

5.6. PROPOSED AMENDMENT TO THE FNQROC DEVELOPMENT MANUAL PLANNING SCHEME POLICY

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RECOMMENDATION

That Council resolves to:

- 1. Adopt the proposed amendments for Version 03.17 (Issue 7) to the FNQROC Development Manual Planning Scheme Policy, as modified, having regard to the submissions received in accordance with Section 22 of the Planning Act 2016 and Chapter 3 Minister's rules for making and amending a planning scheme policy (PSP); and**
- 2. Place a notice in the Port Douglas and Mossman Gazette newspaper advising of Council's decision to adopt the amendments and the effective date of version 03/17 (Issue 7).**

EXECUTIVE SUMMARY

Far North Queensland Regional Organisation of Councils (FNQROC) has recently undertaken a review of the Regional Development Manual (the manual). The manual provides a comprehensive set of guidelines for carrying out various civil engineering works within the local government areas of: Cairns, Cassowary Coast, Cook, Douglas, Mareeba, and Tablelands.

At the Ordinary Council Meeting of 1 August 2017, Council resolved to amend the FNQROC Development Manual Planning Scheme Policy and proceed to public consultation of the proposed amendments.

The purpose of these latest amendments (referred to as Issue 7), are to ensure the manual continues to be functional and up to date and to provide a consistent set of standards to which all can refer.

This latest review has been delayed to ensure the process was initiated under the Planning Act 2016 which became effective on 3 July 2017. This latest proposed revision (Issue 7) has been out for public consultation and submissions received have been considered and as recommended by member council representatives included in the final version for adoption.

BACKGROUND

Cairns Regional Council adopted the FNQROC Development Manual (Issue 6) as a Planning Scheme Policy on the 12 December 2014 in accordance with de-amalgamation legislation Douglas Shire Council transitioned this policy on 1 January 2015. The Development Manual Planning Scheme Policy (number 6) supports the Planning Scheme.

The FNQROC Development Manual was prepared to ensure a consistent set of standards across the region. The manual is a living document that needs to be continually reviewed to ensure it remains contemporary and reflects the needs of the users.

Under Chapter 3 Minister's rules for making and amending a planning scheme policy (PSP), Council must resolve to amend the Planning Scheme Policy as the first step in the amendment process, and then proceed to public consultation.

The current Douglas Shire Planning Scheme includes Planning Scheme Policy Number 6 – FNQROC Regional Development Manual and the proposed Douglas Shire Planning Scheme includes a Planning Scheme Policy - SC6.5 FNQROC Regional Development Manual.

At the Ordinary Council Meeting of 1 August 2017, Council resolved to amend the FNQROC Development Manual Planning Scheme Policy and proceed to public consultation of the proposed amendments.

COMMENT

Representatives from each of the local governments continually work together to review and make amendments to the manual. This is an ongoing process to ensure the manual is contemporary and reflects the needs of the users.

An explanatory statement and summary of the proposed amendments is attached to this report. A table summarising the actions and responsibilities through this project is as follows:

Table 1.

Action	Due Date	Responsibility
Send marked up development manual and proforma report to councils for Councils to resolve to amend the policy	23 June 2017	FNQROC
Council motion to amend the development manual	July 2017	Councils
Advertise the proposed amended policy through: - Cairns Post - Tablelander - Port Douglas & Mossman Gazette - Innisfail Advocate - Cassowary Coast Independent News - Tablelands Advertiser - Cape York News - FNQROC website Send e-subscriber advice to industry (note – all on mailing list have been moved to Development Manual Subscriber)	12 August 2017	FNQROC
Workshop with Industry on Proposed changes 28 and 29 August 2017 and 13 September 2017	28 August 2017 29 August 2017 13 September 2017	FNQROC Councils Industry
Submissions to FNQROC on the amended manual due 22 September 2017	22 September 2017	Councils Industry
Send submissions on the amended manual to councils in preparation for next meeting	29 September 2017	FNQROC
Councils to review submissions prior to meeting 10 October 2017	29 September	Councils
Meeting to review and make recommendation on the submissions	10 October 2017	FNQROC Councils
Send list of submissions and recommendations with final development manual and report to councils for adoption	23 October 2017	FNQROC
Councils to adopt manual and advertise effective date	November 2017	Councils

As noted above, the public consultation period was Saturday 12 August 2017 to Friday 22 September 2017. During this time, three workshops were undertaken with industry to explain the proposed changes. The FNQROC Executive Officer has managed the review process and coordinated the advertising and response to any submissions. Attached to this report are a list of submissions received and the proposed regional response.

The updated Version 03.17 (Issue 7) to the FNQROC Development Manual Planning Scheme Policy will be available from the FNQROC website (www.FNQROC.qld.gov.au) and will supersede the current Issue 6 version.

PROPOSAL

That Council resolves to:

1. Adopt the proposed amendments for Version 03.17 (Issue 7) to the FNQROC Development Manual Planning Scheme Policy, as modified, having regard to the submissions received in accordance with Section 22 of the Planning Act 2016 and Chapter 3 Minister's rules for making and amending a planning scheme policy (PSP); and
1. Place a notice in the Port Douglas and Mossman Gazette newspaper advising of Council's decision to adopt the amendments and the effective date of version 03/17 (Issue 7).

FINANCIAL/RESOURCE IMPLICATIONS

The FNQROC Development Manual (Issue 6) has been enacted in the 2006 Douglas Planning Scheme (as amended) as a planning scheme policy. The adoption of the updated Issue 7 document will not impose any additional financial or resource implications as it will be business as usual.

RISK MANAGEMENT IMPLICATIONS

The risk of not continually updating the manual is that Council will eventually have a manual that is not functional in providing a consistent set of relevant standards to which all can refer. Continually updating the manual will also enable Council to control the standard of infrastructure constructed as part of development and ensure 'donated assets' are fit for purpose, meet whole of life cost principles and will not burden future generations.

The Regional Development Manual is a Planning Scheme Policy and amendments must follow Chapter 3 Minister's rules for making and amending a planning scheme policy (PSP). This includes a minimum 20 day consultation period and review and response to any submissions received during the consultation period. By following this process, Council reduces the risk of being challenged in the future on the process undertaken when implementing Issue 7 of the FNQROC Development manual.

SUSTAINABILITY IMPLICATIONS

Economic: Provision of well planned, integrated and timely infrastructure is a core matter to be considered in the preparation of a planning scheme and in achieving financial, environmental and social sustainability.

Environmental: Well planned, integrated and timely infrastructure based on well established development manual provisions will ensure compliance with federal, state and local government environmental legislation which will preserve and enhance the natural environment.

Social: Well planned, integrated and timely infrastructure based on well established development manual provisions will ensure a consistent approach to development across the region which reflects the community's expectations and enhance community capital.

CORPORATE/OPERATIONAL PLAN, POLICY REFERENCE

This report has been prepared in accordance with the following:

Corporate Plan 2014-2019 Initiatives:

Theme 3 - Improve Environmental Performance

3.1.1 - Undertake a review of the Douglas Shire Planning Scheme acknowledging impacts of climate change so that Council and our communities can appropriately respond.

Theme 4 – Engage, Plan, Partner

4.1.2 - Undertake community engagement activities that are clearly identified and are appropriate in relation to the project.

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.

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.
Fully-Responsible	Funding the full cost of a program or activity
Regulator	Meeting the responsibilities associated with regulating activities through legislation or local law.

CONSULTATION

Internal: Nil

External: Industry representatives have contributed to the review process and these submissions have been considered within the proposed manual.

COMMUNITY ENGAGEMENT

Council officers across the region have been involved in and contributed to the review of the FNQROC Development Manual. Industry representatives have also contributed to the review process and these have been considered within the proposed amended manual.

The process to date has included:

- Submissions by Industry and member Councils to alter the manual were reviewed and incorporated into the amended manual through the following working group meetings:
 - 30 November 2016;
 - 24 March 2017;
 - 20 April 2017;
 - 21 April 2017; and
 - 16 May 2017
- Public consultation phase was undertaken from 12 August to 22 September 2017 with a public notice included in the Cairns Post and regional newspapers. Copies of the amendments were located on the Council's and FNQROC Website with a summary of changes available in Customer Service areas for viewing.
- Development Industry Workshops were held:
 - 28 August 2017;
 - 29 August 2017; and
 - 13 September 2017.
- Public submissions were reviewed and actioned according to the working group recommendations at a FNQROC workshop 10th October 2017
- Issue 03.17 (Issue 7) was released to the Council's for adoption 12 October 2017.

ATTACHMENTS

1. FNQROC Development Manual submissions on proposed changes **[5.6.1]**

Item	Section	Title	Amend / New / Removal	Description	Comments	action	(working comments)	Submissions on proposed changes	recommendation
8	AP1	Operational Checklist	Needs to be in AP1	Link to operational Checklist	Currently the Operational Checklist is a Supplementary Document and not within AP1	Recommended an updated version inclusion as Appendix B "Operational Checklist" and additional wording added to AP1.08		Not recommended, under the act it can't be mandatory requirement not to accept an application. Better used as a guidance document for Councils and Developers - needs to be updated.	Recommended not to include checklist within Development Manual
24	CP1	Appendix A p8 of 14	Delete	Delete reference to WSA 03-2002 19.5	No longer required see hunter water	Not recommended as this relates to Disinfection		Disinfection hasn't been done in years. Agreed by council officers that this is the case, it hasn't been done in years. By the time someone moves into the house there has been significant flow of water through the pipes and the chlorinated water that it is not needed. Hypochlorination is more dangerous than not.	Recommended amendment to identify "if detected by council" where disinfection is identified. S5.30 amended to reflect this as well.
43	D1.08	Vertical Curves	Amend	Include additional references in points 2 & 3 ".....AUSTRROADS guidelines and DTMR Road Planning and Design Manual". Point 5 - Amend to read 'A minimum grade of 0.5 per cent shall be maintained in the kerb and channel'	these should be referred to in design of the road network	Recommended		What is the heirarchy between Qld Streets, AUSTRROADS and TMR. They regularly conflict at times.	Recommended Heirarchy identified in manual, Austroads, then TMR then Qld Streets.
48	D1.12	Intersections	Amend	Point 4 should read "Intersections with Transport and Main Roads..." Point 5 should be amended to "The design of intersections should allow all movements to operate safely for the anticipated demand. Projected traffic demands at an existing intersection post development must be calculated using actual current traffic counts as a base."		Recommended		What is the heirarchy between Qld Streets, AUSTRROADS and TMR. They regularly conflict at times.	Recommended Heirarchy identified in manual, Austroads, then TMR then Qld Streets.
52	D1.16	Bus Stops	Amend	Point 3 should read "Tactile Ground Surface Indicators (TGSIs) are to be installed at all bus stops and shelters in accordance with AS/NZS 1428 Design for access and mobility" (remove reference to AS/NZS 1428.4.2002, Appendix E)		Recommended		these conflict at times, what is the hierarchy?	Recommended Heirarchy identified in manual, Austroads, then TMR then Qld Streets.
	D1.19	Pathways	Add	Where the development is on a hillslope, the footpath is to be located on the downhill side of the road.				Add new clause for clarity.	Not recommended
55	D1.20	Bikeways	Amend	Amend Point 1 reference to read ".....concrete paving in accordance with Austroads and the Manual of uniform Traffic Control (MUTCD)"		Recommended		these conflict at times, what is the hierarchy?	Recommended Heirarchy identified in manual, Austroads, then TMR then Qld Streets.
56	D1.21	Kerb and Channel	Add	New point: "Access ramps are to be provided perpendicular to the carriageway and directionally in line with the opposing access ramp on the other side of the carriageway"		Recommended		References to AS/NZS 1428.1 within the development Manual acknowledge that AS/NSZ 1428.1 cannot be complied with given the local requirements for 2m wide footpaths and associated crossfalls for the paths and verges. D1.21.7 be amended to be consistent with actual council requirements for when to use a kerb ramp	Recommend amendments made to wording.
								NBN Pits not developers responsibility but are being failed because of it (pit lids half in and half out of footpaths) - Developers don't put these in - NBN keeps changing their alignment	Noted
129	D8.07	Utilities	Amend	Point 11 - Change offset to be 1300mm (+/- 20mm) from the outer edge of carriageway to centre of pole.		Recommended		1300mm alignment may clash with water, 840mm may clash with stormwater, has this been checked with Ergon. Pushing to 1300mm may need to lengthen the arm plus or increase alignment. Also seen NBN alignments outside current Telstra. Need to make sure requirement matches with S1010. Where exactly is the outer edge of carriageway.	Recommend reversal of proposal. A new note 5 has been added to put water on the opposite side to the streetlight to avoid clashes and amendment made to D6.10 item 3 reflecting this as well.
148	D9.07	Street Tree Planting	Add	Add 9 a: a. Notify Council in writing on completion of planting and commencement of 13 week 'on maintenance' period.		Not Recommended. Amended wording is recommended: Notify Council in writing on completion of planting and maintain trees for a minimum of 13 weeks prior to 'works acceptance' and until final works Acceptance.		Industry has issues with this one.	Noted, no change to proposed recommended.
164	D9.21	Playgrounds	Amend	Amend 6 (new 7) - replace timber with REPLAS		Not Recommended. Recommended Amended wording to remove proprietary product name.		Need to add "installed as per manufactures recommendations" There have been issues with installation interpretations.	recommend inclusion of note on S4340
210	S8.14	Planting	Amend	Amend Point 9 to read: "9. To ensure establishment, all trees shall be appropriately staked with hardwood or recycled plastic stake, extending into the ground to a depth of 500mm. Tree to be loosely supported from each stake by hessian tree tie or approved equivalent. Refer Standard Drawing S4210 for details.		Recommended		Need to identify what an approved equivalent is. Hessian tree ties don't last, rubber better for trees - issues with this on ground.	Amendment made, Hessian ties only.
231	New		New	Need a drawing outlining sound attenuation fencing for council roads outlining the positions (alignments) and requirements for fencing		Not recommended - TMR have a drawing for this.		TMR drawing is not suitable for 60km roads. TMR drawing is too much. Currently using double lapped timber fences, is this ok? Issues on ground with this one.	Held over for next review.
232	New	Line Treatment with Official Bike path and Sealed shoulder	New	Add "Typical Bicycle Treatment drawing" (#4856706) to standard drawing set		Recommended		Need to add info on where RRP's go - council staff recently installed within the bike path/shoulder	recommended
238	S1000	Concrete Kerb and Channel	Amend	Amend concrete invert type x-section - minimum thickness of concrete to be increased to 150mm Amend note 1 - Concrete N25 min for domestic and N32 min for industrial/commercial use in accordance with AS1379 and AS3600 Amend note 4 - Concrete testing to be conducted every 15m3 Amend edge restraint kerb type x-section		Recommended		New note 5 doesn't make sense new note 4 is onerous - should utilise delivery dockets when required and remove FGF Barrier Flush Kerb. Edge Restraint - Reinforcement bars to be removed and '200min' text to be changed to 300mm Note 4 - amend to read "batching documentation to be provided on request" Note 5 - amend to read "Cut or Trowel joints at maximum 3m ctrs.	Recommend: a. amendments to notes 4 and 5 with intervals being 4m centres instead of 3, b. removing FGF Barrier Flush Kerb c. amendments to edge restraint
245	S1010	Typical Road Cross Sections	Amend	S1010 - Delete '0.67m Barrier Kerb and Channel' and add end dimension of services corridor, being 0.3m - 1.2m offset from property boundary. Change 1.0 dimension to read '1.3m clearance between edge of carriageway and centre of light pole.	Changes based on results of recent residential trip survey and analysis.	Recommended in part.		Where is the outer edge of carriageway (link to light poles) and please cross reference to the manual to ease conflict on the ground. Amend Low density residential to "Rural Residential zone" and change tex '1.5m (nominal) to '1.5m nominal or otherwise agreed with water provider"	Recommend A new note 5 has been added to put water on the opposite side to the streetlight to avoid clashes and amendment made to D6.10 item 3 reflecting this as well.

Item	Section	Title	Amend / New / Removal	Description	Comments	action	(working comments)	Submissions on proposed changes	recommendation
247	S1015C	Access Crossovers		see note on vehicle clearance - drawing needs to reflect industry practice and planning constraints.		Noted - review of S1015 recommended		Residential driveways are generally wider than 3m - could be interpreted that it should be treated then as industrial/commercial. Also, have issues with aprons - recommend Apron as an option. Plan detail - amend text 3000 - residential to "Residential single 3000 min Double 5500max Residential Vehicle Crossing and Commercial and Industrial Vehicle crossing detail - amend text 2.5% max grade to 2.5% - 3.0% Add damp proof membrane as a layer between the bedding material and underside of concrete. Commercial details - detail of 799mm separation from property boundary for ramping, as per residential. Amend note 15 to include 'downpipe' after stormwater. Add new note 20. Multiple downpipe connections to kerb are required to be 75mm apart min. A proprietary Kerb adaptor matching kerb profile are permitted for installation.	Recommend amendments made, except it is not recommended to add new note 20.
250	S1015C	Access Crossovers		Need to acknowledge most residential crossovers are 5m wide or more at the kerb	See also S11100, reference to S2005	Review of S1015 recommended		New notes 17 and 18 - under Ergon policy you can get closer.	Noted but recommended to remain.
251	S1015C	Access Crossovers		Amend dimension on flare/apron on plan section - 600mm min for residential applications and 1200mm for commercial and industrial Amend plan section - include text "property boundary" on the left edge of apron/flare join with kerb. The crossover must be within the confines of the property boundary Amend - new note on plan to read: all crossovers not compliant with this drawing require Council approval Amend - new notes: layback kerb may be left in situ and dowels installed, relocating or removing street trees require approval, s/w outlets to be clear of crossover and aprons, refer to FNQROC D9 for clearances from street trees, driveway to be 500mm clear from electrical disturbing pillars, driveway edge to be 1000mm clear of light and power poles Amend note 4 - where a concrete footpath abuts a crossing an expansion joint shall be installed and the footpath levels may not be altered Amend cross sections - add detail of viscreen between concrete and bedding layer to be consistent with S1035 Amend - plan to show crossover where layback kerb left in place and straight driveway to garage (no flare/apron) Amend dimension from property boundary to path to 700m, amend pathway width to 2000mm		Review of S1015 recommended		Issue with 600 and 1200 wings - industry just doesn't do that - issue with concreting	Noted, wings are included as a representation if used.
252	S1016	Kerb Ramps	Rationalise the number of redundant pram ramps installed. Create an alternative for a cut out and poured with path pram ramp	 See PDF		Review of S1016 Recommended		long term issue, Aurecon undertaking a paper on this, suggest discussing with Ian Chill and Steve Rabbett. AS set for city not what we have here - drawing, manual and AS conflicting - clash with kerb inlet pit which pushes you away, trying to comply with code but it has forgotten functionality. AS, ramp for pram, wheelchair and vision impaired, one of these will always be disadvantaged. CBD directional might be right, areas like trinity not so. seem to be designing as if a vehicle ramp but it's not. Ref Dox 5559625 (Adam Gowell) and 5559628 (Aurecon) for additional issues - no solutions or recommendations other for this to be workshopped further between industry and council (including Ian Chill)	
253	S1016	Kerb Ramps		kerb ramps that are not compliant in relation to the slope of the ramp must be in the direction of travel. FNQROC does not provide an example where the ramp is located on a curve in the K&C which is often the case. TMR Std Drg 1446 is much clearer. Recommend that we revise the drawing to match the TMR standard drawing 1446 drawing.		Review of S1016 Recommended		Delete Note 5 and replace with "TGSIs not required for minor collector environments and below. TGSIs required for all densities above minor collectors, and CBD environments, to be installed as per AS1328.4 Section at layback kerb - remove 45 degree chamfer at bottom rear of kerb. Base of slab to go from the back of kerb profile (where it previously was angled at 45, to base of slab at the start of ramp i.e. slab thickening)	Noted. Recommend: a. move to off the curve b. amend note 5, c. removing 45 degree chamfer at bottom rear of kerb. D. amendments to D1.19 Not recommended: a. two scenario
254	S1016	Kerb Ramps		"Amend section at barrier kerb - new note for no step in invert and new dimension 1520mm from invert to start of transition Amend plan - reposition text for transition to barrier kerb 120mm and to layback kerb 1040mm Amend section at layback kerb - new note for no step in invert and new dimension 1280mm from invert to start of transition Amend perspective view - remove cut into existing footpath and add text: reconstruct footpath to existing levels Amend - new illustration to show facing kerb ramps at an intersection Amend notes - kerb ramp to be installed at all intersections with concrete path outside the tangent point, kerb ramps to be installed directionally in line with the opposing kerb ramp, retrofitted kerb ramps may have the tray left in situ with dowels"		Recommended		S1016 be further modified to provide two scenarios, viz where the ramp is constructed at the same time as the K&C, in which case there is no reinforcement required (as per previous versions of the drawing); and where the ramp is retrofitted, in which case the reinforcement can be used and the drawing should also show the edges of the ramp being dowelled into the channel on each side S1016 be modified so that dimension pertaining to rises are noted as maximum or minimum as appropriate to reflect that the grade on the kerb ramp can vary. Council acknowledge that where KIPs are located at an intersection and conflict with the location of kerb ramps, that the kerb ramp is moved within the curve. That TGSIs are used on kerb ramps where the ramps cannot be set up directly opposite each other. The location of TGSIs are set to provide an indication off the direction of travel to reach the ramp on the opposite side of the road.	
255	S1035C	Pathways/Bikeways		3-5% grade on verge but path at 2.5% means verge may have steps that have been refused in the past. Additional note regarding nail in path for conduits under. Note or specification for a minimum grade i.e. in flat park, what is the minimum fall across a path? a 2.5% grade in this situation will create a step and trip/mowing hazard.		Review of S1035 Recommended		Concrete pathway/Bikeway detail - amend text 2.5% grade to match driveway to "2.5% - 3.0% grade to match driveway/crossover" Contraction Joint detail - amend text "S272 galv mesh " to "SL72 galv mesh" Amend note 2 - replace 600 with 700 amend note 3 - replace liase with "liaise" amend not 5 - replace 5000 with 1500 Pathway link details - add thick black line to show foam at path/kerb join.	Recommended
256	S1035C	Pathways/Bikeways		Commentary around corner truncations less than standard. 1 cord truncations of 4.0 x 4.0 to be formalised. S1004 contradicts offset as 700mm. See also D1.19 D9.12		Review of S1035 recommended		Need to be clear 4 x 4 truncation if it is to be offset from the property boundary but this takes the footpath from the road. A nice radius is better.	Recommend curve included and amendment made to D1.19
257	S1035C	Pathways/Bikeways		"Amend concrete pathway/bikeway x-section - pipe to not sit below kerb tray, pipe locations and allocations for dwelling, 25mm bedding sand to be increased to 50mm. 700m clearance between path and property boundary. Maybe add standardised markers for buried assets Amend footpath verge x-section - multiple pipes at kerb (100mm apart for PVC pipes, kerb adaptors may be touching) Amend expansion joint x-section Amend contraction joint x-section"		Review of S1035 Recommended		Spacing should be halve the width of the pipe (builders are the ones that install not developers). Also pipe switch to rectangular from round so it lessens the impact on the footpath as it goes underneath it. Not sure if there is a converter for round to rectangle.	Noted

Item	Section	Title	Amend / New / Removal	Description	Comments	action	(working comments)	Submissions on proposed changes	recommendation
259	S1040	Street Name Signs		Position of poles on esplanade roads - street poles would provide greater visibility and safety on the non-housed side. Add additional street name suffix list or reference to what may be approved		Note on drawing does advise to place the street pole where there is best visibility.		Drawing shows on intersection . In practice had to get approved. Add note to drawing to clarify it can be on the otherside of the road if it provides best visibility.	Recommended
260	S1040	Street Name Signs		Drawing specifies PVC but CRC currently use Aluminium - change?		Recommend amendment for CRC	LIVE-#5374072-FNOROC Development Manual - CRC Street Signage - S1040 - CRC	Amend note 11 to include "and/or pole assemblies"	Recommended
261	S1050	Grated Kerb Inlet Pit Pipe dia. Less than 600mm		150mm clearance on section drawing - from inside or outside of pipe? Should there be a trafficable version?		External - Recommend amendment to drawing		Add new note 11. Provide a minimum 50mm fall into the tray for self cleaning	Recommended
262	S1050	Grated Kerb Inlet Pit Pipe dia. Less than 600mm		"Amend inlet sag x section - non slip surface text pointing to lintel Amend note - 10 lintel top to have a slip resistant surface"		Recommended		Note 6 is 20 years old, should be removed (not deleted from drawing yet). Need a design for roads on hillslopes - currently they are not capturing and it is suggested that our stormwater pipes are under utilised as a result. Add note re nonslip which was added to S1050	Recommended and noted
263	S1055	Grated Kerb Inlet Pit Pipe dia. Greater than 600mm		150mm clearance on section drawing - from inside or outside of pipe? Should there be a trafficable version?		External - Recommend amendment to drawing		Add note 12. Provide a 50mm fall in the tray for self cleansing	Recommended
264	S10608	Kerb Inlet Grate and Frame		drawing silent on locking tabs - add comment. Crevet Cast Iron alternative pits to be added.		Not Recommended - galvanised grates are preferred - cast iron rust shut and are heavier to lift. No need for locking		Galvanised rocks, cast iron has been used around CRC by CRC staff.	Cast iron not recommended
266	S1095	Subsurface Drainage Flushing Points Outlet		Needs to be reflected on drawings S1004-1010 inclusive and S4210 Needs note on drawing to refer to D4.09. Need clarification around flushing points and use of Pit entry's as flushing point and need clarification around clashes (i.e. with stormwater parallel and under Kerb and/or insufficient cover)		Recommend adding note, Not recommended re clashes - this is site specific		Please add note 12 to reference D4.09	Recommended
271	S1110	Concrete driveway for allotment access		Amend - Minor constructability amendments to x-sections and notes		Recommended with additions		Amend note 6 to be the same as S1015 - N25 should be N32 Concrete Driveway Types 1 & 2 Amend text "3000 minimum width" to 3000 - 5500 residential" Amend Note 6 N25 to N32 and RF82 to SL82 Amend Note 7 to include "to commercial/industrial driveway standard)	Recommended
276	S2005	Hydrant Box Installation		Amend - Minor constructability amendments to x-sections and notes		Recommended		Please add note to also reference S1035	Recommended
284	S2038	Standard Arrangement of 20mm Water Service and Recycled Water Installations		Developer should install all road crossings and property connections at subdivisional stage. Note 6 should be replicated ON the drawing and also on S1035C.	This change would reduce the time taken for properties to be connected, reduce costs to council, reduce damaged services, reduce ESC risk, reduce WHS risk with people working on an open road	Not Recommended. This requires a rather big operational change - it is suggested this is raised at the next CRC Development meeting for workshoping.		The developer is better to do this up front rather than post in a staggered manner. Mackay (?) allows it. Could save councils resources if this is done. (response) difficulties in terminating it. All 200mm reference to be changed to 300mm	Not recommended for CRC, it is recommended this is placed on an agenda for a CRC/industry meeting for discussion. Amendment to change 200mm to 300mm not recommended
286	S3005	House Connection Branches		Complete revision required with industry and CRC. Many of the Fibreglass pits will not work unless below around 2m deep.		Agreed - it is suggested this is raised at the next CRC Development meeting for workshoping.		S3005 hasn't been working for 2 years and needs to be fixed. Recommend add note re depth. Type A and E also wrong - should remove type A	Recommend amendments to be made and D7.14 (12) add new dot point (iv)
294	S4110	Traffic Island Medians		Root Guard and Subsoil not in the right locations. Also ref S1095 and S1004-10		Recommend amendments		Amend galv mesh location to be on bottom of centrally placed mesh	Not recommended
296	S4210	Street Tree Planting		1) Remove "1000x800mm. 500g "Wool Eco mat" pinned with min 6 No. off 94.0mm galvanised wire pins, U-shaped, 200mm long 50mm wide" Not required with mulching practices 3) Amend wording in note on drawing referring to stakes. Remove "...top200mm neatly painted white." 4) Remove note and drawing "2 no. of 21g 'Agriform' Sow release fertiliser tablets at base of planting rootball" 5) Amend wording in drawing specification. Relace brackets with: ". (70% site topsoil, 30% mature mill mud, organic based fertiliser and water gell crystals, mixed into backfill as per manufacturer's recommendations specific to soil structure and texture)" 6) Add to notes on drawing: "All trees must comply with Australian Standard AS2303:2015 - Tree Stock for Landscape Use" 7) A note is required to state that a root barrier must be installed on both sides of the tree in the presence of foot paths and services. 8) Tree planting in a verge less than 1600mm must be discussed with Council during the Concept Planning stage.		Recommend all except note 8 - it is on another drawing.		13/09/2017 Need to identify what an approved equivalent is. Hesion tree ties don't last, rubber better for trees - issues with this on ground.	Recommend amendment to hesian only.
302	S4300	Log Barrier Fencing & Timber Bollards		Amend note 8 to reflect proprietary removable bollards from Replas or the like		Not recommended - cannot include a proprietary product name.		13/09/17 Need to add "installed as per manufactures recommendations" There have been issues with installation interpretations.	
306	S4370	Playground Edging		200 dia bollard not in use. Use 150mm. New drawing preferences recycled plastic - there fore spec needs to reflect availability of recycled materials (which come in 100, 125, 145 and 150mm sizes). Maybe plastic products need a separate drawing?		Recommended		13/09/17 Add note: as per manufacturers installation recommendation.	Recommended
307	S4370	Playground Edging		Amend note 8 to reflect proprietary removable bollards from Replas or the like		Recommend amend Note 4, not recommended to refer to a proprietary product.		13/09/17 Need to add "installed as per manufactures recommendations" There have been issues with installation interpretations.	Recommended
310	S4390	Advisory Signs		As above for plastic materials. New spec? i.e. 200 x 50 board specified on 150mm posts, whereas Replas make 200 x 40 board fitted into 125mm square bollard		Recommended re recycled product, not recommended reference to proprietary product.		13/09/17 Need to add "installed as per manufactures recommendations" There have been issues with installation interpretations.	Recommended