



COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

R E P O R T

Relating to the proposed

Erection of a

MAIL EXCHANGE AT

REDFERN

NEW SOUTH WALES.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

R E P O R T

Relating to the Proposed
erection of a

MAIL EXCHANGE AT REDFERN, N.S.W.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

R E P O R T

MAIL EXCHANGE, REDFERN, NEW SOUTH WALES

	<u>CONTENTS</u>	<u>Paragraph in Report</u>
<u>SECTION I</u>	<u>- INTRODUCTION.</u>	
Historical -		
Definition		1
Early provisions		2
<u>SECTION II</u>	<u>- THE PRESENT PROPOSAL.</u>	
The building	-	4
The cost		6
<u>SECTION III</u>	<u>- THE COMMITTEE'S INVESTIGATIONS.</u>	
General		7
Need for the building -		
Co-ordination of sections		9
The present dispersion		14
Unsatisfactory conditions		16
Economic studies		18
Incidence of mail		19
The Building -		
The mail exchance		22
Lower ground floor		24
Upper ground floor		25
First floor		26
Second floor		27
Third floor		28
Fourth floor		29
Penthouse floor		30
The transport depot		31
Engineering services -		
Electrical		32
Vertical transport		34
Hydraulic services -		37
Mechanical services		38
Air-conditioning		39
Ventilation		42
Amenities		44
Cafeteria		45
Construction		46
Civil defence		48

	<u>Paragraph in Report</u>
Design	49
Site -	55
Selection	58
Old buildings	59
Displaced tenants	61
Parking	68
Vacated floor space	69
Future expansion	71
Fire protection	72
Financial aspect -	
Estimated cost	74
Annual charges	75
Calculation of estimates	76
Past projects	82
Sealed estimates	87
Original estimates	89

S E C T I O N I V - THE COMMITTEE'S CONCLUSIONS.

Summary of recommendations	92
----------------------------	----

COMMONWEALTH OF AUSTRALIA

THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

MAIL EXCHANGE, REDFERN, NEW SOUTH WALES.

R E P O R T

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 Mail Exchange at Redfern, New South Wales, has the honour to report as follows:-

S E C T I O N I - I N T R O D U C T I O N.

Historical

1. Definition. A mail exchange, in broad terms, is a centralised location for the receipt and despatch of all types of mail in bagged form, and an establishment where, by a system of mechanical sorting, this mail is progressively split up and localized to particular basic destinations. The extent of the buildings and the necessary ancillary areas to house these activities is governed by the type and extent of equipment, and the operative staff necessary to handle the traffic load.

2. Early provisions.- The Parliamentary Standing Committee on Public Works has conducted inquiries in the past into the earlier activities of the Mail Branch in connection with the development of mechanical mail handling equipment. Evidence taken in 1926 shows that the Postmaster-General's Department was actively engaged in evolving mechanical appliances aimed at eliminating a great many of the processes that did not call for any special skill or intelligence. Mechanical equipment was evolved and subsequently installed in the Brisbane Mail Branch, being the first machines of their kind in Australia.

They were followed by improved machines installed in Sydney and Melbourne, and the Committee in 1926 recorded its satisfaction that the proposals under consideration went beyond anything available in any other country in the world.

3. The same spirit of enthusiasm has continued in the Department, and mechanisation has been extended progressively through the years, but some of the original machines installed are still in use, giving remarkably good service in their limited way. Intensive research has resulted in the development of improved machines embodying modern principles for mechanization, and new equipment has been installed and tested, with the object of ultimate multiplication to provide a complete mail centre where the modern machines can be utilized with the utmost efficiency and comfort.

D I V I S I O N II. THE PRESENT PROPOSAL.

The Building.

4. The proposal before the Committee aims to provide, on a site in Redfern, a very large building of seven floors, to house a staff which is expected to increase ultimately to 5,380 persons. The main building is to measure approximately 400ft. by 300 ft., and is planned to be of reinforced concrete structural frame with monolithic floors. It is to be faced externally with selected face bricks, and will have windows in aluminium frames,

5. The site chosen for the project faces Cleveland Street, Redfern, and is bounded on the East by Castlereagh Street, and on the West by Pitt Street, having a depth of 577 feet.

The Cost.

6. The cost of the building and various services was set down at £4,170,000, while the capital cost of the mail handling equipment is estimated at £400,000. The time for preparation of final designs and contract documents, possession of site, and erection of the building is estimated at approximately $4\frac{1}{2}$ years.

D I V I S I O N I I I - T H E C O M M I T T E E ' S I N V E S T I G A T I O N S .

General

7. The Committee studied the proposal and the plans submitted in the reference by Parliament; took evidence from officials of the Department of Works and the Postmaster-General's Department, responsible for forwarding the project at this stage; and visited Sydney to inspect the proposed site and the present establishment engaged in the processing of the mails in the Sydney area. Evidence was also taken from independent witnesses, including the President of the Institute of Architects, the City Building Surveyor, representatives of the Postal Employees' Union, local residents involved in the matter, and others in a position to give the Committee information bearing upon the subject.

8. In its study of the matter the Committee was materially assisted by brochures of plans and photographs prepared by the Department of Works and the Postmaster-General's Department, as well as by a large model, constructed to scale, demonstrating in striking form the size of the project and the architectural features planned. The model was also useful in illustrating the various problems encountered in planning this huge building, to cope with the complex mechanical processes connected with the handling of the great volume of mail which is to pass through the establishment.

Need for the Building.

9. Co-ordination of Sections.- Following extensive surveys, it has been determined that the number of postal articles to be processed, comprising three main categories - letters, newspapers and packets, and parcels - will be of the order of 930 million in 1965 and 2,000 million in 1985. This is the quantity passing through the mail exchange in Sydney alone.

10. It was explained to the Committee that the proposal is to erect a building for the establishment of a centralised mail exchange in which to co-ordinate the efforts of all operatives employed on the same sorting process; closely associate at each point of handling, the sorting of letters, newspapers and packets; and to convey sorted mail automatically

from point to point, eliminating wherever possible the manual carriage of mail.

11. Studies have shown that the dispersal of mail activities to other buildings involves additional annual charges and operating costs. Lack of space in the G.P.O. building has already resulted in the division of activities into various buildings, in order to meet all the requirements of the growing volume of business, and it is becoming more difficult to maintain the service previously given to the public, while the operating costs have necessarily increased.

12. It has been determined that, under present and foreseeable circumstances, the concentration of mail exchange activities in one building will -

- (i) reduce transport costs;
- (ii) eliminate time lost in the transport of mails between various buildings;
- (iii) permit a better staff utilization (interchange between sections as peaks occur);
- (iv) permit proper management, supervision, and mail traffic control; and
- (v) eliminate the duplication of plant, services and amenities.

13. In addition to the advantages directly apparent in the efficiency of the mail services provided, there will also be other important benefits which will accrue from the establishment of the complete mail section at Redfern. The space vacated in the G.P.O. and the other buildings, at present housing the mail activities, is urgently needed for extension of other phases of the postal services and administration, where cramped conditions are hampering the work. Not the least of the advantages to be derived from these proposals is the reduction of traffic in the vicinity of the G.P.O., particularly in Pitt Street, where the investigations reveal that the traffic will be reduced by about 56%. It is also estimated that the provision of the transport garaging facilities at Redfern will result in savings of £10,000 per annum initially.

14. The Present Dispersion:- The Sydney Mail Exchange is at present in three main locations:-

- (a) The Administration and the majority of the Traffic Sections are located in the G.P.O. building;

- (b) the Parcels Section is situated in the Chief Parcels Office building in Railway Square, adjacent to the Central Railway Station; and
- (c) The Interstate and Overseas Sub-sections have been placed recently in a renovated building at Hiles Street, Alexandria

15. In addition to the three main locations, there are other sections of the work in areas dispersed from the central control. The Training School building (Yurong Street, Sydney) has to be vacated at the end of 1960. Transport activities have spread into three main garages, located at Chippendale, Newtown and North Sydney, and the new Transport Depot included in this proposal will result in substantial reduction in dead travelling. The object of concentrating these activities at Redfern is to minimise the difficulties of divided control and to make possible the use of the most modern mechanical methods.

16. Unsatisfactory conditions. An important factor emphasizing the need for new and extended premises for the Mail Branch is the existence of unsatisfactory working conditions in the old buildings. Considerable concern was expressed by representatives of the staff, because of the inadequate provisions existing in Sydney for the processing of mail matter. It was submitted that poor ventilation and excessive dust from mail articles cause contamination of the air, while lack of space results in men and women working in grossly overcrowded conditions. The difficulties are particularly aggravated in humid weather, and at the Christmas period, when large additional staffs are employed to cope with the heavy mails. It was agreed that the Department had done all in its power to alleviate the difficult conditions by the use of mechanical dust extractors, oscillating fans, and internal painting, but, in spite of all this, the conditions are still far from adequate. It was stated that the average "leave over" of mail articles since early January of this year has been about 400,000 each day, until the Department introduced excessive overtime in an effort to overtake the back lag.

17. Because the present mail handling facilities cannot cope with the peak load of overseas mails, through lack of space, it becomes necessary to stack thousands of bags of mail matter in confined spaces.

18. Economic Studies.- Before a decision was reached to embark upon such a tremendous undertaking as the complete mail handling establishment at Redfern, various economic studies of alternatives were made. To illustrate this the Committee was supplied with details of two typical economic studies, one assuming the establishment of two suburban depots operated in conjunction with the proposed new building at Redfern, and the other the establishment of a separate parcels post building. The results showed that additional annual operating costs involved in such decentralizing alternatives would cost many thousands of pounds.

19. Incidence of Mail.- It has been the recent experience of all countries whose industrial and commercial progress has been comparable with that of Australia, that postal traffic has increased at a greater rate than population. In assessing the likely traffic load to be handled by the proposed Sydney Mail Exchange at the period of maximum occupation (in 1985), regard must be had to the likely population of the whole of the States and of Australia.

20. Investigation has shown that, during the 20 years 1936 to 1955, the Sydney mail traffic increased by almost 100%, while, during the latter half of that period the increase was 54.9%. Based on calculations embracing anticipated population increase and varying factors relating to the posting habits of the public, it is expected that the volume of mail which passed through the Mail Exchange proper during the year 1955 (about 630 million articles) will have increased to at least 2,000 million articles annually by 1985. The planning of the building, and modern machinery to be placed in it, has been based upon these investigations and calculations, so that the best possible service may be given to the public, by the highly co-ordinated efforts of the staff with the best machinery it has been possible to invent for the purpose.

21. As a result of the study of the evidence regarding the necessity for the new building, and the inspections of the whole of the present branches of the establishment, the Committee is convinced that there is an urgent need for the building to be provided for this service.

The Buildings.

22. The Mail Exchange.- The planning of the whole project has been based upon the functional and managerial concepts established by the Postmaster-General's Department, and it consists of the Mail Exchange, together with the associated Transport Depot. The building has been designed on staffing figures for the maximum anticipated requirement in 1985 when the mail exchange is expected to be fully manned with 5,380 employees.

23. The building for the Mail Exchange occupies a little more than half of the available site, commencing from the new alignment in Cleveland Street. There are seven floors - lower ground, upper ground, first, second, third, fourth, and a penthouse floor - stated to contain approximately 620,000 sq.feet. Exclusive of tank and machinery towers, it is approximately 80 feet high in the centre of the Cleveland Street frontage. The design has been arranged so that, when required, the building can be extended over the south-west quarter of the site, leaving the south-east quarter available for further development.

24. The Lower Ground Floor.-accommodates the Customs Section, with counter provision for the public and Customs agents, having entry to this floor direct from the eastern forecourt. A small grade 2 Post Office, which will serve the public in the vicinity and the staff in the building, is located at the south-east corner of this floor, with entry direct from the pavement. Adjacent to this Post Office is the main staff entry, leading to the Escalator Hall. The remainder of this floor provides for the Dead Letter Office, bag cleaning section, maintenance shops, emergency electrical supply and sub-station.

25. Upper Ground Floor.- This floor is designed as the main centre for receipt, despatch and holding of mail matter. It contains handling platforms and three driveways for vehicles between Pitt and Castlereagh Streets. The northern perimeter is occupied by administrative offices, with lockers and toilets for employees working on this floor. A kiosk and food service store are located at the south west corner.

26. First Floor.- The main area of this floor is allocated to the Parcels Section, and provision has been made at the eastern end

for the Canvas Workers' Section. The northern perimeter is occupied by the Administrative Section, and a small workshop and tea preparation area are located on the south wall.

27. Second Floor.- This floor is mainly allocated to the Parcels Section, but it has at the eastern end a Customs holding area, for mails pending examination and release. Also on this floor are cleaners' offices, lunch rooms, lockers, first aid, Australian Postal Institute, class rooms, etc. A T.V. Control Room will provide accommodation for T.V. equipment, and it is inter-connected throughout the building with administration and supervisors' offices on the various floors by a turret stair. There are also areas for tea preparation, and a maintenance workshop.

28. Third Floor.- This floor is completely allocated to mail handling areas for suburban and country sections, and the Registration Section. The floor also contains space for lockers and toilets, maintenance and tea preparation. Provision has been made for a surveillance gallery overlooking the Registration Section, while at the north-east corner space is made for a future stair case to the second floor, to allow for expansion of the Registration Section.

29. Fourth Floor.- This floor is allocated to the Mail Opening Section, with a training school for mail operatives at the eastern end. The front of the floor is completely taken up with lockers, and toilets for staff working on the floor, while tea preparation and workshop are located on the south wall.

30. Penthouse Floor.- This is the roof floor, and is occupied by plant rooms for the mechanical plant. The cafeteria is also located at this level and provides seating for 1200 persons. There are interesting features including garden courts with glazed shafts providing natural light inside the room, and views of planted areas. Roof terraces will also provide additional space for staff use and further features of interest for this floor.

31. The Transport Depot.- The supporting Transport Depot will be located on the south-west section of the site. It will provide

only day to day service, including servicing and minor repairs for P.M.G. vehicles. The buildings of this depot provide locker, lunch and toilet accommodation for drivers and attendants, and also service and maintenance facilities for vehicles.

Engineering Services.

32. Electrical.- The electrical services include installation of a Sub-station and Main Switch Board to accommodate the requirements of the Sydney County Council, and the emergency diesel generating plant. The emergency generating plant will be capable of supplying 100% of the requirements for ventilation, 40% of lighting, and 50% of mail processing machines, lifts and escalators in the event of failure in the supply authorities' system.

33. Electrical power and light are planned to conform to the Standards Association of Australia. The installation will be of a flexible design with adequate provision of general purpose outlets for electrically operated cleaning machines, office machines etc.

34. Vertical Transport.- Escalators are to be installed to cope with the main passenger traffic requirements. The system will comprise a total of twelve 48" wide escalators operating at 90 feet per minute. They will have a capacity in either direction of 570 passengers each five minutes, and by a modification of the speed they will be capable also of carrying 760 passengers each five minutes. The escalators will shut down automatically in the event of fire, and become additional staircases.

35. The Committee was informed that two alternative systems, an operatorless lift system and an attendant operated system, had been compared with escalators before the determination was made to include them in this proposal. The escalators were shown to have a number of advantages over the alternative methods, and it was pointed out that various large buildings overseas use escalators successfully to as far as the eighth floor. The Committee, after seeking further details of this form of transport for a building of this height, is satisfied that it will be suitable for the purpose and should be installed as planned.

36. A small 16 passenger lift will be installed in conjunction with the escalators, to be operated with or without an attendant, for use by persons who cannot use the escalators. In addition there will be 3 goods lifts for the transport of mail and goods. They will be capable of handling a load of 7,000 lbs at a speed of 150 feet per minute.

37. Hydraulic services on normal lines are available at the site. Allowance has been made for water for domestic and fire purposes, and a sub-soil drainage system will be provided, connected to a sump from which excess underground water will be pumped to the stormwater drains.

38. Mechanical Services.— The mechanical services include air-conditioning supply and exhaust ventilation systems, domestic hot water supply, kitchen and cafeteria equipment, fire sprinklers and hand extinguishers, emergency generating plant and minor services for the Transport Depot.

39. Air Conditioning is the major component of the provision of mechanical services in this project, and it is estimated to cost approximately half a million pounds, or 57% of the total cost of the mechanical engineering services. At first sight the amount set down in the estimates at £498,000 seems quite staggering, and the Committee studied the proposal from various aspects in order to become satisfied that all this was essential in the undertaking. It was explained in evidence that, apart from the huge building which is involved in this question, a significant factor is the very high internal heat load of the building, caused largely by the mail handling machinery, lights which have to be on 24 hours a day, and the number of bodies in the building. It was stressed by the engineers that every project requires special consideration, and, as a result of much study it was stated that air conditioning is a necessity in this building.

40. It was pointed out that, if the building were sparsely populated, if it could be satisfactorily built very much narrower than it is, if it were located on the waterfront, or if it did not have the mail handling machinery in it there would be no need to air-condition the building. As it is, however, it was firmly declared that, if no air conditioning were provided in this building the conditions would be

intolerable, and it would not be operable. It was also pointed out that, in addition to being uncomfortable for the staff, a building with excessively hot and humid conditions results in a considerable decrease in efficiency of the employees, and the satisfactory operation of the establishment.

41. The majority of the working areas in the building will need to be air-conditioned, the main exceptions being the docking areas on the upper ground floor, and the bag cleaning and storage, mail handling plant maintenance, printing and carpenters' sections on the lower ground floor. The administrative areas and the cafeteria would be included in the sections to be air-conditioned.

42. Ventilation.- In the areas excluded from the air-conditioning treatment, alternative supply and exhaust ventilation will be provided. The bag cleaning and similar sections will be provided with special filters for the air which will be suitably heated in winter. The docking area will have continual motor traffic passing through it, and an adequate ventilation system will be required to maintain a healthy atmosphere for the safety of the personnel working a continuous shift in this area. It is proposed to supply a system designed so that the CO concentration from the motor exhausts does not exceed 1 part in 10,000 during periods of peak traffic.

43. A considerable amount of evidence was taken on the subject of air-conditioning, and the Committee weighed the studied explanations of the engineers, and the evidence of experience in this work given by members of the staff, against the heavy cost of this service. As a result the Committee is satisfied that air-conditioning is essential for the efficient working of this establishment as well as for the comfort of the staff, and recommends that it be installed as planned.

Amenities.

44. The proposal makes provision for all the amenities required in a huge undertaking of this kind. Ample lockers, toilets, tea preparation and recreation areas are planned, as indicated in an earlier section of this report, in accordance with the Interdepartmental Scale of Welfare provisions. The Department of National Service has been consulted during the preparation of the design, and its recommendations

were made the basis of the planning.

45. Cafeteria.-- Detailed planning of the kitchen and cafeteria has still to be completed, and, when finished, it will be submitted to the Interdepartmental Food Services Project Committee for concurrence, prior to Treasury approval. It is intended to provide hot meal service in the cafeteria, because shifts will be worked around the clock. Hot meal service will be made for breakfast, lunch, dinner and midnight break, and the seating capacity has been determined on the basis of 1200 persons using the luncheon room at one time. The kiosk is provided on the upper ground floor level, mainly for the use of the Transport Section, but also to provide an off-peak service when the cafeteria would be closed down.

Construction.

46. The planning of the building has been based on the use of reinforced concrete structural frame with monolithic floors, so reinforced that the numerous openings for mail chutes and transfer belts can be obtained in the required positions. Although the building is a project of considerable magnitude, it is one in which bays of standard construction can be repeated again and again, having a total for the building of 448 bays. A great deal of thought was given to the column grid, as a number of factors had to be taken into account in addition to the normal considerations of structural economy in relation to column spacing, floor loading and member sizes permissible. Many different arrangements of the structural frame were examined, and the present arrangement has become possible as a result of the acceptance of a 27 feet column spacing for the vehicular requirements of the upper ground floor. It was stated that the estimated saving as compared with the use of a structural steel frame is about £120,000.

47. The reinforced concrete framework is to be faced externally with selected face bricks, and windows in aluminium frames. For this type of building it was explained that the use of bricks for facing was a considerable economy, the cost being approximately £45,000 as against £100,000 for precast concrete slabs with exposed aggregate face. Where the general public use the building on the lower ground floor, limited use will be made of granite, travertine, aluminium and armour plate glass.

48. Civil defence.- The problem of providing civil defence in a building project of this magnitude has received careful consideration during the planning stages, and it was decided that protected areas for this purpose should be provided in the lower ground floor by strengthening drive-ways Nos.2 and 3 on the upper ground floor to carry debris loading. Inquiries by the Committee in this connection elicited the information that departmental officials check on the requirements from a civil defence point of view from time to time, in order to keep up to date with the latest policy on this matter, and the provision to strengthen the driveways in this project is considered as reasonable.

Design

49. It was stated that the immediate and future environs of the site have been carefully considered in relation to the external design of the building. The future arterial road in Cleveland Street, with Prince Alfred Park opposite will create extended sight lines of the completed project, while reconstruction of adjacent properties, demolished during the road widening, will in future create contemporary architecture in the immediate vicinity.

50. The semi-industrial functions within the building have influenced the economic approach to the structure and the treatment of the elevations. The face bricks will combine the desirable qualities of durability, thermal stability, colour and texture. Windows have been designed with pre-cast concrete frames incorporating sun protection hoods at head and side. These hoods will be located to provide protection from sunlight to the critical aspects of the facades.

51. A cantilever arcade on the Cleveland Street frontage will provide a covered way for staff approaching the entrance from both Pitt and Castlereagh streets, and, in conjunction with durable and colourful material finishes, will emphasize the main entrance and Post Office access in a dramatic way.

52. A glance at the plans and the model immediately give the impression of the great size of the building projected. The main Mail Exchange Building extends from Castlereagh Street to Pitt Street - a distance of 401 feet, while the depth of the building is 304 feet from the

Cleveland Street frontage. It was stated, for comparison, that the building will be almost the size of the average cricket or football oval. The building has a frontage 40 feet longer than the G.P.O., in Martin Place, and a much greater depth.

53. The evidence indicates a general approbation of the aesthetic treatment of the building. The structure is an immense one, with the building essentially a factory, in which considerations of economy are important, so that the bold sweep of the elevations and the modular treatment are appropriate. It was apparent from the model that the white concrete hoods to the windows will relieve the vast facade of brick, and the effect will be enhanced by the cantilever arcade and horizontal window lines on the Cleveland Street facade. A suggestion for a slight alteration in the fenestration on the return flank wall of the Cleveland Street elevation appears sound in a building of these proportions.

54. The Committee was favourably impressed with the plans, particularly when considered with the complementary impressions gained from study of the model, and is satisfied that the design will prove thoroughly appropriate and aesthetically pleasing if special attention is paid to choice of the facing bricks, and if a little further attention is given to the fenestration of the return wall on the Cleveland Street facade.

Site.

55. The site is located in Cleveland Street, Redfern, and faces north. It is part of the old Redfern Municipality transferred to the control of the Sydney County Council in 1949. The site has a frontage to Cleveland Street of 401 feet, and is bounded on two sides by Pitt Street and Castlereagh Street to a depth of 577 feet, while the southern boundary abuts on to private property.

56. Immediately across Cleveland Street is Prince Alfred Park, and on the east of this park a school is located. The site was acquired on 29th March, 1951, and has an area of 5.31 acres, however, a strip 94ft. wide has been allocated in order to conform to a plan for the widening of Cleveland Street, thus reducing the area to 4.45 acres.

57. At the time of acquisition there was a movement urging that another site be selected because of the residential zoning of the area. In 1952, however, the site was re-zoned by the Sydney City Council as part of an industrial area - Class 'G'.

58. Selection.- It was decided that the new site should be convenient to Central Railway Station and the Sydney Air Terminal, with good access to the wharves and the G.P.O., and in a position convenient for suburban road traffic. A survey of the proposed development of new arterial roads and expressways, and an examination of trends in the methods of transporting mails, suggested that the most suitable location for the new site was within half a mile of the Central Railway Station, and an exhaustive investigation of available land was undertaken in this area. The search was narrowed to four sites, of which it was finally decided that the one at present planned for this proposal was selected as the most suitable one for the purpose. The Committee after viewing the site, and considering all the evidence on this question, is satisfied that the site suggested in Cleveland Street, Redfern, is the most suitable for the new exchange.

59. Old buildings.- The site is largely occupied by old residential buildings, many of which are in an advanced state of deterioration, and provide only sub-standard accommodation. There are now 77 buildings on the site, including 3 shops and 3 factories. The houses and flats accommodate approximately 440 people, of whom 81 are main tenants in occupation on the site, and will be affected by the implementation of this project. These numbers are diminishing each time houses are demolished or tenants leave.

60. Since the property was acquired the Department has followed a policy of carrying out only essential building maintenance work. In a number of cases premises have become vacant, and the policy has been to demolish them immediately.

61. Displaced tenants.- The Committee visited the site of the proposed new building, noting that many of the houses were of sub-standard character, and that a number of the buildings which had been vacated were

already demolished or in course of demolition. Evidence was taken from some of the tenants who presented the general views of the tenants to be displaced. The views expressed were clearly in favour of the necessity to proceed with the erection of the new Mail Exchange on this site, the main fear being that no provision would be made for those who were to be dispossessed. It was stated in evidence that they would have no objection at all if alternative accommodation is provided.

62. It was recognised from the outset, by the Department and by the tenants, that there is no legal claim upon the Commonwealth to provide alternative accommodation. In order to assist in clarifying the position the Committee obtained evidence in this regard from the Chief Property Officer of the Department of the Interior. It was explained that the area had been duly acquired, and compensation claims had been settled, with the exception of three cases which are expected to be concluded very shortly.

63. Although the Commonwealth is not legally required to provide alternative accommodation, it is necessary to obtain an order of ejectment before vacant possession of the land can be obtained. As the Landlord and Tenant Act at present gives the Court certain discretion as to the period of delay which can be made to operate, this could cause some serious delay in proceeding with the project.

64. It was emphasized to the Committee that the demolition of such a group of residences, affecting such a number of families at one time would constitute a very considerable hardship upon those involved, and that the question of obtaining any alternative accommodation was a most difficult one for the tenants, many of whom have lived in these houses for a great many years. It was stated that the State Housing Commission would not consider applicants for special relief housing unless the family had been served with an eviction order, and was unable to obtain alternative accommodation.

65. The Committee was informed, early in the inquiry, that the impending difficulties associated with an undertaking of this nature were realised by the Cabinet when the question of reference to the Committee was first under consideration. It was intimated that a

decision had been reached to take action, at an appropriate time to be decided by the Prime Minister, to advise the Postmaster-General, the Minister for National Development and the New South Wales Government of the proposal, and to seek the co-operation of the State Housing Commission in providing suitable accommodation for those displaced persons who meet the conditions laid down by the Commission.

66. The Committee is of opinion that the progress of this important project will be greatly facilitated if the Commonwealth Government supports this aspect of the proposal, and lends its influence to those authorities in a position to take action to supply alternative accommodation for the people displaced from their homes.

67. It was stated in evidence that the time taken in preparing the final plans, and in constructing the building will be approximately $4\frac{1}{2}$ years, while the whole planning of this project has been based upon the necessity to have the building ready by June 1963. If this date is to be achieved it will be essential to avoid every cause of delay, and the Department has urged that the earliest possible action should be taken to resolve the question of vacant possession of the site. In these circumstances the Committee recommends that, in view of the magnitude of this project and the necessity to avoid delays, the action suggested by Cabinet should be taken as soon as possible.

Parking.

68. Until the widening of Cleveland Street takes place, probably some years hence, it is proposed to develop the 94ft. strip between the old and new alignments as a landscaped parking area. It will be divided by a wide pavement leading up to the main entrance, and space for 28 cars will be available on the eastern side of the pavement. Official and overflow parking will^{be} provided on the western side of the entrance. Alternative provision for parking at a later stage will be possible when the south eastern corner of the site is cleared.

Vacated Floor Space.

69. Inquiries were made regarding the amount of space to be vacated when the new Mail Exchange is established at Redfern, and evidence was

submitted in considerable detail, indicating the manner in which the available space will be used to satisfy the demands of other sections pressing for space in which to expand.

70. The Committee took evidence which indicates that the removal of the Mail Exchange from the G.P.O. will, after allowing for expansion of the City Delivery Section, and extension of the main postal hall, release an area of 80,000 sq.ft. for office use. This space, together with areas in other buildings at present housing sections to be transferred to the new building, will enable expansion and development to take place in the Trunk Exchange, staff training, and office accommodation, while the Hiles Street Annexe, when vacated, will be very suitable for use as a motor Vehicle Repair Shop.

Future Expansion.

71. The building as planned has been designed to provide accommodation to meet the estimated Exchange requirements in Sydney until about 1985. After this date it is expected that it will be necessary to extend the building to cater for the post 20-year development. The plans for the building, and the location of the structure on the site, have been designed with this in mind, and provision has been made to permit extension in a southerly direction as may be required.

Fire Protection.

72. As the proposed building offers some definite and unusual fire problems, evidence was taken from the Chairman of the Commonwealth Fire Board. It was considered that, to meet local building and other regulations, it was not only cheaper but also a necessity to plan the building on the basis of automatic fire sprinklers being installed throughout. The necessity was due mainly to the essential operational need of open floor spaces much greater than would be allowed without sprinklers, while saving in cost would result from the reduced number of stairways (and the consequent saving in building space) that is permitted for sprinklered buildings.

73. The P.M.G. engineers were at first averse to the installation of sprinklers on the mail-handling floors, as they were afraid of damage being caused to the mail should any sprinkler heads leak. There seems

to be no reasonable alternative at the moment, though it was stated that, before extensive final designing is commenced, further investigations are to be made in an effort to find some other acceptable solution of the problem. Evidence was given that it is most rare to have a leakage or false discharge from a sprinkler, while the figure quoted for conditions in America show that there is only one chance in a million of a leak. It appears, therefore, that, unless some revolutionary method is evolved in the meantime, it will be necessary to adopt the sprinkler system and take all possible precautions to see that the efficiency of the system is maintained at all times, so that any water damage will be avoided.

Financial Aspect.

74. Estimated Cost.- The cost of the building was estimated, upon prices ruling at May, 1958, at £4,170,000, made up as follows:-

Building work, including Transport Depot		£2,843,000
Mechanical engineering -		
Air conditioning	£498,500	
Ventilation	166,100	
Hot water supply	11,000	
Boiler plant	17,600	
Kitchen equipment	47,300	
Fire sprinkler and hand extinguishers	68,200	
Emergency diesel plant	60,500	
Transport depot	8,800	878,000
Electrical engineering	240,000	
Lifts and escalators	209,000	449,000
	TOTAL	<u>£4,170,000</u>

The cost of the site was set down at £146,000, which included the amount of claims already paid and the estimated cost of those remaining to be settled. The capital cost of the mail handling equipment was set down as £400,000.

75. Annual charges.- A schedule was submitted to the Committee indicating details of annual charges, the items comprising working expenses, depreciation on buildings, services and furniture, and interest on capital cost. Against these charges was shown details of estimated savings in rental value of floor space freed, and savings in transport running costs. The annual charges amounted to £560,400, and the savings £248,700, leaving the net annual charges as £311,700.

76. Calculation of estimates.— The Committee was informed that the estimates were based on prices ruling at May, 1958, and, calculations were made on a square basis, with comparison being made with various other buildings of a similar nature. It was pointed out that this basis is necessary because the estimates at this stage have to be made on what are called sketch drawings, upon which the preparation of detailed quantities, other than in rough form, is impossible.

77. Indications were apparent in the evidence that the present times are abnormal in regard to contract costs for major buildings, and the Committee was seriously concerned with the discrepancy between original estimates and actual contract prices contained in tenders. In this connection specific evidence was sought in an endeavour to elucidate the causes of the disparities exposed in figures relating to the more recent projects put in hand.

78. The Committee had recent experience of the Potts Point Exchange inquiry, where the original estimate of £400,000 was reduced before the end of the investigation to £325,000, owing to expectation of lower contract prices, following receipt by the Department of unexpectedly low tenders for some current projects. After inquiry on that occasion the Committee was convinced that influences were at work which induced the contractors to submit prices on a lower basis. It was accordingly anticipated that the original estimate for the Redfern Mail handling project, referred to the Committee at £4,170,000, only shortly after the Potts Point proposal, would be appropriately reduced also. As this was not the case, and the departmental officials consider it necessary to retain the original estimate, the Committee took further evidence in an endeavour to establish with reasonable certainty whether any definite trends were being established in the sphere of major building activity, either in New South Wales or in the other States.

79. A considerable amount of most interesting evidence was obtained from independent sources, both in connection with the building of major projects, as well as in home building under various authorities such as the War Service Homes and the Co-operative Building Societies.

The evidence establishes definitely that there has been no significant reduction in the cost of materials or wages. It was also clear that there was no marked trend for reduced contract prices in home building, either in N.S.W., or in other parts of Australia - certainly nothing to compare with the reductions under review by the Committee in projects for major buildings, particularly in N.S.W., stated to be in the order of 18%.

80. This evidence, therefore, corroborated the findings in connection with the Potts Point Exchange, and the Committee was forced to the conclusion that the reduced tenders must be due to diminution of the profit margin by builders, though there is no certain trend in this connection, and no way of forecasting how long this situation will continue. Some of the reasons postulated to explain the low tender prices include the tendency for large firms to accept little or no profit, in order to maintain their work forces; the possibility of greater efficiency being attained; and the fact that incentive rates are not being paid at the present time.

81. Because of this position, and of the unusual magnitude of the project, the Department considers that it will not be wise to apply the current drop in prices for city buildings to the Redfern Mail Handling proposal.

In addition, it was pointed out that this huge project is calculated to be constructed by 1963, and it is necessary to exercise some judgment, and hold in reserve a fairly substantial figure which will cover contingencies arising from a firming of prices over these next five years. With this contention the Committee is constrained to agree, though various sections of the evidence evinced facts which caused some considerable misgiving in the minds of the Members, in regard to original estimates submitted from time to time with these references.

82. Past Projects.- It was extremely disconcerting to the Committee to find that the estimate of £754,500, submitted in March, 1956, as the original figure for the Haymarket Exchange, concluded with tenders being received varying from £420,000 to £460,000, a reduction in the average of over 40%. The Committee has now called for a list of the

works completed during the last 5 years, with the departmental estimates shown against the accepted tender prices. It is stated that it will take some little time for the necessary figures to be procured from other States, but the Committee will be able then to get more accurate assessments of the position for future references.

83. The Committee was surprised that conditions in the building trade, during the Potts Point inquiry, should have made it desirable or possible for contractors to submit tenders approximately 18% lower than that calculated by the Department and submitted to the Committee as based on rates ruling a few weeks previously. It is even more difficult to understand why the original Haymarket Exchange estimate should be 40% higher than the final contract price.

84. It might perhaps be expected, in times of deep depression or special emergency, when the cost of materials and wages as well as profits would drop considerably, that a high percentage of disparity would occur between original estimates and final contracts. It would appear in the present circumstances, however, that the drop is in the margin of profit, and has been operating for some time. The conclusion would seem to be clear that original departmental estimates have been based on ruling prices which contained large profits for the contractor, and furthermore, that it is expected by the department that tenders will revert to the former scale after a short period during the Potts Point construction.

85. The Committee is convinced that, where huge building contracts of this nature are under consideration, and builders should be satisfied with ^a comparatively small percentage on a large undertaking, it should be possible for the department to take action to ensure that only tenders containing a reasonable margin of profit are accepted.

86. The evidence shows that the department carries out works programmes in the vicinity of £50,000,000 per annum, and it must surely be in a position to bargain for contracts more keenly priced than appears the case in recent years, before the present reductions became apparent.

87. Sealed estimates.- It is not intended to convey the impression here that the department, or the Minister for Works is misinformed of these figures, or of the position ruling at the time immediately prior to acceptance of contracts. It was made clear in the evidence that a system is adopted to ensure use of the latest figures. An estimate is made on the basis of the sketch drawings, and approved by this Committee and the Parliament. At a later stage, when the detail drawings and final bills of quantities are completed, it is possible to draw up a much more accurate estimate with costs amended at quarterly intervals. This remains a sealed estimate until the time comes to open the tenders.

88. In the case of the Haymarket Exchange this sealed estimate was for the total of £448,000, thus proving to be close to the average of the tenders. This is a most reassuring figure, and it is realised that this final check does at least ensure that the tenders approximate the general basis ruling at the time. The Committee feels, however, that if ruling rates contain profits and/or other charges which can be reduced by over 40% in a short period, irrespective of the cost of wages and materials, some system should be available for checking them in the earlier stages.

89. Original Estimates.- It is thoroughly recognised that perfectly accurate estimates cannot be expected if made upon the basis of sketch drawings at the stage at which projects at present are referred to the Committee for investigation. It has been possible in the past, however, to produce to the Committee original estimates which were reasonably close to the final contract prices. In cases where major variations occurred, the proposals were re-submitted to the Committee for further inquiry.

90. It is essential for the Committee to consider, carefully, the cost of a project in relation to the desirability to recommend its approval by Parliament, and the Committee is confident that it will be well within the capabilities of the officers of the department, usually, to produce estimates which will approximate closely the final tenders.

91. It is recommended, therefore, that consideration be given to evolving a system which will give the Committee estimates with the desired accuracy, or, alternatively, that projects showing major

variations from estimates given to the Committee, should be re-submitted for further investigation of the details, and report to Parliament.

SECTION IV - THE COMMITTEE'S CONCLUSIONS.

Summary of Recommendations.

92. The following is a list of the Committee's conclusions, in summary form only, arrived at after study of the proposal, plans, and evidence involved. The full recommendations are contained in the body of the Report, and may be referred to in the paragraphs quoted at the close of each of the following recommendations:-

	<u>Paragraph in Report.</u>
(1) There is an urgent need for the proposed mail exchange.	21
(2) Escalators should be a suitable form of transport to the number of floors proposed.	35
(3) Air-conditioning is essential for the efficient working of the establishment and should be installed as planned.	43
(4) The Committee was favourably impressed with the plans, and recommends that the building be constructed as planned, with special concern being paid to the choice of facing bricks, and with some further attention to detail of the fenestration of the return wall on the Cleveland Street facade	54
(5) The site proposed is the most suitable for the new exchange.	58
(6) Progress of this important project will be greatly facilitated if the Commonwealth Government lends its influence to those authorities in a position to take action to supply alternative accommodation for the people to be displaced from their homes on the site.	66
(7) In view of the magnitude of the proposal, and the necessity to avoid delays in obtaining vacant possession of the site, the action suggested by the Cabinet should be taken as soon as possible.	65 and 67
(8) If no alternative is discovered, and the sprinkler system of fire protection is necessary, all possible precautions should be taken to ensure that the efficiency of the system is constantly maintained, so that water damage may be avoided.	73
(9) Reduced tender prices appear to be due solely to diminution of profit margin by contractors.	80

- (10) As the present building conditions are claimed to be abnormal, and tenders are expected to rise again, the Committee is constrained to agree that the original estimate of £4,170,000 for this project should be retained. 81
- (11) As such huge contracts are involved, where builders should be satisfied with comparatively small percentages of profit, it should be possible to ensure that, if conditions do become more normal, only tenders containing a smaller margin of profit should be accepted. 85
- (12) The magnitude of the £50,000,000 annual works programme should place the Department in a position to bargain for contracts more keenly priced than must have been the case in recent years, before the present reductions became apparent. 86
- (13) The present system of calculating original estimates for the Committee from sketch plans should be examined, in view of the fact that, between original estimates and tender prices there have been reductions of up to 40%, even though estimates based on bills of quantities subsequently prove to be comparatively accurate. 88
- (14) It is essential for the Committee to consider carefully the cost of a project in relation to the desirability to recommend its approval by Parliament. Consideration should be given to evolving a system giving estimates with the desired accuracy, or, alternatively, projects showing major variations from original estimates should be re-submitted for further investigation and report to Parliament. 90 and 91.

W. R. LAWRENCE.
Chairman.

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

18 SEP 1958