



COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

R E P O R T

Relating to the proposed

Erection of an

AUTOMATIC TELEPHONE EXCHANGE AND POST OFFICE

BUILDING AT POTT'S POINT,

SYDNEY, N.S.W.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

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BUILDING, POTTS POINT, SYDNEY.

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BUILDING, POTTS POINT, SYDNEY.

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 an Automatic Telephone Exchange and Post Office Building at Potts Point, Sydney, 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. Telephone services in the Potts Point area are at present catered for, in the main, by the East Exchange, which is situated on the corner of Liverpool Street and Little Surrey Street, Darlinghurst. A small portion of the area, including a narrow strip to Garden Island, is served by a temporary automatic exchange located in a leased portion of a building situated at the corner of Orwell and Earl Street. These exchanges are rapidly reaching their maximum capacity.
2. As resources have not been available, up to the present time, to proceed with a permanent exchange building, it has been necessary to resort to temporary expedients, such as the provision of the temporary telephone exchange at King's Cross, and the subscribers' equipment in the East Exchange.
3. The existing Potts Point Post Office is one of the busiest of its grade in the metropolitan area of Sydney, and it is in a small shop leased at an annual rental of £520. The area is also served by another official post office at William Street, where the volume of

business has grown to such an extent that the office is one of the busiest in the State.

S E C T I O N I I - THE PRESENT PROPOSAL.

The Building.

4. It is now proposed to erect a building on a site acquired in Macleay street to house a new telephone exchange for 10,000 lines and a post office in order to relieve present congestion, and to cater for the future requirements of the locality. The building as proposed has three floors - lower ground, ground, and first floors, with two mezzanine floors over part of the area. The planning has been based upon a structural steel frame - encased in concrete, with concrete slab floors.

The Site.

5. The site was acquired in 1949, and has a frontage of approximately 74 feet to Macleay Street. It also has frontages of 141 feet to Crick Avenue on the North and to Greenknowe Avenue on the South. The Eastern boundary abuts on to private property.

Estimated Cost.

6. The estimated cost of the building, based upon prices ruling at March, 1958, is £400,000, and the time for preparation of plans and construction of the building is calculated at approximately 2 years and 5 months.

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

General.

7. The Committee studied the plans and sought evidence from officials of the Department of Works and the Postmaster-General's Department. A visit of inspection was paid to the site of the proposed new building, and also to the present post offices and exchanges serving the area. Evidence was also secured from independent experts and persons interested in the proposal, including the President of the Royal Australian Institute of Architects, President of the Real Estate

Institute of New South Wales, the Chief County Planner of the Cumberland Country Council, the President of the King's Cross Chamber of Commerce, and the Sydney City Surveyor.

Need for the Building.

8. Officials of the Postmaster-General's Department submitted detailed evidence on the present unsatisfactory conditions for both telephone and postal services in the area at the present time, and explained that the Sydney telephone network plan now includes a requirement for an automatic telephone exchange in the Potts Point area. It was stated that it is essential to relieve the East Main Exchange, to provide economical cable distribution, and to cater for anticipated heavy development in the district. There is also an urgent need to provide a modern post office to serve this important area adequately for some years to come.

9. Densely populated area. - The Potts Point - King's Cross area, which is approximately one mile east of the city proper, is one of the most densely populated areas in Australia. There is an extremely high content of multi-storey flat units and residential accommodation, as well as many residential hotels. The popularity of the quarter is rapidly increasing to an extent where plans have been approved, and construction already commenced, of a limit height ultra-modern hotel incorporating up-to-date features such as a heliport. It is also forecast that there will be further "super" hotels in the district. The present population of the Potts Point area is 2,500, and it is expected that this figure will be doubled within 20 years.

10. Temporary expedients - Service and engineering studies, prior to 1948, had shown that subscribers' development in the Potts Point district warranted the establishment of a new exchange area. However, due to lack of resources available to the Department at that time, it was not practicable to proceed with the erection of the permanent Potts Point Exchange building then. A suitable site was purchased, however, and all network planning and cabling within the area have been made on the basis of the ultimate provision of this exchange..

11. The first expedient adopted was the provision of the temporary telephone exchange at King's Cross where, by the use of recovered equipment 800 numbers were provided. This exchange has since been extended to serve some 1,450 subscribers, but is extremely congested and is incapable of further extension. Also the condition of much of the equipment has deteriorated to such an extent that maintenance work is uneconomical, and positive action must be taken soon to relieve this state of affairs.

12. In 1953 a further expedient to keep pace with the extraordinary demands of this densely populated area was the provision of Potts Point subscribers' equipment in the East Exchange. The spare available numbers in the East and Potts Point Exchange area total 1,700, but, as this is expected to develop at approximately 770 per annum within the next three or four years, it will be seen that the new exchange must be established and working by about January, 1961.

13. Relief is also required at the East Exchange, which is a Main Exchange accommodating common switch equipment in addition to equipment for its own local subscribers. It is required for routing or "trunking" subscribers' calls from this exchange and its branches in and out of the Sydney metropolitan unit fee network.

14. Subscribers' lines.- The following figures show the estimated development of telephone subscribers' lines in the East Exchange and the Potts Point Exchange, after realignment of the boundaries, and it will be seen that there is an urgent necessity for automatic equipment to cope with the demand:-

	<u>1966</u>	<u>1971</u>	<u>1981</u>
East Exchange	11,150	13,330	17,690
Potts Point Exchange	7,140	8,180	10,250
	<u>18,290</u>	<u>21,510</u>	<u>27,940</u>

15. Post Office accommodation - At the existing Potts Point post-office the counter service is provided by staff working under extremely difficult conditions. There is insufficient space for postal and telegram delivery staffs at the office, and only limited processing can be given to postal articles received over the counter. It has not been possible to provide private letter boxes.

16. At William street, the other official post office serving the areas of Potts Point, Kings Cross, Elizabeth Bay and Woolloomooloo, the volume of business has grown to such an extent that relief accommodation has had to be obtained elsewhere in the district for mail delivery purposes. The desired standard of service is therefore most difficult to maintain, and the amenity provision in both the Potts Point and William street offices falls far short of accepted standards.

17. Postal development in the future.- Considering all the factors, it has been considered that the most economical arrangement, and also the most effective way to meet public requirements in the area, will be to utilize the major portion of the ground floor of the proposed new Potts Point building for a post office from which postal and telegraph delivery services will operate.

18. As a result of thorough consideration of the evidence in this regard, and inspections made of the existing facilities, the Committee is satisfied that there is a pressing need for a new exchange and post office building for the present and near future period.

19. Future Requirements.- Owing to the pressing need for the building, at the present time, it appears likely that a further equipment floor will be needed, in order to make adequate provision for essential services for the next 20 year period. It has been planned, therefore, that the foundations could be constructed in the initial stage to allow for suitable additions when they become necessary. The Committee is convinced that such a precaution is necessary.

20. If the predicted rate of telephone growth accelerates in the post 20-year period, it is possible that the proposed building may need to be extended to meet automatic telephone subscribers' development. It is considered more economical, from a cabling point of view, to provide these additional services as an extension of the proposed exchange, rather than to erect another exchange building elsewhere in the future.

21. In addition to the possible requirements for telephone extensions in the future, it appears likely that other considerations relating to provision of office accommodation for departmental use might add to the

present arguments towards providing a building of full limit height in the future, and the Committee was informed that the cost of strengthening the foundations to this extent would not be considerable. It is, therefore, recommended that the foundations should be constructed as suggested to provide for a limit height building in the future.

The Building.

22. The building as proposed has three floors - lower ground, ground, and first floors. Some toilet and locker accommodation is provided in two mezzanine floors which are made possible by variation in the ceiling heights at the south-east corner of the building. The structure will be 33 feet high at the centre of the Macleay street frontage.

23. The Lower Ground Floor will be occupied by the external plant centre, substation installation and block staff and cable chamber. Space is also available for overnight garaging of departmental vehicles, but it is considered that the type of activity to be conducted in this building will make the provision of off-street parking for business visitors unnecessary.

24. The Ground Floor will be occupied mainly by the post office and the exchange support areas. The public entrance to the post office will be off Macleay street, and will be accessible to the public from a raised terrace protected by a light steel awning.

25. The First Floor will be occupied by the equipment room for the ultimate installation of a 10,000 line exchange, the main distribution frame room, and a luncheon room. A ceiling height of 17 feet has been maintained, to provide for the special telephone equipment, which could be extended into the luncheon room area when additional equipment is necessary in the future. Air treatment plant room has been located at roof level, adjacent to the eastern boundary.

26. Fenestration and Sun protection - In order to reduce solar heat loadings to the telephone exchange equipment floor, the following elevational precautions have been taken -

- (a) Deletion of all windows on the western facade which is the most subject to summer sunlight;
- (n) Provision of horizontal sun hoods to a reduced window

area on the north facade;

- (c) Corresponding increase of window area on the southern facade which is not subject to direct sunlight.

The necessity for this type of treatment has resulted in a building with an aesthetic appearance which was the object of considerable criticism, and is referred to in a later section of this Report.

Civil Defence.

27. In accordance with departmental policy on civil defence, the question of protection was investigated, and it has been planned to provide strengthened shel^{er} areas to the cable chamber for emergency purposes.

Construction.

28. Test bores have shown that a suitable foundation is available at a depth of 20 feet below the surface. The building has been designed with a structural steel frame encased in concrete with concrete slab floors. This type of construction has been chosen in order to keep column sizes to a minimum in the garage area, and to provide the greatest flexibility for changes which might be required in future. The design provides for the frame to be strong enough to carry additional floors to the limit height of 100 feet, and approximately 84 tons of steel will be required for this purpose.

Engineering Services.

29. The evidence submitted contains information of the various electrical services, and the hydraulic services include provision for a sub-soil drainage system connected to a sump from which excess underground water will be pumped to storm water drains.

30. Mechanical services include air conditioning to serve all areas housing telecommunication equipment, in order to ensure a high standard of service, and to reduce maintenance charges. Mechanical ventilation will be supplied to other essential sections of the establishment. Other services include heating, hot water supply, and emergency generating supply.

Documents.

31. It is estimated that the documents for calling public tenders can be completed within seven months from the date that instructions are given to proceed, while tenders could be called and a contract let, with work commencing approximately four months later. Construction of the building would take approximately eighteen months, making a total of about two and a half years for completion of the project.

Building Costs.

32. The estimates of the cost of the building as submitted to the Committee were based on prices ruling in March, 1958, and, including a contingency on all items, amounted to £400,000. Evidence taken by the Committee indicates that, although the original estimates were based on the March values, there were strong indications that tenders for a considerably lower total amount might be possible. It was confidently suggested that the building could be constructed for a total of £325,000, and the Committee sought further information to indicate what factors were responsible for the trends which are tending to create substantial reductions in present building costs so soon after the careful calculations on the March basis. The following statement sets out the details of the original estimates submitted to the Committee, with figures alongside showing the differences estimated under the present trend of lowered contracts:-

	<u>Original Estimate</u>	<u>Revised Estimate.</u>
	£	£
Site preparation, demolition and underpinning.	3,000	3,000
Building work, main structure	326,618	254,000
Hydraulic engineering services, sewerage, water, drainage	5,618	5,400
Mechanical engineering services, air conditioning, ventilation, heating, hot water, fire extinguishers and hoist	34,000	33,700
Electrical engineering services, light and power, thermal alarms	11,364	10,900
Miscellaneous, floor coverings, furniture & c.	6,200	6,000
Strengthening columns and foundations for extension to 100 ft.	13,000	12,000
	<hr/>	<hr/>
<u>Total</u>	400,000	325,000
	<hr/>	<hr/>

33. It was stated that there has been no specific change in award rates of pay for skilled artisans, and there are no available facts to substantiate the suggestion that suppliers of materials might be reducing their prices to the contractors. One of the main factors advanced to account for the considerable difference in the estimated figures was the tendency for some contractors to tender for works which they had not previously considered. In addition, the possibility of work becoming scarce in the near future appears to be encouraging contractors to submit much lower tenders, in order to maintain an efficient work force, until conditions improve again. It is evident to the Committee, therefore, that

whatever the cause, there are firm promises of substantial reductions in the final costs of major buildings, and this trend could continue. The result of such rapid reductions in cost factors could provide opportunities for dangerous slackness in making appropriate adjustments in estimates, with consequent errors in judgment when decisions are being made on allotment of contracts. The Committee, therefore, recommends that the building, as planned with provision for strengthening the foundations, be approved at the estimated cost of £325,000, but that a special review be made of all the factors concerned in the costs, immediately before contracts are signed for this proposal.

Financial Aspect.

34. The estimated total cost of establishing the Potts Point Exchange, including the cost of building, site, equipment, furniture, and allowance for recovery of spare equipment is £1,099,550. The evidence submitted in connection with the revenue and charges for the new exchange shows that the earnings from the telephone services exclusively will provide more than sufficient revenue to offset working expenses incurred in all phases of activities accommodated in the proposed building, as shown by the following total figures:-

	£
Estimated increase in annual net charges	117,730
Estimated increase in annual revenue attributable to the additional telephone facilities made available initially	150,000

As additional equipment is installed to cope with future development, the annual revenue and the annual charges will increase, and the excess of revenue over charges will be much greater.

The Site.

35. The site, having an area of approximately 12,115 square feet, is situated in Macleay street, Potts Point. It has a frontage of approximately 74 feet to Macleay street, and also frontages of 141 feet

to Crick avenue and Greenknowe avenue, giving a very valuable area, with streets on three sides. The site is located in a declared Residential District No.3 of the old City area, and there are indications of considerable growth in the population, with modern residential buildings. It appeared, on first sight, therefore, that the use of this valuable site for a three storey government building would be a most uneconomical and undesirable use of this area.

36. The Committee took evidence on this aspect of the proposal from several witnesses interested in the question, and closely studied the requirements of the Postmaster-General's Department in regard to the site. The possibility of using the area for other purpose, or of disposing of it and selecting an alternative site were also considered.

37. It was strongly represented to the Committee that the proposed building would be required for the two main functions of a local post office and a new automatic telephone exchange. The evidence shows that it is essential to have a new post office in this vicinity, and that the new telephone exchange must be within closely defined limits in this area. The necessity to locate the exchange as closely as possible to the "opper centre" was one of the critical factors in the original decision to acquire this site for the purpose, when the matter was being considered in 1949.

38. Another factor which is not so immediately apparent is the necessity to provide for the future. The plans brought to the Committee already made provision for an additional floor for the future, when extensions to the equipment becomes necessary, and the Committee was also convinced that strengthening of the foundations for an ultimate limit height building was necessary to allow for the requirements of the expanding population in the years to come. It is recognised, therefore, that although a three storey building may appear to be an uneconomical use of the site for the moment, the completed building in the future will be an adequate one for its purpose, and will be, also, a worthy addition to the structures in this important thoroughfare.

39. The Committee is satisfied, therefore, that, although the site is a most valuable one for other purposes, the establishment of the proposed building upon it is fully justified, and will result in an adequate use of the site.

Aesthetic Considerations.

40. Members of the Committee were struck by the type of architecture chosen for the building as illustrated on the plans submitted. The rather modern treatment of the facades to the three streets involved in the project was the subject of a good deal of criticism, and, in particular, the facade to Macleay street was referred to by a number of witnesses in adverse terms. Considerable study was given to this section of the inquiry, as some members of the Committee were inclined to agree that an important government building should be planned in such a way that it could be regarded as an example of appropriate, dignified and impressive design.

41. It was explained to the Committee that this project accommodates two clearly defined functional areas - a post office at ground floor level and a telephone exchange at the first floor level. The site usage has required building to the perimeter at all boundaries, and various other considerations helped to determine the external treatment of the building.

42. In order to reduce solar heat loadings to the telephone exchange equipment floor, the elevational precautions include deletion of all windows on the western facade; provision of horizontal hoods to a reduced window area on the north facade; and a corresponding increase of window area on the southern facade which is not subject to direct sunlight.

43. It is claimed that the design is a logical expression of the above requirements. The facade to Macleay street incorporates a light steel awning which protects the entrances to the post office from the weather and sunlight, and, in conjunction with ample glazing, will provide an inviting approach to both post office and future lift lobby. An endeavour has been made to create in the entrance, in a modern manner, some of the traditional features of colonial architecture.

44. The proposed building was illustrated to the Committee by the use of a model, on which the various colours created a more accurate impress on of the possibilities in the completed building than is evident on the plans. It was also explained that one important feature which cannot be shown on the drawings is the texture of the materials to be employed on the exterior, but which has a tremendous influence on whether the building is aesthetically satisfactory or not. This was also emphasized by several expert witnesses.

45. The departmental architects regard this as a very successful and contemporary design, in which functions and aspect have been thoroughly taken into account. The President of the Australian Institute of Architects considers that it is a very pleasing example of what a modern building might be, and he congratulates the designers upon it. He emphasizes that the facade relies upon its general form, shape and texture, so that the choice of the bricks for the structure is particularly important.

46. The Committee was convinced, by the explanations and the demonstrations on the model, that the facades, which received some adverse criticism during the inquiry, will present a satisfactory aesthetic appearance if constructed with carefully selected materials. It is recommended, therefore, that special attention be paid to the selection of the bricks and other treatment of the Macleay street facade.

47. Garden treatment.- It was explained that, although the verandah is actually on the building line, it should be possible to introduce some flower-box treatment which, taken in conjunction with street planting by the City Council, would have a softening effect. The Committee recommends that this matter be further considered, and that suitable action be taken to enlist the co-operation of the City Council to achieve the desired effect for the Macleay street frontage of this building.

Addition of Flats.

48. During the inquiry certain publicity was given in the press to a suggestion that, in order to make maximum use of the valuable site, additional floors should be added to provide residential flats to the limit

height of the building. Inquiry was made in this matter, and it was found that an approach had been made to the City Council by the Works Department in the earlier stages of the planning, in connection with the possibility of including some extra floors of office accommodation in the design of the building. The reply of the City Council indicated that the site was in a Residential Area Class "C" Zone, that the introduction of office accommodation was out of keeping with the present development, and was not favoured by the planning authorities.

49. With regard to the addition of accommodation for residential purposes, the locality is suitable for flats, but provisions of the Local Government Act limit the total amount of accommodation which can be provided on the area. The formula which is applied in pursuance of the Act limits the area in this case to 37,000 square feet. The building, as it is planned at the moment, with functional requirements, occupies a little over 36,000 square feet, so that, unless there is a change in the Act, it will not be permissible to build any additional accommodation. Any extension to the building would have to be made in contravention of the Act, and, although the Commonwealth Government is not strictly bound by the State law in this matter, it was stated in evidence that Government policy is to adhere to the regulations as closely as possible, and to depart from them only in special cases where it is necessary to provide essential facilities in the public interest.

50. It is not the policy of the Government to provide deliberately for space for commercial activities on a planned scheme, and the inclusion of residential flats in this exchange building would introduce technical problems, which would add to the cost of the facilities now planned. Government facilities would have to be divorced from the commercial areas, with special lifts, escape stairs and other services. This would result in a reduction of the floor area for the telephone exchange and the post office, probably in the order of over 17 per cent of the effective area.

51. The Postmaster General's Department does not need the flats, but it will need additional floors for equipment and other exchange uses in the future. The indications are so strong in this

direction that the Committee has recommended strengthening the foundations to take a limit height building, and it would be highly undesirable to erect residential flats which would be useless for future exchange equipment, for which specialised accommodation is essential.

52. The Sydney City Council approached the Postmaster-General with a request that additional floors be added for residential purposes, but it appears likely that the City Council was not in possession of all the factors involved in this question.

53. The Committee gave full consideration to the matter of additions to the building, and recommends that flats should not be included in the plans, but the space should be reserved for future floors for exchange and postal facilities.

Parking facilities.

54. The garage area planned in the building is designed to house about 8 departmental vehicles overnight, but no space is planned for off-street parking for the public. A suggestion was made by the Cumberland County Council that space for this purpose should be included, and the Committee made inquiries into the matter. In order to provide off-street parking for the public it would be necessary to place the post office and exchange at higher levels. This is undesirable, because it has been necessary to utilize the whole of the ground floor to accommodate the post office and some of the exchange equipment essential at this level. It would also add considerably to the cost of the building, and it was pointed out that the public using the post office would require parking for only short periods. There are three street frontages to the building, and it is considered that they afford a reasonable amount of parking space for persons transacting business in this building. Evidence from the King's Cross Chamber of Commerce affirmed that there is adequate provision of parking facilities in the area, and much of it is unused at present. The Committee recommends that parking space for the public should not be provided in this building.

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

55. The following is a list of the Committee's conclusions, in summary form only, arrived at after study of the proposal, evidence, plans, and the problems 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:-

- (1.) There is a pressing need for a new exchange and post office building for the present and near future period.(para.18).
- (2.) The foundations should be strengthened, as suggested, to provide for a limit height building in the future(para.21).
- (3.) The building should be approved, at the estimated cost of £325,000, but a special review should be made, immediately before contracts are signed for the proposal, of all the factors concerned in the costs (para.33).
- (4.) Although the site is a very valuable one for other purposes, the establishment of the proposed building upon it is fully justified, and will result in an adequate use of the site (para.39).
- (5.) After explanations and demonstrations with the model, the Committee is convinced that the facades, which received some adverse criticism during the inquiry, will present a satisfactory aesthetic appearance, if constructed with carefully selected materials. (para.46).
- (6.) Special attention should be paid to the selection of the bricks and other treatment of the Macleay street facade(para.46).
- (7.) Efforts should be made to enlist the co-operation of the City Council to achieve a garden effect to the Macleay street frontage of the building (para.47).
- (8.) It is not desirable to include residential flats in the plans for this building, but the space should be reserved

(8) (continued)

for future floors for exchange and postal facilities
(para.53).

(9.) Parking space for the public should not be provided in
this building (para. 54).

(W. R. Lawrence.)
Chairman.

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