

Ordinary Meeting of Council

24 June 2020

UNDER SEPARATE COVER ATTACHMENTS

ITEMS 9.5 TO 9.8

QUEANBEYAN-PALERANG REGIONAL COUNCIL ORDINARY MEETING OF COUNCIL

ATTACHMENTS – 24 June 2020 Page i

Item 9.5	Staging Options Project Estimate	s for Embellishment of Proposed Park - 16 Agnes Avenue, Crestwood es			
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QUEANBEYAN-PALERANG REGIONAL COUNCIL

Council Meeting Attachment

24 JUNE 2020

ITEM 9.5 STAGING OPTIONS FOR EMBELLISHMENT OF PROPOSED

PARK - 16 AGNES AVENUE, CRESTWOOD - PROJECT

ESTIMATES

ATTACHMENT 1 ROSS PARK QUEANBEYAN PRELIMINARY DESIGN COST

ESTIMATES FOR STAGE 1 AND STAGE 2

Job Name :	4220 ROSS PARK	Job Description
Client's Name:	<u>Indesco</u>	42/20 Ross Park Queanbeyan Preliminary Design
1		Cost Estimate 19 May 2020

Trd	Trade Description	Trade	Cost/m2	Sub Total	Mark	Trade
No.		%			Up %	Total
1	ROSS PARK QUEANBEYAN PRELIMINARY COST ESTIMATE					
2	Stage 1					
3	Preliminaries and Site Establishment	1.98	6.78	15,000		15,000
4	Earthworks Including Erosion and Sediment Control	3.70	12.65	28,000		28,000
5	Pavements and Surface Finishes	1.46	4.97	11,000		11,000
6	Furniture, Fixtures and Structures - Excluded					
	Multi-Use Court Surfacing and Play Equipment	10.05	34.33	76,000		76,000
	Landscape Topsoil/Subgrade	1.72	5.87	13,000		13,000
	Planting	2.38	8.13	18,000		18,000
	Lighting	2.65	9.03	20,000		20,000
11	Irrigation	1.98	6.78	15,000		15,000
	Landscape Maintenance	1.98	6.78	15,000		15,000
	Subtotal - Trade Works					<u>211,000</u>
14	Consultant Fees (7%)	1.98	6.78	15,000		15,000
15	Escalation to December 2020 (3.2% per annum)	0.66	2.26	5,000		5,000
	Contingency (10%)	3.17	10.84	24,000		24,000
17	Total Outturn Costs Excl GST - Stage 1					<u>255,000</u>
18						
	Stage 2					
20	Preliminaries and Site Establishment	3.57	12.20	27,000		27,000
21	Earthworks including Erosion and Sediment Control	1.46	4.97	11,000		11,000
22	Pavements and Surface Finishes	8.33	28.46	63,000		63,000
23	Furniture, Fixtures and Structures	29.76	101.63	225,000		225,000
24	Play Equipment	4.63	15.81	35,000		35,000
25	Landscape Topsoil/Subgrade	0.79	2.71	6,000		6,000
26	Planting	1.46	4.97	11,000		11,000
27	Lighting	2.65	9.03	20,000		20,000
28	Irrigation	0.66	2.26	5,000		5,000
29	Landscape Maintenance	0.93	3.16	7,000		7,000
	& Woollard Consultants D/L ARN: 81058		Daga :	1 of 4		Printing: 10/May/20

Wilde & Woollard Consultants P/L ABN: 81058229404 AC

1 of 4

Date of Printing: 19/May/20

Job Name :	4220 ROSS PARK	Job Description
Client's Name:	<u>Indesco</u>	42/20 Ross Park Queanbeyan Preliminary Design
1		Cost Estimate 19 May 2020

Trd	Trade Description	Trade	Cost/m2	Sub Total	Mark	Trade
No.		0/0			Up %	Total
30	Subtotal - Trade Works					410,000
31	Consultant Fees (7%)	3.84	13.10	29,000		29,000
32	Escalation to June 2021 (3.2% per annum)	2.12	7.23	16,000		16,000
33	Contingency (10%)	6.08	20.78	46,000		46,000
34	Total Outturn Costs Excl GST - Stage 2					<u>501,000</u>
35						
36	Total Outturn Costs Excl GST - Stage 1 and 2					<u>756,000</u>
37						
38	BASIS OF ESTIMATE:-					
	Ross Park Queanbeyan Landscape Concept Design dated March 2020					
	Staging Plan					
	Ross Park Preliminary Costing					
42	Indesco Emails dated 18 May and 19 May 2020 (Response to Wilde and Woollard Queries)					
43						
44	INCLUSIONS:-					
45	Assumed coloured asphalt playing surface to the basketball court only and the remaining area in the multi-use court as coloured concrete.					
46	Assumed coloured concrete to the secondary pathway and the shaded BBQ/picnic area.					
47	Assumed plain concrete to the accessible pathway					
48	Assumed 50mm sub-base and 50mm base course to asphalt playing surface to level it against the adjoining concrete surface.					
	Assumed 50mm sub-base course to 100mm plain and 100mm coloured concrete surfaces.					
50	Allowed for off-form concrete finish to planter boxes and garden bed.					

Wilde & Woollard Consultants P/L ABN: 81058229404 AC

2 of 4 Date of Printing: 19/May/20

Job Name :	4220 ROSS PARK	Job Description
Client's Name:	<u>Indesco</u>	42/20 Ross Park Queanbeyan Preliminary Design
1		Cost Estimate 19 May 2020

Trd	Trade Description	Trade	Cost/m2	Sub Total	Mark	Trade
No.		0/0			Up %	Total
	Allowed for connection/ meterings/ approvals/ commissioning to potable water and sewer to BBQ and water fountain.					
	Allowed for irrigation to turf, planter boxes and garden beds.					
53	Allowed for 5 solar powered light poles each in stage 1 and 2.					
	Allowed for consultant fees at 7% of trade cost including preliminaries					
	Allowed for 10% contingency.					
56	The costings for the following items have been taken from the Ross Park Preliminary Costing provided:					
57	Supply and install viro tube: \$6,800					
58	Supply and install shade sail: \$50,000					
59	Supply and install wall mounted benches: \$10,000					
60	Supply and install basketball/netball hoops: \$10,000					
61	Supply and install table tennis tables: \$20,000					
62	Supply and install water fountain: \$4,000					
63	Supply and install sculptural elements and signage: \$10,000					
64	Play equipment and fitness equipment: \$35,000					
65	Supply and install Bike Racks: \$1,500					
66						
67	EXCLUSIONS:-					
68	GST					
	Escalation beyond December 2020 for Stage 1 works and beyond June 2021 for Stage 2 works					
70	Excavation in rock					

Wilde & Woollard Consultants P/L ABN: 81058229404 AC

Date of Printing: 19/May/20

Job N	Vame :	4220 ROSS PARK				Job Description	
Clien	t's Name:	<u>Indesco</u>		4	42/20 Ross Park Queanbeyan Preliminary Desi		
					Cost Estimate 19 1	May 2020	
T1		Total Description	T 4 -	G4/3	C-1- T-4-1	3.51-	T
Trd		Trade Description	Trade	Cost/m2	Sub Total	Mark	Trade
No.			%			Up %	Total
71	Remedia ground	ation of contaminated					
72	Relocati	ion of existing services					
73	Authori	ty and statutory fees					
74	Contrib	ution cost					
75	Legal co	osts					
76	Any wo	rks to the perimeter of the					

341.46

755,999

100.00

Final Total: \$ 756,000

756,000

site. GFA: 2,214 m2.

 Job Name :
 4220 ROSS PARK
 Job Description

 Client's Name:
 Indesco
 42/20 Ross Park Queanbeyan Preliminary Design Cost Estimate 19 May 2020

	Item Description	Quantity	Unit	Rate	Mark	Amount
No.					Up %	
Trade: 2 St	<u>tage 1</u>					
1						
Stage 1					Total:	
Trade: 3 <u>P1</u>	reliminaries and Site Establishment					
Preliminarie	s and Site Establishment					
1 Site establish	ment incl amenities, plant on site, etc	1.00	item	15,000.00		15,000.0
2 Preparation o	f 'as built' documentation					INC
	H&S Plan, Safety Management Plan, al Management Plan, Quality					INC
	work from builders					INC
5 Subtotal						15,000.00
Preliminaries	s and Site Establishment				Total:	15,000.0
1 Clearing and		1,597.00		0.15		239.5
Earthworks Control	arthworks Including Erosion and Sedimen Including Erosion and Sediment		m2	0.15		220.5
2 General earth	works to achieve design levels	1,597.00	m2	15.00		
						23,955.0
3 Allowance for including man	or erosion and sediment control measures intenance and repair of erosion and	1.00	item	3,000.00		
3 Allowance fo	intenance and repair of erosion and		item item	3,000.00 805.45		3,000.0
3 Allowance for including massedimentation	intenance and repair of erosion and			ŕ		3,000.0 805.4
3 Allowance for including massedimentation 4 Rounding 5 Subtotal	intenance and repair of erosion and			ŕ	Total:	3,000.0 805.4 28,000.0
3 Allowance for including massedimentation 4 Rounding 5 Subtotal Earthworks I	intenance and repair of erosion and n controls			ŕ	Total:	3,000.0 805.4 28,000.0
3 Allowance for including massedimentation 4 Rounding 5 Subtotal Earthworks I	intenance and repair of erosion and n controls Including Erosion and Sediment Control avements and Surface Finishes			ŕ	Total:	3,000.0 805.4 28,000.0
3 Allowance for including massedimentation 4 Rounding 5 Subtotal Earthworks I Trade: 5 Per Pavements a 1 Supply and in	intenance and repair of erosion and a controls Including Erosion and Sediment Control avements and Surface Finishes Install 100mm plain concrete to accessible		item	ŕ	Total:	3,000.0 805.4 28,000.0 28,000.0
3 Allowance for including marked including marked including and sedimentation and sedimentation and sedimentation and sedimental substitution and sedimental and sedimental and sedimental substitution and sedimental sedimentation sedimental sedimentation sedimental sedimentation sedimental sedimental sedimental sedimentation sedimental sedimentation sedimentat	intenance and repair of erosion and a controls Including Erosion and Sediment Control Invements and Surface Finishes Intelligence Finishes Install 100mm plain concrete to accessible uding granular sub-base (50mm) Install 100mm coloured concrete to walk/	1.00	item	805.45	Total:	3,000.0 805.4 28,000.0 28,000.0
3 Allowance for including marked including marked including and sedimentation 4 Rounding 5 Subtotal Earthworks I Trade: 5 Por Pavements a 1 Supply and in pathway included 12 Supply and in run/ bike trace	intenance and repair of erosion and a controls Including Erosion and Sediment Control Invements and Surface Finishes Intelligence Finishes Install 100mm plain concrete to accessible uding granular sub-base (50mm) Install 100mm coloured concrete to walk/	91.00 4.00	item	805.45 115.00	Total:	3,000.0 805.4 28,000.0 28,000.0
3 Allowance for including markedimentation 4 Rounding 5 Subtotal Earthworks I Trade: 5 Po Pavements a 1 Supply and in pathway included a sub-base (50)	intenance and repair of erosion and a controls Including Erosion and Sediment Control Invements and Surface Finishes Intelligence Finishes Install 100mm plain concrete to accessible uding granular sub-base (50mm) Install 100mm coloured concrete to walk/	91.00 4.00	m2	115.00 115.00	Total:	23,955.0 3,000.0 805.4 28,000.0 28,000.0 460.0 75.0

Wilde & Woollard Consultants P/L ABN: 810582294 Page: 1 of 3 Date of Printing: 19/May/20

Job Name :	4220 ROSS PARK	<u>Job Description</u>
Client's Name:	<u>Indesco</u>	42/20 Ross Park Queanbeyan Preliminary Design Cost Estimate 19 May 2020
i		Localities 12 May 2020

Item	Item Description	Quantity	Unit	Rate	Mark	Amount
No.					Up %	
Trade: 6 Furnitu	re, Fixtures and Structures - Exclud	<u>ed</u>				
Furniture, Fixture	s and Structures - Excluded				Total:	
Trade: 7 <u>Multi-U</u>	se Court Surfacing and Play Equipn	<u>1ent</u>				
1 Multi-Use Court Su	urfacing and Play Equipment					
Surfacing						
multi-use court incl	00mm coloured concrete to luding granular sub-base (50mm)	299.00	m2	115.00		34,385.0
(basketball court) in and base course (50		361.00	m2	80.00		28,880.0
4 Supply and install p	playing court linemarking	1.00	item	2,000.00		2,000.0
5 Rounding		1.00	item	735.00		735.0
6 Subtotal - Surfacing	g 5					66,000.0
Play Equipment						
7 Supply and install b	oasketball/netball hoops	2.00	no	5,000.00		10,000.0
8 Subtotal - Play Equ	ipment					10,000.0
Multi-Use Court S	urfacing and Play Equipment				Total:	76,000.0
Trade: 8 Landsco	ape Topsoil/Subgrade					
Landscape Topsoi	1/ Subgrade					
1 Subgrade preparati	on	842.00	m2	1.00		842.0
2 Excavate tree pits		33.00	no	55.00		1,815.0
3 Site topsoil testing		1.00	item	1,000.00		1,000.0
4 Allowance for top s	soil of 100mm to turf	842.00	m2	10.00		8,420.0
5 Rounding		1.00	item	923.00		923.0
6 Subtotal						13,000.0
Landscape Topsoil	/Subgrade				Total:	13,000.0
Trade: 9 <u>Plantin</u> ;	g					
Planting						
	ree backfill (allow 1m3 to trees)	23.00	m3	98.00		2,254.0
2 Supply and install t		842.00		15.00		12,630.0

Wilde & Woollard Consultants P/L ABN: 810582294

Date of Printing: 19/May/20

Global Estimating System (32 Bit) - J

Page: 2 of 3

| Job Name : 4220 ROSS PARK | Job Description |
| Client's Name : Indesco | 42/20 Ross Park Queanbeyan Preliminary Design Cost |
| Estimate 19 May 2020 |

(tem	Item Description	Quantity	Unit	Rate	Mark	Amount
io.	--	C ,			Up %	
						(Continued)
Trade: 9 Plantin						
	trees (100L) including mulch	23.00		115.00		2,645.0
4 Rounding		1.00	item	471.00		471.0
5 Subtotal						<u>18,000.00</u>
Planting					Total:	18,000.0
Trade: 10 <u>Lightin</u>	g					
Lighting						
1 Allowance for sola poles (allowed for	ar light posts including controller and 5no.)	1.00	item	20,000.00		20,000.0
2 Subtotal						20,000.00
Lighting					Total:	20,000.0
Trade: 11 Irrigation Allowance for irrigation	gation to turf including controller	1.00	item	15,000.00		15,000.00
2 Subtotal						15,000.00
Irrigation					Total:	15,000.0
Trade: 12 <u>Landso</u>	ape Maintenance					
Landscape Maint	enance					
1 Plant establishmen	t (3 months)	3.00	months	1,300.00		3,900.0
2 Maintain the lands (defects and liabili	cape work for a period of 12 months ties)	12.00	months	900.00		10,800.0
3 Rounding	-	1.00	item	300.00		300.0
4 Subtotal						15,000.00
Landscape Mainte					Total :	

Page: 3 of 3

Job Name : 4220 ROSS PARK Job Description Client's Name: Indesco 42/20 Ross Park Queanbeyan Preliminary Design Cost Estimate 19 May 2020 **Item Description** Unit Rate Mark **Item** Quantity Amount No. Up % Trade: 19 Stage 2 1 Total: Stage 2 20 Preliminaries and Site Establishment Preliminaries and Site Establishment 1 Site establishment incl amenities, plant on site, etc 1.00 item 27,000.00 27,000.00 2 Preparation of 'as built' documentation INCL 3 Implement OH&S Plan, Safety Management Plan, INCL Environmental Management Plan, Quality INCL 4 Protection of work from builders 5 Subtotal 27,000.00 Preliminaries and Site Establishment Total: 27,000.00 Trade: 21 Earthworks including Erosion and Sediment Control Earthworks Including Erosion and Sediment Control 1 Clearing and grubbing 617.00 m2 0.15 92.55 2 General earthworks to achieve design levels 617.00 m2 15.00 9,255.00 3 Allowance for erosion and sediment control measures 1.00 item 1,500.00 1,500.00 including maintenance and repair of erosion and sedimentation controls 4 Rounding 1.00 item 152.45 152.45 5 Subtotal 11,000.00 Earthworks including Erosion and Sediment Control Total: 11,000.00 Trade: 22 Pavements and Surface Finishes **Pavements and Surface Finishes** 1 Supply and install 100mm coloured concrete to walk/ 184.00 m2 115.00 21,160.00 run/ bike track (seconday pathway) including granular sub-base (50mm) 2 Supply and install 100mm coloured concrete to areas 101.00 m2 115.00 11,615.00 around planter boxes (not included in stage 1) including granular sub-base (50mm)

Wilde & Woollard Consultants P/L ABN: 810582294 Page: 1 of 4 Date of Printing: 19/May/20

170.00 m2

1.00 item

3 Supply and install 100mm coloured concrete to shaded

4 Allow extra over for terraced steps

BBQ/ picnic area including granular sub-base (50mm)

Global Estimating System (32 Bit) - J

19,550.00

10,000.00

115.00

10,000.00

Job Name :	4220 ROSS PARK	<u>Job Description</u>
Client's Name:	<u>Indesco</u>	42/20 Ross Park Queanbeyan Preliminary Design Cost
1		Estimate 19 May 2020

Item Description	Quantity	Unit	Rate	Mark	Amount
No.				Up %	
Trade: 22 Pavements and Surface Finishes					(Continued)
5 Rounding	1.00	item	675.00		675.0
6 Subtotal					63,000.00
Pavements and Surface Finishes				Total:	63,000.0
Trade: 23 Furniture, Fixtures and Structures					
Furniture, Fixtures and Structures					
1 Supply and install footing for 400mm high concrete wall to planter boxes	167.00	m	150.00		25,050.00
2 Supply and install 400mm high concrete wall (200mm thick) with off form concrete finish to planter boxes	167.00	m	375.00		62,625.0
3 Supply and install footing for concrete wall to garden beds (assumed 900mm high)	22.00	m	175.00		3,850.0
4 Supply and install concrete wall (assumed 900mm high and 200mm thick) with off form concrete finish to garden beds	22.00	m	680.00		14,960.0
5 Supply and install shade sail	2.00	no	25,000.00		50,000.0
6 Supply and install wall mounted benches	5.00	no	2,000.00		10,000.0
7 Supply and install BBQ including connection/ meterings/approvals/commissioning to potable water and sewer	1.00	item	16,000.00		16,000.0
8 Supply and install table tennis tables	2.00	no	10,000.00		20,000.0
9 Supply and install water fountain including connection/metering/approvals/commissioning to potable water and sewer	1.00	no	4,000.00		4,000.0
10 Supply and install sculptural elements and signage	1.00	item	10,000.00		10,000.0
11 Supply and install bike racks	3.00	no	500.00		1,500.0
12 Supply and install picnic setting	1.00	no	7,000.00		7,000.0
13 Rounding	1.00	item	15.00		15.0
14 Subtotal					225,000.00
Furniture, Fixtures and Structures				Total:	225,000.0
Trade: 24 Play Equipment					
Play Equipment					
1 Supply and install play equipment and fitness equipment	1.00	item	35,000.00		35,000.0
2 Subtotal					35,000.00

Wilde & Woollard Consultants P/L ABN: 810582294 Page: 2 of 4 Date of Printing: 19/May/20

Job Name :	4220 ROSS PARK	Job Description
Client's Name:	Indesco	42/20 Ross Park Queanbeyan Preliminary Design Cost Estimate 19 May 2020
		Estimate 19 May 2020

Iter	m Item Description	Quantity	Unit	Rate	Mark	Amount
No.					Up %	
]	Play Equipment				Total :	35,000.00
Tra	de: 25 <u>Landscape Topsoil/Subgrade</u>					
	Landscape Topsoil/Subgrade					
	Supply and install 300mm top soil as specified to shrubeds (planter boxes)	ıb 163.00	m2	30.00		4,890.00
2	Supply and install 800mm top soil to shrub beds (garden beds)	3.00	m2	80.00		240.00
3	Rounding	1.00	item	870.00		870.0
4	Subtotal					<u>6,000.00</u>
]	Landscape Topsoil/Subgrade				Total:	6,000.0
Tra	de: 26 <u>Planting</u>					
	<u>Planting</u>					
1	Supply and install virotube	2,000.00	no	3.40		6,800.0
	Supply and install 75mm bark mulch (planting bed an garden bed)	d 166.00	m2	10.00		1,660.0
3	Supply and install tree backfill (allow 1m3 to trees)	10.00	m3	98.00		980.0
4	Supply and install trees (45L) including mulch	10.00	no	55.00		550.0
	Supply and install shrubs to garden beds (provisional sum)	1.00	item	500.00		500.0
6	Rounding	1.00	item	510.00		510.0
7	Subtotal					11,000.00
]	Planting				Total:	11,000.0
Tra	de: 27 Lighting					
	Lighting					
	Allowance for solar light posts including controller an poles (allowed for 5no.)	nd 1.00	item	20,000.00		20,000.0
	Subtotal					20,000.00
]	Lighting				Total:	20,000.0
Tra	de: 28 Irrigation					
	Irrigation					
1	Allowance for irrigation to planter boxes and garden beds	1.00	item	5,000.00		5,000.0
	Subtotal					5,000.00

Wilde & Woollard Consultants P/L ABN: 810582294 Page: 3 of 4 Date of Printing: 19/May/20

 Job Name :
 4220 ROSS PARK
 Job Description

 Client's Name:
 Indesco
 42/20 Ross Park Queanbeyan Preliminary Design Cost Estimate 19 May 2020

Item Item Descri	ption Qu	antity	Unit	Rate	Mark	Amount
No.					Up %	
Irrigation					Total:	5,000.00
Landscape Maintenance	_					
Landscape Maintenance						
1 Plant establishment (3 months)		3.00	months	700.00		2,100.00
2 Maintain the landscape work for a	period of 12 months	12.00	months	400.00		4,800.00
(defects and liabilities)						100.00
(defects and liabilities) 3 Rounding		1.00	item	100.00		100.00
` ,		1.00	item	100.00		7,000.00

QUEANBEYAN-PALERANG REGIONAL COUNCIL

Council Meeting Attachment

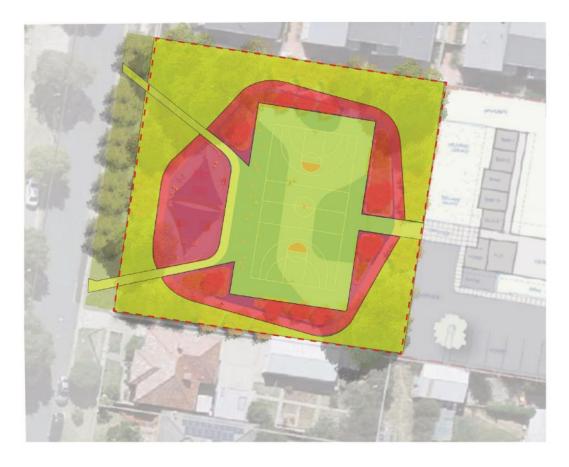
24 JUNE 2020

ITEM 9.5 STAGING OPTIONS FOR EMBELLISHMENT OF PROPOSED

PARK - 16 AGNES AVENUE, CRESTWOOD - PROJECT

ESTIMATES

ATTACHMENT 2 STAGING PLAN FOR EMBELLISHMENT OF PARK AT 16
AGNES AVENUE



LEGEND

SITE BOUNDARY



STAGE 1 PRIORITIES

- Basketball court
 Accessible pathways
 Shade/Perimeter Trees



STAGE 2 PRIORITIES

- · Shade Structure + BBQ
- · Fitness + Play elements
- Secondary pathwaysPlanter beds



STAGING PLAN

DESCRIPTION: CONCEPT DESIGN DATE: 17.03.2020

PROJECT NAME: ROSS PARK PROJECT NUMBER: 7327



QUEANBEYAN-PALERANG REGIONAL COUNCIL

Council Meeting Attachment

24 JUNE 2020

ITEM 9.7 PALERANG COMMUNITY DEVELOPMENT SERVICING PLANS FOR WATER & SEWERAGE

ATTACHMENT 1 PALERANG COMMUNITIES WATER SUPPLY DEVELOPMENT SERVICING PLAN (AMENDED 11 JUNE 2020)



Queanbeyan-Palerang Regional Council

Palerang Community Development Servicing Plan for Water Supply

April 2020

Adopted: [Insert Date]
Effective: [Insert Date]



Document Control

Version	Author	Reviewer	Approved for Issue		
Version	reision Author	Reviewer	Name	Date	
Draft 1	C. Chlochaisri	M. Sundar	M. Sundar	-	
Draft 2	C. Chlochaisri	M. Sundar	M. Sundar	20/12/2019	
Draft 3	C. Chlochaisri	M. Sundar	M. Sundar	14/02/2020	
Final Draft	C. Chlochaisri	M. Sundar	M. Sundar	06/04/2020	

Cover photo: Berlang, "QPRC endorses Tourism Plan", Braidwood Times (2017), https://www.braidwoodtimes.com.au/story/4632416/plan-to-develop-tourist-economy/

Disclaimer

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Executive Summary

Developer Charges are an integral part of the fair pricing of water supply and sewerage services. They are up-front charges levied on developers to recover part of the infrastructure costs incurred in servicing new developments or changes to existing development. Section 64 of the Local Government Act, 1993 enables a local government council to levy developer charges for water supply, sewerage and stormwater services.

This document covers the Development Servicing Plans (DSPs) for water supply service areas of the Palerang Community of Queanbeyan-Palerang Regional Council (QPRC). The maps of the development service areas for water supply are shown in Appendix A. For the areas serviced by the Captains Flat water supply scheme, Council's IWCM strategy identified negligible growth, hence has not been included in the DSP.

This DSP has been prepared in accordance with the Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2016) issued by the Minister for Lands and Water, pursuant to Section 306 (3) of the Water Management Act, 2000.

The existing water supply assets serving the Palerang Community, and the timing and expenditures for assets planned for the next 10-years based on the adopted IWCM Strategy, are presented in Section 4. The levels of service to be provided in the DSP areas are summarised in Section 5.

The water supply developer charges for the area covered by this DSP have been determined in 2019/20 dollars and are as follows:

Water DSP Name	Service area covered	Calculated Developer Charge (\$ per ET)	Adopted Developer Charge (\$ per ET)
Water DSP Area 1	Bungendore- Greenfield Developments	18,471	18,471
Water DSP Area 2	Bungendore and Braidwood	7,452	7,452

The developer charges calculated in these DSPs will be reviewed after eight years, unless required otherwise. In the period between any reviews, the developer charges will be indexed annually on the basis of movements in the consumer price index (CPI) for Sydney, excluding the impact of GST.

The DSPs have been adopted by Council after public exhibition on [insert date] and the adopted developer charges are effective from [insert date].

Developers shall be responsible for the full cost of the design and construction of water supply reticulation works within the subdivisions.

The background documents for the water supply DSP are provided in Appendix B. The electronic copy of these documents containing all the critical data and calculation models behind the DSP will be made available on request.

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1 Introduction

The developer charges are up-front charges levied by urban water utilities to recover part of the infrastructure costs incurred in servicing new developments or additions or changes to the existing developments.

Section 64 of the Local Government Act 1993 enables a local government council to levy developer charges for water supply, sewerage and stormwater. This derives from a cross-reference in that Act to Section 306 of the Water Management Act, 2000.

A Development Servicing Plan (DSP) details the water supply / sewerage developer charges to be levied on developments utilising a water utility's water supply, sewerage and stormwater infrastructure.

The aims and objectives of this DSP are to:

- Provide an overall administrative framework under which specific water assets may be coordinated and constructed
- Ensure that adequate water infrastructure is provided for as part of the new development
- Provide a comprehensive strategy for the assessment, collection, expenditure accounting and review of contributions on an equitable basis
- Ensure that the existing community is not burdened by the provision of water infrastructure as
 a result of future development
- Enable Council to be both publicly and financially accountable in its assessment and administration of the Development Servicing Plans.

This DSP covers water supply developer charges for the service areas of the Palerang Community of Queanbeyan-Palerang Regional Council (QPRC). The maps of water supply DSP areas serviced by Palerang Community of QPRC are shown in Appendix A.

This DSP has been prepared in accordance with the 2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater issued by the Minister for Lands and Water, pursuant to Section 306 (3) of the Water Management Act, 2000.

Once adopted, this DSP supersedes any other requirements related to water supply developer charges for the development areas covered by the DSP. The DSP takes precedence over any of Council's codes or policies where there are any inconsistencies relating to water supply developer charges.

The developer charges should be indexed based on movements in the consumer price index (CPI) for Sydney, excluding the impact of GST. The developer charges calculated in this DSP will be reviewed after eight years.

Developers shall be responsible for the full cost of the design and construction of water supply reticulation works within the subdivisions.

2 Administration

2.1 DSP areas and names

The Palerang Community of QPRC operates and manages three reticulated water supply systems to serve townships within the former Palerang Local Government Area (LGA).

This DSP is applicable to all land within the DSP areas which is serviced by the water infrastructure in the Palerang Community of QPRC. The DSP names and areas covered are presented in Table 2-1.

Table 2-1: DSP Names and Areas Covered

DSP Details		Schemes covered	Area covered	
WDSP 1	Water Supply DSP Area 1	Bungendore-Greenfield Developments	The maps of the water supply DSP areas covered in this document are	
WDSP 2 Water Supply DSP	Bungendore	shown in Appendix A.		
Area 2		Braidwood		

2.2 DSP boundaries

The DSP area boundaries are based on the existing and future developments to be served by Council's water supply services for the Palerang Community. Regarding the new developments outside the water supply DSP areas boundaries, Council may:

- apply the developer charges adopted by this Plan to the new development, or
- prepare a new DSP for the new development.

2.3 Application of developer charges

Developer charges will be levied on all land and new developments within the DSP areas. Council will assess the demand for service in terms of equivalent tenements (ET) and will levy developer charges proportional to the number of ETs. The developer charges will also apply to re-developments (i.e. alterations, additions or change of use for an existing development) on the basis of resulting increase in the ET for the services.

Developers shall be responsible for the full cost of the design and construction of water reticulation works within subdivisions.

2.4 Effective commencement date for this DSP

This DSP has been adopted by QPRC on [insert date] and will be effective from [insert date]. Charges will be levied pursuant to this DSP, as a condition of development consent granted on or after the day this DSP comes into effect.

2.5 Timing and payment of developer charges

The developer charges will be determined and levied in accordance with the provisions of this DSP at the time of considering an application for a compliance certificate under Section 305 of the Water Management Act 2000 or a construction certificate under Section 109c of the Environmental Planning and Assessment Act 1979 or at the time of issuing a notice or other form of written advice e.g. under the SEPP (Exempt and Complying Development Codes) 2008.

The time limit for payment of developer charges will be included in the notice of determination or will be advised to the developer by a separate notice. The amount of any developer charges not paid

within the specified time limit will lapse. Any subsequent determination of developer charges will be made in accordance with Council's then current DSP.

The timing of payment of developer charges to the Council is as follows:

- subdivision prior to the release of the subdivision linen plan (Subdivision Certificate) by Council to the applicant;
- dwellings and other buildings prior to the issue of construction certificate
- other developments prior to the issuing of a notice of commencement of work, should the proposed development not involve any construction.

Other arrangements for payment are at Council's discretion and depend upon the circumstances of the contributor or the development.

Due to the general consistency of subdivisions and dwellings within the Palerang Community no discount rates apply, and the basic charge as set out in the Development Servicing Plans will apply unless special circumstances can be established to the satisfaction of Council.

Payment of a developer charge is a precondition to the granting of a Compliance Certificate, which must be obtained in order to complete a development. A Compliance Certificate will not be issued until the developer charge payment has been received.

2.6 Method of payment

Developer charges must be made in the form of monetary payments to Council. The development consents will contain the conditions specifying the developer charges amount payable at the time when the consent is issued. A note will be attached to the consent condition which will advise that the developer charges will be at the rate which applies at the time of payment. That is the rate may increase, through indexation or replacement of this DSP with a new one, from the time the condition appears on the notice of development consent until the time the developer charge is actually paid to Council.

Developers may seek Council's agreement and approval on payment deferment. Where the applicant can demonstrate that the settlement of the contribution as set out by the Council is unreasonable in the circumstances of the case, the Council may accept deferred or periodic settlement. Any request should provide detailed reasons, and should agreement be granted, deferral will be subject to the following requirements:

- The applicant is to arrange for a Bank Guarantee to be prepared to the value of contributions payable as agreed to by Council (this is to include indexation where applicable),
- The Bank Guarantee is to be made in favour of Council and shall not be the subject of any expiry date,
- Council is to be the custodian of the original Bank Guarantee, and
- The maximum time frame granted for deferment is six months. Should the contributions not be paid by this time, Council will exercise its right under the agreement to call in the Bank Guarantee without notice. Should the approved deferment overlap into the following financial year, then the contribution(s) payable will be subject to indexation.

Upon Council's approval, the charges will be recorded as a debt against the property and payable at a rate applicable at the time of payment.

2.7 Exemptions from developer charges

Crown Developments:

Under Section 306 (4) and (5) of the Water Management Act 2000, the Minister for Planning may decide in regard to developer charges levied on Crown Developments.

Crown developments for essential community services (education, health, community amenities, and law and order) are exempt from general developer charges. Council may charge these developments only for that portion of the direct connection cost (e.g. for a lead-in main) relating to Crown development.

Other Developments:

The contributions set out in this DSP apply to all forms of development within the Palerang Community of QPRC, except for the following:

- a. Erection of a single dwelling house on an existing vacant allotment of land
- Alterations or additions to a single dwelling house where such alterations do not create additional dwellings
- c. Subdivision of land that does not create any additional allotments

2.8 Out of sequence development

Council plans infrastructure development in accordance to a desired sequence of development. If a developer wishes to proceed with a development which is not in the same sequence, provided that there are no other constraints to the development, Council may approve the construction of the essential assets ahead of time. In such cases, the assets will be sized by the Council in accordance with the requirements of the DSP and the full capital cost would initially be met by this developer.

If the asset funded by this developer will serve other future development, the developer could be reimbursed when the Council collects developer charges from the future development. The Council and the developer will enter into an agreement stating how the developer will be reimbursed in the future.

It is recommended that prospective developers seek further advice from Council on out of sequence developments.

2.9 "Works-in-kind" contributions

Upon written request, Council will consider an offer by the applicant to make a contribution by way of "works-in-kind" provided that:

- a) The proposed work satisfies the demands for the kind of public amenities and facilities, for which the contribution is sought,
- b) The proposed work will not prejudice the timing or the manner of the provision of the amenity or facility for which the contribution was required,
- c) The value of the work is at least equal to the value of the contribution assessed in accordance with this plan and that this value is adequately documented,
- d) Agreement has been reached as to the standard of work to be undertaken, and
- e) Where the difference of the value of the work in kind is less than the contribution assessed in accordance with this plan, the balance shall be made by way of monetary contribution.

As part of the Council's decision-making process, a request would only be considered provided the applicant is agreeable to all of the following stipulations:

- An agreement between the applicant and Council on the cost of the works (and value of the work in kind) which is to be determined by reference to satisfactory plans, breakdown of costs, review of audited statements and accounts or similar submitted by the applicant. There would be no indexing of the value of the work in kind or credits so granted.
- The number of credits for a particular type of contribution will be determined by dividing the agreed value of the proposed work by the rate applying to that contribution at the time of the agreement. The credits so agreed will be progressively reduced as the development proceeds. The agreed works schedule may specify those works that may be considered as works in kind.
- An agreed 12-month Defects Liability Period for the cost of the agreed work.
- An agreed standard of workmanship.
- An agreed timetable for the inspection of the works.
- An agreed program for the completion of works.
- Submission of an itemised statement of costs (including all receipts) of the completed works. Where the final cost of the works is less than the initial agreed cost of works, the balance is to be paid to Council as a monetary contribution. The costs of works are to also include a breakdown of all labour costs.

It should be noted that Council will not acknowledge any costs incurred associated with the agreement of 'works-in-kind' as part of above itemised statement.

The decision to accept settlement of a contribution by way of a work-in-kind is at the sole discretion of Council and will require a Council resolution prior to implementation.

It is Council's preference that for broadacre release areas that Council accepts works in kind and that these are to be fully constructed prior to the release of the Linen Plan or at such time as identified in a "written agreement" between the Council and the developer.

Should works-in-kind that have been agreed to by Council be later withdrawn by the applicant for any reason, then the applicant will be liable for the payment of contributions in accordance with the conditions of development consent or complying development certificate plus any indexations that may have occurred since the approval date.

2.10 Indexation

The developer charges should be indexed on the basis of movements in the consumer price index (CPI) for Sydney, excluding the impact of GST.

2.11 Dispute resolution

Council will adopt a transparent and consultative process for determining developer charges for a development. In case of disputes:

- If the dispute is regarding how the Council has calculated the developer charge for a development:
 - The developer may lodge a formal complaint to the Council and the General Manager of the Council will review or cause it to be reviewed
 - If not satisfied with the General Manager's response, the developer may refer the complaint to the NSW Ombudsman as the Council is currently not a member of the Energy & Water Ombudsman NSW (EWON)

- If the dispute is regarding the interpretation of the 2016 Developer Charges Guidelines:
 - The developer may refer the complaint to DPIE Water, which will respond to the complaint
 - If warranted, DPIE Water may refer the matter to an expert technical panel, which will include representatives from DPIE Water, IPART, the NSW Water Directorate, the Council and the development industry, and a developer charges expert for responding to the complaint
- If the developer is still dissatisfied, may request the matter to be reviewed by way of arbitration by an arbitrator, who is to be appointed by agreement between the developer and the Council, in accordance with the Commercial Arbitration Act, 2010. Costs of arbitration are to be borne equally by the developer and the Council. The decision of the arbitrator is binding on both the developer and the Council.

3 Demographics, Growth Projections and Land Use

3.1 Existing services

The Palerang Community of QPRC provides water supply services to Bungendore (Bungendore and Elmslea Estate), Braidwood and Captains Flat (Captains Flat Village and Beverly Hills) within the former Palerang LGA. A summary of the water supply services is shown in Table 3-1. The historical population for the urban centres is presented in Table 3-2 (ABS Census Quickstats data, 2018).

Table 3-1: Palerang Community water supply services

Town / Village	Water Supply Scheme
Bungendore	Bungendore and Currandooly
Braidwood	Braidwood
Captains Flat	Captains Flat
Majors Creek, Nerriga, Araluen, Wamboin and Carwoola	Roof rainwater and/or groundwater bores (privately owned)

Table 3-2: Historical urban centre population of serviced areas

Area	2001	2006	2011	2016
Bungendore	1,685	2,183	2,754	3,317
Braidwood	996	1,108	1,158	1,273
Captains Flat	419	447	436	449

3.2 Service Areas

The water supply service areas and the basis of determining the service areas are shown in the Table below. Council's IWCM Strategy identified negligible growth in the areas serviced by the Captains Flat sewerage scheme; also, the scheme capacity has already been fully taken up. Hence, Captains Flat scheme has not been included in the DSP.

Table 3-3: Water supply service areas

Name of service area	Basis for determining the service area
Bungendore	Separate small town
Braidwood	Separate small town
Bungendore – Greenfield Developments	New development area of over 500 lots

3.3 Growth Projections for the Service Areas

To apportion the cost of providing water supply services within the Council's DSP areas, the demand in each DSP area is required. The demand in each DSP area is determined in terms of equivalent tenements (ETs). An ET is the annual demand a detached residential dwelling will place on water supply infrastructure in terms of water supplied.

Council's IWCM Strategy considered a number of population studies to develop a future population growth strategy and adopted a population and tenement growth forecasts for service planning. For the purpose of the Development Servicing Plans, the tenement growth forecasts by the IWCM strategy

based on demand analysis were further reviewed in light of actual growth observed in the existing serviced areas and the greenfield release areas earmarked to accommodate growth. Accordingly, the timing of growth adopted in the IWCM has been adjusted to be consistent with the observed growth on ground and used for the calculation of developer charges. The estimated equivalent tenements (ET) growth forecasts for the water supply service areas used in the determination of developer charges are presented in Table 3-4.

Table 3-4: Palerang Community water supply DSP areas estimated ET projections

Financial Year	Bungendore	Braidwood	Bungendore- Greenfield	Total ET
1995/96	591	670	0	1,262
2019/20	1,383	805	81	2,269
2020/21	1,458	812	158	2,428
2021/22	1,468	819	230	2,516
2022/23	1,477	825	295	2,597
2023/24	1,487	832	351	2,670
2024/25	1,496	839	474	2,809
2025/26	1,506	846	595	2,947
2026/27	1,516	853	714	3,083
2027/28	1,526	860	831	3,217
2028/29	1,536	867	1,045	3,448
2029/30	1,545	875	1,156	3,576
2030/31	1,556	882	1,264	3,701
2031/32	1,563	889	1,368	3,820
2032/33	1,569	897	1,468	3,933
2033/34	1,575	905	1,564	4,043
2034/35	1,581	912	1,658	4,151
2035/36	1,587	920	1,750	4,256
2036/37	1,593	928	1,837	4,358
2037/38	1,599	936	1,920	4,455
2038/39	1,605	944	1,999	4,548
2039/40	1,611	952	2,073	4,637
2040/41	1,618	960	2,144	4,722
2041/42	1,624	969	2,210	4,803
2042/43	1,631	977	2,273	4,880
2043/44	1,637	986	2,331	4,954
2044/45	1,644	994	2,386	5,024
2045/46	1,649	1,003	2,437	5,090
2046/47	1,655	1,012	2,485	5,152
2047/48	1,660	1,021	2,530	5,211
2048/49	1,666	1,030	2,573	5,269
2049/50	1,671	1,039	2,617	5,327

3.4 Land use information

Information provided in this Plan should be considered in conjunction with Local Environmental Plan, Developer Control Plans (DCPs) and other planning instruments used by QPRC.

4 Infrastructure

4.1 Water supply system overview

The Palerang Community Water Supply systems currently provide drinking water to Bungendore (Bungendore and Elmslea Estate), Braidwood and Captains Flat (Captains Flat Village and Beverly Hills).

There are three water treatment plants in the system: Bungendore WTP, Braidwood WTP and Captains Flat WTP, which supply treated water to an estimated serviced total population of over 5,700.

The current Bungendore Water Supply Scheme consists of the original Bungendore water supply scheme and the recently commissioned supplementary water supply scheme at Currandooly. The original Bungendore water supply scheme consists of four bores located around the town, a WTP and a collection tank. The supplementary Currandooly Scheme consists of a bore, a WTP and a clear water transfer system to the town.

The Braidwood Water Supply Scheme is supplied with water sourced from an off-stream storage dam filled from the Shoalhaven River which is fed by a raw water pump station and a submerged rising main to Braidwood WTP. Water from the WTP is then stored in three service reservoirs before being supplied directly to the town.

The Captains Flat Water Supply Scheme sources water from a dam on the Molonglo River. It consists of an intake at the dam and a booster pump piped to Captain Flats WTP. As no growth is forecast within this scheme service area, it is not included in the DSP.

4.2 Existing water supply assets

Existing water supply assets servicing the Palerang Community DSP areas and their current MEERA costs as valued and maintained by the Council have been included in the capital charges calculation.

The current replacement cost (CRC) for the existing water supply assets in Bungendore and Braidwood is \$32.78 Million (2019/20 \$). In accordance with the 2016 NSW Developer Charges Guidelines, all existing water supply assets servicing the Palerang Community are included in the capital charge calculations except for the following:

- assets aged 30 years and older as of 2020
- assets which are unlikely to be fully utilised over the planning horizon for calculating developer charges
- reticulation assets, which are typically paid for directly by developers
- gifted assets, which were built by developers and later transferred to Council

The CRC of water supply assets in Bungendore and Braidwood included for the calculation of capital charge is \$21.15 Million (2019/20 \$).

Details of the existing assets servicing the areas covered by the water supply DSP with additional water supply DSP background documents are included in Appendix B. A summary of the existing assets and their current replacement costs for included and excluded assets is shown in Table 4-1.

Table 4-1: Summary of existing water supply assets in Bungendore and Braidwood

Service Area	Asset Type	Current Replacement Cost (2019/20 \$)	Excluded Assets (2019/20 \$)	Included Assets (2019/20 \$)
	Network	4,958,373	3,438,518	1,519,855
Braidwood	Pump Station	255,070	68,629	186,441
braidwood	Reservoir	3,271,301	3,271,301	0
	Treatment	3,471,712	0	3,471,712
Braidwood Total		11,956,456	6,778,448	5,178,008
Bungendore	Network	7,669,106	1,969,019	5,700,087
Bungendore Total	Bungendore Total		1,969,019	5,700,087
Dungandara Assata	Trunk Mains	1,722,857	356,933	1,365,924
Bungendore Assets shared with	Pump Station	1,988,974	282,521	1,706,452
Greenfield	Reservoir	2,812,153	1,813,688	998,465
Developments	Treatment	6,631,586	428,929	6,202,657
Shared Assets Total		13,155,570	2,882,072	10,273,498
Grand Total		32,781,132	11,629,539	21,151,593

4.3 Future water supply assets and renewals

Where DSP areas are expected to make use of future assets, the capital cost of these assets are included in the capital charges calculations. In accordance with the Developer Charges Guidelines 2016, the estimated costs of capital works (including contingencies) planned for the next 10 years as adopted by the Council and documented in the Total Asset Management Plan of the Council's IWCM Strategy, 2019, have been further reviewed to be consistent with the Council's adopted Delivery Program 2018-21 and included for the calculation of capital charges.

The Palerang Community water supply capital works program comprises of works for growth, improved standards and renewals. The capital works required for Council to provide water supply to the existing service areas and the new development areas are summarised in Table 4-2 and detailed in Appendix B.

Table 4-2: Water supply future capital works

Water supply capital works program	10-year capex total 2019/20 (\$'000)		
New/ Upgrade Works	25,443		
Renewals	4,425		
Total	29,040		

(Source: Based on the adopted Palerang Community IWCM Strategy, 2019)

The timing and expenditure for the 10-year water supply capital works covered by the DSP is shown in Figure 4-1. Details of the 10-year water supply capital works program are presented in Figure 4-2.

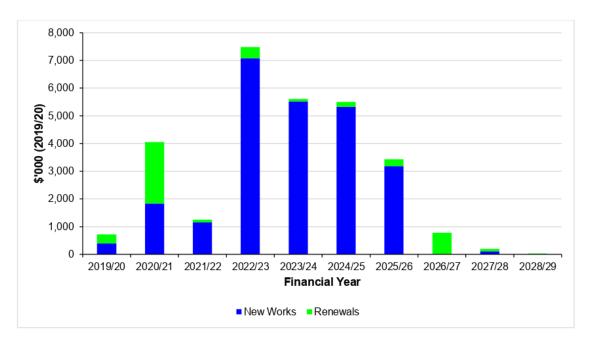


Figure 4-1: Timing of 10-year water supply capital works program

Timing of works and expenditure are to be reviewed and updated when required. Capital cost for growth planned within the next 10 years is included while the reticulation is excluded in the capital charges calculation in this DSP. The Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2016) recommend that capital works for renewals and for improving standards of service be excluded from the capital charges calculation.

Water reticulation

Reticulation is defined as the local pipes providing water supply to individual properties. Reticulation assets are excluded from the calculation of developer charges as the developers are responsible for the full cost of the design and construction of water supply reticulation works within subdivisions. However, LWUs may calculate a reticulation supplement which would be payable by developers that have not provided the reticulation assets.

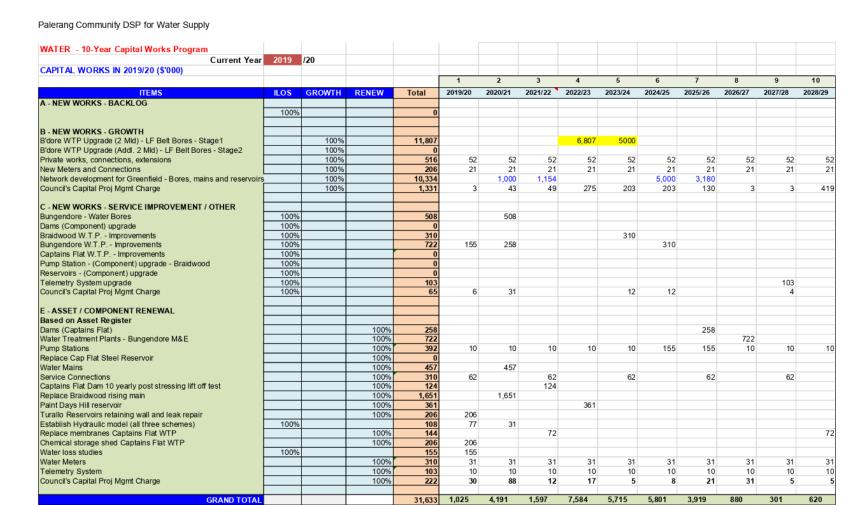


Figure 4-2: 10-year water supply capital works program for Palerang Community

5 Levels of service

Water supply system design capacity and operation are based on providing the adopted levels of service (LOS). The LOS for the water supply services adopted following consultation with the Project Reference Group including community representatives as part of the development of the Palerang Community IWCM strategy 2019 are shown in Table 5-1.

Table 5-1: Palerang Community of QPRC's water supply levels of service

		LEVEL (OF SERVICE
DESCRIPTION	UNIT	Target	Current Performance assessed by Council
Pressure			
Minimum pressure when delivering 0.15 L/s/tenement PID	Metres Head	12	Bungendore - 12 Braidwood - 40
Minimum pressure when delivering 0.10 L/s/tenement with firefighting capability	Metres Head	Positive residual head throughout network	Bungendore - 12 Braidwood - 12
Max. static pressure	Metres head	90	90
Fire-Fighting			
Compliance with The Water Supply Investigation Manual	% area served	95	100
Supply Interruptions to Consumers:			
Planned (95% of time):			
Notice given to domestic customers	Working Days	1	1
Notice given to commercial customers	Working Days	2	3
Notice given to industrial customers	Working Days	2	3
Maximum duration of interruption	Hours	8	2
Total number of interruptions	No./year/1000 tenements	8	5
Unplanned:			
Maximum duration	Hours	6	3
Total number of interruptions	No./year/1000 tenements	10	8
Response Times (Defined as time to have	staff on-site to red	ctify problem)	
Supply Failure: Note: Times apply for 95% of oc	casions		
All Customers:			
During working hours	Hours	1	1
Out of working hours	Hours	2	2
Minor Problems & General Inquiries:			
Oral inquiry	Working Days	2	2

	UNIT	LEVEL OF SERVICE			
DESCRIPTION		Target	Current Performance assessed by Council		
Written inquiry	Working Days	10	15		
Service Provided					
Time to provide an individual connection to water supply in serviced area (90% of times)	Working days	5	5		
Water Quality					
Number of boil water alerts	No./year	0	0		
Taste/odour complaints	No./year	0	0		

6 Design parameters

6.1 Water supply

Investigation and design of water supply system components are based on the following technical documentations:

- Queanbeyan-Palerang Regional Council's levels of service (Refer to Section 5)
- Water Supply Investigation Manual, NSW Public Works (1986)
- WSAA water supply code of Australia WSA 03 2002
- TAM and Financial Plans of Palerang Community IWCM Strategy, 2019

7 Developer charges calculation methodology

7.1 Developer charge concept

The developer charges calculation methodology is based on the net present value (NPV) approach with a view to fully recover the capital cost invested for servicing a development area. The investment is recovered as the up-front developer charges and the net income over time from the annual bills/ charges.

The calculation of developer charges is a two-step process. First, the capital charge is calculated as the present value of the capital cost of assets required over time to service the development area. The capital charge will include the capital cost component that will be recovered through annual bills, which needs to be reduced from the calculated capital charge. Hence, the second step is to calculate the reduction amount, which is the present value of the expected annual charges over time to be paid by the development in excess of operation, maintenance and administration (OMA) costs i.e. net income from annual bills.

The developer charge per equivalent tenement is defined as the capital charge less the reduction amount.

Developer Charge (\$/ET) = Capital Charge (\$/ET) – Reduction Amount (\$/ET)

7.2 Capital charge

The calculated capital charge represents the efficient capital cost of assets used in providing water supply services in the DSP areas. This includes the cost of both existing and future assets per equivalent tenement (ET) to be used to service the DSP areas.

Generally, the capacity of a water supply asset would not be fully utilised until some years after construction of the asset. The calculation takes into account the time to full take-up of the capacity of an asset over the planning horizon (30 years).

The Return on Investment (ROI) is based on the cost of early investment and the recovery of the investment over time. The annual payments have to provide a return of investment to reflect the discounting of future payments.

In accordance with IPART's Determination 9, 2000, the ROI is calculated using the discount rates in Table 7-1.

Table 7-1: Discount rates used in capital charge calculation

Assets	Discount rate	
For Pre-1996 assets	3% pa	
For Post-1996 assets	5% pa	

7.3 Exemption

The assets groups included and excluded from the capital charges calculations are shown in Table 7-2

Table 7-2: Assets included and excluded in capital charges calculations

Group	Capital charge calculation inclusion
Existing assets	Assets less than 30 years old at the commencement of this Plan are included
Future assets (new works)	Assets planned within the next 10 years as adopted by Council are included
Future assets (renewals)	Assets planned for renewal within the next 10 years are included, if replacing assets older than 30 years
Reticulation (existing and future)	Reticulation assets are excluded from the calculation of developer chargers
Assets for out-of-sequence development	Excluded if the developer is required to meet the full cost of such assets
Developer provided assets	Excluded unless the developer is reimbursed fully or partially

7.4 Reduction amount

The reduction amount is the amount by which the capital charge is reduced to arrive at the developer charge. The reduction amount represents the portion of the efficient cost of assets LWUs expect to recover from the new developments as part of their future annual bills for the service provision in the DSP areas.

Council has adopted the NPV of annual bills method to calculate the reduction amount. The reduction amount has been calculated using the NPV for 30 years of the future net income from the annual charge (annual bills less OMA cost) per PV of new ETs.

8 Water supply developer charges

8.1 Water supply capital charges

The details of the calculation of capital charge for the service area covered by this DSP are presented in Appendix B. The calculated water supply capital charges for the three service areas of the Palerang Community are presented in Table 8-1.

Table 8-1: Water supply capital charge for service areas

Water Supply Service Area	Capital charge for EXISTING assets 2019/20 (\$ per ET)	Capital charge for FUTURE assets 2019/20 (\$ per ET)	Capital charge 2019/20 (\$ per ET)
Bungendore-Greenfield Developments	4,782	16,442	21,224
Bungendore	4,380	6,195	10,576
Braidwood	7,636	1,797	9,433

8.2 DSP areas

When the capital charges for two or more service areas are within 30%, they can be agglomerated into a single DSP area. Capital charge for Bungendore Greenfield Developments is the highest calculated and is not within 30% of any of the other two service areas. Hence, it has been considered as a separate DSP area (WDSP Area 1). The capital charges for Bungendore and Braidwood towns are within 30% of each other, hence have been agglomerated into a single DSP area (WDSP Area 2). A summary of the weighted average capital charges for the service areas after their agglomeration into DSP areas is presented in Table 8-2 and details shown in Table B4 of Appendix B.

Table 8-2: Agglomeration of water supply service areas

Water supply Service Area	Capital charge 2019/20 (\$ per ET)	Percentage of highest capital charge DSP Area 1	Percentage of highest capital charge DSP Area 2	Agglomerated DSP area	Weighted average capital charge 2019/20 (\$ per ET)
Bungendore- Greenfield Developments	21,224	100%		Water Supply DSP Area 1	21,224
Bungendore	10,576	50%	100%	Water Supply	40.205
Braidwood	9,433		89%	DSP Area 2	10,205

8.3 Reduction amount calculation

The reduction amount has been calculated using NPV of annual bill method on a utility-wide basis as Council has adopted a uniform tariff structure. The details of reduction amount calculation are presented in Table B3 of Appendix B and a summary is shown in Table 8-3.

Table 8-3: Summary of Reduction Amount Calculation

Discount rate, p.a.	5%
Annual water charge, 2019/20 (\$/ET)	962
Annual water OMA, 2019/20 (\$/ET)	744
Estimated net operating income (\$/ET)	218
PV of new ETs over 30 years	1,826
PV of net income over 30 years (\$)	5,028,677
Reduction Amount, 2019/20 (\$/ET)	2,754

8.4 Water supply developer charge

The developer charge is the capital charge less the reduction amount. The capital charges, the reduction amount and the calculated water supply developer charges for the agglomerated DSP areas in 2019/20 dollars are presented below in Table 8-4.

Table 8-4: Water supply developer charge

Water supply DSP area	Service area covered	Weighted average capital charges 2019/20 (\$ per ET)	Reduction amount 2019/20 (\$ per ET)	Calculated developer charge 2019/20 (\$ per ET)
Water Supply DSP Area 1	Bungendore- Greenfield Developments	21,224	2,754	18,471
Water Supply DSP Area 2	Bungendore Braidwood	10,205	2,754	7,452

8.5 Water supply cross-subsidy

The calculated developer charges are the maximum that may be levied by a water utility. Council proposes to adopt the calculated developer charges for the water supply DSP areas, hence, no cross-subsidy is involved.

9 Reviewing / updating of calculated developer charges

Developer charges are to be reviewed by Council every eight years. After adoption of the DSP document, the developer charges should be adjusted on 1 July each year on the basis of movements in the Consumer Price Index (CPI) for Sydney in the preceding 12 months to December, excluding the impact of GST.

If there is a major change such as the need for significant capital works that had not been included in the existing DSP, Council may carry out a review in less than four years, subject to DPIE Water's approval.

10 Background documents

The references used for the development of this DSP are contained in the following documents:

- Developer Charges Guidelines for Water Supply, Sewerage and Stormwater 2016, DPIE Water
- NSW Water and Sewerage Strategic Business Planning Guidelines, DPIE Water, July 2011
- Palerang Community IWCM Strategy, 2019

The background information of the water supply developer charges calculations is included in Appendix B. The background information contains details on asset commission dates, asset size, capacity and MEERA values of existing assets. They also include the details of calculations of the capital charges, reduction amount and the developer charges.

11 Other DSPs and related contribution plans

Council's other related contribution plans include:

- Palerang Community Sewerage Development Servicing Plan
- Palerang Community Development Control Plan
- Palerang Community Section 94B Contributions Plans

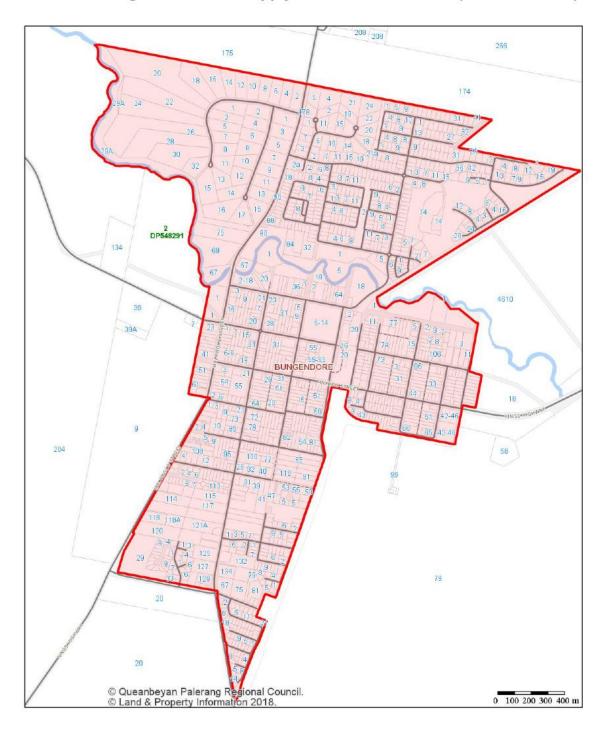
Glossary

Glossary of Terms	
Annual bill	Local Water Utility's annual water bill for an annual demand of 1 ET
Asset	An asset (or part of an asset) including land and headworks assets that directly provides, or will provide, the developer services to developments within the DSP area for which the Developer Charge is payable
Annual demand	The total water demand over a year. Used to size headworks components
Capital cost	The Present Value (MEERA basis) of all expenditure on assets used to service the development
Capital charge	Capital cost of assets per ET adjusted for commercial return on investment (ROI)
СРІ	Consumer price index (All Groups)
CRC	Current replacement cost
Developer charge	Charge levied on developers to recover part of the capital cost incurred in providing infrastructure to new development
Development area	See DSP area
Discount rate	The rate used to calculate the present value of money arising in the future
DPIE Water	Department of Planning, Industry and Environment - Water
DSP	Development Servicing Plan
DSP area	That is part of a water utility's area covered by a particular Development Servicing Plan. Also referred to as Development Area
ET	Equivalent tenement. The annual demand a detached residential dwelling will place on the infrastructure in terms of the water consumption
LGA	Local Government Area
LWU	Local water utility (NSW). Excludes Sydney Water Corporation, Hunter Water Corporation, Gosford Council, Wyong Council, Essential Water and Fish River Water Supply
MEERA	Modern Equivalent Engineering Replacement Asset
Net income	Annual bill minus OMA cost per ET
NPV	Net present value means the difference between the Present Value of a revenue stream and the Present Value of a cost stream
OMA	Operation, maintenance and administration (cost)
Operating cost	In relation to a DSP is the operation, maintenance and administration cost (excluding depreciation and interest) of a LWU in providing Customer services to a DSP area

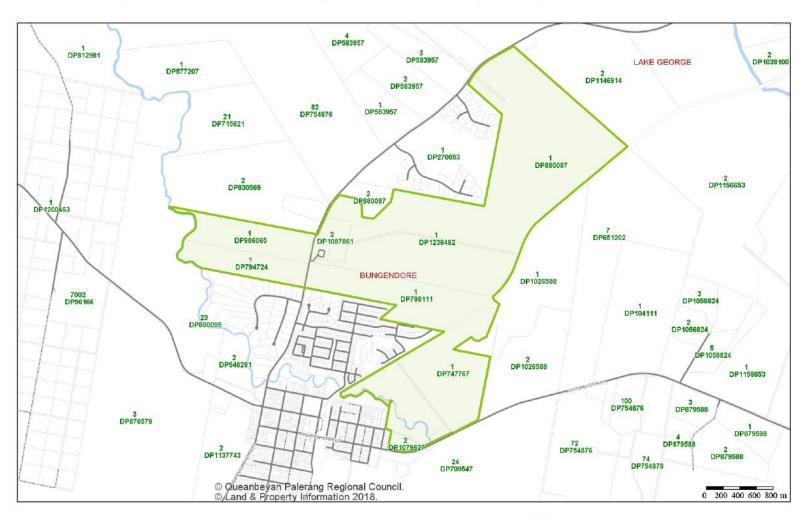
Glossary of Terms	
Palerang Community	Those water supply serviced areas associated with the former Palerang LGA.
Post-1996 asset	An asset that was commissioned by a LWU on or after 1 January 1996 or that is yet to be commissioned
Pre-1996 asset	An asset that was commissioned by a LWU before 1 January 1996
PV	Present value. The current value of future money or ETs
QPRC	Queanbeyan-Palerang Regional Council
Reduction amount	The amount by which the capital charge is reduced to arrive at the developer charge. This amount reflects the capital contribution that will be paid by the occupier of a development as part of future annual bills
Reticulation assets	Reticulation is defined as the local pipes connecting water supply service for individual properties. Reticulation assets are excluded from the calculation of developer charges as the developers are responsible for the full cost of the design and construction of water supply reticulation works within subdivisions
ROI	Return on investment. Represents the income that is, or could be, generated by investing money
Service area	An area serviced by a separate water supply system, a separate small town or village, or a new development of over 500 ETs
TRB	Typical residential bill, which is the principal indicator of the overall cost of a water supply system and is the bill paid by a residential customer using the utility's average annual residential water supplied per connected property
WTP	Water treatment plant

Appendix A DSP service areas

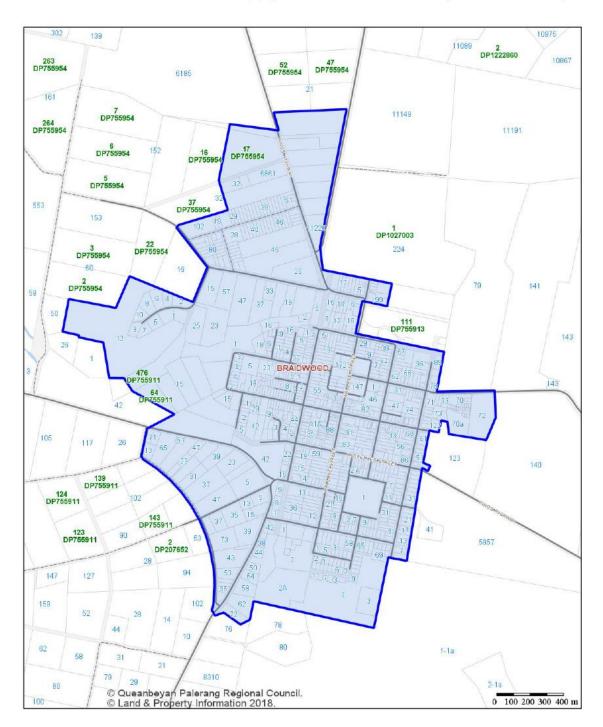
A.1 Bungendore water supply scheme service area (WDSP 2-Part 1)



A.2 Bungendore - Greenfield developments service area (WDSP 1)



A.3 Braidwood water supply scheme service area (WDSP 2-Part 2)



Appendix B Water supply DSP background document

Appendix C Outline of Legislation

Local Government Act 1993

The power for local government councils to levy developer charges for water supply, sewerage and stormwater derives from Section 64 of the *Local Government Act 1993* by means of a cross-reference in that Act to the relevant provisions of the *Water Management Act 2000*.

Section 64 of the Local Government Act states that:

Division 5 of Part 2 of Chapter 6 of the *Water Management Act 2000* applies to a council exercising functions under this Division in the same way as it applies to a water supply authority exercising functions under that Act.

Environmental Planning and Assessment Act 1979

Prior to the introduction of the *Local Government Act* in 1993, councils used the provisions of Section 94 of the Environmental Planning and Assessment Act 1979 to obtain developer contributions for water supply and sewerage services. As part of the *Local Government (Consequential Provisions) Act 1993*, amendment was made to the Environmental Planning and Assessment Act so that Section 94 no longer applied for water supply and sewerage services.

However, Councils can levy developer charges for stormwater under either *Local Government Act* or *Water Management Act*.

Water Management Act 2000

Section 305 (1) and (2) of the Water Management Act states that:

- 1) A person may apply to a water supply authority for a certificate of compliance for development carried out, or proposed to be carried out, within the water supply authority's area.
- 2) as a pre-condition to granting a certificate of compliance for development, a water supply authority may, by notice in writing served on the applicant, require the applicant to do either or both of the following:
 - a) to pay a specified amount to the Authority by way of contribution towards the cost of such water management works as are specified in the notice, being existing works or projected works, or both,
 - b) to construct water management works to serve the development.

Section 305 (3) of the Water Management Act states that:

- 3) In calculating an amount for the purposes of subsection (2) (a):
 - a) the value of existing water management works and the estimated cost of projected water management works may be taken into consideration, and
 - b) the amount of any government subsidy or similar payment is not to be deducted from the relevant value or cost of the water management works, and
 - c) consideration is to be given to any guidelines issued for the time being for the purposes of this section by the Minister.

In 2011, the Minister for Primary Industries became responsible for non-metropolitan NSW town water services. The Minister is responsible for the issue of guidelines for water utilities on the calculation of water supply, sewerage and stormwater developer charges.

Note: Use of moneys raised from developer charges is discussed in Section 2.7 on page 10 of the guidelines.

Local Government (Savings and Transitional) Regulation 1993

The Local Government (Savings and Transitional) Regulation 1993 covers the matter of developer contributions which had previously been obtained by councils under the Environmental Planning and Assessment Act as follows:

- 9) Any monetary contribution held by a council immediately before the commencement of this Regulation, being a contribution arising from a condition:
 - (a) that was imposed under section 94 of the *Environmental Planning and Assessment Act 1979*; and
 - (b) that specifies that the contribution is to be applied towards providing specified water or sewerage services or towards providing water or sewerage services generally, is to be applied towards the construction of works within the meaning of Division 2 of Part 3 of the *Water Supply Authorities Act 1987*, or towards the repayment of money borrowed for the construction of such works, and is not to be applied towards any other purpose.



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QUEANBEYAN-PALERANG REGIONAL COUNCIL

Council Meeting Attachment

24 JUNE 2020

ITEM 9.7 PALERANG COMMUNITY DEVELOPMENT SERVICING PLANS FOR WATER & SEWERAGE

ATTACHMENT 2 PALERANG COMMUNITIES SEWERAGE DEVELOPMENT SERVICING PLAN (AMENDED 11 JUNE 2020)





Queanbeyan-Palerang Regional Council

Palerang Community Development Servicing Plan for Sewerage

April 2020

Adopted: [Insert Date] Effective: [Insert Date]



Document Control

Version Author	Author		Approved for	Approved for Issue	
	Author	Reviewer	Name	Date	
Draft 1	C. Chlochaisri	M. Sundar	M. Sundar	-	
Draft 2	C. Chlochaisri	M Sundar	M Sundar	20/12/2019	
Draft 3	C. Chlochaisri	M Sundar	M Sundar	14/02/2020	
Draft 4	C. Chlochaisri	M Sundar	M Sundar	04/03/2020	
Draft 5	C. Chlochaisri	M Sundar	M Sundar	25/03/2020	
Final Draft	C. Chlochaisri	M Sundar	M Sundar	06/04/2020	

Cover photo: Berlang, "QPRC endorses Tourism Plan", Braidwood Times (2017), https://www.braidwoodtimes.com.au/story/4632416/plan-to-develop-tourist-economy/

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Executive Summary

Developer Charges are an integral part of the fair pricing of water supply and sewerage services. They are up-front charges levied on developers to recover part of the infrastructure costs incurred in servicing new developments or changes to existing development. Section 64 of the Local Government Act, 1993 enables a local government council to levy developer charges for water supply, sewerage and stormwater services.

This document covers the Development Servicing Plans (DSPs) for sewerage service areas of the Palerang Community of Queanbeyan-Palerang Regional Council (QPRC). The maps of the development service areas for sewerage are shown in Appendix A. For the areas serviced by the Captains Flat sewerage scheme, Council's IWCM strategy identified negligible growth, hence has not been included in the DSP.

This DSP has been prepared in accordance with the Developer Charges Guidelines for Water Supply, Sewerage and Stormwater, 2016 issued by the Minister for Lands and Water, pursuant to section 306 (3) of the Water Management Act, 2000.

The existing sewerage assets serving the Palerang Community, and the timing and expenditures for assets planned for the next 10-years based on the adopted IWCM Strategy, are presented in Section 4. The levels of service to be provided in the DSP areas are summarised in Section 5.

Council has elected to levy less than the calculated maximum capital charge for Braidwood and cap the same at 75% of the calculated value for the existing assets. The service areas have been agglomerated for the calculation of developer charges with the capped level of capital charges for Braidwood in accordance with the 2016 Developer Charges Guidelines. The details of capping and the resulting cross-subsidy are presented in Section 8.5. The calculated sewerage developer charges for the agglomerated DSP area have been determined in 2019/20 dollars and are as follows:

Sewerage DSP Name	Service area covered	Calculated Developer Charge (\$ per ET)	Adopted Developer Charge (\$ per ET)	Cross- subsidy by existing customers (\$'000)	Resulting increase in Typical Residential Bill (\$ per ET)
	Braidwood	23,030	10,411	581	18
Sewerage	Bungendore				
DSP Area	Bungendore-Greenfield Developments	10,066			

The developer charges calculated in this DSP will be reviewed after eight years, unless required otherwise. In the period between any reviews, the developer charges will be indexed annually on the basis of movements in the consumer price index (CPI) for Sydney, excluding the impact of GST.

The DSPs have been adopted by Council after public exhibition on [insert date] and the adopted developer charges are effective from [insert date].

Developers shall be responsible for the full cost of the design and construction of sewerage reticulation works within the subdivisions.

The background documents for the sewerage DSP are listed in Appendix B. The electronic copy of these documents containing all the critical data and calculation models behind the DSP will be made available on request.

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Palerang Community DSP for Sewera	ge	
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1 Introduction

The developer charges are up-front charges levied by urban water utilities to recover part of the infrastructure costs incurred in servicing new developments or additions or changes to the existing developments.

Section 64 of the Local Government Act 1993 enables a local government council to levy developer charges for water supply, sewerage and stormwater. This derives from a cross-reference in that Act to Section 306 of the Water Management Act, 2000.

A Development Servicing Plan (DSP) details the water supply/ sewerage developer charges to be levied on developments utilising a water utility's water supply, sewerage and stormwater infrastructure.

The aims and objectives of this DSPs are to:

- Provide an overall administrative framework under which specific sewerage assets may be coordinated and constructed
- Ensure that adequate sewerage infrastructure is provided for as part of the new development
- Provide a comprehensive strategy for the assessment, collection, expenditure accounting and review of contributions on an equitable basis
- Ensure that the existing community is not burdened by the provision of sewerage infrastructure as a result of future development
- Enable Council to be both publicly and financially accountable in its assessment and administration of the Development Servicing Plans.

This DSP covers sewerage developer charges for the service areas of the Palerang Community of Queanbeyan-Palerang Regional Council (QPRC). The maps of sewerage DSP areas serviced by Palerang Community of QPRC are shown in Appendix A.

This DSP has been prepared in accordance with the 2016 Developer Charges Guidelines for Water Supply, Sewerage and Stormwater issued by the Minister for Lands and Water, pursuant to Section 306 (3) of the Water Management Act, 2000.

Once adopted, this DSP supersedes any other requirements related to sewerage developer charges for the development areas covered by the DSP. The DSP takes precedence over any of Council's codes or policies where there are any inconsistencies relating to sewerage developer charges.

The developer charges should be indexed based on movements in the consumer price index (CPI) for Sydney, excluding the impact of GST. The developer charges calculated in this DSP will be reviewed after eight years.

Developers shall be responsible for the full cost of the design and construction of sewerage reticulation works within the subdivisions.

2 Administration

2.1 DSP areas and names

The Palerang Community of QPRC operates and manages three reticulated sewerage schemes to serve townships within the former Palerang Local Government Area (LGA).

This DSP is applicable to all land within the DSP areas which is serviced by the sewerage infrastructure in the Palerang Community of QPRC. The DSP names and areas covered are presented in Table 2-1.

Table 2-1: DSP Names and Areas Covered

DSP Details		Schemes covered	Area covered
SDSP	Sewerage DSP Area	Braidwood	The maps of the sewerage DSP
Area		Bungendore	areas covered in this document are shown in Appendix A.
	Bungendore-Greenfield Developments		

2.2 DSP boundaries

The DSP area boundaries are based on the existing and future developments to be served by Council's sewerage services for the Palerang Community. Regarding the new developments outside the sewerage DSP area boundaries, Council may:

- apply the developer charges adopted by this Plan to the new development, or
- prepare a new DSP for the new development.

2.3 Application of developer charges

Developer charges will be levied on all land and new developments within the DSP areas. Council will assess the demand for service in terms of equivalent tenements (ET) and will levy developer charges proportional to the number of ETs. The developer charges will also apply to re-developments (i.e. alterations, additions or change of use for an existing development) on the basis of resulting increase in the ET for the services.

Developers shall be responsible for the full cost of the design and construction of sewerage reticulation works within subdivisions.

2.4 Effective commencement date for this DSP

This DSP has been adopted by QPRC on [insert date] and will be effective from [insert date]. Charges will be levied pursuant to this DSP, as a condition of development consent granted on or after the day this DSP comes into effect.

2.5 Timing and payment of developer charges

The developer charges will be determined and levied in accordance with the provisions of this DSP at the time of considering an application for a compliance certificate under Section 305 of the Water Management Act 2000 or a construction certificate under Section 109c of the Environmental Planning and Assessment Act 1979 or at the time of issuing a notice or other form of written advice e.g. under the SEPP (Exempt and Complying Development Codes) 2008.

The time limit for payment of developer charges will be included in the notice of determination or will be advised to the developer by a separate notice. The amount of any developer charges not paid within the specified time limit will lapse. Any subsequent determination of developer charges will be made in accordance with Council's then current DSP.

The timing of payment of developer charges to the Council is as follows:

- subdivision prior to the release of the subdivision linen plan (Subdivisiion Certificate) by Council to the applicant;
- dwellings and other buildings prior to the issue of construction certificate
- other developments prior to the issuing of a notice of commencement of work, should the proposed development not involve any construction.

Other arrangements for payment are at Council's discretion and depend upon the circumstances of the contributor or the development.

Due to the general consistency of subdivisions and dwellings within the Palerang Community no discount rates apply, and the basic charge as set out in the Development Servicing Plans will apply unless special circumstances can be established to the satisfaction of Council.

Payment of a developer charge is a precondition to the granting of a Compliance Certificate, which must be obtained in order to complete a development. A Compliance Certificate will not be issued until the developer charge payment has been received.

2.6 Method of payment

Developer charges must be made in the form of monetary payments to Council. The development consents will contain the conditions specifying the developer charges amount payable at the time when the consent is issued. A note will be attached to the consent condition which will advise that the developer charges will be at the rate which applies at the time of payment. That is the rate may increase, through indexation or replacement of this DSP with a new one, from the time the condition appears on the notice of development consent until the time the developer charge is actually paid to Council.

Developers may seek Council's agreement and approval on payment deferment. Where the applicant can demonstrate that the settlement of the contribution as set out by the Council is unreasonable in the circumstances of the case, the Council may accept deferred or periodic settlement. Any request should provide detailed reasons, and should agreement be granted, deferral will be subject to the following requirements:

- The applicant is to arrange for a Bank Guarantee to be prepared to the value of contributions payable as agreed to by Council (this is to include indexation where applicable),
- The Bank Guarantee is to be made in favour of Council and shall not be the subject of any expiry date,
- Council is to be the custodian of the original Bank Guarantee, and
- The maximum time frame granted for deferment is six months. Should the contributions not be paid by this time, Council will exercise its right under the agreement to call in the Bank Guarantee without notice. Should the approved deferment overlap into the following financial year, then the contribution(s) payable will be subject to indexation.

Upon Council's approval, the charges will be recorded as a debt against the property and payable at a rate applicable at the time of payment.

2.7 Exemptions from developer charges

Crown Developments:

Under Section 306 (4) and (5) of the Water Management Act 2000, the Minister for Planning may decide in regard to developer charges levied on Crown Developments.

Crown developments for essential community services (education, health, community amenities, and law and order) are exempt from general developer charges. Council may charge these developments only for that portion of the direct connection cost (e.g. for a lead-in main) relating to Crown development.

Other Developments:

The contributions set out in this DSP apply to all forms of development within the Palerang Community of QPRC, except for the following:

- a. Erection of a single dwelling house on an existing vacant allotment of land
- b. Alterations or additions to a single dwelling house where such alterations do not create additional dwellings
- c. Subdivision of land that does not create any additional allotments

2.8 Out of sequence development

Council plans infrastructure development in accordance to a desired sequence of development. If a developer wishes to proceed with a development which is not in the same sequence, provided that there are no other constraints to the development, Council may approve the construction of the essential assets ahead of time. In such cases, the assets will be sized by the Council in accordance with the requirements of the DSP and the full capital cost would initially be met by this developer.

If the asset funded by this developer will serve other future development, the developer could be reimbursed when the Council collects developer charges from the future development. The Council and the developer will enter into an agreement stating how the developer will be reimbursed in the future.

It is recommended that prospective developers seek further advice from Council on out of sequence developments.

2.9 "Works-in-kind" contributions

Upon written request, Council will consider an offer by the applicant to make a contribution by way of "works-in- kind" provided that:

- a) The proposed work satisfies the demands for the kind of public amenities and facilities, for which the contribution is sought,
- b) The proposed work will not prejudice the timing or the manner of the provision of the amenity or facility for which the contribution was required,
- c) The value of the work is at least equal to the value of the contribution assessed in accordance with this plan and that this value is adequately documented,
- d) Agreement has been reached as to the standard of work to be undertaken, and
- e) Where the difference of the value of the work in kind is less than the contribution assessed in accordance with this plan, the balance shall be made by way of monetary contribution.

4

As part of the Council's decision-making process, a request would only be considered provided the applicant is agreeable to all of the following stipulations:

- An agreement between the applicant and Council on the cost of the works (and value of the work in kind) which is to be determined by reference to satisfactory plans, breakdown of costs, review of audited statements and accounts or similar submitted by the applicant. There would be no indexing of the value of the work in kind or credits so granted.
- The number of credits for a particular type of contribution will be determined by dividing the agreed value of the proposed work by the rate applying to that contribution at the time of the agreement. The credits so agreed will be progressively reduced as the development proceeds. The agreed works schedule may specify those works that may be considered as works in kind.
- An agreed 12-month Defects Liability Period for the cost of the agreed work.
- An agreed standard of workmanship.
- An agreed timetable for the inspection of the works.
- An agreed program for the completion of works.
- Submission of an itemised statement of costs (including all receipts) of the completed works. Where the final cost of the works is less than the initial agreed cost of works, the balance is to be paid to Council as a monetary contribution. The costs of works are to also include a breakdown of all labour costs.

It should be noted that Council will not acknowledge any costs incurred associated with the agreement of Works in Kind as part of above itemised statement.

The decision to accept settlement of a contribution by way of a work-in-kind is at the sole discretion of Council and will require a Council resolution prior to implementation.

It is Council's preference that for broadacre release areas that Council accepts works in kind and that these are to be fully constructed prior to the release of the Linen Plan or at such time as identified in a "written agreement" between the Council and the developer.

Should works-in-kind that have been agreed to by Council be later withdrawn by the applicant for any reason, then the applicant will be liable for the payment of contributions in accordance with the conditions of development consent or complying development certificate plus any indexations that may have occurred since the approval date.

2.10 Indexation

The developer charges should be indexed on the basis of movements in the consumer price index (CPI) for Sydney, excluding the impact of GST.

2.11 Dispute resolution

Council will adopt a transparent and consultative process for determining developer charges for a development. In case of disputes:

- If the dispute is regarding how the Council has calculated the developer charge for a development:
 - The developer may lodge a formal complaint to the Council and the General Manager of the Council will review or cause it to be reviewed
 - If not satisfied with the General Manager's response, the developer may refer the complaint to the NSW Ombudsman as the Council is currently not a member of the Energy & Water Ombudsman NSW (EWON)

- If the dispute is regarding the interpretation of the 2016 Developer Charges Guidelines:
 - The developer may refer the complaint to DPIE Water, which will respond to the complaint
 - If warranted, DPIE Water may refer the matter to an expert technical panel, which will include representatives from DPIE Water, IPART, the NSW Water Directorate, the Council and the development industry, and a developer charges expert for responding to the complaint
- If the developer is still dissatisfied, may request the matter to be reviewed by way of arbitration by an arbitrator, who is to be appointed by agreement between the developer and the Council, in accordance with the Commercial Arbitration Act, 2010. Costs of arbitration are to be bome equally by the developer and the Council. The decision of the arbitrator is binding on both the developer and the Council.

3 Demographics, Growth Projections and Land Use

3.1 Existing services

The Palerang Community of QPRC provides sewerage services to Bungendore (Bungendore and Elmslea Estate), Braidwood and Captains Flat within the former Palerang LGA. A summary of the sewerage services is shown in Table 3-1. The historical population for these urban centres is presented in Table 3-2 (ABS Census Quickstats data, 2018).

Table 3-1: Palerang Community sewerage services

Town / Village	Sewerage Scheme
Bungendore	Bungendore
Braidwood	Braidwood
Captains Flat	Captains Flat
Majors Creek, Nerriga, Araluen, Wamboin and Carwoola	Septic tanks (privately owned)

Table 3-2: Historical urban centre population of serviced areas

Area	2001	2006	2011	2016
Bungendore	1,685	2,183	2,754	3,317
Braidwood	996	1,108	1,158	1,273
Captains Flat	419	447	436	449

3.2 Service Areas

The sewerage service areas and the basis of determining the service areas are shown in the Table below. Council's IWCM Strategy identified negligible growth in the areas serviced by the Captains Flat sewerage scheme; also, the scheme capacity has already been fully taken up. Hence, Captains Flat scheme has not been included in the DSP.

Table 3-3: Sewerage service areas

Name of service area	Basis for determining the service area
Bungendore	Separate small town
Braidwood	Separate small town
Bungendore – Greenfield Developments	New development area of over 500 lots

3.3 Growth Projections for the Service Areas

To apportion the cost of providing sewerage services within the Council's DSP areas, the demand in each DSP area is required. The demand in each DSP area is determined in terms of equivalent tenements (ETs). An ET is the annual demand a detached residential dwelling will place on sewerage infrastructure in terms of sewage discharged.

Council's IWCM Strategy considered a number of population studies to develop a future population growth strategy and adopted a population and tenement growth forecasts for service planning. For the purpose of the Development Servicing Plans, the tenement growth forecasts by the IWCM strategy

based on sewer load analysis were further reviewed in light of actual growth observed in the existing serviced areas and the greenfield release areas earmarked to accommodate growth. Accordingly, the timing of growth adopted in the IWCM has been adjusted to be consistent with the growth observed on ground for the calculation of developer charges. The estimated equivalent tenements (ET) growth forecasts for the sewerage services used in the determination of developer charges are summarised in Table 3-4.

Table 3-4: Palerang Community sewerage DSP area estimated ET projections

Financial Year	Bungendore	Braidwood	Bungendore- Greenfield	Total ET
1995/96	577	506	0	1,083
2019/20	1,363	631	81	2,075
2020/21	1,438	638	158	2,234
2021/22	1,447	644	230	2,321
2022/23	1,456	651	296	2,403
2023/24	1,465	658	352	2,475
2024/25	1,474	665	475	2,613
2025/26	1,482	672	596	2,749
2026/27	1,492	678	715	2,885
2027/28	1,501	685	832	3,018
2028/29	1,510	693	947	3,150
2029/30	1,519	700	1,058	3,277
2030/31	1,529	707	1,166	3,402
2031/32	1,536	714	1,270	3,520
2032/33	1,541	722	1,370	3,633
2033/34	1,546	729	1,466	3,741
2034/35	1,552	737	1,560	3,849
2035/36	1,557	745	1,652	3,953
2036/37	1,562	753	1,739	4,054
2037/38	1,568	761	1,822	4,151
2038/39	1,574	769	1,901	4,243
2039/40	1,579	777	1,975	4,331
2040/41	1,585	785	2,046	4,416
2041/42	1,591	793	2,112	4,496
2042/43	1,597	801	2,175	4,573
2043/44	1,603	810	2,233	4,646
2044/45	1,608	818	2,288	4,715
2045/46	1,613	827	2,339	4,780
2046/47	1,618	836	2,387	4,841
2047/48	1,623	845	2,432	4,899
2048/49	1,627	854	2,475	4,956
2049/50	1,632	863	2,519	5,013

3.4 Land use information

Information provided in this Plan should be considered in conjunction with Local Environmental Plan, Developer Control Plans (DCPs) and other planning instruments used by QPRC.

4 Infrastructure

4.1 Sewerage schemes overview

Council operates the following three reticulated sewerage services to service townships within the former Palerang LGA:

- Bungendore sewerage scheme
- Braidwood sewerage scheme
- Captains Flat sewerage scheme

For the Captains Flat sewerage scheme, as the forecast growth was negligible, developer charges were not calculated and have not been included in the DSP.

Bungendore sewerage scheme

Bungendore STP is located approximately 700 m west from the centre of Bungendore. The scheme is serviced by a conventional gravity sewage collection system comprising 10 pump stations serving small areas within the catchment. The STP has a capacity of 5,000 EP that utilises two IDEA tanks for secondary treatment and chemical phosphorus removal to treat sewage. Effluent is discharged into Mill Post Creek or undergoes chlorination for on-site purposes at the STP and for off-site reuses for end users.

Braidwood sewerage scheme

Braidwood STP is located approximately 1.5 km from the centre of Braidwood. The scheme is serviced by a conventional gravity sewage collection system comprising seven pump stations. The plant receives sewage from the township of Braidwood. The STP is a 2,000 EP capacity STP that utilises one IDEA reactor for secondary treatment and chemical phosphorus removal to treat sewage. Effluent is treated using UV disinfection prior to discharge to Flood Creek.

4.2 Existing sewerage assets

Existing sewerage assets servicing the Palerang community DSP areas and their current MEERA costs as valued and maintained by the Council have been included in the capital charges calculation.

The current replacement cost (CRC) of the existing sewerage assets in Bungendore and Braidwood is \$46.17 Million (2019/20 \$). In accordance with the 2016 NSW Developer Charges Guidelines, all existing sewerage assets servicing the Palerang community are included in the capital charge calculations except for the following:

- assets aged 30 years and older as of 2020
- assets which are unlikely to be fully utilised over the planning horizon for calculating developer charges
- reticulation assets, which are typically paid for directly by developers
- gifted assets, which were built by developers and later transferred to Council

The CRC of the existing sewerage assets in Bungendore and Braidwood included in the calculation of capital charge is \$33.97 Million (2019/20 \$).

Details of the existing assets servicing the area covered by the sewerage DSP with additional sewerage DSP background documents are included in Appendix B. A summary of the existing assets and their current replacement costs for included and excluded assets is shown in Table 4-1.

Table 4-1: Summary of existing sewerage assets in the Palerang Community

Service Area Asset Type		Current Replacement Cost (2019/20) (\$)	Excluded Assets (2019/20 \$)	Included Assets (2019/20 \$)
	Pump Station	2,361,313	358,036	2,003,277
Braidwood	Sewer Main	5,122,507	3,276,462	1,846,045
	Treatment	9,217,555	0	9,217,555
Braidwood Total	Braidwood Total		3,634,498	13,066,877
Rungandara	Pump Station	5,398,585	622,234	4,776,351
Bungendore	Sewer Main	11,119,799	3,751,797	7,368,002
Bungendore Total		16,518,384	4,374,031	12,144,353
Bungendore Assets shared with Greenfield Developments	Treatment	12,954,383	4,197,789	8,756,594
Shared Total		12,954,383	4,197,789	8,756,594
Grand Total		46,174,141	12,206,317	33,967,824

4.3 Future sewerage assets and renewals

Where DSP areas are expected to make use of future assets, the capital cost of these assets are included in the capital charges calculations. In accordance with the Developer Charges Guidelines 2016, the estimated costs of sewerage capital works (including contingencies) planned for the next 10 years as adopted by the Council and documented in the Total Asset Management Plan of the Council's IWCM Strategy, 2019, have been further reviewed to be consistent with the Council's adopted Delivery Program 2018-21 and included for the calculation of capital charges..

The Palerang Community sewerage capital works program is comprised of works for growth, improved standards and renewals. The capital works required for Council to provide sewerage service to the existing serviced areas and the new development areas are summarised in Table 4-2 and detailed in Appendix B.

Table 4-2: Sewerage future capital works

Sewerage service capital works program	10-year capex total 2019/20 (\$'000)
New/ Upgrade Works	19,066
Renewals	2,515
Total	21,581

(Source: Based on the adopted Palerang Community IWCM Strategy, 2019)

The timing and expenditure for the 10-year sewerage capital works program (including backlog works) covered by the DSP is shown in Figure 4-1. Details of the 10 years sewerage capital works program are included in Figure 4-2.

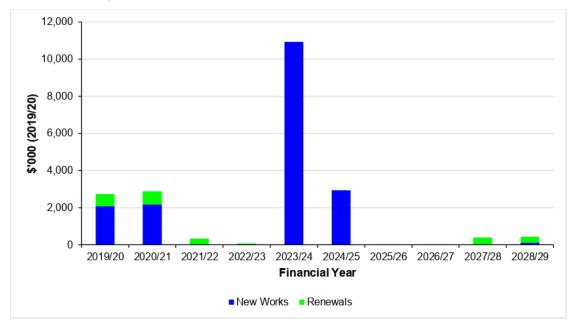


Figure 4-1: Timing of 10-year sewerage capital works program

Timing of works and expenditure are to be reviewed and updated when required. Capital cost for growth planned within the next 10 years is included while the reticulation is excluded in the capital charges calculation in this DSP. The Developer Charges Guidelines for Water Supply, Sewerage and Stormwater (2016) recommend that capital works for renewals and for improving standards of service are to be excluded from the capital charges calculation.

Sewerage reticulation

Reticulation is defined as the local pipes connecting sewerage service from individual properties. Reticulation assets are excluded from the calculation of developer charges as the developers are responsible for the full cost of the design and construction of sewerage service reticulation works within subdivisions. However, Council calculate a reticulation supplement which would be payable by developers that have not provided the reticulation assets.



SEWER - 10-Year Capital Works Program Current Year	2019	/20												
CAPITAL WORKS IN 2019/20 (\$'000)	2013	/20												
CAI TIAL WORKS IN 2010/20 (\$ 000)					1	2	3	4	5	6	7	8	9	10
ITEMS	ILOS	GROWTH	RENEW	Total	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29
A - NEW WORKS - BACKLOG														
	100%			0										
B - NEW WORKS - GROWTH														
Bungendore effluent reuse system	100%			3,802	2,000	1,735			-	67	-	-	-	-
Bungendore STP upgrade 2023/24		100%		10,403	-				10,403		-	-	-	-
Bungendore Greenfield Network Services		100%		3,550						3,550				
Replace rising main and pumps B'dore SPS#2	50%	50%		268		268								
Upgrade pumps at SPS#4 Bungendore		100%		83		83								
Private Works - Extension & connection (infill)		100%		206	21	21	21	21	21	21	21	21	21	21
Council's Capital Proj Mgmt Charge		100%		734	81	84	1	1	417	146	1	1	1	1
C - NEW WORKS - OTHER (Performance improvement)														
Upgrade pumps at SPS#1 Braidwood to meet PWWF	100%	,		0										
Upgrade SPS2 & 7 Bungendore			100%	0										
Upgrade SPS5 at Bungendore			100%	206	206									
Pump Station upgrades / improvements			100%	103				52	-	-	-	-	52	-
Telemetry System upgrade	100%	,		206				-	103	-	-	-	-	103
Council's Capital Proj Mgmt Charge	100%	,		20	8	-	-	2	4	-	-	-	2	4
D - RENEWALS														
Based on Asset Register														
STP Assets renewal/ Major refurbishments			100%	0										
Pump station asset renewal			100%	1,238	-	310	310	-	-	-	-	-	310	310
Inflow study Braidwood - main relining			100%	0	-	-	-	-	-	-	-	-	-	-
Inflow study Bungendore - initial study/works			100%	361	361	-	-	-	-	-	-	-	-	-
Replace rising main SPS#3 Braidwood			100%	310		310								
Telemetry component renewal			100%	103	10	10	10	10	10	10	10	10	10	10
Sewer Manhole Renewals			100%	103	52	52	-	-	-	-	-	-	-	-
Council's Capital Proj Mgmt Charge			100%	90	18	28	13	1	1	1	1	1	13	13
GRAND TOTAL				21,581	2,737	2,879	334	66	10,938	3,774	12	12	388	441

Figure 4-2: 10-year sewerage capital works program for Palerang Community

5 Levels of service

Sewerage system design capacity and operation are based on providing the adopted levels of service (LOS). The LOS for the sewerage services in the Palerang Community adopted following consultation with the Project Reference Group including community representatives as part of the development of the Palerang Community IWCM strategy 2019 are shown in Table 5-1.

Table 5-1: Palerang Community of QPRC's sewerage levels of service

		LEVEL OF SERVI	CE			
DESCRIPTION	UNIT	Target	Current Performance assessed by Council			
Frequency of System Failures						
Category 1: Failure due to rainfall and deficient capacity (overflows)	Number/year	0	0			
Category 2: Failures due to pump or other breakdown including power failure (overflows)	Number/year	0	0			
Category 3: Failures due to main blockages and collapses (overflows)	Number/year	4	2			
Response Times System Failure: (Defined as the maximum tir notification)	System Failure: (Defined as the maximum time to have staff on site to commence rectification after					
Priority 1: (Major spill, significant environmen a major main)	tal or health impact	t, or affecting large nu	umber of consumers i.e.			
During working hours	Hours	0.5	0.5			
After hours	Hours	1	1			
Priority 2: (Moderate spill, some environment other mains)	al or health impact	, or affecting small nu	imber of consumers i.e.			
During working hours	Hours	0.5	0.5			
After hours	Hours	1	1			
Priority 3: (Minor spill, little environmental or	health impact, or af	fecting a couple of c	onsumers)			
During working hours	Working Day	1	1			
After hours	Working Day	1.5	1.5			
Customer Complaints						
General Complaints and Inquiries: Note: Applies for 95% of complaints						
Oral complaints	Working Day	2	2			
Written complaints	Working Day	10	15			
Odour Complaints:						
Treatment works (outside designated buffer zone)	Number/year	2	1			

		LEVEL OF SERVICE		
DESCRIPTION	UNIT	Target	Current Performance assessed by Council	
Pumping Stations	Number/year	2	0	
Reticulation system	Number/year	2	0	

6 Design parameters

6.1 Sewerage

Investigation and design of sewerage system components are based on the following technical documentations:

- Queanbeyan-Palerang Regional Council's levels of service (Refer to Section 5)
- Manual of Practice: Sewer Design (1984)
- Manual of Practice: Sewage Pumping Station Design (1986)
- WSAA Gravity Sewerage Code of Australia V3.1 WSA 02-2014
- WSAA Pressure Sewerage Code of Australia V1.1 WSA 07 2007
- TAM and Financial Plans of Palerang Community IWCM Strategy, 2019

7 Developer charges calculation methodology

7.1 Developer charge concept

The developer charges calculation methodology is based on the net present value (NPV) approach with a view to fully recover the capital cost invested for servicing a development area. The investment is recovered as the up-front developer charges and the net income over time from the annual bills/ charges.

The calculation of developer charges is a two-step process. First, the capital charge is calculated as the present value of the capital cost of assets required over time to service the development area. The capital charge will include the capital cost component that will be recovered through annual bills, which needs to be reduced from the calculated capital charge. Hence, the second step is to calculate the reduction amount, which is the present value of the expected annual charges over time to be paid by the development in excess of operation, maintenance and administration (OMA) costs i.e. net income from annual bills.

The developer charge per equivalent tenement is defined as the capital charge less the reduction amount.

Developer Charge (\$/ET) = Capital Charge (\$/ET) – Reduction Amount (\$/ET)

7.2 Capital charge

The calculated capital charge represents the effective capital cost of assets used in providing sewerage services in the DSP areas. This includes the cost of both existing and future assets per equivalent tenement (ET) to be used to service the DSP areas.

Generally, the capacity of a sewerage asset would not be fully utilised until some years after construction of the asset. The calculation takes into account the time to full take-up the capacity of an asset over the planning horizon (30 years).

The Return on Investment (ROI) is based on the cost of early investment and the recovery of the investment over time. The annual payments have to provide a return of investment to reflect the discounting of future payments.

In accordance with IPART's Determination 9, 2000, the ROI is calculated using the discount rates in Table 7-1.

Table 7-1: Discount rates used in capital charge calculation

Assets	Discount rate
For Pre-1996 assets	3% pa
For Post-1996 assets	5% pa

7.3 Exemption

The assets groups included and excluded from the capital charges calculations are shown in Table 7-2

Table 7-2: Assets included and excluded in capital charges calculations

Group	Capital charge calculation inclusion
Existing assets	Assets less than 30 years old at the commencement of this Plan are included
Future assets (new works)	Assets planned within the next 10 years as adopted by Council are included
Future assets (renewals)	Assets planned for renewal within the next 10 years are included, if replacing assets older than 30 years
Reticulation (existing and future)	Reticulation assets are excluded from the calculation of developer chargers
Assets for out-of-sequence development	Excluded if the developer is required to meet the full cost of such assets
Developer provided assets	Excluded unless the developer is reimbursed fully or partially

7.4 Reduction amount

The reduction amount is the amount by which the capital charge is reduced to arrive at the developer charge. The reduction amount represents the portion of the effective cost of assets LWUs expect to recover from the new developments as part of their future annual bills for the service provision in the DSP areas.

Council has adopted the NPV of annual bills method to calculate the reduction amount. The reduction amount has been calculated using the NPV for 30 years of the future net income from the annual charge (annual bills less OMA cost) per PV of new ETs.

8 Sewerage developer charge

8.1 Sewerage capital charges

The details of calculation of capital charge for the service area covered by this DSP are presented in Appendix B. The calculated sewerage capital charges for the three service areas of the Palerang Community are presented in the Table 8-1.

Table 8-1: Sewerage capital charge for service areas

Sewerage Service Area	Capital charge for EXISTING assets 2019/20 (\$ per ET)	Capital charge for FUTURE assets 2019/20 (\$ per ET)	Capital charge 2019/20 (\$ per ET)
Braidwood	26,153	365	26,519
Bungendore	12,179	4,095	16,274
Bungendore-Greenfield Developments	3,654	9,436	13,091

8.2 DSP areas

When the capital charges for two or more service areas are within 30%, they can be agglomerated into a single DSP area. Capital charge for Braidwood is the highest calculated and is not within 30% of any of the other two service areas, whereas the capital charges for Bungendore and the Greenfield Development area are within 30% of each other (refer to Table 8-2 and Table B4 of Appendix B).

Table 8-2: Agglomeration of sewerage service areas

Sewerage Service Area	Capital charge 2019/20 (\$ per ET)	Percentage of highest capital charge DSP Area 1	Percentage of highest capital charge DSP Area 2	Agglomerated DSP area	Weighted average capital charge 2019/20 (\$ per ET)
Braidwood	26,519	100%	-	Sewerage DSP Area 1	26,519
Bungendore	16,274	61%	100%	Sewerage	13,554
Bungendore- Greenfield Developments	13,091	-	80%	DSP Area 2	

Developer charge for Braidwood based on the calculated level of capital charge will be unaffordable for a small village. Higher developer charge will also stall tenement growth in Braidwood, particularly in the context of the proposed lower developer charges for the other two service areas within the Palerang community and will likely lead to the underutilisation or stranding of the Braidwood sewerage asset capacities.

It has been identified that 99% of the capital charge for the Braidwood service area is contributed by the existing assets, particularly the STP asset commissioned in 2010 with a high level of government grants. For this reason, Council has elected to cap the calculated capital charge for the existing sewerage assets of Braidwood at 70%. Accordingly, the capital charges have been recalculated with the adopted level of capping and the service areas have been re-agglomerated after capping in

accordance with the 2016 Developer Charges Guidelines for the calculation of developer charges (refer to Table 8-3 and Table B5 of Appendix B).

Table 8-3: Agglomeration of sewerage service areas – after capping

Sewerage Service Area	Capital charge 2019/20 (\$ per ET)	Percentage of highest capital charge DSP Area 1	Agglomerated DSP area	Weighted average capital charge 2019/20 (\$ per ET)
Braidwood	18,673	100%		
Bungendore	16,274	87%	Sewerage DSP	
Bungendore- Greenfield Developments	13,091	70%	Area	13,900

8.3 Reduction amount calculation

The reduction amount has been calculated using NPV of annual bill method on a utility-wide basis as Council has adopted a uniform tariff structure. The details of reduction amount calculation are presented in Appendix B and a summary is shown in Table 8-4.

Table 8-4: Summary of Reduction Amount Calculation

Discount rate, p.a.	5%
Annual sewerage charge, 2019/20 (\$/ET)	1,074
Annual sewerage OMA, 2019/20 (\$/ET)	1,811
Estimated net operating income (\$/ET)	276
PV of new ETs over 30 years	1,752
PV of net income over 30 years (\$)	6,111,167
Reduction Amount, 2019/20 (\$/ET)	3,489

8.4 Sewerage developer charge

The developer charge is the capital charge less the reduction amount. The capital charges, the reduction amount and the calculated sewerage developer charges in 2019/20 dollars are presented in Table 8-5.

Table 8-5: Sewerage developer charge

DSP area	Service areas covered	Weighted average capital charges 2019/20 (\$ per ET)	Reduction amount 2019/20 (\$ per ET)	Calculated developer charge 2019/20 (\$ per ET)
Sewerage DSP Area	Bungendore, Braidwood, and Bungendore – Greenfield Developments	13,900	3,489	10,411

8.5 Sewerage cross-subsidy

Council has elected to cap the developer charges for Braidwood in order to maintain affordability and to avoid 'stranded' assets in such villages. The cross-subsidy, resulting from capping of capital charge

for Braidwood must be disclosed in the DSP, Council's Annual Report, annual Operational Plan and in communication materials for consultation with stakeholders. Details of cross-subsidy calculations undertaken for this purpose are presented as part of the DSP background documents in Appendix B and briefly presented below.

Following two options were examined to determine the impact of the adopted cross subsidy:

Option 1 – No cross-subsidy – Calculated maximum developer charge adopted.

Option 2 – Adopted cross-subsidy – 3.8% reduction to weighted average developer charges.

A summary of the developer charges options and cross-subsidy is shown in Table 8-6 and details provided in Table B6 of Appendix B

Table 8-6: Developer charges options and cross-subsidy

Option	Sewerage DSP area	Sewerage service area	PV of new ETs over 30 years	Calculated developer charge 2019/20 (\$ per ET)	Weighted component of developer charge 2019/20 (\$)	Weighted average developer charge 2019/20 (\$ per ET)	Weighted average cross-subsidy to developer charge 2019/20 (\$ per ET)
Option 1:	Sewerage DSP Area 1	Braidwood	120	23,030	1,554		
No cross-	Courorago	Bungendore	242			10,940	Nil
subsidy Sewerage DSP Area 2	Bungendore- Greenfield Developments	1,419	10,066	10,066 9,387			
Option 2:		Bungendore	242				
Adopted cross- subsidy (4.8%	Sewerage DSP Area	Bungendore- Greenfield Developments	1,419	10,441	10,441	10,441	529
reduction)		Braidwood	120				

Option 2 involves an average cross-subsidy of \$529/ET on calculated maximum developer charges. The impact of the cross-subsidy on the typical annual residential sewerage bill is estimated to be an increase of \$18. The impact of cross-subsidies on the annual sewerage bill for each option is shown in Table 8-7 and Figure 8-1 below.

Table 8-7: Impact of cross-subsidy on annual sewerage bill

Option	Required annual sewerage bill 2019/20 (\$/ET)	Resulting increase in annual sewerage bill (%)
Option 1: No cross-subsidy	1,074	Nil
Option 2: Adopted cross-subsidy	1,092	1.67%

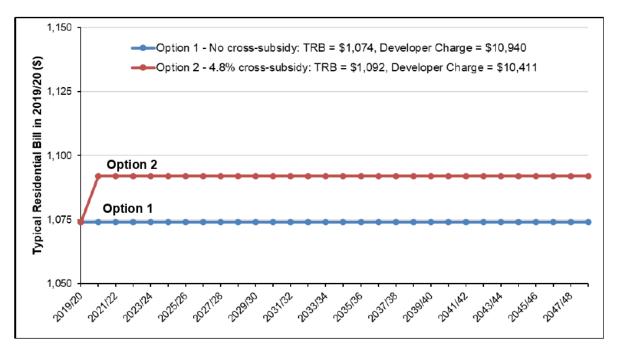


Figure 8-1: Impact of developer charges options on the typical residential bill

9 Reviewing / updating of calculated developer charges

Developer charges are to be reviewed by Council every eight years. The developer charges should be adjusted on 1 July each year on the basis of movements in the Consumer Price Index (CPI) for Sydney in the preceding 12 months to December, excluding the impact of GST.

If there is a major change such as the need for significant capital works that has not been included in the existing DSP, Council may carry out a review in less than four years, subject to DPIE Water's approval.

10 Background documents

The background document and references used for the development of this DSP are contained in the following documents:

- Developer Charges Guidelines for Water Supply, Sewerage and Stormwater 2002, DPIE
 Water
- NSW Water and Sewerage Strategic Business Planning Guidelines, DPIE Water, July 2011
- Palerang Community IWCM Strategy, 2019

The background information of the sewerage developer charges calculations is included in Appendix B. The background information contains details on commission dates, size, capacity and MEERA valuation of existing sewer assets. They also include the details of calculations of the capital charges, reduction amount and developer charges.

11 Other DSPs and related contribution plans

Council's other related contribution plans include:

- Palerang Community Development Control Plan
- Palerang Community Section 94B Contributions Plans

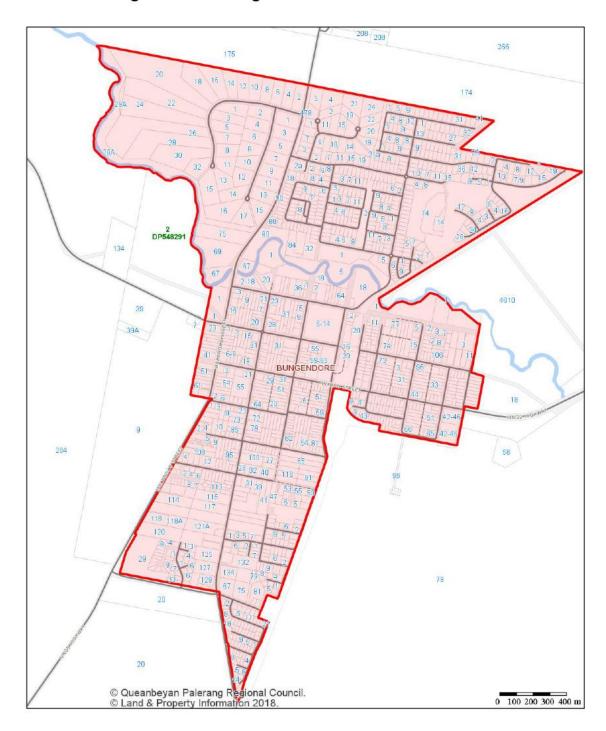
Glossary

Glossary of Terms		
Annual bill	Local Water Utility's annual sewerage bill for an annual demand of 1 ET	
Asset	An asset (or part of an asset) including land and headworks assets that directly provides, or will provide, the developer services to developments within the DSP area for which the Developer Charge is payable	
ADWF	Average dry weather flow. One of the design parameters for flow in sewers	
Capital cost	The Present Value (MEERA basis) of all expenditure on assets used to service the development	
Capital charge	Capital cost of assets per ET adjusted for commercial return on investment (ROI)	
СРІ	Consumer price index (All Groups)	
CRC	Current replacement cost	
Developer charge	Charge levied on developers to recover part of the capital cost incurred in providing infrastructure to new development	
Development area	See DSP area	
Discount rate	The rate used to calculate the present value of money arising in the future	
DPIE Water	er Department of Planning, Industry and Environment - Water	
DSP	Development Servicing Plan	
DSP area	That is part of a sewerage scheme area covered by a particular Development Servicing Plan. Also referred to as Development Area	
EP	Equivalent Persons (or equivalent population). Used as a design parameter for loadings of sewage treatment works	
ET	Equivalent tenement. The annual demand a detached residential dwelling will place on the infrastructure in terms of the sewage discharge	
LWU	Local water utility (NSW). Excludes Sydney Water Corporation, Hunter Water Corporation, Gosford Council, Wyong Council, Essential Water and Fish River Water Supply	
MEERA	Modern Equivalent Engineering Replacement Asset	
Net income	Annual bill minus OMA cost per ET	
NPV	Net present value means the difference between the Present Value of a revenue stream and the Present Value of a cost stream	
OMA	Operation, maintenance and administration (cost)	

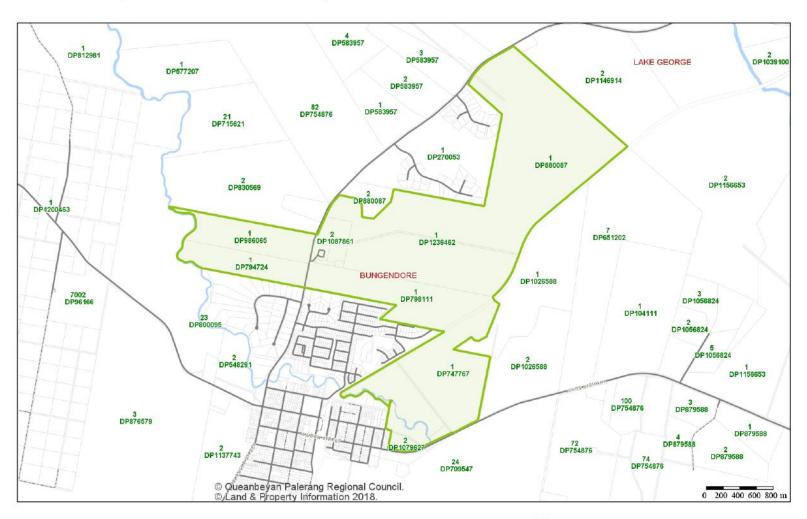
Glossary of Terms		
Operating cost	In relation to a DSP is the operation, maintenance and administration cost (excluding depreciation and interest) of a LWU in providing Customer services to a DSP area	
Palerang Communities	Those sewerage serviced areas associated with the former Palerang LGA.	
Post-1996 asset	An asset that was commissioned by a LWU on or after 1 January 1996 or that is yet to be commissioned	
Pre-1996 asset	An asset that was commissioned by a LWU before 1 January 1996	
PV	Present value. The current value of future money or ETs	
QPRC	Queanbeyan-Palerang Regional Council	
Reduction amount	The amount by which the capital charge is reduced to arrive at the developer charge. This amount reflects the capital contribution that will be paid by the occupier of a development as part of future annual bills	
Reticulation assets	Reticulation is defined as the local pipes connecting water supply and sewerage service for individual properties. Reticulation assets are excluded from the calculation of developer charges as the developers are responsible for the full cost of the design and construction of sewerage reticulation works within subdivisions	
ROI	Return on investment. Represents the income that is, or could be, generated by investing money	
Service area	An area serviced by a separate sewage treatment works, a separate small town or village, or a new development of over 500 ETs	
STP	Sewage treatment plant	
TRB	Typical residential bill, which is the principal indicator of the overall cost of a sewerage system and is the annual sewerage charge paid by a residential customer.	

Appendix A DSP service areas

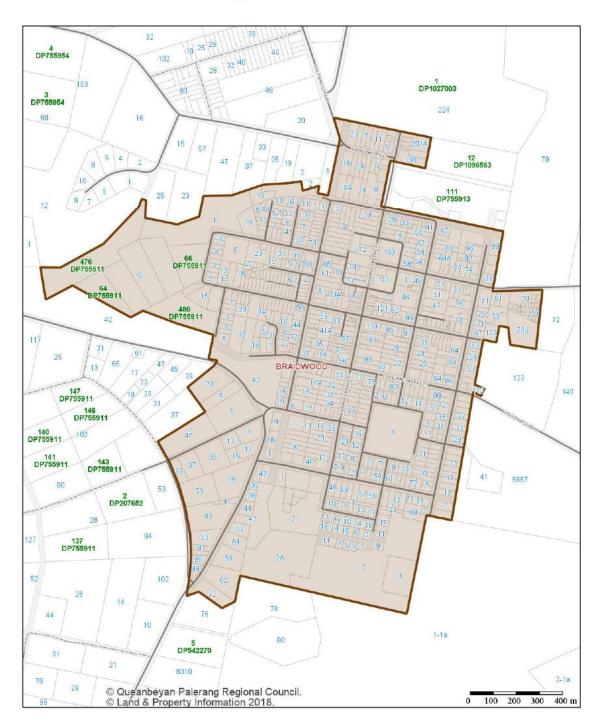
A.1 Bungendore sewerage scheme service area



A.2 Bungendore - Greenfield developments service area



A.3 Braidwood sewerage scheme service area



Appendix B Sewerage DSP background document

Appendix C Outline of Legislation

Local Government Act 1993

The power for local government councils to levy developer charges for water supply, sewerage and stormwater derives from Section 64 of the *Local Government Act 1993* by means of a cross-reference in that Act to the relevant provisions of the *Water Management Act 2000*.

Section 64 of the Local Government Act states that:

Division 5 of Part 2 of Chapter 6 of the *Water Management Act 2000* applies to a council exercising functions under this Division in the same way as it applies to a water supply authority exercising functions under that Act.

Environmental Planning and Assessment Act 1979

Prior to the introduction of the *Local Government Act* in 1993, councils used the provisions of Section 94 of the Environmental Planning and Assessment Act 1979 to obtain developer contributions for water supply and sewerage services. As part of the *Local Government (Consequential Provisions) Act 1993*, amendment was made to the Environmental Planning and Assessment Act so that Section 94 no longer applied for water supply and sewerage services.

However, Councils can levy developer charges for stormwater under either *Local Government Act* or *Water Management Act*.

Water Management Act 2000

Section 305 (1) and (2) of the Water Management Act states that:

- 1) A person may apply to a water supply authority for a certificate of compliance for development carried out, or proposed to be carried out, within the water supply authority's area.
- 2) as a pre-condition to granting a certificate of compliance for development, a water supply authority may, by notice in writing served on the applicant, require the applicant to do either or both of the following:
 - a) to pay a specified amount to the Authority by way of contribution towards the cost of such water management works as are specified in the notice, being existing works or projected works, or both,
 - b) to construct water management works to serve the development.

Section 305 (3) of the Water Management Act states that:

- 3) In calculating an amount for the purposes of subsection (2) (a):
 - the value of existing water management works and the estimated cost of projected water management works may be taken into consideration, and
 - b) the amount of any government subsidy or similar payment is not to be deducted from the relevant value or cost of the water management works, and
 - c) consideration is to be given to any guidelines issued for the time being for the purposes of this section by the Minister.

In 2011, the Minister for Primary Industries became responsible for non-metropolitan NSW town water services. The Minister is responsible for the issue of guidelines for water utilities on the calculation of water supply, sewerage and stormwater developer charges.

Note: Use of moneys raised from developer charges is discussed in Section 2.7 on page 10 of the guidelines.

Local Government (Savings and Transitional) Regulation 1993

The Local Government (Savings and Transitional) Regulation 1993 covers the matter of developer contributions which had previously been obtained by councils under the Environmental Planning and Assessment Act as follows:

- 9) Any monetary contribution held by a council immediately before the commencement of this Regulation, being a contribution arising from a condition:
 - (a) that was imposed under section 94 of the *Environmental Planning and Assessment Act 1979*; and
 - (b) that specifies that the contribution is to be applied towards providing specified water or sewerage services or towards providing water or sewerage services generally, is to be applied towards the construction of works within the meaning of Division 2 of Part 3 of the *Water Supply Authorities Act 1987*, or towards the repayment of money borrowed for the construction of such works, and is not to be applied towards any other purpose.



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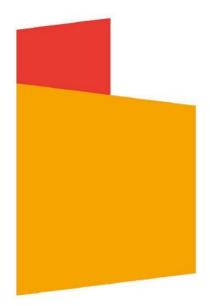
QUEANBEYAN-PALERANG REGIONAL COUNCIL

Council Meeting Attachment

24 JUNE 2020

ITEM 9.8 REVIEW OF THE WATERWISE INITIATIVE

ATTACHMENT 1 DRAFT WATER WISE POLICY





Date policy was adopted:	CEO Signature and date
Resolution number:	
Next Policy review date:	
Reference number:	
Strategic Pillar	
Responsible Branch	DD/MM/YYYY

1. OUTCOMES:

To establish Council's commitment to its Water Wise initiative and to outline the various programs and incentives that support its goal for improved water efficiency.

2. POLICY:

The Water Wise program is designed to increase public awareness about water conservation and to encourage, through various incentives, the more efficient use of water. The aim of the program is to assist in the reduction in use of a scare resource as well as expenditure in terms of pumping and treatment costs.

3. SCOPE OF THE POLICY:

The Water Wise program will offer the incentives outlined in this policy to eligible owner/occupier home owners in Queanbeyan, Bungendore, Braidwood and Captains Flat who are connected to Council's Water Supply. The policy is not available to commercial properties or other non-residential properties.

The Googong Township has been excluded from the provisions of this policy by virtue of its special status as a 5 star Green Star Community rating whereby its IWCM plan already targets a 60% reduction on potable water usage.

4. **DEFINITIONS:**

BASIX - Building Sustainability Index

5. LEGISLATIVE OBLIGATIONS AND/OR RELEVANT STANDARDS:

Plumbing fixtures to be according to AS3500.1 and AS3500.2

6. CONTENT:

6.1 Free Home Tune Up

Home owners may make application for a free Home Tune Up to be carried out by a trained licensed plumber through the Master Plumbers Association. The process includes the following:

- FREE water audit of the home (inside and out) which identifies water use and savings that could be made. A report to be provided to the home owner with copy to Council.
- Installation of a FREE water efficient shower rose (rated WELS 3 or higher).
- · Free replacement of up to two (2) leaking tap washers.
- Installation of up to two (2) FREE regulators in basin or kitchen taps.

The cost to Council for this service will be as agreed between Council and its service provider and will be adjusted annually in line with CPI movements (Sydney – All Groups).

The completion of a Home Tune Up is a prerequisite for the toilet suite replacement initiative and each property shall only be eligible for a tune up once in any five year period.



6.2 Retrofit Toilet Subsidy

Owners who have the Home Tune Up carried out are entitled to have their single flush toilet replaced with a 4.5 litre suite. A similar arrangement is available for homes that have an existing dual flush toilet greater than 6 litres in capacity. This will be subsidised at a maximum of \$275 (\$2019/2020) per toilet (or 50% of the cost for supply and installation – whichever is lower) with a maximum of 2 per household. The subsidy shall be adjusted annually in consideration of both actual historical installation costs for the previous financial year and CPI movements (Sydney – All Groups), whichever is the lesser.

It is expected that eligibility would be determined at the time of the Free Home Tune Up at which time the owner would apply through Council's agent, the Master Plumbers Association.

The works to be undertaken would require approval by Council with arrangements for the works on site to be undertaken by the Master Plumbers Association using a standard suite as agreed by Council. No other alternative suites are available for use under this scheme and no subsidy is available for customer provided suites. The gap between Council's subsidy and the service fee charged by the Master Plumbers Association shall be met by the applicant. The Master Plumbers Association shall invoice the applicant directly for the gap.

The subsidy is available only once per property dur the duration of this program.

6.3 Rainwater Tank Subsidy

This initiative of the policy has 2 main objectives:

- To encourage a greater level of community participation in retro-fitting rainwater tanks by having less onerous requirements on tank sizes to be installed
- 2. To provide necessary incentive to new home-builders to install larger than the minimum size tanks required to satisfy BASIX.

In keeping with these objectives two Categories of rebates are offered:

- · Category 1 Rebates for retro-fitting rainwater tanks to existing homes
- Category 2 Rebates for rainwater tank installations that exceed the requirements of BASIX for new homes

The level of rebate is set as detailed in the following tables.

REBATES AVAILABLE FOR RAINWATER TANK(S) RETRO-FITTED TO EXISTING HOMES (Category 1 Rebates)

Tank Size	Connection to Outside Watering	Connection to Toilet(s)	Connection to Laundry/Washing Machine	Maximum Total Rebate
4,000 – 9,999L	\$128	\$192	\$192	\$512
10,000 – 19,999L	\$192	\$256	\$256	\$704
20,000L	\$256	\$384	\$384	\$1,024



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Notes

- Tanks of 10,000 litres and greater size need formal development approval however Council will not charge any development application fees for these applications.
- 2. Connection arrangements shall be in accordance with AS.3500.1 and 2 (2018)
- The above amounts apply in 2019/2020 and will be adjusted for CPI (Sydney) in subsequent years.

In addition to rebates for retrofitting of rainwater tanks to existing homes the policy also provides rebates to new home-builders who install rainwater tanks that are larger than those required by BASIX (40% savings); in accordance with the following scale.

REBATES AVAILABLE FOR RAINWATER TANKS THAT EXCEED BASIX REQUIREMENTS FOR NEW HOMES (Category 2 Rebates)

Water Saving According to BASIX	Provided Water Tank Size ≥10,000L and tank is connected for Toilet Flushing (≥ 3 star), Laundry Use and calculations include >150 sq metres of Outside Watering from the tank
45-50% saving ¹	\$320
>50% saving ¹	\$640

Notes: 1. To demonstrate this level of water saving will require the submission of a BASIX certificate with the application for rainwater tank rebate.

- The above amounts apply in 2019/2020 and will be adjusted for CPI (Sydney) in subsequent years.
- 3. The rebates do not apply to rainwater tanks that are required as a condition of a subdivision approval..
- 4. To be eligible under the category the rainwater tank rebate application needs to be approved by Council before installation.

7. REVIEW

This policy will be reviewed every four years or earlier as necessary if:

- a) legislation requires it, or
- b) Council's functions, structure or activities change.





