

Sancrox Supply Zone Investigation Area

Propose	d customers											
No of lots												
No of lots						-	User Type					
		User Type Un									_	
		B1 PMHC Buildings	C1 Commercial	CU Businoss Strata Units	F1 Farmland	II Industrial	N1 Rated Water Only	P1 Parks & Gardens	R1 Residential	Rural Residential	Strata Units & Flats	Dual Retic Potable Supply
Proposed no o	flate											
rroposeu no o	Sancrox Rural Residentia											
	Le Clos Verdun	1		_	_					146		
	Le Clos Verdun									132		
	Bushlands Drive	_	_							49		
	Gloucester Hts (FFS)									50		
	Bymes									12		
	Rawdon is Rd DP 754434									13		
	Rawdon is Rd DP 1029887									36		
	Blair									112		
	Nurse									23		
	SE Car Sancrox & Rawdon									25		
	Rawdon									37		
	Subdivide nth of Byrnes									12		-
	Other Future RR (see Map)									181		
	Area 13	10	588			150						48
	Future											-
	North (node HRD1)			_								2
	North (node HRD1) Sorth (node LID1)											2
	West - Murcott (nodes	_										
	East - charley (nodeNS24)				_							
	West South Oxdey (Nodes	SO04, SO012)										1
	Sancrox Industrial											
	Pearsons (3000 kl/yr, 8kl/d)					4						
	Bitumen batching (2000kl/yr, 6k	(d)				3						
	Concrete batching (5500kl/yr, 2	Md/d)				10		5				
	HF Hand (O, not connected)											
	Other Units (assumed 1000 l/d)					33						-
	Murcott land east of highway					27						-
	Total Proposed	10	588		-	200	4			828	-	5,4

20 yr Design Lot Yield

No of lots														
THO OF IOLS									taging					
		2007/08	2008/09	2009/10	2010/11	2011/12	2012/2013	2013/2014	2014/15	2015/16	2016/17	2017/18	10 - 15 years	15 - yea
Proposed no of lotr			-			_	_			_				
	ural Residentia					_	_							
Le Clos Verd		146				_	_	-	-					_
Le Clou Sano			40		132	-	_		_					_
Bushlands D			49	-	50	-	_							
Cloucester H	ts (FFS)			_	12	_	_							_
Bymes	Rd DP 754434		_		13	_	_							
	Rd DP 1029887		_	_	36	_	_							
	R0 DP 1029687	_	-		30		112			_				
Blear Nurse					23		23							
	res & Rawdon	_			- 23		25							
Rawdon.	NE & KEWOOD					_	37							
Subdivide n	h of Person				12		12							
Subarrat III	a or bymes						-							
Other Futur	e RR (see Map)													
0.000 1.000														
Area 13		51	101	151	151	201	201	201	201	201	201	201	1255	
741.017		51	152	303	454	655	856	1057	1258	1459	1660	1861	3116	
Future														
	ode HRD1)								3					
	ode LID1)													
	durcott (nodes													
	harley (nodeNS24)													
	uth Otley (Nodes	O04, SO01;	2)											
Sancrox Ind	m trial		-											
	00 Myr, 8M/d)													
Bitumen bota	hing (2000kl/yr, 6kl	(d)												
Concrete but	ching (5500kl/yr, 20	(6/b)												
	not connected)													
	(assumed 1000 Fd)								7					
	d east of highway													
	Proposed	197	150	151	429	201	410	201	201	201	201	201		
1966	- porta	197	347	498	927	1,128	1,538	1,739	1,940	2,141	2,342	2,543	3,798	

Lot Development Staging

End of table missing

Main Findings - Major Assets

Sancrox Reservoir

- Area 13 development rate drives the construction of Sancrox reservoir
- It is needed in 2011 based on the Thrumster Structure Plan development rates
- Realistically, the new 20 ML Sancrox Reservoir will be operational prior to significant development west of the Pacific Highway.
- ♦ The security of supply to the existing Sancrox Reservoir will be improved by enlarging the Rawdon Island Booster Water Pumping Station

Main Points

Rural Residential and Industrial

Assumptions:

- Rural residential lots will be BASIX homes with rainwater tanks to supply WC, garden, washing machine. Potable topup water to be restricted to 700 l/d (not instantaneous topup).
- Industrial lots using peak day 7500l/d. (Inst 0.15l/s, Avge 5000 l/d)

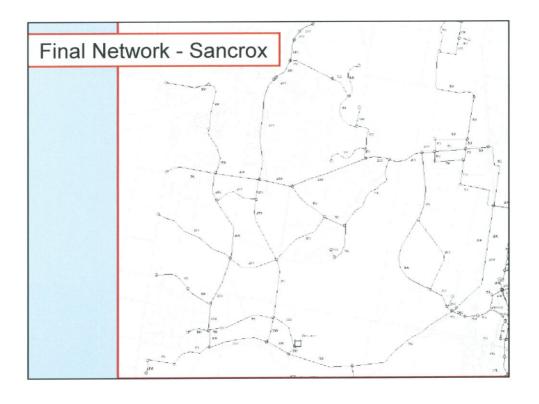
Results

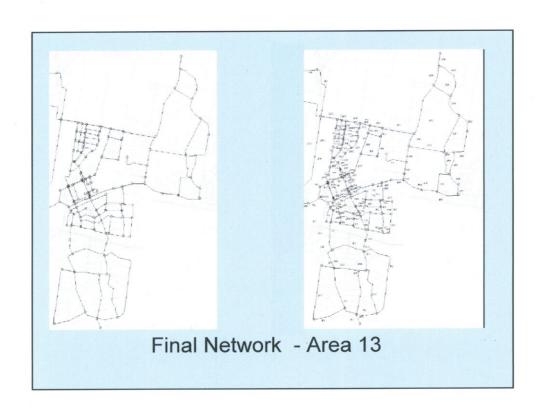
- The existing system can supply Verdun and Stage 1 Industrial
- Current rezoning applicants can develop provided local watermain and booster pumping station amplifications are completed.

Conclusion

Rural Residential & Industrial Development can proceed.

Specific additional contributions have been calculated and need to be further developed





Who ution Dev funde	Pays ed Council	funded	Grand Total
		funded	
		**	
84.5%	4.5%	11%	
605,250	\$245,250		
100,000			
992,748			
228,805 \$2,865	5,765	** ?? Check	
577,044 \$311	,496		
874,474 \$3,139	,871		
240,000			
	7,132		\$25,330,203
	100,000 New Pipelines hove (100,150m) 100,150m 1	100,000 lefines New Pipelines (100,150mm) 992,748 228,805 \$2,865,765 677,044 \$311,496 874,474 \$3,139,871	100,000 New Pipelines (100,150mm) 992,748 228,805 \$2,865,765 ** ?? Check 677,044 \$311,496 874,474 \$3,139,871

Rural Residential Contribution Costs

Rural Residential Distribution Costs

Portion of Reservoir	6.3%	\$5,450,000	\$343,350	Credit ?		
Portion of Trunk	6.3%	\$8,992,748	\$566,543	Credit ?		
Sancrox Booster Pumping Station	100.0%	\$100,000	\$100,000	Credit ?		
Sancrox Distribution Watermains	100.0%	\$2,874,474	\$2,874,474		-	
			\$3,884,367			
Contribution per lot						
525 additional Lots	525	Cont per lot:	\$7,399			
		Credits	\$1,924			
		Additional	\$5,475			

Estimate of Contribution per lot (as at Sept 2007)

Headworks costs = \$6 400

Distribution costs = \$5 500- \$7,400

Total Contribution = \$11 900 - \$13 800

Staging