THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

R E P O R T

relating to the

proposed erection of a

P R I M A R Y S C H O O L

at

D A R W I N, N.T.

C O N T E N T S.

THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

PRIMARY SCHOOL, DARWIN.

REPORT.

The Parliamentary Standing Committee on Public Works, to which the House of Representatives referred for investigation and report the question of the erection of a Primary School at Darwin, Northern Territory, has the honour to report as follows :-

SECTION I.

INTRODUCTION.

EXISTING SCHOOL ARRANGEMENTS.

1. The population of Darwin has grown to something over 6,000 and the educational facilities are quite inadequate. The old school catered for a population of 3,500 and an attempt has been made to cope with the growing demands by providing Sidney Williams huts as a temporary expedient, and by crowding classes together both inside the school and underneath it amongst the supporting piers. There are over 500 children attending the Darwin Public School as well as those provided for at the Convent School.

2. The Darwin School is a primary school, in which arrangements are available also for secondary school children to have special instruction for the intermediate course, but, eventually a secondary school will have to be provided in the town.

DARWIN DEVELOPMENT.

3. During the war the town of Darwin was systematically bombed by the Japanese, and great havoc was caused in the residential sections of the town, a great many houses being completely destroyed. A new plan has been drawn up and accepted for reconstructing the town, and the proposed new Primary School is planned to fit into the scheme adopted.

4. There are five main residential areas provided, in addition to the public building zone, main shopping centre, light and heavy industry zones, and sections are set aside for naval and military purposes and various other town activities. Of the residential areas R1 contains flats, hostels and hotels;

R2 and R3 are general residential areas situated on either side of the main shopping centre; R4 is a residential area placed beyond the light industry zone and on the shores of Frances Bay; and the remaining residential area is in the Parap neighbourhood, adjacent to the heavy industry zone.

SCHOOL PLANNING.

5. The proposed new Primary School is to be situated in residential area R2, and is to be part of the overall scheme of education planned for the completed town. By retaining the old school and building the primary school it is proposed to cater for the development of R2 and R3 until the time when a High School can be built in R3 and relieve the pressure on accommodation in the Primary School. Later on, when circumstances demand it, another primary school is to be built in R4.

S E C T I O N II.

THE PRESENT PROPOSAL.

THE BUILDING.

6. The plans propose a building consisting of two main class room blocks connected by a two storey administrative and library block. Advantage is to be taken of the contour of the ground to place one of the class room blocks, which will accommodate the younger children and the infants, on a lower level than the other, and it will contain its own separate playing area.

7. Construction will be of concrete bricks and concrete floors, the walls being 11" cavity walls painted externally. A continuous ventilating ridge over all class rooms and louvres fitted to the walls will assist in providing a free flow of air to reduce the discomfort of excessively humid weather. Outdoor teaching areas are also a feature which will be of particular benefit in the Darwin climate after the close of the wet season of the year.

SITE.

8. The site occupies an area of 8.8 acres, situated midway between the north-west and south-west boundaries of the R2 area, with road access from McMinn Street and pedestrian access from park strips. The site has a general slope, and the school is to be

placed on the higher ground, with the two storey administrative wing taking advantage of the fall in the ground to form a connecting link between the two class room blocks.

9. Like most sites in Darwin there is a shallow layer of top soil over rock formation, but trees and shrubs indigenous to the area grew without much trouble.

ACCOMMODATION.

10. The upper class room block is to accommodate 130 pupils in an overall area of 5,231 square feet, and the lower class room block 150 pupils (including 30 infants) in an area of 6,483 square feet, while the two storey administrative wing, joining the two class room blocks, will provide an overall area of 8,796 square feet - giving a total area for the building of 20,510 square feet. The total number of pupils, shown as 280, is a minimum, as it is estimated that an additional 50 pupils could be accommodated temporarily until such time as subsequent schools are erected in the adjacent residential areas.

ESTIMATED COST.

11. The estimated cost of the building was calculated in October, 1948, to be £91,000, apportioned as follows :-

Building	...	£73,500
Engineering Services -		
(a) Site preparation		
(b) Access roadway		
(c) Water supply		
(d) Sewerage		
(e) Stormwater drainage		
(f) Electrical installation		9,300
Contingencies	...	8,200
Total estimated cost	...	£91,000

SECTION III.

THE COMMITTEE'S INVESTIGATIONS.

GENERAL.

12. The Committee studied the plans, took evidence from officials of the Department of Works and Housing in Melbourne, and made itself familiar with the details of the project and the reasons for the establishment of the proposed Primary School.

The project was then included with other works referred to the Committee and for which a visit to Alice Springs and Darwin was planned. While in the Northern Territory the Committee was able to inspect the site of the proposed school, and much of the information required in connection with the project was included in the evidence of a general character obtained in the other inquiries.

13. Evidence was also taken from the Administrator and from officials of the Departments of Works and Housing and the Interior, as well as from representatives from the School and local residents.

NECESSITY FOR THE SCHOOL.

14. The reasons advanced for the necessity of providing a new Primary School included the grossly overcrowded conditions being endured at the existing school, the rapid growth of the Darwin population resulting in greater demands for accommodation and school facilities in the years to come, and the desire for education suitable to encourage families to remain in Darwin instead of going South, leaving vacant positions for which it is most difficult to obtain trained staff.

The Present Position.

15. Whereas the school in Darwin was re-opened in 1946 with 69 pupils, there are now 501 children in the Darwin public school, of whom 48 are in the secondary division, and a study of the numbers in the various grades reveals that the pupils in the lower grades are relatively high, and recent increases have been very noticeable. As a consequence there is ample justification for the fears of those in charge that the present overcrowded conditions will become greatly aggravated in the near future, as the large numbers of younger children pass on to the higher grades.

16. There are approximately 100 children in two classes who, through lack of space are compelled to take their lessons beneath the Infants' Block, amongst the piers supporting the building. Although such a position is comfortable enough under some weather conditions there is little protection from wind and driving rain. Teaching of the 48 secondary pupils is seriously hampered, owing to the fact that, although they comprise first, second and third year students, they have to be accommodated in one room.

17. The generally crowded condition of the school, where the children have to sit close together in every spot where a little space can be found, is not only difficult from a teaching point of view, but is a source of the greatest discomfort in the humid summer weather, as well as a menace to the health of all those concerned.

The Growth of Population.

18. It was stated that the increase of the population in Darwin is the highest in Australia, and figures quoted to the Committee indicate that school attendances in the near future must increase rapidly, making the demands for the new school more urgent than ever. The number of births in Darwin for the year ended June 1946, was given as 27; year 1947, as 144; year 1948, as 216; and 1949 is estimated to exceed 300. These figures include half-castes, but not full bloods, and the effect of the increases will be felt in the schools in successive years.

Estimated Enrolments.

19. The Assistant Supervisor of Education for the Northern Territory has made the following estimates as an indication of the number of pupils who will need school facilities in the next few years :-

Primary School, Darwin, Grades I to VII, with ages 5 to 13 plus - enrolment for 1950 estimated at 500; 1951, 550; and increases up to 800 in 1955, when it should remain steady.

20. Post-Primary School - enrolment for 1950, 75; 1951, 80; and increases to 160 in 1955, with enrolments from 1956 onwards remaining static at about 150 to 175.

21. It was therefore shown that, if these estimates are proved to be substantially accurate, the need for the new primary school at once is particularly urgent, and the provision of a High School will have to be planned with little delay.

Movement of the Population.

22. Evidence showed that there is a considerable movement of the Darwin population, both on account of the conditions under which people are accommodated and because of the extreme scarcity of residences in the locality. A further factor contributing to

the tendency for parents to leave employment in Darwin and seek other work in the South is the necessity to seek better educational facilities for their children. With the establishment of new schools and the extension of the curriculum this factor will diminish, and there is a great weight of evidence to support the movement to urge the immediate implementation of the full educational scheme planned for the town.

23. In consideration of these factors the Committee is convinced that there is an urgent need for the proposed new Primary School in Darwin.

THE SITE.

24. The site is a good one, occupying 8.8 acres in a central position of the R2 area, and its contours have been studied and used effectively to provide a school with all the facilities desirable for use by pupils of ages ranging from Infants to Post-Primary students. The site also allows for the provision of playing fields of reasonable dimensions, but, on the south-east portion of the area there are some houses which will have to be moved to adjoining allotments.

25. Some evidence expressed the view that a site offering space for a larger playing field should be selected, but it was pointed out that six or seven public playing areas have been planned not far from the town for cricket and other games needing extensive areas. The site for the school will allow room for other sports where large level areas are not necessary, and sites are in mind for tennis courts, basket ball and hockey grounds.

26. The Committee is therefore satisfied that the site is in a suitable position and is generally satisfactory for the school purposes.

THE BUILDING.

27. The building consists of two main class room blocks connected by a two storey administrative block, and it is specially designed to give the maximum of comfort in the tropical climate of Darwin. A good deal of thought and experience has been concentrated on the planning, and the Department of Works and Housing has applied the ideals gained by its officers from travels abroad on the Continent, Brazil, and other South American countries.

The Lower Class Room Block.

28. The Lower Class Room Block will accommodate the infant and junior age children, and it will have its own cloak room and wash facilities for both sexes. An infants' room with separate lavatory and cloak room accommodation has been planned as a separate entity so that children of tender age, on being introduced to school life, will be under control of their teacher during the whole of their time at school. This also applies to their play area which is planned in the immediate vicinity and under full observation from their class room. On the opposite end of this block to the infants' play area a large covered play area has been incorporated, conveniently situated to serve also as an assembly area for the school during inclement weather. Covered access from this area to each class room block, by means of a ramp to the upper block and by corridor to the lower block, is included in the plan. Integral with this covered play area and assembly area is a tuck shop at which cool drinks, ice cream or school lunches can be made available to the children as occasion demands. Outside lavatory accommodation for pupils has been provided with access from the covered play area.

29. The Lower Class Room Block will contain 5 class rooms with accommodation for 150 pupils, together with store room to each; as well as the students' cloak and wash rooms and the lavatories. Each class room opens on to an outdoor teaching area.

The Upper Class Room Block.

30. The Upper Class Room Block, which is intended for the elder age-group children, will contain 4 class rooms with accommodation for 130 pupils, together with store room to each, general purposes room, and students' cloak and wash room facilities.

31. The general purposes room is situated adjacent to the main entrance lobby of the upper class room block, and it is planned in such a way that it can be used for various purposes, such as school council meetings, etc., and, when thrown open into the adjoining class room, as a small assembly room for visual instruction, film projection, and illustrated lectures.

32. One side wall of each class room opens out on to the outdoor teaching area, and the opposite wall gives access to the corridor running the whole length of the wing.

The Administrative Block.

33. The connecting link between the two class room blocks is the two storey Administrative wing, and it contains, on the upper floor, Principal's room, Teachers' common room, staff lavatories, medical inspection room, and a large library with ancillary office and store room. Below this administrative floor the contour of the ground allows space for some rooms which will provide for storage of sports equipment and school furniture on the same level as the covered play area.

Construction.

34. Generally the building will be constructed of cement bricks and will have concrete floors. Covered play and assembly area will have reinforced concrete flat roof and there will be a similar concrete roof stepped up over the ramp.

35. External walls will be 11" cavity walls painted externally, and internal partition walls will be 9" and 4½" thick cement bricks. Roofs will be framed up with timber trusses and covered with corrugated asbestos cement sheets. All floors, except those to open corridors, ramp, outside lavatory blocks and covered play areas, will be finished with coloured bitumastic felt, to provide resilient, comfortable wearing surfaces, while other floor finishes will be granolithic.

36. The ceilings to class rooms and library will be covered with perforated acoustic tile, while ceilings elsewhere will be plaster sheet on wood frame. On top of all ceilings a layer of 2" insulating wool will be laid as heat insulating material, while the ceilings to open corridors will be constructed of wood battens spaced 1½" apart to afford air movement through the roof. Soffits of wide overhanging eaves in front of class rooms are similarly constructed.

Design.

37. The building has been planned with the special intention of obviating as much of the discomfort of tropical conditions as is possible in modern architecture, and the perspective submitted to the Committee indicates a structure of pleasing appearance and aesthetic proportions. Careful consideration has been given to the aspect of the class room blocks to ensure that every advantage will be taken of the prevailing winds, to ensure free and uninterrupted cross ventilation in individual class rooms, as it is recognised that, in tropical climates, the slightest movement of air within the room has an immediate effect of decreasing the feeling of discomfort attendant on high humidity ratios.

38. By keeping the floor levels of class room blocks down at ground level and providing a complete wall of door-openings to the southern exposure, outdoor teaching areas in front of each class room become practicable. The outdoor teaching areas will be grassed to prevent ground radiation of heat, which would be the case if the areas were paved with impervious materials. Flower boxes in which shrubs can be cultivated will separate each outdoor teaching area, thus affording control of each class room group and providing a counter to visible interruption and the transmission of air-borne sounds to the maximum extent possible. Access to class rooms is by an open corridor with wide overhanging roof to afford weather protection to class room wall; outside windows are louvred; and every provision has been made to ensure the free circulation of air.

39. Some expression of opinion indicated the view that the plan was too grandiose, and temporary accommodation would be better for the present until adequate housing is built. The Committee considered this view but is of opinion that the plan is in accord with modern trends elsewhere. It also recognises that it is essential to erect a building of permanent character, and of modern and attractive design, in order to provide for the future such facilities as will encourage the trained staff to remain in

Darwin, to ensure the highest standard of education possible. It recommends, therefore, that the school should be constructed as planned.

LABOUR AND MATERIALS.

40. In order to determine the degree of urgency of the proposed school building the Committee considered the question of supplies of labour and materials, and the effect that the erection of the proposed school would be likely to have on home building. The evidence showed that there is still a great shortage in Australia of many items of materials necessary for buildings of all kinds, and it is difficult to get skilled labour when required. In Darwin, the position is considerably aggravated by the distance from the other capital cities, by the infrequent transport services, and by the conditions of accommodation in the Northern Territory. It is not likely, therefore, that extensive building operations of any description will be possible without special arrangements being made to take materials and skilled labour from the southern States. This is stated to be possible by arrangement with a contractor who is willing to secure transport for the necessary items in his own ship if sufficient work is available to make the establishment of a complete organisation worthwhile.

41. It is therefore proposed to view the work on this school building as part of a plan of major building projects designed to provide adequate scope to encourage a contractor to arrange regular transport and smooth working schedules.

42. The Committee also realises that school buildings are essential and must be erected simultaneously with housing accommodation, and it recommends that the required labour and materials should be made available for this project as planned.

TECHNICAL AND COMMERCIAL EDUCATION.

43. One of the urgent needs in Darwin, and in the Northern Territory generally, is the provision of technical education to encourage the children in the Territory to train in pursuits which will make them particularly valuable in the localities where skilled labour of almost all kinds is extremely hard to secure. Technical education would be of particular benefit to many children who are not able to achieve success as a result of the higher forms of education.

As a Primary School only, the new building would not be expected to provide comprehensive technical education, but, until a secondary school is available, the whole of the educational facilities are necessarily concentrated in the one school. In this case arrangements should be made to intensify the technical training in Darwin, and to ensure that those students who are suitable for technical work may have the facilities for complete training as soon as possible. The recently established commercial classes will also help materially to alleviate the desperate shortage of staff trained in commercial work and this section of school life should be widely developed.

SECTION IV.

THE COMMITTEE'S CONCLUSIONS.

SUMMARY OF DECISIONS.

44. The following is a summary of the decisions made by the Committee after consideration of all the factors involved :-

		Paragraph in Report.
(1)	There is an urgent need for a new Primary School in Darwin.	23
(2)	The site is generally satisfactory for the purpose.	26
(3)	The design is modern and attractive and the school should be constructed as planned.	39
(4)	The work should be carried out in conjunction with other major works to enable regular transport and smooth working schedules to be arranged.	41
(5)	Materials and labour should be made available for the construction of the building simultaneously with accommodation projects.	42
(6)	Technical and commercial courses should be widely developed in the Northern Territory.	43.

CHARLES A. LAMP
CHAIRMAN.

The Office of the
Parliamentary Standing Committee
on Public Works,
Parliament House,
CANBERRA, A.C.T.

22 SEP 1949