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THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

REPORT

relating to the proposed construction of a

HIGHER PRIMARY SCHOOL

Gove, Northern Territory

BY AUTHORITY

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

HIGHER PRIMARY SCHOOL, GOVE,
NORTHERN TERRITORY

R E P O R T

By resolution on 14 August 1966, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for investigation and report a proposal for the construction of higher primary school buildings at Gove, Northern Territory.

The Committee have the honour to report as follows:

THE COMMITTEE'S INVESTIGATION

1. The Committee received written submissions and drawings from the Departments of Education and Science, and Works. Evidence was taken at a public hearing in Canberra from representatives of these departments and from a representative of Nabalco Pty Ltd. The site for the proposed work was inspected by a Sectional Committee in March 1968.

THE REFERENCE

2. The proposal referred to the Committee is for the erection of higher primary school buildings in the new township of Gove, Northern Territory.
3. In the primary section, the school is planned to ultimately cater for some 600 children between the ages of five and eleven whilst the secondary section will provide a three-year course to intermediate or junior level for about 145 children.

4. The construction of the buildings is to be staged in step with the growth of the area. The overall plan provides for classrooms, special purpose rooms, administration offices, a craft block and sporting and playing facilities.

5. The cost of the work is estimated at \$1,285,000.

THE REASON FOR THE PROPOSAL

6. The peninsula of Gove lies at the north-eastern corner of the Arnhem Land Aboriginal Reserve in the Northern Territory. In 1964, the Government invited proposals from interested parties to mine and treat the extensive bauxite deposits which occur on the peninsula. A proposal put forward by Nabalco Pty Ltd was accepted and in February 1968 a formal agreement was signed with the company requiring the detailed design of an alumina plant to be completed by December 1969. The plant is to have an annual production capacity of at least 500,000 tons of alumina by December 1971. The expected life of the project on the basis of known ore resources and likely production rates is at least 50 years.

7. Under the agreement the company is also responsible for the establishment of a township and the provision of essential town services and facilities. Based on Nabalco's estimates of labour and population growth, a population of 3,000 by 1973 is expected. This figure will include 1,200 men of whom some 710 will be married. Construction of accommodation in the form of houses, flats and maisonettes will commence with the erection of 25 prototype houses followed by further units to meet Nabalco's requirements. Housing will be provided simultaneously for Government staff of whom there are expected to be about 120. About half will be married.

8. To meet the needs of the community at Gove, the Government has agreed to finance, staff and equip the educational facilities. Under the agreement Nabalco is responsible for the erection of the school buildings under the supervision of the Department of Works. Pending the construction of the school, arrangements will be made for school children to receive correspondence lessons.

9. The Committee agree that educational facilities should be provided for students in the Gove township and that there is a need for the work in this reference.

THE TOWNSHIP OF GOVE

10. The area proposed for the township is Mt. Saunders, which lies between Gove Harbour on the north-west of the peninsula and the mining leases to the south-east. Mt. Saunders has been selected because it will provide an attractive setting for housing, commercial and recreation facilities for the expected population and will meet the requirement for a compact settlement insulated from the mining, processing and shipping activities of the area. The standard of the town and its location are expected to help in reducing labour turnover and establishing a comparatively permanent population. It is predicted that the population of the town will increase from 800 at the end of 1968 to 3,000 persons by 1973 and 3,800 by 1975.

11. A town plan prepared by Nabalco has been approved by the Town Planning Board of the Northern Territory Administration.

12. Generally, the town will be positioned on the eastern slopes of Mt. Saunders overlooking the coastal waters of the Gulf of Carpentaria. The family housing areas are immediately adjacent to, and will overlook the proposed school which will be situated slightly above the town centre.

13. The hospital and other miscellaneous activities will be situated on the southern slopes adjacent to the housing areas,

THE PROPOSED SCHOOL

14. Administration By arrangement with the Commonwealth, the South Australian Government is responsible for providing education services in the Northern Territory. The staff and curriculum of the proposed school at Gove will thus be under the control of the Director of Northern Territory Schools who in turn is responsible to the Director-General of Education in South Australia. Teaching staff will be members of the South Australian Education Department.

15. Type A proposal has been evolved which envisages a school catering for both primary and secondary pupils in the one building complex under the control of the one headmaster. It is similar to schools which have proved successful in communities of similar size where numbers do not warrant separate primary and secondary schools initially. However, when the number of secondary students approaches 200 it is usual to consider separation of the two sections each with its own buildings and administration.

16. Size Based on the methods used in Darwin to estimate school enrolments, estimates suggest that there will be approximately 100 primary and 25 secondary students by September 1969. These figures are expected to grow to 290 and 70 respectively by March 1970 and to 610 and 145 respectively at the time the township population reaches 3,000.

17. It is proposed then to design a school ultimately to accommodate 600 primary and 150 secondary children. This enrolment will necessitate 21 standard classrooms, four special purpose rooms, a craft block, administrative offices and general sporting and playing facilities.

18. Church School The Roman Catholic Church has asked that land be reserved at Gove for the construction of a church school, at some future period. As such a school is not expected to eventuate for some time, the present proposal is being planned on the basis that it will serve all children at Gove.

19. Should, however, the church school be built earlier than expected an adjustment would be made in the construction of the later stages of the Government school.

SCOPE OF EDUCATIONAL FACILITIES

20. The Committee were told that due recognition will be given to the particular problems likely to be encountered at Gove and both staffing and curricula will be flexible enough to provide for special needs.

21. Primary The primary section of the school will cater for children aged between five and eleven years, that is, from Grade I to Grade VII. At the conclusion of the primary grades pupils would normally be able to enter upon a course of secondary education in any State.

22. Secondary The secondary section of the school will provide initially a three year course to intermediate or junior level. The Committee were told that should there eventually be a demand for a leaving course, this could be made available.

23. Courses of study will permit pupils of the required academic ability to proceed to university matriculation. The "core" subjects of English, mathematics, general science and social studies will be given to all students, with streams catering for the interests, aptitudes, academic ability and future vocational requirements of all. It is thus envisaged that the academic

stream would include English, a foreign language, mathematics I and II, physics, chemistry, history or geography and, in the early stages, a craft subject. The more technically biased streams would include the "core" subjects, two crafts or one craft and art, and for those requiring them, commercial subjects. All would participate in music, physical education and religious instruction.

24. Adult Education There is expected to be a heavy demand for adult education classes, both cultural and vocational. The facilities to be provided have been designed specifically to serve the needs of those who wish to further academic studies, engage in manual crafts, or take part in various forms of cultural activities.

25. The specific facilities designed for dual purpose pupil and adult education include the home science block, needlework room, art and craft room, woodwork shop and metalwork shop. It is expected that the specialist craft teachers will be available for adult work.

26. Adult education will be under the control of the Darwin Adult Education Centre.

27. Apprentice Training The needs of Nabalco will probably call for indenturing and training of apprentices in trades appropriate to the skills required in the company's activities. Although the school's facilities are not designed to provide the ultimate in the training of apprentices in the engineering and allied trades, the earlier stages and theory can be provided.

28. Discussions are being held with the company with a view to it employing a number of apprentices to provide job opportunities for youths in the area.

It is expected that apprentices would spend the required time in intensive block release instruction at approved apprenticeship training schools.

29. Aboriginal Education The Administration conducts a school at the Yirrkala Mission some 12 miles from the town site. Enrolments at the school during 1967 were 190 primary and 10 post-primary children with 6 children receiving other technical education in the form of limited post-primary craft work.

30. It is thought that a number of families at present residing at the Mission will move into the mining township as the aboriginals find employment with the company. Their children will attend the proposed Gove School, but the numbers involved are unknown at this stage. Planning of the township has taken account of the fact that these people will live at Gove and that their children will be educated there.

31. Whilst some aboriginal families remain at Yirrkala the school there will be required, but probably on a smaller scale. Nevertheless, it will be possible for children from Yirrkala, especially those in the secondary grades, to make use of the facilities proposed at Gove.

32. Sporting Facilities Facilities planned include an Australian Rules size oval, two tennis courts and a basketball court. The headmaster will retain specific control of these facilities but they will be made available for use by the townspeople. For this reason, it is proposed to

- floodlight the basketball court and tennis courts; and
- erect separate toilet and change facilities adjacent to the sports ground.

Townpeople will then be able to use the facilities without entering the school proper. The school population can expect the town recreational facilities including the swimming pool and tennis courts to be available for school use. The school's facilities would be shared with any independent school.

THE SITE

33. The site for the school is on rising ground slightly above the proposed town centre and adjacent to the family housing area.
34. The school site covers 15½ acres including the adjoining sports field. It has a frontage of 1,100 ft to the main perimeter road which connects the town centre with the family housing area. The land is undulating with a fall of 18 ft from west to east. Although some earthworks will be required to provide sites for the buildings, these works will not be extensive.
35. The Committee agree that the site selected is suitable.

THE BUILDING PROPOSAL

36. Design and Construction Arrangements The Committee were told that owing to the remote situation of Gove, there are decided advantages in the Commonwealth buildings, including the school, being constructed as part of the arrangement for the remainder of the buildings in the town, and for them to be scheduled in the general construction programme. The Department of Works has therefore provided Nabaloo with preliminary designs, briefs and schedules of requirements to be developed into tender documents for the project.
37. Design Basically the proposed layout of the school resembles the Millner Primary School in Darwin, modified to suit the secondary component required at Gove.

38. To facilitate supervision and control of the children, it is planned to group the school buildings around a tree shaded courtyard. Because of the climate, the sides of the court must be well spaced to ensure adequate air movement. Undue noise transmission will also be avoided. Classrooms will be placed on the northern and southern sides with windows orientated for optimum sun control. Covered ways and roofed balconies will have wide overhangs which will serve to shade window walls of adjoining classrooms. The infants wing will be separated from the primary and secondary wing, which will be of two-storey construction. This produces a length of building appropriate to the courtyard concept and permits separation of the primary and secondary classes. All sections will have convenient access to the administration and covered assembly wings, lunch and play areas and the courtyard.

39. The design proposal, we believe, produces a balanced building complex with varying height levels and an attractive visual effect.

40. The Buildings The main elements of the building complex are as follows:

- single-storey infants wing on the northern side of the courtyard;
- single-storey administration wing to the east;
- two-storey primary and secondary wing on the southern side;
- home science block and covered assembly and play areas west of the courtyard;
- craft block which will be a separate building to the west of the main block.

41. A small change pavilion will be erected adjacent to the sports area which will be generally south of the school.

42. Construction Staging It is proposed to stage construction of the school to allow flexibility in the planning and construction periods and to ensure that the facilities will be available as the demand grows. We noted that should a church primary school be built, four classrooms in the second or third stage would be deleted from the project. Another factor is that should secondary enrolments exceed 200, the third stage could be deleted altogether, or in part as necessary, and planning of a separate secondary school could proceed without major modification of facilities.

43. Construction has therefore been planned as follows:-

Stage 1 - For completion September 1969.

Single-storey classroom wing. (This will provide four effective classrooms, plus two which will be used temporarily as a headmaster's office and a staff room.)

Stage 2 - For completion March 1970.

Administrative wing

Double storey classroom wing (excluding four standard classrooms)

Sports area and facilities

Assembly area wing (excluding home science room)

Stage 3 - Completion date to be determined.

Craft block

Four standard classrooms

Home science room

44. Structure The standard form of construction being developed by Nabalco will be based on a system of modular building components with infill panels.

45. Nabalco will call tenders on a performance specification, the final details of construction and materials being settled after tenders have closed. However, the buildings will probably be either steel-framed or precast concrete structures with reinforced concrete floor slabs. Walls will be prefabricated panels or precast concrete insulated panels in modular widths fixed to the framing. The roof will be supported on steel framed trusses and covered with sheet metal ribbed decking. The roof space will be insulated. Suspended ceilings will be provided except in the covered assembly area where linings will be fixed to the underside of roof purlins leaving part of the trusses exposed. Staircases will be of prefabricated steel construction with precast concrete treads.

46. All the structures will be designed to withstand winds of up to 110 miles per hour.

47. Finishes The surface finishes are yet to be determined but the following materials represent the quality called for by the performance specification.

48. Floors will probably be finished with vinyl tiles except in toilets, washrooms and similar areas where a granolithic finish will be used.

49. The ceilings of classrooms and offices will be plaster tiles or sprayed vermiculite whilst others will be of asbestos or off-form concrete.

50. Mechanical Services Due to the special needs of the art/craft room and the library, these areas will be air conditioned from the ground floor plant room. All toilets will have exhaust fans.

51. Hot water will be supplied at appropriate points. Chilled drinking water will be available from storage type refrigerated units.

52. Services in the craft block will comprise spray booth exhaust fans, sawdust extract system and L.P. gas supply.

53. Electrical Services Electricity will be provided from the main town supply. Lighting will generally be fluorescent throughout. Tennis and basketball courts will be floodlit.

54. Ceiling fans will be provided to all rooms other than air conditioned areas and stores.

55. A public address system will be installed with loudspeakers placed as required.

56. Hydraulic Services Water supply will be provided from the town mains. Sewage will be disposed of in the town system.

57. Fire Protection A thermal fire alarm system will be installed. Internal protection will be provided by hose reels and portable fire extinguishers. Hydrants will be located outside the buildings.

58. Committee's Conclusion The Committee recommend the construction of the work in this reference.

PROGRAMME

59. The present intention is for Nahalco to invite tenders for the school project in December 1968. Stage 1 of the work is planned for completion in September 1969 and Stage 2 in March 1970. The completion date for Stage 3 is yet to be determined.

ESTIMATE OF COST

60. The estimated cost of the work when referred to the Committee was \$1,285,000 made up as follows:

	\$
Stage 1	189,000
Stage 2	925,000
Stage 3	171,000
	<u>1,285,000</u>

RECOMMENDATIONS AND CONCLUSIONS

61. 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.

	<u>Paragraph</u>
1. EDUCATIONAL FACILITIES SHOULD BE PROVIDED IN THE GOVE TOWNSHIP.	9
2. THERE IS A NEED FOR THE WORK IN THIS REFERENCE.	9
3. THE SITE SELECTED IS SUITABLE.	35

Paragraph

4. THE COMMITTEE RECOMMEND THE CONSTRUCTION OF THE
WORK IN THIS REFERENCE. 58
5. THE ESTIMATED COST OF THE WORK WHEN REFERRED TO THE
COMMITTEE WAS \$1.285 MILLION. 60

F. Chaney

(F.C. CHANEY)
Chairman

Parliamentary Standing Committee on Public Works,
Parliament House,
CANBERRA.

24 September 1968.