 /ater Main WME093 - Recycled Water Main - 200 mm (PVC)_ 2,400 2,40 Pipe ID: 118532 Water Main RWME094 - Recycled Water Main - 200 mm (PVC) PN16 ecycled Water Main - 200 mm (PVC) PN16 132.9031 30,707 30,70 30,70 Pipe_ID: 118522 Water Main RWME096 - Recycled Water Main - 200 mm (PVC)_PN16 Recycled Water Main - 200 mm (PVC)_PN16 1.61893 \$ 20 1.00 WME097 - Recycled Water Main - 180 mm (HDPE)_PN16 PE100 Vater Main RWME098 - Recycled Water Main - 150 mm (PVC) PN16 OPV0 Recycled Water Main - 150 mm (PVC) PN16 OPVC 55,90 55,90 Pipe_ID: 118555 Vater Main RWME100 - Recycled Water Main - 200 mm (PVC)_PN16 Recycled Water Main - 200 mm (PVC)_PN16 231 \$ 20 1.00 3,237 Pipe_ID: 118539 Vater Main WME102 - Recycled Water Main - 200 mm (PVC)_PN16 ecycled Water Main - 200 mm (PVC)_PN16 1.057293 RWME103 - Recycled Water Main - 200 mm (DICL) ecycled Water Main - 200 mm (DICL) Recycled Water Main - 200 mm (PVC)_PN16 Pipe_ID: 118644 RWME104 Water Main RWME104 - Recycled Water Main - 200 mm (PVC)_PN16 ssive 149.8438 231 34,621 34,621 2011 1.00 34,621 Pipe_ID : 118544 Pipe_ID : 117287 RWME105 - Recycled Water Main - 150 mm (PVC) PN16 RWME106 - Recycled Water Main - 150 mm (PVC) PN16 OPV Recycled Water Main - 150 mm (PVC) PN16 Recycled Water Main - 150 mm (PVC) PN16 OPVC 27,724 64,246 27,72 64,24 Vater Main 64,246 8,50 1,200 Vater Main RWME107 - Recycled Water Main - 150 mm (PVC) PN16 OPV RWME108 - Recycled Water Main - 150 mm (PVC) PN16 OPV cycled Water Main - 150 mm (PVC) PN16 OPV cycled Water Main - 150 mm (PVC) PN16 OPV 44.097 Vater Main ine ID: 118547 RWMF109 Water Main RWME109 - Recycled Water Main - 150 mm (HDPE) PN16 cled Water Main - 150 mm (HDPF) PN16 126.7965 193 24.462 24.462 24.46 5,343 5,343 Pipe_ID: 118626 Water Main RWME110 - Recycled Water Main - 150 mm (PVC)_PN16 tecycled Water Main - 150 mm (PVC)_PN16 2011 5,34 Pipe_ID: 118549 RWME111 Water Main RWME111 - Recycled Water Main - 200 mm (PVC) PN16 cycled Water Main - 200 mm (PVC) PN16 /ME112 - Recycled Water Main - 200 mm (PVC)_PN16 24,285 24,285 Pipe_ID: 118540 cycled Water Main - 200 mm (PVC)_PN16 105.1067 24,285 ipe ID: 117337 Water Main RWME113 - Recycled Water Main - 150 mm (PVC)_PN16 OPVC ycled Water Main - 150 mm (PVC) PN16 OPV 2.611985 Vater Main RWME114 - Recycled Water Main - 200 mm (DICL) ecycled Water Main - 200 mm (DICL)_ Pipe ID: 118612 RWME115 Vater Main RWME115 - Recycled Water Main - 200 mm (DICL) ycled Water Main - 200 mm (DICL 1.188533 WME116 - Recycled Water Main - 200 mm (DICL) Pipe ID: 118564 RWME117 Water Main RWME117 - Recycled Water Main - 200 mm (DICL) ecycled Water Main - 200 mm (DICL) 13.94623 3.222 3.222 1.00 3.22 WME118 - Recycled Water Main - 200 mm (DICL) Vater Main RWME119 - Recycled Water Main - 150 mm (PVC) PN16 OPV cycled Water Main - 150 mm (PVC) PN16 OPV 4,62 Pipe_ID: 118527 Vater Main RWME121 - Recycled Water Main - 150 mm (PVC)_ ecycled Water Main - 150 mm (PVC)_ 0.842306 Pipe ID: 118520 Vater Main WME123 - Recycled Water Main - 200 mm (DICL) ecycled Water Main - 200 mm (DICL) 8,10 8,10 WME124 - Recycled Water Main - 200 mm (PVC) PN16 ecycled Water Main - 200 mm (PVC) PN16 Pipe_ID: 117316 Vater Main RWME125 - Recycled Water Main - 150 mm (PVC)_PN16 OPV6 ecycled Water Main - 150 mm (PVC)_PN16 OPV 193 40,617 40,61 1.00 40,61 Pipe_ID: 118538 Vater Main RWME127 - Recycled Water Main - 200 mm (PVC)_PN16 tecycled Water Main - 200 mm (PVC)_PN16 46,248 46,24 46,24 WME128 - Recycled Water Main - 200 mm (PVC) PN16 WME129 - Recycled Water Main - 200 mm (PVC) PN16 ecycled Water Main - 200 mm (PVC) PN16 ecycled Water Main - 200 mm (PVC) PN16 RWME130 - Recycled Water Main - 150 mm (PVC) PN16 OPVC cycled Water Main - 150 mm (PVC)_PN16 OPVC 34,542 34,54 34,54 Pipe_ID: 117289 RWME131 Water Main RWME131 - Recycled Water Main - 150 mm (PVC)_PN16 OPVC Recycled Water Main - 150 mm (PVC)_PN16 OPVC ssive \$ 20 274.4996 RWME132 - Recycled Water Main - 200 mm (PVC)_PN16 ycled Water Main - 200 mm (PVC)_PN16 63,423 63,42 63,42 Pipe_ID: 118608 RWME133 Water Main RWME133 - Recycled Water Main - 200 mm (DICL)_ tecycled Water Main - 200 mm (DICL)_ 0.889823 231 206 20 1.00 RWME134 RWME134 - Recycled Water Main - 220 mm (PVC)_PN16 Recycled Water Main - 220 mm (PVC)_PN16 274.5528 69,186 69,186 69,18

Douglas Shire Council Wastewater

EXISTING TRUNK ASSETS

Return to "Existing Trunk Assets"

	Basic Asset Data		Asset	Asset Data t Attributes			E	Basic Asset Valuation	on			Land Attribute	es	Refine	d Asset Value	Catchment Asset Allo
							E S				ype				eme	(S3) (S4)
£			be (£	_		na ti	u o			on/T			 0	lace	(S2)
a ss	e e	Ę	5	ğ	er (*)	£	2 > 2	diti	<u>5</u>	anne	catii	ts ts	an	y ne	Rep	AAN AAN L BE
et Cl	ž S	cript	t Rai	gth/	met	th.	t Rat	Col	ifi ig) SS V	d lo	t Cos	d Va	uatic	rent	RT D SSSN OYA
AS SK	As s	Des	Ë	e e	Diar	Dep	Base	Site	Mu	Gro	Lanı	, iii	Lan	Valu	Curr	NE CO MC
							May be calculated									
(from ID from the Pump Station, Gravity Main, Rising Main							from unit rates OR unique values can be									0 1 23
MA etc.) LGIP drawings etc							direct entered								CRC	21,11
SETS																
291201 SPSE001 Active Pump Station 291203 SPSE002 Active Pump Station	SPSE001_Pump Station_Junction Road Pump Station (PS - MA) SPSE002_Pump Station_Foxton Avenue Pump Station (PS - MC)	Junction Road Pump Station (PS - MA) Foxton Avenue Pump Station (PS - MC)					\$ - \$ 214,397 \$ - \$ 176,406		1	\$ 214,397 \$ 176,406		\$ 20		2011 1.0 2011 1.0	00 \$ 214,397 00 \$ 176,406	Y
291205 SPSE003 Active Pump Station	SPSE003_Pump Station_Johnston Road Pump Station (PS - MD)	Johnston Road Pump Station (PS - MD)		·			\$ - \$ 234,581		1	\$ 234,581		\$ 20		2011 1.0		Y
291204 SPSE004 Active Pump Station	SPSE004_Pump Station_Mossman Gorge Road Pump Station (PS - ME)	Mossman Gorge Road Pump Station (PS - ME)					\$ - \$ 146,168		1	\$ 146,168		\$ 20		2011 1.0		Y
292204 SPSE005 Active Pump Station 292209 SPSE006 Active Pump Station	SPSE005_Pump Station_Ashford Avenue Pump Station (PS - D)	Ashford Avenue Pump Station (PS - D)					\$ - \$ 72,026 \$ - \$ 171,958		1	\$ 72,026 \$ 171,958		\$ 20 \$ 20) \$ -	2011 1.0 2011 1.0		Υ
292209 SPSE006 Active Pump Station 292210 SPSE007 Active Pump Station	SPSE006_Pump Station_Coral Drive Pump Station (PS - 4D) SPSE007_Pump Station_Martin Scullet Drive Pump Station (PS - 4E)	Coral Drive Pump Station (PS - 4D) Martin Scullet Drive Pump Station (PS - 4E)		· 			\$ - \$ 171,958 \$ - \$ 69,592		1	\$ 171,958 \$ 69,592	 	\$ 20		2011 1.0		Y Y
292225 SPSE008 Active Pump Station	SPSE008_Pump Station_Ulysses Avenue Pump Station (PS - PG)	Ulysses Avenue Pump Station (PS - PG)					\$ - \$ 324,601		1	\$ 324,601		\$ 20		2011 1.0		Υ
292214 SPSE009 Active Pump Station	SPSE009_Pump Station_Escape Street Pump Station (PS - SC2)	Escape Street Pump Station (PS - SC2)		. 			\$ - \$ 179,561		1	\$ 179,561		\$ 20		2011 1.0		Y
292211 SPSE010 Active Pump Station 292212 SPSE011 Active Pump Station	SPSE010_Pump Station_Agincourt Street Pump Station (PS - S1) SPSE011_Pump Station_Endeavour Street Pump Station (PS - S2)	Agincourt Street Pump Station (PS - S1) Endeavour Street Pump Station (PS - S2)					\$ - \$ 179,561 \$ - \$ 77,663		1	\$ 179,561 \$ 77,663	·	\$ 20 \$ 20		2011 1.0 2011 1.0		Y
SPSE012 Active Pump Station	SPSE012 Pump Station_Industrial Beor Street Pump Station (PS - IB)	Industrial Beor Street Pump Station (PS - IB)		·			\$ - \$ 183,138		1	\$ 183,138		\$ 20		2011 1.0	00 \$ 183,138	Y
292205 SPSE013 Active Pump Station	SPSE013_Pump Station_Marina Mirage Pump Station (PS - E)	Marina Mirage Pump Station (PS - E)					\$ - \$ 179,561		1	\$ 179,561		\$ 20		2011 1.0	00 \$ 179,561	Υ
292222 SPSE014 Active Pump Station 292224 SPSE015 Active Pump Station	SPSE014_Pump Station_Spinnaker Close Pump Station (PS - YC)	Spinnaker Close Pump Station (PS - YC)					\$ - \$ 32,511		1	\$ 32,511		\$ 20		2011 1.0 2011 1.0		Υ
292224 SPSE015 Active Pump Station 292230 SPSE016 Active Pump Station	SPSE015_Pump Station_Sports Oval Pump Station (PS - SO) SPSE016_Pump Station_Bale Drive Pump Station (PS - BL)	Sports Oval Pump Station (PS - SO) Bale Drive Pump Station (PS - BL)					\$ - \$ 182,095 \$ - \$ 344,700		1	\$ 182,095 \$ 344,700		\$ 20		2011 1.0 2011 1.0		Y
291206 SPSE017 Active Pump Station	SPSE017_Pump Station_Cooya Beach Road Pump Station (PS - CYB)	Cooya Beach Road Pump Station (PS - CYB)					\$ - \$ 347,149		1	\$ 347,149		\$ 20) \$ -	2011 1.0	00 \$ 347,149	Y
292227 SPSE018 Active Pump Station	SPSE018_Pump Station_Captain Cook Highway Pump Station (PS - CL)	Captain Cook Highway Pump Station (PS - CL)		ļĪ			\$ - \$ 177,032	-	1	\$ 177,032		\$ 20) \$ -	2011 1.0	00 \$ 177,032	Y
292229 SPSE019 Active Pump Station 293201 SPSE020 Active Pump Station	SPSE019_Pump Station_Millman Drive Pump Station (PS - PP) SPSE020_Pump Station_Atherton Street Pump Station (PS - NM)	Millman Drive Pump Station (PS - PP) Atherton Street Pump Station (PS - NM)		 			\$ - \$ 219,765 \$ - \$ 196,376		1	\$ 219,765 \$ 196.376		\$ 20		2011 1.0 2011 1.0		Y Y
292213 SPSE021 Active Pump Station	SPSE021_Pump Station_Saint Crispins Avenue Pump Station (PS - SC1)	Saint Crispins Avenue Pump Station (PS - SC1)					\$ - \$ 179,561		1	\$ 179,561		\$ 20) \$ -	2011 1.0		Y
292208 SPSE022 Active Lift Station	SPSE022_Lift Station_Old Port Road Lift Station (PS - 4C)	Old Port Road Lift Station (PS - 4C)					\$ - \$ 64,709		1	\$ 64,709		\$ 20) \$ -	2011 1.0	00 \$ 64,709	Υ
292207 SPSE023 Active Pump Station 292206 SPSE024 Active Pump Station	SPSE023_Pump Station_Barrier Street Pump Station (PS - 4B)	Barrier Street Pump Station (PS - 4B)					\$ - \$ 129,337		1	\$ 129,337 \$ 99,002		\$ 20		2011 1.0 2011 1.0		Y
292206 SPSE024 Active Pump Station 292201 SPSE025 Active Pump Station	SPSE024_Pump Station_Seabrook Avenue Pump Station (PS - 4A) SPSE025_Pump Station_Mudlo Street Pump Station (PS - A)	Seabrook Avenue Pump Station (PS - 4A) Mudlo Street Pump Station (PS - A)		·			\$ - \$ 99,002 \$ - \$ 187,164		1	\$ 99,002 \$ 187,164		\$ 20		2011 1.0		Υ
292203 SPSE026 Active Pump Station	SPSE026_Pump Station_Crimmins Street Pump Station (PS - C)	Crimmins Street Pump Station (PS - C)					\$ - \$ 86,717		1	\$ 86,717		\$ 20) \$ -	2011 1.0	00 \$ 86,717	Υ
292202 SPSE027 Active Pump Station 291202 SPSE028 Active Pump Station	SPSE027_Pump Station_Macrossan Street Pump Station (PS - B)	Macrossan Street Pump Station (PS - B)		ļĪ			\$ - \$ 156,751	-	1	\$ 156,751		\$ 20 \$ 20		2011 1.0 2011 1.0		Y
291202 SPSE028 Active Pump Station 292231 SPSE029 Active Pump Station	SPSE028_Pump Station_Alchera Drive Pump Station (PS - MB) SPSE029_Pump Station_Downing Street Pump Station (PS - L1)	Alchera Drive Pump Station (PS - MB) Downing Street Pump Station (PS - L1)					\$ - \$ 162,093 \$ - \$ 372,194		1	\$ 162,093 \$ 372,194	·	\$ 20		2011 1.0		v Y
292228 SPSE030 Active Pump Station	SPSE030_Pump Station_Mitre Street Pump Station (PS - 4M)	Mitre Street Pump Station (PS - 4M)		 			\$ - \$ 269,182		1	\$ 269,182		\$ 20	\$ -	2011 1.0		Υ
292220 SPSE031 Active Pump Station	SPSE031_Pump Station_Inlet Street Pump Station (PS - FM)	Inlet Street Pump Station (PS - FM)					\$ - \$ 48,837		1	\$ 48,837		\$ 20		2011 1.0		Υ
292217 SPSE032 Active Pump Station 292216 SPSE033 Active Pump Station	SPSE032_Pump Station_Sheridan Mirage Nth Condo Pump Station (PS - Q3)	Sheridan Mirage Nth Condo Pump Station (PS - Q3)					\$ - \$ 86,896		1	\$ 86,896		\$ 20		2011 1.0 2011 1.0		Y
292216 SPSE033 Active Pump Station 292215 SPSE034 Active Pump Station	SPSE033_Pump Station_Sheridan Mirage South Mirage Lift Station (PS - Q2) SPSE034_Pump Station_Sheridan Mirage Main Comp Pump Station (PS - Q1)	Sheridan Mirage South Mirage Lift Station (PS - Q2) Sheridan Mirage Main Comp Pump Station (PS - Q1)					\$ - \$ 86,896 \$ - \$ 179,561		1	\$ 86,896 \$ 179,561		\$ 20		2011 1.0		Y
292218 SPSE035 Active Pump Station	SPSE035_Pump Station_Sheridan Mirage Country Club Pump Station (PS - Q4)	Sheridan Mirage Country Club Pump Station (PS - Q4)					\$ - \$ 179,561		1	\$ 179,561		\$ 20		2011 1.0		Υ
292219 SPSE036 Active Pump Station	SPSE036_Pump Station_Sheridan Mirage Sth Condo Lift Station (PS - Q5)	Sheridan Mirage Sth Condo Lift Station (PS - Q5)		. 			\$ - \$ 86,896		1	\$ 86,896		\$ 20		2011 1.0		Y
2941001 STPE001 Active Wastewater Treatment Plant 292101 STPE002 Active Wastewater Treatment Plant	STPE001 Wastewater Treatment Plant Port Douglas Wastewater Treatment Plant STPE002 Wastewater Treatment Plant Port Douglas Saltwater Wastewater Treatment Plant	Port Douglas Wastewater Treatment Plant Port Douglas Saltwater Wastewater Treatment Plant					\$ - \$ 8,276,822 \$ - \$ 1,090,785		1	\$ 8,276,822 \$ 1,090,785	·	\$ 20 \$ 20		2011 1.0 2011 1.0	00 \$ 8,276,822 00 \$ 1,090,785	Y
2921041 STPE003 Active Wastewater Treatment Plant	STPE003_Wastewater Treatment Plant_Junction Road Mossman Wastewater Treatment Plant	Junction Road Mossman Wastewater Treatment Plant		† <u>†</u>			\$ - \$ 1,805,608		1	\$ 1,805,608		\$ 20	\$ -	2011 1.0		Y Y Y
ASSETS																
EME001 Passive Effluent Rising Main FMF002 Passive Effluent Rising Main	EME001_Effluent Rising Main_200mm dia EME002_Effluent Rising MainEffluent Rising Main_200 mm dia	Effluent Rising Main_200 mm dia Effluent Rising Main_200 mm dia	Rising Mains	27.68			\$ 233 \$ 6,438 \$ 233 \$ 2,682		1	\$ 6,438 \$ 2,682		\$ 20		2011 1.0 2011 1.0		Y
EME002 Passive Effluent Rising Main																
			Rising Mains Rising Mains	11.53 29.71	200 1.5 200 1.5		\$ 233 \$ 2,682 \$ 233 \$ 6,910		1			\$ 20) \$ -	2011 1.0 2011 1.0		Y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main	EME003 Effluent Rising MainEffluent Rising Main_200 mm dia EME004 Effluent Rising MainEffluent Rising Main_200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 200 mm dia	Rising Mains Rising Mains	29.71 153.5	200 1.5 200 1.5	m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701		1	\$ 6,910 \$ 35,701		\$ 20) \$ -	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701	Y Y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main EME005 Passive Effluent Rising Main	EMEROR3. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROR4. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROR5. Effluent Rising MainEffluent Rising Main. 100 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia	Rising Mains Rising Mains Rising Mains	29.71 153.5 125.97	200 1.5 200 1.5 100 1.5	m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539		1 1	\$ 6,910 \$ 35,701 \$ 19,539		\$ 20 \$ 20) \$ -) \$ -	2011 1.0 2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 19,539	y y y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME006 Passive Effluent Rising Main	EME003 Effluent Rising MainEffluent Rising Main. 200 mm dia EME004 Effluent Rising MainEffluent Rising Main. 200 mm dia EME005 Effluent Rising MainEffluent Rising Main. 100 mm dia EME005 Effluent Rising MainEffluent Rising Main. 100 mm dia	Effluent Rising Main , 200 mm dia Effluent Rising Main , 200 mm dia Effluent Rising Main , 100 mm dia Effluent Rising Main , 100 mm dia	Rising Mains Rising Mains Rising Mains Rising Mains	29.71 153.5 125.97 485.05	200 1.5 200 1.5 100 1.5 100 1.5	m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236		1 1 1 1 1	\$ 6,910 \$ 35,701 \$ 19,539 \$ 75,236		\$ 20 \$ 20 \$ 20) \$ -) \$ -) \$ -	2011 1.0 2011 1.0 2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME007 Passive Effluent Rising Main	EMEROB3. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROB4. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROB5. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROB6. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROB6. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROB6. Effluent Rising MainEffluent Rising Main. 100 mm dia	Effluent Rising Main. 200 mm dia Effluent Rising Main. 200 mm dia Effluent Rising Main. 100 mm dia	Rising Mains Rising Mains Rising Mains	29.71 153.5 125.97	200 1.5 200 1.5 100 1.5 100 1.5 100 1.5 100 1.5	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 155 \$ 63,113		1 1 1 1 1 1	\$ 6,910 \$ 35,701 \$ 19,539 \$ 75,236 \$ 39,483 \$ 63,113		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20	0 \$ - 0 \$ - 0 \$ - 0 \$ -	2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 63,113	Y Y Y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME006 Passive Effluent Rising Main EME007 Passive Effluent Rising Main EME009 Passive Effluent Rising Main EME009 Passive Effluent Rising Main	EMED03 Effluent Rising MainEffluent Rising Main. 200 mm dia EMED04 Effluent Rising MainEffluent Rising Main 200 mm dia EMED05. Effluent Rising MainEffluent Rising Main 100 mm dia EMED06 Effluent Rising MainEffluent Rising Main. 100 mm dia EMED07 Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08 Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08 Effluent Rising MainEffluent Rising Main. 200 mm dia EMED08 Effluent Rising MainEffluent Rising Main. 200 mm dia	Effluent Rising Main. 200 mm dia Effluent Rising Main. 200 mm dia Effluent Rising Main. 100 mm dia	Rising Mains	29.71 153.5 125.97 485.05 254.55 406.89 255.95	200 1.5 200 1.5 100 1.5 100 1.5 100 1.5 200 1.5	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 233 \$ 59,529		1 1 1 1 1 1 1	\$ 6,910 \$ 35,701 \$ 19,539 \$ 75,236 \$ 39,483 \$ 63,113 \$ 59,529		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	0 \$ - 0 \$ - 0 \$ - 0 \$ - 0 \$ -	2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 63,113 00 \$ 59,529	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME007 Passive Effluent Rising Main	EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia	Rising Mains	29.71 153.5 125.97 485.05 254.55 406.89	200 1.5 200 1.5 100 1.5 100 1.5 100 1.5 200 1.5 200 1.5 200 1.5	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 155 \$ 63,113		1 1 1 1 1 1 1 1 1	\$ 6,910 \$ 35,701 \$ 19,539 \$ 75,236 \$ 39,483 \$ 63,113 \$ 59,529 \$ 82,484		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	0 S - 0 S - 0 S - 0 S - 0 S - 0 S -	2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.4	00 \$ 6,910 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 63,113 00 \$ 59,529 00 \$ 59,259 00 \$ 59,259	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME006 Passive Effluent Rising Main EME007 Passive Effluent Rising Main EME008 Passive Effluent Rising Main EME009 Passive Effluent Rising Main EME000 Passive Effluent Rising Main EME010 Passive Effluent Rising Main	EMED03 Effluent Rising MainEffluent Rising Main. 200 mm dia EMED04 Effluent Rising MainEffluent Rising Main 200 mm dia EMED05. Effluent Rising MainEffluent Rising Main 100 mm dia EMED06 Effluent Rising MainEffluent Rising Main. 100 mm dia EMED07 Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08 Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08 Effluent Rising MainEffluent Rising Main. 200 mm dia EMED08 Effluent Rising MainEffluent Rising Main. 200 mm dia	Effluent Rising Main. 200 mm dia Effluent Rising Main. 200 mm dia Effluent Rising Main. 100 mm dia	Rising Mains	29.71 153.5 125.97 485.05 254.55 406.89 255.95 354.65	200 1.5 200 1.5 100 1.5 100 1.5 100 1.5 200 1.5 200 1.5 200 1.5 200 1.5 200 1.5	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 233 \$ 59,525 \$ 233 \$ 82,484		1 1 1 1 1 1 1 1 1 1 1 1	\$ 6,910 \$ 35,701 \$ 19,539 \$ 75,236 \$ 39,483 \$ 63,113 \$ 59,529		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20		2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.4	00 \$ 6,910 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 63,113 00 \$ 59,529 00 \$ 82,484 00 \$ 108,778	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME007 Passive Effluent Rising Main EME008 Passive Effluent Rising Main EME008 Passive Effluent Rising Main EME009 Passive Effluent Rising Main EME010 Passive Effluent Rising Main EME011 Passive Effluent Rising Main EME012 Passive Effluent Rising Main EME013 Passive Effluent Rising Main EME013 Passive Effluent Rising Main	EMED03. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED04. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED05. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED07. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED11. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia	Rising Mains	29.71 153.5 125.97 485.05 254.55 406.89 255.95 354.65 467.7 319.55	200 1.5 200 1.5 100 1.5 100 1.5 100 1.5 200 1.5 200 1.5 200 1.5 200 1.5 200 1.5 200 1.5	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 233 \$ 63,113 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 74,221 \$ 233 \$ 74,221		1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 6,910 \$ 35,701. \$ 19,539 \$ 75,236 \$ 39,483 \$ 63,113 \$ 59,529 \$ 82,484 \$ 108,778 \$ 74,321 \$ 313,448		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20) S	2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.6	00 \$ 6,910 00 \$ 35,701 00 \$ 19,539 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 63,113 00 \$ 63,113 00 \$ 82,484 00 \$ 108,778 00 \$ 120,778 00 \$ 313,448	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME006 Passive Effluent Rising Main EME007 Passive Effluent Rising Main EME007 Passive Effluent Rising Main EME008 Passive Effluent Rising Main EME009 Passive Effluent Rising Main EME010 Passive Effluent Rising Main EME010 Passive Effluent Rising Main EME011 Passive Effluent Rising Main EME012 Passive Effluent Rising Main EME013 Passive Effluent Rising Main EME014 Passive Effluent Rising Main	EMEROIS Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIE Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIT Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIT Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIT Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIT Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIT Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIT Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIT Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIT Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIT Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIT Effluent Rising MainEffluent Rising Main 200 mm dia	Effluent Rising Main. 200 mm dia Effluent Rising Main. 200 mm dia Effluent Rising Main. 100 mm dia Effluent Rising Main. 200 mm dia	Rising Mains	29.71 153.5 125.97 485.05 254.55 406.89 255.95 354.65 467.7 319.55 1347.7 588.68	200 1.5 200 1.5 100 1.5 100 1.5 100 1.5 200 1.5 200 1.5 200 1.5 200 1.5 200 1.5 200 1.5 200 1.5	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	5 233 5 5,100 5 233 5 35,701 5 155 5 19,539 5 155 5 39,481 5 155 5 63,113 5 233 5 59,529 5 233 5 108,78 5 233 5 108,78 5 233 5 108,78 5 233 5 108,78 5 233 5 135,485 5 233 5 313,485 5 233 5 313,485 5 233 5 313,515		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 6,910 \$ 35,701 \$ 19,539 \$ 75,236 \$ 39,483 \$ 63,113 \$ 59,529 \$ 82,486 \$ 108,778 \$ 74,321 \$ 74,321 \$ 313,448 \$ 136,915		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	S	2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 63,113 00 \$ 63,113 00 \$ 59,529 00 \$ 108,778 00 \$ 74,321 00 \$ 74,321 00 \$ 13,448 00 \$ 136,915	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EME003	EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main, 200 mm dia	Effluent Rising Main . 200 mm dia Effluent Rising Main . 200 mm dia Effluent Rising Main . 100 mm dia Effluent Rising Main . 200 mm dia	Rising Mains	29.71 153.5 125.97 485.05 254.55 406.89 255.95 354.65 467.7 319.55	200 1.5 200 1.5 100 1.5 100 1.5 100 1.5 200 1.5 200 1.5 200 1.5 200 1.5 200 1.5 200 1.5 200 1.5	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 233 \$ 63,113 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 74,221 \$ 233 \$ 74,221		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 6,910 \$ 35,701. \$ 19,539 \$ 75,236 \$ 39,483 \$ 63,113 \$ 59,529 \$ 82,484 \$ 108,778 \$ 74,321 \$ 313,448		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20) S	2011 1.4 2011 1.4 2011 1.4 2011 1.4 2011 1.6	00 \$ 6,910 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 63,113 00 \$ 59,529 00 \$ 82,484 00 \$ 108,778 00 \$ 74,321 00 \$ 313,448 00 \$ 313,448 00 \$ 348,880	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEOO3 Passive Effluent Rising Main EMEOO4 Passive Effluent Rising Main EMEOO5 Passive Effluent Rising Main EMEOO5 Passive Effluent Rising Main EMEOO7 Passive Effluent Rising Main EMEOO7 Passive Effluent Rising Main EMEOO9 Passive Effluent Rising Main EMEOO9 Passive Effluent Rising Main EMEOO1 Passive Effluent Rising Main EMEOO14 Passive Effluent Rising Main EMEOO15 Passive Effluent Rising Main EMEOO15 Passive Effluent Rising Main EMEOO16 Passive Effluent Rising Main EMEOO17 Passive Effluent Rising Main EMEOO17 Passive Effluent Rising Main	EMEROAS Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 100 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 100 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 100 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 100 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 100 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia EMEROAE Effluent Rising MainEffluent Rising Main 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia	Rising Mains	29.71 153.5 125.97 254.55 406.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 79.29	200 1.5 200 1.5 100 1.5 100 1.5 100 1.5 200 1.5	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 233 \$ 59,529 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 74,321 \$ 233 \$ 313,448 \$ 233 \$ 313,448 \$ 233 \$ 345,880 \$ 233 \$ 45,880 \$ 233 \$ 45,880 \$ 233 \$ 45,880		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 6,910 \$ 35,701 \$ 19,539 \$ 75,236 \$ 39,483 \$ 63,113 \$ 59,529 \$ 82,484 \$ 108,778 \$ 74,321 \$ 313,448 \$ 136,915 \$ 43,886 \$ 45,886 \$ 45,886		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 108,778 00 \$ 108,778 00 \$ 74,321 00 \$ 313,448 00 \$ 136,915 00 \$ 34,880 00 \$ 84,880 00 \$ 45,886	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDD3 Passive Effluent Rising Main EMEDD4 Passive Effluent Rising Main EMEDD5 Passive Effluent Rising Main EMEDD5 Passive Effluent Rising Main EMEDD6 Passive Effluent Rising Main EMEDD7 Passive Effluent Rising Main EMEDD8 Passive Effluent Rising Main EMEDD9 Passive Effluent Rising Main EMEDD9 Passive Effluent Rising Main EMEDD1 Passive Effluent Rising Main EMED11 Passive Effluent Rising Main EMED12 Passive Effluent Rising Main EMED13 Passive Effluent Rising Main EMED14 Passive Effluent Rising Main EMED15 Passive Effluent Rising Main EMED16 Passive Effluent Rising Main EMED16 Passive Effluent Rising Main EMED17 Passive Effluent Rising Main EMED17 Passive Effluent Rising Main EMED17 Passive Effluent Rising Main EMED18 Passive Effluent Rising Main EMED18 Passive Effluent Rising Main	EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROR Effluent Rising MainEffluent Rising Main. 100 mm dia EMERORS Effluent Rising MainEffluent Rising Main. 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROR. Effluent Rising MainEffluent Rising Main. 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMERORS. Effluent Rising MainEffluent Rising Main. 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia	Rising Mains	29.71 153.5 125.97 485.05 254.55 406.89 255.95 354.65 467.7 319.55 31347.7 588.68 364.95 197.29	200 1.5 200 1.5 100 1.5 100 1.5 100 1.5 200 1.5	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 5 233 \$ 35,701 \$ 5 25 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 63,113 \$ 5 233 \$ 5 233 \$ 108,778 \$ 5 233 \$ 108,778 \$ 5 233 \$ 133,448 \$ 233 \$ 133,448 \$ 233 \$ 133,448 \$ 5 233 \$ 133,448 \$ 5 233 \$ 136,915 \$ 5 233 \$ 136,915 \$ 5 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 184,880 \$ 233 \$ 84,880 \$ 233 \$ 18,480 \$ 5 233 \$ 18,480 \$ 5 233 \$ 18,480 \$ 5 233 \$ 18,480 \$ 5 233 \$ 18,480 \$ 5 233 \$ 18,480 \$ 5 233 \$ 145,886 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 233 \$ 235,845,880 \$ 235,845,8		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 5,010 5 35,701 5 19,539 5 75,236 5 39,483 5 63,113 5 50,529 5 82,484 5 108,778 5 313,448 5 136,915 5 84,880 5 84,880 5 14,435 5 14,439		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 108,778 00 \$ 108,778 00 \$ 136,435 00 \$ 313,448 00 \$ 136,915 00 \$ 44,880 00 \$ 45,886	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EME003 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME007 Passive Effluent Rising Main EME008 Passive Effluent Rising Main EME009 Passive Effluent Rising Main EME010 Passive Effluent Rising Main EME011 Passive Effluent Rising Main EME012 Passive Effluent Rising Main EME013 Passive Effluent Rising Main EME014 Passive Effluent Rising Main EME016 Passive Effluent Rising Main EME016 Passive Effluent Rising Main EME017 Passive Effluent Rising Main EME017 Passive Effluent Rising Main EME017 Passive Effluent Rising Main EME018 Passive Effluent Rising Main EME019 Passive Effluent Rising Main EME019 Passive Effluent Rising Main EME019 Passive Effluent Rising Main	EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 100 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 100 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 100 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 100 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main . 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia	Rising Mains	29.71 153.5 125.97 254.55 406.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 79.29	200 1.5 200 1.5 100 1.5 100 1.5 100 1.5 200 1.5	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 5,100 \$ 233 \$ 35,701 \$ 155 \$ 19,530 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 5 233 \$ 59,520 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 148,505 \$ 233 \$ 45,880		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 5,910 \$ 35,701 \$ 19,539 \$ 75,236 \$ 39,483 \$ 53,113 \$ 59,529 \$ 82,484 \$ 106,778 \$ 74,321 \$ 313,448 \$ 136,915 \$ 84,880 \$ 45,886 \$ 14,350 \$ 14,355		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	S	2011 1.0 2011 1.0	00 \$ 6,930 0 \$ 35,701 0 \$ 35,701 0 \$ 19,339 0 \$ 75,236 0 \$ 39,483 0 \$ 63,113 0 \$ 59,529 0 \$ 59,529 0 \$ 108,778 0 \$ 74,321 0 \$ 74,321 0 \$ 313,448 0 \$ 136,915 0 \$ 45,886 0 \$ 144,938 0 \$ 144,938	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDD3 Passive Effluent Rising Main EMEDD4 Passive Effluent Rising Main EMEDD5 Passive Effluent Rising Main EMEDD5 Passive Effluent Rising Main EMEDD6 Passive Effluent Rising Main EMEDD7 Passive Effluent Rising Main EMEDD8 Passive Effluent Rising Main EMEDD9 Passive Effluent Rising Main EMEDD9 Passive Effluent Rising Main EMEDD1 Passive Effluent Rising Main EMED1 Passive Effluent Rising Main EMED2 Passive Effluent Rising Main EMED21 Passive Effluent Rising Main EMED21 Passive Effluent Rising Main	EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 100 mm dia	Rising Mains	29,71 153,5 125,97 485,09 254,55 406,89 255,99 354,65 497,7 319,55 1347,7 319,59 1347,7 588,68 364,99 197,29 79,35 620,82 644,76 237,74	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 233 \$ 59,529 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 74,221 \$ 233 \$ 133,448 \$ 233 \$ 133,448 \$ 233 \$ 136,918 \$ 233 \$ 136,918 \$ 233 \$ 144,90 \$ 233 \$ 144,390 \$ 233 \$ 149,958 \$ 233 \$ 22,656			5 5,010 5 35,701 5 19,539 5 75,236 5 39,483 5 63,113 5 55,529 5 82,484 5 108,778 5 74,321 5 313,448 5 136,915 5 84,880 5 45,886 5 18,455 5 18,455 5 18,455 5 18,455 5 18,455 5 18,455 5 18,455 5 14,390 5 149,958 5 37,034 5 37,034 5 37,034		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 5,75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 108,778 00 \$ 108,778 00 \$ 131,448 00 \$ 138,455 00 \$ 45,886 00 \$ 18,455 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 154,886	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME007 Passive Effluent Rising Main EME008 Passive Effluent Rising Main EME009 Passive Effluent Rising Main EME010 Passive Effluent Rising Main EME011 Passive Effluent Rising Main EME012 Passive Effluent Rising Main EME013 Passive Effluent Rising Main EME014 Passive Effluent Rising Main EME016 Passive Effluent Rising Main EME016 Passive Effluent Rising Main EME017 Passive Effluent Rising Main EME017 Passive Effluent Rising Main EME018 Passive Effluent Rising Main EME019 Passive Effluent Rising Main EME020 Passive Effluent Rising Main EME021 Passive Effluent Rising Main EME020 Passive Effluent Rising Main EME021 Passive Effluent Rising Main EME021 Passive Effluent Rising Main	EMEROIA : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia	Rising Mains	29,71 153.5 125.97 485.05 254.55 406.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 197.29 79.35 620.82 644.76 238.76	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-3.0m	\$ 233 \$ 5,100 \$ 233 \$ 35,701 \$ 155 \$ 19,530 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 5 233 \$ 59,520 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 148,505 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,555 \$ 233 \$ 144,555 \$ 233 \$ 144,555 \$ 233 \$ 144,555 \$ 233 \$ 149,558			\$ 6,910 \$ 35,701 \$ 19,539 \$ 75,236 \$ 39,483 \$ 53,113 \$ 59,529 \$ 82,484 \$ 106,778 \$ 74,321 \$ 313,448 \$ 136,915 \$ 84,880 \$ 14,390 \$ 14,395 \$ 14,395 \$ 13,7,034 \$ 13,7,034		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	S	2011 1.0 2011 1.0	00 \$ 6,930 0 \$ 35,701 0 \$ 35,701 0 \$ 19,339 0 \$ 75,236 0 \$ 39,483 0 \$ 65,113 0 \$ 59,529 0 \$ 59,529 0 \$ 108,778 0 \$ 74,321 0 \$ 74,321 0 \$ 313,448 0 \$ 136,915 0 \$ 144,938 0 \$ 144,938 0 \$ 144,938 0 \$ 144,938 0 \$ 37,034 0 \$ 37,034 0 \$ 37,034 0 \$ 37,034 0 \$ 37,034 0 \$ 37,034 0 \$ 37,034 0 \$ 37,034	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDD3 Passive Effluent Rising Main EMEDD4 Passive Effluent Rising Main EMEDD5 Passive Effluent Rising Main EMEDD5 Passive Effluent Rising Main EMEDD6 Passive Effluent Rising Main EMEDD7 Passive Effluent Rising Main EMEDD8 Passive Effluent Rising Main EMEDD9 Passive Effluent Rising Main EMEDD9 Passive Effluent Rising Main EMEDD1 Passive Effluent Rising Main EMEDD3 Passive Effluent Rising Main EMEDD3 Passive Effluent Rising Main EMEDD4 Passive Effluent Rising Main EMEDD5 Passive Effluent Rising Main EMEDD5 Passive Effluent Rising Main EMEDD8 Passive Effluent Rising Main EMEDD8 Passive Effluent Rising Main EMEDD8 Passive Effluent Rising Main EMEDD9 Passive Effluent Rising Main EMEDD1 Passive Effluent Rising Main EMEDD2 Passive Effluent Rising Main GMEDD1 Passive Gravity Main GMEDD2 Passive Gravity Main	EMED03. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED04. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED05. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED07. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED01. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED11. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED14. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED17. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED18. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 225 mm dia Gravity Main 225 mm dia	Rising Mains Risin	29,71 153,5 125,97 485,09 254,55 406,89 255,99 354,65 497,7 319,55 1347,7 319,59 1347,7 588,68 364,99 197,29 79,35 620,82 644,76 237,74	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-3.0m	\$ 233 \$ 6,910 \$ 5 233 \$ 35,701 \$ 5 233 \$ 35,703 \$ 5 233 \$ 5 233 \$ 5 233 \$ 7,934 \$ 5 233 \$ 7,934 \$ 5 233 \$ 144,550 \$ 5 233 \$ 144,550 \$ 233 \$ 24,550 \$ 24,550 \$ 24,550 \$ 24,550 \$ 24,55			\$ 5,010 \$ 35,701 \$ 19,539 \$ 75,236 \$ 39,483 \$ 5,532 \$ 39,483 \$ 5,532 \$ 108,778 \$ 108,778 \$ 74,321 \$ 313,448 \$ 136,915 \$ 44,880 \$ 45,886 \$ 14,380		\$ 26 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 6,3113 00 \$ 6,3113 00 \$ 82,484 00 \$ 108,778 00 \$ 108,778 00 \$ 133,448 00 \$ 136,915 00 \$ 418,455 00 \$ 418,455 00 \$ 144,330 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 1,365,915	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EME003 Passive Effluent Rising Main EME004 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME005 Passive Effluent Rising Main EME007 Passive Effluent Rising Main EME008 Passive Effluent Rising Main EME009 Passive Effluent Rising Main EME010 Passive Effluent Rising Main EME011 Passive Effluent Rising Main EME012 Passive Effluent Rising Main EME013 Passive Effluent Rising Main EME014 Passive Effluent Rising Main EME016 Passive Effluent Rising Main EME016 Passive Effluent Rising Main EME017 Passive Effluent Rising Main EME017 Passive Effluent Rising Main EME018 Passive Effluent Rising Main EME019 Passive Effluent Rising Main EME020 Passive Effluent Rising Main EME021 Passive Effluent Rising Main EME020 Passive Effluent Rising Main EME021 Passive Effluent Rising Main EME021 Passive Effluent Rising Main	EMEROIA : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIS : Effluent Rising MainEffluent Rising Main 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia	Rising Mains Risin	29,71 153,5 125,97 485,09 254,55 406,89 255,99 354,65 497,7 319,55 1347,7 319,59 1347,7 588,68 364,99 197,29 79,35 620,82 644,76 237,74	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-	\$ 233 \$ 5,100 \$ 233 \$ 35,701 \$ 155 \$ 19,530 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 5 233 \$ 59,520 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 148,505 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,555 \$ 233 \$ 144,555 \$ 233 \$ 144,555 \$ 233 \$ 144,555 \$ 233 \$ 149,558			\$ 6,910 \$ 35,701 \$ 19,539 \$ 75,236 \$ 39,483 \$ 53,113 \$ 59,529 \$ 82,484 \$ 106,778 \$ 74,321 \$ 313,448 \$ 136,915 \$ 84,880 \$ 14,390 \$ 14,395 \$ 14,395 \$ 13,7,034 \$ 13,7,034		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 5,75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 59,529 00 \$ 108,778 00 \$ 108,778 00 \$ 74,321 00 \$ 74,321 00 \$ 136,915 00 \$ 136,915 00 \$ 18,455 00 \$ 18,455 00 \$ 149,598 00 \$ 174,390 00 \$ 174,390 00 \$ 18,455 00 \$ 18,455 00 \$ 18,455 00 \$ 149,598 00 \$ 174,390	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDD3 Passive Effluent Rising Main EMEDD4 Passive Effluent Rising Main EMEDD5 Passive Effluent Rising Main EMEDD5 Passive Effluent Rising Main EMEDD6 Passive Effluent Rising Main EMEDD7 Passive Effluent Rising Main EMEDD8 Passive Effluent Rising Main EMEDD9 Passive Effluent Rising Main EMEDD9 Passive Effluent Rising Main EMEDD1 Passive Effluent Rising Main EMED11 Passive Effluent Rising Main EMED12 Passive Effluent Rising Main EMED13 Passive Effluent Rising Main EMED14 Passive Effluent Rising Main EMED15 Passive Effluent Rising Main EMED16 Passive Effluent Rising Main EMED16 Passive Effluent Rising Main EMED17 Passive Effluent Rising Main EMED18 Passive Effluent Rising Main EMED19 Passive Effluent Rising Main EMED19 Passive Effluent Rising Main EMED19 Passive Effluent Rising Main EMED20 Passive Effluent Rising Main EMED21 Passive Effluent Rising Main EMED21 Passive Effluent Rising Main EMED21 Passive Effluent Rising Main GMED01 Passive Gravity Main GMED02 Passive Gravity Main GMED03 Passive Gravity Main GMED05 Passive Gravity Main	EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 225 mm dia Gravity Main 225 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05, 254.55 406.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 670.82 644.76 97.41 5.81 6.37 10.35 6.37 10.35 6.37 10.35 6.37 6.37 6.37 6.37 6.37 6.37 6.37 6.37	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-	\$ 233 \$ 6,910 \$ 5 233 \$ 35,701 \$ 5 235 \$ 19,539 \$ 35,701 \$ 5 195,539 \$ 36,735 \$ 155 \$ 63,113 \$ 5 233 \$ 5,249 \$ 5 233 \$ 108,778 \$ 5 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 144,920 \$ 5 233 \$ 144,920 \$ 5 233 \$ 144,920 \$ 5 233 \$ 144,958 \$ 233 \$ 144,958 \$ 233 \$ 144,958 \$ 233 \$ 144,958 \$ 233 \$ 144,958 \$ 233 \$ 144,958 \$ 233 \$ 144,958 \$ 233 \$ 144,958 \$ 235 \$ 144,975 \$ 235 \$ 1,265 \$ 235 \$ 1,265 \$ 235 \$ 1,265 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,497 \$ 235 \$ 1,422 \$ 1,422			5		\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 136,915 00 \$ 136,915 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 144,390 00 \$ 143,545 00 \$ 144,390 00 \$ 143,545 00 \$ 144,390 00 \$ 143,545 00 \$ 144,390 00 \$ 143,550 00 \$ 144,390 00 \$ 143,550 00 \$ 144,390 00 \$ 143,550 00 \$ 144,390 00 \$ 143,550 00 \$ 143,550 00 \$ 144,390 00 \$ 143,550 00 \$ 144,390 00 \$ 143,550 00 \$ 144,390 00	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDO3 Passive Effluent Rising Main EMEDO4 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO2 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO5 Passive Gravity Main	EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROID. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROII. Effluent Rising MainEffluent Rising Main. 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 225 mm dia Gravity Main 225 mm dia	Rising Mains Gravity Sewers	29,71 153.5 125.97 485.05 254.55 466.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 197.29 79.35 620.82 644.76 238.76 637 10 50.43 50.43 50.43	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 201 1.5. 202 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5. 203 1.5.	m-3.0m m-	\$ 233 \$ 5,100 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 5 233 \$ 59,529 \$ 233 \$ 106,778 \$ 233 \$ 106,778 \$ 233 \$ 133,448 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 146,958 \$ 233 \$ 45,886 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,956 \$ 233 \$ 144,956 \$ 233 \$ 146,956 \$ 233 \$ 146,956 \$ 233 \$ 146,956 \$ 233 \$ 146,956 \$ 235 \$ 1,262 \$ 235 \$ 1,262 \$ 235 \$ 1,262 \$ 235 \$ 1,262 \$ 235 \$ 1,262 \$ 235 \$ 1,265 \$ 235 \$ 1,265 \$ 235 \$ 1,268 \$ 235 \$ 1,268 \$ 235 \$ 1,268			5 5, 5, 11, 5, 5, 5, 12, 5, 5, 13, 488 5, 12, 25, 5, 144, 595 5, 144, 595 6, 1		\$ 26 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	S	2011 1.0 2011 1.0	00 \$ 6,930 00 \$ 35,701 00 \$ 35,701 00 \$ 19,339 00 \$ 75,236 00 \$ 39,483 00 \$ 65,113 00 \$ 595,529 00 \$ 108,778 00 \$ 108,778 00 \$ 74,321 00 \$ 136,915 00 \$ 136,915 00 \$ 144,958 00 \$ 144,958 00 \$ 144,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 1,365 00 \$ 1,3	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDO3 Passive Effluent Rising Main EMEDO4 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO7 Passive Gravity Main GMEDO7 Passive Gravity Main GMEDO7 Passive Gravity Main	EMED03. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED04. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED05. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED07. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED01. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED11. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED14. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED16. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED17. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED18. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED10. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED10. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED10. Effluent Rising Main. 225 mm dia EMED10. Gravity MainGravity Main. 225 mm dia EMED10. Gravity MainGravity Main. 225 mm dia EMED10. Effluent MainGravity Main. 225 mm dia EMED10. Gravity MainGravity Main. 300 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Gravity Main 225 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05 254.55 406.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 197.29 79.35 644.76 238.76 97.41 5.81 6.37 10.58 1	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-	\$ 233 \$ 6,910 \$ 5 233 \$ 35,701 \$ 5 235 \$ 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 63,113 \$ 5 19,539 \$ 63,113 \$ 63,113 \$ 74,321 \$ 73,78 \$ 73,79 \$ 73,			5 5, 35,010 5 35,701 5 19,539 5 75,236 5 39,483 5 63,113 5 55,529 5 82,484 5 108,778 5 74,321 5 313,448 5 136,915 5 84,880 5 45,886 5 144,390 5 144,390 5 14,355 5 12,355 5 14,355 5 14,355		S 26 S 20 S 20 S 20 S 20 S 20 S 20 S 20 S 20	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 6,3113 00 \$ 6,3113 00 \$ 6,3113 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 134,448 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 149,958 0	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMED03 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED06 Passive Effluent Rising Main EMED07 Passive Effluent Rising Main EMED08 Passive Effluent Rising Main EMED09 Passive Effluent Rising Main EMED01 Passive Effluent Rising Main EMED10 Passive Effluent Rising Main EMED11 Passive Effluent Rising Main EMED12 Passive Effluent Rising Main EMED13 Passive Effluent Rising Main EMED14 Passive Effluent Rising Main EMED15 Passive Effluent Rising Main EMED16 Passive Effluent Rising Main EMED17 Passive Effluent Rising Main EMED18 Passive Effluent Rising Main EMED19 Passive Effluent Rising Main EMED11 Passive Effluent Rising Main EMED11 Passive Effluent Rising Main EMED21 Passive Gravity Main GMED01 Passive Gravity Main GMED02 Passive Gravity Main GMED04 Passive Gravity Main GMED06 Passive Gravity Main GMED07 Passive Gravity Main GMED07 Passive Gravity Main GMED09 Passive Gravity Main	EMED03. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED05. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED05. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED07. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED01. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED11. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED14. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED16. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED16. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED18. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising Main. 225 mm dia EMED19. Eff	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 225 mm dia Gravity Main 225 mm dia	Rising Mains Gravity Sewers	29,71 153.5 125.97 485.05 254.55 466.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 197.29 79.35 620.82 644.76 238.76 637 10 50.43 50.43 50.43	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-	\$ 233 \$ 5,100 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 5 233 \$ 59,529 \$ 233 \$ 106,778 \$ 233 \$ 106,778 \$ 233 \$ 133,448 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 146,958 \$ 233 \$ 45,886 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,956 \$ 233 \$ 144,956 \$ 233 \$ 146,956 \$ 233 \$ 146,956 \$ 233 \$ 146,956 \$ 233 \$ 146,956 \$ 235 \$ 1,262 \$ 235 \$ 1,262 \$ 235 \$ 1,262 \$ 235 \$ 1,262 \$ 235 \$ 1,262 \$ 235 \$ 1,265 \$ 235 \$ 1,265 \$ 235 \$ 1,268 \$ 235 \$ 1,268 \$ 235 \$ 1,268			5 5, 5, 11, 5, 5, 5, 12, 5, 5, 13, 488 5, 12, 25, 5, 144, 595 5, 144, 595 6, 1		S 26 S 20 S 20 S 20 S 20 S 20 S 20 S 20 S 20	S	2011 1.0 2011 1.1	00 \$ 6,930 00 \$ 35,701 00 \$ 35,701 00 \$ 19,339 00 \$ 75,236 00 \$ 39,483 00 \$ 63,113 00 \$ 59,529 00 \$ 108,778 00 \$ 108,778 00 \$ 74,321 00 \$ 133,448 00 \$ 136,915 00 \$ 144,921 00 \$ 144,930 00 \$ 144,930 00 \$ 149,938	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDU3	EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising Main. 200 mm dia EMEROIA. Effluent Rising Main. 225 mm dia GMEROIA. Gravity MainGravity Main. 225 mm dia GMEROIA. Gravity MainGravity Main. 225 mm dia GMEROIA. Gravity MainGravity Main. 300 mm dia GMEROIA. Gravity MainGravity Main. 300 mm dia GMEROIA. Gravity MainGravity Main. 300 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 255 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05 254.55 406.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 197.29 79.35 644.76 238.76 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 6.37 6.37 6.37 6.37 6.37 6.37 6.37	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-	\$ 233 \$ 6,910 \$ 5 233 \$ 35,701 \$ 5 235 \$ 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 63,113 \$ 5 233 \$ 5 23,48 \$ 5 233 \$ 134,48 \$ 5 233 \$ 134,48 \$ 5 233 \$ 134,48 \$ 5 233 \$ 134,48 \$ 5 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 144,900 \$ 5 233 \$ 144,900 \$ 5 233 \$ 144,900 \$ 5 233 \$ 144,900 \$ 5 233 \$ 144,900 \$ 5 235 \$ 5 24,800 \$ 5 235 \$ 5 24,800 \$ 5 235 \$ 5 24,800 \$ 5 235 \$ 5 24,800 \$ 5 235 \$ 5 24,800 \$			5		S 26 S 20 S 20 S 20 S 20 S 20 S 20 S 20 S 20	S	2011 1.0 2011 1.0	00 \$ 5,701 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 136,418 00 \$ 136,418 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 144,330 00 \$ 149,938 00 \$ 148,938 00 \$ 148,938 00 \$ 1488	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDUS	EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising Main. 200 mm dia EMEROIS. Effluent Rising Main. 200 mm dia EMEROIS. Effluent Rising Main. 225 mm dia EMEROIS. Effluent Rising Main. 230 mm dia EMEROIS. Effluent Rising Main. 230 mm dia EMEROIS. Effluent Rising Main. 230 mm dia EMEROIS. Efflu	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05 244.55 466.89 255.95 354.65 467.7 319.55 1347.7 588.68 137.79 79.35 620.82 644.76 238.76 97.41 5.81 5.81 5.81 5.87 6.97 6.97 6.97 6.97 6.97 6.97 6.97 6.9	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-	\$ 233 \$ 5,100 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 5 233 \$ 59,239 \$ 1233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 133,448 \$ 233 \$ 133,448 \$ 233 \$ 133,448 \$ 233 \$ 134,448 \$ 233 \$ 136,915 \$ 233 \$ 134,488 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 149,958 \$ 233 \$ 149,958 \$ 233 \$ 149,958 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 233 \$ 144,505 \$ 235 \$ 1,2656 \$ 235 \$ 1,2656 \$ 235 \$ 1,2656 \$ 235 \$ 1,2656 \$ 235 \$ 1,2656 \$ 235 \$ 1,2656 \$ 235 \$ 1,2656 \$ 235 \$ 1,2656 \$ 235 \$ 1,2657 \$ 235 \$			5		\$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 59,529 00 \$ 68,113 00 \$ 59,529 00 \$ 108,778 00 \$ 136,915 00 \$ 45,880 00 \$ 136,915 00 \$ 45,880 00 \$ 136,915 00 \$ 45,880 00 \$ 136,915 00 \$ 45,880 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 144,390 00 \$ 1	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDUA Passive Effluent Rising Main	EMED03. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED04. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED05. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED07. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED10. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED11. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED17. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED18. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED10. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED10. Effluent Rising Main Ain. 225 mm dia GMED01. Gravity MainGravity Main. 225 mm dia GMED03. Gravity MainGravity Main. 225 mm dia GMED03. Gravity MainGravity Main. 225 mm dia GMED03. Gravity MainGravity Main. 300 mm dia GMED04. Gravity MainGravity Main. 300 mm dia GMED05. Gravity MainGravity Main. 300 mm dia GMED06. Gravity MainGravity Main. 300 mm dia GMED06. Gravity MainGravity Main. 300 mm dia GMED07. Gravity MainGravity Main. 300 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 255 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05 254.55 406.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 197.29 79.35 644.76 238.76 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 6.37 6.37 6.37 6.37 6.37 6.37 6.37	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-	\$ 233 \$ 6,910 \$ 5 233 \$ 35,701 \$ 5 235 \$ 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 63,113 \$ 5 233 \$ 5 23,48 \$ 5 233 \$ 134,48 \$ 5 233 \$ 134,48 \$ 5 233 \$ 134,48 \$ 5 233 \$ 134,48 \$ 5 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 144,900 \$ 5 233 \$ 144,900 \$ 5 233 \$ 144,900 \$ 5 233 \$ 144,900 \$ 5 233 \$ 144,900 \$ 5 235 \$ 5 24,800 \$ 5 235 \$ 5 24,800 \$ 5 235 \$ 5 24,800 \$ 5 235 \$ 5 24,800 \$ 5 235 \$ 5 24,800 \$			5		\$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 5,75,236 00 \$ 6,113 00 \$ 6,5113 00 \$ 6,5113 00 \$ 108,778 0	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDO3 Passive Effluent Rising Main EMEDO4 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main EMEDO3 Passive Effluent Rising Main EMEDO3 Passive Effluent Rising Main EMEDO4 Passive Effluent Rising Main GMEDO4 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO6 Passive Gravity Main GMEDO7 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO3 Passive Gravity Main	EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 100 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 100 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 100 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 100 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 100 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 100 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising MainEffluent Rising Main : 200 mm dia EMEROIA : Effluent Rising Main : 200 mm dia EMEROIA : Effluent Rising Main : 200 mm dia EMEROIA : Effluent Rising Main : 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 325 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia	Rising Mains Risin	29,71 153.5 125.97 485.05 254.55 466.89 255.95 354.65 467.7 319.55 354.65 467.7 319.55 364.75 197.29 79.35 620.82 644.76 238.76 40.79 40.69 20.43 40.69 20.65 40.69 40.69 20.65 40.69 40.69 20.65 40.69 40.6	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-	\$ 233 \$ 5,100 \$ 155 \$ 19,539 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 5 233 \$ 5,229 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 133,418 \$ 233 \$ 133,424 \$ 233 \$ 136,915 \$ 233 \$ 134,485 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 144,958 \$ 233 \$ 148,550 \$ 233 \$ 144,958 \$ 235 \$ 144,958 \$ 235 \$ 144,958 \$ 235 \$ 144,958 \$ 235 \$ 144,958 \$ 235 \$ 144,958 \$ 235 \$ 144,958 \$ 236 \$ 144,958 \$ 237 \$ 144,958 \$ 238 \$ 144,958 \$ 238 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 144,958 \$ 239 \$ 14,969 \$ 239 \$ 14,969 \$ 239 \$ 14,969 \$ 239 \$ 14,969 \$ 239 \$ 14,969 \$ 239 \$ 24,569 \$ 239 \$ 24,569 \$ 239 \$ 24,569 \$ 239 \$ 24,569 \$ 239 \$ 25,590 \$ 239 \$ 25			\$ 5,010 \$ 35,701 \$ 19,539 \$ 75,236 \$ 9,3483 \$ 63,113 \$ 5 95,529 \$ 108,778 \$ 108,778 \$ 74,321 \$ 135,915 \$ 313,448 \$ 135,915 \$ 34,880 \$ 136,915 \$ 144,930 \$ 144,930 \$ 144,930 \$ 1,497 \$ 1,498 \$ 1,497 \$ 1,498 \$ 1,497 \$ 1,498 \$ 1,499 \$ 1,498 \$ 1,235 \$ 1,499 \$ 1,498 \$ 1,235 \$ 1,499 \$ 1,498 \$ 1,235 \$ 1,498 \$ 1,235 \$ 1,498 \$ 1,235 \$ 1,498 \$ 1,235 \$ 1,498 \$ 1,235 \$ 1,498 \$ 1,235 \$ 1,498 \$ 1,595 \$		S 24 S 24 S 24 S 24 S 24 S 24 S 24 S 24	S	2011 1.0 2011 1.0	00 \$ 6,930 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 63,113 00 \$ 59,529 00 \$ 108,778 00 \$ 108,778 00 \$ 128,478 00 \$ 131,448 00 \$ 131,448 00 \$ 149,598 00 \$ 148,590 0	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDUA	EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising Main. 200 mm dia EMEROIA. Efflu	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05, 254.55 406.89 255.95 354.65 467.7 319.55 139.7 58.68 364.95 197.29 79.35 644.76 238.76 97.41 5.81 6.37 10 238.76 97.41 5.81 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 10 10 10 10 10 10 10 10 10 10 10 10 10	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200	m-3.0m m-	\$ 233 \$ 6,910 \$ 5 233 \$ 35,701 \$ 5 235 \$ 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 5 19,539 \$ 63,113 \$ 5 233 \$ 5,233 \$ 108,778 \$ 5 233 \$ 133,448 \$ 5 233 \$ 133,448 \$ 5 233 \$ 134,448 \$ 5 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 144,901 \$ 5 233 \$ 144,901 \$ 5 233 \$ 144,901 \$ 5 233 \$ 144,901 \$ 5 233 \$ 144,901 \$ 5 233 \$ 144,901 \$ 5 233 \$ 144,901 \$ 5 233 \$ 144,901 \$ 5 233 \$ 144,901 \$ 5 233 \$ 144,901 \$ 5 235 \$ 144,901			5		S 24 S 24 S 24 S 24 S 24 S 24 S 24 S 24	S	2011 1.0 2011 1.0	00 \$ 5,701 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 149,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 148,938 00 \$ 158,530 00	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDU3	EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05 254.55 466.89 255.95 334.65 467.7 319.55 1347.7 588.68 364.95 107.29 79.35 620.82 644.76 238.76 10.5 97.41 5.81 5.81 5.81 5.81 5.81 5.81 5.81 5.8	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 5 233 \$ 59,529 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 134,484 \$ 233 \$ 134,484 \$ 233 \$ 144,390 \$ 235 \$ 1,225 \$ 304 \$ 1,916 \$ 304 \$ 1,860 \$ 305 \$ 365,90			\$ 5,010 \$ 35,701 \$ 19,539 \$ 75,236 \$ 93,483 \$ 63,113 \$ 5 55,529 \$ 108,778 \$ 74,321 \$ 136,915 \$ 84,886 \$ 134,987 \$ 136,915 \$ 14,958 \$ 14,390 \$ 14,390 \$ 1,488 \$ 12,358 \$ 1,488 \$ 11,848 \$ 11,848 \$ 12,358 \$ 1,488 \$ 1,497 \$ 2,349 \$ 1,488 \$ 1,369 \$ 1,488 \$ 1,488 \$ 1,369 \$ 1,488 \$ 1,369 \$ 1,488 \$ 1,369 \$ 1,869 \$ 1,869 \$ 1,869 \$ 1,869 \$ 1,910 \$ 1,680 \$ 1,910 \$ 1,9		\$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22	S	2011 1.0 2011 1.0	00 \$ 35,701 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 5,75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 108,778 00 \$ 108,778 00 \$ 74,321 00 \$ 136,915 00 \$ 136,915 00 \$ 45,886 00 \$ 144,390 00 \$ 144,390 00 \$ 17,034 00 \$ 144,390	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDUA	EMEROIA. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIA. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 100 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising MainEffluent Rising Main. 200 mm dia EMEROIS. Effluent Rising Main. 205 mm dia GMEROIS. Gravity MainGravity Main. 225 mm dia GMEROIS. Gravity MainGravity Main. 225 mm dia GMEROIS. Gravity MainGravity Main. 225 mm dia GMEROIS. Gravity MainGravity Main. 300 mm dia GMEROIS. G	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05, 254.55 406.89 255.95 354.65 467.7 319.55 139.7 58.68 364.95 197.29 79.35 644.76 238.76 97.41 5.81 6.37 10 238.76 97.41 5.81 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 6.37 10 97.41 10 10 10 10 10 10 10 10 10 10 10 10 10	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200	m-3.0m m-	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 1233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 113,448 \$ 233 \$ 133,448 \$ 233 \$ 134,481 \$ 233 \$ 134,481 \$ 233 \$ 134,481 \$ 233 \$ 134,481 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 235 \$ 1,2656			5		\$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22 \$ 22	S	2011 1.0 2011 1.0	00 \$ 5,701 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 5,75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 144,330 00 \$ 144,330 00 \$ 144,330 00 \$ 149,958 00 \$ 144,300 00 \$ 149,958	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMED03 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED06 Passive Effluent Rising Main EMED07 Passive Effluent Rising Main EMED07 Passive Effluent Rising Main EMED08 Passive Effluent Rising Main EMED08 Passive Effluent Rising Main EMED09 Passive Effluent Rising Main EMED10 Passive Effluent Rising Main EMED11 Passive Effluent Rising Main EMED12 Passive Effluent Rising Main EMED13 Passive Effluent Rising Main EMED13 Passive Effluent Rising Main EMED15 Passive Effluent Rising Main EMED16 Passive Effluent Rising Main EMED17 Passive Effluent Rising Main EMED18 Passive Effluent Rising Main EMED19 Passive Effluent Rising Main GMED01 Passive Effluent Rising Main GMED02 Passive Effluent Rising Main GMED03 Passive Gravity Main GMED03 Passive Gravity Main GMED04 Passive Gravity Main GMED09 Passive Gravity Main GMED09 Passive Gravity Main GMED01 Passive Gravity Main GMED11 Passive Gravity Main GMED13 Passive Gravity Main GMED14 Passive Gravity Main GMED15 Passive Gravity Main GMED17 Passive Gravity Main GMED17 Passive Gravity Main GMED18 Passive Gravity Main GMED19 Passive Gravity Main GMED19 Passive Gravity Main GMED19 Passive Gravity Main GMED19 Passive Gravity Main	EMED03. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED04. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED07. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED11. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED14. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED16. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED17. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED18. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising Main Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05 244.55 466.89 255.95 334.65 467.7 319.55 1347.7 588.68 364.95 197.29 79.35 620.82 644.76 238.76 97.41 5.81 6.37 97.41 5.81 6.37 6.37 6.37 6.37 6.37 6.37 6.37 6.37	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 200	m-3.0m m-	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 5 233 \$ 59,529 \$ 233 \$ 108,778 \$ 233 \$ 74,321 \$ 233 \$ 133,448 \$ 233 \$ 133,448 \$ 233 \$ 133,448 \$ 233 \$ 134,481 \$ 233 \$ 134,482 \$ 233 \$ 136,915 \$ 233 \$ 134,483 \$ 233 \$ 134,483 \$ 233 \$ 134,483 \$ 233 \$ 136,915 \$ 233 \$ 136,915 \$ 233 \$ 149,958 \$ 233 \$ 149,958 \$ 233 \$ 149,958 \$ 233 \$ 149,958 \$ 235 \$ 1,267 \$ 235 \$ 1,267 \$ 236 \$ 1,497 \$ 237 \$ 1,497 \$ 238 \$ 1,497 \$ 239 \$ 2,443 \$ 239 \$ 1,580 \$ 230 \$ 3,497 \$ 230 \$ 2,497 \$ 2,497 \$ 2,497 \$ 2,497 \$ 2,497 \$ 2,497 \$ 2,49			5		S 24 S 24 S 24 S 24 S 24 S 24 S 24 S 24	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 59,529 00 \$ 39,483 00 \$ 59,529 00 \$ 108,778 00 \$ 136,915 00 \$ 136,915 00 \$ 45,880 00 \$ 136,915 00 \$ 144,390 00 \$ 144,390 00 \$ 148,850 00 \$ 148,850 00 \$ 148,850 00 \$ 148,850 00 \$ 148,850 00 \$ 148,850 00 \$ 148,850 00 \$ 148,850 00 \$ 148,350 00 \$ 148,350 00 \$ 148,350 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 149,958 00 \$ 16	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDU3	EMEROIA Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIA Effluent Rising Main 225 mm dia GMEROIA Gravity MainGravity Main 225 mm dia GMEROIA Gravity MainGravity Main 300 mm dia GMEROIA Gravity Ma	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 100 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 235 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05, 254.55 406.89 255.95 334.65 134.77 588.68 364.95 197.29 79.35 644.76 238.76 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 5.81 6.37 10 97.41 10 10 10 10 10 10 10 10 10 10 10 10 10	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200 1.5.	m-3.0m m-	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 5 155 \$ 63,113 \$ 5 233 \$ 55,239 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 113,448 \$ 233 \$ 134,448 \$ 233 \$ 136,915 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 233 \$ 144,890 \$ 235 \$ 1,265 \$ 236 \$ 1,265 \$ 237 \$ 1,265 \$ 238 \$ 1,265 \$ 23			5		S 24 S 24 S 24 S 24 S 24 S 24 S 24 S 24	S	2011 1.0 2011 1.0	00 \$ 5,701 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 5,75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 59,529 00 \$ 108,778 00 \$ 108,778 00 \$ 108,778 00 \$ 133,448 00 \$ 136,915 00 \$ 136,915 00 \$ 149,938	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDO3 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main EMEDO3 Passive Effluent Rising Main EMEDO3 Passive Effluent Rising Main EMEDO4 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO6 Passive Gravity Main GMEDO8 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO6 Passive Gravity Main GMEDO7 Passive Gravity Main GMEDO8 Passive Gravity Main GMEDO9 Passive Gra	EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 100 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 100 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 100 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 100 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 100 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 100 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising Main MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising Main MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising Main MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising Main MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising Main MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising Main MainEffluent Rising Main. 200 mm dia EMERODA: Effluent Rising MainEff	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05 244.55 466.89 255.95 334.65 467.7 319.55 1347.7 588.68 364.95 197.29 79.35 620.82 644.76 238.76 97.41 5.81 6.37 97.41 5.81 6.37 6.37 6.37 6.37 6.37 6.37 6.37 6.37	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200	m-3.0m m-	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 1233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 113,448 \$ 233 \$ 133,448 \$ 233 \$ 134,481 \$ 233 \$ 134,481 \$ 233 \$ 134,482 \$ 233 \$ 134,482 \$ 233 \$ 134,482 \$ 233 \$ 136,915 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 235 \$ 1,2656			5		\$ 2.25 \$	S	2011 1.0 2011 1.0	00 \$ 6,910 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 108,778 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 143,800 00 \$ 45,886 00 \$ 144,390 00 \$ 144,390 00 \$ 149,938 00 \$ 144,390 00 \$ 144,390 00 \$ 1,365 00 \$ 1,49,778 00 \$ 1,497 00 \$ 1,222 00 \$ 1,222 00 \$ 1,223 00 \$ 1,223 00 \$ 1,235 00 \$ 1,23	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDO3 Passive Effluent Rising Main EMEDO4 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main GMEDO1 Passive Gravity Main GMEDO2 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO6 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO3 Pas	EMEROIA Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 100 mm dia EMEROIA Effluent Rising MainEffluent Rising Main 200 mm dia EMEROIA Effluent Rising Main 225 mm dia GMEROIA Gravity MainGravity Main 225 mm dia GMEROIA Gravity MainGravity Main 300 mm dia GMEROIA Gravity Ma	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 100 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 235 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05 254.55 466.89 255.95 334.65 467.7 319.55 1347.7 588.68 364.95 137.79 79.35 620.82 644.76 238.76 10.37 10.45 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9 4.9	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200	m-3.0m m-	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 5 233 \$ 5,233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 113,448 \$ 233 \$ 133,448 \$ 233 \$ 134,448 \$ 233 \$ 134,448 \$ 233 \$ 134,448 \$ 233 \$ 136,918 \$ 233 \$ 136,918 \$ 233 \$ 136,918 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 233 \$ 144,950 \$ 235 \$ 1,265			5		\$ 2.25 \$	S	2011 1.0 2011 1.0	00 \$	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDO3 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO3 Passive Effluent Rising Main EMEDO4 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO0 Passive Effluent Rising Main GMEDO1 Passive Effluent Rising Main GMEDO2 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO6 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO2 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Mai	EMED03. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED07. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED11. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED14. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED16. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED17. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED18. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED10. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED11. Gravity MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Gravity MainEffluent Rising Main. 200 mm dia EMED14. Gravity MainEffluent Rising Main. 200 mm dia EMED15. Gravity MainEffluent Rising Main. 200 mm dia EMED16. Gravity MainEffluent Rising Main. 200 mm dia EMED16. Gravity MainEffluent Rising	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm di	Rising Mains Risin	29.71 153.5 125.97 485.05 244.55 466.89 255.95 334.65 467.7 319.55 1347.7 588.68 364.95 107.29 79.35 620.82 644.76 228.76 97.41 5.81 5.81 5.81 5.81 5.81 5.81 5.81 5.8	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 200	m-3.0m m-	\$ 233 \$ 5,19,59 \$ 155 \$ 19,539 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 156 \$ 156 \$ 160,113 \$ 157 \$ 160,113 \$ 157 \$ 160,113 \$ 157 \$ 160,113			5		\$ 2.25 \$	S	2011 1.0 2011 1.0	00 \$	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMED03 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED06 Passive Effluent Rising Main EMED07 Passive Effluent Rising Main EMED08 Passive Effluent Rising Main EMED08 Passive Effluent Rising Main EMED08 Passive Effluent Rising Main EMED01 Passive Effluent Rising Main EMED02 Passive Effluent Rising Main EMED03 Passive Effluent Rising Main EMED04 Passive Effluent Rising Main GMED05 Passive Gravity Main GMED06 Passive Gravity Main GMED07 Passive Gravity Main GMED08 Passive Gravity Main GMED09 Passive Gravity Main GMED01 Passive Gravity Main GMED03 Passive Gravity Main GMED04 Passive Gravity Main GMED05 Passive Gravity Main GMED06 Passive Gravity Main GMED07 Passive Gravity Main GMED08 Passive Gravity Main GMED09 Passive Gravity Main GMED09 Passive Gravity Main GMED01 Passive Gravity Main GMED02 Passive Gravity Main GMED03 Passive Gravity Main GMED04 Passive Gravity Main GMED05 Passive Gravity Main GMED06 Passive Gravity Main GMED07 Passive Gravity Main GMED08 Passive Gravity Main GMED09	EMEROA: Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEROA: Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEROA: Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEROA: Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEROA: Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEROA: Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEROA: Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEROA: Effluent Rising Maint Aint Aint Aint Aint Aint Aint Aint A	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 100 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05 254.55 406.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 137.29 79.35 644.76 238.76 97.41 5.81 6.37 10 5.82 6.28 6.29 2.28,76 6.29 2.28,76 6.29 2.28,76 6.29 2.28,76 6.29 2.28,76 6.29 2.29,65 6.29 2.29 2.29 2.29 2.29 2.29 2.29 2.29	200 1.5. 200	m-3.0m m-	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 233 \$ 55,732 \$ 233 \$ 108,778 \$ 233 \$ 113,448 \$ 233 \$ 134,448 \$ 233 \$ 134,448 \$ 233 \$ 136,915 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 234 \$ 149,595 \$ 235 \$ 144,596 \$ 236 \$ 149,595 \$ 237 \$ 149,595 \$ 238 \$ 148,595 \$ 238 \$ 28,594 \$ 24,480 \$			5		S 24 S 24 S 24 S 26 S 26	S	2011 1.0 2011 1.0	00 \$ 5,701 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 6,3113 00 \$ 6,3113 00 \$ 6,3113 00 \$ 82,484 00 \$ 108,778 00 \$ 108,778 00 \$ 133,448 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 149,958 00 \$ 148,958 00 \$ 149,958 00	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMED03 Passive Effluent Rising Main EMED04 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED07 Passive Effluent Rising Main EMED07 Passive Effluent Rising Main EMED08 Passive Effluent Rising Main EMED09 Passive Effluent Rising Main EMED09 Passive Effluent Rising Main EMED11 Passive Effluent Rising Main EMED12 Passive Effluent Rising Main EMED12 Passive Effluent Rising Main EMED13 Passive Effluent Rising Main EMED14 Passive Effluent Rising Main EMED15 Passive Effluent Rising Main EMED16 Passive Effluent Rising Main EMED16 Passive Effluent Rising Main EMED17 Passive Effluent Rising Main EMED17 Passive Effluent Rising Main EMED17 Passive Effluent Rising Main EMED19 Passive Effluent Rising Main EMED19 Passive Effluent Rising Main EMED19 Passive Effluent Rising Main EMED20 Passive Effluent Rising Main EMED20 Passive Effluent Rising Main EMED20 Passive Effluent Rising Main EMED01 Passive Effluent Rising Main EMED03 Passive Effluent Rising Main GMED04 Passive Gravity Main GMED05 Passive Gravity Main GMED06 Passive Gravity Main GMED07 Passive Gravity Main GMED08 Passive Gravity Main GMED09 Passive Gravity Main GMED09 Passive Gravity Main GMED01 Passive Gravity Main GMED02 Passive Gravity Main GMED03 Passive Gravity Main GMED04 Passive Gravity Main GMED05 Passive Gravity Main GMED07 Passive Gravity Main GMED08 Passive Gravity Main GMED09 Passive Gravity Main GMED09 Passive Gravity Main GMED01 Passive Gravity Main GMED02 Passive Gravity Main GMED02 Passive Gravity Main	EMED03. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED06. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED07. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 100 mm dia EMED08. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED09. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED11. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED14. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED15. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED16. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED17. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED18. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED19. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED10. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED11. Gravity MainEffluent Rising Main. 200 mm dia EMED12. Effluent Rising MainEffluent Rising Main. 200 mm dia EMED13. Gravity MainEffluent Rising Main. 200 mm dia EMED14. Gravity MainEffluent Rising Main. 200 mm dia EMED15. Gravity MainEffluent Rising Main. 200 mm dia EMED16. Gravity MainEffluent Rising Main. 200 mm dia EMED16. Gravity MainEffluent Rising	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm di	Rising Mains Risin	29.71 153.5 125.97 485.05 244.55 466.89 255.95 334.65 467.7 319.55 1347.7 588.68 364.95 107.29 79.35 620.82 644.76 228.76 97.41 5.81 5.81 5.81 5.81 5.81 5.81 5.81 5.8	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200	m-3.0m m-	\$ 233 \$ 5,19,59 \$ 155 \$ 19,539 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 155 \$ 63,113 \$ 156 \$ 156 \$ 160,113 \$ 157 \$ 160,113 \$ 157 \$ 160,113 \$ 157 \$ 160,113			5		\$ 2.25 \$	S	2011 1.0 2011 1.0	00 \$	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMED03 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED06 Passive Effluent Rising Main EMED07 Passive Effluent Rising Main EMED08 Passive Effluent Rising Main EMED08 Passive Effluent Rising Main EMED09 Passive Effluent Rising Main EMED01 Passive Effluent Rising Main EMED04 Passive Effluent Rising Main EMED05 Passive Effluent Rising Main EMED06 Passive Effluent Rising Main EMED07 Passive Effluent Rising Main EMED07 Passive Effluent Rising Main EMED09 Passive Effluent Rising Main EMED09 Passive Effluent Rising Main EMED09 Passive Effluent Rising Main EMED01 Passive Effluent Rising Main EMED01 Passive Effluent Rising Main EMED01 Passive Effluent Rising Main EMED02 Passive Effluent Rising Main EMED01 Passive Effluent Rising Main EMED02 Passive Effluent Rising Main EMED03 Passive Effluent Rising Main EMED04 Passive Effluent Rising Main EMED05 Passive Gravity Main EMED06 Passive Gravity Main EMED08 Passive Gravity Main EMED09 Passive Gravity Main EMED01 Passive Gravity Main EMED02 Passive Gravity Main EMED03 Passive Gravity Main EMED04 Passive Gravity Main EMED05 Passive Gravity Main EMED06 Passive Gravity Main EMED07 Passive Gravity Main EMED09	EMEDIA: Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO: Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO: Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO: Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO: Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO: Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO: Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO: Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO: Effluent Rising MaintEffl	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 300 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia	Rising Mains Risin	29.71 153.5 125.97 485.05 254.55 466.89 255.95 354.65 467.7 319.55 134.77 588.68 364.95 197.29 79.35 644.76 238.76 10.50 40.82 644.76 238.76 10.50 40.82 40.83 10.	200 1.5. 200	m-3.0m m-	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 39,483 \$ 155 \$ 63,113 \$ 5 233 \$ 59,529 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 108,788 \$ 233 \$ 108,788 \$ 233 \$ 134,488 \$ 233 \$ 144,987 \$ 233 \$ 144,987 \$ 233 \$ 144,987 \$ 233 \$ 144,987 \$ 233 \$ 144,988 \$ 233 \$ 144,988 \$ 233 \$ 144,988 \$ 233 \$ 144,988 \$ 233 \$ 144,988 \$ 233 \$ 144,988 \$ 235 \$ 1,487 \$ 236 \$ 1,487 \$ 237 \$ 1,488 \$ 238 \$ 1,489 \$ 238 \$ 1,489 \$ 238 \$ 1,489 \$ 239 \$ 1,489 \$ 239 \$ 1,489 \$ 239 \$ 1,489 \$ 239 \$ 2,566 \$ 230 \$ 1,565 \$ 230 \$ 1,565 \$ 235 \$ 1,567 \$ 236 \$ 1,569 \$ 237 \$ 1,569 \$ 238 \$ 2,364 \$ 1,569 \$ 238 \$ 2,364 \$ 2,44,80 \$ 2,255 \$ 2,365 \$ 2,355 \$ 2,364 \$ 2,24,80 \$ 2,255 \$ 2,365 \$ 2,355 \$ 2,364 \$ 2,24,80 \$ 2,255 \$ 2,365 \$ 2,355 \$ 2,364 \$ 2,24,80 \$ 2,355 \$ 2,364 \$ 2,355 \$ 2,365 \$ 3,364 \$ 2,44,80 \$ 2,365 \$ 2,365 \$ 3,364 \$ 2,44,80 \$ 2,365 \$ 2,365 \$ 3,364 \$ 2,44,80 \$ 2,365 \$ 2,365 \$ 3,364 \$ 2,44,80 \$ 2,365 \$ 2,365 \$ 3,365 \$ 2,365 \$ 3,460 \$ 3,46			5		S 24 S 24 S 24 S 26 S 26	S	2011 1.0 2011 1.0	00 \$ 35,701 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 39,483 00 \$ 59,529 00 \$ 59,529 00 \$ 108,778 00 \$ 136,915 00 \$ 45,865 00 \$ 136,915 00 \$ 45,865 00 \$ 148,390 00 \$ 136,915 00 \$ 45,865 00 \$ 148,390 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 146,380 00 \$ 148,380 00 \$ 148,380 00 \$ 148,380 00 \$ 148,380 00 \$ 148,380 00 \$ 148,380 00 \$ 148,380 00 \$ 148,380 00 \$ 148,380 00 \$ 149,958 00	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDO3 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO3 Passive Effluent Rising Main EMEDO4 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main GMEDO1 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO6 Passive Gravity Main GMEDO7 Passive Gravity Main GMEDO8 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO2 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Main GMEDO5 Passive Gravity Main GMEDO6 Passive Gravity Main GMEDO7 Passive Gravity Main GMEDO8 Passive Gravity Main GMEDO9 Passive Gravity Mai	EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 100 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Effluent Rising MaintEffluent Rising Main. 200 mm dia EMEDIOS. Gravity MaintGravity Main. 225 mm dia GMEDIOS. Gravity	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 3	Rising Mains Risin	29.71 153.5 125.97 485.05 254.55 466.89 255.95 354.65 467.7 319.55 1347.7 588.68 364.95 107.29 79.35 620.82 644.76 238.76 107.29 4.9 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	200 1.5. 200 1.5. 200 1.5. 100 1.5. 100 1.5. 100 1.5. 200	m-3.0m m-	\$ 233 \$ 6,910 \$ 233 \$ 35,701 \$ 155 \$ 19,539 \$ 155 \$ 75,236 \$ 155 \$ 63,113 \$ 5 233 \$ 50,523 \$ 155 \$ 63,113 \$ 233 \$ 108,778 \$ 233 \$ 108,778 \$ 233 \$ 113,448 \$ 233 \$ 133,448 \$ 233 \$ 134,448 \$ 233 \$ 136,915 \$ 233 \$ 134,488 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 233 \$ 144,390 \$ 235 \$ 1,2656 \$ 235 \$ 1,265			5		S 24 S 24	S	2011 1.0 2011 1.0	00 \$ 35,701 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 63,113 00 \$ 108,778 00 \$ 108,778 00 \$ 136,915 00 \$ 136,915 00 \$ 45,886 00 \$ 144,390 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 145,595 00 \$ 15,577 00 \$ 24,480 00 \$ 25,480 00 \$ 39,836	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
EMEDO3 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO5 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO3 Passive Effluent Rising Main EMEDO3 Passive Effluent Rising Main EMEDO4 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO6 Passive Effluent Rising Main EMEDO7 Passive Effluent Rising Main EMEDO8 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO9 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO1 Passive Effluent Rising Main EMEDO2 Passive Effluent Rising Main GMEDO0 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO2 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Main GMEDO9 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO1 Passive Gravity Main GMEDO2 Passive Gravity Main GMEDO3 Passive Gravity Main GMEDO4 Passive Gravity Main GMEDO6 Passive Gravity Main GMEDO7 Passive Gravity Main GMEDO8 Passive Gravity Main GMEDO9 Pas	EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 100 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Effluent Rising MaintEffluent Rising Main 200 mm dia EMEDIO Gravity MaintErivity Main 225 mm dia GMEDIO Gravity MaintErivity Main 225 mm dia GMEDIO Gravity MaintErivity Main 225 mm dia GMEDIO Gravity MaintEravity Main 225 mm dia GMEDIO Gravity Mai	Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Effluent Rising Main 200 mm dia Effluent Rising Main 100 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 225 mm dia Gravity Main 300 mm dia Gravity Main 225 mm di	Rising Mains Risin	29.71 153.5 125.97 485.05, 254.55 406.89 255.95 354.65 467.7 319.55 137.79 139.56 644.76 238.76 97.41 5.81 6.37 79.35 644.76 238.76 97.41 5.81 6.37 10.00 24.76 25.70 25.70 25.70 25.70 26.70 27	200 1.5. 200	m-3.0m m-	5 233 5 6,910 5 233 8 35,701 5 155 19,539 5 155 75,236 5 155 39,484 5 233 5 5,529 5 233 5 5,529 5 233 5 108,778 5 233 5 113,448 5 233 5 136,915 5 233 5 136,915 5 233 5 144,880 5 233 5 144,995 5 233 5 144,995 5 233 5 144,995 5 233 5 144,995 5 233 5 1,497 5 235 5 1,497 5 235 5 1,497 5 235 5 1,248 5 235 <t< td=""><td></td><td></td><td>5</td><td></td><td>S 24 S 24</td><td> S</td><td>2011 1.0 2011 1.0</td><td>00 \$ 35,701 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 6,3113 00 \$ 6,3113 00 \$ 6,3113 00 \$ 82,484 00 \$ 108,778 00 \$ 108,778 00 \$ 133,448 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 149,398 00 \$ 149,958 0</td><td>Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y</td></t<>			5		S 24 S 24	S	2011 1.0 2011 1.0	00 \$ 35,701 00 \$ 35,701 00 \$ 35,701 00 \$ 19,539 00 \$ 75,236 00 \$ 6,3113 00 \$ 6,3113 00 \$ 6,3113 00 \$ 82,484 00 \$ 108,778 00 \$ 108,778 00 \$ 133,448 00 \$ 136,915 00 \$ 136,915 00 \$ 136,915 00 \$ 149,398 00 \$ 149,958 0	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y

197 of 406

Douglas Shire Council Wastewater

Return to "Existing Trunk Assets"

EXISTING TRUNK ASSETS

		Basic Asset Data		Asset	Attributes				Basic Asset Valuat	tion			Land Attributes			Refined Asset Value			
				<u> </u>				ilon				Гуре	(*)				S (S1)	(83)	(\$4)
€		9	-	lype (£ 1			aluat	tion		<u>e</u>	r/uoi:	d (ha)		Year	3	JGLA	N (S2)	EACH
Type	Class	Z and a second s	pt io	tate	un/	a e	€ :	ne V.	ondi	plier	Valu	Locat	f land	/alue	tion	rtion	100	SM AI	ELL B
GIP I	sset	Sset	escri	hit R	engt		bepth	aseli	ite/C	Aultij	iross	and L	ize o Jnit C	and \	/alua	scala	ORT	MOSS	VEW.
								May be calculated	<u> </u>		J						_		
(from ID from the	Pump Station, Gravity Main, Rising Mai	n						from unit rates OR unique values can be									gg.		
1A etc.) LGIP drawings	etc							direct entered								CF	21,15	6,841	612
GME033 Passive	Gravity Main	GME033_Gravity MainGravity Main_375 mm dia	Gravity Main_375 mm dia	Gravity Sewers	203.31	375 1.5m-3		330 \$ 67,090		1	\$ 67,090		\$ 20		2011	1.00 \$	67,090	/	
GME034 Passive GME035 Passive	Gravity Main Gravity Main	GME034_Gravity MainGravity Main_300 mm dia GME035_Gravity MainGravity Main_300 mm dia	Gravity Main_300 mm dia Gravity Main_300 mm dia	Gravity Sewers Gravity Sewers	330.31 201.17	300 1.5m-3 300 1.5m-3		304 \$ 100,322 304 \$ 61,099		1	\$ 100,322 \$ 61,099		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	100,322 61,099	4	
GME036 Passive	Gravity Main	GME036_Gravity MainGravity Main_225 mm dia	Gravity Main_225 mm dia	Gravity Sewers	242.06	225 1.5m-3	3.0m \$	235 \$ 56,867		1	\$ 56,867		\$ 20	\$ -	2011	1.00 \$	56,867	/	
GME037 Passive GME038 Passive	Gravity Main Gravity Main	GME037_Gravity MainGravity Main_225 mm dia GME038_Gravity MainGravity Main_225 mm dia	Gravity Main_225 mm dia	Gravity Sewers Gravity Sewers	280.46 37.41	225 1.5m-3		235 \$ 65,888 235 \$ 8,789		1	\$ 65,888 \$ 8,789		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	65,888 8,789	·	
GME039 Passive	Gravity Main	GME039_Gravity MainGravity Main_225 mm dia	Gravity Main_225 mm dia	Gravity Sewers	200.63	225 1.5m-3		235 \$ 47,134		1	\$ 47,134		\$ 20	\$ -	2011	1.00 \$	47,134	′	
GME040 Passive GME041 Passive	Gravity Main Gravity Main	GME040_Gravity MainGravity Main_225 mm dia GME041_Gravity MainGravity Main_225 mm dia	Gravity Main_225 mm dia Gravity Main_225 mm dia	Gravity Sewers Gravity Sewers	473.48 120.7	225 1.5m-3		235 \$ 111,235 235 \$ 28,356		1	\$ 111,235 \$ 28,356		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	111,235 Y		
GME042 Passive	Gravity Main	GME042_Gravity MainGravity Main_225 mm dia	Gravity Main_225 mm dia	Gravity Sewers	270.9	225 1.5m-3		235 \$ 63,643		1	\$ 63,643		\$ 20		2011	1.00 \$	63,643 Y		
GME043 Passive GME044 Passive	Gravity Main Gravity Main	GME043_Gravity MainGravity Main_225 mm dia GME044_Gravity MainGravity Main_300 mm dia	Gravity Main_225 mm dia Gravity Main_300 mm dia	Gravity Sewers Gravity Sewers	113.46 174.74	225 1.5m-3 300 1.5m-3		235 \$ 26,655 304 \$ 53,072		1	\$ 26,655 \$ 53,072		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	26,655 Y 53,072 Y		
GME045 Passive	Gravity Main	GME045_Gravity MainGravity Main_225 mm dia	Gravity Main_330 mm dia	Gravity Sewers	206.83	225 1.5m-3	3.0m \$	235 \$ 48,591		1	\$ 48,591		\$ 20	\$ -	2011	1.00 \$	48,591 Y		
GME046 Passive	Gravity Main Gravity Main	GME046_Gravity MainGravity Main_225 mm dia GME047_Gravity MainGravity Main_300 mm dia	Gravity Main 225 mm dia Gravity Main 300 mm dia	Gravity Sewers Gravity Sewers	76.96 315.48	225 1.5m-3 300 1.5m-3		235 \$ 18,080 304 \$ 95,818		1	\$ 18,080 \$ 95,818		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	18,080 Y 95,818 Y		
GME048 Passive	Gravity Main	GME048_Gravity MainGravity Main_300 mm dia	Gravity Main_300 mm dia	Gravity Sewers	107.52	300 1.5m-3		304 \$ 32,656		1	\$ 32,656		\$ 20		2011	1.00 \$	32,656 Y		
GME049 Passive	Gravity Main	GME049_Gravity MainGravity Main_300 mm dia	Gravity Main_300 mm dia	Gravity Sewers	73.03	300 1.5m-3		304 \$ 22,181		1	\$ 22,181		\$ 20		2011	1.00 \$	22,181 Y		
GME050 Passive GME051 Passive	Gravity Main Gravity Main	GME050_Gravity MainGravity Main_225 mm dia GME051_Gravity MainGravity Main_225 mm dia	Gravity Main_225 mm dia Gravity Main_225 mm dia	Gravity Sewers Gravity Sewers	175.75 1.37	225 1.5m-3 225 1.5m-3		235 \$ 41,289 235 \$ 322		1	\$ 41,289 \$ 322	<u></u>	\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	41,289 Y 322	v	
GME052 Passive	Gravity Main	GME052_Gravity MainGravity Main_150 mm dia	Gravity Main_150 mm dia	Gravity Sewers	212.92	150 1.5m-3	3.0m \$	199 \$ 42,454		1	\$ 42,454		\$ 20	\$ -	2011	1.00 \$	42,454 Y		
GME053 Passive RME001 Passive	Gravity Main Rising Main	GME053 Gravity MainGravity Main_150 mm dia RME001_Rising MainRising Main_100 mm dia	Gravity Main_150 mm dia Rising Main_100 mm dia	Gravity Sewers Rising Mains	299.43 73.23	150 1.5m-3 100 1.5m-3		199 \$ 59,703 155 \$ 11,359		1	\$ 59,703 \$ 11,359		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	59,703 Y 11,359 Y		
RME002 Passive	Rising Main	RME002_Rising MainRising Main_100 mm dia	Rising Main_100 mm dia	Rising Mains	249.7	100 1.5m-3	3.0m \$	155 \$ 38,731		1	\$ 38,731		\$ 20	\$ -	2011	1.00 \$	38,731		
RME003 Passive RME004 Passive	Rising Main Rising Main	RME003_Rising MainRising Main_200 mm dia RME004_Rising MainRising Main_150 mm dia	Rising Main_200 mm dia Rising Main_150 mm dia	Rising Mains Rising Mains	8.85 379.47	200 1.5m-3 150 1.5m-3		233 \$ 2,058 193 \$ 73,310		1	\$ 2,058 \$ 73,310		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	2,058 Y		
RME005 Passive	Rising Main	RME005_Rising MainRising Main_200 mm dia	Rising Main_200 mm dia	Rising Mains	6.52	200 1.5m-3	3.0m \$	233 \$ 1,516		1	\$ 1,516		\$ 20	\$ -	2011	1.00 \$	1,516 Y		
RME006 Passive RME007 Passive	Rising Main Rising Main	RME006_Rising MainRising Main_200 mm dia RME007_Rising MainRising Main_200 mm dia	Rising Main_200 mm dia Rising Main_200 mm dia	Rising Mains Rising Mains	226.25 9.97	200 1.5m-3 200 1.5m-3		233 \$ 52,621 233 \$ 2,319		1	\$ 52,621 \$ 2,319		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	52,621 Y 2,319 Y		
RME008 Passive	Rising Main	RME008_Rising MainRising Main_200 mm dia	Rising Main_200 mm dia	Rising Mains Rising Mains	158.07	200 1.5m-3	3.0m \$	233 \$ 36,764		1	\$ 36,764		\$ 20	\$ -	2011	1.00 \$	36,764 Y		
RME009 Passive	Rising Main	RME009_Rising MainRising Main_300 mm dia RME010_Rising MainRising Main_300 mm dia	Rising Main_300 mm dia	Rising Mains	217.19	300 1.5m-3		344 \$ 74,755 344 \$ 147,926		1	\$ 74,755 \$ 147,926		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	74,755 Y 147,926 Y		
RME011 Passive	Rising Main Rising Main	RME010 Rising MainRising Main_300 mm dia	Rising Main_300 mm dia Rising Main_300 mm dia	Rising Mains Rising Mains	429.78 435.28	300 1.5m-3		344 \$ 149,819		1	\$ 147,926 \$ 149,819		\$ 20		2011	1.00 \$	149,819 Y		
RME012 Passive	Rising Main	RME012_Rising MainRising Main_300 mm dia	Rising Main_300 mm dia	Rising Mains	380.85	300 1.5m-3		344 \$ 131,085		1	\$ 131,085		\$ 20		2011	1.00 \$	131,085 Y		
RME013 Passive RME014 Passive	Rising Main Rising Main	RME013 Rising MainRising Main_300 mm dia RME014 Rising MainRising Main_300 mm dia	Rising Main_300 mm dia Rising Main_300 mm dia	Rising Mains Rising Mains	614.3 10.99	300 1.5m-3 300 1.5m-3		344 \$ 211,436 344 \$ 3,783		1	\$ 211,436 \$ 3,783		\$ 20 \$ 20		2011	1.00 \$	211,436 Y 3,783 Y		
RME015 Passive	Rising Main	RME015_Rising MainRising Main_375 mm dia	Rising Main_375 mm dia	Rising Mains	224.7	375 1.5m-3	3.0m \$	814 \$ 182,881		1	\$ 182,881		\$ 20	\$ -	2011	1.00 \$	182,881 Y		
RME016 Passive RME017 Passive	Rising Main Rising Main	RME016_Rising MainRising Main_375 mm dia RME017_Rising MainRising Main_100 mm dia	Rising Main_375 mm dia Rising Main_100 mm dia	Rising Mains Rising Mains	440.77 1026.02	375 1.5m-3		814 \$ 358,738 155 \$ 159,146		1	\$ 358,738 \$ 159,146		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	358,738 Y 159,146	·	
RME018 Passive	Rising Main	RME018_Rising MainRising Main_100 mm dia	Rising Main_100 mm dia	Rising Mains	1040.04	100 1.5m-3	3.0m \$	155 \$ 161,321		1	\$ 161,321		\$ 20	\$ -	2011	1.00 \$	161,321	′	
RME019 Passive RME020 Passive	Rising Main Rising Main	RME019_Rising MainRising Main_100 mm dia RME020_Rising MainRising Main_80 mm dia	Rising Main_100 mm dia Rising Main_80 mm dia	Rising Mains Rising Mains	183.28 2784.2	100 1.5m-3 80 1.5m-3		155 \$ 28,429 132 \$ 367,514		1	\$ 28,429 \$ 367,514		\$ 20 \$ 20		2011	1.00 \$	28,429 367,514		
RME021 Passive	Rising Main	RME021_Rising MainRising Main_100 mm dia	Rising Main_100 mm dia	Rising Mains	641.67	100 1.5m-3	3.0m \$	155 \$ 99,529		1	\$ 99,529		\$ 20		2011	1.00 \$	99,529	1	
RME022 Passive	Rising Main Rising Main	RME022_Rising MainRising Main_80 mm dia	Rising Main_80 mm dia Rising Main_50 mm dia	Rising Mains Rising Mains	259.04 40.7	80 1.5m-3 50 1.5m-3		132 \$ 34,193 91 \$ 3,702		1	\$ 34,193 \$ 3,702		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	34,193 Y 3,702 Y		
RME024 Passive	Rising Main	RME023_Rising MainRising Main_50 mm dia RME024_Rising MainRising Main_100 mm dia	Rising Main_30 mm dia	Rising Mains	263.34	100 1.5m-3		155 \$ 40,847		1	\$ 40,847		\$ 20		2011	1.00 \$	40,847 Y		
RME025 Passive	Rising Main	RME025_Rising MainRising Main_150 mm dia	Rising Main_150 mm dia	Rising Mains	694.99	150 1.5m-3		193 \$ 134,265 233 \$ 41,553		1	\$ 134,265 \$ 41,553		\$ 20		2011	1.00 \$ 1.00 \$	134,265 Y		
RME026 Passive RME027 Passive	Rising Main Rising Main	RME026_Rising MainRising Main_200 mm dia RME027_Rising MainRising Main_63 mm dia	Rising Main_200 mm dia Rising Main_63 mm dia	Rising Mains Rising Mains	178.66 181.23	63 1.5m-3		233 \$ 41,553 107 \$ 19,323		1	\$ 41,553 \$ 19,323		\$ 20 \$ 20		2011	1.00 \$	41,553 Y 19,323 Y		
RME028 Passive	Rising Main	RME028_Rising MainRising Main_100 mm dia	Rising Main_100 mm dia	Rising Mains	203.85	100 1.5m-3		155 \$ 31,619		1	\$ 31,619		\$ 20		2011	1.00 \$	31,619 Y		
RME029 Passive RME030 Passive	Rising Main Rising Main	RME029_Rising MainRising Main_150 mm dia RME030_Rising MainRising Main_100 mm dia	Rising Main_150 mm dia Rising Main_100 mm dia	Rising Mains Rising Mains	229.93 49.21	150 1.5m-3 100 1.5m-3		193 \$ 44,420 155 \$ 7,633		1	\$ 44,420 \$ 7,633		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	44,420 Y 7,633 Y		
RME031 Passive	Rising Main	RME031_Rising MainRising Main_63 mm dia	Rising Main_63 mm dia	Rising Mains	334.49	63 1.5m-3	3.0m \$	107 \$ 35,663		1	\$ 35,663		\$ 20	\$ -	2011	1.00 \$	35,663 Y		
RME032 Passive RME033 Passive	Rising Main Rising Main	RME032_Rising MainRising Main_50 mm dia RME033_Rising MainRising Main_200 mm dia	Rising Main_50 mm dia Rising Main_200 mm dia	Rising Mains Rising Mains	100.65 708.22	50 1.5m-3		91 \$ 9,155 233 \$ 164,718		1	\$ 9,155 \$ 164,718		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	9,155 Y 164,718	Y	
RME034 Passive	Rising Main	RME034_Rising MainRising Main_200 mm dia	Rising Main_200 mm dia	Rising Mains	380.61	200 1.5m-3		233 \$ 88,522		1	\$ 88,522		\$ 20		2011	1.00 \$	88,522	Y	
RME035 Passive	Rising Main	RME035 Rising MainRising Main 200 mm dia	Rising Main_200 mm dia Rising Main_150 mm dia	Rising Mains	51.68 850.93	200 1.5m-3 150 1.5m-3	3.0m \$	233 \$ 12,020 193 \$ 164,391		1	\$ 12,020 \$ 164,391		\$ 20 \$ 20	\$ -	2011	1.00 \$ 1.00 \$	12,020 164,391	Y	
RME037 Passive	Rising Main Rising Main	RME036_Rising MainRising Main_150 mm dia RME037_Rising MainRising Main_200 mm dia	Rising Main 200 mm dia	Rising Mains Rising Mains	399.22	200 1.5m-3	3.0m \$	233 \$ 92,851		1	\$ 92,851		\$ 20	\$ -	2011	1.00 \$	92,851	Y	
RME038 Passive	Rising Main	RME038 Rising MainRising Main_200 mm dia RME039 Rising MainRising Main_200 mm dia	Rising Main, 200 mm dia	Rising Mains	21.27	200 1.5m-3		233 \$ 4,947		1	\$ 4,947		\$ 20		2011	1.00 \$	4,947	Y	
RME040 Passive	Rising Main Rising Main	RMEU39 KISING MAINRISING MAIN 200 mm dia RME040 Rising MainRising Main_200 mm dia	Rising Main_200 mm dia Rising Main_200 mm dia	Rising Mains Rising Mains	532.97 584.32	200 1.5m-3 200 1.5m-3		233 \$ 123,958 233 \$ 135,901		1	\$ 123,958 \$ 135,901		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	123,958 135,901	Y	
RME041 Passive	Rising Main	RME041_Rising MainRising Main_200 mm dia	Rising Main_200 mm dia	Rising Mains	10.46 320.59	200 1.5m-3	3.0m \$	233 \$ 2,433		1	\$ 2,433 \$ 74,563		\$ 20	\$ -	2011	1.00 \$ 1.00 \$	2,433	Y	
RME042 Passive RME043 Passive	Rising Main Rising Main	RME042_Rising MainRising Main_200 mm dia RME043_Rising MainRising Main_100 mm dia	Rising Main_200 mm dia Rising Main_100 mm dia	Rising Mains Rising Mains	320.59 218.38	200 1.5m- 100 1.5m-		233 \$ 74,563 155 \$ 33,873		1	\$ 74,563 \$ 33,873		\$ 20 \$ 20		2011	1.00 \$	74,563 33,873	γ Υ	
RME044 Passive	Rising Main	RME044_Rising MainRising Main_100 mm dia	Rising Main_100 mm dia	Rising Mains	262.16	100 1.5m-3	3.0m \$	155 \$ 40,664		1	\$ 40,664		\$ 20	\$ -	2011	1.00 \$	40,664 Y		
RME045 Passive RME046 Passive	Rising Main Rising Main	RME045_Rising MainRising Main_100 mm dia RME046_Rising MainRising Main_200 mm dia	Rising Main_100 mm dia Rising Main_200 mm dia	Rising Mains Rising Mains	151.51 705.23	100 1.5m-3 200 1.5m-3	3.0m \$ 3.0m \$	155 \$ 23,501 233 \$ 164,022		1	\$ 23,501 \$ 164,022		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	23,501 Y 164,022 Y		
RME047 Passive	Rising Main	RME047_Rising MainRising Main_150 mm dia	Rising Main_150 mm dia	Rising Mains	64.83	150 1.5m-3	3.0m \$	193 \$ 12,525		1	\$ 12,525		\$ 20	\$ -	2011	1.00 \$	12,525 Y		
RME048 Passive RME049 Passive	Rising Main Rising Main	RME048_Rising MainRising Main_200 mm dia RME049_Rising MainRising Main_150 mm dia	Rising Main_200 mm dia Rising Main_150 mm dia	Rising Mains Rising Mains	235.18 252.58	200 1.5m-3 150 1.5m-3		233 \$ 54,698 193 \$ 48,796		1	\$ 54,698 \$ 48,796		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	54,698 Y 48,796 Y		
RME050 Passive	Rising Main	RME050_Rising MainRising Main_150 mm dia	Rising Main_150 mm dia	Rising Mains	542.74	150 1.5m-3	3.0m \$	193 \$ 104,852		1	\$ 104,852		\$ 20	\$ -	2011	1.00 \$	104,852 Y		
RME051 Passive	Rising Main Rising Main	RME051_Rising MainRising Main_375 mm dia RME052_Rising MainRising Main_375 mm dia	Rising Main_375 mm dia Rising Main_375 mm dia	Rising Mains Rising Mains	64.38 51.08	375 1.5m-3 375 1.5m-3		814 \$ 52,398 814 \$ 41,574		1	\$ 52,398 \$ 41,574		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	52,398 Y 41,574 Y		
RME053 Passive	Rising Main	RME053_Rising MainRising Main_375 mm dia	Rising Main_375 mm dia	Rising Mains	226.57	375 1.5m-3	3.0m \$	814 \$ 184,403		1	\$ 184,403		\$ 20	\$ -	2011	1.00 \$	184,403 Y		
RME054 Passive	Rising Main	RME054_Rising MainRising Main_100 mm dia	Rising Main_100 mm dia	Rising Mains	225.66 90.93	100 1.5m-3 300 1.5m-3		155 \$ 35,002 344 \$ 31,297		1	\$ 35,002 \$ 31,297		\$ 20	\$ -	2011	1.00 \$ 1.00 \$	35,002 Y 31,297 Y		
RME056 Passive	Rising Main Rising Main	RME055_Rising MainRising Main_300 mm dia RME056_Rising MainRising Main_300 mm dia	Rising Main_300 mm dia Rising Main_300 mm dia	Rising Mains Rising Mains	90.93 557	300 1.5m-3 300 1.5m-3		344 \$ 31,297 344 \$ 191,714		1	\$ 31,297 \$ 191,714		\$ 20 \$ 20		2011	1.00 \$	191,714 Y		
RME057 Passive	Rising Main	RME057_Rising MainRising Main_300 mm dia	Rising Main_300 mm dia	Rising Mains	396.06	300 1.5m-3 200 1.5m-3		344 \$ 136,320 233 \$ 56,531		1	\$ 136,320		\$ 20 \$ 20	\$ -	2011	1.00 \$	136,320 Y 56,531 Y		
RME058 Passive RME059 Passive	Rising Main Rising Main	RME058_Rising MainRising Main_200 mm dia RME059_Rising MainRising Main_100 mm dia	Rising Main_200 mm dia Rising Main_100 mm dia	Rising Mains Rising Mains	243.06 215.83	100 1.5m-3	3.0m \$	233 \$ 56,531 155 \$ 33,477		1	\$ 56,531 \$ 33,477		\$ 20		2011	1.00 \$ 1.00 \$	33,477 Y		
RME060 Passive	Rising Main	RME060_Rising MainRising Main_100 mm dia	Rising Main_100 mm dia	Rising Mains	81.37	100 1.5m-3	3.0m \$	155 \$ 12,621		1	\$ 12,621		\$ 20	\$ -	2011	1.00 \$	12,621 Y		
RME061 Passive RME062 Passive	Rising Main Rising Main	RME061_Rising MainRising Main_150 mm dia RME062_Rising MainRising Main_100 mm dia	Rising Main_150 mm dia Rising Main 100 mm dia	Rising Mains Rising Mains	312.32 403.09	150 1.5m-3 100 1.5m-3	3.0m \$	193 \$ 60,337 155 \$ 62,523		1	\$ 60,337 \$ 62,523		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	60,337 Y 62,523 Y		
RME063 Passive	Rising Main	RME063_Rising MainRising Main_100 mm dia	Rising Main_100 mm dia	Rising Mains	849.33	100 1.5m-3	3.0m \$	155 \$ 131,740		1	\$ 131,740		\$ 20	\$ -	2011	1.00 \$	131,740 Y		
RME064 Passive RME065 Passive	Rising Main Rising Main	RME064_Rising MainRising Main_150 mm dia	Rising Main_150 mm dia Rising Main_80 mm dia	Rising Mains	183.98 268.68	150 1.5m-3 80 1.5m-3	3.0m \$	193 \$ 35,543 132 \$ 35,466		1	\$ 35,543 \$ 35,466		\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	35,543 Y 35,466 Y		
RME066 Passive	Rising Main	RME065_Rising MainRising Main_80 mm dia RME066_Rising MainRising Main_300 mm dia	Rising Main_80 mm dia Rising Main_300 mm dia	Rising Mains Rising Mains	348.39	300 1.5m-3	3.0m \$	344 \$ 119,912		1	\$ 119,912		\$ 20	\$ -	2011	1.00 \$	119,912 Y		
RME067 Passive	Rising Main	RME067_Rising MainRising Main_200 mm dia	Rising Main_200 mm dia	Rising Mains	249.6	200 1.5m-3	3.0m \$	233 \$ 58,052		1	\$ 58,052		\$ 20	\$ -	2011	1.00 \$	58,052 Y		
RME068 Passive RME069 Passive	Rising Main Rising Main	RME068_Rising MainRising Main_100 mm dia RME069_Rising MainRising Main_300 mm dia	Rising Main_100 mm dia Rising Main_300 mm dia	Rising Mains Rising Mains	10.08 963.3	100 1.5m-3 300 1.5m-3		155 \$ 1,564 344 \$ 331,558		1	\$ 1,564 \$ 331,558	<u></u>	\$ 20 \$ 20		2011	1.00 \$ 1.00 \$	1,564 Y 331,558 Y		
RME070 Passive	Rising Main	RME070_Rising MainRising Main_200 mm dia	Rising Main_200 mm dia	Rising Mains	8.5	200 1.5m-3	3.0m \$	233 \$ 1,977		1	\$ 1,977		\$ 20	\$ -	2011	1.00 \$	1,977	Y	
RMF071 Passive	Rising Main	RME071_Rising MainRising Main_80 mm dia	Rising Main_80 mm dia	Rising Mains		80 1.5m-3		132 \$ 4,990			\$ 4,990		\$ 20			1.00 S	4,990 Y		

198 of 406

Attachment 5.1.11 199 of 406

Douglas Shire Council
Wastewater
EXISTING TRUNK ASSETS

Return to "Existing Trunk Assets"

							Asset Data															Catchment A	sset Allocation	
				Basic Asset Data		Asset	t Attributes				E	Basic Asset Valua	tion			Land	Attributes			Refined Ass	et Value	_		E
Councils ID (from			S S S S S S S S S S S S S S S S S S S	Aeset Name	Description	Unit Rate Type (*)	Length/unit (*)	Diameter (*)	Depth (*)	Unit Rate	May be calculated from unit rates OR unique values can be discontinued.	Site/Condition	Multipler	Gross Value	Land Location/Type	Size of land (ha) (*)	Unit Cost	Land Value	Valuation Year	Escalation	Current Replaceeme	PORT DOUGLAS (S1 MOSSMAN (S2) COOYA BEACH (S3)	NEWELL BEACH (54) WONGA BEACH / A44 ROCKY POINT (55)	SHARED TREATMEN (S2-S5)
GIS, FAR, AMA etc.) LGIP drawings	5	etc								direct entered										CRC	6,8	1,8	- =
	RME074	Passive	Rising Main	RME074_Rising MainRising Main_100 mm dia	Rising Main_100 mm dia	Rising Mains	90	100 1.5	sm-3.0m	\$ 155	\$ 13,960		1	\$ 13,960			\$ 20 \$. -	2011	1.00 \$	13,960 Y			
	RME075	Passive	Rising Main	RME075_Rising MainRising Main_150 mm dia	Rising Main_150 mm dia	Rising Mains	125	150 1.5	sm-3.0m	\$ 193	\$ 24,149		1	\$ 24,149			\$ 20 \$; -	2011	1.00 \$	24,149 Y			
	RME076				Rising Main_100 mm dia	Rising Mains	163.75	100 1.5	5m-3.0m	\$ 155	\$ 25,399		1	\$ 25,399			\$ 20 \$	-	2011	1.00 \$	25,399 Y			
	RME078				Rising Main_100 mm dia	Rising Mains	27.63	100 1.5	5m-3.0m	\$ 155	\$ 4,286		1	\$ 4,286			\$ 20 \$	-	2011	1.00 \$	4,286 Y			
	RME077	Passive	Rising Main	RME077_Rising MainRising Main_100 mm dia	Rising Main_100 mm dia	Rising Mains	519.03	100 1.5	5m-3.0m	\$ 155	\$ 80,507		1	\$ 80,507	L		\$ 20 \$	\$ -	2011	1.00 \$	80,507 Y			
										\$ -	\$ -		1	\$ -			\$ 20 \$	\$ -		1.00 \$				

Douglas Shire Council
Transport
EXISTING TRUNK ASSETS

Return to "Existing Trunk Assets"

Land Valuation Type Location

				Asset Data	1										Catchment As
	Basic Asset Da	sta	-	Asset	Attributes		Ę	Basic Asset Valuation			rpe	Land Attributes	Re	fined Asset Value ਦੁ	± ±
GIP ID	sset Name	oe scription	Jnit Rate Type (*	.ength/unit (*)	dercahy/name	Jnit Rate	Saseline Valuatic	ite/Condition	Multiplier	sross Value	and Location/Ty	ize of land (ha) (Juit Cost and Value	/aluation Year	Skalation	Douglas Shire So (TR1)
cils ID (from ID from the RR AMA etc.) LGIP drawins Arterial. Subarterial. Collector		, and the second					May be calculated from unit rates OR unique values can be direct entered	,		J				CRC	31,539
ISECTIONS ISECTIONS Intersection: Roundabout - 1 lane minor	Old Port Road and Nautilus Street	ISE001 Intersection: Roundabout - 1 lane minor. Old Port Road and Nautilus Street	INTERSECTION / STRUCTURES	1	Intersection: Roundabout - 1 lane minor	\$ 271,425	\$ 271.425	Douglas Shire South (TR1)	1	\$ 271,425		\$ 20 \$ -	2009	1.05 \$ 285	5,965 Y
ISE002 Intersection: Roundabout - 1 lane minor	Old Port Road and Downing Street	ISE002 Intersection: Roundabout - 1 lane minor Old Port Road and Downing Street	INTERSECTION / STRUCTURES	1	Intersection: Roundabout - 1 lane minor	\$ 271,425 \$ -			1	\$ 271,425 \$ -		\$ 20 \$ - \$ 20 \$ -	2009 2009		5,965 Y
TURES SBE001 Bridge	Oliver Creek Bridge	SBE001_Oliver Creek Bridge_L=11.5 W=4	INTERSECTION / STRUCTURES	11.5	Structures: Bridges (/m2)	\$ 6,181	\$ 71,081	Douglas Shire North (TR2)	1.4	\$ 99,514		\$ 20 \$ -	2009	1.05 \$ 104	4,845
SBE002 Bridge SBE003 Bridge	Goobiddi Bridge Hutchinson Creek Bridge	SBE002_Goobiddi Bridge_Marrs Creek (Mossman Gorge Road) L=9 W=6 SBE003_Hutchinson Creek Bridge_Hutchinson Creek (Cape Tribulation Road) L=25.7 W=4.2	INTERSECTION / STRUCTURES INTERSECTION / STRUCTURES	9 25.7	Structures: Bridges (/m2) Structures: Bridges (/m2)	\$ 6,181 \$ 6,181		Douglas Shire South (TR1) Douglas Shire North (TR2)	1 1.4	\$ 55,629 \$ 222,392		\$ 20 \$ - \$ 20 \$ -	2009 2009		8,609 Y 4,306
SBE004 Bridge SBE005 Bridge	Junction Bridge Noah Bridge	SBE004_Junction Bridge_Cooya Beach Road L=24 W=6 SBE005_Noah Bridge_Noah Creek (Cape Tribulation Road) L=36 W=3.6	INTERSECTION / STRUCTURES INTERSECTION / STRUCTURES		Structures: Bridges (/m2) Structures: Bridges (/m2)	\$ 6,181 \$ 6,181		Douglas Shire South (TR1) Douglas Shire North (TR2)	1.4	\$ 148,344 \$ 311,522		\$ 20 \$ - \$ 20 \$ -	2009		6,291 Y 8,211
SCE001 Culvert SCE002 Culvert	Ulysses Avenue Creek Neardiwan	SCE001 Ulysses Avenue Ulysses Avenue L=18 W=9 SCE002 Creek Neardiwan Cape Tribulation Road L=14 W=8	INTERSECTION / STRUCTURES INTERSECTION / STRUCTURES	18	Structures: Culverts Structures: Culverts	Identified in schedule(s) Identified in schedule(s)	\$ 278,265		1	\$ 278,265 \$ 150,154		\$ 20 \$ - \$ 20 \$ -	2009 2009	1.05 \$ 293	3,172 Y 8,198
SCE003 Culvert SCE004 Culvert	Buchanan Ck Rd	SCE003_Buchanan Ck Rd_Buchanan Creek Road (Cow Bay) L=13 W=8	INTERSECTION / STRUCTURES INTERSECTION / STRUCTURES	13	Structures: Culverts	Identified in schedule(s)	\$ 88,928	Douglas Shire North (TR2)	1.4	\$ 124,500		\$ 20 \$ -	2009	1.05 \$ 131	1,169 6.802
SCE005 Culvert	Buchanan Ck Rd Buchanan Ck Rd	SCE004_Buchanan Ck Rd_Buchanan Creek Road (Cow Bay) L=8 W=8 SCE005_Buchanan Ck Rd_Buchanan Creek Road (Cow Bay) L=14 W=10	INTERSECTION / STRUCTURES	14	Structures: Culverts Structures: Culverts	Identified in schedule(s) Identified in schedule(s)	\$ 90,369	Douglas Shire North (TR2) Douglas Shire North (TR2)	1.4 1.4	\$ 126,516		\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 133	3,294
SCE006 Culvert SCE007 Culvert	Shepard Valley Cl St Crispan Avenue	SCE006_Shepard Valley Cl_Parker Creek L=10_W=8 SCE007_St Crispan Avenue_Saint Crispins Avenue (Parker Creek) L=6_W=18	INTERSECTION / STRUCTURES INTERSECTION / STRUCTURES	6	Structures: Culverts Structures: Culverts	Identified in schedule(s) Identified in schedule(s)		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 265,882 \$ 106,683	<u> </u>	\$ 20 \$ - \$ 20 \$ -	2009 2009	1.05 \$ 112	0,126 Y 2,398 Y
SCE008 Culvert SCE009 Culvert	Mason Creek Causeway Myall Creek Culvert	SCE008_Mason Creek Causeway_Cape Tribulation Road (Cape Tribulation Road) L= 56 W=7 SCE009_Myall Creek Culvert_Cape Tribulation Road (Cape Tribulation Road) L=42.5 W=7.9	INTERSECTION / STRUCTURES INTERSECTION / STRUCTURES	56 42.5	Structures: Culverts Structures: Culverts	Identified in schedule(s) Identified in schedule(s)	\$ 260,913 \$ 329,833	Douglas Shire North (TR2) Douglas Shire North (TR2)	1.4 1.4	\$ 365,278 \$ 461,766		\$ 20 \$ - \$ 20 \$ -	2009		4,846 6,504
SCE010 Culvert SCE011 Culvert	Coopers Creek Crossing Thompson Creek Culvert	SCE010 Coopers Creek Crossing Cooper Creek (Cape Tribulation Road) L=86.2 W=7.3 SCE011 Thompson Creek Culvert Cape Tribulation Road L=73.8 W=6.6	INTERSECTION / STRUCTURES INTERSECTION / STRUCTURES	86.2	Structures: Culverts Structures: Culverts	Identified in schedule(s) Identified in schedule(s)	\$ 372,170	Douglas Shire North (TR2) Douglas Shire North (TR2)	1.4 1.4	\$ 521,038		\$ 20 \$ -	2009	1.05 \$ 548	8,951 7,246
SFLE001 Ferry Landings (Conc Platforms and Moorin		SELECT Trionips of Clerk Curver Cape Production Road 1–73.3 w –0.0 SFLEOOT Ferry Landings Cape Tribulation Road (Allowance for 2 off)	INTERSECTION / STRUCTURES		Structures: Other	c -		Douglas Shire North (TR2)	1.4			\$ 20 \$ - \$ 20 \$ - \$ 20 \$ -	2009		9,693
SETS	Large Park	Tables 2 and Maria College of the Co	POAR ARATU	420.20	In other collection	3	3 420.452	In the street of track		420.453		3 20 3	2000		5 003 V
154396 TRE001 Rural Major Collector 154396 TRE002 Rural Major Collector	Junction Road Junction Road	TRE001_Rural Major Collector Junction Road TRE002_Rural Major Collector Junction Road	ROAD / PATH ROAD / PATH	161.38	Rural Major Collector Rural Major Collector	\$ 1,006	\$ 162,364	Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 129,163 \$ 162,364		\$ 20 \$ -	2009	1.05 \$ 171	6,083 Y 1,063 Y
37483 TRE003	Bow Street Pringle Street	TRE003_Urban Minor Collector_Bow Street TRE004_Urban Minor Collector_Pringle Street	ROAD / PATH ROAD / PATH		Urban Minor Collector Urban Minor Collector	\$ 2,751 \$ 2,751		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 239,574 \$ 617,077	 	\$ 20 \$ - \$ 20 \$ -	2009 2009		2,408 Y 0,135 Y
1.65678 TRE005 Urban Minor Collector 1.41842 TRE006 Urban Minor Collector	Pringle Street Connolly Street	TRE005_Urban Minor Collector_Pringle Street TRE006_Urban Minor Collector_Connolly Street	ROAD / PATH ROAD / PATH		Urban Minor Collector Urban Minor Collector	\$ 2,751 \$ 2,751		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 440,608 \$ 361,961		\$ 20 \$ - \$ 20 \$ -	2009		4,212 Y 1,352 Y
36860 TRE007 Urban Minor Collector	Blain Street	TRE007_Urban Minor Collector_Blain Street	ROAD / PATH	132.29	Urban Minor Collector	\$ 2,751	\$ 363,914	Douglas Shire South (TR1)	1	\$ 363,914		\$ 20 \$ -	2009	1.05 \$ 383	3,409 Y
66589 TRE010 Urban Major Collector 61764 TRE011 Urban Major Collector	Reef Street Nautilus Street	TRE010_Urban Major Collector_Reef Street TRE011_Urban Major Collector_Nautilus Street	ROAD / PATH ROAD / PATH	55.71	Urban Major Collector Urban Major Collector	\$ 3,054 \$ 3,054	\$ 170,138	Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 176,185 \$ 170,138	<u> </u>	\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 179	5,623 Y 9,252 Y
L66589 TRE012 Urban Major Collector L39493 TRE016 Rural Major Collector	Reef Street Cape Tribulation Road	TRE012_Urban Major Collector_Reef Street TRE016_Rural Major Collector_Cape Tribulation Road	ROAD / PATH ROAD / PATH		Urban Major Collector Rural Major Collector	\$ 3,054 \$ 1,006			1.4	\$ 242,945 \$ 3,914,333	 	\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 255 1.05 \$ 4,124	5,960 Y 4,029
166589 TRE017 Urban Major Collector 179189 TRE018 Urban Minor Collector	Reef Street Wonga Beach Road	TRE017_Urban Major Collector_Reef Street TRE018_Urban Minor Collector_Wonga Beach Road	ROAD / PATH ROAD / PATH		Urban Major Collector Urban Minor Collector	\$ 3,054 \$ 2,751	- T	Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 151,142 \$ 166,538		\$ 20 \$ - \$ 20 \$ -	2009 2009		9,239 Y 5,460 Y
.61764 TRE019 Urban Major Collector 76918 TRE020 Rural Minor Collector	Nautilus Street Buchanan Creek Road	TRE019 Urban Major Collector Nautilus Street TRE020 Rural Minor Collector Buchanan Creek Road	ROAD / PATH	121.89	Urban Major Collector Rural Minor Collector	\$ 3,054 \$ 724	\$ 372,251	Douglas Shire South (TR1) Douglas Shire North (TR2)	1.4	\$ 372,251 \$ 249,222		\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 392	2,193 Y 2,573
76918 TRE021 Rural Minor Collector	Buchanan Creek Road	TRE021_Rural Minor Collector_Buchanan Creek Road	ROAD / PATH	878.44	Rural Minor Collector	\$ 724	\$ 635,727	Douglas Shire North (TR2)	1.4	\$ 890,018		\$ 20 \$ -	2009	1.05 \$ 937	7,697
96163 TRE022 Rural Major Collector 58928 TRE023 Urban Minor Collector	Cooya Beach Road Marlin Drive	TRE022_Rural Major Collector_Cooya Beach Road TRE023_Urban Minor Collector_Marlin Drive	ROAD / PATH ROAD / PATH		Rural Major Collector Urban Minor Collector	\$ 1,006 \$ 2,751			1	\$ 223,123 \$ 136,086	 	\$ 20 \$ - \$ 20 \$ -	2009		5,076 Y 3,376 Y
162939 TRE024 Urban Minor Collector 137483 TRE025 Urban Minor Collector	Oleander Drive Bow Street	TRE024_Urban Minor Collector_Oleander Drive TRE025_Urban Minor Collector_Bow Street	ROAD / PATH ROAD / PATH		Urban Minor Collector Urban Minor Collector	\$ 2,751 \$ 2.751		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 384,325 \$ 402,729		\$ 20 \$ - \$ 20 \$ -	2009		4,914 Y 4,304 Y
139493 TRE026 Rural Major Collector 179189 TRE027 Urban Minor Collector	Cape Tribulation Road Wonga Beach Road	TRE026_Rural Major Collector_Cape Tribulation Road TRE027_Urban Minor Collector_Wonga Beach Road	ROAD / PATH ROAD / PATH		Rural Major Collector Urban Minor Collector	\$ 1,006 \$ 2,751		Douglas Shire North (TR2) Douglas Shire South (TR1)	1.4	\$ 347,388 \$ 748,267		\$ 20 \$ - \$ 20 \$ -	2009 2009	1.05 \$ 365	5,998 8,353 Y
L58928 TRE028 Urban Minor Collector	Marlin Drive	TRE028_Urban Minor Collector_Marlin Drive	ROAD / PATH	181.32	Urban Minor Collector	\$ 2,751	\$ 498,790	Douglas Shire South (TR1)	1	\$ 498,790		\$ 20 \$ -	2009	1.05 \$ 525	5,510 Y
162939 TRE029 Urban Minor Collector 137367 TRE030 Urban Minor Collector	Oleander Drive Bougainvillea Street	TRE029_Urban Minor Collector_Oleander Drive TRE030_Urban Minor Collector_Bougainvillea Street	ROAD / PATH ROAD / PATH		Urban Minor Collector Urban Minor Collector	\$ 2,751 \$ 2,751		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 628,026 \$ 284,826	<u> </u>	\$ 20 \$ - \$ 20 \$ -	2009		0,085 Y
60024 TRE031 Rural Major Collector 37367 TRE032 Urban Minor Collector	Melaleuca Drive Bougainvillea Street	TRE031_Rural Major Collector_Melaleuca Drive TRE032_Urban Minor Collector_Bougainvillea Street	ROAD / PATH ROAD / PATH		Rural Major Collector Urban Minor Collector	\$ 1,006 \$ 2,751			1	\$ 978,382 \$ 350,875	 	\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 1,030 1.05 \$ 369	0,795 Y 9,672 Y
96119 TRE033 Urban Minor Collector 59370 TRE034 Urban Minor Collector	Forest Glen Drive Maxwell Street	TRE033_Urban Minor Collector_Forest Glen Drive TRE034_Urban Minor Collector_Maxwell Street	ROAD / PATH		Urban Minor Collector Urban Minor Collector	\$ 2,751 \$ 2.751		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 397,805 \$ 306.833		\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 419	9,116 Y 3,271 Y
139493 TRE035 Rural Major Collector	Cape Tribulation Road	TRE035_Rural Major Collector_Cape Tribulation Road	ROAD / PATH	79.075	Rural Major Collector	\$ 1,006	\$ 79,557	Douglas Shire South (TR1)	1	\$ 79,557		\$ 20 \$ -	2009	1.05 \$ 83	3,819 Y
137367 TRE036 Urban Minor Collector 139493 TRE037 Rural Major Collector	Bougainvillea Street Cape Tribulation Road	TRE036_Urban Minor Collector_Bougainvillea Street TRE037_Rural Major Collector_Cape Tribulation Road	ROAD / PATH ROAD / PATH	539.19	Urban Minor Collector Rural Major Collector	\$ 2,751 \$ 1,006	\$ 542,479	Douglas Shire South (TR1) Douglas Shire North (TR2)	1.4	7 7 7 7 7 7 7	<u> </u>	\$ 20 \$ -			0,157
96163 TRE038 Urban Major Collector 175825 TRE039 Rural Major Collector	Cooya Beach Road Wharf Street	TRE038_Urban Major Collector_Cooya Beach Road TRE039_Rural Major Collector_Wharf Street	ROAD / PATH ROAD / PATH		Urban Major Collector Rural Major Collector	\$ 3,054 \$ 1,006		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 2,519,908 \$ 592,402	 	\$ 20 \$ - \$ 20 \$ -	2009 2009	1.05 \$ 2,654 1.05 \$ 624	4,903 Y 4,138 Y
.43639 TRE040 Urban Minor Collector 139493 TRE041 Rural Major Collector	Davidson Street Cape Tribulation Road	TRE040_Urban Minor Collector_Davidson Street TRE041_Rural Major Collector_Cape Tribulation Road	ROAD / PATH ROAD / PATH	286.87	Urban Minor Collector Rural Major Collector	\$ 2,751 \$ 1,006	\$ 789,145	Douglas Shire South (TR1) Douglas Shire North (TR2)	1 1 4	\$ 789,145 \$ 472,467		\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 831	1,421 Y 7,777
73620 TRE042 Urban Minor Collector	Ulysses Avenue	TRE042_Urban Minor Collector_Ulysses Avenue	ROAD / PATH	73.88	Urban Minor Collector	\$ 2,751	\$ 203,235	Douglas Shire South (TR1)	1	\$ 203,235		\$ 20 \$ -	2009	1.05 \$ 214	4,123 Y
73612 TRE043 Urban Minor Collector 39493 TRE044 Rural Major Collector	Old Port Road Cape Tribulation Road	TRE043 Urban Minor Collector Old Port Road TRE044 Rural Major Collector Cape Tribulation Road	ROAD / PATH ROAD / PATH	980.27	Urban Minor Collector Rural Major Collector	\$ 2,751 \$ 1,006	\$ 986,250	Douglas Shire South (TR1) Douglas Shire North (TR2)	1.4			\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 1,918 1.05 \$ 1,454	4,718
73620 TRE045 Urban Minor Collector 39493 TRE046 Rural Major Collector	Ulysses Avenue Cape Tribulation Road	TRE045_Urban Minor Collector_Ulysses Avenue TRE046_Rural Major Collector_Cape Tribulation Road	ROAD / PATH ROAD / PATH		Urban Minor Collector Rural Major Collector	\$ 2,751 \$ 1,006		Douglas Shire South (TR1) Douglas Shire North (TR2)	1.4		<u> </u>	\$ 20 \$ - \$ 20 \$ -			4,250
139493 TRE047 Rural Major Collector 139493 TRE048 Rural Major Collector	Cape Tribulation Road Cape Tribulation Road	TRE047, Rural Major Collector_Cape Tribulation Road TRE048, Rural Major Collector_Cape Tribulation Road	ROAD / PATH ROAD / PATH		Rural Major Collector Rural Major Collector	\$ 1,006 \$ 1,006	7	Douglas Shire North (TR2) Douglas Shire North (TR2)	1.4	\$ 5,929,953 \$ 2,062,103	 	\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 6,247 1.05 \$ 2,172	
76918 TRE049 Rural Minor Collector 37157 TRE050 Rural Major Collector	Buchanan Creek Road Bonnie Doon Road	TRE049 Rural Minor Collector Buchanan Creek Road TRE050 Rural Major Collector Roanie Doop Road	ROAD / PATH ROAD / PATH	841.29	Rural Minor Collector Rural Maior Collector	\$ 724 \$ 1,006	\$ 608,842	Douglas Shire North (TR2) Douglas Shire South (TR1)	1.4	\$ 852,378 \$ 885,660		\$ 20 \$ - \$ 20 \$ -	2009		8,041 3,106 Y
137157 TRE051 Rural Major Collector	Bonnie Doon Road	TRE051_Rural Major Collector_Bonnie Doon Road	ROAD / PATH	886.59	Rural Major Collector	\$ 1,006	\$ 891,998	Douglas Shire South (TR1)	1	\$ 891,998		\$ 20 \$ -	2009	1.05 \$ 939	9,784 Y
139493 TRE052 Rural Major Collector 139493 TRE053 Rural Major Collector	Cape Tribulation Road Cape Tribulation Road	TRE052_Rural Major Collector_Cape Tribulation Road TRE053_Rural Major Collector_Cape Tribulation Road	ROAD / PATH ROAD / PATH	1300	Rural Major Collector Rural Major Collector	\$ 1,006 \$ 1,006	\$ 1,307,930	Douglas Shire North (TR2) Douglas Shire North (TR2)	1.4 1.4	\$ 1,831,102	<u> </u>	\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 1,079 1.05 \$ 1,929	9,197
139493 TRE054 Rural Major Collector 139493 TRE056 Rural Major Collector	Cape Tribulation Road Cape Tribulation Road	TRE054_Rural Major Collector_Cape Tribulation Road TRE056_Rural Major Collector_Cape Tribulation Road	ROAD / PATH ROAD / PATH		Rural Major Collector Rural Major Collector	\$ 1,006 \$ 1,006		Douglas Shire North (TR2) Douglas Shire North (TR2)	1.4 1.4		 	\$ 20 \$ - \$ 20 \$ -	2009 2009	1.05 \$ 6,398 1.05 \$ 515	8,997 5,199
1.54396 TRE057 Rural Major Collector	Junction Road Buchanan Creek Road	TRE057 Rural Major Collector Junction Road TRE058 Rural Minor Collector Buchanan Creek Road	ROAD / PATH ROAD / PATH	772.05	Rural Major Collector Rural Minor Collector	\$ 1,006 \$ 724		Douglas Shire South (TR1) Douglas Shire North (TR2)	1 1.4	\$ 776,760 \$ 397,106		\$ 20 \$ - \$ 20 \$ -	2009 2009		8,372 Y 8,379
76918 TRE059 Rural Minor Collector	Buchanan Creek Road	TRE059_Rural Minor Collector_Buchanan Creek Road	ROAD / PATH ROAD / PATH	163.33	Rural Minor Collector	\$ 724	\$ 118,202	Douglas Shire North (TR2)	1.4	\$ 165,483		\$ 20 \$ -	2009	1.05 \$ 174	4,348
165678 TRE060 Urban Minor Collector 96121 TRE061 Urban Major Collector	Pringle Street Mossman Gorge Road	TRE060_Urban Minor Collector_Pringle Street TRE061_Urban Major Collector_Mossman Gorge Road	ROAD / PATH	543.97	Urban Minor Collector Urban Major Collector	\$ 2,751 \$ 3,054	\$ 1,661,279	Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 586,735 \$ 1,661,279		\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 1,750	
137157 TRE062 Rural Major Collector 96176 TRE063 Rural Minor Collector	Bonnie Doon Road Newell Road	TRE062_Rural Major Collector_Bonnie Doon Road TRE063_Rural Minor Collector_Newell Road	ROAD / PATH ROAD / PATH	1436	Rural Major Collector Rural Minor Collector	\$ 1,006 \$ 724		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 469,084 \$ 1,039,233	L	\$ 20 \$ - \$ 20 \$ -	2009	1.05 \$ 1,094	
139493 TRE064 Rural Major Collector 139493 TRE065 Rural Major Collector	Cape Tribulation Road Cape Tribulation Road	TRE064 Rural Major Collector Cape Tribulation Road TRE065 Rural Major Collector Cape Tribulation Road	ROAD / PATH ROAD / PATH		Rural Major Collector Rural Major Collector	\$ 1,006 \$ 1,006		Douglas Shire North (TR2) Douglas Shire North (TR2)	1.4 1.4			\$ 20 \$ - \$ 20 \$ -	2009 2009		2,705 4,163
73612 TRE066 Urban Minor Collector	Old Port Road	TRE066_Urban Minor Collector_Old Port Road	ROAD / PATH	558.67	Urban Minor Collector	\$ 2,751	\$ 1,536,834	Douglas Shire South (TR1)	1	\$ 1,536,834	 	\$ 20 \$ -	2009	1.05 \$ 1,619	9,165 Y
175825 TRE067 Rural Major Collector 96163 TRE068 Rural Major Collector	Wharf Street Cooya Beach Road	TRE067 Rural Major Collector .Wharf Street TRE068 Rural Major Collector .Cooya Beach Road	ROAD / PATH ROAD / PATH	395.35	Rural Major Collector Rural Major Collector	\$ 1,006 \$ 1,006	\$ 397,762	Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 526,824 \$ 397,762		\$ 20 \$ - \$ 20 \$ -		1.05 \$ 419	
137157 TRE069 Rural Major Collector 163339 TRE070 Urban Minor Collector	Bonnie Doon Road Owen Street	TRE069_Rural Major Collector_Bonnie Doon Road TRE070_Urban Minor Collector_Owen Street	ROAD / PATH ROAD / PATH	212.11	Rural Major Collector Urban Minor Collector	\$ 1,006 \$ 2,751	\$ 583,489	Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 665,032 \$ 583,489	<u> </u>	\$ 20 \$ - \$ 20 \$ -		1.05 \$ 614	0,659 Y 4,748 Y
163339 TRE071	Owen Street Buchanan Creek Road	TRE071_Urban Minor Collector_Owen Street TRE072_Rural Minor Collector_Buchanan Creek Road	ROAD / PATH ROAD / PATH	143.71 211.44	Urban Minor Collector Rural Minor Collector	\$ 2,751 \$ 724	\$ 395,329	Douglas Shire South (TR1) Douglas Shire North (TR2)	1.4	\$ 395,329 \$ 214,227		\$ 20 \$ - \$ 20 \$ -			6,507 Y 5,703
133121 TRE073 Urban Minor Collector	Agincourt Street	TRE073_Urban Minor Collector_Agincourt Street	ROAD / PATH	83.21	Urban Minor Collector	\$ 2,751	\$ 228,901	Douglas Shire South (TR1)	1	\$ 228,901		\$ 20 \$ -	2009	1.05 \$ 241	1,163 Y
133121 TRE074 Urban Minor Collector	Agincourt Street Nautilus Street	TRE074_Urban Minor Collector_Agincourt Street TRE075_Urban Major Collector_Nautilus Street	ROAD / PATH ROAD / PATH		Urban Minor Collector Urban Major Collector	\$ 2,751 \$ 3,054		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 161,889 \$ 606,583	 	\$ 20 \$ - \$ 20 \$ -	2009 2009		0,562 Y 9,079 Y

Douglas Shire Council Transport

EXISTING TRUNK ASSETS

Return to "Existing Trunk Assets"

Asset Data ıral Major Collector Cape Tribulation Road 076_Rural Major Collector_Cape Tribulation Road 2067 Rural Major Collector 2,079,609 Douglas Shire North (TR2 333.43 Rural Major Collecto 335,464 Douglas Shire North (494,80 3 Douglas Shire South (Douglas Shire South ıral Major Collector 080_Rural Major Collector_Cape Tribulation Road 081_Rural Minor Collector_Buchanan Creek Road 350.87 Rural Major Collector 353,01 Douglas Shire North (TR) 494,23 639,800 Douglas Shire South (TR ban Minor Collecto ban Minor Collecto Mudlo Street ooya Beach Road 441,901 Douglas Shire South (TF 209,078 Douglas Shire South (TR1 143,494 Douglas Shire South (TR1 76.004 Urban Minor Collecto 220,2 52.163 Urban Minor Collector 414 Rural Major Collector 151,18 438,8 086_Rural Major Collector_Cape Tribulation Roa ıral Major Collector 416,525 Douglas Shire South (TR1 oya Beach Road 195.17 Rural Major Collecto 196,361 Douglas Shire South (T 089_Urban Minor Collector_Palm Street 163,292 Douglas Shire South (TR1 ichanan Creek Road 093_Rural Minor Collector_Buchanan Creek Road 445.98 Rural Minor Collector 322,756 Douglas Shire North (TR2 139493 TRE094 ural Major Collector Cape Tribulation Road E094_Rural Major Collector_Cape Tribulation Road AD / PATH 229.82 Rural Major Collector 231,222 Douglas Shire North (TR2) 323,71 341,0 139493 TI Cape Tribulation Road 2486 Rural Major Collector 2,501,165 Douglas Shire North (TR2 3.501.63 3.689.2 096_Urban Minor Collector_Marlin Drive 838,413 Douglas Shire South (TR1 139493 TRE097 ıral Major Collector Cape Tribulation Road E097_Rural Major Collector_Cape Tribulation Road 191.07 Rural Major Collector 192,236 Douglas Shire North (TR2) 269,13 283,54 73620 TRE098 rban Minor Collector Ulysses Avenue E098 Urban Minor Collector Ulysses Avenue DAD / PATH 321.57 Urban Minor Collector 884,600 Douglas Shire South (TR1) 884,60 931,99 1,189,0 E101_Urban Minor Collector_Mudlo Street 410.26 Urban Minor Collector 1,128,576 Douglas Shire South (TR1 161279 TRE101 rban Minor Collector Audlo Street rban Minor Collector aint Crispins Avenue E102_Urban Minor Collector_Saint Crispins Avenue 85.93 Urban Minor Collector 236,383 Douglas Shire South (TR1) 236,383 rban Minor Collecto 659.1 Urban Minor Collector 1,813,105 Douglas Shire South (TR1 158928 TRE105 Urban Minor Collector Marlin Drive RE105_Urban Minor Collector_Marlin Drive DAD / PATH 85.667 Urban Minor Collector 235,660 Douglas Shire South (TR1) 235,66 1,764,90 1.05 248,28 1,859,44 Rural Major Collector 1,260,643 Douglas Shire North (TF ander Drive 148.47 Urban Minor Collecto 408,423 Douglas Shire South (TR: 408,42 430,3 2 Douglas Shire South (TR: ıral Major Collecto 110_Rural Major Collector_Cape Tribulation Roa 2054 Rural Major Collector 2,066,529 Douglas Shire South (TR 463.46 Rural Major Collector 210.53 Urban Minor Collector 21.02 Urban Major Collector 6207 Rural Major Collector 466,287 Douglas Shire North (579,143 Douglas Shire South (5 Douglas Shire South (ıral Major Collecto 114_Rural Major Collector_Cape Tribulation Road ral Major Collecto 2388 Rural Major Collecto 16_Urban Minor Collector_Saint Crispins Avenue Douglas Shire South (aint Crispins Avenue 113.51 Urban Minor Collector 206.97 Rural Major Collector 117_Rural Major Collector_Cape Tribulation Roa 208,233 Douglas Shire North (TR rban Major Collecto Wonga Beach Road 20_Urban Minor Collector_Wonga Beach Road Vonga Beach Road 121_Urban Minor Collector_Wonga Beach Road 355,304 Douglas Shire South (TR ral Major Collector 688.94 Rural Major Collector 165389 TRE124 186,843 Douglas Shire South (TR1 186,84 196,8 Urban Major Collector ort Street RE124_Urban Major Collector_Port Street DAD / PATH 61.18 Urban Major Collector rban Minor Collector rzinski Street E125_Urban Minor Collector_Berzinski Street 138.21 Urban Minor Collector 380,199 Douglas Shire South (TR1 380,19 400,5 139493 TRE126 ural Major Collecto 538.77 Rural Major Collector 148,966 Douglas Shire North (TR2) 76918 TRE128 ural Minor Collector Buchanan Creek Road RE128_Rural Minor Collector_Buchanan Creek Road DAD / PATH 170.56 Rural Minor Collector 123,434 Douglas Shire North (TR2) 172,808 182,06 ural Minor Collector uchanan Creek Road RE129_Rural Minor Collector_Buchanan Creek Road DAD / PATH 343.61 Rural Minor Collector 248,671 Douglas Shire North (TR2) 348,139 366,78 158.42 Rural Minor Collector E131_Rural Minor Collector_Buchanan Creek Road 114,649 Douglas Shire North (TR2) 169,1 Buchanan Creek Road 135564 TRE132 rban Major Collector Barrier Street E132_Urban Major Collector_Barrier Street 193.13 Urban Major Collector 589,817 Douglas Shire South (TR1) 589,81 621,4 ban Major Collecto E134_Urban Major Collector_Reef Street 30.56 Urban Major Collector 93,330 Douglas Shire South (TR1) 98,3 329,35 178,31 135564 TRE136 rban Major Collector Barrier Street E136_Urban Major Collector_Barrier Street 55.42 Urban Major Collector 169,252 Douglas Shire South (TR1 169,2 135564 TRE137 rban Major Collector Barrier Street E137_Urban Major Collector_Barrier Street AD / PATH 225.24 Urban Major Collector 687,881 Douglas Shire South (TR1) 687,88 Douglas Shire North (T 571.68 Rural Major Collector ıral Major Collector nnie Doon Road 141_Rural Major Collector_Bonnie Doon Road 575,167 Douglas Shire South (TR1 ural Major Collector 9 Douglas Shire North (TR. 3 Douglas Shire South (TR 35,530 Douglas Shire South (TR: rban Minor Collecto 206,866 Douglas Shire South (TR1 963,503 Douglas Shire South (TR1 Wharf Street Nautilus Street ıral Major Collector Cooya Beach Road E150_Rural Major Collector_Cooya Beach Road 458.52 Rural Major Collector 461,317 Douglas Shire South (TR1 486, Agincourt Street Wharf Street 405,150 Douglas Shire South (TR1 180,458 Douglas Shire South (TR1 175825 190,1 154_Urban Minor Collector_Wharf Street 65.6 Urban Minor Collector 856.38 Rural Minor Collector ixies Road L71_Rural Minor Collector_Vixies Road 619,762 Douglas Shire South (TF 9611 835,635 Douglas Shire South (T napper Island [1,982,8 1,882,070 Douglas Shire South (TR: 158928 TRE176 28.654 Urban Minor Collector 78.824 Douglas Shire South (TR1 300,561 Douglas Shire South (TR1 158928 TRE178 rban Minor Collector arlin Drive RE178_Urban Minor Collector_Marlin Drive DAD / PATH 60.15 Urban Minor Collector 165,465 Douglas Shire South (TR1) 165,46 174,33 158928 TRE179 rban Minor Collector arlin Drive RE179 Urban Minor Collector Marlin Drive AD / PATH 41.025 Urban Minor Collector 112,855 Douglas Shire South (TR1) 112,85 118,90 E181_Access Street_Oasis Drive 190.48 Access Street 462,893 Douglas Shire South (TR1 cess Street sis Drive cess Street sis Drive E182_Access Street_Oasis Drive cess Street 358,251 Douglas Shire South (TR1) 358,25 158813 TRE183 rban Minor Collector arine Parade E183 Urban Minor Collector Marine Parade 214.46 Urban Minor Collector 589,954 Douglas Shire South (TR1 621,5 217.23 Urban Minor Collector 228.32 Urban Minor Collector 629,58 661,72 628,081 Douglas Shire South (TR1) 158813 TRE185 RE185_Urban Minor Collector_Marine Parade 628,08 Jrban Minor Collector arine Parade DAD / PATH 158813 TRE186 rban Minor Collector rine Parade E186_Urban Minor Collector_Marine Parade 208.71 Urban Minor Collector 574,136 Douglas Shire South (TR1) 574,13 604,89 158813 TRE187 671,902 Douglas Shire South (TR1 671,90 96119 TRE189 rban Minor Collector rest Glen Drive E189_Urban Minor Collector_Forest Glen Drive DAD / PATH 257.63 Urban Minor Collector 708,709 Douglas Shire South (TR1) 831,288 Douglas Shire South (TR1) 708,709 746,67 875,82 wbray Street

Douglas Shire Council
Transport
EXISTING TRUNK ASSETS

Return to "Existing Trunk Assets"

Land Valuation	Location Location														
					Asset Data										
				_											Catchment Asset Allocation
		Basic Asset Da	ta		Asset	Attributes		c c	Basic Asset Valuation		9	Land Attributes	Refined /	Asset Value த	€ €
				.) e	£	ê E		uatio	5		ā/Ty	(ha)	in in	acem	e So
	lass	a me	tion	te Ty	i i	√/na	2	Na Val	ad iti:	alue	catio	and (on Ye	Repl	s Shii
set IC	P ID	Se	cr i	it Ra	ngth/	srcah	it Ra	selin	o)/a	ultipl oss V	la Lo	e of I	luati	rrent	R1) R2) R2)
As	As A	A S	<u>g</u>	- 5	3	<u> </u>	5	89	៵	Σ̈́	ē	La Si	V Va	3	ăt ăt
						1		May be calculated from unit rates OR							
	ID from the LGIP drawings Arterial. Subarterial. Collector					1		unique values can be direct entered						CRC	31,536
146218 TF		Esplanade	TRE193_Urban Minor Collector_Esplanade	ROAD / PATH	266.4	4 Urban Minor Collector	\$ 2,751		Douglas Shire South (TR1)	1 \$ 732,834		\$ 20 \$ -	2009 1.05	\$ 772,093	3 Y
175016 TF 161269 TF		Warner Street Mowbray Street	TRE194_Urban Minor Collector_Warner Street TRE195_Urban Minor Collector_Mowbray Street	ROAD / PATH ROAD / PATH		Urban Minor Collector Urban Minor Collector	\$ 2,751 \$ 2,751		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 739,959 1 \$ 372,634	ļ	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 779,600 \$ 392,597	
175016 TF	RE196 Urban Minor Collector	Warner Street	TRE196_Urban Minor Collector_Warner Street	ROAD / PATH	255.4	Urban Minor Collector	\$ 2,751	\$ 702,575	Douglas Shire South (TR1)	1 \$ 702,575		\$ 20 \$ -	2009 1.05	\$ 740,213	3 Y
96121 TF 175825 TF		Mossman Gorge Road Wharf Street	TRE197_Rural Minor Collector_Mossman Gorge Road TRE198_Urban Minor Collector_Wharf Street	ROAD / PATH ROAD / PATH		7 Rural Minor Collector L Urban Minor Collector	\$ 724 \$ 2,751		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 305,908 1 \$ 304,825	}	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 322,296 \$ 321,155	
TF	RE199 Urban Minor Collector	Snapper Island Drive	TRE199_Urban Minor Collector_Snapper Island Drive	ROAD / PATH	262.47	7 Urban Minor Collector	\$ 2,751	\$ 722,023	Douglas Shire South (TR1)	1 \$ 722,023		\$ 20 \$ -	2009 1.05	\$ 760,703	3 Y
96121 TF	RE200 Rural Minor Collector RE201 Urban Minor Collector	Mossman Gorge Road Sandpiper Street	TRE200_Rural Minor Collector_Mossman Gorge Road TRE201_Urban Minor Collector_Sandpiper Street	ROAD / PATH ROAD / PATH		Rural Minor Collector Urban Minor Collector	\$ 724 \$ 2,751		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 3,250,860 1 \$ 783,753	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 3,425,014 \$ 825,740	
	RE202 Urban Minor Collector	Oriole Street	TRE202_Urban Minor Collector_Oriole Street	ROAD / PATH	404.52	Urban Minor Collector	\$ 2,751	\$ 1,112,786	Douglas Shire South (TR1)	1 \$ 1,112,786		\$ 20 \$ -	2009 1.05	\$ 1,172,400	
	RE203 Urban Minor Collector RE204 Urban Minor Collector	Brolga Street Birdwing Street	TRE203_Urban Minor Collector_Brolga Street TRE204_Urban Minor Collector_Birdwing Street	ROAD / PATH ROAD / PATH		Urban Minor Collector Urban Minor Collector	\$ 2,751 \$ 2,751		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 602,883 1 \$ 1,459,589	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 635,180 \$ 1,537,782	
	RE008 Rural Major Collector	Cooya Beach Road	TRE008_Rural Major Collector_Cooya Beach Road	ROAD / PATH ROAD / PATH		Rural Major Collector	\$ 1,006 \$ 2.751		Douglas Shire South (TR1)	1 \$ 162,616	I	\$ 20 \$ -	2009 1.05	\$ 171,328	8 Y 4 Y
	RE009 Urban Minor Collector RE013 Urban Minor Collector	Connolly Street Grant Street	TRE009_Urban Minor Collector_Connolly Street TRE013_Urban Minor Collector_Grant Street	ROAD / PATH		2 Urban Minor Collector 2 Urban Minor Collector	\$ 2,751	7	Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 509,243 1 \$ 353,818	!	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 536,524 \$ 372,773	
	RE014 Urban Minor Collector RE015 Urban Minor Collector	Owen Street	TRE014_Urban Minor Collector_Owen Street	ROAD / PATH ROAD / PATH		4 Urban Minor Collector	\$ 2,751	\$ 351,397	Douglas Shire South (TR1)	1 \$ 351,397 1 \$ 379,842	ļ	\$ 20 \$ -	2009 1.05 2009 1.05	\$ 370,222 \$ 400.190	2 Y
	RE015 Urban Minor Collector RE055 Access Street	Mowbray Street Snapper Island Drive	TRE015_Urban Minor Collector_Mowbray Street TRE055_Access Street_Snapper Island Drive	ROAD / PATH		3 Urban Minor Collector 2 Access Street	\$ 2,751 \$ 2,430		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 379,842 1 \$ 1,346,346	<u> </u>	\$ 20 \$ - \$ 20 \$ -	2009 1.05	\$ 1,418,472	0 Y 2 Y
MAJOR GRANT FUN	NDING						\$ -	\$ -		1 \$ -		\$ 20 \$ -	1.00	\$ -	
TF	RESUB1 Bitumen Sealing of Cape Tribulation Road Nor			ROAD / PATH			#N/A	-\$ 9,209,356	Douglas Shire North (TR2)	1.4 -\$ 12,893,098		\$ 20 \$ -	2011 1.00	-\$ 12,893,098	Y
	RESUB2 Bitumen Sealing of Cape Tribulation Road Nor		HA) - Federal Government Funding HA) - Wet tropics Management Authority Funding	ROAD / PATH ROAD / PATH			#N/A #N/A	-\$ 4,093,047 -\$ 818,609	Douglas Shire North (TR2) Douglas Shire North (TR2)	1.4 -\$ 5,730,266 1.4 -\$ 1,146,053	ļ	\$ 20 \$ - \$ 20 \$ -	2011 1.00 2011 1.00	-\$ 5,730,266 -\$ 1,146,053	6 Y 3 Y
	RESORS BRUINEN SEATING OF CAPE PROGRAMON KORD NOT	ar nom die Mossman - Dama'ee Road (Wi	isy-wee tropics wanagement autority tanding	MOAD/TATII			\$ -	\$ -	Douglas Shire Horti (1142)	1 \$ -		\$ 20 \$ -	1.00		
PATH ASSETS 34002 2 FE	PE001 Concrete Path	Millman Drive Off	Concrete Path Millman Drive Off	ROAD / PATH	88 212	Concrete Path	Š 167	1 \$ 14 697	Douglas Shire South (TR1)	1 \$ 14.687		\$ 20 \$ -	2009 1.05	\$ 15.474	4 Y
34002_2 FF	PE002 Concrete_Path	Millman Drive Off	Concrete_Path_Millman Drive Off	ROAD / PATH	111.77	7 Concrete_Path	\$ 167	\$ 18,610	Douglas Shire South (TR1)	1 \$ 18,610		\$ 20 \$ -	2009 1.05	\$ 19,607	7 Y
	PE003 Concrete Path PE004 Concrete Path	Yiki Street Mitre Street	Concrete_Path_Yiki Street Concrete_Path_Mitre Street	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 9,943 1 \$ 83,851		\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 10,476 \$ 88,343	
23034_2 FF	PE005 Concrete_Path	Mitre Street	Concrete_Path_Mitre Street	ROAD / PATH	147.98	Concrete_Path	\$ 167	\$ 24,639	Douglas Shire South (TR1)	1 \$ 24,639	İ	\$ 20 \$ -	2009 1.05	\$ 25,959	9 Y
	PE006 Concrete_Path PE007 Concrete_Path	Mitre Street Mitre Street	Concrete_Path_Mitre Street Concrete_Path_Mitre Street	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 69,589 1 \$ 7,168	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 73,317 \$ 7,552	
34018_1 FF	PE008 Concrete_Path	Sagiba Avenue	Concrete_Path_Sagiba Avenue	ROAD / PATH	200.87	7 Concrete_Path	\$ 167	\$ 33,445	Douglas Shire South (TR1)	1 \$ 33,445	İ	\$ 20 \$ -	2009 1.05	\$ 35,237	7 Y
	PE009 Concrete_Path PE010 Concrete_Path	Res_pathway Res_pathway	Concrete_Path_Res_pathway Concrete_Path_Res_pathway	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 26,047 1 \$ 49,704	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 27,443 \$ 52,366	
	PE011 Concrete_Path	Oriole Street	Concrete_Path_Oriole Street	ROAD / PATH	47.186	Concrete_Path	\$ 167	\$ 7,856	Douglas Shire South (TR1)	1 \$ 7,856		\$ 20 \$ -	2009 1.05	\$ 8,277	7 Y
	PE012	Oriole Street Sandpiper Close	Concrete_Path_Oriole Street Concrete_Path_Sandpiper Close	ROAD / PATH ROAD / PATH		7 Concrete_Path 2 Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 18,410 1 \$ 3,172	<u> </u>	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 19,396 \$ 3,342	
34011_2 FF 34011_1 FF	PE014 Concrete_Path	Sandpiper Close	Concrete_Path_Sandpiper Close	ROAD / PATH		Concrete Path	\$ 167		Douglas Shire South (TR1)	1 \$ 24,292	ļ	\$ 20 \$ -	2009 1.05 2009 1.05	\$ 25,594	
	PE015 Concrete Path PE016 Concrete Path	Sandpiper Close Res_pathway	Concrete_Path_Sandpiper Close Concrete_Path_Res_pathway	ROAD / PATH ROAD / PATH		4 Concrete_Path 3 Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 16,534 1 \$ 5,576	<u> </u>	\$ 20 \$ - \$ 20 \$ -	2009 1.05	\$ 17,420 \$ 5,874	
	PE017 Concrete Path PE018 Asphalt_Path	Res_pathway Port Douglas Road	Concrete Path Res pathway Asphalt Path Port Douglas Road	ROAD / PATH		L Concrete_Path 7 Asphalt_Path	\$ 167 \$ 193		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 9,268 1 \$ 3.571		\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 9,764 \$ 3,763	
130005_1 FF	PE019 Concrete_Path	Res_pathway	Concrete_Path_Res_pathway	ROAD / PATH	230.43	Concrete_Path	\$ 167	\$ 38,367	Douglas Shire South (TR1)	1 \$ 38,367		\$ 20 \$ -	2009 1.05	\$ 40,422	2 Y
	PE020 Concrete Path PE021 Concrete Path	Res_pathway Endeavour Street	Concrete Path Res pathway Concrete Path Endeavour Street	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 17,376 1 \$ 3.042		\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 18,307 \$ 3,205	7 Y 5 Y
23018_1 FF	PE022 Concrete Path	Endeavour Street	Concrete_Path_Endeavour Street	ROAD / PATH	57.13	Concrete_Path	\$ 167	\$ 9,512	Douglas Shire South (TR1)	1 \$ 9,512		\$ 20 \$ -	2009 1.05	\$ 10,022	
	PE023 Concrete Path PE024 Concrete Path	Endeavour Street St Crispins Avenue	Concrete_Path_Endeavour Street Concrete_Path_St Crispins Avenue	ROAD / PATH ROAD / PATH		Concrete Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 22,328 1 \$ 12,095	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 23,524 \$ 12,743	
23056_6 FF	PE025 Concrete Path	St Crispins Avenue	Concrete_Path_St Crispins Avenue	ROAD / PATH		Concrete Path	\$ 167	\$ 23,153	Douglas Shire South (TR1)	1 \$ 23,153		\$ 20 \$ -	2009 1.05	\$ 24,394	4 Y
25000_1	PE026	Baler Street Helmet Street	Concrete_Path_Baler Street Concrete_Path_Helmet Street	ROAD / PATH ROAD / PATH		Concrete_Path L Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 2,434 1 \$ 2,046	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 2,564 \$ 2,156	4 Y 6 Y
	PE028 Concrete Path PE029 Concrete Path	Triton Crescent Reef Street	Concrete Path Triton Crescent Concrete Path Reef Street	ROAD / PATH ROAD / PATH		Concrete Path Concrete Path	\$ 167 \$ 167	\$ 6,993	Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 6,993 1 \$ 12,012	I	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 7,368 \$ 12,656	8 Y
	PE030 Concrete_Path	Res_pathway	Concrete Path Res_pathway	ROAD / PATH		Concrete_Path	\$ 167		Douglas Shire South (TR1)	1 \$ 1,450		\$ 20 \$ -	2009 1.05	\$ 1,527	
	PE031	Bale Drive Morning Close	Concrete_Path_Bale Drive Concrete_Path_Morning Close	ROAD / PATH ROAD / PATH		Concrete_Path Concrete Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 20,714 1 \$ 27,163		\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 21,824 \$ 28,618	
23035_1 FF	PE033 Concrete_Path	Morning Close	Concrete_Path_Morning Close	ROAD / PATH	71.321	L Concrete_Path	\$ 167	\$ 11,875	Douglas Shire South (TR1)	1 \$ 11,875		\$ 20 \$ -	2009 1.05	\$ 12,511	1 Y
	PE034	Res_pathway Port Douglas Road	Concrete_Path_Res_pathway Gravel_Path_Port Douglas Road	ROAD / PATH ROAD / PATH		Gravel_Path	\$ 167 \$ 32		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 7,114 1 \$ 598	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 7,495 \$ 630	
23049_1 FF	PE036 Concrete_Path	Savannah Close	Concrete_Path_Savannah Close	ROAD / PATH	89.886	Concrete_Path	\$ 167	\$ 14,966	Douglas Shire South (TR1)	1 \$ 14,966		\$ 20 \$ -	2009 1.05	\$ 15,768	
	PE037 Concrete Path PE038 Concrete Path	Res_pathway Escape Street Link	Concrete_Path_Res_pathway Concrete_Path_Escape Street Link	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 14,796 1 \$ 11,743	<u> </u>	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 15,588 \$ 12,372	
	PE039 Concrete Path PE040 Concrete_Path	Res_pathway Escape Street	Concrete Path Res pathway Concrete Path Escape Street	ROAD / PATH ROAD / PATH	139.06	Concrete_Path	\$ 167 \$ 167	\$ 23,153	Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 23,153 1 \$ 13,030	ļ	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 24,394 \$ 13,728	
23032_1 FF	PE041 Concrete_Path	Mahogany Street	Concrete_Path_Mahogany Street	ROAD / PATH	68.624	Concrete_Path	\$ 167	\$ 11,426	Douglas Shire South (TR1)	1 \$ 11,426	<u> </u>	\$ 20 \$ -	2009 1.05	\$ 12,038	8 Y
	PE042	Davidson Street Res_pathway	Concrete_Path_Davidson Street Concrete_Path_Res_pathway	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 72,271 1 \$ 38,605	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 76,143 \$ 40,673	
23021_4 FF	PE044 Concrete_Path	Garrick Street	Concrete Path Garrick Street	ROAD / PATH	66.093	3 Concrete_Path	\$ 167	\$ 11,004	Douglas Shire South (TR1)	1 \$ 11,004		\$ 20 \$ -	2009 1.05	\$ 11,594	
	PE045	Blake Street Blake Street	Concrete Path Blake Street	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 9,119 1 \$ 9.139	}	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 9,608 \$ 9.629	
23008_2 FF	PE047 Concrete Path	Beryl Street	Concrete Path Beryl Street	ROAD / PATH	60.154	1 Concrete_Path	\$ 167	\$ 10,016	Douglas Shire South (TR1)	1 \$ 10,016		\$ 20 \$ -	2009 1.05	\$ 10,552	2 Y
	PE048 Concrete_Path PE049 Concrete_Path	Beryl Street Res_pathway	Concrete_Path_Beryl Street Concrete_Path_Res_pathway	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 18,000 1 \$ 11,325	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 18,965 \$ 11,931	
130008_1 FF	PE050 Concrete Path	Res_pathway	Concrete_Path_Res_pathway	ROAD / PATH	30.839	Concrete_Path	\$ 167	\$ 5,135	Douglas Shire South (TR1)	1 \$ 5,135		\$ 20 \$ -	2009 1.05	\$ 5,410	0 Y
	PE051 Brick Paver_Path PE052 Concrete_Path	Garrick Street Mowbray Street	Brick Paver_Path_Garrick Street Concrete_Path_Mowbray Street	ROAD / PATH ROAD / PATH		I Brick Paver_Path I Concrete_Path	\$ 366 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 13,930 1 \$ 20,153	<u> </u>	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 14,676 \$ 21,233	
	PE053 Concrete Path PE054 Gravel Path	Mowbray Street	Concrete_Path_Mowbray Street	ROAD / PATH ROAD / PATH	117.9	Concrete_Path	\$ 167 \$ 32	\$ 19,630	Douglas Shire South (TR1)	1 \$ 19,630 1 \$ 2,216	ļ	\$ 20 \$ -	2009 1.05 2009 1.05	\$ 20,682 \$ 2,335	2 Y 5 Y
130017_1 FF	PE054 Gravel Path PE055 Concrete_Path	Res_pathway Res_pathway	Gravel Path Res pathway Concrete Path Res pathway	ROAD / PATH	95.024	2 Gravel_Path 4 Concrete_Path	\$ 32 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 15,821	<u> </u>	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 16,669	9 Y
	PE056 Concrete Path PE057 Brick Paver Path	Res_pathway Res_pathway	Concrete Path Res pathway Brick Paver Path Res pathway	ROAD / PATH ROAD / PATH	79.596	Concrete_Path Brick Paver_Path	\$ 167 \$ 366		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 13,253 1 \$ 64,458	ļ	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 13,963 \$ 67,911	
130002_1 FF	PE058 Concrete Path	Res_pathway	Concrete_Path_Res_pathway	ROAD / PATH	55.966	Concrete_Path	\$ 167	\$ 9,318	Douglas Shire South (TR1)	1 \$ 9,318	!	\$ 20 \$ -	2009 1.05	\$ 9,818	8 Y
	PE059 Concrete_Path PE060 Brick Paver_Path	Owen Street Owen Street	Concrete_Path_Owen Street Brick Paver_Path_Owen Street	ROAD / PATH ROAD / PATH		7 Concrete_Path 7 Brick Paver_Path	\$ 167 \$ 366		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 19,442 1 \$ 44,618	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 20,484 \$ 47,008	
23042_2 FF	PE061 Brick Paver_Path	Owen Street	Brick Paver_Path_Owen Street	ROAD / PATH	20.667	7 Brick Paver_Path	\$ 366	\$ 7,554	Douglas Shire South (TR1)	1 \$ 7,554		\$ 20 \$ -	2009 1.05	\$ 7,959	9 Y
	PE062 Brick Paver_Path PE063 Concrete_Path	Owen Street Owen Street	Brick Paver_Path_Owen Street Concrete_Path_Owen Street	ROAD / PATH ROAD / PATH		Brick Paver_Path Concrete_Path	\$ 366 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 16,926 1 \$ 8,313	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 17,833 \$ 8,758	
23022_2 FF	PE064 Brick Paver_Path	Grant Street	Brick Paver_Path_Grant Street	ROAD / PATH	104.87	7 Brick Paver_Path	\$ 366	\$ 38,331	Douglas Shire South (TR1)	1 \$ 38,331		\$ 20 \$ -	2009 1.05	\$ 40,384	4 Y
	PE065 Brick Paver_Path PE066 Brick Paver_Path	Grant Street Warner Street	Brick Paver_Path_Grant Street Brick Paver_Path_Warner Street	ROAD / PATH ROAD / PATH	23.675	Brick Paver_Path Brick Paver_Path	\$ 366 \$ 366		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 \$ 18,703 1 \$ 8,653	 	\$ 20 \$ - \$ 20 \$ -	2009 1.05 2009 1.05	\$ 19,705 \$ 9,117	
23022_2 FF	PE067 Brick Paver_Path	Grant Street	Brick Paver_Path_Grant Street	ROAD / PATH	111.91	Brick Paver_Path	\$ 366	\$ 40,904	Douglas Shire South (TR1)	1 \$ 40,904		\$ 20 \$ -	2009 1.05	\$ 43,096	6 Y
23022_1 FF	PE068 Brick Paver_Path	Grant Street	Brick Paver_Path_Grant Street	ROAD / PATH	92.045	Brick Paver_Path	\$ 366	33,643	Douglas Shire South (TR1)	1 \$ 33,643	L	\$ 20 \$ -	2009 1.05	\$ 35,446	6 Y

Attachment 5.1.11 203 of 406

> **Douglas Shire Council** Transport

Return to "Existing Trunk Assets" EXISTING TRUNK ASSETS

					Asset Data	1												Catchment	Asset Allocati
		Basic Asset Dat	a	c c	Asset	Attributes		e e	Basic Asset Valuation			- be	Land A	ttributes		Refined Ass	et Value	ŧ	Ę
				Ape (3	€	ě		luatio	<u>o</u>			on/T/	(ha) (ear		olacen	ire So	ire No
₽ 6	Class	Name	ption	ate +	/unit	hy/n	a te	ne Va	o ndit	lier	Value	ocati	land:	ost alue	ion Y	ig i	ıt Rep	as Sh	as Sh
sset l	Sset (ssetí	escri	in the second se	ength	ierca	in Si	aselir	ite/Ω	fultip		and L	ize of	nit C	aluat	scalat	urren	ougl TR1)	Jougl TR2)
4	5	4	Δ	5		I	5	May be calculated	<i>ν</i>	2	6	-	<u> </u>	5 3	>	iii	·		
Councils ID (from ID from								from unit rates OR unique values can be										4	39
GIS, FAR, AMA etc.) LGIP dra								direct entered									CRC	ž	131,
23038_2 FPE069		Murphy Street	Concrete_Path_Murphy Street	ROAD / PATH		Concrete_Path Concrete_Path	\$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 2,384 \$ 13,729	1		20 \$ -	2009	1.05 \$	2,512		4
23026_1 FPE070 23065_2 FPE071		Inlet Street Wharf Street	Concrete_Path_Inlet Street Brick Paver_Path_Wharf Street	ROAD / PATH ROAD / PATH		Concrete_Path Brick Paver_Path	\$ 167 \$ 366		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 13,729 \$ 32,348			20 \$ - 20 \$ -	2009	1.05 \$	14,464 34,081		/
13031_1 FPE072	2 Concrete_rotii	Quaid Street	Concrete_Path_Quaid Street	ROAD / PATH		Concrete_Path	\$ 167	7	Douglas Shire South (TR1)	1	\$ 3,976	5	\$	20 \$ -	2009	1.05 \$	4,188	3 Y	
13031_1 FPE073 13031_1 FPE074		Quaid Street Quaid Street	Concrete_Path_Quaid Street Gravel_Path_Quaid Street	ROAD / PATH ROAD / PATH		Concrete_Path Gravel Path	\$ 167 \$ 32	\$ 4,912 \$ 609		1	\$ 4,912 \$ 609		\$	20 \$ - 20 \$ -	2009	1.05 \$	5,176 642	Y	4
9111_1 FPE075		White Oak Av : Waratah Cl	Concrete_Path_White Oak Av : Waratah Cl	ROAD / PATH		Concrete_Path	\$ 167		Douglas Shire South (TR1)	1	\$ 13,491		\$	20 \$ -	2009	1.05 \$	14,214		4
9112_1 FPE076 9113_1 FPE077		Esplanade Forest Glen Rd : Satinash St	Concrete_Path_Esplanade Concrete_Path_Forest Glen Rd : Satinash St	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 7,671 \$ 12,957	,		20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	8,082 13,651		/
34045_1 FPE078		Monarch Drive	Concrete_Path_Monarch Drive	ROAD / PATH		Concrete_Path	\$ 167		Douglas Shire South (TR1)	1	\$ 3,852		\$	20 \$ -	2009	1.05 \$	4,058	3 Y 1 Y	4
14046_1 FPE079 34045_1 FPE080		Spoonbill Close Monarch Drive	Concrete Path Spoonbill Close Concrete Path Monarch Drive	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 7,120 \$ 13,497			20 \$ - 20 \$ -	2009 2009	1.05 \$ 1.05 \$	7,501 14,220	Y Y	4
9109_1 FPE081		Esplanade	Concrete_Path_Esplanade	ROAD / PATH	41.359		\$ 167		Douglas Shire South (TR1)	1	\$ 6,886	5	\$	20 \$ -	2009	1.05 \$	7,255	5 Y 1 Y	4
34043_2 FPE082 34043_1 FPE083		Riflebird Crescent Riflebird Crescent	Concrete Path_Riflebird Crescent Concrete Path_Riflebird Crescent	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 36,916 \$ 27,163	3	\$	20 \$ - 20 \$ -	2009 2009	1.05 \$ 1.05 \$	38,894 28,618	Y	4
9110_1 FPE084	4 Concrete_Path	Front Street : Riflebird Cres	Concrete_Path_Front Street : Riflebird Cres	ROAD / PATH	165.46	Concrete_Path	\$ 167	\$ 27,549	Douglas Shire South (TR1)	1	\$ 27,549		\$	20 \$ -	2009	1.05 \$	29,025	Y	4
13007_1 FPE085 13009_1 FPE086		Hospital Street Jack Street	Concrete_Path_Hospital Street Concrete_Path_Jack Street	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 17,449 \$ 9,215		\$ \$	20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	18,384 9,708	1 Y 3 Y	4
240418_1 FPE087	7 Concrete Path	Res_pathway	Concrete_Path_Res_pathway	ROAD / PATH	18.882	Concrete_Path	\$ 167	\$ 3,144	Douglas Shire South (TR1)	1	\$ 3,144	ļ.	\$	20 \$ -	2009	1.05 \$	3,312	2 Y	4
13004_3 FPE088 13004_2 FPE089		Grogan Street Grogan Street	Concrete_Path_Grogan Street Concrete_Path_Grogan Street	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167	- F	Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 39,805 \$ 19,724	1	\$	20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	41,938 20,780	9 Y	4
13004_1 FPE090	0 Concrete Path	Grogan Street	Concrete_Path_Grogan Street	ROAD / PATH	207.73	Concrete_Path	\$ 167	\$ 34,587	Douglas Shire South (TR1)	1	\$ 34,587	7	\$	20 \$ -	2009	1.05 \$	36,440) Y	4
13004_1 FPE091 13015_1 FPE092		Grogan Street Mullavey Street	Concrete Path Grogan Street Concrete Path Mullavey Street	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 1	\$ 14,876 \$ 11.317	7	Ş S	20 \$ -	2009	1.05 \$ 1.05 \$	15,673 11,923	3 Y 3 Y	4
13003_1 FPE093	3 Concrete_Path	Dan Hart Lane	Concrete_Path_Dan Hart Lane	ROAD / PATH	115.8	Concrete_Path	\$ 167	\$ 19,281	Douglas Shire South (TR1)	1	\$ 19,281		\$	20 \$ -	2009	1.05 \$	20,314	1 Y	4
13021_1 FPE094 13021_1 FPE095		William Street William Street	Concrete Path William Street Concrete Path William Street	ROAD / PATH ROAD / PATH		Concrete Path Concrete Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 1	\$ 25,509 \$ 11,581			20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	26,876 12,202	9 2 Y	4
13022_2 FPE096	6 Concrete_Path	Wilson Street	Concrete_Path_Wilson Street	ROAD / PATH	271.21	Concrete_Path	\$ 167	\$ 45,156	Douglas Shire South (TR1)	1	\$ 45,156			20 \$ -	2009	1.05 \$	47,576		4
13022_2 FPE097 13013_2 FPE098		Wilson Street Mill Street	Concrete Path Wilson Street Concrete Path Mill Street	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 1	\$ 3,538 \$ 21,434		\$	20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	3,728 22,582	3 Y 2 Y	4
13013_1 FPE099	9 Concrete_Path	Mill Street	Concrete_Path_Mill Street	ROAD / PATH	132.89	Concrete_Path	\$ 167	\$ 22,126	Douglas Shire South (TR1)	1	\$ 22,126	5	\$	20 \$ -	2009	1.05 \$	23,312	Υ	4
13013_2 FPE100 13013_1 FPE101		Mill Street Mill Street	Concrete_Path_Mill Street Concrete_Path_Mill Street	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 1	\$ 16,393 \$ 26,389			20 \$ -	2009	1.05 \$ 1.05 \$	17,271 27,802	1 Y 2 Y	4
240421_1 FPE102	2 Concrete_Path	Res_pathway	Concrete_Path_Res_pathway	ROAD / PATH	24.717	Concrete_Path	\$ 167	\$ 4,115	Douglas Shire South (TR1)	1	\$ 4,115			20 \$ -	2009	1.05 \$	4,336	5 Y	4
240422_1 FPE103 240420_1 FPE104		Res_pathway Res_pathway	Concrete Path Res_pathway Concrete Path Res_pathway	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 6,638 \$ 3,382		ş S	20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	6,993 3,563	3 Y	4
13014_1 FPE105		Mossman Street	Concrete Path Mossman Street	ROAD / PATH		Concrete_Path	\$ 167	7	Douglas Shire South (TR1)	1	\$ 62,501		\$	20 \$ -	2009	1.05 \$	65,849		4
240419_1 FPE106 120111_1 FPE107		Res_pathway Res_pathway	Concrete_Path_Res_pathway Concrete_Path_Res_pathway	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 11,869 \$ 7,503	3	\$	20 \$ - 20 \$ -	2009 2009	1.05 \$ 1.05 \$	12,505 7,905	Y 5 Y	4
120111_1 FPE108	8 Concrete_Path	Res_pathway	Concrete_Path_Res_pathway	ROAD / PATH	65.324	Concrete_Path	\$ 167	\$ 10,876	Douglas Shire South (TR1)	1	\$ 10,876			20 \$ -	2009	1.05 \$	11,459		4
13006_1 FPE109 13014_2 FPE110		Hart Street Mossman Street	Concrete Path Hart Street Concrete Path Mossman Street	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 27,486 \$ 1,987			20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	28,958 2,094		4
240425_1 FPE111		Res_pathway	Concrete_Path_Res_pathway	ROAD / PATH		Concrete_Path	\$ 167		Douglas Shire South (TR1)	1	\$ 14,219			20 \$ -	2009	1.05 \$	14,981	ı Y	4
34024_2 FPE112 34024_3 FPE113		Bayil Drive Bayil Drive	Concrete Path Bayil Drive Concrete Path Bayil Drive	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 21,217 \$ 13,148			20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	22,354 13,852	1 Y 2 Y	4
34024_4 FPE114		Bayil Drive	Concrete_Path_Bayil Drive	ROAD / PATH	72.23	Concrete_Path	\$ 167	\$ 12,026	Douglas Shire South (TR1)	1	\$ 12,026	5	\$	20 \$ -	2009	1.05 \$	12,671	L Y	4
34024_5 FPE115 34024_1 FPE116		Bayil Drive Bayil Drive	Concrete Path Bayil Drive Concrete Path Bayil Drive	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1 1	\$ 4,425 \$ 16,170		\$	20 \$ - 20 \$ -	2009 2009	1.05 \$ 1.05 \$	4,662 17,036	2 Y 5 Y	/
32024_1 FPE117		Cooya Beach Road	Concrete_Path_Cooya Beach Road	ROAD / PATH		Concrete_Path	\$ 167		Douglas Shire South (TR1)	1	\$ 2,008	3	\$	20 \$ -	2009	1.05 \$	2,116	Y	4
34025_1 FPE118 34024 6 FPE119		Barrbal Drive Bayil Drive	Concrete Path Barrbal Drive Concrete Path Bayil Drive	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 7,237 \$ 7,099		\$	20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	7,624 7,480	1 Y) Y	/
240424_1 FPE120	0 Concrete_Path	Res_pathway	Concrete_Path_Res_pathway	ROAD / PATH		Concrete Path Concrete Path	\$ 167	\$ 10,012	Douglas Shire South (TR1)	1	\$ 10,012 \$ 7,162		\$	20 \$ -	2009	1.05 \$	10,548 7 546	3 Y	4
240423_1 FPE121 9104_1 FPE122		Res_pathway Fitzmaurice Drive Park	Concrete_Path_Res_pathway Concrete_Path_Fitzmaurice Drive Park	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 7,162 \$ 23,045	L	\$	20 \$ - 20 \$ -	2009 2009	1.05 \$	7,546 24,280	Y) Y	4
9097_1 FPE123		Calophyllum Close Off	Concrete_Path_Calophyllum Close Off	ROAD / PATH ROAD / PATH		Concrete_Path	\$ 167		Douglas Shire South (TR1)	1	\$ 8,456		\$	20 \$ -	2009	1.05 \$	8,909	Y Y	4
9099_1 FPE124 37076_2 FPE125	4 Concrete_Path 5 Concrete_Path	Gardenia Close New Wonga Esplanade	Concrete Path Gardenia Close Concrete Path New Wonga Esplanade	ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 8,533 \$ 4,199)	\$	20 \$ - 20 \$ -	2009	1.05 \$	8,990 4,424	Y	4
9104 1 FPE126 9100 1 FPE127		Fitzmaurice Drive Park Cliffdale Street Park	Concrete Path Fitzmaurice Drive Park Concrete Path Cliffdale Street Park	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 36,164 \$ 8,398		\$	20 \$ - 20 \$ -	2009 2009	1.05 \$ 1.05 \$	38,101 8,848		4
33023_1 FPE128		Janbal Street	Concrete_Path_Janbal Street Concrete_Path_Janbal Street	ROAD / PATH		Concrete_Path	\$ 167		Douglas Shire South (TR1)	1	\$ 19,236			20 \$ -	2009	1.05 \$	20,266		
37062_2 FPE129 37076_2 FPE130		Res_pathway	Concrete_Path_Res_pathway	ROAD / PATH		Concrete_Path	\$ 167		Douglas Shire South (TR1)	1	\$ 6,659 \$ 3,545			20 \$ - 20 \$ -	2009 2009	1.05 \$ 1.05 \$	7,016	Y Y	
37076_2 FPE130 9104_1 FPE131		New Wonga Esplanade Fitzmaurice Drive Park	Concrete_Path_New Wonga Esplanade Concrete_Path_Fitzmaurice Drive Park	ROAD / PATH ROAD / PATH	51.445	Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 3,545			20 \$ -	2009	1.05 \$	3,735 9,024	·	
9104_2 FPE132		Yumba Cl : Calophyllum Cl	Concrete_Path_Yumba Cl : Calophyllum Cl	ROAD / PATH	105.06	Concrete_Path Concrete_Path	\$ 167		Douglas Shire South (TR1)	1	\$ 17,492		\$	20 \$ -	2009	1.05 \$	18,430		4
9101_1 FPE133 9104_3 FPE134		Timberlea Drive East Park Yumba Cl : Calophyllum Cl	Concrete_Path_Timberlea Drive East Park Concrete_Path_Yumba Cl : Calophyllum Cl	ROAD / PATH ROAD / PATH	190.58	Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 8,476 \$ 31,732			20 \$ - 20 \$ -	2009 2009	1.05 \$ 1.05 \$	8,930 33,431		4
9102_1 FPE135	5 Concrete_Path	Barka Close Off	Concrete_Path_Barka Close Off	ROAD / PATH	53.434	Concrete_Path	\$ 167	\$ 8,897	Douglas Shire South (TR1)	1	\$ 8,897	7	\$	20 \$ -	2009	1.05 \$	9,373	3 Y	4
33022_6 FPE136 33022_5 FPE137		Ives Avenue Ives Avenue	Concrete_Path_Ives Avenue Concrete_Path_Ives Avenue	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 8,596 \$ 15,218			20 \$ - 20 \$ -	2009 2009	1.05 \$ 1.05 \$	9,057 16,033		4
33022_4 FPE138		Ives Avenue	Concrete_Path_Ives Avenue	ROAD / PATH	37.691	Concrete_Path	\$ 167	\$ 6,276	Douglas Shire South (TR1)	1	\$ 6,276		\$	20 \$ -	2009	1.05 \$	6,612	2 Y	
9107_1 FPE139 240417_1 FPE141		Barra Close Off Res_pathway	Gravel_Path_Barra Close Off Concrete_Path_Res_pathway	ROAD / PATH ROAD / PATH		Gravel_Path Concrete_Path	\$ 32 \$ 167		Douglas Shire South (TR1) Douglas Shire North (TR2)	1.4	\$ 1,406 \$ 8,439		\$	20 \$ - 20 \$ -	2009 2009	1.05 \$ 1.05 \$	1,482 8,891		Y
240426_1 FPE142	2 Concrete_Path	Res_pathway	Concrete_Path_Res_pathway	ROAD / PATH	46.8	Concrete_Path	\$ 167	\$ 7,792	Douglas Shire South (TR1)	1	\$ 7,792	2		20 \$ -	2009	1.05 \$	8,210) Y	4
FPE143 FPE144		Barrbal Drive Barrbal Drive	Concrete_Path_Barrbal Drive Concrete_Path_Barrbal Drive	ROAD / PATH ROAD / PATH		Concrete_Path Concrete_Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 28,788 \$ 14,922			20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	30,330 15,721		4
FPE145	5 Concrete_Path	Bayil Drive	Concrete_Path_Bayil Drive	ROAD / PATH	38.379	Concrete_Path	\$ 167	\$ 6,390	Douglas Shire South (TR1)	1	\$ 6,390)	\$	20 \$ -	2009	1.05 \$	6,732	2 Y	
FPE146 FPE147		Bayil Drive Barrbal Drive	Concrete Path Bayil Drive Concrete Path Barrbal Drive	ROAD / PATH ROAD / PATH	92.183	Concrete Path Concrete Path	\$ 167 \$ 167		Douglas Shire South (TR1) Douglas Shire South (TR1)	1	\$ 15,348 \$ 1.029	9		20 \$ - 20 \$ -	2009	1.05 \$ 1.05 \$	16,171 1,084	l Y 1 Y	
FPE152		Beach Access_from Solander Blvde	Concrete Path Beach Access from Solander Blvde	ROAD / PATH	60.541	Concrete_Path	\$ 167			1	\$ 10,080)	\$	20 \$ -	2009	1.05 \$	10,620		
							\$ -	\$ -		1	\$ -		\$	20 \$ -		1.00 \$	-		

Douglas Shire Council Parks and Land for Community Facilities

Return to "Existing Trunk Assets"

EXISTING TRUNK ASSETS

	luation Type	Location	J																			
						Asset Data	1												Cato	hment Asset A	Allocation	
		Basic As	set Data		Asset Attribute	S		Basic Asset Va	aluation		0	Land Attributes			Refined Ass	set Value	33	3)	C5)	of oray	man of	(6
					(£)			tion			ξ	£				eme	PPLC	(2) PP	(PPL	outh lowb	al Area - Mossm ir to Daintree al Area - North o	1 1888; ed (e-)
					уре			alu a	tion	o o	io n/	<u> </u>		Year		palc	las ((PPI	ach	Rive	aint Z	ict Shared Iments Ict Shared Iments (5,88 Iments (1-9)
Δ.	_	Jass	v ₂	ortion	lte.]		a 2	9 9	ndi	lier /alu	ocat	lanc ost	an ne	on (io	r Re	Bno	Bea	Be Be	Area Area O M	Area O Di Area ee R	t Sh t Sh nen nen
et	01 4	set C	dres	scri	it Ra	it (*)	it Re	Se iii	o/cc	ultip oss \	결	it C	> p	<u>In at</u>	alat	Te .	ξ	oya	ewel ong	owb ral,	ral,	stric stric tchr tchr tchr
Ass	٦Θ	ASS	Ad	De	5	ű,	5	B B	Sit	M Sig	- Far	Sig	<u> </u>	a a	Esc	ā	8	žβ	žž	R S S S	R Riv	2 2 2 2 8 2
		T															н	3 2	4 7	9 2	8 6	11 12
Councils ID (from								May be calculated from unit rates OR unique values can be									8		ιn		o ñ	8 6 2
	ID from the LGIP drawings	Local/District Park						direct entered								CRC	13,1	2,07	1,01	516	1,30	3,32
IGLE CATCHMEN	NT ASSETS							Cost of Park Embelishments														
	PPLC001	Conservation	Cooya Beach	Jim Holdsworth Park			ė.	\$ 64,201		1 \$ 64,201		1.51	ė	2011	1.00 \$	64,201		lv I	_			
	PPLC002	Local Recreation Park	Daintree	Daintree Town Boat Ramp Area			\$0	\$ 6,700		1 \$ 6,700		0.32	\$ -	2011	1.00 \$	6,700	lt			 	Y	
	PPLC003	Local Recreation Park	Daintree	Pioneer Park			\$0	\$ 33,840		1 \$ 33,840		0.24	\$ -	2011	1.00 \$	33,840					Υ	
	PPLC004	Other Open Space	Daintree	Daintree Toilets			\$0	\$ 145,602		1 \$ 145,602	ļ	0.06	<u>\$</u> -	2011	1.00 \$		ļ			 	Υ	
	PPLC005 PPLC006	Land for Drainage Purposes Local Recreation Park	Newell Newell	Jimal Park Phil Lunn Park			\$0 \$0	\$ 1,400 \$ 12,400		1 \$ 1,400 1 \$ 12,400	 	0.11 0.38	\$ -	2011	1.00 \$ 1.00 \$	1,400 12,400	ł	<u>Y</u>		 	 	
	PPLC007	Conservation	Newell	Newell Beach Esplanade			\$0			1 \$ 12,400		1.26	\$ -	2011	1.00 \$	12,400	lt	Y		 	 	
	PPLC008	Conservation	Newell	Newell Beach Esplanade			\$0	\$ -		1 \$ -		0.97	\$ -	İ	1.00 \$	-	l1	Y				
	PPLC009	District Recreation Park	Newell	Newell Beach Esplanade			\$0	\$ 2,500		1 \$ 2,500		1.76	\$ -	2011	1.00 \$	2,500	ļĪ	Y				
	PPLC010 PPLC011	Conservation District Recreation Park	Wangetti	Wangetti Esplanade Wangetti Beach Access			\$0	\$ -		1 \$ - 1 \$ 2,200		24.19 0.36	\$ -	2011	1.00 \$ 1.00 \$	37,850	ļ <u></u>			Y		
	PPLC011 PPLC012	Conservation Conservation	Wangetti Wangetti	Wangetti Beach Access Wangetti (West Of Cook Hwy)			\$0	2,200		1 5 2,200		3.55	\$ 35,650	2011	1.00 \$	37,850	 			Y	 	
	PPLC013	Conservation	Wonga	New Wonga Esplanade			\$0	\$ -		1 \$ -		0.21	\$ -		1.00 \$	-	<u> </u>		Y	<u> </u>		
	PPLC014	Conservation	Wonga	New Wonga Esplanade			\$0	+		1 \$ -		0.39	\$ -		1.00 \$	-			Y			
	PPLC015	Conservation Local Recreation Park	Wonga	Wonga Esplanade			\$0	<u> </u>		1 \$ -		1.22	\$ -	2044	1.00 \$	-	ļ <u>-</u>		Y		ļ <u> </u>	
	PPLC016 PPLC017	Local Recreation Park Conservation	Wonga Wonga	Bells Park New Wonga Esplanade			\$0	\$ 98,235 \$ -		1 \$ 98,235 1 \$ -		0.54 1.45	\$ -	2011	1.00 \$ 1.00 \$	98,235	 		Y	 	 	
	PPLC018	Conservation	Mossman	Unnamed Reserve			\$0	\$ -		1 \$ -		3.14	\$ -	<u> </u>	1.00 \$,			<u> </u>	<u> </u>	
	PPLC019	Local Recreation Park	Mossman	Manjal Dimbi (Middlemiss Park)			\$0	LT.		1 \$ -		0.12	\$ 23,200	2011	1.00 \$	23,200						
	PPLC020 PPLC021	Local Recreation Park Local Recreation Park	Mossman Mossman	David Jack Park Kuhirri			\$0	\$ 23,201 \$ 36,586		1 \$ 23,201 1 \$ 36,586	ļ	0.06 0.68	\$ - \$ 136,400	2011	1.00 \$ 1.00 \$	23,201 172,986	 			 	 	
	PPLC021 PPLC022	Conservation	Mossman	Shepherd Valley			\$0	\$ 30,360		1 5 -		0.13	\$ 130,400	2011	1.00 \$	172,960				 	 	
	PPLC023	Conservation	Mossman	Shepherd Valley			\$0	\$ -		1 \$ -		1.31	\$ -	İ	1.00 \$	-	,					
F	PPLC024	Land for Drainage Purposes	Craiglie	Buluru/Ulysses Avenue			\$0	\$ -		1 \$ -		0.32	\$ -		1.00 \$	-						
(PPLC025	District Recreation Park	Craiglie	Willy Pye Memorial (Teamsters) Park			\$0	\$ 202,594		1 \$ 202,594		1.38	\$ -	2011	1.00 \$	202,594	<u>Y</u>					
F	(i) + (ii) PPLC026 (i) - (iv)	District Recreation Park	Craiglie	Hutchings Park			\$0	\$ 134,517		1 \$ 134,517		2.92	\$ 1,753,200	2011	1.00 \$	1,887,717	<u>'</u>					·····
\ <u>\</u>	(I) - (IV) PPLC027	Conservation	Mowbray	Mowbray River Environment Area			ŚO	s -		1 5 -		1.48	\$ -	 	1.00 \$		Y			 	 	
	PPLC028	Conservation	Mowbray	Mowbray River Environment Area			\$0	\$ -		1 \$ -		9.60	\$ -	<u> </u>	1.00 \$		Υ					
	PPLC029	Land for Drainage Purposes	Port Douglas	Buluru Park			\$0	\$ 1,400		1 \$ 1,400	ļ	2.00	\$ -	2011	1.00 \$	1,400	Y			 	 	
F	PPLC030 (i) + (ii)	Land for Drainage Purposes	Port Douglas	Warri Park			¢n			1 6 .		1.28	ė .		1.00 \$		v					
F	PPLC031	Other Open Space	Port Douglas	Public Toilets			\$0	\$ 146,402		1 \$ 146,402		0.45	\$ -	2011	1.00 \$	146,402	Y			 	 	
	PPLC032	District Recreation Park	Port Douglas	Island Point Lookout			\$0	\$ 3,741		1 \$ 3,741		0.21	\$ 128,580	2011	1.00 \$	132,321	Υ					
	PPLC033	Conservation	Port Douglas	Island Point Nature Reserve			\$0 \$0	\$ -		1 \$ -		6.81	\$ -	 	1.00 \$	-	Y			 	 	
	PPLC034 PPLC035	Conservation District Recreation Park	Port Douglas Port Douglas	Island Point Nature Reserve Julan Park			ŞU SO	\$ -		1 5 -		0.47 0.21	\$ -	 	1.00 \$ 1.00 \$		Y Y			 	 	
	PPLC036	District Recreation Park	Port Douglas	4 Mile Beach Esplanade			\$0	\$ 88,328		1 \$ 88,328		1.18	\$ -	2011	1.00 \$	88,328	Y			 	 	
F	PPLC037	Conservation	Port Douglas	4 Mile Beach Esplanade			\$0			1 \$ -		2.18	\$ -		1.00 \$	-	Υ					
	PPLC038	Conservation	Port Douglas	Sands Street			\$0	\$ -		1 \$ -	ļ	2.66	\$ -	2044	1.00 \$	2.400	Y				ļ <u>-</u>	
	PPLC039 PPLC040	Local Recreation Park Conservation	Port Douglas Port Douglas	Jalumbu Park 4 Mile Beach Esplanade			\$0	\$ 2,400		1 \$ 2,400 1 \$ -		0.89 2.63	\$ - \$ -	2011	1.00 \$ 1.00 \$	2,400	Y				 	
	PPLC041	District Recreation Park	Port Douglas	Bruno Reidwig Park			\$0	\$ 96,150		1 \$ 96,150	I	2.25	\$ -	2011	1.00 \$	96,150	Υ					
F	PPLC042	District Recreation Park	Port Douglas	4 Mile Beach Esplanade			\$0	\$ 145,602		1 \$ 145,602		0.99	\$ -	2011	1.00 \$	145,602	Υ				 	
F	PPLC043 PPLC044	Conservation	Port Douglas	4 Mile Beach Esplanade			\$0	\$ -		1 \$ -	ļ	2.23	\$ -	ļ	1.00 \$		Y				ļ	
F	PPLC044 PPLC045	Conservation Conservation	Port Douglas Port Douglas	4 Mile Beach Esplanade Aboretum			\$0	\$ 7,500		1 \$ 7500		1.71 6.18	\$ -	2011	1.00 \$	7,500	Y			 	 	
F	PPLC046	Land for Drainage Purposes	Port Douglas	Nautilus St Park			\$0	\$ -		1 \$ -		3.08	\$ -		1.00 \$		Υ			<u> </u>		
	PPLC047	Other Open Space	Port Douglas	No. 9 Ribbon Avenue			\$0	\$ -		1 \$ -		0.08	\$ -	ļ	1.00 \$	-	Υ					
	PPLC048 PPLC049	Conservation	Killaloe	Coolalinga Driver			\$0	\$ -		1 \$ -		3.50	\$ -	ļ	1.00 \$		ļ <u>-</u>			Y	ļ <u> </u>	
	(i) -> (v)	District Recreation Park	Lower Daintree	Daintree Ferry Area			\$0	\$ 161,933		1 \$ 161,933		4.28	\$ -	2011	1.00 \$	161,933					Υ	
F	PPLC050	Conservation	Miallo	Somerset Drive			\$0	\$ -		1 \$ -		11.63	\$ -		1.00 \$	-				<u> </u>	Υ	
	PPLC051	District Recreation Park	Mossman	Rotary Park (Mossman)			\$0	7		1 \$ 192,323		0.91	\$ -	2011	1.00 \$	192,323						
	PPLC052 PPLC053	Local Recreation Park Conservation	Mossman Mowbray	North Mossman Park Mowbray River Environment Area			\$0 \$0	<u> </u>		1 \$ 2,500		0.15 27.26	\$ -	2011	1.00 \$ 1.00 \$		 			v	Y	
	PPLC053 PPLC054	District Recreation Park	Rocky Point	Rocky Point Esplanade			\$0	\$ 6,200		1 \$ 6,200		2.00	\$ -	2011	1.00 \$	6,200	 				Υ	
	PPLC055	Conservation	Rocky Point	Rocky Point Esplanade			\$0	\$ 9,900		1 \$ 9,900		11.09	\$ -	2011	1.00 \$	9,900					Υ	
	PPLC056	District Recreation Park	Cow Bay	Cow Bay Esplanade			\$0	7		1 \$ 33,400		0.97	\$ 24,135	2011	1.00 \$	57,535					Y	<u> </u>
	PPLC057	Conservation	Wangetti	Wangetti Esplanade			\$0	\$ -		1 \$ -	ļ	26.48	\$ -	ļ	1.00 \$		ļ <u>-</u>			Y	ļ	
	PPLC058 PPLC059	Conservation Conservation	Wangetti Wangetti	Cook Hwy Reserve Cook Hwy Reserve			\$0	\$ -		1 5 -		40.27 51.32	\$ -	·	1.00 \$ 1.00 \$		l			Y	 	
	PPLC060	Conservation	Wangetti	Wangetti Esplanade			\$0	+		1 \$ -		140.06	\$ -		1.00 \$	-	<u> </u>			Y		
	PPLC066	District Recreation Park	Cooya Beach	Jim Holdsworth Park			\$0	y		1 \$ 212,138		2.33	\$ -	2011	1.00 \$	212,138		Y				
	PPLC067 PPLC068	District Recreation Park District Recreation Park	Newell	Newell Beach Esplanade Wanga Community Park			\$0	\$ 341,359 \$ 98,471		1 \$ 341,359 1 \$ 98,471		3.61 3.83	\$ - \$ 383,270	2011	1.00 \$	341,359 481,741	l	Y			 	
, , , , , , , , , , , , , , , , , , ,	PPLC069	Local Government Wide Recreation Park	Wonga Mossman	Wonga Community Park George Davis Park			\$0	+		1 \$ 98,471		1.44	\$ 383,270	2011	1.00 \$ 1.00 \$	564,940	,				 	
F							+				t		4			259,738	1::				·····	·
F	PPLC070 PPLC071	District Recreation Park	Port Douglas	4 Mile Park			\$0	\$ 259,738 \$ 305,185		1 \$ 259,738 1 \$ 305,185	L	1.42	\$ 778,200	2011 2011			Υ			<u> </u>	<u> </u>	l lL

Attachment 5.1.11 205 of 406

Douglas Shire Council Parks and Land for Community Facilities

Return to "Existing Trunk Assets"

EXISTING TRUNK ASSETS

						Asset Data	ı														Catchmen	nt Asset A	Illocation		
		Basic A	set Data		Asset Attribute	es		Basic Asset	Valuation			Land Attribu	utes			Refined Asset	Value	~	-	. -	5)	ay	E _		
Asset ID	CI ID	Asset Class	Address	Description	Unit Rate Type (*)	Unit (*)	Unit Rate	Baseline Valuation	Site/Condition	Gross Value	Land Location/Type	Size of land (ha) (*)	Unit Cost	Land Value	Valuation Year	Escalation	Current Repalceme	Port Douglas (PPLC1	Mossman (PPLC2)	Newell Beach (PPLC	Wonga Beach (PPLC Rural Area - South o	Mowbray River Rural Area - Mowbr River to Mossman	Rural Area - Mossm River to Daintree Rural Area - North o Daintree River	District Shared Catchments District Shared Catchments (5,8&9)	gional S tchmen
																		1	2 8	4	2	7	8 6	10	12 30
ncils ID (from AR, AMA etc.) ID	from the LGIP drawing	s Local/District Park						May be calculated from unit rates OR unique values can be direct entered									CRC	13,194	2,071	902 445	1,015	516 565	1,309	17,693	21,022
PLE CATCHMI	ENT (REGIONAL) A	SSETS						Cost of Park Embelishments																	
PI	PLC072	Community Facilities	Coova Beach	Community Facilities	T T		l (nls -		1 5 -		0.00		<u>-</u>		1.00 S		y ly	/ Y	ly l	l y	ly l	$\overline{}$	V	
	PLC073	Community Facilities	Newell	Community Facilities		 	Ś	0 \$ 4.100	 	1 \$ 4.100		1.58		\$ -	2011	1.00 \$	4.100	y y	/ Y		Y	Y		Ÿ	
	PLC074	District Sports Park	Wangetti	District Sports Park	·	†	Ś	0 \$ -	 	1 5 -		1.26		\$ 125,700	2011	1.00 \$	125,700	Y Y	/ Y	Y	Y	Υ	/	Y	
	PLC075	Community Facilities	Port Douglas	Community Facilities	·	†	Ś	0 \$ -	 	1 5 -		1.89		\$ 567,480	2011	1.00 \$	567.480	Y Y	/ Y	Y	Y	Υ	/	Y	
	21 C076	Community Facilities	Port Douglas	Community Facilities		 	Š	0 \$ 71,272	 	1 \$ 71,272		0.10		\$ -	2011	1.00 \$	71,272		/ · · ·	v		· ·	{	v	
	PLC077	Community Facilities	Port Douglas	Community Facilities		 	Š	n \$ -	 	1 \$ -		0.33		ς -		1.00 \$		v v	/ · · ·	v		· ·		v	
	PLC078	Community Facilities	Port Douglas	Community Facilities		 	<u>-</u>	n s		1 \$.		0.69		\$ 206.820	2011	1.00 \$	206.820	·	, -		v	- i		Y	
	21 C079	Community Facilities	Port Douglas	Community Facilities		 	<u>-</u>	0 \$ 7,457		1 \$ 7.457		0.03		\$ 200,020	2011	1.00 \$	7.457		, -		v	- i	{·	Y	
	PLC080	District Sports Park	Port Douglas	District Sports Park	-{	 	<u>-</u>	0 \$ 13,959	 	1 \$ 13,959		1.72		ė	2011	1.00 \$	13,959		, · · · ·		-			-	
	PLC080	District Sports Park District Sports Park	Port Douglas	District Sports Park	· 	 	, , , , , , , , , , , , , , , , , , ,	0 \$ 39,159	 	1 5 39.159		0.56		ė	2011	1.00 \$	39.159		, -		-			ν	
		- 			· 	 	,	0 5 39,139	 	1 6		0.00		, ·	2011	1.00 \$	33,133	· · · ·	, - -					Y	
	PLC082	Community Facilities	Port Douglas	Community Facilities	· 	 	3		 	1 \$ 7.500		1.85		,	2011	1.00 \$	7.500	<u></u>	 -				/ 	v	
	PLC083 PLC084	District Sports Park	Cassowary Newell	District Sports Park		 		0 \$ 7,500	 	1 5 /,500		0.00		ž	2011	1.00 \$	7,500	<u></u>	·	 	<u>Y</u>			<u>Y</u>	
PI	PLC086	Community Facilities Local Government Wide Sports Park	Mossman	Community Facilities Local Government Wide Sports Park		 	<u>.</u>	0 \$ 193.687	 	1 \$ 193.687		6.74		<u> </u>	2011	1.00 \$	193.687	<u> </u>	, <u>Y</u>	T T	Y	Y	it	<u>, , , , , , , , , , , , , , , , , , , </u>	
) - (!!) PLC087	District Sports Park	Port Douglas	District Sports Park		 	3	0 \$ 228,019	 	1 5 228.019		8.75		\$ 5,247,660	2011	1.00 \$	5.475.679	·	,		<u>'</u>	- <u>'</u>	(Y	+
	PLC088		Daintree		 	 	3	0 \$ 228,019	 	1 ¢ 228,019		0.00		\$ 3,247,000 ¢	2011	1.00 \$	3,473,079	 			· ·		v v	<u>т</u>	
		Community Facilities		Community Facilities			\$) \$ -	 	1 2 -		0.00		3 -	ļ	1.00 \$				^Y			i i		
	LC089	Community Facilities	Lower Daintree	Community Facilities			Ş	υ Ş -	ļ	1 5 -				\$ -	ļ	1.00 \$					<u></u>		Y Y	Y	
	LC090	District Sports Park	Forest Creek	District Sports Park			Ş	U \$ -	ļ	1 5 -		0.82		\$ -				ļ <u>+</u> .		y	<u></u>		Y	Y	
	LC091	Community Facilities	Forest Creek	Community Facilities			Ş	0 \$ 68,704		1 \$ 68,704		0.58		Ş -	2011	1.00 \$	68,704	<u>-</u>		у	<u> </u>		YY	Y	↓
	PLC093	District Sports Park	Daintree	District Sports Park			\$	0 \$ 165,233	ļ	1 \$ 165,233		3.03		Ş -	2011	1.00 \$	165,233			у			YY	Y	
	PLC094	District Sports Park	Diwan	District Sports Park	<u> </u>		\$	0 \$ 222,002	ļ	1 \$ 222,002		9.94		\$ -	2011	1.00 \$	222,002	ļ		У	1		Y Y	Y	
	PLC095	Community Facilities	Mossman	Community Facilities	<u> </u>		\$	0 \$ -	ļ	1 \$ -		0.41		\$ -	ļ	1.00 \$		Y Y	Υ	Y Y	/ Y	Υ	Y Y		Y
PI	LC096	Community Facilities	Port Douglas	Community Facilities		<u> </u>	\$	0 \$ -		1 \$ -		0.07		\$ -	L	1.00 \$	-	Y Y	Υ	Y Y	Y Y	Υ	Y Y		Y
PI	PLC097	Community Facilities	Port Douglas	Community Facilities		L	\$	0 \$ -		1 \$ -		0.26		\$ 78,990	2011	1.00 \$	78,990	Y Y	/ Y	Y Y	Y Y	Υ	Y Y		Y
Pf	PLC098	Local Government Wide Recreation Park	Port Douglas	Local Government Wide Recreation Park		L	\$	0 \$ 80,082		1 \$ 80,082		1.78		\$ 532,710	2011	1.00 \$	612,792	Y Y	/ Y	Y	Y Y	Υ	Y Y		Y
						T	\$	0 \$ -		1 \$ -				\$ -		1.00 \$	-								
					1	T		a I 4		4.1.4	T				T	1.00 Ś		·		-T			(-	/	T

Attachment 5.1.11 206 of 406

Douglas Shire Council Future Trunk Assets Water Supply Transportation Sewerage Parks & Community Facilities

Attachment 5.1.11 207 of 406

to "Future Trunk A	Accode"				Douglas Shire Council Wastewater																						
to ruture fruik r	<u>osets</u>				Future Trunk Assets																						
	Data References		Refer Extrinsic Material		Tuture Trunk Assets																						
_	Data Referrices	: -	Refer Extrinsic Waterial																								
	Land Valuation Ty	уре	Location																								
				Basic Asset Data		Asset At	Asset Data		_	Land Attribut				Paris A	sset Valuation							Defined	Asset Value		Catchme	ent Asset Allocation	ion
		1	1	Basic Asset Data		Asset At	tributes		_	Land Attribut	25			Basic A	sset valuation	_						Kefinea	Asset value		1 _		/ E /
Asset ID	OI ID	Asset Type (*)	Asset Class	Asset Name	Description	Unit Rate Type (*)	Length/unit (*)	Diameter (*) Depth (*)	Land Location/Type	Size of land (ha) (*) Unit Cost	Land Value	Unit Rate Baseline Valuation	Valuation Year	Base Est Escalation	Site/Condition	Multiplier	Contingency Cost	Project Owners Cost	Gross Value	Year provided (*)	Escalation	% Renewal	Gross Cost (escalated)	Present Day Value	PORT DOUGLAS (S1.	COOYA BEACH (S3) NEWELL BEACH (S4) WONGA BEACH /	ROCKY POINT (SS) SHARED TREATMEN
	m ID from the		Pump Station, Gravity Main, Rising Main etc									May be ca from unit unique valu direct e	rates OR es can be									% of co- which is renewa related	Gross cost (used for	Adjusted Current Day Value	1153 1153	1.850 3	5,244 5
ACTIVE ASSET	'S																								1 10		7
	SPSF001	Active		SPSF001_Andreassen Road Pump Station	Andreassen Road Pump Station						\$ -		18,219	2006	.25		1 15.0%	20% \$	549,887	2021	1.46	0.55	% \$801,53		Υ \	Y Y Y	Υ
	SPSF002	Active	Pump Station	SPSF002_Marlin Drive Pump Station	Marlin Drive Pump Station						\$ -		36,403		.25			20% \$	606,584	2031	2.12	0.30	% \$1,288,79		Υ ١	Y Y Y	Y
		Active Active		SPSF003_Miallo Pump Station	Miallo Pump Station	······································	-				Ş -		136,403 118,219		.25		1 20.0%	20% \$ 20% \$	606,584	2031	2.12 1.46	0.30 (% \$1,288,79	7 \$ 383,359	Y	v	
	SPSF004 SPSF005	Active	Pump Station Pump Station	SPSF004_Newell Road Pump Station SPSF005_Rankin Street Pump Station	Newell Road Pump Station Rankin Street Pump Station		-						118,219	2006	25		1 15.0% 1 20.0%	20% \$	549,887 573,795	2021	2.46	0.55 100	T.	2 -\$ 362,637	 	, ,	
······································		Active	Pump Station	SPSF006_Mossman WWTP Reuse Pump Station Stage 2	Mossman WWTP Reuse Pump Station Stage 2								18,219	2006	.25		1 20.0%	20% \$	573,795	2031	2.12	0.30 300			1	Y Y	/
······································	SPSF007	Active	Pump Station	SPSF007_Mossman Golf Course Reuse Pump Station	Mossman Golf Course Reuse Pump Station	•	 				1		18,219	2006	25		1 20.0%	20% \$	573,795	2031	2.12	0.30 400				Y	/ 7
		Active		SPSF008_Existing Mossman WWTP PS Upgrade	Existing Mossman WWTP PS Upgrade								18,219	2006	.25		1 20.0%	20% \$	573,795	2031	2.12	0.30 500			Υ ١	Y Y Y	Υ
		Active	Storage Facility	SSFF001_Mossman Golf Club Reuse Storage Facility - 3 ML	Mossman Golf Club Reuse Storage Facility - 3 ML								72,759		25		1 20.0%	20% \$	491,824	2031	2.12	0.30 600			Υ ١	Y Y Y	Υ
		Active	Storage Facility	SSFF002_Mossman WWTP reuse Storage Facility - 1 ML	Mossman WWTP reuse Storage Facility - 1 ML								09,197		25		1 20.0%	20% \$	1,639,415	2031	2.12	0.30 700	7//		Y 1	Y Y Y	Y
		Active	Treatment Plant_Upgrade	STPF001_Interim Mossman WWTP Upgrade - Regulate flowsUPGRA			-						13,618	2006	25		1 7.5%	20% 5	345,061	2011	1.00	0.78 900	T-/:/:-		Y N	Y Y Y	Y
		Active Active	Treatment Plant_Upgrade		Interim Mossman WWTP Upgrade - Alternative sludge infrastructure		 		_				85,441	2006	25		1 7.5%	20% \$	1,305,324	2015	1.83	0.78 900				, , , , ,	, T
·		Active	Treatment Plant_Upgrade Treatment Plant_Upgrade	STPF004_Mossman WWTP Upgrade Stage 1 Including Endent reuse STPF004_Mossman WWTP Upgrade Stage 2UPGRADE	e F Mossman WWTP Upgrade Stage 1 including Effluent reuse PS Stage : Mossman WWTP Upgrade Stage 2		 -				 		64.235	2006	25		1 20.0%	20% \$ 20% \$	23,234,332 5.885.893	2027	2.12	0.30 1100			i i	YYY	Y
PASSIVE ASSE		ricere	Treatment Flant_opgrade	STITE OF THE STITE OF THE STATE	Moderna VVIII Opprode Stage 2							¥ 3/-	- 1,200						0,000,000				7220,000,00	31,233,511			_
	1	Passive	Effluent Rising Main	EMF001_Effluent Rising Main_100 mm dia_Trunk	EMF001_Effluent Rising Main_100 mm dia_PVC	Rising Mains	4984.59	100 1.5m-3.0n	n	\$ 2	\$ -	\$ 155 \$ 7	773,160	2011	.00		1 20.0%	20% \$	1,113,350	2031	2.12	0.30	% \$2,365,51	3	Y	Y Y Y	Υ
	RMF001	Passive		RMF001_Low Pressure Main_150 mm dia_Trunk	RMF001_Low Pressure Main_110 mm dia_PVC	Rising Mains	1121.36	150 1.5m-3.0n			\$ -		16,636	2011	00		1 20.0%	20% \$	311,955	2031	2.12	0.30	% \$662,80		1	Y	
	RMF002	Passive	Low Pressure Main	RMF002_Low Pressure Main_100 mm dia_Trunk	RMF002_Low Pressure Main_110 mm dia_PVC	Rising Mains	595.06	100 1.5m-3.0n	n	\$ 2		\$ 155 \$	92,300		.00		1 20.0%	20% \$	132,912	2031	2.12	0.30	% \$282,39	\$ \$ 84,000	\ \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Υ	
	RMF003	Passive		RMF003_Low Pressure Main_100 mm dia_Trunk	RMF003_Low Pressure Main_160 mm dia_PVC	Rising Mains	264.95	100 1.5m-3.0n		\$ 2			41,096		.00		1 20.0%	20% \$	59,179	2031	2.12	0.30	% \$125,73)	Y	
	RMF004	Passive	Rising Main	RMF004_Rising Main_100 mm dia_Trunk	RMF004_Rising Main_200 mm dia_PVC	Rising Mains	272.04	100 1.5m-3.0n		\$ 2			42,196		.00			20% \$	58,231	2017	1.25	0.70	% \$73,00)	Y	
	RMF005	Passive	Rising Main	RMF005 Rising Main 100 mm dia	RMF005 Rising Main 100 mm dia PVC	Rising Mains	282.79 4787.94	100 1.5m-3.0n		5 2			43,864 75,432		.00		1 20.0%	20% \$ 20% \$	63,164 1,980,621	2031	2.12	0.30	% \$134,20 % \$4,208,18			Y	
	RMF067	Passive	Rising Mains	RMF067_Rising Mains_250 mm dia_Wonga_Trunk	RMF067_Rising Mains_250 mm dia_Wonga_PVC_Wonga_Beach	Rising Mains	4/8/.94	250 1.5m-3.0n	"	5 2	\$ -	\$ 287 \$ 1,3	73,452	2011	.00		1 20.0%	20% \$	1,980,621	2031	2.12	0.30	% \$4,208,18	3 1,251,746			
	RMF068	Passive	Rising Mains	RMF068_Rising Mains_150 mm dia_Craiglie_Trunk	RMF068_Rising Mains_150 mm dia_PVC_Craiglie	Rising Mains	1138.79	150 1.5m-3.0n	n	\$ 2) s -	\$ 193 \$ 2	20,003	2012	.00		1 15.0%	20% \$	303,604	2021	1.46	0.55	% \$442,54	2 \$ 241,360		Y	
	RMF069	Passive		RMF069_Rising Mains_150 mm dia_Wonga_Trunk	RMF069_Rising Mains_150 mm dia_Wonga_PVC_Wonga_Beach	Rising Mains	240.98	150 1.5m-3.0n	n	\$ 2	\$ -	\$ 193 \$	46,555	2013	00		1 20.0%	20% \$	67,039	2031		0.30	% \$142,43	7 \$ 42,368	,	Y	
	RMF067	Passive	Rising Mains	RMF067_Rising Mains_250 mm dia_Wonga_Trunk	RMF067_Rising Mains_250 mm dia_Wonga_PVC_Wonga_Beach	Rising Mains	4787.94	250 1.5m-3.0n	n	\$ 2	\$ -	\$ 287 \$ 1,3	75,432	2006	25		1 15.0%	20% \$	2,376,766	2021	1.46	0.55	% \$3,464,44	\$ 1,889,487		Y Y	
	RMF068	Passive	Rising Mains	RMF068_Rising Mains_150 mm dia_Wonga_Trunk	RMF068_Rising Mains_150 mm dia_Wonga_PVC_Craiglie	Rising Mains	1138.79	150 1.5m-3.0n	n	5 2	5 -	\$ 193 \$ 2	20,003	2006	25		1 15.0%	20% \$	380,168	2021	1.46	0.55	% \$554,14	1 \$ 302,227	Υ		
	RMF069	Passive		RMF069_Rising Mains_150 mm dia_Wonga_Trunk	RMF069_Rising Mains_150 mm dia_Wonga_PVC_Wonga_Beach	Rising Mains	240.98	150 1.5m-3.0n		\$ 2	\$ -		46,555		.25		1 20.0%	20% \$	83,945	2026	1.76	0.40	% \$147,72			Y	
	1	1								¢ 2	nie .	ė .			nni		1				0.00	1.00	0/ 6	al é			

Attachment 5.1.11 208 of 406

Douglas Shire Council Parks and Land for Community Facilities Return to "Future Trunk Assets" **Future Trunk Assets** May be calculated from unit rates OR unique values can be direct entered % of cost which is renewal related PPLCOS1 Local Recreation Park PPLCOS2 Local Recreation Park PPLCOS4 Local Recreation Park PPLCOS6 Local Recreation Park PPLCOS6 Local Recreation Park PPLCOS6 District Recreation Park PPLCOS6 District Recreation Park PPLCOS6 District Recreation Park PPLCOS9 Local Government Wide Recreation Park PPLCOS9 District Recreation Park PPLCOS9 District Recreation Park PPLCOS9 District Recreation Park PPLCOS9 District Sports Park PPLCOS6 District Sports Park PPLCOS7 District Sports Park PPLCOS9 District Sports Park PPLCOS9 District Sports Park PPLCOS9 District Sports Park PPLCOS9 District Sports Park PPLCOS9 District Sports Park PPLCOS9 District Sports Park PPLCOS9 District Sports Park PPLCOS9 District Sports Park PPLCOS9 District Sports Park PPLCOS9 District Sports Park PPLCOS9 District Sports Park Bonnie Doon Lou Prince Park Mossman New Local Park Craiglie New Local Park Craiglie New Local Park Craiglie New Local Park Cooya Beach Jim Holdsworth Park Newell Newell Beach Esplanade Wonga Wonga Community Park Mossman George Davis Park Port Douglas 4 Mile Park Port Douglas New Startic Sports Park (Future) Cooya Beach New District Sports Park (Future) Mossman Cornation Park/Show Grounds - Upgrade Port Douglas Port Douglas Sports Reserve - Upgrade Wonga Beach New District Sports Park (Future) Daintree Daintree Sports Oval - Upgrade Diwan Diwan Sports Reserve - Upgrade Mossman and Environs Mossman and Environs Port Douglas and Environs Port Douglas and Environs Coastal Suburbs, Villages and Townships (Cooya Beach) Coastal Suburbs, Villages and Townships (Newell Beach) Coastal Suburbs, Villages and Townships (Wonga Beach) Mossman and Environs Port Douglas and Environs Port Douglas and Environs Coastal Suburbs, Villages and Townships (Cooya Beach) Mossman and Environs Port Douglas and Environs Coastal Suburbs, Villages and Townships (Cooya Beach) Coastal Suburbs, Villages and Townships (Wonga Beach) Coastal Suburbs, Villages and Townships (Daintree Township) Coastal Suburbs, Villages and Townships (Daintree Township) 1 15.0% 20% 5 89,558 1 15.0% 20% 5 1,114,937 1 20.0% 20% 5 1,114,937 1 20.0% 20% 5 1,163,412 1 15.0% 20% 5 817,416 1 15.0% 20% 5 490,450 1 20.0% 20% 5 852,956 1 20.0% 20% 5 852,956 1 20.0% 20% 5 852,956 1 20.0% 20% 5 852,956 1 20.0% 20% 5 8,2956 1 20.0% 20% 5 8,2956 1 20.0% 20% 5 8,2956 1 20.0% 20% 5 8,2956 1 20.0% 20% 5 2,288,399 1 20.0% 20% 5 2,288,399 1 20.0% 20% 5 2,288,399 1 20.0% 20% 5 2,288,399 1 20.0% 20% 5 2,288,399 1 20.0% 20% 5 2,288,399 1 20.0% 20% 5 2,288,399 1 20.0% 20% 5 3,295,300 1 20.0% 20% 5 3,295,300 1 20.0% 20% 5 3,295,300 1 20.0% 20% 5 3,295,300 1 20.0% 20% 5 3,295,300 1 20.0% 20% 5 3,295,300 1 20.0% 20% 5 3,295,300 1.40 0.58 1.40 0.58 2.12 0.30 1.63 0.45 1.40 0.58 1.40 0.58 1.51 0.51 1.57 0.48 1.63 0.45 1.69 0.43 1.61 0.55 1.63 0.45 1.65 0.40 1.76 0.40 1.69 0.43 0.00 1.00 112,800 200,000 600,000 300,000 645,213 645,213 139,338 473,038 283,823 473,038 473,038 473,038 922,113 1,143,654 1,269,115 521,924 395,257 360,325 1,054,461 1,040,427 379,763 Y 664,913 389,899 397,622 647,672 632,982 Y 1,373,717 Y 1,530,348 Y 1,622,064 Y 757,412 516,906 471,222 150,000 150,00

Attachment 5.1.11 209 of 406

Douglas Shire Council Transport

Future Trunk Assets

Data References
Refer Extrinsic Material

																
					Asset	Data										ment Asset Alloc
			Basic Asset Data			Asset Attributes	Land Attributes				Basic Asset Valuation				Refined Asset Value	
					-		ed)		Ę		uc	1 50	_		<u>u</u>	를 를
					<u> </u>	. g	Ę j		at 9		atic e	l Sost	2 ا		/alu	S S
			9	e -	g .	·	ion (+)		alto	Yea	tion	cy C	ded	50		a is sign
		<u>a</u> ss	<u> </u>	후	<u> </u>	→	t t	, a	e V	, uo	in the second se	o šen	alu	ig ig	wal cost	S S
= =	9	0	H Z	불		į] = 5 S	> 7	ag uil	nati) S	ting tip	Z S P	our late	ss C ala	2 Jega (2
ASS.	15	Asse	AASS.	Sec	[E	₽		i i	Sas.	⁄alı,	Site 8a	Yoj Son	Sro Sro	Esca	% Sion	9 E 9 E
									May be calculated from unit rates OR						% of cost which is	
Councils ID (from	ID from the LGIP								unique values can be						renewal Gross cost (used for	539
GIS, FAR, AMA etc.)	drawings	Arterial, Subarterial, Collector							direct entered						related CF forecasts) Adjusted Current D.	Day Value 8
INTERSECTIONS						<u>'</u>	<u> </u>					·				
	ISF001	Priority Intersection	ISF001 Priority Intersection Bonnie Doon Road - Captain	Cr Bonnie Doon Road - Captain Cook Highway (AUL + CHR)	INTERSECTION / STRUCTURES		Ś	20 S -	\$ 380,212	2017	1.00 Douglas Shire South _Upgrade (TR1_U)	1.5 20.0% 20%	\$ 821,257 202	5 1.76 0.40	0% \$1,445,271 \$ 5	582,124 Y
			ISF002_Priority Intersection Stage 1_Wharf Street - Mowb		INTERSECTION / STRUCTURES											
	ISF002	Priority Intersection Stage 1		(Re-alignment of Mowbray Street + culvert works + AUL +			Ś	20 \$ -	\$ 380,212	2017	1.00 Douglas Shire South _Upgrade (TR1_U)	1.5 20.0% 20%	\$ 821,257 203	1 2.12 0.30	0% \$1,744,908 \$ 5	519,032 Y
							\$	20 \$ -	\$ -		1.00	1		0.00 1.00	\$0 \$	
STRUCTURES		·														
	SCF011	Culvert	Culvert Crossing - Cnr Millman Drive and Downings Street	Upgrade of Existing Sub-standard Culvert Structures to mee	et flow requirements	200 Structures: Culverts (RCBC: 5x 1200*1800)	\$	20 \$ -	\$ 395,759	2015	1.00 Douglas Shire South _Upgrade (TR1_U)	1.5 20.0% 20%	\$ 854,840 203	1 2.12 0.30	85% \$272,439 \$	81,038 Y
	SCF012	Culvert	Culvert Crossing - Trunk Drainage Line (Wabul Street)			1333 Structures: Culverts (RCBC: 16x 1200*900)	Ś	20 \$ -	\$ 659,599	2015	1.00 Douglas Shire South (TR1)	1 20.0% 20%	\$ 949,822 202	2 1.51 0.51		737,965 Y
	SCF013	Trunk Drainage Line	Craiglie - Trunk Drainage Line			400 Trunk Drainage Line	\$	20 \$ -	\$ 450,000	2015	1.00 Douglas Shire South (TR1)	1 7.5% 20%	\$ 580,500 201	1 1.00 1.00	0% \$580,500 \$ 5	580,500 Y
	FPBF001	PEDESTRIAN BRIDGE	JUNCTION CREEK PEDESTRIAN BRIDGE	JUNCTION CREEK	INTERSECTION / STRUCTURES	34.9	\$	20 \$ -	\$ 510,000	2017	1.00 Douglas Shire South (TR1)	1 15.0% 20%	\$ 703,800 202	1.40 0.58	0% \$987,942 \$ 5	572,494
ROADS																
	TRF006	Urban Minor Collector	Andreassen Road	Future	ROAD / PATH 36	1.22 Urban Major Collector	\$	20 \$ -	\$ 3,054 \$ 1,103,162	2009	1.05 Douglas Shire South (TR1)	1 20.0% 20%	\$ 1,673,655 202	5 1.76 0.40	0% \$2,945,344 \$ 1,1	,186,320 Y
	TRF007	Urban Minor Collector	Wabul Street	Future	ROAD / PATH 33	1.94 Urban Major Collector	\$	20 \$ -	\$ 3,054 \$ 1,013,741	2009	1.05 Douglas Shire South (TR1)	1 20.0% 20%	\$ 1,537,991 202	1.90 0.36	0% \$2,918,457 \$ 1,0	,041,265 Y
	TRF008	Urban Minor Collector	Wabul Street	Future		2.36 Urban Major Collector	\$	20 \$ -	\$ 3,054 \$ 1,045,564	2009	1.05 Douglas Shire South (TR1)	1 20.0% 20%		2.05 0.32		,025,785 Y
	TRF009	Urban Minor Collector	Wabul Street	Upgrade	ROAD / PATH 17	0.88 Urban Major Collector	\$	20 \$ -	\$ 3,054 \$ 521,866	2009		1.5 20.0% 20%		1 2.12 0.30		750,570 Y
	TRF010	Urban Minor Collector	Milman Drive	Upgrade		2.89 Urban Major Collector		20 \$ 197,700	\$ 3,054 \$ 619,624	2009		1.5 20.0% 20%		5 1.76 0.40		,118,563 Y
	TRF011	Urban Minor Collector	Downing Street	Upgrade		3.45 Urban Major Collector	0.4028 \$		\$ 3,054 \$ 712,954	2009		1.5 20.0% 20%				,198,563 Y
	TRF012	Urban Major Collector	Wharf Street	Upgrade		8.81 Urban Major Collector		20 \$ -	\$ 3,054 \$ 1,798,220	2009		1.5 20.0% 20%		2 1.51 0.51		,179,462 Y
	TRF013	Urban Major Collector	Wharf Street	Upgrade		3.63 Urban Major Collector		20 \$ -	\$ 3,054 \$ 1,599,161	2009		1.5 20.0% 20%		2 1.51 0.51		,827,503 Y
	TRF032	Rural Major Collector	Melaleuca Dr & Bougainvillea Street	Upgrade		1111 Rural Major Collector		20 \$ -	\$ 1,006 \$ 1,117,777	2009		1.5 20.0% 20%		1 2.12 0.30		,607,636 Y
	TRF033	Urban Minor Collector	Bougainvillea Street	Upgrade		3.05 Urban Major Collector	5	20 \$ -	\$ 3,054 \$ 314,714	2009		1.5 15.0% 20%		1 1.46 0.55		545,641 Y
	TRF034	Urban Major Collector	Bougainvillea Street	Upgrade		5.72 Urban Major Collector	5	20 \$ -	\$ 3,054 \$ 1,147,445	2009		1.5 15.0% 20%		1 1.46 0.55		,989,407 Y
	TRF036 TRF037	Urban Major Collector	Palm Street	Upgrade		116 Urban Major Collector		20 \$ -	\$ 3,054 \$ 229,404 \$ 3,054 \$ 168,455	2009 2009		1.5 15.0% 20%		1 1.46 0.55		397,733 Y
	TRF037	Urban Major Collector Urban Major Collector	Palm Street Palm Street	Upgrade		.159 Urban Major Collector .733 Urban Major Collector		20 \$ -	\$ 3,054 \$ 168,455 \$ 3,054 \$ 148,830	2009		1.5 15.0% 20% 1.5 15.0% 20%		1 1.46 0.55 1 1.46 0.55		292,062 Y 258,037 Y
	TRF039	Urban Major Collector	Cooya Beach Road	Upgrade Upgrade		0.73 Urban Major Collector Urban Major Collector		20 \$ -	\$ 3,054 \$ 148,830	2009		1.5 15.0% 20%				904,002 Y
	TRF043	Urban Major Collector	Forest Glen Drive	Future		8.27 Urban Major Collector	Mossman and Environs 1.7892 \$		\$ 3,054 \$ 1,277,392	2009		1.3 13.0% 20%				,586,457 Y
	TRF044	Urban Major Collector	Daintree Horizon Drive	Future		2.95 Urban Major Collector		20 \$ -	\$ 3,054 \$ 1,871,943	2009		1 20.0% 20%				,794,874 Y
	TRF075	Urban Minor Collector	Snapper Island Drive	Upgrade		4.02 Rural Minor Collector		20 \$ -	\$ 724 \$ 400,944	2009		1.5 20.0% 20%		1 2.12 0.30		576,656 Y
	TRF076	Urban Minor Collector	Snapper Island Drive	Future		5.45 Urban Minor Collector	\$	20 \$ -	\$ 2,751 \$ 1,913,099	2009	1.05 Douglas Shire South (TR1)	1 20.0% 20%		1 2.12 0.30	0% \$6,166,768 \$ 1,8	,834,336 Y
	TRF077	Urban Minor Collector	Vixies Road	Upgrade		6.38 Urban Minor Collector	\$	20 \$ -	\$ 2,751 \$ 2,355,799	2009	1.05 Douglas Shire South _Upgrade (TR1_U)	1.5 20.0% 20%	\$ 5,361,125 203	1 2.12 0.30		,388,213 Y
PATHS					· · · · · · · · · · · · · · · · · · ·								•		·	
	FPF001	TRUNK_PATH	Port Douglas Road	TRUNK_PATH_Port Douglas Road	ROAD / PATH 14	0.18 Concrete_Path	\$	20 \$ -	\$ 167 \$ 23,340	2009	1.05 Douglas Shire South (TR1)	1 7.5% 20%	\$ 31,722 201	5 1.21 0.74	0% \$38,298 \$	28,283 Y
	FPF002	TRUNK_PATH	CAPT COOK HIGHWAY	TRUNK_PATH_CAPT COOK HIGHWAY		3.52 Concrete_Path	\$	20 \$ -	\$ 167 \$ 28,891	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 42,006 201	7 1.25 0.70		36,603 Y
	FPF003	TRUNK_PATH	OFF OLD PORT ROAD	TRUNK_PATH_OFF OLD PORT ROAD	ROAD / PATH 75	7.55 Concrete_Path	\$	20 \$ -	\$ 167 \$ 126,132	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 183,387 201	7 1.25 0.70	0% \$229,909 \$ 1	159,802 Y
	FPF004	TRUNK_PATH	OFF ULYSSES AVENUE	TRUNK_PATH_OFF ULYSSES AVENUE	ROAD / PATH 38	.768 Concrete_Path		20 \$ -	\$ 167 \$ 6,455	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 9,385 201	7 1.25 0.70	0% \$11,766 \$	8,178 Y
	FPF005	TRUNK_PATH	OFF ULYSSES AVENUE	TRUNK_PATH_OFF ULYSSES AVENUE		144 Concrete_Path	\$	20 \$ -	\$ 167 \$ 9,181	2009		1 15.0% 20%	\$ 13,349 201	7 1.25 0.70		11,632 Y
	FPF006	TRUNK_PATH	OFF ULYSSES AVENUE	TRUNK_PATH_OFF ULYSSES AVENUE		.062 Concrete_Path		20 \$ -	\$ 167 \$ 7,336	2009		1 15.0% 20%		7 1.25 0.70		9,295 Y
	FPF007	TRUNK_PATH	Oriole Street	TRUNK_PATH_Oriole Street		5.28 Concrete_Path		20 \$ -	\$ 167 \$ 34,179	2009		1 15.0% 20%		7 1.25 0.70		43,303 Y
	FPF008	TRUNK_PATH	Brolga Street	TRUNK_PATH_Brolga Street		6.74 Concrete_Path		20 \$ -	\$ 167 \$ 34,422	2009		1 15.0% 20%		7 1.25 0.70		43,611 Y
23039#3	FPF009 FPF010	TRUNK_PATH TRUNK_PATH	NAUTILUS STREET NAUTILUS STREET	TRUNK_PATH_NAUTILUS STREET TRUNK_PATH_NAUTILUS STREET		.883 Concrete_Path		20 \$ -	\$ 167 \$ 16,464 \$ 167 \$ 9,219	2009	1.05 Douglas Shire South (TR1)	1 7.5% 20%	\$ 22,376 201 \$ 12,529 201	5 1.21 0.74		19,951 Y
23039#2	FPF011	TRUNK PATH	NAUTILUS STREET	TRUNK PATH NAUTILUS STREET		367 Concrete_Path 4.95 Concrete_Path		20 \$ -	\$ 167 \$ 30,794	2009		1 7.5% 20% 1 7.5% 20%	\$ 41,853 201	5 1.21 0.74 6 1.21 0.74		11,171 Y 37,317 Y
23045#9	FPF015	TRUNK PATH	REEF STREET	TRUNK PATH REEF STREET		699 Concrete_Path		20 \$ -	\$ 167 \$ 7.109	2009		1 7.5% 20%		5 1.21 0.74		8.615 Y
23045#8	FPF016	TRUNK_PATH	REEF STREET	TRUNK_PATH_REEF STREET		2.03 Concrete_Path		20 \$ -	\$ 167 \$ 16,988	2009		1 7.5% 20%				20,586 Y
23045#7	FPF017	TRUNK_PATH	REEF STREET	TRUNK_PATH_REEF STREET		.802 Concrete_Path		20 \$ -	\$ 167 \$ 15,785	2009		1 7.5% 20%				19,128 Y
23045#6	FPF018	TRUNK_PATH	REEF STREET	TRUNK_PATH_REEF STREET		402 Concrete_Path		20 \$ -	\$ 167 \$ 9,724	2009		1 7.5% 20%	\$ 13,216 201			11,784 Y
23045#5	FPF019	TRUNK_PATH	REEF STREET	TRUNK_PATH_REEF STREET	ROAD / PATH 49	.691 Concrete_Path		20 \$ -	\$ 167 \$ 8,274	2009	1.05 Douglas Shire South (TR1)	1 7.5% 20%	\$ 11,245 201	5 1.21 0.74	0% \$13,576 \$	10,026 Y
23045#4	FPF020	TRUNK_PATH	REEF STREET	TRUNK_PATH_REEF STREET	ROAD / PATH 27	916 Concrete_Path	\$	20 \$ -	\$ 167 \$ 4,648	2009	1.05 Douglas Shire South (TR1)	1 7.5% 20%	\$ 6,317 201	5 1.21 0.74	0% \$7,627 \$	5,632 Y
23038#5	FPF021	TRUNK_PATH	OFF MURPHY STREET	TRUNK_PATH_OFF MURPHY STREET		141 Concrete_Path	\$	20 \$ -	\$ 167 \$ 16,007	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 23,274 201	1.30 0.65		19,821 Y
23038#4	FPF022	TRUNK_PATH	OFF MURPHY STREET	TRUNK_PATH_OFF MURPHY STREET		5.11 Concrete_Path		20 \$ -	\$ 167 \$ 27,491	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 39,970 201	1.30 0.65		34,039 Y
23042#3	FPF023	TRUNK_PATH	OFF OWEN STREET	TRUNK_PATH_OFF OWEN STREET		191 Concrete_Path		20 \$ -	\$ 167 \$ 10,022	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 14,571 201	1.30 0.65		12,409 Y
23042#3	FPF024	TRUNK_PATH	OFF OWEN STREET	TRUNK_PATH_OFF OWEN STREET		443 Concrete_Path		20 \$ -	\$ 167 \$ 4,736	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 6,885 201	1.30 0.65		5,864 Y
	FPF025	TRUNK_PATH TRUNK_PATH	OFF WARNER STREET OFF MURPHY STREET	TRUNK_PATH_OFF WARNER STREET TRUNK_PATH_OFF MURPHY STREET		4.85 Concrete_Path		20 \$ -	\$ 167 \$ 32,443	2009		1 15.0% 20%				39,259 Y
23038#3	FPF026					3.75 Concrete_Path		20 \$ -	\$ 167 \$ 25,599	2009		1 15.0% 20%				31,697 Y
23038#2 23038#1	FPF027 FPF028	TRUNK_PATH TRUNK_PATH	OFF MURPHY STREET OFF MURPHY STREET	TRUNK_PATH_OFF MURPHY STREET TRUNK_PATH_OFF MURPHY STREET		0.11 Concrete_Path 534 Concrete_Path		20 \$ -	\$ 167 \$ 44,973 \$ 167 \$ 10,578	2009		1 15.0% 20% 1 15.0% 20%		3 1.30 0.65 8 1.30 0.65		55,686 Y 13,098 Y
23030#1	FPF028 FPF029	TRUNK_PATH	OFF WARNER STREET	TRUNK_PATH_OFF WARNER STREET		.275 Concrete_Path		20 \$ -	\$ 167 \$ 10,578 \$ 167 \$ 8,537	2009	1.05 Douglas Shire South (TR1) 1.05 Douglas Shire South (TR1)	1 15.0% 20% 1 15.0% 20%	\$ 15,380 201 \$ 12,413 201	1.30 0.65		13,098 Y 10,331 Y
	FPF029	TRUNK_PATH	Port Douglas Sports Reserve	TRUNK_PATH_OFF WARNER STREET TRUNK_PATH_Port Douglas Sports Reserve		1.19 Concrete Path		20 \$ -	\$ 167 \$ 8,537 \$ 167 \$ 83,448	2009		1 20.0% 20%	\$ 12,413 201 \$ 126.603 202	2 1.51 0.52		98,364 Y
0	FPF031	TRUNK PATH	OFF WHARF STREET	TRUNK PATH_POIL DOUGHS SPOTES RESERVE		8.15 Concrete Path		20 \$ -	\$ 167 \$ 19.672	2009		1 20.0% 20%		2 1.51 0.51		23,188 Y
11001#1	FPF032	TRUNK PATH	BONNIE DOON ROAD	TRUNK PATH BONNIE DOON ROAD		424 Concrete_Path		20 \$ -	\$ 167 \$ 237,096	2009		1 15.0% 20%				274,047 Y
11001#2	FPF033	TRUNK PATH	BONNIE DOON ROAD	TRUNK PATH BONNIE DOON ROAD		1568 Concrete_Path		20 \$ -	\$ 167 \$ 261,072	2009	¥ 1	1 15.0% 20%				301,759 Y
13040#1	FPF034	TRUNK_PATH	MELALEUCA DRIVE	TRUNK_PATH_MELALEUCA DRIVE		9.15 Concrete_Path		20 \$ -	\$ 167 \$ 166,358	2009		1 15.0% 20%				192,285 Y
	FPF035	TRUNK_PATH	OFF COOYA BEACH RD	TRUNK_PATH_OFF COOYA BEACH RD		2545 Concrete_Path		20 \$ -	\$ 167 \$ 423,743	2009		1 15.0% 20%				489,782 Y
13037#5	FPF036	TRUNK_PATH	BOUGAINVILLEA STREET	TRUNK_PATH_BOUGAINVILLEA STREET		9.01 Concrete_Path		20 \$ -	\$ 167 \$ 19,815	2009		1 15.0% 20%				22,903 Y
13037#4	FPF037	TRUNK_PATH	BOUGAINVILLEA STREET	TRUNK_PATH_BOUGAINVILLEA STREET		414 Concrete_Path		20 \$ -	\$ 167 \$ 16,552	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%		1 1.46 0.55	0% \$35,079 \$	19,132 Y
13037#3	FPF038	TRUNK_PATH	BOUGAINAVILLEA STEET	TRUNK_PATH_BOUGAINAVILLEA STEET	ROAD / PATH 10	9.97 Concrete_Path	\$	20 \$ -	\$ 167 \$ 18,310	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 26,621 202		0% \$38,804 \$	21,164 Y
	FPF039	TRUNK_PATH	BOUGAINVILLEA STREET	TRUNK_PATH_BOUGAINVILLEA STREET	ROAD / PATH 28	0.63 Concrete_Path	\$	20 \$ -	\$ 167 \$ 46,725	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 67,935 202	1 1.46 0.55	0% \$99,023 \$	54,007 Y
	FPF040	TRUNK_PATH	BOUGAINVILLEA STREET	TRUNK_PATH_BOUGAINVILLEA STREET	ROAD / PATH 76	5.54 Concrete_Path	\$	20 \$ -	\$ 167 \$ 127,462	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 185,321 202	1 1.46 0.55	0% \$270,129 \$ 1	147,327 Y
	FPF041	TRUNK_PATH	Res_pathway	TRUNK_PATH_Res_pathway		.628 Concrete_Path	\$	20 \$ -	\$ 167 \$ 6,598	2009	1.05 Douglas Shire South (TR1)	1 20.0% 20%	\$ 10,010 202			7,777 Y
	FPF042	TRUNK_PATH	DAINTREE HORIZON DRIVE	TRUNK_PATH_DAINTREE HORIZON DRIVE		020 Concrete_Path	\$	20 \$ -	\$ 167 \$ 169,830	2009		1 20.0% 20%				182,632 Y
13052#2	FPF044	TRUNK_PATH	FOREST GLEN ROAD	TRUNK_PATH_FOREST GLEN ROAD		2.23 Concrete_Path	\$	20 \$ -	\$ 167 \$ 43,661	2009		1 20.0% 20%				46,953 Y
42046::2	FPF045	TRUNK_PATH	OFF CORAL SEA DRIVE	TRUNK_PATH_OFF CORAL SEA DRIVE		6.53 Concrete_Path	\$	20 \$ -	\$ 167 \$ 87,667	2009		1 20.0% 20%		1.76 0.40		94,276 Y
13016#2	FPF046	TRUNK_PATH	OWEN STREET	TRUNK_PATH_OWEN STREET TRUNK_PATH_OWEN STREET		76.6 Concrete_Path		20 \$ -	\$ 167 \$ 29,404	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%		1 1.46 0.55		33,986 Y
13016#1	FPF047 FPF048	TRUNK_PATH TRUNK_PATH	OWEN STREET BOW STREET	TRUNK_PATH_OWEN STREET TRUNK_PATH_ROW STREET	ROAD / PATH 11 ROAD / PATH 84	7.81 Concrete_Path		20 \$ -	\$ 167 \$ 19,615	2009		1 15.0% 20%		1 1.46 0.55		22,672 Y
	FPF048 FPF049	TRUNK_PATH TRUNK PATH	BOW STREET ENID MAY LANE	TRUNK_PATH_BOW STREET TRUNK_PATH_ENID MAY LANE		584 Concrete_Path 5.72 Concrete Path		20 \$ -	\$ 167 \$ 14,083 \$ 167 \$ 22,597	2009		1 15.0% 20% 1 15.0% 20%		1 1.46 0.55 1 1.46 0.55		16,278 Y 26,119 Y
15011#1	FPF049 FPF050	TRUNK_PATH TRUNK_PATH	Manjal Dimbi (Middlemiss Park)	TRUNK_PATH_ENID MAY LANE TRUNK_PATH_Manjal Dimbi (Middlemiss Park)		149 Concrete_Path		20 \$ -	\$ 167 \$ 22,597 \$ 167 \$ 6,352	2009		1 15.0% 20% 1 15.0% 20%				7,342 Y
13052#1	FPF055	TRUNK_PATH TRUNK_PATH	FOREST GLEN ROAD	TRUNK_PATH_Manjai Dimbi (Middlemiss Park) TRUNK_PATH_FOREST GLEN ROAD		964 Concrete_Path			\$ 167 \$ 6,352	2009		1 20.0% 20%				7,342 Y 8,588 Y
13032#1	FPF055	TRUNK_PATH	GIBLIN STREET	TRUNK_PATH_FOREST GLEN KOAD TRUNK_PATH_GIBLIN STREET		.996 Concrete_Path	5 e	20 \$ -	\$ 167 \$ 7,986	2009		1 20.0% 20%		1 2.12 0.30		11,494 Y
	FPF057	TRUNK PATH	SNAPPER ISLAND DRIVE	TRUNK PATH_GIBEIN STREET TRUNK PATH_SNAPPER ISLAND DRIVE	ROAD / PATH 33	6.32 Concrete_Path	3 e	20 \$ -	\$ 167 \$ 55,997	2009		1 20.0% 20%		1 2.12 0.30		53,692 Y
	FPF058	TRUNK PATH	SNAPPER ISLAND DRIVE	TRUNK_PATH_SNAPPER ISLAND DRIVE		7.78 Concrete_Path		20 \$ -	\$ 167 \$ 114,515	2009		1 20.0% 20%		1 2.12 0.30		109,801 Y
	FPF060	TRUNK_PATH	Birdwing Street	TRUNK PATH SINAPPER ISLAND DRIVE TRUNK PATH Birdwing Street	ROAD / PATH 72	.272 Concrete_Path		20 \$ -	\$ 167 \$ 12,033	2009		1 15.0% 20%				15,246 Y
	FPF061	TRUNK_PATH	Birdwing Street	TRUNK_PATH_Birdwing Street		134 Concrete_Path	9	20 \$ -	\$ 167 \$ 11,677	2009		1 15.0% 20%		7 1.25 0.70		14,795 Y
	FPF062	TRUNK PATH	COOYA BEACH ROAD	TRUNK_PATH_COOYA BEACH ROAD		7.39 Concrete_Path		20 \$ -	\$ 167 \$ 19,545	2009		1 15.0% 20%		1 1.46 0.55		22,592 Y
	FPF063	TRUNK_PATH	COOYA BEACH ROAD	TRUNK_PATH_COOYA BEACH ROAD		9.55 Concrete_Path		20 \$ -	\$ 167 \$ 21,570	2009		1 15.0% 20%				24,932 Y
	FPF065	TRUNK_PATH	Birdwing Street	TRUNK_PATH_Birdwing Street		9.54 Concrete_Path	\$	20 \$ -	\$ 167 \$ 13,243	2009		1 15.0% 20%		7 1.25 0.70		16,779 Y
	FPF066	TRUNK_PATH	Birdwing Street	TRUNK_PATH_Birdwing Street		3.94 Concrete_Path	\$	20 \$ -	\$ 167 \$ 38,951	2009		1 15.0% 20%		7 1.25 0.70		49,349 Y
	FPF067	TRUNK_PATH	WHARF STREET	TRUNK_PATH_WHARF STREET	ROAD / PATH 98	247 Concrete_Path		20 \$ -	\$ 167 \$ 16,358	2009	1.05 Douglas Shire South (TR1)	1 20.0% 20%	\$ 24,818 202	2 1.51 0.51	0% \$37,564 \$	19,282 Y
	FPF068	TRUNK_PATH	OFF PATHWAY	TRUNK_PATH_OFF PATHWAY	ROAD / PATH	7.95 Concrete_Path	\$	20 \$ -	\$ 167 \$ 6,319	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 9,187 201	7 1.25 0.70	0% \$11,517 \$	8,005 Y
	FPF069	TRUNK_PATH	GEORGE DAVIS PARK	TRUNK_PATH_GEORGE DAVIS PARK	ROAD / PATH 96	.744 Concrete_Path	\$	20 \$ -	\$ 167 \$ 16,108	2009	1.05 Douglas Shire South (TR1)	1 15.0% 20%	\$ 23,420 202	1 1.46 0.55	0% \$34,137 \$	18,618 Y
	FPF070	TRUNK_PATH	COARL SEA DRIVE	TRUNK_PATH_COARL SEA DRIVE	ROAD / PATH 10	2.13 Concrete_Path	\$	20 \$ -	\$ 167 \$ 17,005	2009	1.05 Douglas Shire South (TR1)	1 20.0% 20%	\$ 25,798 202	5 1.76 0.40	0% \$45,401 \$	18,286 Y
							\$	20 \$ -	\$ - \$ -		1.00	1		0.00 1.00	\$0 \$	

Attachment 5.1.11 210 of 406

Return to "Future Trunk Assets"				Douglas Shire Council Water Supply																							
eturn to Future Trunk Assets				Future Trunk Assets																							
Data Refernce	ICPS	Refer Extrinsic Mate	erial	Tuture Trunk Assets					\neg																		
			7																								
Land Valuation 1	n Type	Location	_																								
						Asset Data																				Catchment Ar	sset Allocation
			Basic Asset Data			sset Attributes		Land Attributes					Basic Asse	t Valuation							Refine	ed Asset Val	lue			2	
					2		96	£			<u> </u>		Ę.				Soci							9	, M	ا ـ ا ـ	JEN 3
sset ID	sset Type (*)	sset Class	sset Name	escription	nit Rate Type ('	ength/unit (*) iameter (*)	and Location/Ty	ize of land (ha)	and Value	nit Rate	aseline Valuatk	aluation Year	ase Est Escalati	ite/Condition	lultiplier	ontingency Cos	roject Owners (ross Value	ear provided (*)	scalation	scounting	, Kenewal	ross Cost escalated)	resent Day Valu	SORT DOLIGIAS	MOSSMAN (WZ	MHYANBEEL (W MHYAN
4 5	<		<	0		ه ا د	1 3	<u> </u>			<u> </u>	>			2	0	<u>~</u>	<u> </u>	<u> </u>	Ü	<u> </u>	<u>K</u>	<u>ن ت</u>				m # 10
Councils ID (from GIS, FAR, AMA etc.) ID from the LGI		Reservoir, Trunk Main, etc.									May be calculated from unit rates OR unique values can be direct entered										% of whice rene	ich is ewal Gross	cost (used for	Adjusted Current		5,969	34 88
ACTIVE ASSETS																										N N	N M M
WIF001	Active	Raw Water Intake	Existing Mossman Intake 2-Stage 1 (Upgrade)	WIF001_Raw Water Intake_Existing Mossman Intake 2-Stage 1 (Upgrade)				\$	20 \$ -	\$ -	\$ 150,000	2006	1.25		1	7.5%	20% \$	242,298	2016	1.21	0.74	0%	\$292,532	\$	216,037 Y	Y	Y
WIF001	Active	Raw Water Intake	Existing Mossman Intake 2-Stage2 (Upgrade)	WIF001_Raw Water Intake_Existing Mossman Intake 2-Stage2 (Upgrade)				\$	20 \$ -	\$ -	\$ 750,000	2006	1.25		1	15.0%	20% \$	1,296,011	2018	1.30	0.65	0%	\$1,687,180		L,103,720 Y	Y	Y
WRF001	Active	Reservoir	Cooya Reservoir 2 (1.8 ML)	WRF001_Reservoir_Cooya Reservoir 2 (1.8 ML)					20 \$ -	\$ -	\$ 2,100,000	2009	1.05		1	7.5%	20% \$	2,854,125	3	0.00	1.00	0%	\$0	\$	0		
WRF003	Active	Reservoir	Wonga Beach (1.3 ML)	WRF003_Reservoir_Wonga Beach (1.3 ML)					20 \$ -	S -	\$ 346,917	2006	1.25		- 1		20% \$	625,542	2025	1.69	0.43	0%	\$1,060,137		453,688 Y		
WRF004	Active	Reservoir	Mossman Reservoir (3.3 ML)	WRF004 Reservoir Mossman Reservoir (3.3 ML)														1.793.218	2011				\$1,793,218	\$ 1,	1.793.218	Y	
PASSIVE ASSETS								\$	20 \$ -	\$ -	\$ 1,110,133	2006	1.25		1		20% \$	1,/93,210	2011	1.00	1.00	0%	\$1,795,210				/
										\$ -	, , , ,	2006	1.25		1	7.5%	20% \$	1,/93,216	2011	1.00	1.00	0%	. , ,		, ,		
WMF001	Passive	Water Main	WMF001_Water Main_225 mm dia	WMF001_Water Main_225 mm dia_UPVC	Passive	1904	225	\$	20 \$ -	\$ -	\$ 489,766	2011	1.25		1	7.5% 7.5%	20% \$	631,798	2011	1.00	1.00	0%	\$631,798		631,798 Y		
WMF002	Passive	Water Main	WMF002_Water Main_225 mm dia	WMF002_Water Main_225 mm dia_DICL	Passive	469.83	225 225	S S	20 \$ - 20 \$ -	\$ 257	\$ 489,766 \$ 120,854	2011 2011	1.00 1.00		1 1	7.5% 7.5% 7.5%	20% \$	631,798 155,902	2011	1.00	1.00	0% 0% 0%	\$631,798	\$	155,902 Y		
WMF002 WMF003(i)	Passive Passive	Water Main Water Main	WMF002_Water Main_225 mm dia Installing 150mm - Interim (to replace 80mm)	WMF002_Water Main_225 mm dia_DICL WMF003(i)_Water_Main_Interim_150 mm dia_UPVC_Teamster Park to Caravan Park	Passive Passive	469.83 110.43	225 225 150	\$ \$ \$ \$	20 \$ - 20 \$ - 20 \$ -	\$ 257 \$ 193	\$ 489,766 \$ 120,854 \$ 21,304	2011 2011 2011	1.00 1.00 1.00		1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5%	20% \$ 20% \$ 20% \$	631,798 155,902 27,482	2011 2011 2014	1.00 1.00 1.12	1.00 1.00 0.83	0% 0% 0% 0%	\$631,798 \$155,902 \$30,771	\$ \$	155,902 Y 25,654 Y		
WMF002 WMF003(i) WMF003(ii)	Passive Passive Passive	Water Main Water Main Water Main	WMF002 Water Main_225 mm dia Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm)	WMF002_Water Main_225 mm dia_DICL WMF003(i)_Water_Main_Interim_150 mm dia_UPVC_Teamster Park to Caravan Park WMF003(ii)_Water_Main_Interim_150 mm dia_UPVC_Caravan Park to Creek	Passive Passive Passive	469.83 110.43 736.24	225 225 150 150	\$ \$ \$ \$	20 \$ - 20 \$ - 20 \$ - 20 \$ -	\$ 257 \$ 193 \$ 193	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035	2011 2011 2011 2014	1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 15.0%	20% \$ 20% \$ 20% \$ 20% \$	631,798 155,902 27,482 196,009	2011 2011 2014 2017	1.00 1.00 1.12 1.25	1.00 1.00 0.83 0.70	0% 0% 0% 0% 0% 0% 0% 0%	\$631,798 \$155,902 \$30,771 \$245,733	\$ \$ \$	155,902 Y 25,654 Y 170,801 Y		
WMF002 WMF003(i) WMF003(ii) WMF003(iii)	Passive Passive Passive Passive) Passive	Water Main Water Main Water Main Water Main	WMF002_Water Main_225 mm dia Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm)	WMF002_Water Main_225 mm dia_DICL WMF003(i)_Water_Main_Interim_150 mm dia_UPVC_Teamster Park to Caravan Park WMF003(ii)_Water_Main_Interim_150 mm dia_UPVC_Caravan Park to Creek WMF003(iii)_Water_Main_Interim_150 mm dia_UPVC_Creek to Resevoir	Passive Passive Passive Passive	469.83 110.43 736.24 1016	225 225 150 150 150	\$ \$ \$ \$ \$	20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ -	\$ 257 \$ 193 \$ 193 \$ 193	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007	2011 2011 2011 2014 2015	1.00 1.00 1.00 1.00 1.00		1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 15.0%	20% \$ 20% \$ 20% \$ 20% \$ 20% \$	631,798 155,902 27,482 196,009 270,489	2011 2011 2014 2017 2019	1.00 1.00 1.12 1.25 1.35	1.00 1.00 0.83 0.70 0.62	0% 0% 0% 0% 0% 0% 0% 0%	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652	\$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y		
WMF002 WMF003(i) WMF003(ii) WMF003(iii) WMF003	Passive Passive Passive) Passive Passive	Water Main Water Main Water Main Water Main Water Main	WMF002 Water Main 225 mm dia Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) WMF003 Water Main 225 mm dia	WMF002. Water Main, 225 mm dia, DICL WMF003(i), Water Main, Interim, 150 mm dia, UPVC, Teamster Park to Caravan Park WMF003(ii), Water Main, Interim, 150 mm dia, UPVC, Caravan Park to Creek WMF003(iii), Water Main, Interim, 150 mm dia, UPVC Cireek to Reservir WMF003 Water Main, 225 mm dia, UPVC (Uritate Upgrade)	Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863	225 225 150 150 150 225	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ -	\$ 257 \$ 193 \$ 193 \$ 193 \$ 257	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007 \$ 479,219	2011 2011 2011 2014 2015 2016	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 7.5%	20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$	631,798 155,902 27,482 196,009 270,489 618,193	2011 2011 2014 2017 2019 2012	1.00 1.00 1.12 1.25 1.35 1.04	1.00 1.00 0.83 0.70 0.62 0.94	0% 0% 0% 0% 0% 0% 0%	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932	\$ \$ \$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y		
WMF002 WMF003(i) WMF003(ii) WMF003(iii) WMF003 WMF004	Passive Passive Passive Passive Passive Passive Passive	Water Main Water Main Water Main Water Main Water Main Water Main	WMF002_Water Main_225 mm dia installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) WMF003_Water Main_225 mm dia WMF004_Water Main_450 mm dia	WMF002, Water Main, 225 mm dia, DICL WMF003(ii), Water Main, Interim, I50 mm dia, UPVC, Teamster Park to Caravan Park WMF003(iii), Water, Main, Interim, I50 mm dia, UPVC, Caravan Park to, Creek WMF003(iiii), Water, Main, Interim, I50 mm dia, UPVC, Creek to Resevoir WMF003, Water Main, 225 mm dia, UPVC, Ultimate Upgrade) WMF004, Water Main, 450 mm dia, DICL	Passive Passive Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863 970	225 225 150 150 225 450 225	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ -	\$ 257 \$ 193 \$ 193 \$ 193 \$ 257 \$ 675	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007 \$ 479,219 \$ 654,963	2011 2011 2011 2014 2015 2016 2011	1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 15.0% 20.0%	20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$	631,798 155,902 27,482 196,009 270,489 618,193 943,147	2011 2011 2014 2017 2019	1.00 1.00 1.12 1.25 1.35 1.04	1.00 1.00 0.83 0.70 0.62 0.94	0% 0% 0% 0% 0% 0% 0%	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777	\$ \$ \$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y 668,522 Y		
WMF002 WMF003(i) WMF003(ii) WMF003 WMF003 WMF004 WMF005	Passive Passive Passive Passive Passive Passive Passive Passive Passive	Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main	WMF002_Water Main_225 mm dia Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) WMF003_Water Main_225 mm dia WMF004_Water Main_4250 mm dia WMF005_Water Main_225 mm dia	WMF002, Water Main, 225 mm dia, DICL WMF003(i), Water Main, Interfim, 150 mm dia, UPVC, Teamster Park to Caravan Park WMF003(ii), Water, Main, Interfim, 150 mm dia, UPVC, Creek to Resevoir WMF003(iii), Water, Main, Interfim, 150 mm dia, UPVC Creek to Resevoir WMF003, Water Main, 225 mm dia, UPVC (Ultimate Upgrade) WMF004, Water Main, 250 mm dia, DICL WMF005, Water Main, 250 mm dia, DICL WMF005, Water Main, 250 mm dia, DICL	Passive Passive Passive Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863 970 955.38	225 225 225 150 150 150 225 450 225	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ -	\$ 257 \$ 193 \$ 193 \$ 193 \$ 257 \$ 675 \$ 257	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007 \$ 479,219 \$ 654,963 \$ 245,752	2011 2011 2011 2014 2014 2015 2016 2011	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 7.5% 20.0% 7.5%	20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$	631,798 155,902 27,482 196,009 270,489 618,193 943,147 317,021	2011 2011 2014 2017 2019 2012 2026 2011	1.00 1.00 1.12 1.25 1.35 1.04 1.76	1.00 1.00 0.83 0.70 0.62 0.94 0.40 1.00	0% 0% 0% 0% 0% 0% 0%	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777 \$317,021	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y 668,522 Y 317,021 Y	Y	
WMF002 WMF003(i) WMF003(ii) WMF003 WMF003 WMF004 WMF005 WMF006	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main	WMF002_Water Main 225 mm dia Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) WMF003_Water Main 225 mm dia WMF004_Water Main 250 mm dia WMF005_Water Main 225 mm dia	WMF002, Water Main, 225 mm dia, DICL WMF003(i), Water Main, Interim, 150 mm dia, UPVC, Teamster Park to Caravan Park WMF003(iii), Water, Main, Interim, 150 mm dia, UPVC, Caravan Park to Creek WMF003(iii), Water, Main, Interim, 150 mm dia, UPVC (creek to Resevoir WMF003, Water Main, 225 mm dia, UPVC (Ultimate Upgrade) WMF004, Water Main, 225 mm dia, UPVC WMF005, Water Main, 225 mm dia, UPVC WMF006, Water Main, 225 mm dia, UPVC	Passive Passive Passive Passive Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863 970 955.38 603.91	225 225 150 150 150 225 450 225 225 225 225	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ -	\$ 257 \$ 193 \$ 193 \$ 193 \$ 257 \$ 257 \$ 257 \$ 257	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007 \$ 479,219 \$ 654,963 \$ 245,752 \$ 155,344	2011 2011 2011 2014 2015 2016 2011 2011 2011	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 7.5% 20.0% 7.5% 7.5%	20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$	631,798 155,902 27,482 196,009 270,489 618,193 943,147 317,021 200,393	2011 2011 2014 2017 2019 2012 2026 2011 2011	1.00 1.00 1.12 1.25 1.35 1.04 1.76 1.00	1.00 1.00 0.83 0.70 0.62 0.94 0.40 1.00	0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777 \$317,021 \$200,393	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y 668,522 Y 317,021 Y 200,393 Y	Y	
WMF002 WMF003(i) WMF003(ii) WMF003(iii) WMF003 WMF004 WMF005 WMF006 WMF006 WMF007(i)	Passive Passive Passive Passive Passive Passive Passive Passive Passive	Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main	WMF002, Water Main 225 mm dia installing 150mm - Interim (to replace 80mm) installing 150mm - Interim (to replace 80mm) installing 150mm - Interim (to replace 80mm) WMF003, Water Main 225 mm dia WMF004, Water Main 255 mm dia WMF005, Water Main 225 mm dia WMF005, Water Main 225 mm dia WMF005, Water Main 225 mm dia WMF005, Water Main 255 mm dia	WMF002. Water Main. 225 mm dia. DICL WMF003(i). Water, Main. Interim., 150 mm dia. UPVC, Teamster Park to Caravan Park WMF003(ii). Water. Main. Interim., 150 mm dia. UPVC, Creek to Resevoir WMF003(iii). Water. Main. Interim., 150 mm dia. UPVC (Creek to Resevoir WMF003). Water Main., 225 mm dia. UPVC (Ultimate Upgrade) WMF004. Water Main., 250 mm dia. UPVC WMF005. Water Main., 250 mm dia. UPVC WMF005. Water Main., 250 mm dia. UPVC WMF005. Water Main., 250 mm dia. UPVC WMF005. Water Main., 250 mm dia. UPVC WMF005. Water Main., 150 mm dia. UPVC	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863 970 955.38 603.91 4025	225 225 150 150 150 225 450 225 225 150 225 225 225 225 225 225 225 225 225 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ -	\$ 257 \$ 193 \$ 193 \$ 193 \$ 257 \$ 675 \$ 257 \$ 257 \$ 193	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007 \$ 479,219 \$ 654,963 \$ 245,752 \$ 155,344 \$ 776,503	2011 2011 2011 2014 2015 2016 2011 2011 2011 2011	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 7.5% 20.0% 7.5% 7.5% 7.5%	20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$	631,798 155,902 27,482 196,009 270,489 618,193 943,147 317,021 200,393 1,001,689	2011 2011 2014 2017 2019 2012 2026 2011	1.00 1.00 1.12 1.25 1.35 1.04 1.76	1.00 1.00 0.83 0.70 0.62 0.94 0.40 1.00	0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777 \$317,021 \$200,393 \$1,001,689	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y 668,522 Y 317,021 Y 200,393 Y 1,001,689 Y	Y	
WMEROIZ WMF003(ii) WMF003(iii) WMF003(iii) WMF003 WMF004 WMF005 WMF005 WMF007(ii) WMF007(ii)	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main	WMF002_Water Main 225 mm dia Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) WMF003_Water Main 225 mm dia WMF004_Water Main 250 mm dia WMF005_Water Main 250 mm dia WMF005_Water Main 250 mm dia WMF005_Water Main 125 mm dia WMF007(I)_Water Main 125 mm dia	WMF002. Water Main, 225 mm dia, DICL WMF003(i), Water Main, Interim, 150 mm dia, UPVC, Teamster Park to Caravan Park WMF003(ii), Water, Main, Interim, 150 mm dia, UPVC, Caravan Park to Creek WMF003(iii), Water, Main, Interim, 150 mm dia, UPVC (Creek to Resevoir WMF003), Water Main, 225 mm dia, UPVC (Ultimate Upgrade) WMF004, Water Main, 225 mm dia, UPVC WMF005, Water Main, 225 mm dia, UPVC WMF005, Water Main, 225 mm dia, UPVC WMF007, Water Main, 225 mm dia, UPVC WMF007, Water Main, 225 mm dia, UPVC WMF007, Water Main, 225 mm dia, UPVC	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863 970 955.38 603.91 4025 976.4	225 225 150 150 150 225 225 225 225 225 225 225 225 225 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ -	\$ 257 \$ 193 \$ 193 \$ 257 \$ 257 \$ 675 \$ 257 \$ 257 \$ 257 \$ 257	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007 \$ 479,219 \$ 654,963 \$ 245,752 \$ 155,344 \$ 776,503 \$ 251,159	2011 2011 2011 2014 2015 2016 2011 2011 2011	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 7.5% 20.0% 7.5% 7.5%	20% \$. 20% \$. 20% \$. 20% \$. 20% \$. 20% \$. 20% \$. 20% \$. 20% \$. 20% \$. 20% \$. 20% \$. 20% \$. 20% \$. 20% \$.	631,798 155,902 27,482 196,009 270,489 618,193 943,147 317,021 200,393 1,001,689 323,996	2011 2011 2014 2017 2019 2012 2026 2011 2011	1.00 1.00 1.12 1.25 1.35 1.04 1.76 1.00 1.00	1.00 1.00 0.83 0.70 0.62 0.94 0.40 1.00	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777 \$317,021 \$200,393 \$1,001,689 \$323,996	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y 668,522 Y 317,021 Y 200,393 Y 1,001,689 Y 323,996	Y	
WMF002 WMF003(i) WMF003(ii) WMF003(iii) WMF003 WMF004 WMF005 WMF005 WMF007(ii) WMF007(iii)	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main	WMF002, Water Main, 225 mm dia installing 150mm - Interim (to replace 80mm) installing 150mm - Interim (to replace 80mm) installing 150mm - Interim (to replace 80mm) installing 150mm - Interim (to replace 80mm) WMF003, Water Main, 225 mm dia WMF005, Water Main, 225 mm dia WMF005, Water Main, 225 mm dia WMF0007 (Water Main, 225 mm dia WMF007(ii), Water Main, 225 mm dia WMF007(ii), Water Main, 225 mm dia	WMF002. Water Main. 225 mm dia. DICL WMF003(i), Water, Main, Interfim, 150 mm dia. UPVC, Teamster Park to Caravan Park WMF003(ii), Water, Main, Interfim, 150 mm dia. UPVC, Craek to Resevoir WMF003(iii) Water Main, Interfim, 150 mm dia. UPVC Creek to Resevoir WMF003. Water Main, 225 mm dia. UPVC (Ultimate Upgrade) WMF003. Water Main, 225 mm dia. UPVC WMF005. Water Main, 225 mm dia. UPVC WMF006. Water Main, 225 mm dia. UPVC WMF007A, Water Main, 225 mm dia. UPVC WMF007A, Water Main, 225 mm dia. UPVC WMF007A, Water Main, 225 mm dia. UPVC WMF007A, Water Main, 225 mm dia. UPVC	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863 970 955.38 603.91 4025	225 225 225 225 225 225 225 225 225 225	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	20 \$ -	\$ 257 \$ 193 \$ 193 \$ 257 \$ 675 \$ 257 \$ 257 \$ 257 \$ 257 \$ 257 \$ 257	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007 \$ 479,219 \$ 654,963 \$ 245,752 \$ 155,344 \$ 776,503 \$ 251,159 \$ 927,057	2011 2011 2011 2014 2015 2016 2011 2011 2011 2011 2011 2011 2011	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 15.0% 7.5% 20.0% 7.5% 7.5% 7.5% 7.5% 7.5%	20% S 20% S	631,798 155,902 27,482 196,009 270,489 618,193 943,147 317,021 200,393 1,001,689 323,996 1,195,903	2011 2011 2014 2017 2019 2012 2026 2011 2011	1.00 1.00 1.12 1.25 1.35 1.04 1.76 1.00 1.00 1.00 1.00	1.00 1.00 0.83 0.70 0.62 0.94 0.40 1.00	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777 \$317,021 \$200,393 \$1,001,669 \$323,996 \$1,195,903	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y 668,522 Y 317,021 Y 200,393 Y 1,001,689 Y	Y	
WMF002 WMF003(ii) WMF003(iii) WMF003 WMF003 WMF005 WMF005 WMF006 WMF006 WMF007(ii) WMF007(ii)	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main	WMF002_Water Main 225 mm dia Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) WMF003_Water Main 225 mm dia WMF004_Water Main 250 mm dia WMF005_Water Main 250 mm dia WMF005_Water Main 250 mm dia WMF005_Water Main 125 mm dia WMF007(I)_Water Main 125 mm dia	WMF002. Water Main, 225 mm dia, DICL WMF003(ii), Water Main, Interim, 150 mm dia, UPVC, Teamster Park to Caravan Park WMF003(iii), Water Main, Interim, 150 mm dia, UPVC, Caravan Park to Creek WMF003(iii), Water Main, 225 mm dia, UPVC (Ultimate Upgrade) WMF003, Water Main, 225 mm dia, UPVC WMF005, Water Main, 250 mm dia, UPVC WMF005, Water Main, 250 mm dia, UPVC WMF005, Water Main, 225 mm dia, UPVC WMF005, Water Main, 125 mm dia, UPVC WMF007A, Water Main, 125 mm dia, UPVC WMF007B, Water Main, 125 mm dia, UPVC WMF007B, Water Main, 125 mm dia, UPVC WMF007B, Water Main, 125 mm dia, UPVC WMF007B, Water Main, 120 mm dia, UPVC	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863 970 955.38 603.91 4025 976.4 3604 3	225 225 150 150 150 225 225 225 225 225 225 230 300	S S S S S S S S S S	20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ - 20 \$ -	\$ 257 \$ 193 \$ 193 \$ 257 \$ 257 \$ 675 \$ 257 \$ 257 \$ 257 \$ 257	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 479,219 \$ 654,963 \$ 245,752 \$ 155,344 \$ 776,503 \$ 251,159 \$ 927,057 \$ 927,057	2011 2011 2011 2014 2015 2016 2011 2011 2011 2011	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 20.0% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5%	20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$ 20% \$	631,798 155,902 27,482 196,009 270,489 618,193 943,147 317,021 200,393 1,001,689 323,996	2011 2011 2014 2017 2019 2012 2026 2011 2011	1.00 1.00 1.12 1.25 1.35 1.04 1.76 1.00 1.00	1.00 1.00 0.83 0.70 0.62 0.94 0.40 1.00	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777 \$317,021 \$200,393 \$1,001,689 \$323,996	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y 668,522 Y 317,021 Y 200,393 Y 1,001,689 Y 323,996	Y Y Y Y	
WMEROIZ WMF003(ii) WMF003(iii) WMF003(iii) WMF003 WMF005 WMF005 WMF005 WMF007(ii) WMF007(iii) WMF009 WMF009 WMF009 WMF009 WMF009	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main	WMF002. Water Main 225 mm dia installing 150mm - Interim (to replace 80mm) installing 150mm - Interim (to replace 80mm) installing 150mm - Interim (to replace 80mm) WMF003. Water Main 225 mm dia WMF004. Water Main 255 mm dia WMF005. Water Main 255 mm dia WMF005. Water Main 255 mm dia WMF005. Water Main 255 mm dia WMF007. Water Main 255 mm dia WMF007. Water Main 255 mm dia WMF007. Water Main 255 mm dia WMF007. Water Main 255 mm dia WMF008. Water Main 255 mm dia WMF008. Water Main 255 mm dia	WMF002. Water Main. 225 mm dia. DICL WMF003(i). Water, Main. Interfim. 150 mm dia. UPVC, Teamster Park to Caravan Park WMF003(ii). Water, Main. Interfim. 150 mm dia. UPVC, Craek to Resevoir WMF003(iii) Water. Main. Interfim. 150 mm dia. UPVC Creek to Resevoir WMF003. Water Main. 225 mm dia. UPVC (Ultimate Upgrade) WMF003. Water Main. 225 mm dia. DICL WMF005. Water Main. 225 mm dia. UPVC WMF006. Water Main. 225 mm dia. UPVC WMF006. Water Main. 225 mm dia. UPVC WMF007. Water Main. 225 mm dia. UPVC WMF007. Water Main. 300 mm dia. UPVC WMF009. Water Main. 300 mm dia. DICL WMF009. Water Main. 300 mm dia. DICL WMF009. Water Main. 300 mm dia. DICL WMF009. Water Main. 400 mm dia. DICL	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863 970 955.38 603.91 4025 976.4 3604 3	450 225 225 150 225 225 225 225 300	S S S S S S S S S S	20 \$ - 20	\$ 257 \$ 193 \$ 193 \$ 193 \$ 257 \$ 675 \$ 257 \$ 257 \$ 257 \$ 257 \$ 257 \$ 325	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007 \$ 479,219 \$ 654,963 \$ 245,752 \$ 155,344 \$ 776,503 \$ 251,159 \$ 927,057 \$ 927,057 \$ 1,834,573	2011 2011 2011 2014 2015 2016 2011 2011 2011 2011 2011 2011 2011	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 20.0% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5% 7.5%	20% S 20% S	631,798 155,902 27,482 196,009 270,489 618,193 943,147 317,021 200,393 1,001,689 323,996 1,195,903	2011 2014 2017 2019 2012 2026 2011 2011 2011 2011 2011 2011	1.00 1.00 1.12 1.25 1.35 1.04 1.76 1.00 1.00 1.00 1.00	1.00 1.00 0.83 0.70 0.62 0.94 0.40 1.00 1.00 1.00 1.00 1.00 1.00	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777 \$317,021 \$200,393 \$1,001,689 \$323,996 \$1,195,903 \$2,467	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y 668,522 Y 317,021 Y 200,393 Y 1,001,689 Y 323,996 Y 195,903 Y 195,903 Y	Y Y Y Y Y Y Y	
WMF002 WMF003(ii) WMF003(iii) WMF003(iii) WMF003(iii) WMF004 WMF004 WMF006 WMF007(ii) WMF007(iii) WMF007(iii) WMF007(iii) WMF008 WMF009	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main Water Main	WMF002, Water Main 225 mm dia rstalling 150mm - Interim (to replace 80mm) installing 150mm - Interim (to replace 80mm) installing 150mm - Interim (to replace 80mm) installing 150mm - Interim (to replace 80mm) WMF003, Water Main 225 mm dia WMF004, Water Main 255 mm dia WMF005, Water Main 225 mm dia WMF005, Water Main 225 mm dia WMF007(ii), Water Main 225 mm dia WMF007(ii), Water Main 225 mm dia WMF0097(ii), Water Main 225 mm dia WMF0097, Water Main 250 mm dia WMF009, Water Main 300 mm dia WMF009, Water Main 300 mm dia WMF011, Water Main 430 mm dia WMF010, Water Main 430 mm dia	WMF002, Water Main, 225 mm dia, DICL WMF003(ii), Water, Main, Interim, 150 mm dia, UPVC, Teamster Park to Caravan Park WMF003(iii), Water, Main, Interim, 150 mm dia, UPVC, Caravan Park to Creek WMF003(iii), Water, Main, Interim, 150 mm dia, UPVC (Creek to Resevoir WMF003(iii), Water Main, 225 mm dia, UPVC (Ultimate Upgrade) WMF004, Water Main, 256 mm dia, UPVC WMF005, Water Main, 256 mm dia, UPVC WMF005, Water Main, 256 mm dia, UPVC WMF007A, Water Main, 225 mm dia, UPVC WMF007A, Water Main, 225 mm dia, UPVC WMF007A, Water Main, 250 mm dia, DICL WMF009, Water Main, 300 mm dia, DICL WMF009, Water Main, 300 mm dia, DICL WMF001, Water Main, 450 mm dia, DICL WMF010, Water Main, 450 mm dia, DICL WMF011, Water Main, 450 mm dia, DICL WMF011, Water Main, 450 mm dia, DICL	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863 970 955.38 603.91 4025 976.4 3604 3	450 225 225 150 225 225 225 225 300	S S S S S S S S S S	20 \$ -	\$ 257 \$ 193 \$ 193 \$ 257 \$ 257	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007 \$ 479,219 \$ 654,963 \$ 245,752 \$ 155,344 \$ 775,503 \$ 251,159 \$ 927,057 \$ 974 \$ 1,284,573	2011 2011 2014 2014 2015 2016 2011 2011 2011 2011 2011 2011 2011	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 7.5% 20.0% 7.5% 7.5% 7.5% 7.5% 7.5% 20.0%	20% S 20% S	631,798 155,902 27,482 196,009 270,489 618,193 943,147 317,021 200,393 1,001,689 1,195,903 1,402 2,641,785 5,100,774	2011 2011 2014 2017 2019 2012 2026 2011 2011 2011 2011 2011 2026 2026	1.00 1.00 1.12 1.25 1.35 1.04 1.76 1.00 1.00 1.00 1.00	1.00 1.00 0.83 0.70 0.62 0.94 0.40 1.00 1.00 1.00 1.00 1.00 1.00	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777 \$317,021 \$200,393 \$1,001,689 \$323,996 \$1,195,903 \$2,467 \$4,649,086 \$8,976,484	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y 668,522 Y 317,021 Y 200,393 Y 4,001,689 Y 323,996 1,195,903 994 4,872,551 3,615,532	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	
WMF002 WMF003(i) WMF003(i) WMF003(i) WMF003 WMF003 WMF004 WMF005 WMF005 WMF005 WMF005 WMF005 WMF005 WMF005 WMF005 WMF005 WMF005 WMF005 WMF005 WMF005 WMF005 WMF005	Passive Passive	Water Main Water Main	WMF002, Water Main, 225 mm dia Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) WMF003, Water Main, 225 mm dia WMF004, Water Main, 225 mm dia WMF006, Water Main, 225 mm dia WMF007(ii) Water Main, 225 mm dia WMF007(ii) Water Main, 225 mm dia WMF007(ii) Water Main, 225 mm dia WMF009 Water Main, 230 mm dia WMF009, Water Main, 200 mm dia WMF009, Water Main, 300 mm dia WMF009, Water Main, 300 mm dia WMF009, Water Main, 300 mm dia WMF009, Water Main, 300 mm dia	WMF002. Water Main. 225 mm dia. DICL WMF003(i). Water, Main. Interfim. 150 mm dia. UPVC, Teamster Park to Caravan Park WMF003(ii). Water, Main. Interfim. 150 mm dia. UPVC, Craek to Resevoir WMF003(iii) Water. Main. Interfim. 150 mm dia. UPVC Creek to Resevoir WMF003. Water Main. 225 mm dia. UPVC (Ultimate Upgrade) WMF003. Water Main. 225 mm dia. DICL WMF005. Water Main. 225 mm dia. UPVC WMF006. Water Main. 225 mm dia. UPVC WMF006. Water Main. 225 mm dia. UPVC WMF007. Water Main. 225 mm dia. UPVC WMF007. Water Main. 300 mm dia. UPVC WMF009. Water Main. 300 mm dia. DICL WMF009. Water Main. 300 mm dia. DICL WMF009. Water Main. 300 mm dia. DICL WMF009. Water Main. 400 mm dia. DICL	Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive Passive	469.83 110.43 736.24 1016 1863 970 955.38 603.91 4025 976.4 3604 3 2217 5246	450 225 225 150 225 225 225 225 300	S. S. S. S. S. S. S. S.	20 \$ -	\$ 257 \$ 193 \$ 193 \$ 193 \$ 257 \$	\$ 489,766 \$ 120,854 \$ 21,304 \$ 142,035 \$ 196,007 \$ 479,219 \$ 654,963 \$ 245,752 \$ 155,344 \$ 776,503 \$ 251,159 \$ 927,057 \$ 927,057 \$ 1,834,573 \$ 3,542,044 \$ 5,53,042	2011 2011 2011 2014 2015 2016 2011 2011 2011 2011 2011 2011 2011	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 7.5% 20.0% 7.5% 7.5% 7.5% 7.5% 7.5% 20.0%	20% S 20% S	631,798 155,902 27,482 196,009 270,489 618,193 943,147 317,021 200,393 1,001,689 323,996 1,195,903 1,402 2,641,785	2011 2011 2014 2017 2019 2012 2026 2011 2011 2011 2011 2011 2026 2026	1.00 1.00 1.12 1.25 1.35 1.04 1.76 1.00 1.00 1.00 1.00 1.00 1.76 1.76 1.76	1.00 1.00 0.83 0.70 0.62 0.94 0.40 1.00 1.00 1.00 1.00 0.40 0.40	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777 \$317,021 \$200,393 \$1,001,689 \$323,996 \$1,195,903 \$2,467 \$4,649,086	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y 668,522 Y 317,021 Y 200,393 Y 4,001,689 Y 323,996 H 1,195,903 H 994 H 8,872,551 H	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	
WMF002 WMF003(II) WMF003(III) WMF003(III) WMF003 WMF004 WMF005 WMF006 WMF007 WMF006 WMF007 WMF007 WMF009 WMF010 WMF010	Passive Passive	Water Main Water Main	WMF002, Water Main 225 mm dia Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) Installing 150mm - Interim (to replace 80mm) WMF003, Water Main 225 mm dia WMF004, Water Main 255 mm dia WMF005, Water Main 255 mm dia WMF006, Water Main 125 mm dia WMF007(1), Water Main 125 mm dia WMF008, Water Main 225 mm dia WMF008, Water Main 255 mm dia WMF009, Water Main 305 mm dia WMF010, Water Main 305 mm dia WMF011, Water Main 450 mm dia WMF011, Water Main 450 mm dia WMF011, Water Main 450 mm dia	WMF002. Water Main. 225 mm dia. DICL WMF003(i), Water, Main, Interfim, 150 mm dia. UPVC, Teamster Park to Caravan Park WMF003(ii), Water, Main, Interfim, 150 mm dia. UPVC, Craek to Resevoir WMF003(iii) Water, Main, Interfim, 150 mm dia. UPVC, Creek to Resevoir WMF003. Water Main, 225 mm dia. UPVC (Ultimate Upgrade) WMF003. Water Main, 225 mm dia. DIVC WMF008. Water Main, 225 mm dia. UPVC WMF008. Water Main, 225 mm dia. UPVC WMF007. Water Main, 225 mm dia. UPVC WMF007A, Water Main, 150 mm dia. UPVC WMF007B, Water Main, 150 mm dia. DICL WMF009. Water Main, 150 mm dia. DICL WMF010. Water Main, 450 mm dia. DICL WMF011. Water Main, 450 mm dia. DICL WMF011. Water Main, 450 mm dia. DICL WMF011. Water Main, 450 mm dia. DICL WMF011. Water Main, 450 mm dia. DICL WMF010. Water Main, 450 mm dia. DICL	Passive Passive	469.83 110.43 736.24 1016 1863 970 955.38 603.91 4025 976.4 3604 3 2717 5246	450 225 225 150 225 225 225 225 300	S. S. S. S. S. S. S. S. S. S. S. S. S. S	20 \$ -	\$ 257 \$ 193 \$ 193 \$ 257 \$ 5 257 \$	\$ 489,766 \$ 120,854 \$ 21,304 \$ 141,2035 \$ 196,007 \$ 654,963 \$ 245,752 \$ 155,344 \$ 776,503 \$ 227,057 \$ 927,057 \$ 927,057 \$ 1,334,573 \$ 3,542,204 \$ 5,3542,204 \$ 5,3542,004 \$ 5,3542,004 \$ 5,3542,004 \$ 5,3542,004 \$ 5,3542,004	2011 2011 2011 2014 2015 2016 2011 2011 2011 2011 2011 2011 2011	1.00 1.00 1.00 1.00 1.00 1.00		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7.5% 7.5% 7.5% 7.5% 15.0% 15.0% 7.5% 20.0% 7.5% 7.5% 7.5% 7.5% 20.0% 20.0% 20.0% 20.0%	20% S 20% S	631,798 155,902 27,482 196,009 270,489 618,193 943,147 200,393 1,001,689 323,996 1,195,903 1,402 2,641,785 5,100,774	2011 2011 2014 2017 2019 2012 2026 2011 2011 2011 2011 2011 2026 2026	1.00 1.00 1.12 1.25 1.35 1.04 1.76 1.00 1.00 1.00 1.00 1.76 1.76 1.76 1.76	1.00 1.00 0.83 0.70 0.62 0.94 0.40 1.00 1.00 1.00 1.00 1.00 0.40	0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0	\$631,798 \$155,902 \$30,771 \$245,733 \$365,652 \$641,932 \$1,659,777 \$317,021 \$200,393 \$1,001,689 \$323,996 \$1,195,903 \$2,467 \$4,649,086 \$8,976,484 \$79,881	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	155,902 Y 25,654 Y 170,801 Y 225,131 Y 604,171 Y 668,522 Y 317,021 Y 200,393 Y ,001,689 Y 323,996 ,195,093 ,994 ,872,551 8,615,532 ,665,597	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	

Attachment 5.1.11 211 of 406

Douglas Shire Council

Return to Navigation Pane

Summary Cost Schedule

	Catchment	2002024	Demand		Cost			
No	No Name		NPV Future (B)	TOTAL (A)+ (B)	Existing (C)	NPV Future (D)	TOTAL (C)+ (D)	Cost per Unit Demand
			Water Supply					
	1 PORT DOUGLAS (W1)	16,328	9,203	25,530	\$ 32,499,394	\$ 4,891,098	\$ 37,390,492	\$ 1,465
	2 MOSSMAN (W2)			7,463	\$ 16,650,241			\$ 2,411
	3 WHYANBEEL (W3)			2,709	\$ 14,448,700	\$ 8,302,889		\$ 8,399
	4:DAINTREE (W4)			325	\$ 3,937,567		\$ 3,937,567	\$ 12,12
	5:SHARED TREATMENT (W1&W2)	22,605	10,406		\$ 8,551,527	\$ 659,879	\$ 9,211,406	\$ 279
	Totals	47,105	21,934	69,038	\$ 76,087,430	\$ 15,197,932	\$ 91,285,361	
	对对公司是是国际企业的 自己的是是是是		Sewerage					
	1 PORT DOUGLAS (S1)	15,073		20,885				
	2 MOSSMAN (S2)	5,544	1,236	6,780	\$ 4,265,705	\$ 243,058	\$ 4,508,763	\$ 669
	3 COOYA BEACH (S3)	267	1,232	1,499	\$ 1,193,654	\$ 2,010,407	\$ 3,204,061	\$ 2,137
	4 NEWELL BEACH (S4)	_	529	529	\$ 47,880 \$ 175,437	\$ 426,868	\$ 474,748	\$ 897
	5 WONGA BEACH / ROCKY POINT (S5)		2,119	2,119	\$ 175,437	\$ 1,623,601	\$ 1,799,037	\$ 849
	6 SHARED TREATMENT (S2-S5)	5,811	5,280	11,091	\$ 902,804			\$ 118
	Totals	26,695	16,207	42,902	\$ 27,264,226	\$ 5,399,775	\$ 32,664,001	(国际)
			Stormwater					
	0				1/25-	\$ -	\$ -	\$ -
	Totals				\$ -	\$	\$ -	
	经 通过基本的		Transport					
	1: Douglas Shire South (TR1)	93,412	36,461	129,873	\$ 86,701,648	\$ 33,184,318	\$ 119,885,966	\$ 923
	2:Douglas Shire North (TR2)	3,970	- 359	3,611	\$ 43,572,580	\$ -	\$ 43,572,580	\$ 12,06
	0				\$ -	\$ -	\$ -	\$ -
	Totals	97,382	36,102	THE PROPERTY OF THE PROPERTY OF THE PARTY OF	\$ 130,274,228	\$ 33,184,318	\$ 163,458,546	
		Park	s and Commu	inity				
	1 Port Douglas (PPLC1)	9,757	3,247	13,004	\$ 6,773,491		<u> </u>	
	2 Mossman (PPLC2)	1,531	510	2,041	\$ 1,403,523	~		\$ 1,65
******************	3:Cooya Beach (PPLC3)	667	221	888	\$ 462,196	\$ 936,285	\$ 1,398,481	\$ 1,57!
	4:Newell Beach (PPLC4)	329	110	439	\$ 449,467	\$ 446,859	\$ 896,326	\$ 2,042
	5 Wonga Beach (PPLC5)	751	250	1,001	\$ 666,198	\$ 663,776	\$ 1,329,974	\$ 1,329
	6 Rural Area - South of Mowbray River (PPLC6)	382	126	508	\$ 144,329	\$ 66,063	\$ 210,392	\$ 414
	7 Rural Area - Mowbray River to Mossman River (PPLC	418	140	558	\$ 116,555		<u> </u>	\$ 339
	8: Rural Area - Mossman River to Daintree River (PPLC	968	321	1,289	\$ 477,842		****************	\$ 637
	9 Rural Area - North of Daintree River (PPLC9)	743	247	990	\$ 142,887	\$ 263,464	\$ 406,351	\$ 410
	0 District Shared Catchments (1,2,3,4,6&7)	13,084	4,355	17,439	\$ 3,356,407	\$ 2,263,065	\$ 5,619,472	\$ 32:
	0 District Shared Catchments (5,8&9)	2,462	818	3,280	\$ 227,970	\$ 872,770	\$ 1,100,739	\$ 330
	O Regional Shared Catchments (1-9)	15,546	5,173	20,719	\$ 345,891	CONTRACTOR OF THE PARTY OF THE	\$ 345,891	\$ 1
	Totals	46,638	15,519	62,157	\$ 14,566,755	\$ 12,254,091	\$ 26,820,846	

Attachment 5.1.11 212 of 406

Douglas Shire Council

Return to Navigation Pane

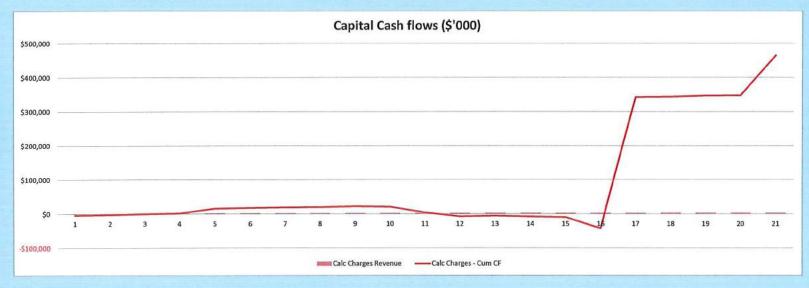
Summary Cash flow Projections (\$,000's)

em Year		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Anticipated Cost (Cap X in \$000)	Water	\$6,200	\$642	\$0	\$111	\$0	\$293	\$246	\$1,687	\$366	\$0	\$0	50	\$0	\$0	\$1,060	\$15,288	\$0	\$0	\$0	\$0	
	Sewerage	-\$2,415	\$0	\$0	\$0	-\$12,141	\$0	\$73	\$0	\$0	\$0	\$5,263	\$0	\$0	\$0	\$0	\$148	-\$382,127	\$0	\$0	\$0	-\$152,
	Stormwater	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	Transport	\$581	\$0	\$0	\$0	\$0	\$234	\$599	\$264	\$81	\$988	\$11,151	\$13,430	\$0	\$0	\$0	\$14,953	\$0	\$2,918	\$0	\$3,246	\$36,0
	Parks and Community	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,236	\$3,234	\$775	\$1,341	\$5,593	\$3,755	\$5,908	\$0	\$0	\$0	\$0	\$3,4
	Total Cost	\$4,365	\$642	\$0	\$111	-\$12,141	\$526	\$918	\$1,951	\$446	\$4,224	\$19,648	\$14,204	\$1,341	\$5,593	\$4,815	\$36,296	-\$382,127	\$2,918	\$0	\$3,246	-\$113,3
Anticipated Charges Revenue (\$000)	Residential Charges	\$1,000	\$1,883	\$1,939	\$1,998	\$2,057	\$2,119	\$2,339	\$2,409	\$2,481	\$2,556	\$2,632	\$2,848	\$2,933	\$3,021	\$3,112	\$3,205	\$3,259	\$3,357	\$3,458	\$3,561	\$3,
	Comm/Ind Charges	\$200	\$106	\$109	\$112	\$115	\$119	\$124	\$128	\$132	\$135	\$140	\$138	\$142	\$146	\$151	\$155	\$166	\$171	\$176	\$181	\$1
	Total revenue	\$1,200	\$1,988	\$2,048	\$2,109	\$2,173	\$2,238	\$2,463	\$2,537	\$2,613	\$2,691	\$2,772	\$2,986	\$3,075	\$3,167	\$3,262	\$3,360	\$3,425	\$3,528	\$3,634	\$3,743	\$3,8
Annual CF (\$000)		-\$3,165	\$1,346	\$2,048	\$1,999	\$14,314	\$1,712	\$1,545	\$586	\$2,167	-\$1,533	-\$16,876	-\$11,219	\$1,734	-\$2,426	-\$1,552	-\$32,936	\$385,552	\$609	\$3,634	\$497	\$117,1
Cumulative CF (\$000)		-\$3,165	-\$1,819	\$229	\$2,228	\$16,542	\$18,254	\$19,799	\$20,384	\$22,551	\$21,018	\$4,142	-\$7,077	-\$5,342	-\$7,768	-\$9,320	-\$42,256	\$343,296	\$343,905	\$347,538	\$348,035	\$465,2

 NPV Cost
 -\$138,058.92

 NPV Revenue
 \$31,367.43

 NPV Annual Cashflow
 \$159,460.09



Attachment 5.1.11 213 of 406

Douglas Shire Council Water Supply

Unit Rates

Return to Unit Rates Sheet

Note: Unit rates are only one option for valuation of assets. Unique values (\$) can be entered in the Existing Assets sheet and the Future Asset Sheets

Asset Type 1:	Active
WaterUnitrates1	
Diameter	Rate/m
Bore	5,321.79
Raw Water Intake	Item
Pump Station	Item
Reservoir Water Treatment Plant	Item
Water Treatment Plant	Item

40 \$777 50 \$799 63 \$91 75 \$ 80 \$108 100 \$174 150 \$192 180 \$ 200 \$231 220 \$ 225 \$251 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 801 \$841 660 \$4,521 675 \$1,517	Asset Type 2:	Passive
32 \$76 40 \$77 50 \$79 63 \$91 75 \$ 80 \$108 100 \$174 150 \$192 180 \$ 200 \$231 220 \$ 255 \$257 250 \$273 300 \$324 450 \$675 500 \$841 660 \$1,521 675 \$1,517	WaterUnitrates2	
40 \$777 50 \$799 63 \$91 75 \$ 80 \$108 100 \$174 150 \$192 180 \$ 200 \$231 220 \$ 225 \$251 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 801 \$841 660 \$4,521 675 \$1,517	Diameter	Rate/m
50 \$79 63 \$91 75 \$ 80 \$108 100 \$174 150 \$192 180 \$ 200 \$231 220 \$ 225 \$251 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 600 \$841 660 \$1,521 675 \$1,517	32	\$76.27
50 \$79 63 \$91 75 \$ 80 \$108 100 \$174 150 \$192 180 \$ 200 \$231 220 \$ 225 \$251 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 600 \$841 660 \$1,521 675 \$1,517	40	\$77.77
75 \$ 103. 80 \$108 100 \$174 150 \$192 180 \$ 215. 200 \$231 220 \$ 251. 225 \$257. 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$00 \$841 660 \$1,521 675 \$1,517	50	\$79.26
75 \$ 103. 80 \$108 100 \$174 150 \$192 180 \$ 215. 200 \$231 220 \$ 251. 225 \$257. 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$00 \$841 660 \$1,521 675 \$1,517	63	\$91.23
100 \$174 150 \$192 180 \$ 2153 200 \$231 220 \$ 251.9 225 \$257 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 801 \$841 660 \$1,521 675 \$1,517	75	
150 \$192 180 \$ 2153 200 \$231 220 \$ 251.9 225 \$257 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 801 \$841 660 \$1,521 675 \$1,517	80	
150 \$192 180 \$ 2153 200 \$231 220 \$ 251.9 225 \$257 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 801 \$841 660 \$1,521 675 \$1,517	100	\$174.23
200 \$231 220 \$ 251.4 225 \$257 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 600 \$841 660 \$1,521 675 \$1,517	150	\$192.92
200 \$231 220 \$ 251.4 225 \$257 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 600 \$841 660 \$1,521 675 \$1,517	180	\$ 215.80
220 \$ 251.4 225 \$257 250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 600 \$841 660 \$1,521 675 \$1,517	200	
250 \$273 300 \$324 375 \$627 450 \$675 500 \$788 525 \$ 801. 600 \$841 660 \$1,521 675 \$3,517		
375 \$627 450 \$675 500 \$788 525 \$ 801 600 \$841 660 \$1,521 675 \$1,517	225	\$257.23
375 \$627 450 \$675 500 \$788 525 \$ 801 600 \$841 660 \$1,521 675 \$1,517	250	\$273.68
375 \$627 450 \$675 500 \$788 525 \$ 801 600 \$841 660 \$1,521 675 \$1,517	300	\$324.52
500 \$788 525 \$ 801. 600 \$841 660 \$1,521 675 \$1,517	375	\$627.36
525 \$ 600 \$841 660 \$1,521 675 \$1,517	450	
600 \$841 660 \$1,521 675 \$1,517	500	\$788.87
600 \$841 660 \$1,521 675 \$1,517	525	\$ 801.96
660 \$1,521 675 \$1,517	600	\$841.22
675 \$1,517	660	\$1,521.67
	675	\$1,517.93
700 \$1,543	700	
750 \$1,661		\$1,661.50
800 \$1,898	800	

NOTES

Rates Allows for hydrants.

Water Pipes <= 375mm are usually replaced by uPVC >375 and <= 600 replaced by DICL >600 replaced by Mild steel

Recycled Water Mains :

Assumed to be the same cost as Potable water mains(where equivalent size mains exist. Additional sizes used in recycled water network identified in red. Value were interpolated from the unit rates of the pipe sizes immediately larger/ smaller than nominated size

Items shown in Blue - Costs have been interpolated from existing data

Watersitecond	
Location/Condition type	Multiplier
RURAL / Sand	0.95
RURAL / Good Soil	1.09
RURAL / Poor Soil (High WT areas)	1.13
RURAL / ASS	1.18
RURAL / Soft Rock	1.22
RURAL / Hard Rock	1.62
RURAL / Underwater	1.63
URBAN / Sand	1.00
URBAN / Good Soil	1.14
URBAN / Poor Soil (High WT areas)	1.18
URBAN / ASS	1.40
URBAN / Soft Rock	1.27
URBAN / Hard Rock	1.67
URBAN / Underwater	1.66
HIGH DENSITY URBAN / Sand	1.20
HIGH DENSITY URBAN / Good Soil	1.34
HIGH DENSITY URBAN / Poor Soil (High WT areas)	1.38
HIGH DENSITY URBAN / ASS	1.43
HIGH DENSITY URBAN / Soft Rock	1.47
HIGH DENSITY URBAN / Hard Rock	1.87
HIGH DENSITY URBAN / Underwater	1.71
CBD / Sand	1.45
CBD / Good Soil	1.58
CBD / Poor Soil (High WT areas)	1.63
CBD / ASS	1.67
CBD / Soft Rock	1.71
CBD / Hard Rock	2.11
CBD / Underwater	1.89
Island / Sand	1.32
Island / Good Soil	1.49
Island / Poor Soil (High WT areas)	1.55
Island / ASS	1.60
Island / Soft Rock	1.65
Island / Hard Rock	2.15
Island / Underwater	2.14
PORT DOUGLAS (W1)	1
MOSSMAN (W2)	1
WHYANBEEL (W3)	1
DAINTREE (W4)	1
DAGMAR HEIGHTS (W5)	1

Project Owners Cost	
Watreprojcost	
Term	%
5	10%
10	15%
15	20%
20	30%

 $Locational\ /\ Catchment\ Multipliers\ \ used\ in\ LGIP\ unless\ Site\ based\ condition\ information\ available$

Attachment 5.1.11 214 of 406

Douglas Shire Council Wastewater

Return to Unit Rates Sheet

Unit Rates

Note: Unit rates are only one option for valuation of assets. Unique values (\$) can be entered in the Existing Assets sheet and the Future Asset Sheets

Note: Unit rates are only one option for	valuation of assets. Onlique
Asset Type 1:	Rising Mains
SewerUnitrates1	
Diameter	Rate/m
50	\$90.96
63	\$106.62
80	\$132.00
100	\$155.11
150	\$193.19
200	\$232.58
225	\$260.35
250	\$287.27
300	\$344.19
375	\$813.89
450	\$926.18
500	\$1,110.03
600	\$1,278.71
660	\$1,747.34
675	\$1,761.85
700	\$1,786.77
750	\$1,853.47
800	\$1,996.18
110) \$ 140.51
160	210.19

Notes

Wastewater Effluent Rising Main Unit Rates

(As Per Rising Main Rates)

Wastewater Low Pressure Mains

110mm 160mm

Wastewater rising mains

Small diameter rising mains (50,63, & 80 mm)
Extrapolated from unit rates 100mm and above.
20% allowance for Fillings

ii be entereu iii the Existing Assets si	ieet and the ruture Asset sheets
Asset Type 2 (Depth Dependent):	Gravity Sewers
SewerUnitrates2	
	Depth Ranges
	1.5m-3.0m

Diameter	Depth	Rate/m
100	1.5m-3.0m	\$199.39
150	1.5m-3.0m	\$234.93
200	1.5m-3.0m	\$303.72
225	1.5m-3.0m	\$329.99
250	1.5m-3.0m	\$314.53
300	1.5m-3.0m	\$361.68
375	1.5m-3.0m	\$386.41
400	1.5m-3.0m	\$578.84
450	1.5m-3.0m	\$624.43
500	1.5m-3.0m	\$773.58
600	1.5m-3.0m	\$949.79
660	1.5m-3.0m	\$1,383.33
675	1.5m-3.0m	\$1,421.20
700	1.5m-3.0m	\$1,486.89
750	1.5m-3.0m	\$1,388.74
800	1.5m-3.0m	\$1,634.50
825	1.5m-3.0m	\$1,762.01
900	1.5m-3.0m	\$1,880.25
960	1.5m-3.0m	\$2,210.24
1,000	1.5m-3.0m	\$2,278.25
1,050	1.5m-3.0m	\$2,365.58
1,085	1.5m-3.0m	\$2,428.95
1,200	1.5m-3.0m	\$2,883.36

Notes

Assume Good Soil - 1.5-3.0m depth. (FNQROC preference for Gravity Sewers <3.0m) 20% allowance for fittings

Costs Based on Construction Cost in Urban Areas in good soil (Sand)

Site/ Condition Allowances Sewersitecond

Location/Condition type	Multiplier
RURAL / Sand	0.96
RURAL / Good Soil	1.14
RURAL / Poor Soil (High WT areas)	1.18
RURAL / ASS	1.20
RURAL / Soft Rock	1.57
RURAL / Hard Rock	2.25
URBAN / Sand	1.00
URBAN / Good Soil	1.18
URBAN / Poor Soil (High WT areas)	1.22
URBAN / ASS	1.37
URBAN / Soft Rock	1.60
URBAN / Hard Rock	2.29
HIGH DENSITY URBAN / Sand	1.15
HIGH DENSITY URBAN / Good Soil	1.33
HIGH DENSITY URBAN / Poor Soil (H	1.37
HIGH DENSITY URBAN / ASS	1.39
HIGH DENSITY URBAN / Soft Rock	1.76
HIGH DENSITY URBAN / Hard Rock	2.44
CBD / Sand	1.34
CBD / Good Soil	1.51
CBD / Poor Soil (High WT areas)	1.55
CBD / ASS	1.57
CBD / Soft Rock	1.94
CBD / Hard Rock	2.63
Island / Sand	1.31
Island / Good Soil	1.53
Island / Poor Soil (High WT areas)	1.58
Island / ASS	1.61
Island / Soft Rock	2.06
Island / Hard Rock	2.92
PORT DOUGLAS (S1)	1
MOSSMAN (S2)	1
COOYA BEACH (S3)	1
NEWELL BEACH (S4)	1
WONGA BEACH / ROCKY POINT (S5)	1
SHARED TREATMENT (S2-S5)	1

Project Owners Cost Sewerprojcost

%
10%
15%
20%
30%

Notes

Locational / Catchment Multipliers used in LGIP unless Site based condition information available

Attachment 5.1.11 215 of 406

Douglas Shire Council

Return to Unit Rates Sheet

Transport Unit Rates

Note: Unit rates are only one option for valuation of assets. Unique values (\$) can be entered in the Existing Assets sheet and the Future Asset Sheets

Asset Type 1:	ROAD / PATH
RoadUnitrates1	
Road Hierarchy Standard	Rate/m or unit
Sub Arterial	\$4,538.48
Urban Major Collector	\$3,053.99
Urban Minor Collector	\$2,750.88
Rural Major Collector	\$1,006.10
Rural Minor Collector	\$723.70
Access Street	\$2,430.14
Path Hierarchy Standard	Rate/m or unit
Concrete_Path	\$166.50
Asphalt_Path	\$193.39
Brick Paver_Path	\$365.51
Gravel_Path	\$32.16

	_
Asset Type 2:	INTERSECTION / STRUCTURES
RoadUnitrates2	
Asset Description	Rate/m or unit
Intersection: Signalised	\$ 568,412.97
Intersection: Roundabout - 1 lane minor	\$ 271,424.73
Structures: Bridges (/m2)	\$ 6,180.99
Structures: Culverts	Identified in schedule(s)
Structures: Others	Identified in schedule(s)

Site/ Condition Allowances	
Roadsitecond	
Location/Condition type	Multiplier
Douglas Shire South (TR1)	1.00
Douglas Shire South _Upgrade (TR1_U)	1.50
Douglas Shire North (TR2)	1.40
Douglas Shire North _Upgrade (TR2_U)	2.00

Project Owners Cost	
Roadprojcost	
Term	%
5	10%
10	15%
15	20%
20	40%

NOTES

Assume All paths 1.5m wide (1m-3m)

216 of 406 Attachment 5.1.11

Douglas Shire Council Land for Parks and Community Facilities

Return to Unit Rates Sheet

Parks and Open Space Embellishment Cost

Note: Unit rates are only one option for valuation of assets. Unique values (\$) can be entered in the Existing Assets sheet and the Future Asset Sheets

Embell	ishments
Parksunitrate1]
Item	Rate per Park Type

Site/ Condition Allowances	
Parkssitecond	
Location/Condition type	Multiplier
Port Douglas (PPLC1)	1.00
Mossman (PPLC2)	1.00
Cooya Beach (PPLC3)	1.00
Newell Beach (PPLC4)	1.00
Wonga Beach (PPLC5)	1.00
Rural Area - South of Mowbray River (PPLC6)	1.00
Rural Area - Mowbray River to Mossman River (PPLC7)	1.00
Rural Area - Mossman River to Daintree River (PPLC8)	1.00
Rural Area - North of Daintree River (PPLC9)	1.00
District Shared Catchments (1,2,3,4,6&7)	1.00
District Shared Catchments (5,8&9)	1.00
Regional Shared Catchments (1-9)	1.00

Project Owners Cost	
Parkprojcost	
Term	%
5	10%
10	15%
15	20%
20	30%

Attachment 5.1.11 217 of 406

Douglas Shire Council Land Costs

Return to Unit Rates Sheet

Unit Rates

Unit Cost of Land (\$/m2)	Landcst				
Option 2 - Land Cost (by Location)					
Landcst2	Ī				
Location	Cost of Land (per m2)				
Port Douglas and Environs	\$ 304.43				
Mossman and Environs	\$ 19.75				
Coastal Suburbs, Villages and Townships (Cooya Beach)	\$ 32.53				
Coastal Suburbs, Villages and Townships (Daintree Township)	\$ 16.58				
Coastal Suburbs, Villages and Townships (Newell Beach)	\$ 335.62				
Coastal Suburbs, Villages and Townships (Wangetti)	\$ 48.42				
Coastal Suburbs, Villages and Townships (Wonga Beach)	\$ 48.33				
Rural Areas and Rural Settlements	\$ 2.64				
Settlement Areas North of the Daintree River	\$ 2.27				
World Heritage Areas and Environs	\$ 0.17				
Coastal Suburbs, Villages and Townships	\$ 51.35				

\$ 20.00

Option 2 - Land Cost (by Location)			Option 2 - Land Cost (by Type)	
Landcst2			Landcst2	
Location	Cost of Land (per m2)	Ī	Landuse type	Cost of Land (per m2)
Port Douglas and Environs	\$ 304.43		Local Recreation Park Port Douglas and Environs (LRP-PD)	\$ 60.00
Mossman and Environs	\$ 19.75		Local Recreation Park Mossman and Environs (LRP-M)	\$ 20.00
Coastal Suburbs, Villages and Townships (Cooya Beach)	\$ 32.53		Local Recreation Park (Wossinan and Environs (Exercity) Local Recreation Park Coastal Suburbs, Villages and Townships (Cooya Beach) (LRP-CB.)	\$ 20.00
	\$ 16.58			\$ 20.00
Coastal Suburbs, Villages and Townships (Daintree Township)			Local Recreation Park Coastal Suburbs, Villages and Townships (Newell Beach) (LRP-NB)	
Coastal Suburbs, Villages and Townships (Newell Beach)	\$ 335.62		Local Recreation Park Coastal Suburbs, Villages and Townships (Wonga Beach) (LRP-WB)	\$ 20.00
Coastal Suburbs, Villages and Townships (Wangetti)	\$ 48.42		Local Recreation Park Coastal Suburbs, Villages and Townships (Wangetti) (LRP-W)	\$ 20.00
Coastal Suburbs, Villages and Townships (Wonga Beach)	\$ 48.33		Local Recreation Park Coastal Suburbs, Villages and Townships (Daintree Township) (LRP-DT)	\$ 20.00
Rural Areas and Rural Settlements	\$ 2.64		Local Recreation Park Rural Areas and Rural Settlements (LRP-RS)	\$ 10.00
Settlement Areas North of the Daintree River	\$ 2.27		Local Recreation Park Settlement Areas North of the Daintree River (LRP-ND)	\$ 5.00
World Heritage Areas and Environs	\$ 0.17		Local Recreation Park World Heritage Areas and Environs (LRP-WHA)	\$ 5.00
Coastal Suburbs, Villages and Townships	\$ 51.35		District Recreation Park Port Douglas and Environs (DRP-PD)	\$ 60.00
			District Recreation Park Mossman and Environs (DRP-M)	\$ 10.00
			District Recreation Park Coastal Suburbs, Villages and Townships (Cooya Beach) (DRP-CB)	\$ 10.00
			District Recreation Park Coastal Suburbs, Villages and Townships (Newell Beach) (DRP-NB)	\$ 10.00
			District Recreation Park Coastal Suburbs, Villages and Townships (Wonga Beach) (DRP-WB)	\$ 10.00
			District Recreation Park Coastal Suburbs, Villages and Townships (Wangetti) (DRP-W)	\$ 10.00
			District Recreation Park Coastal Suburbs, Villages and Townships (Daintree Township) (DRP-DT)	\$ 10.00
			District Recreation Park Coastal Suburbs, Villages and Townships (Danrier Township) (DRP-DT) District Recreation Park Rural Areas and Rural Settlements (DRP-RS)	\$ 5.00
			District Recreation Park Rural Areas and Rural Settlements (DRP-NS) District Recreation Park Settlement Areas North of the Daintree River (DRP-ND)	\$ 5.00 \$ 2.50
			District Recreation Park World Heritage Areas and Environs (DRP-WHA)	\$ 2.50
			District Sports Park Port Douglas and Environs (DSP-PD)	\$ 60.00
			District Sports Park Mossman and Environs (DSP-M)	\$ 10.00
			District Sports Park Coastal Suburbs, Villages and Townships (Cooya Beach) (DSP-CB)	\$ 10.00
			District Sports Park Coastal Suburbs, Villages and Townships (Newell Beach) (DSP-NB)	\$ 10.00
			District Sports Park Coastal Suburbs, Villages and Townships (Wonga Beach) (DSP-WB)	\$ 10.00
			District Sports Park Coastal Suburbs, Villages and Townships (Wangetti) (DSP-W)	\$ 10.00
Note: Does not include Building Unit / Group Title Plans or Community Maneger	nent Scheme Properties due t	o their Valuation Methods (i.e. Entir	District Sports Park Coastal Suburbs, Villages and Townships (Daintree Township) (DSP-DT)	\$ 10.00
	·	·	District Sports Park Rural Areas and Rural Settlements (DSP-RS)	\$ 5.00
			District Sports Park Settlement Areas North of the Daintree River (DSP-ND)	\$ 2.50
			District Sports Park World Heritage Areas and Environs (DSP-WHA)	\$ 2.50
			Local Government Wide Recreation Park Port Douglas and Environs (LGWRP-PD)	\$ 30.00
			Local Government Wide Recreation Park Mossman and Environs (LGWRP-M)	\$ 10.00
			Local Government Wide Recreation Park Coastal Suburbs, Villages and Townships (Cooya Beach) (LGWRP-CB)	\$ 10.00
			Local Government Wide Recreation Park Coastal Suburbs, Villages and Townships (Cobys Beach) (LGWRP-NB)	\$ 10.00
			Local Government Wide Recreation Park Coastal Suburbs, Villages and Townships (Wonga Beach) (LGWRP-WB)	\$ 10.00
			Local Government Wide Recreation Park Coastal Suburbs, Villages and Townships (Wangetti) (LGWRP-W)	\$ 10.00
			Local Government Wide Recreation Park Coastal Suburbs, Villages and Townships (Daintree Township) (LGWRP-DT)	\$ 10.00
			Local Government Wide Recreation Park Rural Areas and Rural Settlements (LGWRP-RS)	\$ 5.00
			Local Government Wide Recreation Park Settlement Areas North of the Daintree River (LGWRP-ND)	\$ 2.50
			Local Government Wide Recreation Park World Heritage Areas and Environs (LGWRP-WHA)	\$ 2.50
			Local Government Wide Sports Park Port Douglas and Environs (LGWSP-PD)	\$ 30.00
			Local Government Wide Sports Park Mossman and Environs (LGWSP-M)	\$ 10.00
			Local Government Wide Sports Park Coastal Suburbs, Villages and Townships (Cooya Beach) (LGWSP-CB)	\$ 10.00
			Local Government Wide Sports Park Coastal Suburbs, Villages and Townships (Newell Beach) (LGWSP-NB)	\$ 10.00
			Local Government Wide Sports Park Coastal Suburbs, Villages and Townships (Wonga Beach) (LGWSP-WB)	\$ 10.00
			Local Government Wide Sports Park Coastal Suburbs, Villages and Townships (Wangetti) (LGWSP-W)	\$ 10.00
			Local Government Wide Sports Park Coastal Suburbs, Villages and Townships (Daintree Township) (LGWSP-DT)	\$ 10.00
			Local Government Wide Sports Park Rural Areas and Rural Settlements (LGWSP-RS)	\$ 5.00
			Local Government Wide Sports Park Rural Areas and Rural Settlements (LGWSP-RS) Local Government Wide Sports Park Settlement Areas North of the Daintree River (LGWSP-ND)	\$ 2.50
				\$ 2.50
			Local Government Wide Sports Park World Heritage Areas and Environs (LGWSP-WHA)	
			Community Facilities Port Douglas and Environs (CF-PD)	\$ 30.00
			Community Facilities Mossman and Environs (CF-M)	\$ 10.00
			Community Facilities Coastal Suburbs, Villages and Townships (Cooya Beach) (CF-CB)	\$ 10.00
			Community Facilities Coastal Suburbs, Villages and Townships (Newell Beach) (CF-NB)	\$ 10.00
			Community Facilities Coastal Suburbs, Villages and Townships (Wonga Beach) (CF-WB)	\$ 10.00
			Community Facilities Coastal Suburbs, Villages and Townships (Wangetti) (CF-W)	\$ 10.00
			Community Facilities Coastal Suburbs, Villages and Townships (Daintree Township) (CF-DT)	\$ 10.00
			Community Facilities Rural Areas and Rural Settlements (CF-RS)	\$ 5.00
			Community Facilities Settlement Areas North of the Daintree River (CF-ND)	\$ 2.50
			Community Facilities World Heritage Areas and Environs (CF-WHA)	\$ 2.50
			Comments of the control of the contr	2.50

NOTES
To be used for the valuation of Public Parks and Community Land (PPCL)
Abbreviations are made up of a PARK HEIRACHY and LOCALITY code

Local Recreation Park	LKP
District Recreation Park	DRP
District Sports Park	DSP
Local Government Wide Recreation Park	LGWRP
Local Government Wide Sports Park	LGWSP
Community Facilities	CF
Locality	Locality Code
Port Douglas and Environs	-PD
Mossman and Environs	-M
Coastal Suburbs, Villages and Townships (Cooya Beach)	-CB
Coastal Suburbs, Villages and Townships (Newell Beach)	-NB
Coastal Suburbs, Villages and Townships (Wonga Beach)	-WB
Coastal Suburbs, Villages and Townships (Wangetti)	-W
Coastal Suburbs, Villages and Townships (Daintree Township)	-DT
Rural Areas and Rural Settlements	-RS
Settlement Areas North of the Daintree River	-ND
World Heritage Areas and Environs	-WHA

PARK HEIRACHY code



TECHNICAL BRIEFING REPORT

Local Government Infrastructure Plan
Key Assumptions and Methodology

PREPARED FOR
DOUGLAS SHIRE COUNCIL



July 2017

Attachment 5.1.12 219 of 406



DOCUMENT CONTROL SHEET

Trinity Engineering and Consulting Title: LGIP: Key Assumptions and Cairns Office: Methodology **Project Manager: Rudd Rankine** Level 1 10 Grafton Street Author: **Rudd Rankine** Cairns QLD 4870 Client: **Douglas Shire Council** PO Box 7963 Cairns QLD 4870 **Client Contact:** Paul **Client Reference:** DSC_LGIP Telephone (07) 4040 7111 Synopsis: A technical briefing report www.trinityengineering.com.au summarising the key assumptions and methodology used for the preparation of the DSC LGIP



TEC © 2017 Trinity Engineering and Consulting

This document is and shall remain the property of Trinity Engineering and Consulting. This document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.

Any recommendations contained in this report are based largely on our understanding of the information that has been supplied to us, and should be balanced against additional information that you may hold or seek. The client is cautioned to exercise due commercial diligence in the interpretation of any material herein, and accept our findings as suggestions given in good faith requiring interpretation within the context of the client's own enterprise environment.

This document is prepared under the agreed Terms of Engagement with the Client and may not be used by any third party. Third parties should obtain independent advice and no responsibility or liability is accepted by Trinity Engineering and Consulting for the use of this document by a third party.

	REVISION/CHECKING HISTORY							
Rev	Author	Approved for Issue						
No.		Name	Name Signature					
1	RMR	Rudd Rankine	RRC.	15/12/17				

DISTRIBUTION		REVISION									
	0	1	2	3	4	5	6	7	8	9	10
DSC	1	1									
TEC Library	1	1									



Table of Contents

1.	Introduction	3
2.	Background	3
3.	PLANNING ASSUMPTIONS	4
5.	WATER SUPPLY TRUNK INFRASTRUCTURE	24
6.	WASTEWATER SUPPLY TRUNK INFRASTRUCTURE	27
7.	PUBLIC PARKS AND LAND FOR COMMUNITY FACILITIES TRUNK INFRASTRUCTURE	31
AΡ	PENDIX A: EXTRINSIC MATERIAL	

Attachment 5.1.12 221 of 406



1. Introduction

This report has been prepared for the Douglas Shire Council (DSC) as part of the preparation of the Local Government Infrastructure Plan (LGIP). The aims of the report are to outline the key assumptions and methodology used to prepare the LGIP. These include the

- Planning Assumptions including population growth and demand projections) which have been used to determine and underpin the need and growth of the trunk infrastructure networks.
- Costs
- Network Planning
- Financial Modelling

Council's trunk infrastructure networks covered by the LGIP include: -

- Water,
- Waste water (Sewerage)
- Stormwater
- Transport (Roads and Paths),
- Public Parks and Community Land.

2. Background

Under the Sustainable Planning Act 2009 (SPA) all local governments were required to include a Priority Infrastructure Plan (PIP) in their planning schemes. Councils are now required to include a Local Government Infrastructure Plan (LGIP) instead of a PIP.

A grace period, starting from the commencement of the new framework and ending 30 June 2016, has been included in the legislation, during which time a local government planning scheme is not required to include a Local Government Infrastructure Plan (LGIP).

From 1 July 2016 onwards, local governments will be required to include an LGIP in their planning scheme if they intend to levy infrastructure charges or impose conditions for trunk infrastructure. In accordance with section 997 of SPA, a local government may apply to the Planning Minister for an extension of the date to a date not later than 30 June 2018, to adopt an LGIP.

Local governments that do not intend to levy infrastructure charges or impose conditions for trunk infrastructure do not need to include an LGIP in their planning schemes.

Councils are required to include an LGIP in their planning Schemes if they wish to levy infrastructure charges or impose conditions for trunk infrastructure.

The LGIP's must be in place by June 30, 2018.



3. PLANNING ASSUMPTIONS

3.1 Overview

The planning assumptions for the Douglas Shire Council (DSC) have been used to develop a GIS based population and demand model. The model uses a Geographic Information System (GIS) based platform to apply planning constraints to individual sites (lots). The resulting model, based 'bottom up' approach, then spatially allocates region wide population projections from the Population model the the digital cadastre database (DCDB). The same process is undertaken to assign demand (residential and non-residential to the same DCDB. This spatial allocation of population and demands enables the aggregation of data in any defined spatial area (i.e. "Catchments").

The assumptions and methodologies on which the P&D model have created have been outlined in the planning assumptions below.

3.2 Population Modelling

3.2.1 Population modelling of resident and non-resident (Tourist) population

To ensure that infrastructure networks accommodate the demand generated by both resident and visitor populations. The various accommodation types identified have been assessed and a "maximum overnight tourist capacity" determined. These results have been trended over the 2011 to Ultimate cohorts using expected population growth rate as a surrogate for determining projected tourists over time, as outlined below.

The Queensland Government Population projections – 2015 edition (Medium Series)¹ were used as a basis for determining the resident population projections for the Periods 2011 to 2031 across Douglas Shire. The proportion of non-resident population was determined as a percentage of the resident population from Census data for 2011, and 2016 (Av.= 50%). The total number of non-residents was then determined by multiplying the medium series resident population projections by the average non-resident population (~50%)

The total population = resident population + non-resident population

The totals for 2036 and Ultimate (approximately 2061) have been extrapolated from the totals provided in the previous periods. For the purposes of the DSC-LGIP the ultimate scenario of the Douglas Shire Planning Scheme is considered to occur in around 2061. Table 1 below identifies the Population and Tourist Figures used as a basis for creating the Population Spatial Model.

Table 1 - Population projections (resident and non-resident) from Government data sources vs. Predicted Modelling outcome

Column 1		Existing and projected population					
Projection area	Base date 2011	2016	2021	2026	2031	Ultimate Development	
Resident Population ²	11,816	11,911	12,528	13,255	14,020	18,088	
Non-Resident ³	5,364	6,490	6,257	6,620	7,002	9,034	
TOTAL Population (from Source)	15,546	17,591	18,785	19,875	21,022	27,122	
% Visitors	45.4 ⁴ %	54.5% ⁵	49.9%6	49.9%	49.9%	49.9%	
DSC Population and Demand Model	18,150	18,829	19,519	20,190	20,918	24,774	

¹ Queensland Government population projections, 2015 edition; Australian Bureau of Statistics, Regional population growth, Australia, 2013-14, (Cat no. 3218.0).

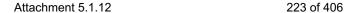
² Medium Series (ABS, 2015)

³2011& 2016 -> Non-resident values from ABS Census data.
2021-Ultimate -> extrapolated from calculated (average non-resident population (%) * Resident Population)

⁴ Calculated from 2011 Census Data

⁵ Calculated from 2016 Census Data

⁶ Calculated Average (%) from 2011 & 2016 Census Data



	A	1
4	4	11
1	1	-

Column 1		Existing and projected population				
Projection area	Base date 2011	2016	2021	2026	2031	Ultimate Development
Variance	17%	7%	4%	2%	-0.5%	-8%

3.2.1.1 Population Model Validation

The initial Population and Demand (P&D) model was developed by Integran Pty Ltd for the Douglas Shire Council's (DRAFT) Priority Infrastructure Plan. This was undertaken in 2009. This model used to provide a base from which modification were made to reflect any zonal changes in the new planning scheme. A back analysis showed negligible different in planning or demand modelling (0.7%), which is within the margins of error. Similarly, the outputs from the P&D Model were assessed against the Population data for DSC LGA collected by the Australian Bureau of Statistics as part of the Census data. Interestingly the P&D model appears to be increased in accuracy through time.

- In 2011: the total predicted population (resident + non-resident) was 18,154 vs 15,546 (QGSO resident population + ABS- Population Visitor). The P&D model is over-predicting by +17%)
- In 2016: the total predicted population (resident + non-resident) was 18,841 vs 17,591 (model is over-predicting by +7%).
- Ultimate (2061): the total predicted population (resident + non-resident) is 24,891 vs 27,122 (model is under-predicting by +8%).

This is considered to demonstrate a high degree of correlation, and confidence between the P&D model and actual the population as reported through the government data sources.

3.2.2 Current Population

Existing population has been allocated on a lot by lot basis to all residential land uses (obtained from Council's rates database) based on dwelling types and expected household sizes across the LGA. A summary of the average household sizes used are provided in Table 2. For example, a property identified as containing a house is assigned a 2021 population of 2.43. This allocation has been aligned with the population projections and refined through comparison with the ABS Census Data.

Table 2 - Average Household size

Dwelling Type	Household Density (Persons/ Occupied Dwelling)					
	2011	2016	2021	2026	DSC_P&D model 2031- Ultimate	
Separate House	2.59	2.51	2.43	2.35	2.32	
Semi, Detached, Flats	2.22	2.15	2.08	2.01	1.98	
Other	1.90	1.84	1.78	1.72	1.70	
All	2.36	2.29	2.21	2.14	2.06	

Sources: DSC_ Population & Demand Model_2010, CRC_Population and Demand Model_2010, ABS 2011, 2016 PEP Profiles

¹ Refer to DSC_POP&DEMAND_MODEL_TEC_180824.xls

Attachment 5.1.12 224 of 406



The development potential of the Douglas Shire Planning Scheme was determined through an analysis of the Planning Scheme Intents (Constraints and Densities), consideration of approved development applications and understanding of the realistic development trends throughout the Shire.

On determination of this "realistic" development capacity of the former Douglas Shire, the expected growth for each five-year period beyond 2011 was allocated across potential growth areas of the Shire (i.e. locations yet to reach the 'ultimate' realistic capacity), with areas of greater capacity absorbing the largest amount of growth.

Residential populations were allocated across all residential Planning Areas, while tourist growth was only allocated to only those Planning Areas likely to accommodate tourist population (e.g. Tourist & Residential Area, Residential 2 and Commercial). This information has been used in the development of the spatial model. The spatial model has been verified through a comparative assessment against ABS Population data within Census boundaries (SA2 level).

3.2.3 Ultimate Population

The ultimate development potential of Douglas Shire Council's Planning Scheme was determined through the following process:

Developable area was determined through an analysis of the Digital Cadastre Database (DCDB), with consideration given to the following factors:

- Currently approved development applications;
- Application of constraints which may limit affected development including natural and planning constraints. The natural constraints considered as part of this assessment were:
 - Water resources;
 - Flood hazards:
 - Biodiversity, waterways & conservation areas

The planning considerations and constraints used as part of this assessment included:

- Locality
- Planning Areas
- Maximum plot Ratios
- Special Precincts
- Min/ Max Plot Ratios
- Maximum height / number of storeys
- Min Lot Size

The degree to which constraints affected development has been determined using council officer's experience in dealing with proposed developments affected by the relevant constraints. The ultimate projected population for the Douglas Shire Council LGA is shown in Table 1.

Source: \\ 4_Extrinsic Material\ Supporting_Information|0_Planning_2_Demand_Assumptions\ 170912_demand_assumption_zoneuse

3.2.4 Interim Population Allocation

Growth between current and ultimate population has been with consideration given to factors affecting propensity to develop. These include:

- Location with respect to the Priority Infrastructure Area (PIA) (i.e. accommodates 10-15 years growth);
 - Within the 10 15 year PIA period, 95% of the growth is allocated to within the PIA boundary and the balance 5% of population growth was assumed to be satisfied outside the PIA boundary. This was considered a reasonable assumption, given the presence of Residential, Rural Residential and isolated areas of Tourist Accommodation zoned land outside the PIA.
- Availability and proximity to infrastructure services;
- Likelihood and location of infill development within the PIA.
- Potential staging of development for areas based on direction from Council's planning department;
- Existence of Planning Approvals.
 - It is noted that there is currently sufficient developable land with current development approvals over the land to take up the expected growth within the PIA period. This is to be monitored over time, and through the required revisions of LGIP.

Attachment 5.1.12 225 of 406



Residential populations were allocated across all residential Planning Areas, while tourist growth was only allocated to only those Planning Areas likely to accommodate tourist population. The population growth between the base year and ultimate are defined in Table SC3.1.1 of Council's DRAFT LGIP (Section 4 of the Planning Scheme).

3.3 Infrastructure Demand

The DSC_P&D Demand Model as developed by Integran Pty Ltd, expresses residential and non-residential demand as *Equivalent Demand Units (EDUs)*. An equivalent demand unit represents the level of demand generated by a single detached residential dwelling on a standard allotment (401m2 to 900m2). One (1) EDU is equivalent to the demand generated by a single detached residential dwelling for the respective trunk infrastructure network as follows:

- Water Supply 1 EDU = 2.59 EPs (with average daily consumption per EP as per Council's development manual);
- Wastewater 1 EDU = 2.59 EPs (with average dry weather flow per EP as per Council's development manual)
- Transport (Roads) 1 EDU = 10 vehicle trips.

3.3.1 Existing Demand

3.3.1.1 Residential

The level of demand in the base year (2011) is determined by dividing the 2011 population by the average household size (2.59).

3.3.1.2 Non-Residential.

The Non-residential demand (EDU's) has been determined using the developable area calculations that were determined through the Population Modelling Process. EDU rates per Hectare for each landuse / Planning Area were multiplied by the developable area in hectares. Where more detailed information was available or has been determined for planning locations, the (Table 3).

Table 3- Broad-Hectare Demand used in the determination of the DSC_Population and Demand Model : Residential Demands (Integran Pty Ltd 2011)

Column 1	Column 2		Column 4				
		Demai	nd generatio	n rate for a t	runk infrastructu	re network	
Area classification	LGIP development type	Water supply network	Sewerage network	Transport network	Parks and land for community facilities network	Stormwater network	
		(EDU/dev ha)	(EDU/dev ha)	(EDU/ha)	(ha/1000 persons)	(imp ha/dev ha)	
	Tourist and Residential	88.8	88.8	300	4.8	0.8	
	Commercial	25.9	25.9	400	4.8	0.9	
BROAD	Industry	31.1	31.1	200	4.8	0.9	
HECTARE	RE Community	25.9	25.9	120	4.8	0.2	
	Conservation	3.9	3.9	10	4.8	0.0	

When Converting the DSC_D&P Model the base units of measurements used in the LGIP, the rates as outlined in Section 3.3 for the Water, Waste Water (Sewerage) and Transport Networks. Table 4 Summarise the results.





Table 4- Broad-Hectare Demand used in the determination of the DSC_Population and Demand Model :Non - Residential Demands (Integran Pty Ltd 2011) (LGIP)

Column 1	Column 2	Column 4						
		Demand generation rate for a trunk infrastructure network						
Area classification	LGIP development type	Water supply network	Sewerage network	Transport network	Parks and land for community facilities network	Stormwater network		
		(EDU/dev ha)	(EDU/dev ha)	(EDU/ha)	(ha/1000 persons)	(imp ha/dev ha)		
	Tourist and Residential	88.8	88.8	300	4.8	0.8		
	Commercial	25.9	25.9	400	4.8	0.9		
BROAD	Industry	31.1	31.1	200	4.8	0.9		
HECTARE	Community and Recreational Facilities	25.9	25.9	120	4.8	0.2		
	Conservation	3.9	3.9	10	4.8	0.0		

To ensure the existing non-residential demand was not overestimated a number of assumptions were applied based on the size of the parcel and whether or not the existing landuse is consistent with the underlying land use intent. These include:-

- For all (occupied and vacant) lots < 1 Hectare assumes 100% Developed
- For occupied lots > 1 Hectare assumes 100% Developed
- For vacant lots > 1 Hectare assumes 0% Developed
- For demand generating uses on all Community and Recreation Facilities Lots Assumes 100%
- For Vacant or zero demand generating uses on all Community and Recreation Facilities Lots –
 Assumes 0%

3.3.2 Future Demand

3.3.2.1 Residential

The level of demand from the base year (2011) to ultimate was determined by dividing the population by the average household size for each corresponding time period. (Population – refer to Table 1, Average household density (people/house) – refer Table 2).

3.3.2.2 Non-Residential

The Non-residential demand (EDU's) has been determined using the developable area calculations (in HA) determined through the Population Modelling Process and applying these against the EDU rates per Hectare for each land use / Planning Area. (Refer Table 3 & 4). The rate of non-residential demand growth is linked (through the population modelling) to residential demand growth.

3.4 Employment

3.4.1 Base Year (2011) Employment

The total labour force for the Douglas Shire Council was determined using data produced by the QGSO and calculated using the formula's used in the PIPRICS Calculator¹. Using the following assumptions

- Labour Force Containment Rate = 74.3%
- Resident Employment Rate (Participation Rate) = 81.4%

¹ Queensland Government, Department of Infrastructure and Planning (2008), Behind the PIPRICS Calculator – A detailed methodology for calculating assumptions for a Priority Infrastructure Plan (PIP) using a Regulated Infrastructure Charges Schedule (RICS), 18 June 2008



Job Containment Rate

= 44.4%

The PIPRICS formulas then calculate employment based on population growth. Whilst this is considered a reasonable approach, the limitations as to the absolute nature of the assumptions noted above are obvious. But for matters of estimation, they are considered reasonable.

The low job-containment rate (44.4%) reflects the limited major employment generators in the DSC region, and the requirement of the labour force to seek work opportunities in the nearby communities (notably Cairns).

3.4.2 Future Employment

The projected labour force requirements for the future year cohorts are based on the Population growth estimated through the DSC_Population and Demand Model, using the same methodology as outlined in Section 3.4.1.

3.4.3 Floor Space Requirements

The total floor space requirements for growth in the non-residential sector are based on assumptions about space (m2) per employee by employment sector. These are shown in Table 5.

Table 5 - Floor space requirement for employees in different sectors.

Employment Sector	Floor Space (m² / employee)
Retail	30
Commercial	30
Industrial	150
Community Services	25

The calculation of the current and future floor space requirements relies on assumptions about the proportion of employment sector growth. This has been linked to the planning scheme zoning in accordance with the assumptions made in Table 6.

Table 6 - Employment by Planning Area

	Employment Sector					
Planning Area	Industry	Retail	Commercial	Community Services	Other 1 (incl. home based, mining, construction, agriculture)	
Industrial Zoned Land	100%	3%	0%	0%	0%	
Commercial Zoned Land	0%	92.5%	97.5%	2.5%	0%	
Community and Recreational Facilities	0%	5%	2.5%	97.5%	0%	
TOTAL	100%	100%	100%	100%	0%	

The floor space requirements have been calculated for the base year and forecast for the future periods, based on the assumption outlined above. The results have been summarised in Table 22.3 of the LGIP and repeated below for ease of reference.

-

¹ It is assumed that there is no "Demand" for additional non-residential floor space for the Employment Sector of "Other". This is because "Other" category/ sector is considered likely to be made up of business such as home based businesses, mining, construction and agriculture. The permanent non-residential floor space generation from these activities are considered to negligible and have assumed to be 0 in the modelling.

Attachment 5.1.12 228 of 406



Table 7 Residential dwellings and non-residential floor space assumptions summary

Column 1	Column 2 Assumptions Base date (2011) 2016 2021 2026 2031 Ultimate development					
Description						
Residential dwellings ¹	7779	8,330	8,925	9,549	10,161	14,328
Non-residential floor space (m2 GFA) ²	136,860	143,690	150,670	157,290	164,205	205,157

3.5 Priority Infrastructure Area Capacity

3.5.1 General

The appropriateness of the PIA to ensure an appropriate supply of serviced land was assessed after giving due consideration to

- i) Factors effecting the location and scale of development
- ii) Assessments of the propensity and intensity of infill development

3.5.2 Priority Infrastructure Area: Residential Capacity

The PIA is assessed as having sufficient capacity to accommodate an additional 1770 dwellings which equates to an additional population of approximately 3741 persons in the 15-year time horizon of the PIA. The projected Population growth from the population model during the same period is 3,289 people. This demonstrates that the PIA is sufficient to contain the Population³ growth up to an including 2026. The PIA is expected to reach its residential capacity between 2026 and 2031 – which are inside the acceptable limits identified within the LGIP guidelines.

3.5.3 Integrated Resort Development Scheme

The integrated resort development scheme (IRDS) has been <u>excluded</u> from the PIA for the DSC LGIP, as it falls outside of the control and jurisdiction of the DSC planning scheme. However, the demands from the IRDS have been included in the demand calculations and infrastructure network planning, as the development will cater for additional residents and non-residents over the expected timeline of the LGIP (15 years).

3.5.4 Priority Infrastructure Area: Non-Residential Capacity

The projected future demand for non-residential floor space within the PIA over the life of the LGIP (20 years) is approximately 18,430m2. Assuming a development yield of approximately 55%, this equates to a land area of approximately 33.5Ha.

The available non-residential land within the PIA is shown in Table 8. The PIA provides sufficient non-residential land for the planned duration of the LGIP. Indeed, the available Industrial land included in the PIA is more than the projected demand. This is considered reasonable given a large portion of the vacant existing industrial land is already serviced by all infrastructure networks. The under-utilised industrial land refers to infill development or re-development of existing sites to a higher scale or intensity.

¹ Total number of residential dwellings

² Total non-residential floor space (m2 GFA)

³ Population Growth inclusive of residents and tourist/ non-residents





Table 8: Non-Residential land summary (within the PIA)

		Development Potential ¹			
Planning Scheme Zoning	Total Area (Ha)	Vacant (Ha)	Under- utilised (Ha)	Total (Ha)	
Commercial	64	3.75	6	9.75	
Industry	76	14.25	12.75	27	
Community and Recreational Facilities	594	17.25	3.75	21	
Conservation	210,393	0	0	0	
TOTAL	211,127	35.25	22.5	57.75	

3.6 Cost Assumptions

Unit rates used within the schedule of works (SoW) model are included using the information deemed most accurate and appropriate, which was available at the time the document was drafted. For asset costing purposes within the SoW model, all unit rates have been indexed to the base year of the model, 2011, using a rate of 3% (Charges Escalation Rate) unless noted otherwise.

The unit rates used for determining network values have been derived using raw unit rate data (asset cost only). The 'replacement cost' of an asset, will also include on-costs such as: - investigations, environmental/approvals management, detail design, and project management etc. These on-costs referred to as Project Owners Costs. In the Schedule of Works (SoW) Model. The owners' costs considered to be an essential element of determining the current replacement costs (as referenced in the Statutory Guideline 03/14.

It is noted that the Evans and Peck report referenced within the State SoW model user manual identifies that many Council's already include on costs within their unit rates. DSC has separated these costs to provide additional transparency and ease of understanding throughout the LGIP documents.

3.6.1 Water and Wastewater (Sewerage) Unit Rates

<u>Active Assets:</u> Current replacement cost for active assets (pump stations, treatment plants etc.) have been provided as project costs. The costs were sourced from Council asset registers (where possible). Where this information was not available the costs were sourced from the Douglas Shire Council's Draft PIP Document. The Source of these cost were from DSC's asset register or where not – available from Cairns Regional Council's asset register.

Notes

- Cairns Regional Council and Douglas Shire Council were amalgamated at the time of the preparation of the DRAFT Priority Infrastructure Plans
- 2) Adopting costs for infrastructure based for Douglas Shire Council assets based on Cairns Regional Council Assets Register costs is considered conservative, as there are additional costs for transport and logistics typically required to develop infrastructure in Douglas Shire Council.

Passive Assets: Unit rates for passive assets have been derived from the 30th June 2017 Valuation Report.

This report builds a cost for water supply and sewer assets which is based on:

- Raw unit rate cost; plus
 - Application of various cost modifiers which affect construction cost, including:
 - Existing Development Type (Rural, Urban, High Density Urban, CBD)
 - Soil Type (Good soil, poor soil, sand, acid sulfate soil, soft rock, hard rock)
 - Pipe depth

¹ From DSC Population – Demand Model (Integran 2011)

Attachment 5.1.12 230 of 406



- Pipe diameter

Spatially dependant cost modifiers (development/soil type) have been identified within a GIS system using boundaries provided with the abovementioned Cardno report.

3.6.2 Cost Modifiers

In addition to the unit rates for the assets identified above, a number of cost multipliers have been applied (as necessary) across the water and waste water networks. These have been summarised in Table 9.

Table 9 – Cost Modifiers applicable to water and waste water networks.

Cost Modifier	Valuation	Applies to	Adjustment	Comment
	Component		Factor	
On-cost Allowance	Works	All Existing and Future Assets	20%	Project Owners costs include on-costs such as:- investigations, environmental/ approvals management, detail design, and project management etc.
Time based contingency	Works	All Future Assets	0%-30%	0% 0-5yrs 10% 5-10yrs 15% 10-15yrs 20% 15-20yrs 30% 20+ yrs
Construction Cost Multipliers	Works	All Future Assets	95%-215% (Water) 96% - 292% (Wastewater)	Cost modifiers which affect construction cost, including: - Existing Development Type (Rural, Urban, High Density Urban, CBD) - Soil Type (Good soil, poor soil, sand, acid sulphate soil, soft rock, hard rock) - Pipe depth - Pipe diameter Currently insufficient data to justify any variation from 1.0 for any assets. All sewerage reticulation was assumed to be <3m deep – as per the requirements of the FNQROC development manual. All works were assumed to occur in Urban/ Good Soil 1.5-3.0m deep (i.e. Multiplier of 1.0) All future LGIP works do NOT have any Construction Cost Multipliers applied.
Spatial Multipliers (Spatially Dependent Cost Multipliers for Catchments)	Works	All Future Assets	1.0	Currently insufficient data to justify any variation from 1.0. (Possible in future revisions of LGIP). No Spatial Multipliers Applied to LGIP works

Attachment 5.1.12 231 of 406



3.6.3 Stormwater Unit Rates

The stormwater network has not been included in the DSC LGIP at this point in time

3.6.4 Cost Modifiers

N/A – as above.

3.6.5 Transport Unit Rates

Transport costs have been applied as project costs identified from Council's Capital Works program and detailed planning documents where possible. Where such costs do not exist, unit rates have been applied as detailed below.

Roads

Road unit rates have been determined using the mean unit rates from the following sources (minus on cost allowance and indexed to 2011 using CPI¹:

- Council's draft Priority Infrastructure Plan (PIP) unit rates (2010)
- Council unit rates:
 - # 646604-v6-Unit Rate Book for Council Assets;
 - #854357-v4B-Unit_Rates_for_Traffic_Management_Plans
- Cost Estimates for Concept Design of Wharf Street Intersection

A summary of the unit rate costs for the Road and Paths has been provided in Table 6.

Table 10 - Unit Rates used for Road and Paths

Road Hierarchy Standard	Rate/m or unit		
Sub Arterial	\$4,538.48		
Urban Major Collector	\$3,053.99		
Urban Minor Collector	\$2,750.88		
Rural Major Collector	\$1,006.10		
Rural Minor Collector	\$723.70		
Access Street	\$2,430.14		
Path Hierarchy Standard	Rate/m or unit		
Concrete_Path	\$166.50		
Asphalt_Path	\$193.39		
Brick Paver_Path	\$365.51		
Gravel_Path	\$32.16		

Land

Rates for land acquisitions of road corridors has been based on the 2006 Rushton Valuations and De. A copy of which has been included in the extrinsic material. A summary of the land costs used for the various locations has been summarised in Table 7. The Generic Land Cost for was set at \$20/m2. The reason that the unit rate appears low relative to the land rate in Table 7 is that there is limited land resumptions required in any of the built-up (and consequentially more expensive areas). The \$20/m2 is nominally half way between the typical cost of land in Rural Areas and the average of the Coastal Suburbs, Villages and Townships (excluding Newell Beach)

¹ CPI_Index_ABS_640101



Table 11 - Land Values

Location	Cost of Land (per m2)
Port Douglas and Environs	\$ 304.43
Mossman and Environs	\$ 19.75
Coastal Suburbs, Villages and Townships (Cooya Beach)	\$ 32.53
Coastal Suburbs, Villages and Townships (Daintree Township)	\$ 16.58
Coastal Suburbs, Villages and Townships (Newell Beach)	\$ 335.62 ¹
Coastal Suburbs, Villages and Townships (Wangetti)	\$ 48.42
Coastal Suburbs, Villages and Townships (Wonga Beach)	\$ 48.33
Rural Areas and Rural Settlements	\$ 2.64
Settlement Areas North of the Daintree River	\$ 2.27
World Heritage Areas and Environs	\$ 0.17
Coastal Suburbs, Villages and Townships	\$ 51.35

Paths

The unit rates used for assessing the trunk paths network has been adjusted to the base date rates Council identified in:

#646604-v6-Unit_Rate_Book_for_Council_Assets;

It has been assumed all paths were 1.5m wide. This is considered a reasonable approach to account for the varying widths of the existing paths, which have been constructed to various widths and standards and the future trunk network, which will have paths constructed at the width defined by the standards at the time. (Typically, 2-3m).

Structures

The unit rates used for intersections and structures are outlined in Table 7. A detailed breakdown of how these unit rates have been determined has been provided in the following spreadsheets which have been provided as part of the LGIP extrinsic material.

- #646604-v6-Unit_Rate_Book_for_Council_Assets;
- #854357-v4B-Unit_Rates_for_Traffic_Management_Plans;
- #2432888-v1-(8_26_20)_DTMR__Bridge_Info__Summary

In the case where culverts have been used. The costs have been taken from #646604-v6-Unit_Rate_Book_for_Council_Assets and indexed up to the base date (June 2011) using the CPI index, and summarised in Table 8.

Table 13 Intersections and Structures - Unit Rates

Asset Description	Rate/m or unit
Intersection: Signalised	\$ 568,412.97
Intersection: Roundabout - 1 lane minor	\$ 271,424.73
Structures: Bridges (/m2)	\$ 6,180.99

3.6.6 Cost Modifiers

The cost modifiers used for the transport network have been summarised in Table 9.

¹ Appears as an Out-of-line valuation. This is considered to be due to an over-representation of high value lots/ sales during the period of the assessment.





Table 14: Summary of Cost Modifiers applied to the Douglas Shire Council Transport Network.

Cost Modifier	Valuation Component	Applies to	Adjustment Factor	Comment
On-cost Allowance	Works	All Existing and Future Assets	20%	Project Owners costs include on-costs such as: - investigations, environmental/ approvals management, detail design, and project management etc.
Time based contingency	Works	All Future Assets	0%-30%	0% 0-5yrs 10% 5-10yrs 15% 10-15yrs 20% 15-20yrs 30% ¹ 20+ yrs
Spatial Multipliers (Spatially Dependent Cost Multipliers for Catchments)	Works	All Future Assets	1.4	A Multiplier of 1.0 applies to all NEW Construction Works South of the Daintree River.
Construction Cost Multipliers	Works	All Future Assets	1.5	A cost multiplier of 1.5 for applies for all UPGRADE ² works South of the Daintree River.
			2.0	A cost multiplier of 2.0 for applies for all UPGRADE ³ works North of the Daintree River. ⁴

3.6.7 Public Parks and Community Land Unit Rates

The cost of the existing and future park embellishment costs have not been included in the 'Schedule of Works' using a unit rate approach. They have been included on as discrete planning Costs. These costs have been identified through a back analysis of Council's Asset Register for parks.

The Cost of land used in the calculations of public parks has been based on the Council's Valuation by Rushton's (2006) and adopted in Council's Previous Priority Infrastructure Plan (2010). Indexation has not been applied between the period of 2010 and 2011, as that values adopted in 2010 were still considered reasonable for 2011. The analysis used to determine the land values, necessarily made some assumptions and approximations to determine fair-value for the land. The variation of index values between 2010 and 2011 is considered less than the margin of error associated with the assumptions made in the original analysis. Therefore, the same figures have been adopted for the land values for the 2011 base date. A summary of the costs of land values used for the parks of various hierarchies and locations have been summarised in Table 10. The value of park land dedicated to Council (pre-1990) are not eligible to form part of the cost base and have been set to \$0. Where Council have nominated a specific value for the Future parkland, these values have been included in the Schedule of Works model as discrete items also.

¹ From Department of Transport and Main Roads (TMR), Project Cost Estimating Manual, Seventh Edition, Published July 2017 (pg 45)

² The increased cost of undertaking reconstruction works of roads in a built-up environment (brownfield development), involves additional complexities - existing services, traffic management, approvals management etc.

³ The increased cost of undertaking reconstruction works of roads in a built-up environment (brownfield development), involves additional complexities - existing services, traffic management, approvals management etc.

⁴ The cost multiplier of 2.0 was assigned after discussion with Council Officers, Transport Engineers and Consultants. It was noted that this is slightly lower than the result of multiplying the LOCATIONAL MULTIPLIER (1.4) x UPGRADE MULTIPLIER = 2.1 (for works north of the Daintree river. This was considered a reasonable estimate due to reduced traffic loads (and traffic management) and simpler (lower order) road hierarchies.

Attachment 5.1.12 234 of 406



Table 15. Land Cost - Public Parks

Landuse type	Cost of Land (per m2)
Local Recreation Park Port Douglas and Environs (LRP-PD)	\$ 60.00
Local Recreation Park Mossman and Environs (LRP-M)	\$ 20.00
Local Recreation Park Coastal Suburbs, Villages and Townships (Cooya Beach) (LRP-CB)	\$ 20.00
Local Recreation Park Coastal Suburbs, Villages and Townships (Newell Beach) (LRP-NB)	\$ 20.00
Local Recreation Park Coastal Suburbs, Villages and Townships (Wonga Beach) (LRP-WB)	\$ 20.00
Local Recreation Park Coastal Suburbs, Villages and Townships (Wangetti) (LRP-W)	\$ 20.00
Local Recreation Park Coastal Suburbs, Villages and Townships (Daintree Township) (LRP-DT)	\$ 20.00
Local Recreation Park Rural Areas and Rural Settlements (LRP-RS)	\$ 10.00
Local Recreation Park Settlement Areas North of the Daintree River (LRP-ND)	\$ 5.00
Local Recreation Park World Heritage Areas and Environs (LRP-WHA)	\$ 5.00
District Recreation Park Port Douglas and Environs (DRP-PD)	\$ 60.00
District Recreation Park Mossman and Environs (DRP-M)	\$ 10.00
District Recreation Park Coastal Suburbs, Villages and Townships (Cooya Beach) (DRP-CB)	\$ 10.00
District Recreation Park Coastal Suburbs, Villages and Townships (Newell Beach) (DRP-NB)	\$ 10.00
District Recreation Park Coastal Suburbs, Villages and Townships (Wonga Beach) (DRP-WB)	\$ 10.00
District Recreation Park Coastal Suburbs, Villages and Townships (Wangetti) (DRP-W)	\$ 10.00
District Recreation Park Coastal Suburbs, Villages and Townships (Daintree Township) (DRP-DT)	\$ 10.00
District Recreation Park Rural Areas and Rural Settlements (DRP-RS)	\$ 5.00
District Recreation Park Settlement Areas North of the Daintree River (DRP-ND)	\$ 2.50
District Recreation Park World Heritage Areas and Environs (DRP-WHA)	\$ 2.50
District Sports Park Port Douglas and Environs (DSP-PD)	\$ 60.00
District Sports Park Mossman and Environs (DSP-M)	\$ 10.00
District Sports Park Coastal Suburbs, Villages and Townships (Cooya Beach) (DSP-CB)	\$ 10.00
District Sports Park Coastal Suburbs, Villages and Townships (Newell Beach) (DSP-NB)	\$ 10.00
District Sports Park Coastal Suburbs, Villages and Townships (Wonga Beach) (DSP-WB)	\$ 10.00
District Sports Park Coastal Suburbs, Villages and Townships (Wangetti) (DSP-W)	\$ 10.00
District Sports Park Coastal Suburbs, Villages and Townships (Daintree Township) (DSP-DT)	\$ 10.00
District Sports Park Rural Areas and Rural Settlements (DSP-RS)	\$ 5.00



District Sports Park Settlement Areas North of the Daintree River (DSP-ND)	\$ 2.50
District Sports Park World Heritage Areas and Environs (DSP-WHA)	\$ 2.50
Local Government Wide Recreation Park Port Douglas and Environs (LGWRP-PD)	\$ 30.00
Local Government Wide Recreation Park Mossman and Environs (LGWRP-M)	\$ 10.00
Local Government Wide Recreation Park Coastal Suburbs, Villages and Townships (Cooya Beach) (LGWRP-CB)	\$ 10.00
Local Government Wide Recreation Park Coastal Suburbs, Villages and Townships (Newell Beach) (LGWRP-NB)	\$ 10.00
Local Government Wide Recreation Park Coastal Suburbs, Villages and Townships (Wonga Beach) (LGWRP-WB)	\$ 10.00
Local Government Wide Recreation Park Coastal Suburbs, Villages and Townships (Wangetti) (LGWRP-W)	\$ 10.00
Local Government Wide Recreation Park Coastal Suburbs, Villages and Townships (Daintree Township) (LGWRP-DT)	\$ 10.00
Local Government Wide Recreation Park Rural Areas and Rural Settlements (LGWRP-RS)	\$ 5.00
Local Government Wide Recreation Park Settlement Areas North of the Daintree River (LGWRP-ND)	\$ 2.50
Local Government Wide Recreation Park World Heritage Areas and Environs (LGWRP-WHA)	\$ 2.50
Local Government Wide Sports Park Port Douglas and Environs (LGWSP-PD)	\$ 30.00
Local Government Wide Sports Park Mossman and Environs (LGWSP-M)	\$ 10.00
Local Government Wide Sports Park Coastal Suburbs, Villages and Townships (Cooya Beach) (LGWSP-CB)	\$ 10.00
Local Government Wide Sports Park Coastal Suburbs, Villages and Townships (Newell Beach) (LGWSP-NB)	\$ 10.00
Local Government Wide Sports Park Coastal Suburbs, Villages and Townships (Wonga Beach) (LGWSP-WB)	\$ 10.00
Local Government Wide Sports Park Coastal Suburbs, Villages and Townships (Wangetti) (LGWSP-W)	\$ 10.00
Local Government Wide Sports Park Coastal Suburbs, Villages and Townships (Daintree Township) (LGWSP-DT)	\$ 10.00
Local Government Wide Sports Park Rural Areas and Rural Settlements (LGWSP-RS)	\$ 5.00
Local Government Wide Sports Park Settlement Areas North of the Daintree River (LGWSP-ND)	\$ 2.50
Local Government Wide Sports Park World Heritage Areas and Environs (LGWSP-WHA)	\$ 2.50
Community Facilities Port Douglas and Environs (CF-PD)	\$ 30.00
Community Facilities Mossman and Environs (CF-M)	\$ 10.00
Community Facilities Coastal Suburbs, Villages and Townships (Cooya Beach) (CF-CB)	\$ 10.00
Community Facilities Coastal Suburbs, Villages and Townships (Newell Beach) (CF-NB)	\$ 10.00
Community Facilities Coastal Suburbs, Villages and Townships (Wonga Beach) (CF-WB)	\$ 10.00
Community Facilities Coastal Suburbs, Villages and Townships (Wangetti) (CF-W)	\$ 10.00





Community Facilities Coastal Suburbs, Villages and Townships (Daintree Township) (CF-DT)	\$ 10.00
Community Facilities Rural Areas and Rural Settlements (CF-RS)	\$ 5.00
Community Facilities Settlement Areas North of the Daintree River (CF-ND)	\$ 2.50
Community Facilities World Heritage Areas and Environs (CF-WHA)	\$ 2.50

3.6.8 Cost Modifiers

The cost modifiers relevant to the Parks in the Douglas Shire Council LGA have been summarised in Table 11.

Table 16. Cost Modifier - Public Parks

Cost Modifier	Valuation Component	Applies to	Adjustment Factor	Comment
On-cost Allowance	Works	All Existing and Future Assets	20%	Project Owners costs include on-costs such as: - investigations, environmental/ approvals management, detail design, and project management etc.
Time based contingency	Works	All Future Assets	0%-30%	0% 0-5yrs 10% 5-10yrs 15% 10-15yrs 20% 15-20yrs 30% 20+ yrs
Spatial Multipliers (Spatially Dependent Cost Multipliers for Catchments)	Works	All Future Assets	1.0	A Multiplier of 1.0 applies to all Parks in the DSC Shire. There is insufficient evidence to justify SPATIAL multipliers above 1.0.
Construction Cost Multipliers	Works	All Future Assets	1.5	

3.6.9 Network Planning

Network planning for the Douglas Shire Council LGIP has in some cases been undertaken beyond the 10-15 year timeframe of the PIA. To provide a basis to produce a Discounted Cashflow Model of the future expenditures required under the LGIP for the life of the Planning Scheme, a realistic ultimate development of the Planning Scheme has been nominated at or around 2061.

Network planning for the various networks has been based on the identification of future growth characteristics of the region. These have been considered in consultation with Council's planners and engineers, and informed by various studies and reports prepared for to address the same. The studies and reports used to

- 1) Identify the desired standards of service (DSS);
- Inform the Plans for Trunk Infrastructure (PFTI); and Schedule of Works (SoW)
- 3) Determine priority, timing and costs for the recommended works

The list of reports and studies are listed as the extrinsic material, within the LGIP, and can be provided to the public at request. Copies have also been provided as part of this report and review as part of the Extrinsic Material to the LGIP.

The various planning timelines for the infrastructure networks are defined in **Table 4.5.1** of the LGIP. These are all more than the 10-15 minimum timeline as specified by SG03/14. The networks have all been developed in accordance with the Desired Standards of Service (DSS) as defined in **Tables 22.4 – 22.12** in the LGIP (Section 4 of the Planning Scheme. A copy of the extrinsic material referenced in the LGIP has been reproduced in Appendix A.

Attachment 5.1.12 237 of 406



The methodology used for the modelling of each of the networks has been outlined in Section 3.8 to 3.11.

Attachment 5.1.12 238 of 406



4. TRANSPORT INFRASTRUCTURE NETWORK

4.1.1 Overview

This section provides an overview of the key assumptions and methodology used to determine infrastructure charges for the Transport Trunk Infrastructure Network for the Douglas Shire Council's Local Government Infrastructure Plans (LGIP).

4.1.2 Existing Assets

4.1.2.1 Source of Trunk Assets

- Existing trunk road assets were obtained from Douglas Shire Council GIS asset mapping, Council information and policies and previous infrastructure priority infrastructure planning documentation (PIP 2006). The adopted networks were reviewed by Council to confirm the trunk roads and hierarchies.
- Length of road assets based on mapped length from GIS asset mapping.
- Council identified the relevant road hierarchy based on the relevant standards of service that are outlined in the Council's engineering guidelines. These standards are defined by the Far North Region of Council's (FNQROC) development manual
- Council roads are identified as 'catchment' assets in the charges model.
- Roundabouts on trunk roads were also included.
- There are currently no existing signalised intersections.
- Structures (including bridges, culverts, and ferry landings) were also included where they coincided with the trunk network. These were sourced from GIS mapping and refined through review by Council and TMR officers.

4.1.3 Current Replacement Costs

4.1.3.1 Council Roads

- Unit rates for Council roads were determined and applied to the mapped length of each road segment.
- The unit rates were derived for each road hierarchy based on the design cross-sections of the respective hierarchies. Refer to file "#854357-v4B-Unit_Rates_for_Traffic_Management_Plans_(including_annual_service_costs)" for further detailed breakdown of unit rate inclusions for the respective hierarchies. The unit rates in the spreadsheet are expressed in June 2009 dollars (unit rates determined for former Cairns City area applied to former Douglas Shire area where hierarchies aligned) and have been indexed to the base date (2011) using CPI, for use in the LGIP Schedule of Works (SoW) model.
- For existing roads, the relevant unit rate was applied to determine the asset value. The costs for "minor upgrade works" that may be required on existing roads is accounted for in current replacement cost for the relevant Hierarchy / Type.
- A multiplier of 1.4 was used to increase the value of assets located north of the Daintree River to account for the additional costs of having to supply materials and labour without a bridge crossing to roads north of the river.
- The multiplier has been used by Council for Asset Valuations in this region and reviewed by the Queensland Audit Office.
- For upgrading roads existing in a brownfield setting (i.e. existing development). A multiplier of:
 - 1.5 was used South of the Daintree River and
 - o 2.0 North of the Daintree River.
- Previous funding received for the Bitumen sealing of Cape Tribulation Road was removed from the existing catchment asset establishment costs refer to report #2571770 "Bitumen Sealing the Cape Tribulation Road Through World Heritage Listed Property". The funding packages identified in this report were indexed up from June 1992 to June 2011 using CPI.

4.1.3.2 Council Intersections

- All existing roundabouts have been valued at \$ 271,425 (in 2011 dollars) based on a 1 lane minor roundabout. The cost allows for:
 - Large vegetated roundabout >20m diameter;
 - Site preparation;

Attachment 5.1.12 239 of 406



- Maintenance kerb around perimeter;
- Landscaping and vegetation.
- Priority Intersections (which consist of signs and line markings) were assumed to be included within the road cross section unit rates.

4.1.3.3 Council Structures

Bridges

- All existing bridges have been valued by applying a unit rate of \$6,181/sqm to the area of the bridge.
 This allows for
 - An average bridge deck cost of \$4,415/ m2; and a 40% allowance for the cost of the bridge abutments and approaches (in 2011 dollars).
 - The average cost of bridge deck was obtained from CRC unit rate schedule "#646604-v6-Unit_Rate_Book_for_Council_Assets.xls". This was determined by a back-analysis of bridge cost data from within the Cairns Regional Council Region, which was supplemented (and supported) by bridge asset data from the Department of Transport and Main Roads (TMR).

Source: #2432888-v1-(8_26_20)_DTMR_Bridge_Info_Summary

Culverts

Costs of culverts have been sourced from Council's asset database
 Source: #646604-v6-Unit_Rate_Book_for_Council_Assets;

4.1.4 Future Assets

4.1.4.1 Source of Trunk Assets

- The scope of future (upgrades or new) road infrastructure including location, hierarchy and timing was based on:
 - o previous infrastructure planning undertaken for the adoption of the Douglas Shire Council Priority Infrastructure Plan (PIP).
 - Council officers through hard copy mark ups (and then digitised into GIS) including several reviews and updates.
 - o Collaboration with Engineers/ Officers from the Department of Transport and Main Roads.
- The only future State Controlled infrastructure included is the signalisation of the Captain Cook Highway and Port Douglas Road intersection. However, this and other longer term strategic upgrade projects have been identified however these are well outside of the 15-year horizon of the LGIP.

4.1.5 Current Replacement Costs

The unit rates for future road assets were derived on the same basis as for existing roads.

- Costs of upgrading existing roads are based on 150% of the relevant ultimate road hierarchy / type
 unit rates to allow for additional costs such as interim works and traffic management (to enable the
 road to continue to function during construction works), and the costs associated with service
 relocations and reforming an existing road formation (as oppose to commencing the works from fresh);
- Future (new) roads costs were based on 100% of the unit rate applicable to the relevant planned road hierarchy / type with a land component added where necessary to allow for land acquisitions to accommodate the new road.
- Rates for land acquisitions of road corridors has been based on the 2006 Rushton Valuations and De. A copy of which has been included in the extrinsic material. A summary of the land costs used for the various developed population centres were based on determination of average unimproved capital values (UCVs) for residential land in the suburb that the future road was situated. Refer to files "Craiglie Land Values.xls", "Wonga Land Values.xls", and "Mossman Land Values.xls". The land values that were adopted for use in the LGIP are summarised in Table 7.
- No subsidies were considered for future assets as no subsidies can be guaranteed.

4.1.6 Method of Cost Apportionment

4.1.6.1 Charging Catchments

Attachment 5.1.12 240 of 406



 Two (2) Transport Trunk Infrastructure Charges Catchments have been identified based on land north and south of the Daintree River.

4.1.6.2 Allocation of Infrastructure

- Both existing and future assets have been allocated to the corresponding charging catchment to which they ultimately provide a function.
- The 'Y' symbol in the schedule of works tables indicates the catchment that each asset item has been apportioned to.

4.1.7 Determination of Demand

The demand model used for the determination of the required trunk infrastructure was based on the Population and Demand model as outlined in Section 3.3 The model was then modified to include:

- Changes to the traffic generation resulting from changes to land uses through either development or town planning land use changes;
- Modification of the demand units from 'Equivalent Demand Units' (EDU1) to the trips per day as required by the State's LGIP template.
 - For traffic 1 EDU = 10 trips/day

The methodology used in the original development of the Douglas Shire Council's (DRAFT) Priority Infrastructure Plan (PIP) identifies demand for existing and future uses (residential and non-residential) in terms of equivalent demand units or "EDU"s. The conversion from the EDU base unit to the trips/ day base demand unit (as required by the State) is done by simply multiplying the EDU demand result by 10 (1 EDU = 10 trips/day).

4.1.7.1 Existing

Residential Uses

 All Residential land uses contained within the existing service catchment (on any zoned land) were identified and an Equivalent Demand Unit (EDU) calculated based on the intensity of the use (e.g. Single Unit Dwelling = 1 EDU, Multi-Unit Dwelling = 0.75 EDUs per unit)

Non-Residential Uses

- All Non-Residential Zoned land contained within a Charging catchment was identified and an Equivalent Demand Unit (EDU) calculated based on the EDU / Hectare for that particular Zone (e.g. Industry = 20 EDU/ha, Commercial = 28 EDU/ ha).
- Land excluded from the above process included: Non-Residential Land that contained an existing Residential Use (in which case the relevant residential demand was applied) and all vacant englobo Non-Residential Land (i.e. greater than 1 ha in size).

4.1.7.2 Future

Residential Zoned Land

- The Population Modelling previously performed for the Priority Infrastructure Plan provided a population projection for all residential zoned land on a lot by lot basis using the Planning Scheme intents to determine the expected yields.
 - The projected populations have been validated against the Census data for the Port Douglas Local Government Area for 2006, 2011 and 2016, which show reasonable correlations, and provide a level of confidence in the model accuracy of the model for the determination of infrastructure demands.
- This population was determined based on the average household size (persons per household) for a standard residential dwelling at the relevant demand year.

Non-Residential Zoned L	and
-------------------------	-----

¹ 1 EDU is defined as the demand created by a single detached dwelling or standard "house" lot.

Attachment 5.1.12 241 of 406



- All Non-Residential Zoned land contained within a Charging catchment was identified and an Equivalent Demand Unit (EDU) calculated based on the EDU / Hectare for that particular Zone (e.g. Industry = 20 EDU/ha, Commercial = 28 EDU/ ha).
- Land excluded from the above process included: Non-Residential Land that contained an existing Residential Use (in which case the relevant residential demand was applied) and all vacant englobo Non-Residential Land (i.e. greater than 1 ha in size).

Attachment 5.1.12 242 of 406



5. WATER SUPPLY TRUNK INFRASTRUCTURE

5.1 Overview

This section provides an overview of the key assumptions and methodology used to determine infrastructure charges for the Water Supply Trunk Infrastructure Network for the Douglas Shire Council's Local Government Infrastructure Plans (LGIP).

5.2 Existing Assets

5.2.1 Source of Trunk Assets

- Existing Water Supply active and passive GIS Mapping has been obtained from:
 - AutoCAD drawings, where provided by Council, design plans or 'as constructed' plans, Council records, or estimated using aerial photographs.
 - These plans were refined through reviews by Council Officers.
- Water main lengths were based upon the mapped length using GIS to calculate.
- Other asset attributes such as pipe diameters were also obtained from design plans and 'as constructed' plans and/or Council Officer knowledge.
- All Active Assets providing a function to the trunk mains have been considered trunk assets.

5.2.2 Current Replacement Costs

- Unit rates (\$/m) have been applied for all passive assets based on rates provided by Cairns Water. These rates were derived from unit rate estimates provided by Cardno (refer to file: 4_Extrinsic_Material\1_Supporting_Information\1_Water Supply\4_Costs\DSC_LGIP\SC Unit Rates Costs 170804)
 - Where On-costs have been applied in the valuation of the unit rates, these have been removed to provide a RAW Cost for the infrastructure items. The RAW cost has then been indexed from the valuation date to the base date (2011) in accordance with the CPI.
- Where rates were missing for some pipe diameters, a rate was adopted from the closest equivalent size/type main, where provided.
- Active Assets: Where possible costs have been derived from Council's asset register and file "Client water calculations 09_08_07.xls). The asset register identifies costs in June 2007 dollars these were indexed to June 2011 (base year) using Consumer Price Index (Brisbane, All Groups).
- All Existing Water Treatment Plants have been subject to the 40% subsidy available through State Government Grants and has been accounted for in determining the establishment cost of Existing Infrastructure.

5.2.3 Future Assets

5.2.3.1 Source of Trunk Assets

- Scope, location, and timings of future infrastructure and upgrades to existing infrastructure were obtained from:
 - Water Supply Planning Report MWH, 2009 refer to report "Division 10 (Former Douglas Shire) Water Supply Planning Report A1162900" prepared by MWH, 2009;
 - Associated GIS mapping of network augmentations;
- Officer knowledge and review and refinement of the above to separate trunk and non-trunk asset augmentations.
- Water main lengths were based upon the mapped length using GIS to calculate.

5.2.4 Current Replacement Costs

- All Future Passive Assets costs have been based on the Unit rates provided by Cairns Water (refer to existing Asset section above for more detail).
- Future Active Asset costs have been identified from the 10-year Capital Works Programming, and expressed June 2011 dollars.
- No subsidies were considered for future assets as no subsidies can be guaranteed for future works.

Attachment 5.1.12 243 of 406



5.2.5 Method of Cost Apportionment

5.2.5.1 Charging Catchments

- Water Supply Charging Catchments have been based on Council's Water Service Areas, and expanded to included future serviced urban land.
- Four (4) Water Supply Trunk Infrastructure Charges Catchments have been identified.
- Assets have been allocated based on the WTP (Charges Catchment) they serve.

5.2.6 Allocation of Infrastructure

- Both existing and future assets have been allocated to the corresponding charging catchment to which they ultimately provide a function, in accordance with the "average"
- cost apportionment methodology.
- The 'Y' symbol in the schedule of works tables indicates the catchment that each asset item has been apportioned to.
- "Regional Assets' (which are typically identified as 'Active assets') like raw water intakes and treatment plants have been apportioned to multiple catchments based on the shared use of the infrastructure across multiple catchments.
- Passive assets (water pipe reticulation network) have been allocated to the catchment in which they
 occur.

5.2.7 Determination of Demand

The demand model used for the determination of the required trunk infrastructure was based on the Population and Demand model as outlined in Section 3.3

The model was then modified to include:

- Changes to the demand resulting from changes to land uses through recent development or town planning land use changes;
- Modification of the base demand unit from 'Equivalent Demand Units' (EDU1) to "Equivalent Persons" as required by the State's LGIP template.
 - For Water Demand: 1 EDU = 2.59 Equivalent Persons

5.2.7.1 Existing

Existing Demand was calculated on the following basis:

Residential Uses

All Residential land uses contained within the existing service catchment (on any zoned land) were identified and an Equivalent Demand Unit (EDU) calculated based on the intensity of the use (e.g. Single Unit Dwelling = 1 EDU, Multi-Unit Dwelling = 0.75 EDUs per unit)

Non-Residential Uses

All Non-Residential Zoned land contained within a Charging catchment was identified and an Equivalent Demand Unit (EDU) calculated based on the EDU / Hectare for that Zone (e.g. Industry = 20 EDU/ha, Commercial = 28 EDU/ ha).

Land excluded from the above process included: Non-Residential Land that contained an existing Residential Use (in which case the relevant residential demand was applied) and all vacant englobo Non-Residential Land (i.e. greater than 1 ha in size).

5.2.7.2 Future

Future Demand was calculated on the following basis:

Residential Zoned Land

The Population Modelling previously performed for the Priority Infrastructure Plan provided a population projection for all residential zoned land on a lot by lot basis using the Planning Scheme intents to determine the expected yields.

¹ 1 EDU is defined as the demand created by a single detached dwelling or standard "house" lot.

Attachment 5.1.12 244 of 406



- The projected populations have been validated against the Census data for the Port Douglas Local Government Area for 2006, 2011 and 2016. These show a reasonable correlation and provide an improved level of confidence in the model to determine demands and infrastructure needs.
- This population was determined based on the average household size (persons per household) for a standard residential dwelling at the relevant and ultimate demand year.

Non-Residential Zoned Land

- The EDU / ha rates were applied to the area of all Non-residential zoned land to determine the ultimate EDUs.
- This demand was trended over the interim periods using the Population contained in each catchment as a proxy for demand.

Attachment 5.1.12 245 of 406



6. WASTEWATER SUPPLY TRUNK INFRASTRUCTURE

6.1 Overview

This section provides an overview of the key assumptions and methodology used to determine infrastructure charges for the Waste Water Trunk Infrastructure Network for the Douglas Shire Council's Local Government Infrastructure Plans (LGIP).

6.1.1 Existing Assets

6.1.1.1 Source of Trunk Assets

- Existing Water Supply active and passive GIS Mapping has been obtained from:
 - Autocad drawings, where provided by Council, design plans or 'as constructed' plans, Council records, or estimated using aerial photographs.
 - These plans were refined through reviews by Council Officers.
- Trunk pipe lengths were based upon the mapped length using GIS to calculate.
- Other asset attributes such as pipe diameters were also obtained from design plans and 'as constructed' plans and/or Council Officer knowledge.
- All Active Assets providing a function to the trunk mains have been considered trunk assets.

6.1.2 Current Replacement Costs

- Unit rates (\$/m) have been applied to all passive assets based on:
- For gravity mains and rising mains rates provided by Cairns Water. These rates were derived from unit rate estimates provided by Cardno
 - (refer to file:4_Extrinsic_Material\1_Supporting_Information\1_Water Supply\4_Costs\DSC_LGIP\ DSC Unit Rates Costs 170804).
- The relevant rates for 'Good soil' and average depth of 1.5-3.0m were used. An allowance of 20% 'on costs' are included in these unit rates.
 - o For Effluent Rising mains applied the same rate as rising main for the relevant pipe diameters.
 - For Low Pressure mains rates obtained from Appendix E of the Mossman WWTP Upgrade
 Supplementary Planning Report (April 2009) for polyethylene pipes.
 - Where On-costs have been applied in the valuation of the unit rates, these have been removed to provide a RAW Cost for the infrastructure items. The RAW cost has then been indexed from the valuation date to the base date (2011) in accordance with the CPI.
- Where rates were missing for some pipe diameters, a rate was adopted from the closest equivalent size/type main.
- Active Asset costs have been derived from Council's asset register (Refer to file "Client sewer calculations 09_08_07.xls). The asset register identifies costs in June 2007 dollars. These were indexed to June 2011 (base year) using the Consumer Price Index
- All Existing Wastewater Treatment Plants have been subject to the 40% subsidy available through State Government Grants and has been accounted for in determining the establishment cost of Existing Infrastructure.

6.1.3 Future Assets

6.1.3.1 Source of Trunk Assets

- Scope, location, and timings of future infrastructure and upgrades to existing infrastructure were obtained from:
 - Maunsell (2007) Mossman Sewerage Treatment Plant Planning Report;
 - o Maunsell (2009) Mossman WWTP Interim Upgrade Report;
 - Maunsell (2009) Mossman WWTP Supplementary Report:
 - Maunsell (2009) Mossman WWTP Supplementary Report Addendum;
 - Associated mapping of network augmentations (digitised from hard copy plans to GIS);
 - Officer knowledge and review and refinement of the above to finalise the trunk network.
- Wastewater main lengths were based upon the mapped length using GIS to calculate.

Attachment 5.1.12 246 of 406



6.1.3.2 Current Replacement Costs

- All Future Passive Assets costs have been based on the Unit rates provided by Cairns Water and the Mossman WWTP Upgrade Supplementary Planning Report (refer to existing Asset section above for more detail).
- The source of Future Active Asset costs is identified in the following table. Only those items which are identified for the construction within the life of the LGIP have been identified in the Schedule of Works.

Table 17. Current Replacement Costs for the Waste Water Supply Trunk Network.

Asset ID	Description	Asset Value*	Cost Source
NOTE01	Establishment, As Constructed Drawings, Survey, Geotechnical, Design and Contract Admin Costs	\$133,959.05	Attachment A of Maunsell (2009) Mossman WWTP Supplementary Report – Addendum – Opinion of Probable Costs for Northern Recycled Water Scheme (indexed from June 2009 to June 2011 with CPI)
NOTE02	Establishment, As Constructed Drawings, Survey, Geotechnical, Design and Contract Admin Costs	\$241,125.12	Attachment A of Maunsell (2009) Mossman WWTP Supplementary Report – Addendum – Opinion of Probable Costs for Southern Recycled Water Scheme (indexed from June 2009 to June 2011 with CPI)
SPSF01	Andreassen Road Pump Station	\$375,084.17	Applied Same Cost Assumption as per Appendix I of the Maunsell (2009) Mossman WWTP Supplementary Report - Addendum - Opinion of Probable Costs for Southern Recycled Water Scheme
SPSF02	Marlin Drive Pump Station	\$396,517.62	Appendix I of the Maunsell (2009) Mossman WWTP Supplementary Report - Wonga Beach PS
SPSF03	Miallo Pump Station	\$396,517.62	Appendix I of the Maunsell (2009) Mossman WWTP Supplementary Report - Wonga Beach Intermediate PS
SPSF04	Newell Road Pump Station	\$375,084.17	Appendix I of the Maunsell (2009) Mossman WWTP Supplementary Report - Mossman GC PS
SPSF05	Rankin Street Pump Station	\$375,084.17	Appendix I of the Maunsell (2009) Mossman WWTP Supplementary Report - Newell Beach PS
SPSF06	Mossman WWTP Reuse Pump Station - Stage 2	\$375,084.17	Attachment A of Maunsell (2009) Mossman WWTP Supplementary Report – Addendum – Opinion of Probable Costs for Southern Recycled Water Scheme (indexed from June 2009 to June 2011 with CPI)
SPSF07	Mossman Golf Course Reuse Pump Station	\$375,084.17	Attachment A of Maunsell (2009) Mossman WWTP Supplementary Report – Addendum – Opinion of Probable Costs for Northern Recycled Water Scheme (indexed from June 2009 to June 2011 with CPI)





SPSF08	Existing Mossman WWTP PS Upgrade	\$375,084.17	Appendix I of the Maunsell (2009) Mossman WWTP Supplementary Report - Mossman WWTP PS
SSFF01	Mossman Golf Club Reuse Storage Facility - 3ML	\$321,500.55	Attachment A of Maunsell (2009) Mossman WWTP Supplementary Report – Addendum – Opinion of Probable Costs for Southern Recycled Water Scheme (indexed from June 2009 to June 2011 with CPI)
SSFF02	Mossman WWTP reuse Storage Facility - 1 ML	\$1,071,668.89	Attachment A of Maunsell (2009) Mossman WWTP Supplementary Report – Addendum – Opinion of Probable Costs for Southern Recycled Water Scheme (indexed from June 2009 to June 2011 with CPI)
STPF01	Interim Mossman WWTP Upgrade - Regulate flows	\$251,791.16	CRC Email dated 11/5/10 - indexed from March 2010 to June 2011 with CPI
STPF02	Interim Mossman WWTP Upgrade - Alternative sludge infrastructure	\$952,495.43	CRC Email dated 11/5/10 - indexed from March 2010 to June 2011 with CPI
STPF03	Mossman WWTP Upgrade Stage 1 including Effluent reuse PS Stage 1	\$15,188,046.43	Attachment A of Maunsell (2009) Mossman WWTP Supplementary Report – Addendum – Opinion of Probable Costs for Southern Recycled Water Scheme (indexed from June 2009 to June 2011 with CPI)

No subsidies were considered for future assets as no subsidies can be guaranteed for future works.

6.1.4 Method of Cost Apportionment

6.1.4.1 Charging Catchments

- Waste water Charging Catchments have been based on Council's Wastewater Service Areas, and expanded to included future serviced urban land.
- Five (5) Wastewater Trunk Infrastructure Charges Catchments have been identified.
- Assets have been allocated based on the WTP (Charges Catchment) they serve.

6.1.4.2 Allocation of Infrastructure

- Both existing and future assets have been allocated to the corresponding charging catchment to which they ultimately provide a function, in accordance with the "average" cost apportionment methodology.
- The 'Y' symbol in the schedule of works tables indicates the catchment that each asset item has been apportioned to.
- 'Regional Assets' such as the Mossman WWTP have been apportioned to multiple catchments based on the shared use of the infrastructure across multiple catchments.

6.1.5 Determination of Demand

The demand model used for the determination of the required trunk infrastructure was based on the Population and Demand model as outlined in Section 3.3. The model was then modified to include:

 Changes to the demand resulting from changes to land uses through recent development or town planning land use changes;



- Modification of the base demand unit from 'Equivalent Demand Units' (EDU1) to "Equivalent Persons" as required by the State's LGIP template.
 - For Wastewater Demand: 1 EDU = 2.59 Equivalent Persons (As defined on Table 7.1 of Council's development Manual (FNQROC)

6.1.6 Existing

Existing Demand was calculated on the following basis:

Residential Uses

All Residential land uses contained within the existing service catchment (on any zoned land) were
identified and an Equivalent Demand Unit (EDU) calculated based on the intensity of the use (e.g.
Single Unit Dwelling = 1 EDU, Multi-Unit Dwelling = 0.5 EDUs per unit).

Non-Residential Uses

- All Non-Residential Zoned land contained within a Charging catchment was identified and an Equivalent Demand Unit (EDU) calculated based on the EDU / Hectare for that particular Zone (e.g. Industry = 20 EDU/ha, Commercial = 28 EDU/ ha).
- Land excluded from the above process included: Non-Residential Land that contained an existing Residential Use (in which case the relevant residential demand was applied) and all vacant englobo Non-Residential Land (i.e. greater than 1 ha in size).

6.1.7 Future

Future Demand was calculated on the following basis:

Residential Zoned Land

- The Population Modelling previously performed for the Priority Infrastructure Plan provided a population projection for all residential zoned land on a lot by lot basis using the Planning Scheme intents to determine the expected yields.
- The projected populations have been validated against the Census data for the Port Douglas Local Government Area for 2006, 2011 and 2016. These show a reasonable correlation and provide an improved level of confidence in the model to determine demands and infrastructure needs.
- This population was determined based on the average household size (persons per household) for a standard residential dwelling at the relevant and ultimate demand year.

Non-Residential Zoned Land

- The EDU / ha rates were applied to the area of all Non-residential zoned land to determine the ultimate EDUs.
- This demand was trended over the interim periods using the Population contained in each catchment as a proxy for demand.

DSC: LGIP – Assumptions and Methodology Creimaty Council Meeting - 5 June 2018

Page 30

¹ 1 EDU is defined as the demand created by a single detached dwelling or standard "house" lot.

Attachment 5.1.12 249 of 406



7. PUBLIC PARKS AND LAND FOR COMMUNITY FACILITIES TRUNK INFRASTRUCTURE

7.1 Overview

This section provides an overview of the key assumptions and methodology used to determine infrastructure charges for the Public Parks and Land for Community Facilities Trunk Infrastructure Network for the Douglas Shire Council's Local Government Infrastructure Plans (LGIP).

7.1.1 Existing Assets

7.1.1.1 Source of Trunk Assets

- Existing park (land) assets were obtained from Douglas Shire Council asset database and associate GIS asset mapping.
- Identification of land acquired prior to 1 January 1990 was subsequently identified by Strategic Leisure Pty Ltd (Parks Planning consultant) in consultation with Council Officers.
- Embellishments contained within existing parks were identified by former Douglas Shire officers based on a 'stocktake' of embellishments contained within – refer to 'Asset List' tab within the file "100518_DSC_Park_Embellishments_Table.xls"

7.1.1.2 Current Replacement Costs

- The value of existing parks (land component) acquired after 1 January 1990 was based on unimproved capital value (UCV) data extracted from PDS Live. The rates used varied depending on park hierarchy and locality – refer to file "100518_Land_Valuations_Pop_Model.xls" for data sources and summary land values.
- Land values for District Parks, Local Government Wide Parks and Community Facilities were generally based on 50% of the value of Local Recreation Parks for the relevant locality (the exception being for District Parks located in Port Douglas where land values are typically higher than other townships). This is based on typically larger parcels of land being required and hence an overall lower 'englobo' rate.
- The value of embellishments contained in existing parks (whether or not the park was acquired after 1 January 1990) was based on a combination of Council asset data and external data from other Queensland Local Governments refer to Background Data and Legend tab within excel file "100518 DSC Park Embellishments Table.xls".
- The Council asset data was in the form of unit rates refer to file "#854357-v4B-Unit_Rates_for_Traffic_Management_Plans.xls". All unit rates were multiplied by the total number of assets identified for each park. A total embellishment cost for each park could then be determined.
- No contingencies or 'on costs' were included in the existing asset valuations.
- No subsidies were removed for existing assets, as no external subsidies were provided.

7.1.2 Future Assets

7.1.2.1 Source of Trunk Assets

- The scope of future parks (and upgrades to existing parks) is based on the Cairns Regional Council (Former Douglas Shire) Public Parks and Land for Community Purposes Trunk Infrastructure Planning Study (May 2010) and associated GIS data prepared by Strategic Leisure Group Pty Ltd.
- The scope of future embellishments was based on a 'palette' approach whereby a standard 'suite' of embellishments are to be provided in each future park (and park upgrade) based on Council standards of service for each park hierarchy as specified in Table "100518_Final Parks v2 (post1990+new) _Embellishments Future June 2006 dollars".
- Where parks are being refurbished, the existing assets are also included in the charge, as it is assumed that these assets/embellishments will be retained.



7.1.2.2 Current Replacement Costs

- The value of future parks (land component) was determined using the same rates as per the existing parks.
- The value of future park embellishments (and future embellishments in existing parks) was based on the costs identified by Strategic Leisure using the 'palette' of standard embellishments for different park hierarchies refer to file "100518_Final Parks v2 (post1990+new) _Embellishments Future June 2006 dollars". The rates identified by Strategic Leisure were in March 2010 dollars these were indexed to June 2011 from March 2010 using CPI.

7.1.3 Method of Cost Apportionment

7.1.3.1 Charging Catchments

The draft Douglas LGIP has nine (9) Public Parks and Land for Community Facilities charges catchments. These catchments have been derived from the planning scheme Planning Localities.

7.1.3.2 Allocation of Infrastructure

- Allocation of parks to catchments was undertaken by Strategic Leisure and is reflected in the infrastructure schedules on the following basis: -
 - Natural 'barriers' form the boundaries of the Rural Area catchments (e.g. Mossman River, Daintree River, Mowbray River).
 - All local recreation parks were allocated to the relevant catchment that it is completely contained within.
 - Some district parks were allocated to individual catchments, however a significant proportion were allocated across more than catchment to reflect their shared use across the local government area.
 - Local government wide parks were allocated across all catchments.

7.1.4 Determination of Demand

The demand model used for the determination of the required trunk infrastructure was based on the Population and Demand model as outlined in Section 3.3. The model was then modified to include:

- Demand based on residential demand only.
- Changes to the demand resulting from changes to land uses through recent development or town planning land use changes;
- Modification of the base demand unit from 'Equivalent Demand Units' (EDU1) to "Equivalent Persons" as required by the State's LGIP template.
 - o For "PPCL Demand" the population in each of the sections were used.

¹ 1 EDU is defined as the demand created by a single detached dwelling or standard "house" lot.

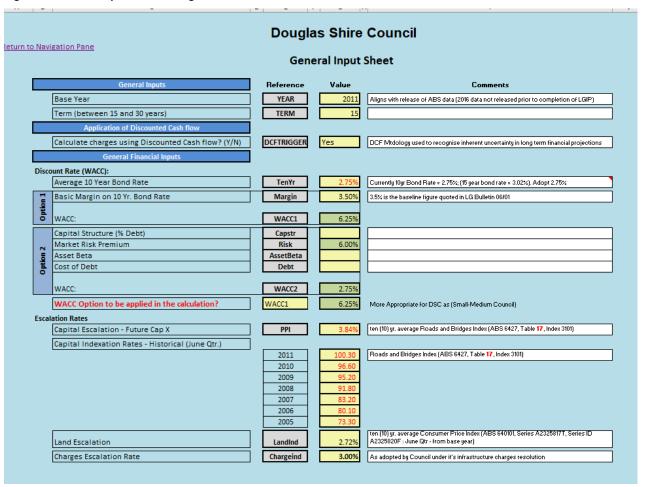
Attachment 5.1.12 251 of 406



7.2 Financial Modelling Assumption

The financial modelling assumptions that have been adopted for use in the DSC LGIP have been shown in the Figure below. The information used to support the assumed rates have been included in the Supporting Material in the Extrinsic Material.

Figure 1: Financial Inputs in the Douglas Shire Council LGIP





APPENDIX A Extrinsic Material

Attachment 5.1.12 253 of 406



Extrinsic material

The below table identifies the documents that assist in the interpretation of the local government infrastructure plan and are extrinsic material under the *Statutory Instruments Act 1992*.

Column 1	Column 2	Column 3	
Title of document	Date	Author	
Planning			
Douglas Shire Council Planning Scheme	2006	Douglas Shire Council & Cairns Regional Council	
Proposed Douglas Shire Council Planning	2016	Douglas Shire Council	
CRC Asset Registers and Data (During	Various	Cairns Regional Council	
amalgamation	(circa 2009)		
DSC Asset Registers and Data	2016 (part)	Douglas Shire Council	
QGSO Estimated Residential Population and	2013	QGSO	
Population Forecasts by LGA, 2011 – 2036			
FNQROC Development Manual – Issue 6	2014	FNQROC	
Review of Owners Project Cost and	2009	Evans and Peck	
Contingency Allowances, Evans and Peck			
Douglas Shire Council (DRAFT) Priority	2010	Integran – Infrastructure	
Infrastructure Plan		Management	
Water			
DNRM Planning guidelines for water supply and	2014	Department of Energy and	
sewerage		Water Supply	
NHMRC Australian Drinking Water Guidelines, V6	2011	Australian Government,	
		National Health and Medical ResearchCouncil	
FNQROC Development Manual – Issue 6	2014	FNQROC	
Works Design Guidelines D6 – Water Reticulation,			
WSAA Codes,	2011	Water Services Association of Australia.	
Planning Guidelines for Water and Sewage,	2014	QLD Department of Energy and Water Supply	
Mossman WWTP Interim Upgrade Report	2009	Maunsell Australia	
Mossman WWTP Supplementary Report		Pty Ltd	
Mossman WWTP Supplementary Report –		(Now AECOM)	
Addendum			
Division 10 (Former Douglas Shire) Water Supplying Report	2009	MWH (now Stantec)	
Division 10 (Former Douglas Shire) Water Supplying Report	2010	MWH (now Stantec)	
Water and Wastewater As Constructed Plans	various	Douglas Shire Council	



Water and Sewerage Asset Valuations Report 2006 2016 (part) Douglas Shire Council – Total Management Plan Douglas Shire Council – Water Treatment Plants – Planning Report Douglas Shire Council – Water Treatment Plants – Planning Report Plants – Planning Report Far North Queensland (DRAFT) Regional Water Supply Strategy Douglas Shire Council (DRAFT) Priority Infrastructure Plan (Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report Waste Water DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment Planning Report Planning Planning Planning Report Planning Planning Planning Planning Report Planning Planning Planning Planning Planning Report Planning Planning Planning Planning Planning Report Planning Planni	Water Supply and Sewerage Asset Register and al Works Programs	2017	Douglas Shire Council
Douglas Shire Council – Total Management Plan Douglas Shire Council – Water Treatment Plants – Planning Report Douglas Shire Council – Water Treatment Plants – Planning Report Plants – Planning Report Far North Queensland (DRAFT) Regional Water Supply Strategy Douglas Shire Council (DRAFT) Priority Infrastructure Plan (Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report Maste Water DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment Maunsell (2007) Maunsell Australia	Water and Sewerage Asset Valuations Report	2006	Cardno
Douglas Shire Council – Water Treatment Plants – Planning Report Douglas Shire Council – Water Treatment Plants – Planning Report Far North Queensland (DRAFT) Regional Water Supply Strategy Douglas Shire Council (DRAFT) Priority Infrastructure Plan (Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Rex Creek Intake Council Rex Greek Intake Upgrade Options Assessment Report DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment Maunsell (2007) Maunsell Australia		2016 (part)	
Plants – Planning Report Douglas Shire Council – Water Treatment Plants – Planning Report Far North Queensland (DRAFT) Regional Water Supply Strategy Douglas Shire Council (DRAFT) Priority Infrastructure Plan (Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment Maunsell (2007) Maunsell Australia	Douglas Shire Council – Total Management Plan	2007	Douglas Shire Council
Douglas Shire Council – Water Treatment Plants – Planning Report Far North Queensland (DRAFT) Regional Water Supply Strategy Douglas Shire Council (DRAFT) Priority Infrastructure Plan (Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment Maunsell (2007) Maunsell Australia	Douglas Shire Council – Water Treatment	1999	GHD
Plants – Planning Report Far North Queensland (DRAFT) Regional Water Supply Strategy Douglas Shire Council (DRAFT) Priority Infrastructure Plan (Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2007 MILITARIAN Qld Government Department of Natural Resources and Water Infrastructure Management Infrastructure Management GHD Department of Energy and Water Supply MWH (now Stantec GHD Maunsell Australia	Plants – Planning Report		
Far North Queensland (DRAFT) Regional Water Supply Strategy Douglas Shire Council (DRAFT) Priority Infrastructure Plan (Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2007 Maunsell Australia	Douglas Shire Council – Water Treatment	1999	Kinhill Cameron
Supply Strategy Department of Natural Resources and Water Douglas Shire Council (DRAFT) Priority Infrastructure Plan (Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2010 Integran: Infrastructure Management GHD Department of Energy and Water Supply MWH (now Stantec GHD Maunsell Australia	Plants – Planning Report		McNamara
Douglas Shire Council (DRAFT) Priority Infrastructure Plan (Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council 2017 GHD Bepartment of Energy and Water Supply Mother Supply MWH (now Stantec Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment Maunsell (2007) Mossman Sewerage Treatment	Far North Queensland (DRAFT) Regional Water	2007	Qld Government
Priority Infrastructure Plan (Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report Waste Water DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment Infrastructure Management Infrastructure I	Supply Strategy		•
(Population and Demand Model) Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2017 GHD Department of Energy and Water Supply MWH (now Stantec GHD GHD Maunsell Australia	Douglas Shire Council (DRAFT)	2010	Integran :
Desired Standards of Service Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report Waste Water DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2017 GHD Department of Energy and Water Supply MWH (now Stantec GHD Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2007 Maunsell Australia	Priority Infrastructure Plan		Infrastructure Management
Douglas Shire Council Rex Creek Intake Upgrade Options Assessment Report Waste Water DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2017 GHD Department of Energy and Water Supply MWH (now Stantec GHD Maunsell Australia	(Population and Demand Model)		
Rex Creek Intake Upgrade Options Assessment Report Waste Water DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment Z017 Maunsell Australia	Desired Standards of Service		
Options Assessment Report Waste Water DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2017 Department of Energy and Water Supply MWH (now Stantec GHD Maunsell Australia	Douglas Shire Council	2017	GHD
Waste Water DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2014 Department of Energy and Water Supply MWH (now Stantec GHD Maunsell Australia	Rex Creek Intake Upgrade		
DNRM Planning guidelines for water supply and sewerage Mossman and Port Douglas WWTP – Catchments Sewerage Infrastructure – Growth Management Plan Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2014 Department of Energy and Water Supply MWH (now Stantec GHD Maunsell Australia	Options Assessment Report		
Sewerage Mossman and Port Douglas WWTP – Catchments 2013 Sewerage Infrastructure – Growth Management Plan Douglas Shire Council 2016 Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2007 Water Supply MWH (now Stantec GHD Maunsell Australia	Waste Water		
Mossman and Port Douglas WWTP – Catchments 2013 MWH Sewerage Infrastructure – Growth Management Plan (now Stantec Douglas Shire Council 2016 GHD Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2007 Maunsell Australia	DNRM Planning guidelines for water supply and	2014	
Sewerage Infrastructure – Growth Management Plan (now Stantec Douglas Shire Council 2016 GHD Mossman Water Security Planning Report Reliability Assessment 2007 Maunsell Australia	sewerage		vvater Supply
Douglas Shire Council Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2016 GHD Maunsell Australia	Mossman and Port Douglas WWTP – Catchments	2013	MWH
Mossman Water Security Planning Report Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2007 Maunsell Australia	Sewerage Infrastructure – Growth Management Plan		(now Stantec
Reliability Assessment Maunsell (2007) Mossman Sewerage Treatment 2007 Maunsell Australia	Douglas Shire Council	2016	GHD
Maunsell (2007) Mossman Sewerage Treatment 2007 Maunsell Australia	Mossman Water Security Planning Report		
` '	Reliability Assessment		
Planning Report Ptv Ltd	Maunsell (2007) Mossman Sewerage Treatment	2007	Maunsell Australia
· · · · · · · · · · · · · · · · ·	Planning Report		Pty Ltd
(Now AECOM)			(Now AECOM)
FNQROC Development Manual – Issue 6 2014 FNQROC	FNQROC Development Manual – Issue 6	2014	FNQROC
Works Design Guidelines D6 – Water Reticulation,	Works Design Guidelines D6 – Water Reticulation,		
WSAA Codes, 2011 Water Services Association of Australia.	WSAA Codes,	2011	
Planning Guidelines for Water and Sewage, 2014 QLD Department of Energy and Water Supply	Planning Guidelines for Water and Sewage,	2014	
Mossman WWTP Interim Upgrade Report 2009 Maunsell Australia	Mossman WWTP Interim Upgrade Report	2009	Maunsell Australia
Mossman WWTP Supplementary Report Pty Ltd	Mossman WWTP Supplementary Report		Pty Ltd
Mossman WWTP Supplementary Report – (Now AECOM)	Mossman WWTP Supplementary Report –		(Now AECOM)
Addendum	Addendum		



Division 10 (Former Douglas Shire) Water Supplying Report	2009	MWH (now Stantec)
Water and Wastewater As Constructed Plans	various	Douglas Shire Council
Water Supply and Sewerage Asset Register and al Works Programs	2017	Douglas Shire Council
Water and Sewerage Asset Valuations Report	2006	Cardno
	2016 (part)	
Douglas Shire Council (DRAFT)	2010	Integran :
Priority Infrastructure Plan		Infrastructure Management
(Population and Demand Model)		
Desired Standards of Service		
Stormwater		
Douglas Shire Council (DRAFT)	2010	Integran :
Priority Infrastructure Plan		Infrastructure Management
(Desired Standards of Service)		
FNQROC Development Manual – Issue 6	2014	FNQROC
Works Design Guidelines D4 – Stormwater		
Drainage		
Works Design Guidelines D5 – Stormwater		
Quality		
Transport		
·	2010	Integran :
Transport	2010	Integran : Infrastructure Management
Transport Douglas Shire Council (DRAFT)	2010	
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan		Infrastructure Management
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6		Infrastructure Management
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6 Works Design Guidelines		Infrastructure Management
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6 Works Design Guidelines D1 – Road Geometry		Infrastructure Management
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6 Works Design Guidelines D1 – Road Geometry D3 – Road Pavements		Infrastructure Management
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6 Works Design Guidelines D1 – Road Geometry D3 – Road Pavements D8 – Utilities		Infrastructure Management
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6 Works Design Guidelines D1 – Road Geometry D3 – Road Pavements D8 – Utilities D9 – Landscaping		Infrastructure Management
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6 Works Design Guidelines D1 – Road Geometry D3 – Road Pavements D8 – Utilities D9 – Landscaping FNQROC - Standard Drawings	2014	Infrastructure Management FNQROC
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6 Works Design Guidelines D1 – Road Geometry D3 – Road Pavements D8 – Utilities D9 – Landscaping FNQROC - Standard Drawings Douglas Shire Council Critical Bridge	2014	Infrastructure Management FNQROC
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6 Works Design Guidelines D1 – Road Geometry D3 – Road Pavements D8 – Utilities D9 – Landscaping FNQROC - Standard Drawings Douglas Shire Council Critical Bridge Information	2014	Infrastructure Management FNQROC Texcel
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6 Works Design Guidelines D1 – Road Geometry D3 – Road Pavements D8 – Utilities D9 – Landscaping FNQROC - Standard Drawings Douglas Shire Council Critical Bridge Information DSC GIS Asset Data sets	2014	Infrastructure Management FNQROC Texcel
Transport Douglas Shire Council (DRAFT) Priority Infrastructure Plan FNQROC Development Manual – Issue 6 Works Design Guidelines D1 – Road Geometry D3 – Road Pavements D8 – Utilities D9 – Landscaping FNQROC - Standard Drawings Douglas Shire Council Critical Bridge Information DSC GIS Asset Data sets Douglas Shire Council Report on Bitumen Sealing he Cape Tribulation Road Through World Heritage	2014	Infrastructure Management FNQROC Texcel

Attachment 5.1.12 256 of 406



Unit Rates for Transport Network Plans (#854357)	2009	Cairns Regional
one rates for transport network rians (#004007)		Council
	2009	Cairns Regional
DSC Bridges Strategy		Council / Douglas Regional Council (Amalgamated)
ODO Desistes of Bridges	2009	Cairns Regional
CRC Register of Bridges		Council
Bridge Data	various	Department of Transport and Main Roads
TMR Bridge Cost Information (#2432888)	2009	Department of Transport and Main Roads (TMR)
Junction Creek Pedestrian Bridge –	2017	GHD
Detailed Design and Costing Report		
LGIP Wharf St Intersection Preliminary Cost Schedule	2017	Trinity Engineering and Consulting
Far North Queensland	2016	Department of Transport and
Principal Cycle Network Plan		Main Roads (TMR)
Far North Queensland	2017	Department of Transport and
Principal Cycle Network Plan		Main Roads (TMR)
Addendum – Priority Route Maps		
Strategy Report (DRAFT)	2017	Point 8 (in association with
Port Douglas to Newell Beach Cycle Route		Zwart Transport Planning)
Public Parks and Land for Community Purposes P		
Douglas Shire Council (DRAFT)	2010	Integran :
Priority Infrastructure Plan		Infrastructure Management
Former Douglas Shire Public	2009	Strategic Leisure
Parks and Land for Community Purposes		
Trunk Infrastructure Planning Study		
FNQROC Development Manual – Issue 6	2014	FNQROC
Works Design Guidelines		
D9 – Landscaping		
FNQROC - Standard Drawings		
DSC GIS Asset Data sets	2016	Douglas Shire Council
PDSLive – Extract of Property Sale	2017	PDS Live
DSC Park Embellishment Data	2010	CRC

Attachment 5.1.12 257 of 406



Modelling		
Appendix C – Schedule of Works Model user manual	2016	DILGP
Queensland Department of Local Government and Planning, "Update on National Competition Policy Issues", Local Government Bulletin Ref 06/01; 6 th June 2001	June 2001	Queensland Department of Local Government and Planning

Attachment 5.1.13 258 of 406

Douglas Shire Council Anticipated Growth - Residential

Return to "Catchment Demand"

(Note: For users seeking to calculate costs over a thirty (30) year period, dwelling data needs to be entered in the detailed table (rows 66-114))

LGIP Table 3.1.4—Existing and projected residential dwellings (by census yr.)

	- Existing und pr	Existing and projected residential dwellings						
Projection area	LGIP development type	2011	2016	2021	2026	2031		
	Separate House	1,862	2,020	2,188	2,362	2,545		
Port Douglas and	Semi, Detached, Flats	1,831	1,987	2,154	2,328	2,509		
Environs	Other	626	679	737	796	852		
	Total	4,319	4,686	5,079	5,486	5,905		
	Separate House	287	310	337	366	391		
	Semi, Detached, Flats	282	305	332	361	386		
Mossman and Environs	Other	96	104	113	123	132		
	Total	665	719	782	850	909		
	Separate House	108	130	152	175	197		
Coastal Suburbs,	Semi, Detached, Flats	106	128	150	173	195		
Villages and Townships	Other	36	44	51	59	67		
(Cooya Beach)				31				
	Total	250	302	353	407	459		
	Separate House	15	16	18	21	23		
Coastal Suburbs, Villages and Townships (Daintree Township)	Semi, Detached, Flats Other	15	16	18	21	23		
		5	6	6	7	8		
	Total	35	38	42	49	53		
Coastal Suburbs,	Separate House	76	80	83	87	91		
Villages and Townships	Semi, Detached, Flats	75	78 27	82	85 29	89 30		
(Newell Beach)	Other Total	26 177		28				
		1//	185	193	201	209		
Coastal Suburbs,	Separate House Semi, Detached, Flats							
Villages and Townships	Other			<u></u>				
(Wangetti)	Total							
		129	144	160	177	193		
Coastal Suburbs,	Separate House Semi, Detached, Flats	127	142	158	174	190		
Villages and Townships	Other	43	49	54	60	66		
(Wonga Beach)	Total	299	335	372	411	448		
	Separate House	877	890	906	924	939		
Outside priority	Semi, Detached, Flats	862	876	892	910	925		
infrastructure area	Other	295	300	305	311	316		
(total)	Total	2,034	2,066	2,103	2,145	2,180		
	Separate House	3,354	3,590	3,844	4,112	4,377		
	Semi, Detached, Flats	3,298	3,532	3,786	4,052	4,315		
Douglas Shire Council	Other	1,127	1,209	1,294	1,385	1,469		
	Total	7,779	8,331	8,924	9,549	10,161		
		.,		-,	.,	-,		

	Maximum Charge	
Calculated Charges	(AICS 2016)	Levied Charges
\$ 19,491 \$ 15,718 \$ 10,479	\$ 25,870	\$ 19,491
\$ 15,718	\$ 22,174	\$ 15,718
\$ 10,479	\$ 14,783	\$ 10,479
\$ 23,382 \$ 19,053 \$ 12,702	\$ 25,870	\$ 23,382
\$ 19,053	\$ 22,174	\$ 19,053
\$ 12,702	\$ 14,783	\$ 12,702
A 21.00=	A 25.070	24.225
\$ 21,335	\$ 25,870	\$ 21,335
\$ 17,298	\$ 22,174	\$ 17,298
\$ 17,298 \$ 11,532	\$ 14,783	\$ 11,532
7 11,552	7 14,703	7 11,552
\$ 154,034	\$ 25,870	\$ 25,870
\$ 119,102	\$ 22,174	\$ 22,174
\$ 119,102 \$ 79,402	\$ 14,783	\$ 14,783
\$ 23,059	\$ 25,870	\$ 23,059
\$ 23,059 \$ 18,776 \$ 12,517	\$ 22,174	\$ 18,776
\$ 12,517	\$ 14,783	\$ 12,517
		· · · ·
\$ 37,844	\$ 25,870	\$ 25,870
\$ 31,448 \$ 20,966	\$ 22,174 \$ 14,783	\$ 22,174 \$ 14,783
20,300	Ţ 1,703	Ţ 1,703
\$ -		Ġ.
\$ - \$ -		\$ - \$ -
ς -		ς -
<u>-</u>		, <u> </u>

Charges Capped by AICS (2016)

LEGEND

Attachment 5.1.13 259 of 406

Douglas Shire Council Anticipated Growth - Non Residential

Return to "Catchment Demand"

(Note: For users seeking to calculate costs over a thirty (30) year period, Non residential floor space needs to be entered in the detailed table (rows 93-164))

LGIP Table 3.1.5—Existing and projected non-residential floor space (by census yr.)

		Ex	isting and proje	cted non - resid	lential floor spac	е
Projection area	LGIP development type	2011	2016	2021	2026	2031
r rojection area	Industrial	35,064	36,714	38,514	40,164	41,892
	Commercial	27,896	29,306		32,096	33,508
	Retail	6,339	6,639	6,939	7,239	7,539
Port Douglas and Environs						
	Community Services	2,167	2,267	2,367	2,467	2,567
	Others (incl. home based business)					
	Total	71,466	74,926	78,536	81,966	85,506
	Industrial	37,986	39,936	41,886	43,686	45,639
	Commercial	11,386	11,956	12,526	13,096	13,667
Mossman and Environs	Retail	2,305	2,425	2,545	2,665	2,785
IVIOSSITIATI ATIU ETIVITOTIS	Community Services	867	917	967	1,017	1,067
	Others (incl. home based business)					
	Total	52,544	55,234	57,924	60,464	63,158
	Industrial	-	-	-	-	-
	Commercial	9,678	10,188	10,698	11,178	11,689
Coastal Suburbs	Retail	2,305	2,425	2,545	2,665	2,785
Villages and Townships	Community Services	867	917	967	1,017	1,067
	Others (incl. home based business)					
	Total	12,850	13,530	14,210	14,860	15,541
	Industrial	73,050	76,650	80,400	83,850	87,530
	Commercial	48,960	51,450	53,940	56,370	58,864
Douglas Shire Council	Retail	10,950	11,490	12,030	12,570	13,109
Douglas Sillic Couriell	Community Services	3,900	4,100	4,300	4,500	4,702
	Others (incl. home based business)	-	-	-	-	-
	Total	136,860	143,690	150,670	157,290	164,205

Calclulated Charges (LGIP) (\$/m2)	Maximum Charge (AICS 2016) \$/m2	Levied Charges (\$/m2)
\$ 169.65	\$ 46.19	\$ 46.19
\$ 233.59	\$ 129.34	\$ 129.34
\$ 52.56	\$ 166.30	\$ 52.56
\$ 0.97	\$ 141.55	\$ 0.97
\$ 208.37	\$ 46.19	\$ 46.19
\$ 134.60 \$ 27.43	\$ 129.34	\$ 129.34
\$ 27.43	\$ 166.30	\$ 27.43
\$ 4.09	\$ 141.55	\$ 4.09
\$ -	\$ 46.19	\$ -
\$ 150.88	\$ 129.34	\$ 129.34
\$ 35.95 \$ 5.30	\$ 166.30	\$ 35.95
\$ 5.30	\$ 141.55	\$ 5.30

п	F	G	F	N	Т

\$ 1,234.00 Charges Capped by AI \$ - Charges Calculated th

Appendix D – LGIP Checklist

Appendix D is part of Statutory Guideline 03/14 – Local government infrastructure plans

Review principles:

- A reference in the checklist to the LGIP Template is taken to include a relevant reference to the SPA, statutory guideline for LGIPs, statutory guideline for MALPI or the Queensland Planning Provisions (QPP).
- Compliance requirements are not limited to the requirements listed in the checklist.

Compila			ted to the requirements listed in the checklist.	T. L	To be completed by any disted solitones				
			ructure plan (LGIP) checklist	•	by local government	To be completed by appointed reviewer			
LGIP guideline outcome	LGIP component	Number	Requirement	Requirement met (yes/no)	Local government comments	Compliant (yes/no)	Justification	Corrective action description	Recommendation
The LGIP is consistent with the	All	1.	The LGIP sections are ordered in accordance with the LGIP template.	YES	The LGIP sections are structured and ordered in accordance with the LGIP template	Yes	The sections are consistent with the LGIP guideline template.	No action required.	Complies
legislation and statutory		2.	The LGIP sections are correctly located in the planning scheme.	YES	The LGIP will be located in section 4 of the Douglas Shire Council Planning Scheme	Yes	The location of the LGIP is Part 4 of the planning scheme.	No action required.	Complies – review underway.
guideline for LGIPs		3.	The content and text complies with the mandatory components of the LGIP template.	YES	Complies	Yes	The LGIP contains all mandatory content.	No action required.	Complies
		4.	Text references to numbered paragraphs, tables and maps are correct.	YES	Complies	Yes	The LGIP correctly references tables and maps.	No action required.	Complies
	Definitions	5.	Additional definitions (to those in the QPP) do not conflict with statutory requirements.	YES	There are no additional / alternative definitions used.	Yes	There are no additional definitions.	No action required.	Complies
	Preliminary section	6.	The drafting of the Preliminary section is consistent with the LGIP template.	YES	The drafting of the preliminary section has been undertaken in accordance with the LGIP template	Yes	The preliminary section is consistent with the template.	No action required.	Complies
		7.	All five trunk networks included in the LGIP. If not, which networks are excluded? Why have these networks been excluded?	YES*	The LGIP contains detailed planning for the water, sewerage, roads, paths, and public parks and community facilities trunk network. However, the stormwater trunk infrastructure network has not been detailed in the LGIP. This is a result of insufficient information being currently available to undertake reliable, (detailed) infrastructure planning for this network. Under the current version of the LGIP, a provision for detailed infrastructure planning in the forms of a drainage management plan (DMP) for the Port Douglas and Environs and Mossman and Environs regions.	Yes	The exclusion of stormwater is appropriate as Council has not completed the planning. Council will undertake an amendment to include stormwater when the planning is available.	No action required.	Complies
	Planning assumptions - structure	8.	The drafting of the Planning assumptions section is consistent with the LGIP template.	YES	The drafting of the planning assumptions has been prepared using the LGIP template. It is noted that section 4.2.2 of the template requires developable areas to be mapped in Schedule 3. Council requests a relaxation of this requirements as it is not considered reasonable (or indeed possible at this stage) to map the developable areas, given they are affected by a range of locality specific constraints and opportunities, and design matters which may only be determined on a case-by-case	Yes	The planning assumptions section is consistent.	No action required.	Complies

tachment 5.1.14			The develoafile of the Sare generally depicted on the zones (Which are also on the PIA				
9.	All the projection areas listed in the tables of projections are shown on the relevant maps and vice versa.	YES	maps). All the projection areas listed in the tables of projections are shown on the relevant maps and vice versa.	Yes	The projections areas are shown on a map.	No action required.	Complies
10.		YES	Separate service catchment maps have been provided as part of the PFTI maps.	Yes	The service catchments are shown on the relevant PFTI map series.	No action required.	Complies
Planning assumptions - methodology 11.		YES	The population and dwelling projections are aligned with forecasts prepared the QGSO that were current as at 1/6/17. The base year of the projections contained in the LGIP is 2011, as it provided the most recent complete set of data from an Australian Census. Australia's 2016 census data was not released at the time of the preparation of the LGIP. The resident population as reported by the QGSO at 2011 was 11,186 persons. However, to appropriately account for infrastructure demand generated by tourists, the population projections contained in the Douglas LGIP must include tourist projections. At base year the tourist population is estimated to be 5,364 (based on Visitor Population from the ABS), taking the total population (residents and tourists) to 15,546 in 2011. This equates to a visitor to resident population of 45.4%. At the time of writing the LGIP, the Population data from the 2016 Census had just been released. Similarly, the figures for Residents = 11,911 persons Visitors / Residents = 54.8% Due to the variability of tourist numbers, and average of the two census years was taken (=49.94 (~50%)) Resident population projections for the subsequent time periods are based on the medium series forecasts, with tourist projections increasing in line with population growth. Dwelling forecasts have been determined by converting population to dwellings using average household size information from QGSO and ABS. The breakdown between dwelling types has also been	Yes	The total populations are consistent with the QGSO medium series as detailed in Queensland Government population projections and ABS data, with specific consideration of tourists.	No action required.	Complies

Attachment 5.1.14				dwelling b 262 of ASS of Enumeration (PEP) ABS Table B31).				
	12.	The employment and non-residential development projections align with the available economic development studies, other reports about employment or historical rates for the area.	YES	The employment and non- residential projections are based on ABS employment and labour force data for base year projected in increase in line with population growth. Employment and floor space projections have been allocated to projection areas based on an assessment of non-residential land uses and demands by planning district.	Yes	Employment projections are consistent with ABS census.	No action required.	Complies
	13.	The developable area excludes all areas affected by absolute constraints such as steep slopes, conservation and flooding.	YES	Projected population and employment growth have been estimated considering absolute constraints to development. The extent of urban zones in the draft Planning Scheme (2016) already incorporates overlay constraints such as flooding, hillslopes and natural areas.	Yes	Flooding, water and environmental constraints are removed as stated in the planning assumption methodology extrinsic material document.	No action required.	Complies
	14.	The planned densities reflect realistic levels and types of development having regard to the planning scheme provisions and current development trends.	YES	The assumed densities identified in the LGIP are based on an assessment of Planning Scheme Code provisions, average allotment yields determined through review of the DCDB, previous development approvals, and discussions with Council planners. The densities used are considered realistic based on market demand in the Local government area. A review of the Council's Demand and Population model which has was developed prior to 2011 and based on the assumed densities, shows a high degree of correlation (+/-10%), which further supports and validates the density assumptions made.	Yes	Densities are consistent with the anticipated uses in accordance with the Planning Scheme	No action required.	Complies
	15.	The planned densities account for land required for local roads and other infrastructure.	YES	20-30% allowance for road, open space and other infrastructure has been factored into the density calculations.	Yes	Densities are consistent with the anticipated uses in accordance with the Planning Scheme allowing for local infrastructure footprints.	No action required.	Complies
	16.	The population and employment projection tables identify "ultimate development" in accordance with the QPP definition.	YES	The population and employment projection tables identify "ultimate development" in accordance with the QPP definition. This is estimated to be at approximately 2061.	Yes	Ultimate capacity is stated in planning assumptions.	No action required.	Complies
	17.	Based on the information in the projection tables and other available material, it is possible to verify the remaining capacity to accommodate growth, for each projection area.	YES	LGIP planning assumptions tables have been prepared using the format required of the LGIP template, which shows projections for each projection year and ultimate development. From this information, it is possible to determine remaining capacity after each time period.	Yes	The difference between the Ultimate and 2026 projections provide an indication of available capacity in each projection area.	No action required.	Complies

Attachment 5.1.14	18.	The planning assumptions reflect an efficient, sequential pattern of development.	YES	The plannia and saving Consequence of the plannia of the provisions and associated land use pattern, the extent of growth areas, propensity to develop, and align with QGSO forecasts. The PIA are considered defined to constrain development in area to ensure an efficient and sequential pattern of development.	Yes	The PIA allows for additional development.	No action required.	Complies
	19.	Has the Department of Transport and main Roads or any relevant distributor-retailer been consulted in the preparation of the LGIP? What was the outcome of the consultation?	YES	TMR was consulted in relation to the LGIP and its integration of with their planning. Outcomes: 1) TMR initially advised that they thought the initial designation of road hierarchies was excessive. These have been reviewed in line with those recommended by TMR and consultation with Council's traffic and transport planners and Engineers. 2) Craiglie Bypass: TMR advised a preference for transport planning to be undertaken on the western side of the Highway at Craiglie. Whilst this was outside of the projected planning horizon, it's location, nominal road alignment and associated infrastructure have been identified within the PFTI and the SoW as an "Area of Investigation". No cost has been considered in the context of infrastructure required to service this area in the current LGIP. It is expected that this will be refined over the next reviews of the LGIP as discussions with Council and TMR continue. 3) TMR are not planning any upgrade/ capital works along any of the SCR or trunk roads in the next 15 years. Although that is subject to change. Council has acknowledged TMR's advice and made changes to the LGIP planning and SoW to reflect these comments.	Yes	Evidence of consultation has been provided.	No action required.	Complies
Planning assumptions - demand	20.	The infrastructure demand projections are based on the projections of population and employment growth.	YES	Infrastructure demand projections have been expressed in the units defined by the LGIP template. The rates of growth in demand is reflective of population and employment growth. The projections have been prepared at the service catchment level and reflect generally understood and recognised demand generation	Yes	The demand for all networks has been developed from the planning assumptions.	No action required.	Complies

Attachment 5.1.14			rates for that spective zones and land uses.				
21.	The demand generation rates align with accepted rates and/or historical data.	YES	The projections have been prepared at the service catchment level and reflect generally understood and recognised demand generation rates for the respective zones and land uses. The DSC demand generation rates have been benchmarked and validated against historic data and compared to CRC Council's demand generation rates. The demand generation rates reflect generally accepted rates defined in relevant standards	Yes	The demand generation rates are consistent with the guideline.	No action required.	Complies
22.	The service catchments used for infrastructure demand projections are identified on relevant PFTI maps and demand tables.	YES	(FNQROC). Service catchments are identified in the PFTI maps contained in Schedule 3, for each network, and within the demand tables.	Yes	The service catchments are shown on each networks' maps, and these catchments are consistent with the demand tables.	No action required.	Complies
23.	The service catchments for each network cover, at a minimum, the PIA.	YES	Refer to the network catchment maps, and PIA Plans as contained in Schedule 3	Yes	The service catchments cover the PIA.	No action required.	Complies
24.	The Asset Management Plan and Long Term Financial Forecast align with the LGIP projections of growth and demand. If not, is there a process underway to achieve this?	YES* (in progress)	Through the LGIP development process, Council recognised the importance of alignment of these varying management documents. While some alignment had been undertaken in the past there is now an increased awareness of the criticality of such within the organisation. Council has committed resources to the development and refinement of their AMP, LTAMP, LTFF. However, at the time of the preparation of the LGIP, this process was still ongoing. There remains a need to further develop data management and business practices to ensure a commonly agreed set of base assumptions and data capture between the LGIP, LTAMP and LTFF.	Yes	Council has undertaken to develop longer term plans including LTFF and AMPs.	No action required.	Complies – process underway
Prioirty 25. infrastructure area (PIA)	The drafting of the PIA section is consistent with the LGIP template.	YES	The drafting of the PIA section is consistent with the LGIP template.	Yes	The section is consistent with the LGIP guideline template.	No action required.	Complies
26.	Text references to PIA map(s) are correct.	YES	Refer to the PIA Plans in Schedule 3	Yes	The references are correct.	No action required.	Complies
27.	The PIA boundary shown on the PIA map is legible at a lot level and the planning scheme zoning is also shown on the map.	YES	Refer to the PIA Plans in Schedule 3	Yes	The PIA boundary is legible at the lot level, on a base of the planning scheme zones.	No action required.	Complies
28.	The PIA includes all areas of existing urban development serviced by all relevant trunk infrastructure networks at the time the LGIP was prepared.	YES	The PIA includes all areas of existing urban development with all relevant trunk networks	Yes	The PIA boundary is legible at the lot level, on a base of the planning scheme zones.	No action required.	Complies

Attachment 5.1.14	20	The DIA accommendates are with fair at land	YES	The PIA ac 265 mot challes growth	Yes	The planning converting	No action required	Complies
	29.	The PIA accommodates growth for at least 10 years but no more than 15 years.		for approximately 10 years of urban growth from the date of adoption (expected 2018). The lower bound of provision has been provided for, based on the revised (and reduced) growth projections by the QGSO released in 2016. If the reduced growth projections are used – then there is capacity for approximately 15 yrs of development within the PIA.	Yes	The planning assumptions show there is capacity in the PIA to 2031 allowing for 10-15 years' growth.	No action required.	Complies
	30.	Are there areas outside the PIA for which the planning assumptions identify urban growth within the next 10 to15 years? If so, why have these areas been excluded from the PIA?	YES	There are some locations outside of the PIA where growth may occur in the next 10-15 years. This is primarily due to the planning scheme having more zone land available than is contained within the PIA, and the exact location of growth within the next 10-15 year is not clear. The definition of a PIA which excludes some areas in which development may occur is to enable Council to focus their energy and resources into the efficient planning and delivery of infrastructure to areas contained within the PIA. IT should be noted that the extent of growth is very minor and unlikely to influence any new capital works in these locations. As such, it is not expected that it would alter the planning and demand assumptions within the PIA.	Yes	There is no significant urban growth identified outside the PIA.	No action required.	Complies
	31.	The PIA achieves an efficient, sequential pattern of development.	YES	While minor growth is projected to occur outside the PIA, the PIA focusses on fully serviced urban zoned land only. This will help to achieve efficiencies in infrastructure provision by encouraging the logical extension to the current urban form.	Yes	Provision of infrastucture within the PIA achieves an efficient pattern of development.	No action required.	Complies
Desired standards of service (DSS)	32.	The drafting of the DSS section is consistent with the LGIP template.	YES	The LGIP has been prepared using the LGIP template and has a desired standard of service (DSS) clearly articulated for each network.	Yes	The section is consistent with the LGIP guideline template.	No action required.	Complies
	33.	The DSS section states the key planning and design standards for each network.	YES	The DSS section states the key planning and design standards for each network.	Yes	The DSS section outlines the key planning and design standards.	No action required.	Complies
	34.	The DSS reflects the key, high level industry standards, regulatory and statutory guidelines and codes, and planning scheme policies about infrastructure.	YES	The DSS for each network refers to the key standards contained in other relevant documents (eg. FNQROC Development Manual, QUDM etc)	Yes	The DSS are consistent with industry standards.	No action required.	Complies
	35.	There is alignment between the relevant levels of service stated in the local government's Long-Term Asset Management Plan (LTAMP) and the LGIP. If not, is there a process underway to achieve this?	YES*	It is the intention of Council's LTAMP to provide and fund infrastructure in an effective and efficient manner that reduces whole of life cycle costs while meeting community expectations and standards. The LTAMP in and of itself does	Yes	Council has undertaken to compile long term LTFF and AMPs.	No action required.	Complies – process underway

Ordinary Council Meeting - 5 June 2018

Δttac	nment 5.1.14				not identif 266 of ic406			1	
AllaG	illielit 5.1.14								
					infrastructure Standards.				
					However, Council's defined				
					Desired Standards of Service				
					(DSS) and infrastructure				
					planning that forms part of the				
					LGIP, also seeks to minimise				
					whole of lifecycle costs.				
					Furthermore the DCC and				
					Furthermore, the DSS and				
					infrastructure standards				
					currently adopted by Council				
					are reflected in the Council's				
					FNQROC Development Manual.				
					The FNQROC Development				
					Manual refers to widely				
					accepted standards and				
					practices for the planning,				
					design and construction of				
					infrastructure in a safe and				
					efficient manner, an in a way				
					that minimises the whole of				
					lifecycle costs. The FNQROC				
					Manual has been developed				
					and refined over time by a				
					collective of Far North Region				
					Councils. It represents the				
					current best practice and				
					minimum acceptable standards				
					requried to meet the Desired				
					Standards of Service.				
					It is a combination of these				
					processes, which demonstrate				
					alignment of intents between				
					the LGIP and LTAMP. Council is				
					also currently developing their				
					Strategic and Long-Term Asset				
					Management Policies. Once				
					completed, it is a requirement				
					for Council to review the LGIP				
					and LTAMP's to ensure				
					congruence.				
	Plans for trunk	36.	The drafting of the PFTI section is consistent	YES	The LGIP has been prepared	Yes	The section is consistent	No action required.	Complies
		50.			using the LGIP template	103		ivo action required.	Compiles
	infrastructure		with the LGIP template.				with the LGIP guideline		
	(PFTI) –						template.		
	structure and	37.	PFTI maps are identified for all networks	YES	PFTI maps have been prepared	Yes	Mapping exists for all	No action required.	Complies
	text		listed in the Preliminary section.		for all infrastructure networks.		networks.		
	-	20		YES	PFTI schedule of works tables	Voc	The section includes	No action required	Complies
		38.	PFTI schedule of works summary tables for	123	have been provided for all	Yes		No action required.	Complies
			future infrastructure are included for all		trunk networks. As required by		schedules of work for each		
			networks listed in the Preliminary section.		the template the schedules		network.		
					only relate to future works.				
					The SoW template (excel				
					based) contains all existing and future infrastructure for each				
					network.				
-	PFTI – Maps	39.	The maps clearly identify the existing and	YES	Existing and future networks	Yes	Mapping exists for all future	No action required.	Complies
	-	33.			have been mapped for all the	103		ivo action required.	Compiles
	[Add rows to		future trunk infrastructure networks		LGIP networks and provided in		and existing networks.		
	the checklist to		distinct from each other.		the PFTI.				
	address these				Congreto Diagrafia E inting				
	items for each				Separate Plans for Existing and Future infrastructure have been				
					provided where is was				
l.			1		nary Council Meeting - 5 Jun				

tachment 5 net works]				considered for the user(s).				
	40.	The service catchments referenced in the SOW model and infrastructure demand summary tables are shown clearly on the maps.	YES	The service catchments referred to the SoW model and infrastructure demand summary tables have been identified in the set of drawings for each of the infrastructure networks.	Yes	There are service catchment maps for all networks.	No action required.	Complies
	41.	Future trunk infrastructure components are identified (at summary project level) clearly on the maps including a legible map reference.	YES	Complies. Future infrastructure items are clearly identified on the mappings. The legend provides the user with assistance to understand the type of infrastructure assets, and works to be undertaken.	Yes	The future trunk infrastructure projects are shown on each networks' maps.	No action required.	Complies
	42.	The infrastructure map reference is shown in the SOW model and summary schedule of works table in the LGIP.	YES	Complies. Infrastructure items are clearly identified on the mapping, and are labelled with Unique ID numbers. These numbers correlate to the numbering contained within the Schedule of Works table in the LGIP and SoW model.	Yes	A unique identifier exists on the maps, in the model and in the schedule of works.	No action required.	Complies
Schedules of works [Add rows to the checklist to	43.	The schedule of works tables in the LGIP complies with the LGIP template.	YES	Complies. The schedule of works templates in the LGIP have been prepared using the LGIP template	Yes	The section is consistent with the LGIP guideline template.	No action required.	Complies
address these items for each of the networks]	44.	The identified trunk infrastructure is consistent with the SPA and LGIP guideline.		The infrastructure depicted on the plans has been determined in consultation with Council based on an assessment of those elements of the network which perform a shared function. Non-trunk infrastructure or 'internal' infrastructure has been excluded.	Yes	The infrastructure identified appears consistent with the LGIP guideline.	No action required.	Complies
	45.	The existing and future trunk infrastructure identified in the LGIP is adequate to service at least the area of the PIA.		The infrastructure network planning has been undertaken, taking into consideration demand across the entire service catchment(s). These extend beyond the PIA.	Yes	The existing and future trunk infrastructure projects shown on each networks' maps appear to service the PIA.	No action required.	Complies
	46.	Is there alignment of the scope, estimated cost and planned timing of proposed trunk capital works contained within the Schedule of Works and the relevant inputs of the LTAMP and LTFF? If not, is there a process underway to achieve this?	NO	Council are in the process of developing their LTFF and LTAMP. In this regard, alignment has not been completed to date. However, the importance and value of this requirement to ensure the cohesion between Council business units and financial sustainability is noted. As Council continues to develop their SAMP/ LTAMP/ LTFF, we will continue to actively work to align all planning, engineering and financial reporting around the varying expenditures and revenues to ensure clarity and certainty of alignment. It is		Council has undertaken to compile long term LTFF and AMPs.	No action required.	Complies – process underway
				expected that full alignment between all these documents may be difficult, and will require a number of iterations				

Ordinary Council Meeting - 5 June 2018

Attachment 5.1.14			269 of 496				
Attachment 5.1.14			to achieve 26en O stu 4 (Jobent				
			alignment".				
			Some areas which are expected				
			to require more detailed				
			consideration would be:-				
			consideration would be				
			LGIP/ LTFF				
			,				
			The LGIP contains				
			infrastructure works (or land)				
			which is delivered by the				
			development industry,				
			concurrent with land				
			development. In this scenario				
			the works would not typically				
			form part of Council's LTFF or				
			Capital Works Program.				
			LGIP/ LTAMP				
			The timing of infrastructure				
			delivery in the LGIP is the				
			current "best estimate" of				
			when it will be required to				
			service the required demand.				
			The necessarily requires the				
			reliance on assumptions				
			(population growth,				
			development patterns,				
			economic conditions etc). The				
			due to the Trunk nature of the				
			items identified within the LGIP				
			(i.e. high value/ critical nature),				
			movements in the timing of				
			delivery is expected to create				
			the need to revisit the LGIP/				
			LTAMP regularly to ensure				
			congruence.				
			LGIP/LTAMP/LTFF/ Capital				
			Works Program.				
			Consistency of data capture will				
			be critical (i.e. ensuring that				
			data for and from each of these				
			items are able to be sufficiently				
			detailed and captured to				
			ensure useability between				
			each.				
47	The cost of trunk infrastructure identified in	Yes	The Key Input assumptions are	Yes	The cost of infrastructure	No action required.	Complies
	the SOW model and schedule of works		documented within the SoW		has been prepared in		
	tables is consistent with legislative		model and are consistent with industry standards and		accordance with the LGIP		
			legislative requirements.				
	requirements.		. J		guideline.		
			Costs have been determined				
			using the best information				
			available (unit rates and project				
		.	cost estimates).	0040			

Attachment 5.1.14				269 of 406				
Attachment 5.1.14								
				Allowances for the Project Owners Cost has been set as				
				20% across all asset classes.				
				This is within accepted industry				
				standards and is recognised by				
				the State as reflected by the				
				SoW User manual.				
				3000 Osci mandai.				
				Time based contingencies have				
				been applied of 10%,15%,20%				
				and 30% for works being				
				undertaken within horizon of				
				5,10,15 and 20 years				
				respectively. The exception of				
				which is transport in which a				
				40% contingency is provided,				
				for works planned outside of				
				the 20-year horizon. This is in				
				accordance with TMR's road				
				planning and design manual				
				and Evan's and Pecks (2009)				
				report on Contingencies and				
				on-costs – as reference in the				
				Statutory guideline 03/14.				
SOW model	48.	The submitted SOW model is consistent	Yes	Complies	Yes	The model is consistent with	No action required.	Complies
		with the model included with the statutory		The LGIP – SoW model has		the LGIP guideline template.	·	·
				been prepared using the		die Edit galdenne template.		
		guideline for LGIPs.		template provided as part of				
				the Statutory guideline for				
				LGIPs and its associated User Manual				
		TI COM	Vec	Complies	.,	TI 6014/		
	49.	The SOW model has been prepared and	Yes	The LGIP – SoW model has	Yes	The SOW model has been	No action required.	Complies
		populated consistent with the statutory		been prepared using the		prepared in accordance with		
		guideline for LGIPs and its User manual for		template provided as part of		the LGIP guideline.		
		1 -		the Statutory guideline for		die Loir guideinie.		
		the SOW model.		LGIPs and its User Manual for				
				the SoW model				
Extrinsic	50.	All relevant background studies and reports	Yes	All key background studies and	Yes	The extrinsic material has	No action required.	Complies
	50.			reports in relation to the	162		ivo action required.	Complies
material		in relation to the preparation of the LGIP		preparation of the LGIP are		been supplied.		
		are available and identified in the list of		available and identified in the				
		extrinsic material in the LGIP guideline.		list of extrinsic material in the				
		extrasic material in the Loir guideline.		LGIP.				

Attachment 5.1.15 270 of 406

First compliance check of Douglas Shire Council local government infrastructure plan

Prepared by: Integrated Infrastructure Planning December 2017



Version	Date	Reviewer name and signature				
1	12 December 2017	Kylie Grimley	Lyly			

Attachment 5.1.15 271 of 406

1.1 Introduction

Integrated Infrastructure Planning (IIP) has been engaged by Trinity Engineering and Consulting on behalf of Douglas Shire Council (DSC) to undertake a first compliance check of its proposed Local Government Infrastructure Plan (LGIP).

IIP is required to:

- (1) evaluate whether a proposed LGIP complies with the requirements outlined under the Minister's Guidelines and Rules, including the LGIP template, the SOW model and the LGIP Checklist.
- (2) provide a written statement and the completed checklist to the local government detailing the findings of the compliance check.

Scope exclusions

The following items are outside the scope of this review:

- A verification of the accuracy of individual inputs used in the preparation of an LGIP.
- A review of the local government's Long Term Financial Forecast (LTFF) or asset management plan (LTAMP) other than to determine the extent of their alignment with the LGIP.

Compliance check process

The process used to undertake the compliance check comprised the following steps:

Stage	Description
<u>Engaged</u>	Documents and other information received from Trinity Engineering and Consulting on behalf of DSC on 10 November, 2017.
Review	 Review commenced on 17 November, 2017. Initial comments provided 20 November, 2017; Council response to initial comments received from Trinity Engineering and Consulting 11 December, 2017.
Final report	Review report issued on 12 December, 2017.

Attachment 5.1.15 272 of 406

The following personnel were involved in the compliance check on behalf of the Douglas Shire Council:

Name	Title	Date of discussion (s)	Scope of discussion
Rudd Rankine	Civil/Geotechnical Engineer	20 November	 Initial comments on documents supplied Minor mapping, typographical and formatting issues

Compliance check findings

Council advises work is underway to provide alignment between the LGIP, LTFF and the capital works program. Council also indicates work is underway on the asset management plans.

DSC has undertaken consultation with Councillors, internal network and finance stakeholders as well as external consultation with DTMR, the relevant state agency responsible for transport matters.

Conclusions

The Douglas Shire Council Local Government Infrastructure Plan and associated documentation is compliant with the *Planning Act 2016* and statutory guidelines.

Recommendations

IIP recommends to the Douglas Shire Council that the LGIP should proceed to the State for approval for public notification.

Recommended conditions to be imposed

Nil.



The Hon Cameron Dick MP Minister for State Development, Manufacturing, Infrastructure and Planning

Our ref: MC18/237

Your ref: 837125

1 William Street
Brisbane QLD 4000
PO Box 15009 City East
Queensland 4002 Australia
Telephone +617 3719 7200
Email statedevelopment@ministerial.qld.gov.au
www.dsdmip.qld.gov.au

07 MAR 2018

Councillor Julia Leu Mayor Douglas Shire Council PO Box 723 MOSSMAN QLD 4873

Email: Julia.Leu@douglas.qld.gov.au

Dear Councillor Leu Jila,

Thank you for your letter of 18 December 2017 providing the Douglas Shire Council's (the council) proposed Local Government Infrastructure Plan (LGIP) for review and approval to proceed to public consultation.

I congratulate the council in taking the initiative to prepare a LGIP for its community. This is an important step to ensure the council continues to have the ability to levy charges or impose trunk infrastructure conditions on future development approvals.

The proposed LGIP has been assessed against the requirements of the repealed *Sustainable Planning Act 2009* and for compliance with the Statutory guideline 01/16: Making and amending local planning instruments (MALPI) and the Statutory guideline 03/14: Local government infrastructure plans.

In accordance with MALPI, I am pleased to advise the council may now proceed to publicly consult on the version of the proposed LGIP provided to the Department of State Development, Manufacturing, Infrastructure and Planning (the department) on 12 February 2018. Further advice to assist the council in revising and refining the proposed LGIP is enclosed.

I note the council was previously granted an extension to 30 June 2018 to have a LGIP in place, otherwise it will not be able to continue to levy infrastructure charges or impose infrastructure conditions under section 111 of the *Planning Act 2016*.

As such, I strongly urge the council to prioritise the finalisation of the proposed LGIP to ensure it may continue to levy infrastructure charges. The department is committed to working with the council, as a matter of priority, to help the finalisation and adoption of the proposed LGIP.

If you require further information, please contact Mr Tony Croke, Principal Planner, Planning and Development Services – North, in the department, on (07) 4037 3205 or tony.croke@dsdmip.qld.gov.au, who will be pleased to assist.

Yours sincerely

CAMERON DICK

Minister for State Development, Manufacturing,

Infrastructure and Planning

Enc

Enclosure 1

FURTHER ADVICE FOR THE DOUGLAS SHIRE COUNCIL'S CONSIDERATION ON THE PROPOSED LOCAL GOVERNMENT INFRASTRUCTURE PLAN (LGIP)

The following advice is given to the Douglas Shire Council for its consideration, so that it may further revise and refine the proposed LGIP:

- A valuable output of an LGIP is information about the cash flow projections which
 compares future infrastructure charges revenue to expenditure. In this regard, the state
 sets the maximum charges that a local government may levy for the provision of trunk
 infrastructure. Where expenditure exceeds the revenue from infrastructure charges, the
 local government has to consider options to manage it. Any shortfall in charges revenue
 to cover expenditure will have to be recovered from other sources such as rates.
- The LGIP preparation process seeks to take into account the inter-relationships and alignment between local government infrastructure planning, future growth, Asset Management Plans (AMP) and Long-Term Financial Forecasts (LTFF). Within this framework, local governments are responsible to strategically consider and manage the provision for and funding, of trunk infrastructure in their local government area, in an efficient and financially sustainable manner. To achieve this over time, local governments are encouraged to undertake regular reviews to ensure ongoing alignment of their LGIP, AMP and LTFF.
- The residential and non-residential anticipated growth worksheets include levied charges which appear to exceed the prescribed amount in the Planning Regulation 2017 (the Planning Regulation) (i.e. the maximum charge) and are based on an alternative functionality to the standard Schedule of Works (SoW) model.
 - To improve clarity, it is recommended that the council adjust the levied charges (as capped by the Planning Regulation) so that the projected revenue is correctly identified.
- Include the extrinsic material which explains that the planning scheme zonings, included on the Priority Infrastructure Area (PIA) maps, represent the developable area (e.g. similar to the comments included in the LGIP checklist) and amend section 4.2.2(1) of the LGIP to reference the PIA maps.
- Allocate all future water infrastructure items in the SoW to the relevant service catchment(s).
- Include a value for item PPLC062 in the SoW, or if there are reasons for council's approach, include the extrinsic material to explain the approach.