1975

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

Parliamentary Standing Committee on Public Works

REPORT

relating to the proposed construction of

MALAK PRIMARY AND PRE-SCHOOL

at

Darwin
Northern Territory

(THIRD REPORT OF 1975)

CONTENTS

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

MALAK PRIMARY AND PRE-SCHOOL
DARWIN, NORTHERN TERRITORY

REPORT

By resolution on 13 November 1974, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for investigation and report to the Parliament, the proposal to construct the Malak Primary and Pre-School, Darwin, Northern Territory.

The Committee have the honour to report as follows:

THE REFERENCE

1. The proposal referred to the Committee is for the construction of a single storey integrated complex, centrally located in the sub-division of Malak, providing facilities for a primary school to accommodate up to 800 pupils with an associated double unit pre-school for 100 pupils. The pre-school will be linked to the primary school by a covered way.

2. The estimated cost of the work when referred to the Committee was $2.8 million.

THE COMMITTEE'S INVESTIGATION

3. The Committee received written submissions and drawings from the Departments of Education and Housing and Construction and took evidence from representatives of these departments at a public hearing in Melbourne on 9 December, 1974. We inspected the proposed site when in Darwin earlier last year.

4. Endorsement and Reservation Following the disaster at Darwin caused by Cyclone Tracy on 25 December 1974, the Committee reconsidered the basis on which this report was prepared. It is most likely that the expected block turn-off in the neighbourhood of Malak, as outlined in paragraph 12 of this report, could no longer be expected to apply and the need for the school could, therefore, be in doubt.

5. On 20 February 1975, the Committee sought clarification of the present position in Darwin from a representative of the Department of Education. He explained to the Committee that the school may still be required should the need be proved in terms of land development and planned population in the area. He also advised that the design of the proposed Malak school would be modified to conform to a new building code to withstand stronger winds. With the reservation that the proposal meets the above mentioned criteria, the Committee endorse the recommendations made in paragraph 49 of this report. The paragraphs that follow are based on the submissions made to the Committee at the hearing on 9 December 1974.

6. The Committee's proceedings will be printed as Minutes of Evidence.

EDUCATION IN THE NORTHERN TERRITORY

7. The administrative arrangements for education in the Northern Territory have been changed by two recent decisions. In 1970, the South Australian Government decided to withdraw from its responsibilities

for education in the Northern Territory over a period of five years. In February 1973 the Australian Government decided that all education in the Territory, including education in Aboriginal communities, should become the responsibility of the Department of Education. Malak Primary School will thus be part of a school system controlled by the Northern Territory Division of the Department of Education.

8. Teaching staff at Northern Territory schools are members of the Commonwealth Teaching Service and all officers of the Northern Territory are officers of the Public Service or the Commonwealth Teaching Service.

THE NEED

9. Development of the District of Sanderson The District of Sanderson, located 10 kms to the north-east of Darwin comprises the neighbourhoods of Anula, Wulagi, Malak and Karama. The first two neighbourhoods to be developed were Anula and Wulagi, the engineering services for which are described in the Committee's Second Report of 1972. The primary schools in those neighbourhoods are now under construction and are scheduled to open at the commencement of the 1976 school year. The preliminary estimates for the primary schools of Anula and Wulagi were under the mandatory limit of $2 million for reference to the Committee. However, when tenders were received, they exceeded the $2 million limit. In order to avoid delay in the construction of the schools they were subsequently exempted by the Parliament from reference to the Committee.

10. Malak will be the third neighbourhood developed and the proposed school is expected to be required for the 1977 school year. The school for the neighbourhood of Karama will not be required until 1978. The engineering services for Malak and Karama neighbourhoods are described in the Committee's Sixth Report of 1973.

11. Expected Enrolments The number of school age children in an area is estimated on the basis of the number of occupied dwellings. As a useful planning guide it has been estimated that an average of o.8 pupils per family or dwelling unit attend government primary schools in the Darwin area. It should be recognised, however, that this is a broad indication only and that the actual enrolments may exceed that figure during peak periods.

12. The land development schedule as prepared by the Department of the Northern Territory indicates the following block turn-off.

Stage 1	Blocks Available	Stage 2	Blocks Available
June 1975	104	-	-
September 1975	80	-	-
December 1975	159	December 1975	100
March 1976	84	March 1976	100
		June 1976	131
		September 1976	81
	427		412

TOTAL 839, including approximately 30 residential blocks for flats and other special purposes which do not produce significant numbers of enrolments.

13. The table below sets out the estimates of government school enrolments in the Malak area for the years 1976 to 1980 based on the above development programme.

	Progressive Number of Children		Progressive Number of Children
June 1976	40	December 1978	570
December 1976	190	June 1979	615
June 1977	360	December 1979	640
December 1977	455	June 1980	680
June 1978	520	December 1980	695

14. During 1976, the children living in Malak are expected to attend the Wulagi school. Transport will be provided for those children during that period. The build up in enrolments for the Malak school at the beginning of 1977 is expected to be about 300 children. This will increase to about 455 children by the end of that year and within a further three years should be approaching its planned capacity when it is expected that the construction of most of the houses in the sub-division of Malak will be completed.

15. Committee's Conclusion There is a need for a primary and pre-school by 1977 in the new sub-division of Malak, Northern Territory subject to the reservation expressed in paragraph 5.

THE PROPOSAL

16. Outline The proposed school consists of an air conditioned single storey structure providing facilities for a primary school together with a naturally ventilated adjoining building with facilities for a pre-school. Although the planned facilities are similar to those provided in recent Northern Territory schools, there are some differences in the design of this school. Information coming to hand from overseas suggests

that there is a need for a reduction in the scale of open learning areas in order to give children a better sense of identification. Experience has also shown that there is a need for additional withdrawal areas for study and discussion purposes. The Malak design reflects this development.

17. Closer Integration between Primary and Pre-School As a result of developments in the administrative structure of the education system in the Northern Territory, there is no longer a separate infants section and no teacher will be designated as Infants Mistress. There will be two Assistant Principals, one of whom has the responsibility for early childhood education. The building proposal reflects these changes and will lead towards closer integration of all sections of the school.

18. Design Concept The major elements of the primary school accommodation comprise Administration, Learning Areas, Library/Resource Centre and a Multi-purpose and Luncheon area, and have been planned to function efficiently around a central courtyard.

19. The planning layout permits internal circulation and provides a link to all areas of the school, thus permitting freedom of student movement particularly to the Library/Resource Centre which is the focal point.

20. There are eight learning areas, each one made up of a central activities area and further divided into a series of interconnected spaces which comprise a gathering area or "home base" for the children, classrooms, practical work and special activities areas. Those small bays can be separated by furniture or curtains or used in association with adjacent areas to form a large open space. Ancillary facilities such as teachers' studies, withdrawal rooms, stores and toilets are provided at convenient points and appropriate requirements for handicapped staff and children are also incorporated in the design.

21. In addition to the general learning areas, there are a number of common facilities which all students will use. These comprise a craft room, a general purpose room, covered assembly areas and canteen. These facilities will also be suitable for use by the community when not required by the school.

22. The proposed design, with its utilisation of different sized areas and use of mobile screens, should allow sufficient flexibility to reduce to a minimum any need for future modification.

23. Additional Facilities Two additional facilities not previously provided in recent schools are change rooms and showers and covered bicycle storage units instead of the usual open storage racks. A need for the change room facilities in primary schools has become necessary because students are required to play sports during the school day and should be able to shower and change before returning to class. Covered storage for bicycles has been accepted by the Department of Education because bicycles are increasingly expensive and less able to withstand exposure to the weather.

24. Modern Primary Education Aims The Committee were told that one of the aspects of modern primary education is its emphasis on the development of attitudes and values, including both individual and social qualities. The atmosphere and method of operation of an open plan school are intended to encourage both self-reliance and co-operation with other children and the adult members of the group. The domestic atmosphere of the school and the example of the co-operation of the teachers are expected to facilitate this concept.

25. The open plan school aims to provide good opportunities for teachers to co-operate in planning and teaching, thereby allowing them to make better use of their own special talents. In such a school, children can move

easily from large groups to small groups or to individual study, with an emphasis on pupil motivation and initiative in learning, on pupil activity and on the development of personal and social qualities.

THE BUILDING PROPOSAL

26. Site The school site, comprising Lot 2283 of the Malak sub-division, is centrally located in the neighbourhood. It has an area of 3.96 hectares with a frontage of 238 metres. It is bounded by parkland on the west and by residential area to the north and east. To the south is a proposed recreation oval which will be available to the school as well as the community. Site planning provides for access roads, parking areas, a bus bay, footpaths, bicycle park, two sealed play areas and two basketball courts. It is expected that the site will be available for construction purposes by mid-1975.

27. The Committee agree that the site selected is suitable.

28. Design The planning layout conforms to the Department of Education's requirements and allows for a generally circular pattern of internal movement linking all areas of the school.

29. The accommodation requirements of the school have been planned to function efficiently together around a central courtyard and fall into clearly defined elements of administration, learning areas, library/resource centre and multi-purpose luncheon area. The pre-school is of standard Northern Territory design and forms a separate linked building.

30. Flexibility In order that the school may be adapted to suit changing educational needs, all internal walls, with the exception of plant room walls, will be of non-structural, framed and sheeted construction. This means that individual internal spaces may be increased and decreased in size as circumstances dictate. Visual screening will be provided by curtains or mobile partitions as required.

31. Acoustics Acoustic treatment will be provided to reduce the general noise level. Floors will be carpeted and ceilings treated acoustically as necessary. The special activities rooms will be acoustically separated from the rest of the building.

32. Sun Control In order to reduce the load on the air treatment plant and to reduce the glare, the majority of windows will face onto verandah areas, with wide roof overhangs. This will reduce the need for sun-screening. Anti-glare glass will be used in all windows and glazed external doors.

33. Structural Design The structure of the building will consist of exposed steel columns supporting steel rafters, with non-loadbearing external concrete block walls and lightweight internal partitions. Roofs will be of coloured steel decking. Structural stability will be provided by the frame action of the rafters and columns, and by bracing within selected wall panels.

34. Preliminary foundation investigations have been undertaken and it is expected that normal concrete footings will be suitable throughout.

35. Mechanical Services Air conditioning will be provided to all occupied areas of the school, except the open assembly area and the pre-school. The system will be arranged so that part of the facility can be operated to serve areas, such as the library/resource centre, outside normal school hours.

36. Chilled water, from a plant room at the south-west corner of the school, will be piped to air handling plant rooms in the school building. Conditioned air will be distributed through insulated metal ducting in the roof space of the building.

37. Other mechanical services including the mechanical ventilation of the pre-school, toilets, stores and kitchen block, and the supply of chilled water to the drinking units.

38. Hydraulic Services Water will be obtained from the town supply for plumbing purposes and the automatic ground watering installations. Sewerage will be connected to the town sewer system. All stormwater drainage will be collected in an underground drainage system and discharged into the main stormwater drain.

39. Electrical Services Power supply to the school will be from the town mains by an underground cable to a substation within the building. Light and power services as necessary will be installed in conformity with the Australian Standard Codes of Practice. External illumination will be provided to access roads, car parks and footpaths. Security lighting will be provided to the building.

40. Fire Protection A thermal fire detection and alarm system will be installed. Hose reels and portable fire extinguishers will be provided inside the building and fire hydrants and hoses outside. The layout of the school provides easily accessible exits from all areas.

41. Furniture and Fittings All movable fittings, furniture and school equipment will be supplied by the Department of Education. Built-in fitments such as shelving, benches, cupboards etc. are included in the estimate for this project.

42. Landscaping Suitable indigenous vegetation will be retained wherever possible and additional trees and shrubs will be planted in selected areas around the building and main approaches. The central courtyard and areas in front of the school will be grassed. Parking areas will be screened by trees and shrubs.

43. Car Parking Parking will be provided for 36 cars and 100 bicycles. The car park will be integrated with a parking area proposed for the adjacent community recreation area which will provide for parking of a further 30 cars. Access to the building will be through the car park to minimise vehicular traffic on the site for reasons of safety and economy.

44. Liaison with Local Authorities and Environmental Impact The proposed building complies with all relevant codes and building regulations.

45. An environmental impact statement was prepared for this proposal to provide an assessment of the effects on the present environment. The study shows that there will be no detrimental effects.

46. Committee's Recommendation The Committee recommend the construction of the work in this reference.

ESTIMATE OF COST

47. The estimated cost of the work when referred to the Committee was $2.8 million made up as follows:

	$
Building works	1,870,000
Electrical services	180,000
Mechanical services	470,000
Other Engineering and specialist services	30,000
Site works and landscaping	250,000
	2,800,000

The revised estimate when presented to the Committee at the public hearing was $3.10 million.

PROGRAMME

48. The preparation of contract documents and the invitation and consideration of tenders will take until July 1975. It is planned that the school will be ready for occupancy by the beginning of 1977.

RECOMMENDATIONS AND CONCLUSIONS

49. The summary of recommendations and conclusions of the Committee is set out below. Alongside each is shown the paragraph in the report to which it refers.

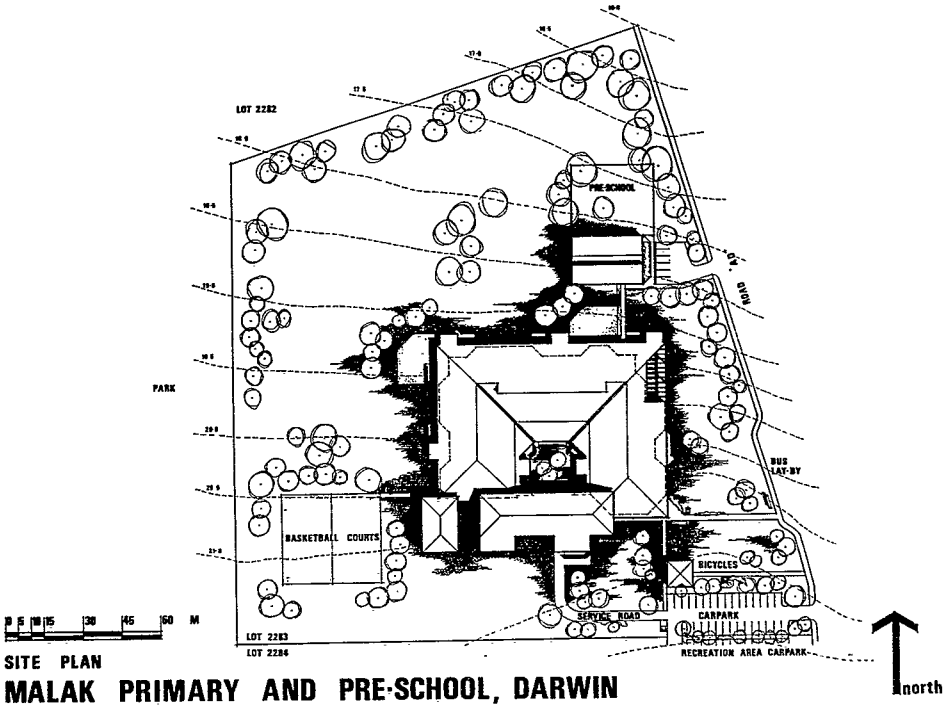
		Paragraph
1.	THERE IS A NEED FOR A PRIMARY AND PRE-SCHOOL BY 1977 IN THE NEW SUB-DIVISION OF MALAK, NORTHERN TERRITORY SUBJECT TO THE RESERVATION EXPRESSED IN PARAGRAPH 5.	15
2.	THE SITE SELECTED IS SUITABLE.	27
3.	THE COMMITTEE RECOMMEND THE CONSTRUCTION OF THE WORK IN THIS REFERENCE.	46
4.	THE ESTIMATED COST OF THE WORK WHEN REFERRED TO THE COMMITTEE WAS $2.8 MILLION.	47

L.K. Johnson.

(L.K. JOHNSON)
Chairman

Parliamentary Standing Committee on Public Works,
Parliament House,
CANBERRA, A.C.T.

27 February 1975.



SITE PLAN

MALAK PRIMARY AND PRE-SCHOOL, DARWIN