

Parliamentary Standing Committee on Public Works

REPORT

relating to the



RELOCATION OF THE AUSTRALIAN HYDROGRAPHIC OFFICE TO WOLLONGONG, NSW

(Twenty-First Report of 1992)

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA
1992

The Parliament of the Commonwealth of Australia
Parliamentary Standing Committee on Public Works

Report Relating

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**Relocation of the Australian Hydrographic
Office to Wollongong, NSW**

(Twenty-First Report of 1992)

TABLE OF CONTENTS

	Page
Members of the 30th Parliamentary Standing Committee on Public Works	vi
Extract from the Votes and Proceedings of the House of Representatives of 14 October 1992	vii
THE REFERENCE	1
THE COMMITTEE'S INVESTIGATION	1
BACKGROUND	3
THE NEED	3
Existing Facilities	3
Increasing Demand	4
Short-term Relief	4
Staff Amenities	5
Working Conditions	5
Committee's Conclusion	6
THE PROPOSAL	7
Options Considered	7
Financial Evaluation of Options	8
Siting Options	9
Committee's Conclusion	9
The Preferred Site	9
Access	10
Car parking	10
Child Care	11
Staff Loss	11
Committee's Conclusion	11
Committee's Conclusion	12
Training	12
Maintenance of Services	13
Committee's Conclusion	13
Accessibility to Clients and Contractors	13

SCOPE OF WORK	14
Committee's Conclusion	15
Visible External Form	15
Internal Fitout	16
Workstations	16
Technical Workstations	16
Computer Workstations	17
Executive Workstations	17
Standard Workstations	17
Internal Finishes	17
Lobby	17
Floors	17
Walls	17
Ceilings	18
Lighting	18
Doors	18
Staff Amenities	18
Landscaping	18
Training/Educational Facilities	19
MECHANICAL SERVICES	19
ENERGY CONSERVATION	19
Electrical and Ancillary Services	20
Hydraulics	21
Sewer	21
Stormwater	21
Cold and Hot Water Services	21
Solar power	21
Lift Services	21
Vertical Transportation	21
Fire Safety	22
OCCUPATIONAL HEALTH AND SAFETY	22
ENVIRONMENTAL ASPECTS	22
CONSULTATIONS	23
Timetable	24
Financial Aspects	24
Committee's Recommendation	24

DISSENT BY MR. BILL TAYLOR MP, MR. BRUCE SCOTT MP AND
SENATOR PAUL CALVERT 24

CONCLUSIONS AND RECOMMENDATIONS 25-26

APPENDICES

Appendix A - List of Witnesses A-1 - A-2

Appendix B - Project Drawings B-1 - B-8

**MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS**

(Thirtieth Committee)

Mr Colin Hollis MP (Chairman)

Mr William Leonard Taylor MP (Vice-Chairman)

Senate

Senator Bryant Robert Burns

Senator Paul Henry Calvert*

Senator John Robert Devereux

House of Representatives

Mr Ewen Colin Cameron MP

Mr Lloyd Reginald O'Neil MP

Mr Russell Neville Gorman MP

Mr Bruce Craig Scott MP

*Appointed on 24.8.90 following the retirement of Senator
Dr Glenister Sheil

Committee Secretary: Peter Roberts

**Sectional Committee on the Relocation of the Australian Hydrographic
Office to Wollongong, NSW**

Mr Colin Hollis MP (Chairman)

Mr William Leonard Taylor MP (Vice-Chairman)

Mr Russell Neville Gorman MP

Inquiry Secretary: Denise Denahy

Secretarial Support: Sue Whalan

EXTRACT FROM THE VOTES AND PROCEEDINGS OF
THE HOUSE OF REPRESENTATIVES

No. 152 dated Wednesday, 14 October 1992

13. PUBLIC WORKS - PARLIAMENTARY STANDING
COMMITTEE - REFERENCE OF WORK - RELOCATION
OF AUSTRALIAN HYDROGRAPHIC OFFICE TO
WOLLONGONG; Mr Staples (Minister for Aged, Family and
Health Services), for Mr Beddall (Minister representing the
Minister for Administrative Services), pursuant to notice, moved
- That, in accordance with the provisions of the *Public Works
Committee Act 1969*, the following proposed work be referred
to the Parliamentary Standing Committee on Public Works for
consideration and report: Relocation of Australian
Hydrographic Office (AHO) to Wollongong.

Debate ensued.

Question - put and passed.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

RELOCATION OF THE AUSTRALIAN HYDROGRAPHIC OFFICE TO WOLLONGONG, NSW

By resolution on 14 October 1992 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report the proposal for the relocation of the Australian Hydrographic Office to Wollongong, NSW.

THE REFERENCE

1. It is proposed that the Australian Hydrographic Office (AHO), presently located in an eight storey Defence owned building in North Sydney be relocated to Wollongong. The new facilities are proposed to be located in Station Street, adjacent to the Wollongong Railway Station and the new Taxation Office building due to be completed in 1993.

THE COMMITTEE'S INVESTIGATION

2. The Committee received a written submission from the Department of Defence (Defence) and evidence was taken from its representatives at a public hearing held at Wollongong on 13 November 1992. Prior to the public hearing the Committee inspected the present accommodation in North Sydney and the four sites considered for the new building, namely the Leichhardt site, the Rawson Street site, the Abigroup site and the Station Street site.

3. The following persons and organisations also presented submissions and appeared before the Committee at the public hearing:

- . Hon. S P Martin MP
- . Wollongong City Council
- . Hydrographic Society
- . Public Sector Union

- . Metal and Engineering Workers Union
- . Returned and Services League - National Headquarters
- . Mr J Donohoe
- . Commander G Geraghty
- . Mr T Long.

Submissions and letters were also received from the following:

- . ACROD Ltd
- . Hon S West MP
- . Mr D Holliday
- . Mrs V Donohoe
- . Mrs P Donohoe
- . Mr J Howell
- . Mr R Liggins
- . University of Wollongong
- . Australian Heritage Commission
- . Australian Institute of Architects
- . Australian Quadraplegic Association
- . Mr B Pillich
- . Commonwealth Fire Board
- . Australian Maritime Safety Authority.

A list of witnesses who gave evidence at the public hearing is at Appendix A. The Committee's proceedings will be printed as Minutes of Evidence.

BACKGROUND

4. The Hydrographic Service (the Service) is responsible for the publication of nautical charts and other information required for the safety of all ships (both military and civilian) navigating in Australian waters. The Service had its origins in the British Admiralty Hydrographic Office in 1795. The office carried out surveys and published charts of the Australian coast throughout the 19th century in support of the defence and commercial development of the colonies. The Royal Australian Navy (RAN) assumed responsibility for hydrographic surveys in 1920 and for the publication of charts in 1942. The strong military rationale in support of the Service has been maintained on the basis that 'the availability of comprehensive maps and charts is fundamental to the successful conduct of military operations'.

THE NEED

Existing Facilities

5. The AHO is presently located in an eight storey Defence owned building in North Sydney. The building as originally configured, was acquired by Defence in 1977 and originally provided 2222 m² of office accommodation with 15 car spaces in two basement levels.

6. To meet the increasing requirement for additional office and on-site chart storage space, building renovations including some re-arrangement of the ground floor and conversion of 10 car spaces were completed in 1979. This resulted in 295 m² additional usable space in the lower basement giving a total of 2670 m².

7. The extra space provided a clean dry area for the temporary storage for charts awaiting preparation for despatch and distribution. The residual 194 m² in the upper basement provides two car parking spaces (in lieu of the original 15 spaces) for the Hydrographic Office station wagon and Detached Survey Unit (HODSU) 4WD vehicle and limited associated survey equipment. The need for secure storage of deployable equipment in the form of a sea container and a trailerable survey craft cannot now be met at Walker Street and these are stored on other Navy property remote from the AHO.

8. The standard of accommodation is poor and poses operational difficulties which give rise to many inefficiencies. The single most significant limitation in the existing building, apart from the overall floor space available in the building, is the maximum useable area on each floor. This obliges chart production staff to commute continually between floors to carry out different aspects of their daily work schedule. Operationally the building is inefficient for the functions performed. These inefficiencies cannot be overcome by alteration or refurbishment.

Increasing Demand

9. Apart from the expanding capability of the AHO to gather data more quickly and efficiently arising from significant advances in technological enhancement and the increased number of data gathering assets, the demand for accurate information by the Fleet and an expanding number of civilian maritime vessels has imposed added pressure on the limited resources of the AHO to increase output. The increasing workload has not been accompanied by additional working space and there remains no flexibility to expand to meet the current and future demand.

Short-term Relief

10. In the expectation that an acceptable medium term solution would be identified to satisfy the accommodation shortfall at 161 Walker Street, and to facilitate urgent expansion in the coordination and development and oceanographic support areas, short-term relief to the critical overcrowding problem was arranged early in 1991 through the lease of additional accommodation at 118 Walker Street.

11. Presently, Defence leases two floors (each of approximately 638 m²) of open-planned office accommodation at this address. This imposes a further operational penalty by virtue of the inefficiencies created by the need to traverse Walker Street throughout the day. The lease for the 118 Walker Street property expires as from 1 July 1993 but is extendible by monthly or quarterly periods.

Staff Amenities

12. Current staff amenities cannot cater for staff needs

- . a small lunch room on the seventh floor does not allow space for seating. A lunch room on the ground floor is used for a sick bay and for lockers. Staff who stay indoors at lunchtime are forced to remain at their desks
- . only one shower for both sexes is available in the complex. This is a converted toilet. The floor of the cubicle slopes towards the adjacent toilet.
- . only two car parking spaces are available for official vehicles
- . there is no space available in the complex for any recreational or leisure facilities. Every floor level is taken up with workstations or storage facilities.

Working Conditions

13. Problems exist in most working areas

- . doubt exists about the adequacy of the structural floor capacity to support a higher demand for chart storage than presently available. Where storage is on the fifth level, there is clear evidence of the floor being highly stressed by the 'out of level' storage vertical plan cabinets
- . there is inadequate space for compactus particularly in the registry area (located at 118 Walker Street) which is remote from the majority of users
- . the closeness of working areas for cartographic staff on the second and third levels limits access to natural light and does not allow variance of light darkness for light table activities
- . there is limited access to natural light for cartographic staff undertaking certain drafting functions and inadequate lighting variation to allow artificially darkened areas for cartographic light table activities

- there is inadequate space/plumbing support for lithographic and screenprinting
- the dispatch area is accommodated in the basement in substandard accommodation without access to natural light. Delivery dock arrangements are unsatisfactory and inefficient
- passageways are cluttered with filing cabinets. The general 'rabbit warren' appearance has an adverse effect on staff morale
- there is a noisy and distracting working environment caused by the removal of partitions to utilise the maximum available space
- meeting rooms for training, presentation of briefs, discussions with visitors/contractors are limited
- there is restricted space for the display of hydrographic products or activities.

14. To overcome safety concerns arising from the poor state of the original facade, parts of which had fallen onto the pavement in Walker Street threatening pedestrians, the external facade of the building was replaced as a matter of urgency during 1991-92.

15. The single most significant limiting factor apart from the overall floor space available in the building is the maximum usable area on each floor of 295 m². This imposes the necessity for chart production staff to commute continuously between floors of the building to carry out different aspects of their daily work schedule. Operationally the building is inefficient for the functions performed. These inefficiencies cannot be overcome by alteration or refurbishment.

Committee's Conclusion

16. The standard of accommodation at 161 Walker Street is poor, and despite renovations the building is unable to adequately cater for the technical activities undertaken.

THE PROPOSAL

17. The proposed facilities will comprise a two-level podium containing entry foyer, stores, registry and a welcoming room at ground level with an upper level car park for 40 vehicles. Above the podium will rise a five-level office 'tower' with each floor having a nominal net area of 800 m². The top floor is stepped back to the north to provide a covered roof deck for staff recreational and leisure use. The structured car park above ground was selected to avoid excavation of the rock sub-base present at the site.

Options Considered

18. During 1991, a Project Control Group (PCG), chaired by the Director General Facilities - Navy was formed to oversight and provide guidance to the Project Director during the definition, development, construction and commissioning phases of a project set up to identify alternative accommodation options for the AHO.

19. To assist the Project Director, a team of independent consultants (Project Directors Pty Ltd) was engaged midway through 1991. The company, in association with Inscan, Leighton Contractors Pty Ltd and the JTM Group, reviewed and amended the user requirement, completed early conceptual sketches of a typical building regardless of location, identified an order of cost estimate and assessed the availability and advised on the cost implications of alternative locations in Sydney, Newcastle and Wollongong.

20. Early in 1992, on the basis of information presented to the PCG, a submission was prepared briefing the Minister of Defence on issues related to each of the location options considered. The completion of the submission in March 1992 signalled the conclusion of the consultancy.

21. On 24 June 92, the Minister of Defence (Senator Robert Ray) announced that the AHO would be relocated to Wollongong and asked that work proceed to the point where the project could be considered by the Public Works Committee and for staff to be regularly advised of planning progress.

22. To meet this objective, the PCG met to put in place the steps necessary to implement the Minister's decision and to oversight delivery of the project. In August 1992 Kinhill Engineers Pty Ltd was engaged to assist with pre-construction planning and to advise on the most appropriate site for construction of the new AHO.

Financial Evaluation of Options

23. The three location options put to the Minister (Leichhardt in Sydney, Wollongong and Newcastle) were subjected to a detailed financial evaluation using discounted cash flow techniques. The aim was to determine the financial attractiveness of the options by comparing receipts and expenditures with a view to generating a net cash flow over a 12 year period and which when discounted back, would yield a discounted Net Present Cost (NPC).

24. The outcome of the financial evaluation of the three options indicated that remaining in Sydney and constructing a new building on the Leichhardt site was the cost effective option. That is, in strictly financial terms, taken over a period of some 12 years, the Department was \$8.9m better off by relocating to Leichhardt than staying in North Sydney. Furthermore, it showed that by relocating to Wollongong the Department was \$7.1m better off than staying at North Sydney. Expressed another way, in selecting the Leichhardt option over Wollongong, the Department would be \$1.8m better off - over 12 years.

25. In net present value terms, having regard for the time value of money, the difference between Leichhardt and Wollongong (about \$150 000 per year) is considered to be marginal - in the context of the benefits produced by the organisation.

26. Non-financial factors considered, included a preference of staff to remain in Sydney, the possible disruption of productivity if staff losses result and the implications of recruiting and training staff to replace those who elect not to be relocated. Against this, the relocation enabled the Government to contribute in a positive way by providing a stimulus to the economy of the Illawarra Region through employment during the construction phase, local recruitment of staff lost as a result of the relocation, and the injection of ongoing operating funds into local commerce.

Siting Options

27. Prior to the selection and acquisition of the preferred site, nine sites were thoroughly investigated, one of which included an existing Defence site on the western side of the railway line in Gipps Street, Wollongong. The site houses a depot utilised by the 'B' Company, 4/3 Royal NSW Regiment (RNSWR), one of two Reserve Army units in the Illawarra Region (the other being the Wollongong University Regiment). Whilst adequate space is available on the site to construct a building of approximately 5000 m² (with an optimum area per floor of 800 m²), there would be no residual space for the reserve troops to drill and carry out other essential training functions, including weapons instruction or for the parking of vehicles of the soldiers attending parade nights.

28. Of the remaining eight sites, one was sold during the investigation, one was inappropriately zoned and two were excluded on the basis of high acquisition costs.

Committee's Conclusion

29. The Committee believes that the Station Street site adjacent to the Wollongong Railway Station is the most appropriate site for construction of an office for the Australian Hydrographic Service.

30. To provide an objective assessment of the four remaining sites, criteria for selection were developed by Kinhill Engineers against which each site was ranked. From this assessment, one site was excluded on account of estimated construction cost penalties. Of the three remaining sites, the preferred site (referred to as 'the Station Street site') more closely met the Department's criteria for selection.

The Preferred Site

31. The Station Street site, adjacent to the proposed new Taxation Office building to be completed during 1993, has an area of 1935 m² unencumbered by easements or rights-of-way permitting a development in the order of 6800 m². The site overlooks the Wollongong Railway Station and is in close proximity to retail outlets and commerce to the west of the CBD.

32. Prior to acquisition of the site (which currently accommodates 50 public car spaces), the views of the Wollongong City Council were sought about the effect acquisition would have on train commuters, residents, shopkeepers or shoppers. The loss of car parking spaces was not seen as an influence inhibiting acquisition.

33. Redevelopment of the site is compatible with the Council's longer term plan for redevelopment of the western sector of the city centre. The site offers considerable potential to design an unobtrusive but elegant structure to reflect the significance of the functions performed within the building.

Access

34. The Station Street site is 10 minutes by car from the majority of Wollongong suburbs. By virtue of its adjacency to the Wollongong Railway Station, the site is well serviced by four local bus companies which service suburban Wollongong, Shellharbour and Albion Park to and from the CBD during and after normal office hours. A taxi rank is located adjacent to the site.

35. Rail services are available to the south coast and northern suburbs and to and from Sydney on a regular basis. The State Rail Authority has been approached to determine if the frequency of train services to and from Sydney can be improved. The CBD, which adjoins the Princes Highway, is five minutes drive by car from the South Coast (Freeway 6) and 30 minutes from Campbelltown (Freeway 5). The site is 25 minutes drive from the southern tip of the Sutherland Shire and 50 minutes drive to Sydney Airport which gives an indication of the speed with which international parcels (or visitors) can be despatched or received.

Car parking

36. The Wollongong City Council has advised that there are over 600 on-street spaces within the CBD with the formal off-street parking stock totalling approximately 4300. Those who drive to the CBD generally have no problems finding parking. The proposed new AHO will contain approximately 40 undercover car spaces plus an additional 10 hard standing spaces once the landscaping arrangements are refined. This equates to more than one car space for every three members of staff. The Committee was advised that this arrangement is acceptable to the Council.

Child Care

37. There are 16 government and 20 private child care centres in the Wollongong area. Of these, six are located in the CBD. The majority of child care facilities are located in the suburbs of Wollongong and are easily accessible on the way to and from the workplace. The distribution of these suburban centres to determine accessibility and availability (including waiting times for children in the 0-2 and 2-5 age groups) is being further investigated by Defence.

38. Consideration will be given to a number of options:

- including a facility on-site serving solely the demand generated by AHO staff
- entering into a cost sharing arrangement with a private child care organisation to meet this need off-site; or
- sharing a facility with another government or commercial organisation.

Staff Loss

39. Possible loss of expertise through staff loss was emphasised by various groups. Defence advised the Committee that the possible extent of staff loss is not known and cannot be determined conclusively until all staff have exercised their election to relocate or not. Defence does not believe that there exists in the community a reservoir of qualified, unemployed, marine cartographers. However, there are grounds to suggest that a large number of basically trained people exist in the community, who could be adequately trained to satisfactorily perform activities related to hydrographic operations within a reasonable period of time. Defence believes that these people will be educationally equipped to allow them to enter the organisation and contribute earlier than could be expected from untrained personnel.

Committee's Conclusion

40. Should key staff resign, the Committee believes that it will be essential for staff resources within the Australian Hydrographic Office to be diverted to critical functions while efforts are being made to recruit qualified replacement staff.

41. Defence acknowledges that the production rate of charts could slow for a period during and immediately following the move. However, Defence does not believe that its function - to maintain safety of life at sea - will be compromised. Considerable potential exists for contingency plans to be put into place to attract either replacement staff locally, from Sydney, nationally or internationally. This can be augmented by training programs initiated from within the AHO, from academic institutions, and/or from other government departments such as the Department of Employment, Education and Training (DEET) with its national infrastructure focused on the 'skills base' of the unemployed population. Defence acknowledges that there will be some drop in the rate of production of charts in the office. This may involve a redistribution of resources within the AHO to keep the essential services functioning. This ability to redirect the expertise within the office will ensure that any risk to maritime safety is not compromised.

42. Defence acknowledges that certain staff will wish to remain in the Sydney metropolitan area primarily for personal family reasons, spouse employment factors, or for reasons of particular schooling needs. Entitlements for the staff are currently being investigated by Defence.

43. Defence does not believe that redundancy for staff is a preferred alternative to moving to Wollongong. For staff electing to remain in Sydney, Defence will make every effort to seek an effective redeployment solution by ensuring adequate redeployment and retraining options are available for staff.

Committee's Conclusion

44. The only objective means of assessing the effect on the retention rate of staff will be after formal elections held six months prior to the move.

45. The Committee recommends that the Department of Defence continues to liaise with staff and staff associations during the relocation process.

Training

46. Defence advised the Committee that it had received a letter from the Commonwealth Employment Service (CES) in Wollongong concerning an industry based training scheme. The CES maintains that in consultation

with the AHO and relevant training organisations, the CES is prepared to tailor a training package specifically targeted to the needs of the AHO and the occupations which may prove difficult to recruit.

Maintenance of Services

47. Defence has advised that maintenance of links with Defence users will be maintained. The AHO will maintain a dedicated communication link with maritime headquarters. The maritime commander does not perceive any adverse effect on the frequency of communications or the ability to provide or obtain hydrographic data from the AHO should it be relocated to Wollongong.

48. Defence has advised that external consultants and servicing organisations will maintain existing servicing arrangements, or alternatively, establish a presence in Wollongong.

49. Defence has advised that there is no basis to suggest that other (general navigational) chart users will be affected by the move.

Committee's Conclusion

50. The Committee believes that relocation of the Australian Hydrographic Office to Wollongong will not adversely affect services provided.

Accessibility to Clients and Contractors

51. Defence does not believe that the delivery of charts and other products to users will be jeopardised.

52. Because the AHO is not location dependent, it is not expected that the regular supply of charts to the fleet will alter significantly from existing arrangements. No additional service or delivery costs are anticipated.

53. Defence advised that research shows that a number of prime contractors are prepared to continue to service the organisation without detriment from Sydney or alternatively relocate and establish a commercial presence in Wollongong.

SCOPE OF WORK

54. The indicative design of the building comprises a two level podium containing entry foyer, stores, registry and a welcoming room at ground room with an upper level of car parking for 40 vehicles. Above the podium, which occupies some 75% of the site, rises a five level office 'tower' with each floor having a nominal net area of 800 m². The top floor is stepped back to the north to provide a covered roof deck for staff recreational and leisure use. The location of the structured car parking above ground was selected to avoid excavation of the rock sub-base present at the site. An advantage of the elevated car park position is that it will be naturally ventilated, being open on the east and west elevations to capture prevailing breezes.

55. The site is presently a gently sloping bitumen car park. Demolition is limited to removal of signs and barriers. Excavation will be minimal involving some minor levelling to achieve the desired ground level datum and pits will be required at the lift shafts for overrun. Some trenching will be required for stormwater and sanitary drainage. Pending geotechnical analysis, observation indicates a rock sub-base and it is anticipated that the building will site on pad footings at near surface level of the existing rock. Vehicular access from Station Street to the raised level site will be by ramp whilst pedestrian access from the nearby railway station will be at existing grade.

56. The structural system proposed is a reinforced concrete structure with a column grid of 8.4 m x 8.4 m which is well suited to both office fitout and car parking bay size requirements. A floor-to-floor height of 3.95 m has been selected giving ceiling heights in office areas of 2.7 m and allowing for adequate service and structural zones. Each office floor is serviced by two lifts, two stairs, toilets, tea alcove, meeting and resource room facilities. These provisions are centrally located in a high bay zone where central stores and compactus will be located. Internal circulation on each floor is logical and clear, running the full length of each floor south to north along the lift lobby corridor access.

57. The design takes into account and conforms with the Building Code of Australia (BCA) and the requirements as specified in 'The Performance Criteria for the Provision of Facilities for Government Office Accommodation' (1991).

Committee's Conclusion

58. The design of the proposed building will provide a floor area which will enable chart compilation to be carried out on the one level.

Visible External Form

59. The building employs conventional commercial structural systems and finishes, combining them in such a way as to project a maritime image suited to the activities of the AHO, its Wollongong location and the availability of expansive sea views from the site. Modern and distinctive, the building design is intended to reflect the unique nature of the hydrographic functions performed.

60. The separate lift shaft is an interesting feature, - conveying an historical allusion to the lighthouses of the past - important to mariners navigating coastal waters.

61. The building form takes maximum advantage of the elevated site and its available sea views by providing a glass curtain to the eastern elevation. This area of 'transparency' is anchored solidly to the rock site by the solid appearance of the ground level storage podium. The naturally ventilated open car park level provides a visual separation to the two forms. Above the podium, the upper floors are set back from the street to soften the form as well as to provide a terrace, for the use of staff, at car park level.

62. To the north, west and south elevations, a precast concrete wall panel system is proposed. To avoid summer solar heat gain and due to the absence of significant views, window areas are reduced on these elevations and internal planning arranged to locate support functions requiring less outlook (e.g. library, stores, computer support). The external lift shaft is also clad in precast concrete panels. All precast lift panels will be off-form concrete with a light sandblast finish.

63. The lift shaft panels will be white cement to emphasis the verticality and symbolise 'the beacon reference' whilst elsewhere the precast panels will contain ochre colouring. The roof deck and car park roof level terrace will be paved with similar ochre coloured precast paving panels over a

waterproof membrane system. Non-structural roofing elsewhere will be colourbond metal decking of mid-grey colour. The roof level canopy over the recreational/leisure roof deck will be steel framed with riveted steel roofing panels symbolic of maritime construction techniques. Indicative floor loadings are shown below:

- office areas 3.0 k Pa
- compactus areas 10.0 k Pa
- car park areas 3.0 k Pa
- warehouse areas 1.2 k Pa per metre of clear height
- dead loads partitions: 1 k Pa
Ceilings and AC: 0.5 k Pa.

Internal Fitout

64. The overall design philosophy of the new building is to provide a modern, bright and generally open-plan working environment consistent with good quality commercial office services, finishes and fixtures having regard to the recommendations contained in the 'Defence Scales and Standards', 'Commonwealth Office Accommodation Guidelines' and the 'Code of Practice for Commonwealth Leased Premises'.

Workstations

65. Generally, the AHO will be provided with workstation-type furniture specially designed to match the technical nature of the tasks undertaken. Where possible, it is intended that staff be given the opportunity to contribute to the layout of their individual workspaces during the design phase. A variety of workstations has been identified to match specific activities within the AHO.

Technical Workstations

66. Technical workstations are designed to accommodate the drafting functions within the chart production area. A 'prototype workstation cluster' has been introduced recently comprising a drafting, layout and light table complemented by a digitising table. The results of the prototype trial in

terms of building and operational efficiency have been encouraging and action is well advanced to further develop the prototype prior to finalising the Design Briefs.

Computer Workstations

67. Computer workstations comprise left and right return and PC workspace with additional space designed into the area to accommodate a second computer terminal.

Executive Workstations

68. Executive workstations allocated to senior officer staff (performing predominantly administrative-type functions) comprise left and right return and PC workspace plus additional table space/discussion area for visitors.

Standard Workstations

69. For basic administrative functions, the standard workstation comprises a left and right return including a PC workstation space.

Internal Finishes

Lobby

70. The main entrance lobby opening into a 'welcoming room' and display area and Research/Training Centre (to facilitate university affiliation arrangements) will be suitably designed and furnished with a distinctive quality of finish reflecting the maritime functions performed.

Floors

71. Floors will be finished with commercial grade carpet on quality underfelt to all areas except the lunch room, wet areas, main entrance and other selected areas.

Walls

72. The number of partitioned offices will be minimised and arranged to take maximum advantage of the available natural light. Walls to rooms/offices will generally be full height, floor-to-ceiling, steel stud with

plasterboard lining. Glazed walls will comprise powdercoated aluminium glazing frame and clear, laminated glass butt-jointed with clear silicon joints.

Ceilings

73. Ceilings will generally be suspended and painted plaster with some ceiling areas translucent at skylight areas in the main lobby.

Lighting

74. Concealed/effect/specific-to-task lighting to design layout and to Australian Standards for a VDU environment will be provided.

Doors

75. Internal doors will comprise 35 mm solid core doors set in 2600 mm powdercoat door frame. Fire doors to stairs and plant rooms will have appropriate door closers and signage and meet the requirements of the BCA. Operable doors will be provided in the Conference Room.

Staff Amenities

76. An objective of the proposal is to provide substantially improved amenities for staff over those now provided at 161 Walker Street, North Sydney. Shower facilities are included for staff. A library and main conference centre is to be provided with smaller additional meeting rooms on each level. The 'welcoming room' at the main entrance is a design innovation incorporated to enable AHO staff to receive visitors and discuss aspects of work without the need to proceed to inner areas of the office. Elsewhere in the building, meeting rooms/discussion spaces will be included on each level.

Landscaping

77. A suitably landscaped roof deck featuring an 'outdoor eatery' is proposed for the relaxation of staff. Lunch room and barbecue facilities will be included adjacent to the shielded viewing deck which will have commanding views of the ocean and across to the mountain ranges to the west.

78. The site will be landscaped and trees planted to soften the environment and generally improve the amenity of the site for users.

Training/Educational Facilities

79. Preliminary discussions between the AHO executive and academics from the Wollongong University and Wollongong TAFE have confirmed that considerable potential exists to enter into a cooperative affiliation for the training of AHO staff and research particularly directed to the development of the electronic chart. As a means of encouraging this affiliation, the proposal includes a dedicated training/research suite for the joint use by University/TAFE personnel.

MECHANICAL SERVICES

80. All work is to comply with the BCA and AS 1668 Parts I and II. Mechanical services equipment is planned to have a minimum design life of 15 years and it is intended that all equipment (that is, air handling units, pumps and the like) will be selected on the basis of cost-effectiveness over the projected life of the equipment (including maintenance costs).

81. Airconditioning to the office levels will be activated through central, roof mounted, air cooled chillers (with the requisite acoustic treatment) with conditioned air reticulated to these levels via a central riser shaft. Control of conditioned air for each level will be via a variable air volume system with a building management system ensuring efficient usage. The ground floor level will be serviced with chilled water from the central plant with a separate air handling unit at this level.

ENERGY CONSERVATION

82. Defence has sought advice from several sources including the Department of Primary Industry and Energy on energy saving innovations. In general planning terms, the building design and installed mechanical and electrical plant are to minimise energy use. To this end, a building management system is to be installed for control and management of all services and facilities. All systems and equipment are to be analysed to ensure that minimal energy usage is a major criterion for selection. It is intended that a performance index for the building be established with energy targets assigned to each element in regard to fuel or energy type, location and usage.

83. Defence advised the Committee that it believes it has designed an energy efficient building. The building has been designed to be solar passive in its orientation. Concrete panels are located on the northern and western faces of the building to take the heat of the sun away from the building. A blade on the front of the building will take the late sun off the face. This will reduce the heat load. Solar cells will be located on the roof.

84. The Department has specified low loss ballast luminaries with natural light sensitive switching such that, as the sun comes onto the face of the building, lights will be switched off.

Electrical and Ancillary Services

85. The facility will require an electrical load of 500 kW. Currently there is no direct access of 11 kV mains to the site requiring the construction of an 11 kV/415 V substation.

86. Power is to be reticulated throughout the building in accordance with BCA and all wiring is to comply with AS3000. Emergency power is to be provided by a 100 kW generator. Local uninterrupted power supplies to protect computer systems are to be included with that equipment.

87. Voice and data communications are to be reticulated via a 12 core optical fibre cable capable of supporting the present and future requirements of the AHO.

88. Lighting: Design will follow AS 1680 Parts I and II with the use of energy efficient lighting sources, ballasts and design. Use is to be made of external light sensing to switch lighting tubes in some fittings during daylight hours.

89. Security: A single point of entry for pedestrians and vehicles will be via the ramp at the south-western corner of the site. Vehicular entry and exit will be boom gate controlled. Personnel entry and exit into the main trunk of the building from the foyer will be via a keycard type system.

90. Telephone: The telephone system is to be installed with PABX (or alternative technology) with a minimum capacity of 200 extensions and 50 incoming lines.

Hydraulics

91. All design is to comply with the relevant codes and the specific requirements of the Water Board and any other relevant authority. Toilets will be provided at all levels with facilities for disabled in accordance with the BCA.

Sewer

92. The sewer system will gravitate from all ground floor fixtures and new plumbing stackwork and connect to the existing Water Board sewer located in Station Street. The Water Board has advised that the existing water and sewer mains are of adequate size to service the proposed building without amplification.

Stormwater

93. The stormwater drainage system is to conform to the City of Wollongong Minute No. 809 (dated 17 October 1988) for Detention of Peak Stormwater Flows. This is to be achieved by use of a detention structure within the existing stormwater drainage system.

Cold and Hot Water Services

94. These will be provided to toilets and all other amenities with boiling water units provided as required.

Solar Power

95. The detailed design of the facility will seek to maximise the economic use of solar power within the operation of the building services.

Lift Services

Vertical Transportation

96. Two lifts are located to the south of the office floors in a separate lift shaft giving the 'lighthouse effect'. Here the design of the lift lobbies will give staff the opportunity to take advantage of the expansive sea views

whilst en route between the various departments in the building. Two stairwells located in the office tower servicing each level (that is, seven stops) are provided in accordance with AS 1735.

Fire Safety

97. The new AHO facility will be equipped with fire sprinklers with hydrants, hose reels and hand-held extinguishers provided at strategic locations throughout the building. Detailed consideration has also been given to the access to the site and buildings for fire fighting appliances.

98. Though Defence does not support the proposition that local fire authorities be given the power to certify or approve the design and construction of Defence buildings for constitutional and practical reasons, nonetheless, initial discussions have been held with the NSW Fire Brigade on the question of tender access and to give a preliminary indication of building size and layout. Independent experts will be utilised to certify that the fire safety measures provided in the building meet all relevant standards.

99. The Defence representative of the Commonwealth Fire Board has been consulted during design development and comments have been incorporated in the Performance Requirement Brief. Specific assurances were given in these discussions that the proposed work fully complies with the BCA and FACMAN 2 (Manual of Fire Protection Engineering) and that the Wollongong City Council and local fire brigade have been consulted and will continue to be consulted during design development and prior to the commencement of construction. It is intended that liaison continue with the Defence representative on the Commonwealth Fire Board throughout the project.

OCCUPATIONAL HEALTH AND SAFETY

100. The design of the building has had regard to the implementation of work practices in accordance with the Codes of Practice pursuant to section 70, of the *Occupational Health and Safety (Commonwealth Employment) Act 1991*.

ENVIRONMENTAL ASPECTS

101. The proposal has received a Certificate of Environmental Compliance.

CONSULTATIONS

102. The proposal has been discussed with the following authorities:

- . Wollongong City Council - compatibility with regional planning, zoning, site features including easements, drainage, car parking requirements, airconditioning systems, transport / access, child care facilities
- . Wollongong Chamber of Commerce - impact on commerce in CBD
- . Royal Australian Institute of Architects - building design, efficiency and special regional aspects
- . State Transit Authority - train access, frequency and timetables
- . Illawarra Water Board - access to sewer and water supply
- . Illawarra Electricity - access and availability of supply
- . Department of Primary Industries and Energy - energy conservation
- . NSW Department of Planning - compatibility with regional planning
- . Wollongong University - teaching and research affiliations
- . Wollongong TAFE - teaching and research affiliations
- . Commonwealth Fire Board - fire protection and safety aspects
- . NSW Fire Brigade - fire protection, access and egress from buildings/site
- . Telecom - incoming lines to the new building.

Timetable

103. It is expected that preliminary design will be completed by March 1993, documentation by May and construction by December 1993. Fitout and commissioning of the building together with installation and testing of equipment is expected to be completed by February 1994 in advance of occupation as from 1 March 1994.

Financial Aspects

104. The cost budget for the proposed work, \$10m at October 1992 prices, includes the fitout, furniture and fitting (including furniture workstations). An additional \$2.5m has been budgeted to cover project expenses, equipment, land acquisition and contingency to bring the total project cost at October 1992 prices to \$12.5m.

Committee's Recommendation

105. The Committee recommends construction of facilities for the Australian Hydrographic Office at Wollongong at a cost of \$12.5m at October 1992 prices.

DISSENT BY MR BILL TAYLOR MP, MR BRUCE SCOTT MP AND SENATOR PAUL CALVERT

106. While it is agreed that the accommodation at 161 Walker Street, North Sydney is below standard and needs early replacement, the Wollongong solution is not based on the operational needs nor of the personnel management requirements of the Hydrographic Service of the Royal Australian Navy.

107. Insufficient recognition is therefore given to the disruptive nature of the Wollongong option, both in terms of the operational function of the Hydrographic Office and the adverse morale and disruption of key technical staff. The Wollongong option is a decision imposed by the Minister for Defence for political reasons other than those which would enhance the Hydrographic Office's functions.

108. Alternative sites in the Sydney area need to be examined further, rather than to accept the unashamedly political decision for the Wollongong site.

CONCLUSIONS AND RECOMMENDATIONS

	Paragraph
1. The standard of accommodation at 161 Walker Street is poor, and despite renovations the building is unable to adequately cater for the technical activities undertaken.	16
2. The Committee believes that the Station Street site adjacent to the Wollongong Railway Station is the most appropriate site for construction of an office for the Australian Hydrographic Service.	29
3. Should key staff resign, the Committee believes that it will be essential for staff resources within the Australian Hydrographic Office to be diverted to critical functions while efforts are being made to recruit qualified replacement staff.	40
4. The only objective means of assessing the effect on the retention rate of staff will be after formal elections held six months prior to the move.	44
5. The Committee recommends that the Department of Defence continues to liaise with staff and staff associations during the relocation process.	45
6. The Committee believes that relocation of the Australian Hydrographic Office to Wollongong will not adversely affect services provided.	50
7. The design of the proposed building will provide a floor area which will enable chart compilation to be carried out on the one level.	58

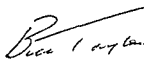
8. The Committee recommends construction of facilities for the Australian Hydrographic Office at Wollongong at a cost of \$12.5m at October 1992 prices. 105



Colin Hollis
Chairman
7 December 1992

**DISSENT BY MR BILL TAYLOR MP, MR BRUCE SCOTT MP AND
SENATOR PAUL CALVERT**

1. While it is agreed that the accommodation at 161 Walker Street, North Sydney is below standard and needs early replacement, the Wollongong solution is not based on the operational needs nor of the personnel management requirements of the Hydrographic Service of the Royal Australian Navy. 106
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Bill Taylor
Vice-Chairman
11 December 1992



Bruce Scott



Senator Paul Calvert

APPENDIX A

WITNESSES

BLACKLEY, Mr Bernard, Project Director for Relocation of the Australian Hydrographic Office, Department of Defence, Russell Offices (A-2-02), Canberra, Australian Capital Territory 2600

BLANNERHASSETT, Commander Colin Clive, Director General Facilities-Navy, Department of Defence, Russell Offices, (A-2-17), Canberra, Australian Capital Territory 2600

CAMPBELL, Alderman David Andrew, Lord Mayor, Wollongong City Council, Locked Bag 8821, South Coast Mail Centre, Burelli Street, Wollongong, New South Wales 2520

CUMMING, Mr Peter Roy, Manager, Planning, Wollongong City Council, Burelli Street, Wollongong, New South Wales 2500

CUMMINS, Mr Adrian Ronald, Returned and Services League Defence Committee Member, Returned and Services League of Australia Ltd, Cnr Constitution Avenue and Blamey Crescent, Campbell, Australian Capital Territory 2601

DONOHUE, Mr John David, 12 Paulwood Avenue, Winmalee, New South Wales 2777

FORTESCUE, Ms Robyn Kay, Organiser, Metals and Engineering Workers Union, 133 Parramatta Road, Granville, New South Wales 2142

GERAGHTY, Commander Geoffrey John, Commercial Support Officer, c/o 161 Walker Street, North Sydney, New South Wales 2060

LEECH, Commodore John William, Hydrographer, Australian Hydrographic Office, Royal Australian Navy, Department of Defence, 161 Walker Street, North Sydney, New South Wales 2060

LONG, Mr Timothy Francis, Technical Officer, 161 Walker Street,
North Sydney, New South Wales 2060

MARTIN, Mr Stephen Paul, Parliamentary Secretary for Foreign
Affairs and Trade, Member for MacArthur, Parliament of
Australia, Suite 7, Ronald and Glass Building, 83-85 Railway
Street, Corrimal, New South Wales 2518

MILTON, Mr Anthony, Consultant, Department of Defence, GPO
Box 1987, Canberra, Australian Capital Territory 2601

MORAN, Mr Peter Michael, Assistant Secretary, Resources and
Project Management, Department of Defence, Russell Offices
(K-3-14), Canberra, Australian Capital Territory 2600

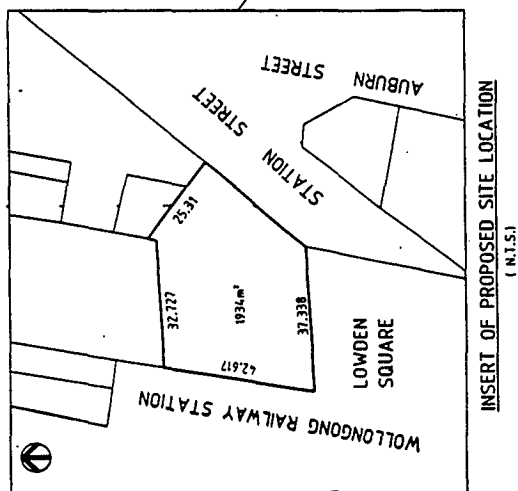
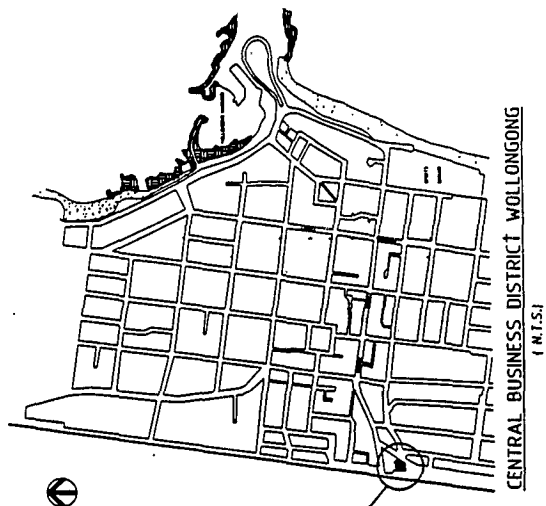
WAUGH, Mr Matthew, Manager, Corporate Relations,
Wollongong City Council, Burelli Street, Wollongong, New
South Wales 2500

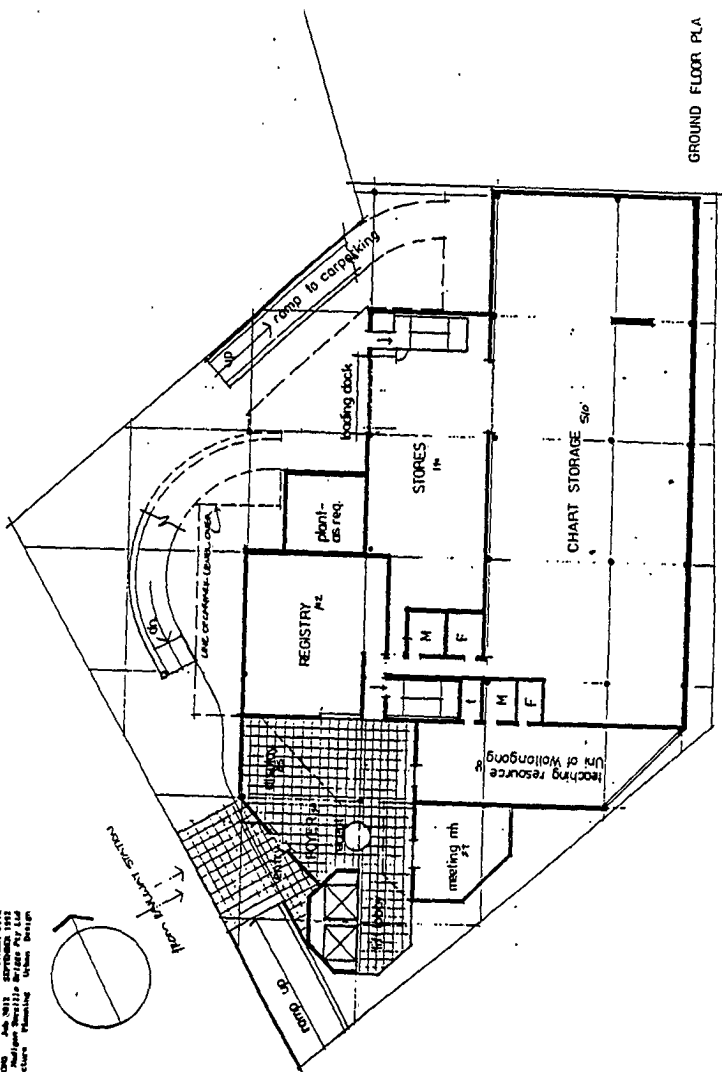
WHITMORE, Mr Edward Ronald, Chairman, East Australian
Region, Australasian Branch, International Hydrographic
Society, 6 Carrington Street, Wahroonga, New South Wales
2076

APPENDIX B

PROJECT DRAWINGS

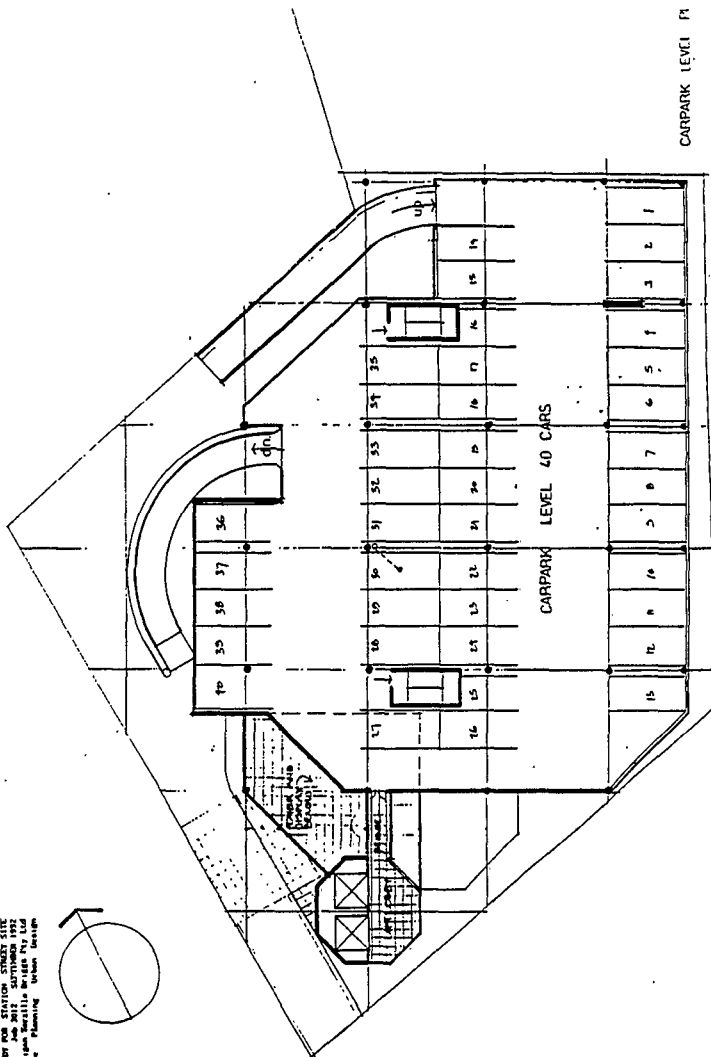
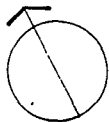
	Page
Proposed Site Location/Central Business District	B-1
Ground Floor Plan	B-2
Carpark Level Plan	B-3
Typical Upper Floor	B-4
Top Floor	B-5
West-East Section	B-6
East Elevation (Station Street View)	B-7
West Elevation (from Railway Station Street)	B-8



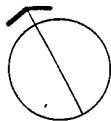


GROUND FLOOR PLAN

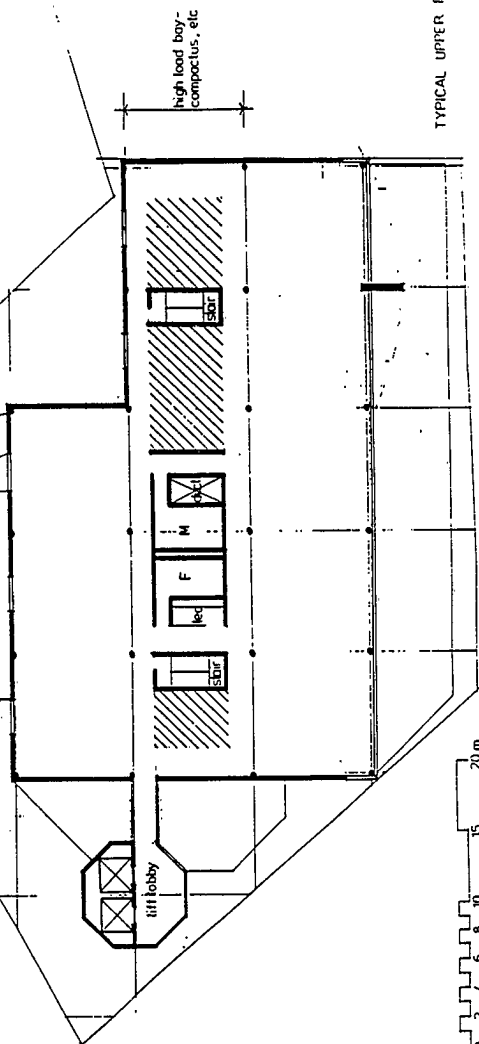
HYPERBOLIC COFFEE RELOCATION PROJECT
DESIGN STUDY FOR STATION STREET SITE
WILLOWBROOK JOB #112 SUTTHIRAK 1993
Gordon Thompson Architects Pty Ltd
Architecture Planning Urban Design



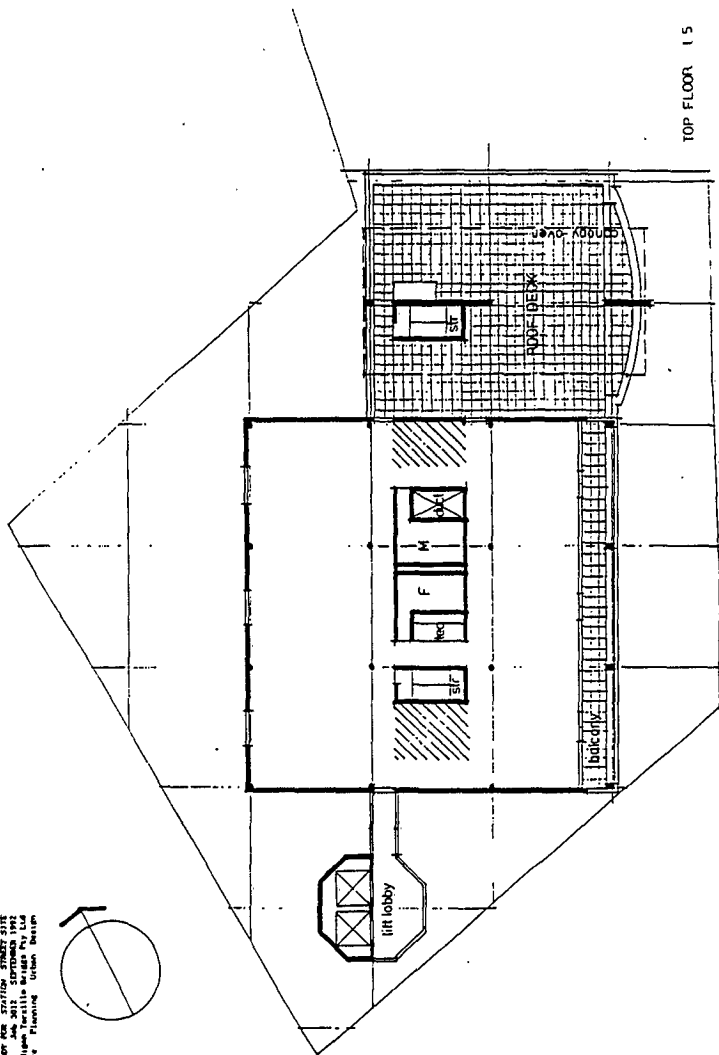
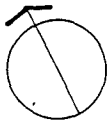
CARPARK LEVEL 1



8.4 x 8.4 column grid
 3.95 floor to floor height
 Nett per floor nominal 800 sqm

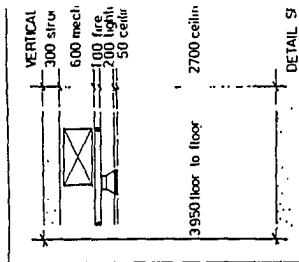
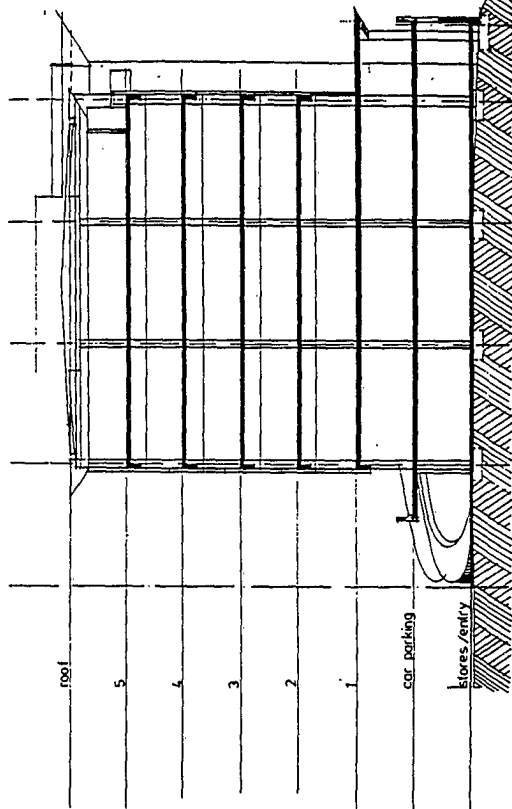


HYDROBONNET OFFICE RELOCATION PROJECT
 1000 WEST 10TH AVENUE, SUITE 200
 KILLBUCK, OH 44131 SEPTEMBER 1992
 Edmund Neufeldt Architects Inc.
 Architecture Planning Urban Design



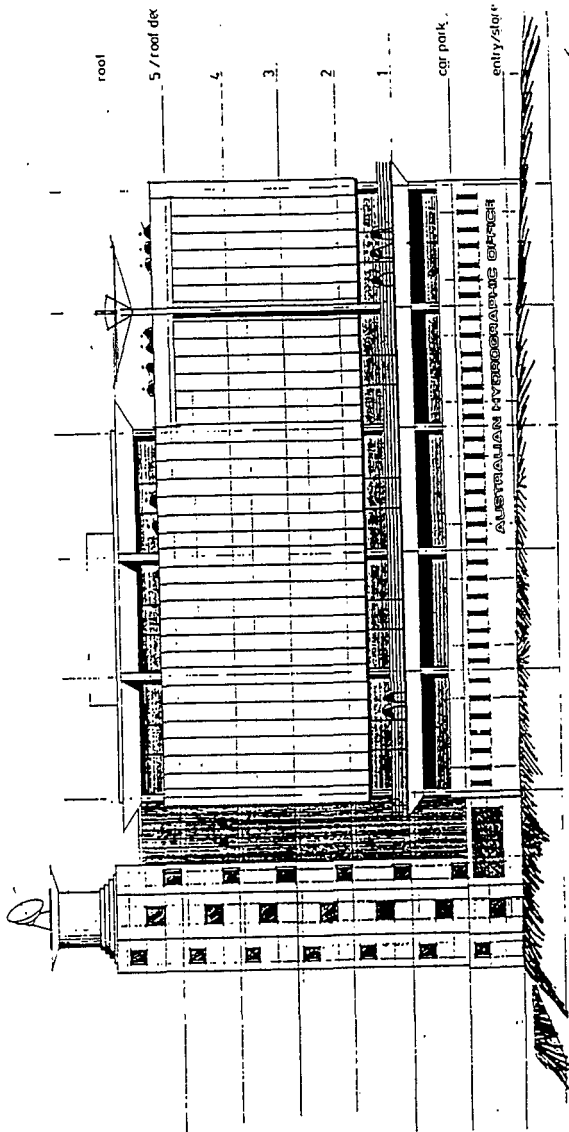
TOP FLOOR 15

HYPERCOMMUNICATION INDUSTRY
 DESIGN STUDY FOR STATION STREET SITE
 RELEASED JAN. 2011 BY SUTHERLAND
 STEWART ARCHITECTS, P.C., Ltd.
 Architecture Planning Urban Design



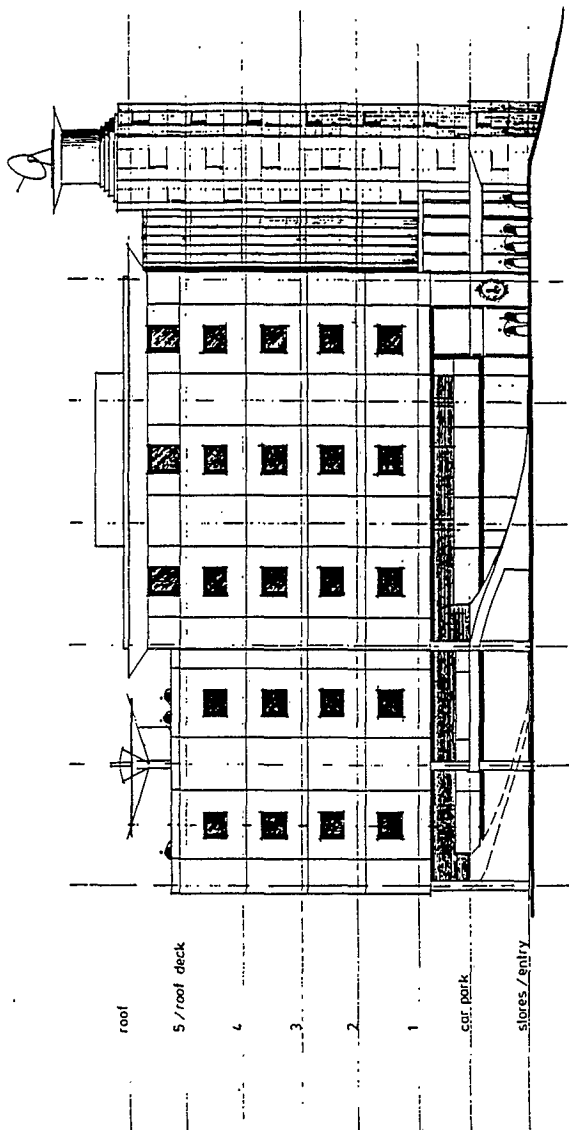
WEST-EAST SECTION

HYPERBOLIC OPTIC RELOCATION INQUIRY
 DESIGN STUDY FOR STATION STREET 5111
 KOLARONG STREET, TARISSA IN 4824 PT, Ltd
 Architecture Planning Urban Design



EAST ELEVATION
 Station Street view

DESIGN STUDY FOR STATION STREET 3112
WOLLOONGABEE JOB 3012 SEPTEMBER 1992
Eduardo Medina Torralba Design Pty Ltd
Architecture Planning Urban Design



WEST ELEVATION
from railway station