



THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

R E P O R T

relating to the proposed provision of

ENGINEERING SERVICES

to the

RAPID CREEK SUBDIVISION, STAGE 2B,

DARWIN, NORTHERN TERRITORY.

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PROVISION OF ENGINEERING SERVICES
TO THE RAPID CREEK SUBDIVISION, STAGE 2B,
DARWIN, NORTHERN TERRITORY.

REPORT

His Excellency the Administrator in Council has referred to the Parliamentary Standing Committee on Public Works for inquiry and report to the House of Representatives, the proposal to provide engineering services to Stage 2B of the Rapid Creek subdivision at Darwin, Northern Territory. The Committee have the honour to report as follows:-

General

1. The inquiries of the Committee have been concerned only with the engineering services to be provided for a stage of development of the Rapid Creek subdivision at Darwin which will yield 252 serviced blocks of a total of 848 in the complete subdivision.
2. The work proposed is an extension of development that has been taking place in the Nightcliff area since major residential subdivision was completed in the Town of Darwin. The first stage of the work at Rapid Creek yielded 167 serviced building blocks and 177 blocks are now in the process of being serviced.
3. Of the total number of blocks, therefore, 344 are either already serviced or are in the process of being serviced, 252 are the subject of this reference and servicing of the remaining 252 will be carried out in later stages.

4. In view of the limited nature of this inquiry, the Committee concluded that no useful purpose would be served by a visit to Darwin. Evidence was taken in Sydney from representatives of the Northern Territory Administration and the Department of Works.

The need for engineering services

5. The need to provide engineering services for the Stage 2B development of the Rapid Creek area arises from the demand for residential building blocks. There is no shortage of suitable land but it is the wise policy of the Northern Territory Administration not to permit building until services are provided.

6. Land for private development.- During the financial years 1948/49 to 1960/61 inclusive, 1092 residential and business lots were made available either by public auction or preferential allocation to ex-servicemen.

7. This has not satisfied the demand for land for private development. In fact, there is an estimated unsatisfied demand from the last auction sale in November 1960 for 100 blocks and the estimated annual requirement is in the vicinity of 140 blocks.

8. As evidence of the demand for lots for private building, we were told that at the last auction sale, when premiums averaged approximately £400, record prices were paid.

9. Housing Commission.- The Housing Commission, which accepts applications from persons of limited means who are not adequately housed and who are not officers within the meaning of the Public Service Act 1922-1928 or the Public Service Ordinance 1928-1948, at present holds 345 applications for rental housing. The wastage rate is approximately 30% and the rate of registration is 4 to 5 per week.

10. In addition there are 150 families residing in sub-standard accommodation in ex-Army camps. The Administration is intent upon clearing these areas but so far only 15% of the dwellers have applied for alternative accommodation.

11. It has been estimated that 60 blocks will be required in each of the next two financial years for the Housing Commission.

This number will make no significant contribution to the problem of providing rental accommodation and is related only to the expected financial provision for the construction of rental homes.

12. Departmental housing.— Evidence was given that at least 100 houses are required for staff of the Northern Territory Administration and Commonwealth Departments in Darwin. However, funds for the construction of departmental housing are expected to be such that only 50 will be included in the 1961/62 Works programme.

13. The shortage of housing for staff, it is claimed, is having a detrimental effect on recruitment.

14. Estimated number of blocks required.— The number of blocks needed in the next two financial years has been estimated as follows:—

	<u>1961/62</u>	<u>1962/63</u>
Housing Commission	60	60
Commonwealth departmental housing	50	100
Unsatisfied public demand	100	—
Estimated public requirement	140	150 x.
Total	350	310

x. Allows for slight population increase.

15. This requirement for 660 building blocks has been estimated on the basis of meeting the demand for private home building, but in relation to Commonwealth departmental and Housing Commission housing is related only to the number of houses for which funds are expected to be available and not to the demands for such housing.

16. Against this estimated requirement, engineering work in progress will yield 177 blocks, the proposal before the Committee will yield 252 blocks, and 150 blocks are expected to be available from the private subdivision of two fairly large areas of land already under existing lease.

17. Thus, if all the blocks from these three sources are serviced by the end of the 1962/63 financial year, 579 blocks will be available to meet the estimated need by that time for 660 blocks.

18. On these figures alone, the need for the work proposed is established. It is strengthened by the thought that private subdivision may not yield 150 blocks by June 1963 and in the knowledge that portion of the need is related to the anticipated provision of funds to erect houses for rental and not to the demand for them.

19. The Committee have concluded that there is an urgent need to develop Stage 2B of the Rapid Creek subdivision without delay, and we recommend accordingly.

20. We further urge that early action be taken so that Stages 3 and 4 can be commenced in time for all the 252 blocks in this group to be serviced by the end of the 1963/64 financial year.

The area to be serviced.

21. The area to be serviced in the proposal before the Committee abuts the main shopping area for Nightcliff. It is about $6\frac{1}{2}$ miles from the administrative centre of Darwin with which it will be connected by a bus service.

22. Proximity to R.A.A.F. bombing range.— During the course of our inquiries reports were current in the press alleging that bombing exercises on the R.A.A.F. range situated near the Rapid Creek subdivision had caused damage to residences in the Nightcliff area. Nightcliff and Rapid Creek adjoin, the latter being approximately $4\frac{1}{2}$ miles from the target area of the range.

23. It is not the Committee's function to be concerned with the liability for or the cause of the damage. In the circumstances, however, we felt that the proximity of the range to existing development and plans to develop increasingly closer to it dictated that the matter should have our attention.

24. Evidence was therefore obtained from representatives of the Department of Air and the Department of Territories.

25. At the time of writing this report the Department of Air does not accept liability for the alleged damage and a report by the Department of Works, which does not give the cause, reveals that the damage to buildings under construction is of a very minor nature.

26. The attitude of the Department of Territories is that the planned development of suburbs should not be precluded by the use of the bombing range. This is a reasonable attitude, but evidence was given that an examination of the papers of the Department of Territories did not reveal that any specific attention had been given to the proximity of the range when the subdivision in question was originally considered. We were also told that the Department of Air had not been consulted.

27. The Committee advise very close examination of the possibility of R.A.A.F. activities on the Leanyer Swamp bombing range causing damage and nuisance in areas of development at Darwin, particularly as they are becoming closer to the range.

28. We suggest that the Department of Territories and the Department of Air consult so that each can be made aware of the plans of the other and to give the opportunity to find mutually acceptable solutions to any problems.

The proposed engineering services.

29. The engineering services to be provided are main water surface drainage, water supply, sewerage, electricity supply and roads including kerbs, channels, carriage ways and footpaths. These services have been designed to the appropriate recognised standards.

30. The blocks to be serviced will have an average area of 37 perches and an average frontage of 80 feet. The average cost of providing engineering services to the blocks, including the provision of services common to this and other development, is approximately £1,300.

31. Main water surface drainage.- The area is close to the sea and to Rapid Creek which give natural outlets for stormwater. Economical drainage is therefore possible with shallow underground pipes which, we agree, are far more preferable than open drains.

32. Water supply.- Water supply for the whole area is provided by an 8-inch pipe connected to the trunk pumping mains from

the Manton Dam at the Berrimah turn-off on the Stuart Highway. From this system water will be reticulated to the blocks in the area to be serviced.

33. Apart from reticulation, it is proposed to provide additional storage in elevated tanks, and to maintain a safe margin against failure in supply additional storage capacity of 600,000 gallons will be needed within the next 3 years.

34. The existing storage of 150,000 gallons is to be augmented initially by a 300,000 gallon capacity elevated tank. On maximum demand this will give one day's storage as a reserve against breakdown when the area serviced by Stage 1 of the Rapid Creek subdivision has been fully occupied.

35. Further augmentation to the extent of 300,000 gallons is proposed later to provide for the population expected in the Nightcliff and Rapid Creek areas when the Rapid Creek subdivision is completed. It is planned to have this tank available for storage by the end of 1964.

36. The reference to the Committee proposed the replacement of the 8-inch diameter main laid during the last war with a larger main at an estimated cost of £175,000.

37. However, replenishment of the storage can be sufficiently augmented if the pumping rate is increased from 500,000 to 700,000 gallons per day.

38. By replacing the remaining 1,400 feet of asbestos cement section in the existing main with cast iron pipe, this higher pumping rate can be achieved.

39. It is now proposed to defer augmentation of the 8-inch main until after the completion of the Rapid Creek subdivision.

40. The Committee agree that reticulation, augmentation of storage and replacement of part of the existing main should be undertaken as proposed. The provision of an additional main should be delayed and the need for it should be determined in relation to development beyond that envisaged in the Rapid Creek subdivision.

41. Sewerage.- The close proximity of the low water line at Nightcliff has provided a convenient place for the discharge of macerated sewage direct to the sea. This has eliminated high capital expenditure and annual costs associated with the provision of an orthodox sewage works.

42. A pumping station is situated close to the shore and discharges through a 12-inch cast iron outfall to the low water mark.

43. Another pumping station is under construction to serve all but Stage 4 of the Rapid Creek subdivision. Stage 4 will be served by the existing pumping station.

44. Sewerage reticulation will be connected to the pumping station and a third pump will be needed for Stage 2B(b) and Stage 3.

45. We were told that macerated sewage is heavily diluted with the 20 foot tides at Darwin and because dilution is so great were assured that no health risk is created and no nuisance results.

46. Electricity supply.- Work in progress will provide sufficient feeder capacity to carry development to Stage 4 of the Rapid Creek subdivision.

47. Local transformers and distribution mains will be constructed as required to meet the subdivisional development proposed.

48. Roads.- Roads, including kerbs and channels, vehicle crossings and footpath pavements, will be constructed to normal suburban standards.

49. All road pavements will be sealed from kerb to kerb. Depending on intended use, width of the pavements will vary from the standard of 24 feet between kerbs to 34 feet and 38 feet for major roads.

50. The Committee recommend that the engineering services proposed be provided as planned.

Construction time.

51. It is understood that little time will be required to advance documentation to a stage where tenders can be called. Construction time is estimated to be approximately twelve months. Stages 3 and 4 are planned for completion by June 1964.

Estimates of cost.

52. The estimated cost of the engineering services recommended by the Committee is £361,800, made up as follows:-

Rapid Creek subdivision Stage 2B(a)		
	£	£
Roads and drainage	90,000	
Water reticulation	11,500	
Sewerage reticulation	18,000	
Electricity reticulation	<u>12,000</u>	131,500
Rapid Creek subdivision Stage 2B(b)		
Roads and drainage	72,000	
Water reticulation	9,000	
Sewerage reticulation	16,500	
Electricity reticulation	<u>12,000</u>	109,500
Two elevated water storage tanks each of 300,000 gallon capacity		110,000
Replacement of asbestos cement section of water main with cast iron pipes		2,800
Booster pump for water main		5,000
Additional sewage pump		<u>3,000</u>
		<u><u>361,800</u></u>