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# Department of **Public Works**



annual report 19



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1962-63

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PARLIAMENT OF NEW SOUTH WALES

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# REPORT

OF THE

## DEPARTMENT OF PUBLIC WORKS

FOR THE

Year ended 30th June, 1962

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*Ordered to be printed, 12 March, 1963*

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*Wholly set up and printed in Australia by*

VICTOR C. N. BLIGHT, GOVERNMENT PRINTER, SYDNEY, NEW SOUTH WALES

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1963

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# DEPARTMENT OF PUBLIC WORKS

## NEW SOUTH WALES

### Annual Report for the Year 1961-1962

The Director of Public Works to the Honourable Phillip Norman Ryan, M.L.A., Minister for Public Works.

Sir,

I have the honour to present to the Minister the Annual Report of the Department of Public Works for the year ended 30th June, 1962.

#### I. ADMINISTRATION

The following officers are in charge of the various activities:—

Assistant Director, J. C. C. G. Humphrey, LL.B.  
 Chief Engineer, F. W. Potter, B.E., A.M.I.C.E. (Aust.).  
 Government Architect, E. H. Farmer, B. Arch., F.R.A.I.A., M.R.S.H.  
 Secretary, C. E. Jenkins, A.A.S.A.  
 Principal Engineer, Harbours and Rivers, A. R. Ford, B.E., M.I.C.E., M.I.E. (Aust.).  
 Principal Engineer, Water Supply and Sewerage, L. N. Jamieson, M.C.E., A.M.I.E. (Aust.).  
 Principal Designing Engineer, J. E. Dryden, B.E.  
 Local Government Engineer, J. A. E. Cameron, A.S.T.C., A.M.I.E.A.  
 Manager, Building Construction and Maintenance, A. J. White, C.E., A.M.I.E. (Aust.).  
 Plant Engineer, W. P. Bannister, A.M.I.E. (Aust.).  
 Principal Surveyor, R. E. Doyle, Reg. Surveyor.  
 Accountant, L. A. Davis, A.A.S.A., A.C.I.S.  
 Legal Officer, J. M. Dymock, LL.B.  
 Chief Clerk, A. A. Poirrier.  
 Superintendent of Stores, B. W. Phillips.  
 Administrative Officers—  
 General, T. H. Walker, LL.B.  
 Organisation and Methods, A. G. Dunstan, A.A.S.A.  
 Engineering, T. A. Mackintosh, A.S.T.C. (M. & L.G. Eng.).  
 Chief Testing Officer, J. McC. Shortis, A.S.T.C. (Chem.), A.R.A.C.I.  
 Director, State Dockyard, Newcastle, H. D. Harding.  
 Manager, State Brickworks, P. H. Thomson.  
 Manager, Government Motor Garage, A. T. Hahn.  
 Engineer Superintendent, Dredge Service, G. T. Baker, A.S.T.C.

#### II. LEGISLATION

Legislation passed during the year:—

*Tweed Heads Harbour Works Act, 1961.*

This Act authorised the carrying out of works at Tweed Heads estimated to cost £390,000 to improve Tweed Heads Harbour.

*Port Kembla Inner Harbour (Further Construction) Act, 1961.*

This Act authorised the carrying out of works, new wharf, dredging, railway access, and associated works, to Port Kembla Harbour, estimated to cost £2,500,000.

*Public Works (Amendment) Act, 1961.*

This Act made provision for the authorisation of public works costing up to £200,000 by Executive Council Minute, for the authorisation in similar manner of the construction of several classes of public buildings and institutions notwithstanding that the estimated cost exceeds £200,000; for the sale or lease of superfluous land with approval of the Governor in such manner as the Constructing Authority deems expedient; to confirm the validity of the authorisation of certain works already undertaken and for purposes connected therewith.

#### III. FINANCIAL

(For details see Appendix I)

Expenditure and repayments on works and services are summarised as follows:—

	Gross Expenditure		Receipts and Repayments	
	£	s. d.	£	s. d.
Consolidated revenue .....	5,717,734	0 2	685,975	10 3
General loans .....	8,454,360	7 0	1,173,575	8 6
Special deposits account .....	33,771,606	15 7	23,903,681	0 0
Consolidated revenue—grants, loans, advances, etc. ....	8,760	12 7	.....	
	47,952,461	15 4	25,763,231	18 9
Payments made direct by other departments for works and services carried out ...	294,272	1 1	.....	
	48,246,733	16 5	25,763,231	18 9
Gross expenditure .....	.....		47,952,461	15 4
Less receipts .....	.....		25,763,231	18 9
			22,189,229	16 7
Add—Loan expenditure not costed in Head Office—				
State Dockyard .....	95,000	0 0	.....	
State Terracotta Tileworks .....	33,769	17 4	128,769	17 4
Net expenditure .....	.....		22,317,999	13 11



#### IV. HARBOURS AND RIVERS

(For details see Appendix II)

The main activities of the Branch in construction and maintenance for the year were:—

##### NEWCASTLE HARBOUR

On behalf of the Maritime Services Board, the Port Authority, a contract for £3,000,000 was let for the removal of rock in Newcastle Harbour and work is about to commence on the site.

In addition, wharfage work within the Harbour continued with amenities and utilities being constructed on Wickham Wharf, and foundation testing was carried out preparatory to construction of Throsby Basin No. 1 and 2 berths on the site of the existing oil berth. A further preliminary to the latter work was the construction of a temporary oil berth, placed in operation in August, 1961.

Extensive dredging was still required to maintain the channels. The problem was intensified by the large quantity of silt deposited by a flood during the year.

Work to a value of £58,000 was carried out on other wharves in the harbour and the southern breakwater, at the request of the Maritime Services Board.

It is evident that the change of authority in the Port of Newcastle has had little effect on this Branch's activities in that area. In fact, the Branch now has the additional work of maintenance of the Railway Berths.

##### NEWCASTLE DISTRICT

Work on the Reclamation of the Islands continued, approximately 6,000,000 cubic yards of material having been pumped ashore and 3,000 lineal feet of foreshore protection completed. At this stage of the work, with the imminent release of the reclaimed lands, greater public interest is being taken in the project.

Hunter Valley flood mitigation works continued, with the completion of a bank protection wall at Berry Park and the installation of four floodgates as part of the Nelson Plain drainage system.

##### PORT KEMBLA DISTRICT

The Inner Harbour contracts for dredging and rock removal were practically completed. Work by day labour is in progress for the construction of the Coal Berth wharf and rail embankment. In conjunction with this work a contract has been let for the supply and installation of the coal handling plant. Storage will be provided for 140,000 tons of coal.

A programme of wharf and berth maintenance and improvements was carried out.

##### LISMORE DISTRICT

Brunswick Heads Harbour Works were completed and officially opened on 17th February, 1962. At the close of the year construction was continuing on Evans Heads Harbour Works and Tweed Heads Harbour Works, with construction of the Northern Breakwater and near completion of the 390 foot long bridge over the Evans River on the former, and construction of access roads and the opening up of the quarry for the latter work.

##### COFF'S HARBOUR DISTRICT

Macleay River, Shark Island Diversion was completed. Coff's Harbour Jetty and Macleay and Hastings Rivers breakwaters were repaired, together with some dredging of the Hastings River and other maintenance works.

##### METROPOLITAN DISTRICT

The construction of sheet pile walling bank protection in Cooks River was again the main work undertaken.

#### CLARENCE HARBOUR WORKS

Activity on this project was concentrated on construction of the Southern Breakwater, which was extended to 1,790 feet and is approximately 40 per cent complete. Maintenance only was carried out on the Northern Breakwater.

##### GENERAL

Other work included flood mitigation constructions on coastal rivers by some shire and county councils on a 2/3 subsidy basis, various investigations at the Manly Hydraulics Laboratory, and dredging of navigable channels in coastal rivers and ports.

#### V. WATER SUPPLY AND SEWERAGE

(For details see Appendix IIIA)

The construction of water supply and sewerage works continued in a large number of country areas, either by day labour, contract or by local Councils under the supervision of Departmental Engineers.

##### Major Water Supply Works

###### HUME RESERVOIR

The raising and strengthening of this structure were completed. A paper was published on the procedures finally adopted which has added to the technical knowledge concerning work of this nature.

###### THE ENTRANCE

Due to the absence of a suitable site, the dam embankment has been built on a foundation of 10 feet of clay overlying 30 feet of sandy silt, with a unique design of drainage to prevent failure. Work has progressed to a point where storage will commence shortly. The pumps and rising main are practically complete, and supply is scheduled for 1963.

###### FISH RIVER

The laying of 29 miles of steel pipeline from Oberon to Leura by contract is continuing. A tunnel approximately 3,000 feet in length, constructed in bad ground, required excavation to be carried out under air pressure to prevent collapse, and is near completion.

##### COONABARABRAN WATER SUPPLY AND SEWERAGE

The dam and gravitation main are completed and supply connected; the sewerage is proceeding with completion scheduled for June, 1963.

##### LOWER CLARENCE

This work is being done by day labour and includes the laying of approximately 100 miles of asbestos cement pipes, 21-in. to 4-in. diameter, to service the area from Grafton to Yamba. This is the first occasion the Department has used such large diameter asbestos cement pipes. Material economy has resulted from this innovation.

##### TWEED DISTRICT

Tweed Shire Council is constructing this weir and reticulation to Departmental plans and specifications to service Murwillumbah to Tweed Heads.

##### SEWERAGE WORKS

The Department is constructing sewerage schemes at Boorowa, Coonabarabran, Wentworth, Coonamble, Lawson, Crookwell, Mullumbimby and Oberon, whilst those at Portland and Springwood have been completed.

The Department is exercising general oversight of sewerage works at Broken Hill, Lismore, Tumburumba, Wauchope and Wingham, under construction by the appropriate Authorities.



## VI. ARCHITECTURAL

(For details see Appendix IV)

The volume of work in the design and construction of new buildings has again increased, sketch plans and working drawings to the value of £46,773,700 having been prepared, whilst construction expenditure was of a total of some £23,000,000.

The reorganisation of the secondary school programme has necessitated a revision of accommodation requirements, and this has had a bearing on planning of schools required for the 1964 year.

The scheme for the use of the Prince of Wales Hospital as a teaching hospital for the University of New South Wales undergraduates and post-graduates necessitated extensive re-modelling and additions to establish the hospital for this purpose. The work is well under way.

The subject of major steam raising plants in hospitals was considered in conjunction with the Department of Public Health and the Hospitals Commission, and plans and specifications were revised to enable advantage to be taken of the diversity of equipment available. Advantage will accrue in respect of performance and efficiency.

The psychiatric hospitals' building requirements have varied with a new concept of treatment involving greater use of day hospitals in conjunction with existing hospitals.

Plans for standard type hospital units for children of various age groups and conditions, psychiatric community centres, and outpatients' departments in various suburbs and in close proximity to the General Hospitals were developed.

Initial planning commenced for the complete re-organisation of the Callan Park Mental Hospital and the remodelling of two selected wards, known as project wards, in each Mental and State Hospital in New South Wales.

The new Government Office Building advanced a further stage with the excavation of the site and a contract being let for the supply and fabrication of the structural steelwork. Tenders were called for the lifts and air conditioning plant, closing July-August, and tenders for the erection of the building itself are expected to be called in October-November, 1962.

Works completed during the year totalled 319 at an estimated cost of £16,735,400; 17 works are still in progress since prior to 1st July, 1961, estimated to cost £6,712,400, and works commenced during the year and still in progress total 176, at an estimated completed cost of £13,487,050.

## VII. BUILDING CONSTRUCTION AND MAINTENANCE

(For details see Appendix V)

There was an uptrend in activities throughout the State as indicated by the expenditure in the Metropolitan area of £5,009,745 as against £4,211,017 in the previous year.

Maintenance expenditure on schools was £1,550,000 in the Metropolitan area and £1,006,000 for the rest of the State. Maintenance of other public buildings including State Institutions and Mental Hospitals was carried out, covering renovations, modernisation and standard maintenance at a cost of £1,665,000. Some of this work was at Technical Schools and Hospitals with funds provided by the Department of Technical Education and the Hospitals Commission. An extensive country building maintenance programme was continued.

A total of 216 classrooms at 80 locations costing £1,986,235 were erected in the Metropolitan area.

Major projects carried out were as follows:—

Extensive renovations at Darlinghurst Court House, Supreme Court, Central Court and District Court buildings.

Improved lighting of the National Art Gallery.

Renovation and remodelling of the New Police Headquarters and Agriculture Department's buildings.

Renovations at "Garrawarra" Hospital, Strickland Convalescent Hospital and Parramatta Girls' Training School.

Conversion of Liverpool State Hospital to a Technical College and remodelling of East Sydney Technical College to provide additional accommodation.

The number of employees on the day labour staff in the Metropolitan area increased by 204 to 2,064 at the close of the period.

## VIII. LOCAL GOVERNMENT ENGINEERING

(For details see Appendix VI)

Allocations totalling £4,995,300 were made to 232 shires and municipalities and the Department of Main Roads for rural road development, whilst £174,338 was distributed to 61 councils for the restoration of flood damage to roads, bridges, etc.; £14,000 was distributed to six councils as grants for bank erosion protection works. Grants totalling £65,772 were made to councils towards construction of five bridges to replace subsidised ferries.

Revenue Vote funds were again limited to £47,500 and were distributed by way of 108 grants to councils for construction, repair and renewal of works. Through this restriction many applications had to be deferred.

Grants totalling £70,000 were made to 29 councils to assist construction of Olympic swimming pools in country towns.

A Federal grant of £500,000, augmented by an allocation of £75,000 from C.A.R. Act funds and a Treasury allocation of £126,000, was distributed as relief for unemployment throughout the State.

## IX. ENGINEERING DESIGN

(For details see Appendix VII)

No significant change in the volume of work occurred in the period. Major designs undertaken included the Port Kembla Coal Loading Wharf and the checking of detailed designs of the coal loading plant submitted by the Contractor.

Water supply schemes were designed for Kootingal-Moonbi, Attunga, Bendemeer, Yeoval and Bulahdelah, the latter notable for having a fish ladder incorporated in the weir. The design of a large sludge treatment plant for Bathurst Sewerage, involving sludge heating by digestion gases, was also undertaken.

## X. SURVEY AND SURVEY DRAFTING

(For details see Appendix VIII)

All classes of survey work were carried out for this and other Departments, Government Instrumentalities and Local Government bodies.

Engineering, land and hydrographic surveys were made for country towns' water supplies and sewerage works, harbours and rivers, flood mitigation, reclamations, buildings (universities, schools, hospitals, court houses, police stations, penitentiaries, etc.), sales and leases of departmental lands.

A large volume of surveys was again carried out for the Department of Education, including engineering surveys for contour plans for sewerage, drainage and ground improvements and numerous boundary surveys for the acquisition of sites for new schools, additions to existing sites, etc., the total surveys being an increase of 36 to 274.

The survey drafting field remained about the same, much of the work being for the Education Department and the Electricity Commission.

In the plan printing and mounting section, the 16-mm. and 35-mm. microfilm units prepared 524,942 negatives, of which 500,756 were of records of other Departments and Instrumentalities. Heliographs prepared totalled 131,685.

## XI. STORES

(For details see Appendix IX)

A substantial increase in activities occurred, requisitions received increased to 16,373, orders issued to 15,870, and quotations called to 1,450. These figures include the new function of requisitioning and ordering for the complete outfitting of institutions constructed for other Departments.



Steel inspections were increased due to the commencement of the Fish River Water Supply steel pipeline as foreshadowed in last year's report, and, together with increased demands for inspection of steel generally, spun pipes, fibrolite pipes, valves, castings, etc., required the appointment of additional inspectors. A recent expansion in the asbestos cement pipe manufacturing field will require the appointment of further inspectors in the near future.

The Department's Workshop and Store, Leichhardt, were fully engaged in the repair and maintenance of plant, fabrication of structural steelwork, and the receipt and issue of stores and materials.

To the advantage of the Department and employees, a nine-week training course was held in employees' time for interested welders at the Depot, which enabled five to obtain their Department of Labour and Industry Pressure Tickets and so produce a higher class of work.

## XII. TESTING AND INSPECTION

(For details see Appendix X)

Cement testing showed a substantial decrease of 1,740,000 bags from last year to a figure of 3,558,000 bags, caused by the cessation of testing for the Snowy Mountains Hydro-Electric Authority and the Warragamba Dam.

Physical and chemical testing of concrete cylinders, steel rope, mortar, sand, etc., all increased with the exception of testing of concrete cylinders for the Department of Works, that body having purchased a compression testing machine.

## XIII. PLANT

(For details see Appendix XI)

During the year No. 1 Plant to a value of £210,018 was acquired, including motor vehicles costing £59,766. In addition, plant and equipment valued at £56,000 was purchased on behalf of Departmental projects.

Technical advice was made available to all branches as required, and the Scientific Instrument Section continued to provide an efficient maintenance and repair service for instruments for this and other Departments.

## XIV. STATE DOCKYARD

(For details see Appendix XII)

The Dockyard again operated profitably and for the 20th successive year returned a substantial surplus, the turnover and net profit being £3,836,770 and £317,049 respectively. The sum of £188,459 was allocated from the net profit for payment of weekly profit-sharing dividends during 1962-63, the total so set aside since inception of the scheme in 1951 being £1,352,545.

Employment has increased by 221 to 1,789 at the close of the year at 31st March, 1962.

Work proceeded on the construction of diesel engines, under licence, for use in vessels under construction.

Heavy engineering works were again carried out for Barren Gorge Hydro Electric and Vales Point Power Stations, for other government requirements, and for industry generally.

Plant, buildings and construction berths were all improved and extended to ensure the continued efficient operation of the undertaking.

Since the inception of the Dockyard in 1942, 54 vessels have been completed and 6 are under construction. A hopper barge of 700 tons capacity for the department and a 2,000 tons D.W. Vessel for the Australian Shipbuilding Board were completed in the year.

## XV. STATE BRICKWORKS

(For details see Appendix XIII)

The net profit for the year 1961-1962 was £90,975, with brick prices at £20 2s. 6d. and £15 3s. 6d. per 1,000 which were £1 17s. 0d. and 12s. per 1,000 below trade rates for face and commons, respectively. Production was 39,960,600 common bricks and 14,050,300 face bricks.

Increasing use of automatic stokers and ventilation equipment has increased the production capacity of common bricks to 1,000,000 per week, whilst the use of fork lift handling, cooling fans and firing modifications has enlarged face brick production capacity to 350,000 per week, the overall capacity now being of the order of 63,000,000 bricks per annum.

Maintenance and essential improvements to kilns, buildings and equipment were carried out to enable continued efficient functioning of the Brickworks.

Employment increased by two Public Service Board appointees and 21 Ministerial employees, respectively, to 40 and 400, whilst 50 contract brick carters and six hired vehicles remained the same as last year.

## XVI. GOVERNMENT MOTOR GARAGE

(For details see Appendix XIV)

Expenditure and receipts rose by £10,393 and £17,243 to £137,802 and £146,254, respectively.

Special jobs carried out include the following for the Police Department:—

- Ten special patrol vans.
- Special trailer for flood rescue.
- Fitting out new launch.
- Fitting up truck chassis for Diving Station.

Outboard motor units for the Department of Civil Defence are now being reconditioned at the Garage.

Further items of plant were purchased to assist the speed of repairs and increase efficiency.

Employment remained constant at 65 employees.

## XVII. STANDARDS ASSOCIATION OF AUSTRALIA

The Department continued to make available the services of its officers for representation on Association Committees dealing with the issue of new specifications and codes; revising existing publications and interpreting the technical character of specifications, etc.

Assistance was also rendered to the Association in the revision of draft standards, whether of Australian, British or Empire origin.

## XVIII. PERSONNEL

(For details see Appendix XV)

A total of 258 new officers commenced during the year, whilst 92 resignations were received from the professional and clerical divisions.

Training facilities were provided for eight fellows under the Colombo Plan.

Tutorial discussion classes in Departmental procedure were attended by 70 officers, including 30 professional division officers attending voluntarily.

Sixty-nine sponsored trainees are now attending full-time courses at Universities.

Recruit trainees were again given a two-week induction course upon commencement in the Department.



**XIX. STAFF****Professional**

The difficulty of recruiting professional staff persists, the present establishment being below strength in spite of advertising and efforts to secure suitable overseas staff.

**Senior Administrative**

The administrative structure was further reorganised with the appointment of Administrative Officers covering Engineering, Organisation and Methods, and General; with a further position covering Architecture yet to be filled.

The following officers retired during the year, following long and meritorious service:—

- Mr. M. R. Downie, Chief Clerk.
- Mr. D. A. Evans, Principal Engineer, Government Architect's Branch.
- Mr. J. Turnbull, Engineer, Dredge Service.
- Miss J. F. Ross, Architect.
- Mr. G. H. G. Goscombe, Architect.
- Mr. H. C. Grimster, Specification Writer.
- Mr. J. H. Farrands, Supervisor, Dubbo.
- Mr. W. J. Bourke, Staff Clerk.
- Mr. K. O. Ward, Senior Clerk, Water Supply and Sewerage Branch.
- Mr. J. Torpey, Senior Accounts Clerk, Building Construction and Maintenance Branch.
- Mr. R. Green, Timekeeper, Port Kembla.
- Mr. J. Young, Messenger.

It is with regret that I record the death of:—

- Mr. H. B. Hughes, Accounts Inspector.
- Mr. R. W. Short, Senior Clerk, Port Kembla.
- Mr. R. G. Roberts, Foreman, Newcastle.
- Mr. J. L. P. Price, Clerk, Building Construction and Maintenance Branch.

**XX. GENERAL**

During the year the Assistant Director, Mr. J. C. C. G. Humphrey, accompanied by the Principal Engineer, Harbours and Rivers, Mr. A. R. Ford, travelled to England and the Continent inspecting hydraulic laboratories and investigating work done on problems similar to the siltation problem at Newcastle Harbour. One result has been the retention of the Wallingford Research Station as Consultant in the Newcastle Harbour siltation model investigation.

**XXI. ACKNOWLEDGMENT**

The programme of work undertaken during the year made heavy demands on the staff, and I gratefully acknowledge the efforts of all those who contributed towards the Department's achievements.

Yours faithfully,

R. A. JOHNSON, B.A., LL.B.,  
Director of Public Works.



## APPENDIX I

## FINANCIAL

## Expenditure

## WORKS AND SERVICES

The expenditure and repayments in respect of works and services are summarised as follows:—

	Gross Expenditure			Receipts and Repayments		
	£	s.	d.	£	s.	d.
Consolidated Revenue .....	5,717,734	0	2	685,975	10	3
General Loans .....	8,454,360	7	0	1,173,575	8	6
Special Deposits Account .....	33,771,606	15	7	23,903,681	0	0
Consolidated Revenue— Grants, Loans, Advances, etc.	8,760	12	7	.....		
	47,952,461	15	4	25,763,231	18	9
Payments made direct by other Departments for Works and Services carried out .....	294,272	1	1	.....		
	£48,246,733	16	5	25,763,231	18	9
				£	s.	d.
Gross expenditure .....				47,952,461	15	4
Less—receipts .....				25,763,231	18	9
				22,189,229	16	7
Add—loan expenditure not costed in Head Office— State Dockyard .....	95,000	0	0			
State Terracotta Tile- works .....	33,769	17	4	128,769	17	4
Net expenditure .....				£22,317,999	13	11

## Consolidated Revenue Fund

## DETAILS OF EXPENDITURE AND RECEIPTS

	Expenditure			Receipts		
	£	s.	d.	£	s.	d.
Salaries and payments in the nature of salaries .....	1,637,099	19	10	.....		
Maintenance and working ex- penses other than salaries...	181,378	10	1	.....		
Maintenance of public works and services— Harbours and rivers .....	261,384	16	4	.....		
Dredge service .....	334,816	16	0	.....		
Public buildings .....	1,299,990	14	11	.....		
Water supplies, sewerage and stormwater drainage .....	11,566	2	11	.....		
State telephone services ...	352,585	17	5	.....		
Electricity and gas .....	783,184	11	8	.....		
River Murray Works .....	78,925	0	0	.....		
Miscellaneous works and services not elsewhere included .....	141,793	8	8	.....		
Other services— Junee water supply—estima- ted deficit on working .....	11,500	0	0	.....		
South West Tablelands Water Supply—estimated deficit on working .....	73,000	0	0	.....		
Leichhardt Depot—care and custody of idle plant and stock .....	4,500	0	0	.....		
Grants to municipal, shire and county councils, for construction, repairs and renewal of works .....	47,491	9	4	...		
Grants to municipal and shire councils in respect of flood damage .....	2,205	0	0	.....		

## DETAILS OF EXPENDITURE AND RECEIPTS—continued

	Expenditure			Receipts		
	£	s.	d.	£	s.	d.
Other services—continued						
Circular Quay improvements —cleaning promenade, painting and general main- tenance .....	606	5	1	.....		
Departmental magazine Stateworks—subsidy to- wards publication costs ...	230	0	0	.....		
Australian Engineering Con- ference and Committees —contribution towards secretarial costs, etc. ....	25	0	0	.....		
Fees payable to consultants in respect of architectural works .....	479,998	3	8	.....		
National Association of Test- ing Authorities grant .....	264	15	0	.....		
Post graduate and other courses for departmental officers .....	222	14	0	.....		
Newcastle floating dock— crane and slipway repairs	8,759	0	0	...		
Departmental trainees fees, superannuation, etc. ....	2,654	16	8	.....		
Treasurer's Advance Ac- count— Overseas trip by Mr. J. C. Humphrey, Assistant Di- rector and Mr. A. R. Ford, Principal Engineer, Har- bours and Rivers .....	2,583	2	11	.....		
Eden Jetty, Fendering—loss of hydraulic jack—ex gratia payment .....	5	0	0	.....		
Newcastle Harbour Siltation —Services of Wallingford Hydraulic Research Sta- tion .....	112	15	8	.....		
Proposed Commonwealth— State Law Court Building —consultants fees .....	850	0	0	.....		
Treasury Special Revenue Vote— Monetary value of leave payable to dependant relatives of deceased public servants .....	8,331	15	4	.....		
Unforeseen expenses .....	190	5	9	...		
Exchange on remittances ...	238	11	6	.....		
Revenue received and paid into consolidated revenue— Repayments to previous years .....	.....			157,819	14	10
Miscellaneous services rendered—cost of supervision	.....			48,530	6	8
Exchange on remittances ...	.....			361	16	10
Receipts returned—transfer under section 31 Audit Act	.....			1,242	9	0
Rent ex land .....	.....			8,423	19	11
On-cost to cover design and supervision in connection with architectural works ...	.....			363,663	7	5
Commission to cover cost of collection of premiums— group assurances schemes, etc. ....	.....			1,529	17	5
Payments by Undertakings of Department of Public Works of the employees liability to State Super- annuation .....	.....			17,988	13	5
Unclassified receipts—rent for special port facilities sale of plans, etc. ....	.....			86,336	13	4
Repayments to Public Works fund—previous years .....	.....			78	11	5
	£	5,726,494	12 9		685,975	10 3

Net..... £5,040,519 2 6



## General Loan Account

## DETAILS OF EXPENDITURE AND REPAYMENTS

	Expenditure			Unissuable		
	£	s.	d.	£	s.	d.
Harbours and rivers and dredges .....	2,786,039	6	8	465,555	8	1
Water supply works .....	543,039	7	3	1,125	0	0
Sewerage and stormwater drainage.....	5,998	0	4	13,752	10	2
Construction of water supplies and sewerages in shires and municipalities.....	607,994	7	0	.....		
Public buildings .....	4,308,289	11	0	633,663	9	10
Leichhardt Depot extensions...	3,191	8	0	.....		
River Murray Commission ...	81,125	0	0	.....		
State Brickworks—re-establishment .....	.....			2,381	1	3
Circular Quay improvements...	48,683	6	9	15,839	10	4
Advances to councils for construction of country killing centres .....	.....			41,258	8	10
Construction of miscellaneous works in shires and municipalities .....	70,000	0	0	.....		
Total £	8,454,360	7	0	1,173,575	8	6

## Special Deposits Account

## DETAILS OF EXPENDITURE AND RECEIPTS

	Balance at 1st July, 1961		Receipts		Expenditure		Balance at 30th June, 1962	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Public Works Store Advance Account .....	90,066	13 1	607,619	10 5	568,939	8 5	128,746	15 1
Building Construction and Maintenance Branch Working Account .....	489,555	18 7	5,053,474	0 4	4,817,671	19 9	725,357	19 2
Government Engineering and Shipbuilding Undertaking Working Account .....	.....		35	1 8	21,864	11 8	21,829	10 0 Dr.
Dredge Service Trading Undertaking Working Account .....	289,933	7 4	1,392,119	8 11	1,143,615	8 10	538,437	7 5
Unclaimed Salaries and Wages Account .....	2,350	7 11	3,114	4 10	3,860	0 7	1,604	12 2
Unclaimed Moneys Account .....	774	4 9	328	19 2	507	13 11	595	10 0
Public Works Department Working Account S.D. 9A...	162,347	0 3	6,976,179	13 11	6,555,918	6 5	582,608	7 9
Public Works Department Working Account S.D. 9A...	2,365	15 7	144,626	12 3	146,737	3 3	255	4 7
Public Works Department Working Account S.D. 9C...	28,485	12 1 Dr.	99,633	9 11	100,292	5 0	29,144	7 2 Dr.
Public Works Department Working Account S.D. 9D...	7,093	3 2	411,460	11 10	326,712	12 1	91,841	2 11
Public Works Department Working Account S.D. 9E...	158	12 10 Dr.	600,793	11 8	737,366	9 4	136,731	10 6 Dr.
Hunter Valley Flood Mitigation Working Account .....	93,005	0 11	313	5 5	81,413	0 3	11,905	6 1
Provision for arrears of maintenance and repairs to schools and police buildings .....	100,000	0 0	.....		100,000	0 0	.....	
Security Deposit Trust Account .....	114,091	7 2	124,198	0 6	106,521	16 0	131,767	11 8
June Water Supply Working Account .....	10,279	4 10	36,051	3 1	35,110	0 8	11,220	7 3
June Water Supply—Renewal Reserve Account—Cash .....	3,008	19 2 Dr.	3,157	6 1	.....		148	6 11
June Water Supply—Renewal Reserve Account—Securities .....	63,091	15 0	.....		.....		63,091	15 0
Bethunga Water Supply .....	210	0 0	427	9 7	430	10 5	206	19 2
Plant Control Account .....	57,919	17 4	429,007	10 10	451,957	16 3	34,969	11 11
South-West Tablelands Water Supply Working Account .....	45,794	9 5	207,903	15 9	225,598	3 8	28,100	1 6
South-West Tablelands Water Supply—Renewal Reserve Account—Cash .....	16,896	14 4 Dr.	17,744	4 0	.....		847	9 8
South-West Tablelands Water Supply—Renewal Reserve Account—Securities .....	329,999	18 6	.....		.....		329,999	18 6
Leichhardt Depot Working Account .....	24,118	7 6	285,825	19 11	269,234	16 5	40,709	11 0
Testing Branch Working Account .....	46,268	3 6	75,016	5 7	105,544	16 10	15,739	12 3
Testing Branch Leave and Depreciation Reserve Account—Securities .....	24,400	0 0	.....		.....		24,400	0 0
Balance of Salaries—Adjustment Account.....	3,544	2 7	7,999	11 8	3,544	2 7	7,999	11 8
Advances to Officers for Purchase of Motor Cars .....	7,167	1 1 Dr.	3,561	19 9	5,398	11 1	9,003	12 5 Dr.
Mulwala Water Supply and Sewerage Working Account .....	43	18 1	11,638	10 9	11,598	6 8	84	2 2
Commonwealth Aid Roads and Works Act, 1956.....	4,759,644	12 0	2,642	19 4	4,762,287	11 4	.....	
Commonwealth—State Grants for restoration of Flood-damaged Roads, Bridges, etc. ....	1,305	9 4 Dr.	1,393	15 10	88	6 6	.....	
Fish River Water Supply Scheme .....	16,811	8 9	500	0 0	1,728	7 9	15,583	1 0
Fish River Water Supply Working Account .....	58,746	12 7	137,668	9 7	170,458	17 2	25,956	5 0
Fish River Water Supply—Renewal Reserve Securities Account .....	38,800	0 0	.....		.....		38,800	0 0
Fish River Water Supply—Renewal Reserve Account .....	7,824	8 3 Dr.	8,654	13 8	.....		830	5 5



## Special Deposits Accounts—Details of Expenditure and Receipts—continued

	Balance at 1st July, 1961			Receipts			Expenditure			Balance at 30th June, 1962		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Testing Branch Investment Account .....	20,000	0	0	.....			.....			20,000	0	0
Northern Coalfields Roads and Drainage Works .....	.....			.....			95,000	0	0	95,000	0	0
Public Works Suspense Account—												
Generally .....	257,128	15	10	777,355	9	3	674,149	14	0	360,334	11	1
Annual, Sick and Long Service Leave to Ministerial												
Employees .....	276,527	0	10	240,372	8	9	260,008	17	0	256,890	12	7
Hospitals Commission .....	3,593,437	6	4	4,545	15	4	3,765,486	4	5	167,503	2	9
Snowy Mountains Hydro-electric Authority .....	25	9	2	20	2	6	44	16	2	0	15	6
Hume Reservoir Construction .....	115,301	17	3	498,154	8	5	349,303	19	8	33,548	11	6
Architectural Works .....	137,461	6	7	5,569,538	7	3	5,372,977	4	2	334,022	9	8
Water Transport Works .....	301,402	19	2	56,244	11	10	294,786	19	11	62,860	11	1
Commonwealth Grant for Unemployment Relief .....	880,000	0	0	34,390	0	0	824,634	9	6	89,755	10	6
Alstonville Water Supply .....	132	4	8	.....			.....			132	4	8
Ashford Water Supply .....	7,017	16	4	.....			768	5	0	6,249	11	4
Attunga Water Supply .....	9,000	0	0	96	6	4	6,411	13	11	2,684	12	5
Bathurst Water Supply .....	4,984	18	4	.....			56	4	8	4,928	13	8
Bendemeer Water Supply .....	9,000	0	0	96	6	4	9,127	14	4	31	8	0
Berrima District Water Supply .....	25,000	0	0	.....			20,470	2	3	4,529	17	9
Bourke Water Supply .....	7,020	13	6	.....			109	9	0	6,911	4	6
Broken Hill Water Board .....	9,133	8	1	.....			6,860	9	4	2,272	18	9
Bulahdelah Water Supply .....	36,750	14	6	.....			21,156	19	7	15,593	14	11
Geurie Water Supply .....	200	5	8	0	13	7	.....			200	19	3
Girilambone Water Supply .....	0	2	6	.....			0	2	6	.....		
Clarencetown Water Supply .....	8,276	4	11	.....			1,659	18	5	6,616	6	6
Coonabarabran Water Supply .....	44,907	5	3	4,588	4	6	51,066	12	3	1,571	2	6
Gulgambone Water Supply .....	2,881	6	3	.....			11	14	9	2,869	11	6
Guyra Water Supply .....	6,134	7	5	.....			369	3	3	5,765	4	2
Gunning Water Supply .....	25,000	0	0	30	18	6	42,607	14	8	17,576	16	2
Kootenigal-Moonbi Water Supply .....	6,000	0	0	96	6	5	38,680	18	5	32,584	12	0
Lower Clarence Water Supply .....	128,850	0	0	150	9	10	158,548	2	7	29,547	12	9
Mittagong Water Supply .....	9,664	11	8	14,859	15	0	6,154	9	0	18,369	17	8
Molong Water Supply .....	11,128	12	2	17	0	0	2,106	17	4	9,038	14	10
Moss Vale Water Supply .....	80,698	16	10	941	15	11	80,184	17	8	1,455	15	1
Port Macquarie Water Supply .....	337	7	5	895	17	5	671	19	5	561	5	5
Rylstone-Kandos Water Supply .....	59,636	3	2	.....			55,761	5	9	3,874	17	5
Sawtell Water Supply .....	1,807	14	8	10	5	0	172	5	1	1,645	14	7
Stroud Water Supply .....	7,923	13	4	.....			2,895	10	9	5,028	2	7
Tantawangalo Water Supply .....	599	8	8	738	13	6	.....			139	4	10
Tathra Water Supply .....	1,677	13	7	167	18	6	113	14	10	1,623	9	11
Tea Gardens Water Supply .....	53,374	18	2	.....			20,652	16	4	32,722	1	10
Warialda Water Supply .....	4,543	5	3	.....			8	0	10	4,535	4	5
Werris Creek Water Supply .....	20	2	11	.....			.....			20	2	11
Barraba Sewerage .....	3,783	12	4	.....			.....			3,783	12	4
Boorowa Sewerage .....	88,794	18	0	2,009	14	10	89,925	15	11	878	16	11
Coff's Harbour Sewerage .....	11	16	5	299	0	5	3,438	9	3	3,151	5	3
Condobolin Sewerage .....	389	0	7	.....			51	11	5	440	12	0
Coonabarabran Sewerage .....	83,983	3	0	1,887	7	11	66,109	8	3	19,761	2	8
Coonamble Sewerage .....	86,841	10	0	988	3	1	57,900	17	2	29,928	15	11
Crookwell Sewerage .....	76,375	16	3	1,644	6	7	102,031	12	10	24,011	10	0
Hay Sewerage .....	52	12	1	.....			.....			52	12	1
Kyogle Sewerage .....	370	10	0	.....			5	4	0	365	6	0
Lawson Sewerage .....	105,000	0	0	12,871	5	2	151,399	19	2	33,528	14	0
Manilla Sewerage .....	764	3	6	9	1	9	.....			773	5	3
Moree Sewerage .....	3,245	11	3	.....			15	13	9	3,229	17	6
Mullumbimby Sewerage .....	78,032	15	9	552	12	3	57,157	3	8	21,428	4	4
Murwillumbah Sewerage .....	1,966	1	10	2,470	0	0	3	0	0	500	18	2
Narrandera Sewerage .....	1,850	5	3	.....			.....			1,850	5	3
Narromine Sewerage .....	2,860	6	7	96	8	1	12	10	0	2,944	4	8
Nyngan Sewerage .....	4,208	4	8	.....			756	5	7	4,964	10	3
Portland Sewerage .....	16,226	13	4	4,467	18	3	27,579	9	0	39,338	4	1
Oberon Sewerage .....	59,987	10	0	885	0	8	51,938	5	9	8,934	4	11
Springwood Sewerage .....	97,487	17	7	28,112	15	10	133,899	6	2	8,298	12	9
Tenterfield Sewerage .....	390	3	2	.....			122	18	2	267	5	0
Warren Sewerage .....	419	1	10	320	8	10	37	13	3	136	6	3
Wentworth Sewerage .....	73,702	16	3	664	15	11	78,667	18	10	4,300	6	8
Wingham Sewerage .....	38,947	0	7	.....			33,133	3	10	5,813	16	9
	£ 13,445,919	11	5	23,903,681	0	0	33,771,606	15	7	3,577,993	15	10

Payments Made Direct by Other Departments for Works  
and Services Carried Out

Authority	Expenditure
	£ s. d.
Education Department .....	20,478 12 6
Technical Education Department .....	6,000 0 0
River Murray Commission .....	267,793 8 7
	£294,272 1 1



### Financial Assistance for City Municipal and Shire Councils

	£	s.	d.
Consolidated Revenue—			
Grants to councils for construction, repairs and renewals of works .....	47,491	9	4
Grants to councils for flood damage .....	2,205	0	0
	<u>£49,696</u>	<u>9</u>	<u>4</u>
Special Deposits—			
Commonwealth-State grants .....	£1,305	9	4 Cr.

Grants to City, Municipal and Shire Councils were:—

	Consolidated Revenue State Grants			Special Deposits Commonwealth State Grants		
	Construction, Repairs and Renewal of Works			Flood Damage		
	£	s.	d.	£	s.	d.
City Councils—						
Armidale .....	500	0	0	.....		
Bathurst .....	500	0	0	.....		
Broken Hill .....	500	0	0	.....		
Greater Cessnock .....	500	0	0	.....		
Goulburn .....	500	0	0	.....		
Maitland .....	.....			.....		
Orange .....	500	0	0	.....		
Penrith .....	500	0	0	.....		
Tamworth .....	500	0	0	.....		
£	4,000	0	0	.....		
Municipal Councils—						
Ballina .....	500	0	0	.....		
Bowral .....	500	0	0	.....		
Casino .....	290	0	0	.....		
Cooma .....	500	0	0	.....		
Cootamundra .....	500	0	0	.....		
Glen Innes .....	500	0	0	.....		
Gunnedah .....	500	0	0	.....		
Junee .....	500	0	0	.....		
Kempsey .....	500	0	0	.....		
Mudgee .....	500	0	0	.....		
Muswellbrook .....	500	0	0	.....		
Narrabri .....	500	0	0	.....		
Narromine .....	114	0	0	.....		
Nyngan .....	500	0	0	.....		
Queanbeyan .....	500	0	0	.....		
Quirindi .....	150	0	0	.....		
Singleton .....	500	0	0	.....		
Taree .....	500	0	0	.....		
Windsor .....	470	0	0	2,205	0	0
Wingham .....	500	0	0	.....		
Young .....	475	0	0	.....		
£9,499	0	0		2,205	0	0

Grants to City, Municipal and Shire Councils were:—  
*continued*

	Consolidated Revenue State Grants		Special Deposits Commonwealth- State Grants	
	Construction, Repairs and Renewal of Works	Flood Damage	Flood Damage	
	£ s. d.	£ s. d.	£ s. d.	
Shire Councils—				
Barraba .....	500 0 0	.....	.....	
Baulkham Hills .....	500 0 0	.....	.....	
Berrigan .....	500 0 0	.....	.....	
Bingara .....	500 0 0	.....	.....	
Bland.....	500 0 0	.....	.....	
Boolooroo .....	240 0 0	.....	.....	
Boorowa .....	235 0 0	.....	.....	
Boomi .....	500 0 0	.....	.....	
Boree .....	500 0 0	.....	.....	
Byron .....	500 0 0	.....	.....	
Canobolas .....	500 0 0	.....	.....	
Central Darling .....	1,062 0 0	.....	.....	
Coff's Harbour .....	500 0 0	.....	.....	
Colo .....	500 0 0	.....	.....	
Condobolin .....	202 0 0	.....	.....	
Coolah .....	500 0 0	.....	.....	
Coonabarabran .....	875 0 0	.....	.....	
Coonamble .....	500 0 0	.....	.....	
Corowa .....	500 0 0	.....	.....	
Culcairn .....	500 0 0	.....	.....	
Darling .....	.....	.....	1,192 5 10 Cr.	
Dungog .....	Cr. 8 10 8	.....	.....	
Gloucester .....	471 0 0	.....	.....	
Goobang .....	500 0 0	.....	.....	
Goodradigbee .....	126 0 0	.....	.....	
Gosford .....	500 0 0	.....	.....	
Guyra .....	500 0 0	.....	.....	
Hastings .....	500 0 0	.....	.....	
Hume .....	500 0 0	.....	.....	
Jemalong .....	300 0 0	.....	.....	
Jerilderie .....	412 0 0	.....	.....	
Jindalee .....	453 0 0	.....	.....	
Kyeamba .....	794 0 0	.....	.....	
Lachlan .....	500 0 0	.....	.....	
Leeton .....	500 0 0	.....	.....	
Lockhart .....	500 0 0	.....	.....	
Maclean .....	500 0 0	.....	.....	
Manilla .....	500 0 0	.....	.....	
Manning .....	500 0 0	.....	.....	
Merriwa .....	360 0 0	.....	.....	
Mittagong .....	500 0 0	.....	.....	
Molong .....	500 0 0	.....	.....	
Mumbulla .....	642 0 0	.....	.....	
Murray .....	500 0 0	.....	.....	
Murrumburrah .....	375 0 0	.....	.....	
Murrumbundi .....	460 0 0	.....	.....	
Namoi .....	500 0 0	.....	.....	
Narraburra .....	500 0 0	.....	.....	
Narrandera .....	500 0 0	.....	.....	
Oberon .....	500 0 0	.....	.....	
Peel .....	500 0 0	.....	.....	
Port Stephens .....	263 0 0	.....	.....	
Rylstone .....	500 0 0	.....	.....	
Snowy River.....	500 0 0	.....	.....	
Stroud .....	500 0 0	.....	.....	
Sutherland .....	500 0 0	.....	.....	
Tallanganda .....	83 0 0	.....	.....	
Tamarrang .....	432 0 0	.....	.....	
Tenterfield .....	250 0 0	.....	.....	
Timbregongie .....	445 0 0	.....	.....	
Tintenbar .....	405 0 0	.....	.....	
Tumbarumba .....	500 0 0	.....	.....	
Tweed .....	500 0 0	.....	.....	
Ulmarra .....	500 0 0	.....	.....	
Uralla.....	325 0 0	.....	.....	
Urana.....	500 0 0	.....	.....	
Walgett.....	500 0 0	.....	.....	
Warren .....	1,000 0 0	.....	.....	
Wellington .....	986 0 0	.....	.....	
Woodburn .....	500 0 0	.....	.....	
Wyong .....	448 0 0	.....	.....	
Yallaro .....	352 0 0	.....	201 10 0 Cr.	
£	33,992 9 4	.....	1,393 15 10 Cr.	
SUMMARY				
	£ s. d.	£ s. d.	£ s. d.	
City Councils .....	4,000 0 0	.....	88 6 6	
Municipal Councils .....	9,499 0 0	2,205 0 0	.....	
Shire Councils .....	33,992 9 4	.....	1,393 15 10 Cr.	
Total as per Summary ... £	47,491 9 4	2,205 0 0	1,805 9 4 Cr.	

## Staff

The numerical strength of staff and the estimated annual salary charges as at 30th June, 1962, compared with the previous year are as follows:—

	Permanent Officers				Temporary Officers				Total Staff			
	Number		Salaries		Number		Salaries		Number		Salaries	
	1960-61	1961-62	1960-61	1961-62	1960-61	1961-62	1960-61	1961-62	1960-61	1961-62	1960-61	1961-62
General Staff .....	1,173	1,181	£1,629,855	£1,847,728	804	582	£739,726	£650,073	1,977	1,763	£2,369,581	£2,497,801
Tradesmen and apprentices appointed under the Public Service Act .....	...	...	...	...	1,169	1,400	1,299,784	1,490,542	1,169	1,400	1,299,784	1,490,542
	1,173	1,181	1,629,855	1,847,728	1,973	1,982	2,039,510	2,140,615	3,146	3,163	3,669,365	3,988,343

N.B.—As from 1st May, 1961, the Dredge Service became a State Industrial Trading Undertaking and consequently has been omitted from the above figures.



## Fish River Water Supply

## INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31ST DECEMBER, 1961

EXPENDITURE			INCOME		
Previous year £		£	Previous year £		£
9,061	Working expenses—		26,425	Water sales:—	
1,049	Salaries, wages and expenses .....	10,850	11,716	Lithgow City Council .....	26,425
1,224	Stores and materials used .....	1,798	3,826	Blaxland Shire Council .....	14,617
1,717	Transport .....	1,530	108,700	Oberon Shire Council .....	3,749
2,653	Plant costs .....	2,569	1,698	Electricity Commission .....	142,500
1,374	Miscellaneous charges .....	3,436		Minor Consumers .....	1,606
7,000	Electricity for pumping .....	1,443	152,365		188,897
1,000	Renewals reserve .....	7,000			
5,108	Storm damage reserve .....	1,000			
110,790	Capital contribution rebates .....	5,108	1,088	Meter Rents, etc. ....	320
8,210	Interest charges, etc.....	134,780			
4,267	Sinking Fund payment.....	10,090			
	Net profit .....	9,613			
£153,453		£189,217	£153,453		£189,217

## Fish River Water Supply

## BALANCE SHEET AS AT 31ST DECEMBER, 1961

LIABILITIES			ASSETS		
Previous year £		£	Previous year £		£
715,743	Capital Contributions—			Fixed Assets—	
388,500	Commonwealth Government .....	715,743	4,411,448	Storage dam, pipelines, reservoirs, mains, plant and equipment.....	4,592,547
69,596	State Government .....	388,500	63,722	Assets vested in councils .....	63,722
5,482	Blaxland Shire Council .....	69,262			
94,927	Oberon Shire Council .....	5,557			
	Lithgow City Council .....	93,359	4,693	Current Assets—	
1,274,248		1,272,421	25,797	Stores and materials .....	4,041
3,175,486	Contributions for Augmentation—			Sundry Debtors .....	20,327
	State Government .....	3,348,137			24,368
5	Reserves—		16,811	Cash at Treasury, Unexpended Capital—	
2,407	Plant repairs .....	332	3,269	Contributions .....	16,811
7,232	Employees' leave .....	2,967	30,339	Working account .....	3,035
17,662	Storm damage .....	8,134			19,846
30,339	Sinking fund .....	27,752		Renewal Reserve Fund .....	38,816
8,735	Renewals .....	38,816			
	Capital adjustments .....	10,562			
30,499	Current liabilities —				
9,466	Sundry creditors .....	11,098			
	Accumulated Profit and Loss				
	Account .....	19,080			
£4,556,079		£4,739,299	£4,556,079		£4,739,299

There was a profit of £9,613 for the year compared with £4,267 in the previous year.

Income was £35,763 more than in 1960.

The quantity of water delivered during the year was 1,376,182,204 gallons compared with 939,270,000 gallons in 1960. Consumption by Councils having increased by 77,366,000 gallons and consumption at Wallerawang Power Station having increased by 360,130,000 gallons.

Expenditure was £30,417 greater than in 1960 resulting mainly from interest charges, etc., applying progressively to the assessed completed cost of each stage of the work as brought into operation. A full year's interest charges would apply for 1961 for those works brought into operations during 1960. The assessed value of work brought into operation during 1961 was £59,000.

Expenditure on all augmentation works for the year was £182,741.



## South-west Tablelands Water Supply

## INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31ST DECEMBER, 1961

EXPENDITURE			INCOME		
Previous year			Previous year		
£		£	£		£
49,238	Working Expenses—		96,612	Water Sales—	
11,920	Salaries, wages and expenses .....	48,595	17,587	Councils .....	100,152
52,384	Stores and materials .....	10,298	7,376	Railways Department .....	12,102
2,962	Electricity .....	58,713		Minor consumers .....	8,778
4,986	Transport .....	2,795			
	Miscellaneous .....	5,714	121,575		121,032
			1,541	Meter Rents, etc. ....	1,770
121,490		126,115	87,536	Deficiency .....	84,584
61,685	Interest etc. on Capital Debt .....	66,179			
14,587	Renewal Reserve contribution .....	1,472			
12,890	Sinking Fund contribution .....	13,620			
£210,652		£207,386	£210,652		£207,386

## South-west Tablelands Water Supply

## BALANCE SHEET AS AT 31ST DECEMBER, 1961

LIABILITIES			ASSETS		
Previous year			Previous year		
£		£	£		£
1,481,941	Capital Debt .....	1,563,025		Fixed Assets—	
144,220	Less repaid .....	157,840	1,489,366	Land, buildings, reservoirs, mains and equipment .....	1,571,201
1,337,721		1,405,185		Investments—	
	Capital Contributions—			Renewal Reserve — In-scribed stock .....	320,000
4,100	Demondrille Shire Council	4,100	300,000	Cash at Treasury .....	1,744
			6,157		
	Reserves—		306,157		321,744
144,220	Debt Repayment—Reserved and Repaid (as above)	157,840		Current Assets—	
			12,716	Stores and materials ...	12,907
144,220		157,840	39,144	Debtors—for water ...	42,127
306,157	Renewal .....	321,744	17,122	Cash at Treasury ...	19,251
450,377		479,584	68,982		74,285
	Current Liabilities—				
	Creditors—				
	Colonial Treasurer for advance on account of deficiencies	49,374			
50,959					
21,348	Stores and services .....	28,987			
72,307		78,361			
£1,864,505		£1,967,230	£1,864,505		£1,967,230

The excess of expenditure over income of £84,584 was £2,952 less than that of the previous year.

The volume of water delivered during 1961 was 792,842,937 gallons at a cost per 1,000 gallons of 62·777 pence compared with 803,482,468 gallons in 1960 at 62·921 pence per 1,000 gallons.

Water pumped during 1961 was 894,698,000 gallons compared with 905,476,000 gallons in 1960.

Rates charged for the sale of water were as follows:—Bulk supplies to Councils and the Railway Department, 3s. per 1,000 gallons from 1st January, 1958; Supplies to Councils for public baths, 2s. 3d. per 1,000 gallons from 1st January 1958; Supplies to minor consumers, 3s. 6d. per 1,000 gallons from 1st April, 1958.

The construction programme for the undertaking for 1961 involved an expenditure of £81,083.



## Junee Water Supply

## INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31ST DECEMBER, 1961

EXPENDITURE			INCOME		
Previous year			Previous year		
£		£	£		£
8,613	Working Expenses—		9,109	Water Sales—	
1,505	Salaries, Wages and Expenses .....	8,529	12,950	Railway Department .....	6,183
8,603	Stores and Materials .....	1,552	881	Junee Municipal Council .....	15,280
741	Electricity .....	8,471		Minor Consumers .....	1,129
352	Transport .....	354	22,940		22,592
	Miscellaneous .....	1,405	199	Meter Rents, etc. ....	115
19,814		20,311	12,926	Deficiency .....	12,664
10,592	Interest etc. on Capital Debt and				
2,149	Working Capital .....	11,201			
3,510	Renewal Reserve Contribution .....	219			
	Sinking Fund Contribution .....	3,640			
£36,065		£35,371	£36,065		£35,371

## Junee Water Supply

## BALANCE SHEET AS AT 31ST DECEMBER, 1961

LIABILITIES				ASSETS			
Previous year				Previous year			
£		£	£	£		£	
264,875	Capital Debt .....	267,198			Fixed Assets—		
45,262	Less Repaid .....	48,902		260,504	Land, Buildings, Reservoirs, Mains		262,705
			218,296		and Equipment .....		
219,613					Investments—	£	
	Reserves—			57,792	Renewal Reserve—Inscribed		
	Debt Repayment—			1,013	Stock .....	61,292	
45,262	Reserved and Repaid (as	48,902		58,805	Cash at Treasury .....	313	61,605
	above) .....						
58,804	Renewal .....	61,605	110,507		Current Assets—		
104,066				445	Stores and Materials .....	354	
				5,780	Debtors—for Water, etc. ...	8,043	
				6,057	Cash at Treasury .....	3,132	
	Current Liabilities—			12,282			11,529
	Creditors—						
	Colonial Treasurer for						
4,391	advances on ac-	2,727					
3,521	count of deficiencies	4,309					
	Stores and Services						
7,912			7,036				
£331,591			£335,839	£331,591			£335,839

The deficiency of £12,664 was £262 less than that of the previous year.

The volume of water delivered during 1961 was 150,169,000 gallons at a cost per 1,000 gallons of 56·530 pence compared with 152,469,300 gallons in 1960 at 56·769 pence per 1,000 gallons.

Water pumped during 1961 was 164,301,000 gallons compared with 159,824,000 gallons in 1960.

Rates charged for the sale of water were as follows:—Bulk supplies, 3s. per 1,000 gallons from 1st January 1958; Supplies for public baths, 2s. 3d. per 1,000 gallons from 1st January, 1958; Supplies to minor consumers, 3s. 6d. per 1,000 gallons from 1st April, 1958.

## Bethungra Water Supply

Operations for the year 1961 resulted in a surplus of £403 compared with £389 for the previous year.

The surplus of £403 has been transferred to consolidated revenue this financial year bringing the total amount transferred since commencement of operations in 1917, to £10,903.



**Mulwala Water Supply and Sewerage**  
INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31ST DECEMBER, 1961

EXPENDITURE			INCOME		
Previous Year £		£	Previous year £		£
6,514	Working Expenses—			Water Sales—	
1,336	Salaries, wages and expenses .....	7,772	3,063	Corowa Shire Council .....	5,405
3,168	Stores and materials used .....	1,248	204	Department of the Interior .....	223
378	Electricity .....	3,335			
	Miscellaneous charges .....	199	3,267		5,628
11,396		12,554		Balance of cost of operations chargeable to Department of Defence Production .....	7,026
100	Interest on working capital .....	100	8,229		
£11,496		£12,654	£11,496		£12,654

**Mulwala Water Supply and Sewerage**  
BALANCE SHEET AS AT 31ST DECEMBER, 1961

LIABILITIES			ASSETS		
Previous year £		£	Previous year £		£
80,732	Capital Debt—			Fixed Assets—	
40,872	Commonwealth Government .....	80,732	122,738	Reservoir, Treatment Works, Mains, Plant and Equipment .....	122,688
	State Government .....	40,872		Current Assets—	
121,604		121,604	1,840	Sundry Debtors .....	4,644
2,000	Working Capital .....	2,000	1,209	Stores and Materials .....	1,074
	Current Liabilities—		100	Cash at Treasury .....	74
2,283	Creditors .....	4,876			
£125,887		£128,480	£125,887		£128,480

The Mulwala Water Supply and Sewerage Undertaking was constructed by the State on behalf of the Commonwealth as a wartime measure, the net cost of operations being borne by the Commonwealth Department of Defence Production. The amount chargeable to that Department for 1961 was £7,026 compared with £8,229, for 1960.

203,773,000 gallons were delivered during the year compared with 178,994,100 the previous year.

**Building Construction and Maintenance Branch Working Account**  
INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 30TH JUNE, 1962

EXPENDITURE			INCOME		
Previous year £		£	Previous year £		£
1,650,966	Direct Charges—			Recoupments .....	5,015,268
1,206,207	Wages .....	1,863,479	4,439,143	Add Unrecouped Expenditure, 30th June, 1962 .....	90,545
515,065	Materials .....	1,536,944	154,156		
55,374	Contract payments .....	479,727			5,105,813
	Other charges .....	52,636	4,593,299		
3,427,612		3,932,786		Less Unrecouped Expenditure, 1st July, 1961 .....	154,156
290,901	Supervision, Wages and Salaries .....	313,841	273,226		
48,618	Workers' Compensation Premium ...	56,497			4,951,657
54,009	Pay Roll Tax .....	61,361	4,320,073		
63,981	Public Holidays .....	75,016		Add Balance of Operating Accounts, 30th June, 1962 .....	11,433
47,955	Sick, etc., Leave .....	41,041	7,175		
156,100	Provision for Annual and Long Service Leave .....	173,206			4,963,090
49,977	Plant costs .....	59,162	4,327,248		
109,335	Transport costs .....	121,630		Less Balance of Operating Accounts, 1st July, 1961 .....	7,175
19,635	Sundry Expenses .....	35,546	7,058		
21,562	Interest on advance .....	21,875			
.....	Net store operating charges .....	44,459			
4,289,685		4,936,420			
30,505	Net Profit Transferred to Accumulated Profit and Loss Account .....	19,495			
£4,320,190		£4,955,915	£4,320,190		£4,955,915



### Building Construction and Maintenance Branch Working Account

BALANCE SHEET AS AT 30TH JUNE, 1962

LIABILITIES		ASSETS	
Previous year £	£	Previous year £	£
			Buildings constructed from Working Capital ..... 13,017
500,000	Working Capital (Advanced by Treasury) ..... 500,000	13,703	Working Plant and Equipment..... 194,722
269,178	Sundry Creditors ..... 411,779	185,624	Stores and Materials ..... 260,644
	Reserves for Annual and Long Service Leave ..... 363,476	275,776	Sundry Debtors ..... 122,641
328,661	Accumulated Profit and Loss Account —Profit ..... 52,560	159,070	Operating Accounts ..... 11,433
33,065	Operating Accounts ..... .....	7,753	Balance in Special Deposits Account at Treasury ..... 725,358
.....		489,556	
578			
£1,131,482	£1,327,815	£1,131,482	£1,327,815

There was a nett profit of £19,495 for the year 1961–1962 compared with a profit of £30,505 in the preceding year. Work carried out by the branch is charged to this Department's votes or to other Department's at cost, plus oncost to cover overhead expenses, and the profit for the year represents the excess of oncost charged over overhead expenses. The oncost rate is kept under review and kept at a minimum.

Total expenditure was £4,936,512 compared with £4,289,685 in the previous year, an increase of £646,827.

The monthly average number of employees (excluding staff) during the year was 1,954 compared with 1,728 in the previous year.

### Testing Branch

INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31ST DECEMBER, 1961

EXPENDITURE			INCOME		
Previous year £		£	Previous year £		£
			43,545	Sundry Fees for Inspection and Testing of Cement .....	30,707
9,443	Head Office Salaries and Supervision...	10,291		Sundry Fees for Testing and Inspection Other than Cement—	£
23,726	Head Office Working Expenses .....	26,658		Head Office .....	24,272
3,009	Newcastle Branch, Working Expenses...	3,177	15,658	Port Kembla .....	7,879
4,797	Port Kembla Branch Working Expenses	5,556	5,533	Newcastle .....	3,576
8,701	Cement Inspections and Control .....	7,705	3,738	Sydney .....	13,751
8,067	Sydney Inspections—Working Expenses	9,226	12,141		
	Interest and Exchange on Working Capital .....	.....		Interest received from investments .....	49,478
	Net Surplus Transferred to Accumulated Profit and Loss Account .....		1,087		1,242
23,959		18,814			
<hr/> £81,702		<hr/> £81,427	<hr/> £81,702		<hr/> £81,427

### Testing Branch

BALANCE SHEET AS AT 31ST DECEMBER, 1961

LIABILITIES			ASSETS		
Previous year					
£		£			£
10,037	Sundry Creditors .....	10,665	31,163	Plant and Major Equipment .....	31,451
	Reserve for annual and long service			Air Conditioning Equipment and Fog	
9,801	leave .....	9,792	1,378	Room .....	1,378
	Reserve for repairs, maintenance and		1,686	Working Tools and Minor Equipment...	1,790
2,498	alterations .....	2,633		Investments—	
	Reserve for depreciation and renewals			Metropolitan Water Sewerage and	
12,173	of plant and equipment .....	14,182	20,700	Drainage Board loans .....	24,400
97,914	Accumulated Profit and Loss Account	76,581		Sundry Debtors—	
			18,371	For services rendered .....	16,337
			59,125	Cash in Special Deposits Account at	
				Treasury .....	38,497
<hr/> £132,423		<hr/> £113,853	<hr/> £132,423		<hr/> £113,853

There was a net profit of £18,814 for the year 1961, compared to the net profit of £23,959 for the year 1960.

Although there was an improvement in the Head Office, Port Kembla and Newcastle sections, the overall retrogression of £5,145 compared to the previous year was due to a reduction of 15 per cent in the volume of cement tested. Income from cement testing decreased by £12,839 mainly as a result of the cessation of testing to a special specification for the Snowy Mountains Hydro Electric Authority.



## No. 1 Plant Control

## INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31ST MARCH, 1962

EXPENDITURE			INCOME		
Previous year £		£	Previous year £		£
107,784	Trading Expenses—		316,707	Hire Charges .....	352,951
4,801	Repairs and Renewals .....	102,659	1,533	Service Charges .....	2,087
9,545	Servicing .....	5,419	7,057	Profit on realisation of plant .....	.....
125,092	Insurance Premiums .....	10,524			
	Depreciation .....	139,657			
247,226		258,259			
24,473	Administrative Salaries and Expenses...	29,960			
35,610	Interest, etc., on Capital .....	36,690			
1,314	Miscellaneous .....	1,329			
.....	Loss on realisation of plant .....	8,336			
16,674	Net profit transferred to Accumulated Profit and Loss Account .....	20,464			
£325,297		£355,038	£325,297		£355,038

## No. 1 Plant Control

## BALANCE SHEET AS AT 31ST MARCH, 1962

LIABILITIES			ASSETS		
Previous year £		£	Previous year £		£
745,000	Capital Debt .....	745,000	756,752	General and Floating Plant.....	845,790
49,580	Less Repaid .....	55,490	45,801	Sundry Debtors .....	78,522
695,420		689,510	153,254	Cash at Treasury .....	18,461
95,997	Repairs and renewals reserve .....	50,000			
126,743	Sundry Creditors .....	95,669			
37,647	Accumulated Profit and Loss Account—				
	Accumulated Funds as at £				
	1st April, 1961 .....	37,647			
	Nett profit for Year .....	20,464			
.....	Transferred from repairs and renewals reserve ...	49,483			
		107,594			
£955,807		£942,773	£955,807		£942,773

The profit for 1961-1962 was £20,464 as compared with a profit of £16,674 in 1960-1961, an increase of £3,790.

Realisation of plant resulted in a profit of £7,057 in 1960-61 and a loss of £8,336 in 1961-62. These results are included in the above figures.

Revenue from hire and service charges in 1961-1962 was £36,798 more than in 1960-1961 mainly due to increased departmental activities and higher rates charged on some items of plant.

Expenditure for the year was £17,616 more than the previous year mainly due to increased activities.

## Leichhardt Depot Working Account

## INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31ST MARCH, 1962

EXPENDITURE			INCOME		
Previous year £		£	Previous year £		£
37,822	Direct Charges—		193,200	Services Rendered .....	240,431
66,868	Wages .....	57,043	92	Miscellaneous Revenue .....	469
17,947	Stores Used .....	77,473			
3,122	Cartage .....	16,989			
	Miscellaneous Charges .....	728			
125,759		152,233			
8,258	Workshop Supervision .....	9,968			
10,311	Workshop Operating Costs .....	11,628			
5,280	Leave and Public Holidays .....	6,732			
9,062	Depreciation .....	5,047			
8,587	Interest on Advances .....	8,887			
10,313	Salaries .....	10,510			
1,236	Workers' Compensation Premiums ...	1,668			
874	Provision for long service leave .....	618			
1,713	Pay Roll Tax .....	2,243			
6,256	Sundry Expenses .....	10,236			
5,643	Net Profit Transferred to Accumulated Profit and Loss Account .....	21,130			
£193,292		£240,900	£193,292		£240,900



**Leichhardt Depot Working Account**  
BALANCE SHEET AS AT 31ST MARCH, 1962

LIABILITIES				ASSETS			
Previous year				Previous year			
£		£	£	£			£
	Capital Debt—				Buildings, Fences, etc. ....		84,266
	Provided from Loan Vote			88,874	Plant, Machinery and Working Equip-		
192,678	Funds .....	193,620		43,404	ment .....		42,301
.....	Provided from other funds	.....		522	Stores and Railway Stamps on Hand...		644
5,858	Less Sinking Fund Pay-	6,848		95,706	Sundry Debtors .....		104,798
	ments .....			9,166	Balance in Special Deposits Accounts at		
186,820			186,772		the Treasury .....		40,834
	Working Capital—						
	Reserves—	£					
6,100	For Long Service Leave	6,718					
	For Repairs and Renewals						
3,670	of Buildings and Equip-	3,971					
	ment .....						
9,770			10,689				
24,587	Sundry Creditors .....		37,757				
16,495	Accumulated Profit and Loss Account...		37,625				
£237,672		£272,843	£237,672				£272,843

There was a net profit of £21,130 for the year compared with a net profit of £5,643 for 1960-1961.

The improvement is attributable to the increased volume of work carried out in the Depot workshops which resulted in an increase of income from Services Rendered of £47,231.

During the year it was possible to reduce the oncost rate which compares favourably with private organisations.

**LEICHHARDT DEPOT STORE ADVANCE ACCOUNT**

The value of stores issued and services rendered was £434,181 compared with £395,405 in 1960-1961.

Payments for stores purchased, operating costs, etc., totalled £425,809 compared with £380,279 in 1960-1961, an increase of £45,530.

The value of stock on hand increased by £3,590 to £349,489 during the year.

Operating costs of the store are financed by an oncost on the value of issues and a subsidy from Revenue Vote—Care and Custody of idle plant and stock. Oncost recovered during the year was £46,537 and the subsidy received was £4,500.

**State Brickworks**

**MANUFACTURING AND PROFIT AND LOSS ACCOUNT FOR YEAR ENDED 31ST MARCH, 1962**

Previous year			Previous year		
£		£	£		
	Manufacturing Expenses—		862,857	Sales .....	842,041
362,646	Wages .....	370,929	31,900	Add stock on hand at 31st March,	
7,884	Pay roll tax .....	8,064		1962 .....	56,357
8,115	Workers' compensation insurance ...	9,122	894,757		898,398
4,919	Silicosis insurance .....	5,481	28,241	Less stock on hand at 1st April, 1961	31,900
73,695	Coal .....	70,103			
10,941	Stores .....	10,981	866,516		866,498
24,434	Electricity .....	26,021	170,064	Cartage recovered .....	162,791
14,097	Plant hire .....	15,148	7,711	Sundry Income .....	8,991
116,392	Repairs and maintenance .....	130,162			
24,350	Depreciation .....	29,733			
1,335	Water and sewerage .....	951			
494	Insurance of mobile plant .....	501			
649,302		677,196			
175,808	Cartage, etc. ....	167,085			
	Administration and general office				
80,605	expenses .....	82,160			
16,730	Interest etc. on Capital.....	17,580			
2,460	Sinking fund contributions.....	2,540			
924,905		946,561			
	Profit for Year—				
45,974	Employees' Profit Sharing Dividend	47,375			
73,412	Carried to Accumulated Funds .....	44,344			
£1,044,291		£1,038,280	£1,044,291		£1,038,280



## State Brickworks

## BALANCE SHEET AS AT 31ST MARCH, 1962

LIABILITIES				ASSETS			
Previous year £		£	£	Previous year £		£	£
384,748	Capital—				Fixed Assets—		
19,877	General Loan .....	379,720			Land, buildings,		
364,871	Less repaid .....	22,417	357,303		kilns, railway sid-		
					ings and tracks,		
19,877	Reserves and provisions—				plant and machin-	759,128	
141,077	Capital repayments.....	22,417	568,044		ery .....	146,042	613,086
33,150	Employees' leave .....	152,668			Less depreciation ...		
2,438	Repairs and Maintenance .....	40,890			Plant, tools and		
27,900	Mobile plant insurance .....	2,633			office equipment	148,314	
224,442	Employees' profit sharing		67,113		Less depreciation ...	73,654	74,660
	dividend .....	28,100					
65,193			246,708	635,157	Investments—		687,746
4,276	Current liabilities—				Depreciation reserve		
69,469	Creditors .....	50,868			—Commonwealth		
	Deposits on orders .....	3,204	105,000		Government ins-	105,000	
			54,072		cribed stock .....		
295,408	Accumulated funds—		27,000		Metropolitan Water		
73,412	As at 1st April, 1961 .....	368,820	540		Sewerage and	41,000	
368,820	Unappropriated profit for year	44,344	132,540		Drainage Board...	42	
			413,164		Deposit at Treasury		146,042
					Current assets—		
					Brick stocks .....	56,357	
					Stores and materials	37,510	
					Sundry Debtors ...	104,671	
					Less provision for		
					bad debts .....	9,000	
							95,671
					Cash at Treasury		
					and in hand .....	47,921	
							237,459
£1,027,602		£1,071,247	£1,027,602				£1,071,247

There was a net profit of £91,719 compared with £119,386 in 1960–1961. An amount of £47,375 was transferred to employees' profit sharing dividend fund and £44,344 to Accumulated Profit and Loss Account.

The total quantity of bricks sold decreased from 53,708,937 in 1960–1961, sold at an average price of £16 1s. 4d. per 1,000, returning £862,857 to 50,975,504 in 1961–1962, sold at an average price of £16 10s. 4d. per 1,000, returning an amount of £842,041.



## Government Motor Garage

INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 30TH JUNE, 1962

EXPENDITURE			INCOME		
Previous year £		£	Previous year £		£
27,935	Trading expenses—		130,141	Services rendered .....	139,936
8,451	Wages .....	31,361	1,277	Miscellaneous revenue .....	1,700
47,844	Annual, long service, sick, etc. leave...	7,535			
905	Stores and materials used .....	51,631			
6,723	Electricity used .....	1,063			
2,914	Shop supervision .....	7,376			
696	Repairs and maintenance .....	3,825			
3,908	Depreciation on plant and tools .....	742			
	Sundry trading expenses .....	3,764			
99,376		107,297			
15,998	Managerial, clerical and storekeepers' salaries .....	16,172			
753	Workers' compensation insurance premiums .....	784			
1,565	Pay roll tax .....	1,645			
3,201	Cleaning and caretaking .....	3,388			
764	Insurance on buildings, plant, stock, etc.	764			
1,072	Depreciation on buildings, office furniture and equipment .....	1,071			
1,750	Interest etc. on loan debt .....	1,803			
3,635	Sundry overhead expenses .....	3,303			
3,304	Profit for year carried to accumulated funds .....	5,409			
£131,418		£141,636	£131,418		£141,636

## Government Motor Garage

BALANCE SHEET AS AT 30TH JUNE, 1962

LIABILITIES			ASSETS		
Previous year £		£	Previous year £		£
76,930	Capital debt .....	76,930	49,617	Land, buildings, plant, tools and equipment .....	49,096
39,562	Less repaid .....	39,842	10,168	Stores and materials .....	10,906
37,368		37,088	33,839	Debtors .....	32,880
			4,690	Cash .....	13,767
16,143	Reserves—				
2,394	Employees' leave .....	16,971			
369	Renovations .....	3,474			
	Stock disposal adjustments .....	869			
18,906		21,314			
17,755	Current liabilities—				
	Sundry creditors for stores and services .....	18,553			
24,285	Accumulated Profit and Loss Account .....	29,694			
£98,314		£106,649	£98,314		£106,649

The revenue of the Government Motor Garage is principally derived from hourly labour rates, and stores and materials, including oncost, charged to repair orders. During 1961–1962 the man-hours charged to repair orders averaged 260·7 per day compared with 229·4 during 1960–1961. Services rendered increased by £9,795 or 7·5 per cent. compared with 1960–1961.



## Dredge Service

INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD 1ST MAY, 1961 TO 30TH SEPTEMBER, 1961

EXPENDITURE			INCOME		
Previous year £	£	£	Previous year £	£	
Nil	Salaries, wages, etc. ....	187,066	Nil	Hire charges.....	640,485
	Stores purchased ..... 65,940				
	Miscellaneous charges .... 609				
	Rental of berths, etc. .... 4,424				
		70,973			
	Repairs and overhauls .....	130,618			
	Depreciation .....	66,750			
	Provision for losses or damage ....	14,018			
	Employees' leave .....	20,917			
	Workers' Compensation premiums ..	4,393			
	Pay roll tax .....	4,934			
		499,669			
	Administrative charges .....	13,600			
	Interest charges .....	56,620			
		569,890			
	Net surplus transferred to accumu- lated funds .....	70,595			
		£640,485			£640,485

## Dredge Service

BALANCE SHEET AS AT 30TH SEPTEMBER, 1961

LIABILITIES			ASSETS		
Previous year £	£	£	Previous year £	£	
Nil	Capital Debt .....	3,385,786	Nil	General plant .....	3,018,285
	Less Repaid .....	5,440		Plant under construction .....	308,439
		3,380,346			
	Workshop operating account .....	907		Stores and materials .....	3,061
	Sundry Creditors.....	242,222		Sundry debtors .....	340,745
	Reserves—				
	Repairs and overhauls .....	64,897		Cash at Treasury.....	180,231
	Employees' leave ....	76,310			
	Losses or damage ....	14,018			
	Maintenance of berths, etc.....	1,466			
		156,691			
	Accumulated Funds .....	70,595			
		£3,850,761			£3,850,761

The Dredge Service became a departmental trading undertaking from 1st May, 1961, and the financial year will end on the 30th September each year. Expenditure for the period 1st May, 1961, to 30th September, 1961 was £569,890 and hire charges received for work carried out was £640,485. The surplus of £70,595 resulted from Dredge Service plant working considerable overtime during the period. Of hire charges received, 63 per cent was met by the Maritime Services Board, 8 per cent by other authorities and the B.H.P. Co. Ltd., and 29 per cent from departmental accounts.



## APPENDIX II

### HARBOURS AND RIVERS

#### FUNCTIONS

The functions of the Harbours and Rivers branch comprise:

- (1) the investigation, planning, preliminary design, construction and maintenance of all maritime works (other than some minor works carried out by Councils) outside the ports of Sydney, Newcastle and Botany Bay, including breakwaters, training walls, wharves, wharf cranes, cargo sheds, rail and road access to jetties, footways, coal-loading docks, etc.;
- (2) constructing and maintenance authority on behalf of the Maritime Services Board for Newcastle Harbour;
- (3) the administration and control of a large fleet of dredges and associated plant for use in the dredging of harbours, river entrances and tidal sections of coastal rivers where necessary for navigation;
- (4) constructing authority under the Hunter Valley Flood Mitigation Act;
- (5) examination of Local Government Works or Flood Mitigation on coastal rivers;
- (6) examination of and advice on Local Government Works of a maritime nature where financial assistance has been sought from the Department and/or where construction is on a flood plain;
- (7) the construction of engineering works on behalf of Departmental Trading Undertakings;
- (8) the carrying out of investigations regarding long-range harbour development and technical aspects of tide and wave action, sand movement, flood mitigation in coastal rivers, foreshore erosion, dredging and preservation of maritime structures;
- (9) provision of engineering advice to the Lands and Mines Departments on Leases, Permissive Occupancies, etc., in tidal waters, (i.e., dredging, sand removal, reclamations, etc.);
- (10) policing the Rivers and Foreshores Improvements Act, (i.e., protection of river banks within two chains of such banks);
- (11) investigation of proposals for the formation of Drainage Unions under the Drainage Act, 1939 (as amended), and recommending their constitution or otherwise, to the Minister.

#### OPERATIONS

##### General

Expenditure on construction and maintenance was:—

	£
Harbours and rivers works .....	3,013,549
Dredge service .....	1,494,875
State Dockyard .....	21,865
Hunter Valley Flood Mitigation .....	81,100
Water Transport works .....	276,490
	<hr/>
	£4,887,879

Loan expenditure on improvements to harbours and coastal rivers was £2,361,039 6s. 8d., the major works being the Port Kembla Inner Harbour and Coal Loader, Newcastle Wharves, Clarence Harbour and the Islands Reclamation, Newcastle.

Expenditure of Commonwealth Aid Loan Funds on works of water transport amounted to £276,490. These included improvements to the fishing ports at Brunswick Heads, Evans Head, Tweed Heads and Ulladulla Harbour. Of these ports Brunswick Heads was completed with the exception of some rock removal at the entrance; the equipment from Brunswick has been transferred to Tweed Heads to start operations there; and Ulladulla Harbour improvements was commenced.

This was the first full year in which the Maritime Services Board controlled Newcastle Harbour and Botany Bay. This Branch, however, still carried out maintenance, construction and dredging on behalf of the Maritime Services Board and overall there was an increase in the activities of the branch, expenditure for the year being £430,226 greater than for the preceding year.

#### COASTAL RIVERS AND PORTS

##### Tweed River

Construction of Tweed Heads Harbour works commenced and resulted in the tipping of a small quantity of stone for the commencement of the southern breakwater. The quarry was prepared and access roads constructed and the transfer of machinery and plant from Brunswick Heads completed. The expenditure for the year was £17,593 3s.

Normal general maintenance works were undertaken during the year on Terranora Dock. A diesel engine, to replace obsolete boilers, for driving pumps has been delivered for installation.

Dredging was undertaken mainly to keep the upriver channels up to the requirements of the Colonial Sugar Refining Company's cane barges. A total of 19,221 tons of material was dredged during the year by the dredge *Harwood*.

##### Brunswick Heads

The construction of all breakwaters and training walls as designed, together with extensions and modifications, was completed. Quarrying operations were terminated and all stores, plant and materials transferred to Tweed Heads.

The work was officially opened by the Premier, The Hon. R. J. Heffron, on 17th February, 1962. The final cost was approximately £240,000.

##### Richmond River

The bar dredge *Hermes* was engaged in maintaining upriver channels and improving the bar and inner crossings. These were maintained generally to a depth of 13 ft. except for short periods.

Dredge *Coraki* was engaged on improvements in the Broadwater.

Total quantities removed were:—

<i>Hermes</i> .....	108,968 tons
<i>Coraki</i> .....	43,050 tons

Repairs to northern and southern breakwaters continued during the year. A total of 51 10-ton and 16 40-ton concrete blocks were tipped along the breakwater together with 600 cu. yd. of stone protection.

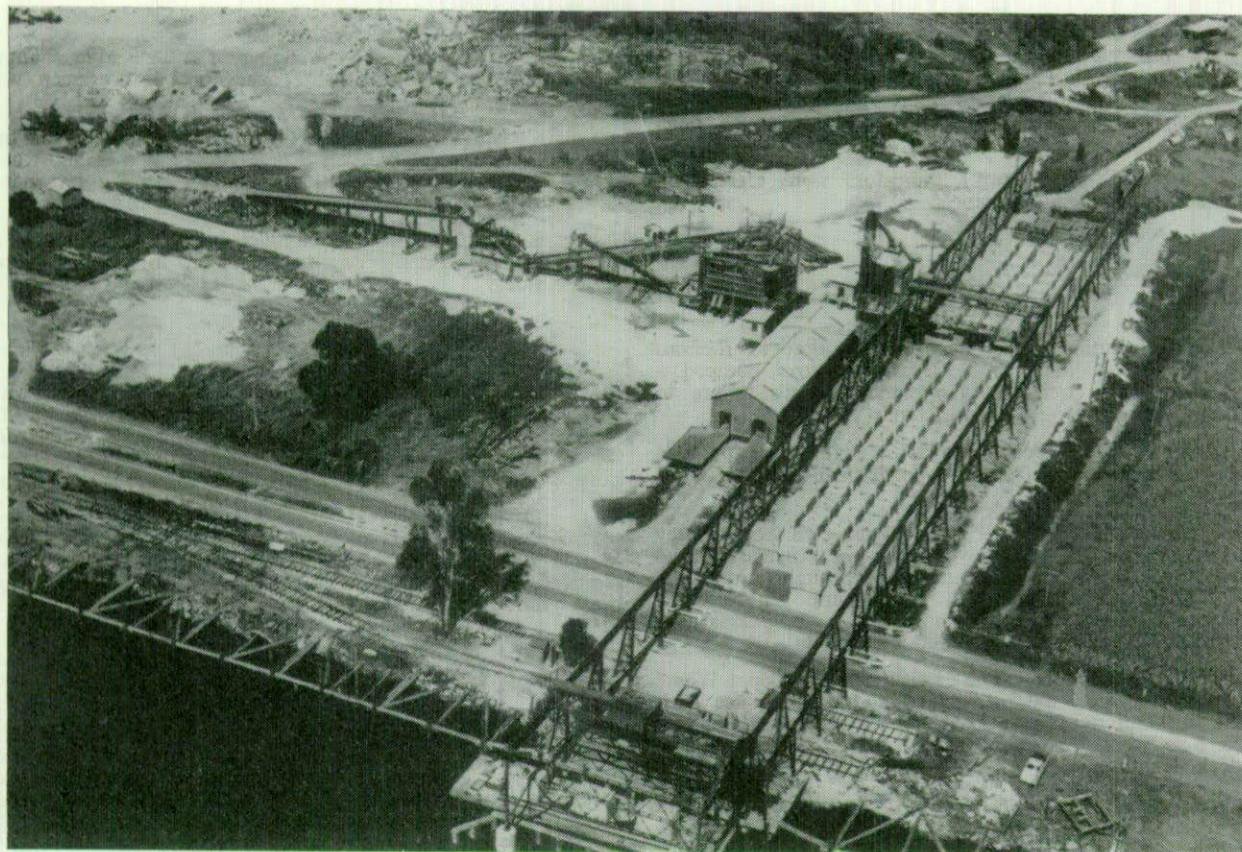
General maintenance and minor works carried out included repairs to buildings and machinery at Riley's Hill Dock.

##### Evans Head

The Evans Head Harbour Works proceeded with the development of the quarry and construction of training walls and the northern breakwater. The bridge was opened for construction traffic, however final completion depends on placing of a wearing surface and footway slabs.

This year the quantity of stone placed in the breakwater and training walls was 35,165 tons, expenditure being £100,568 16s. 6d.





Concrete Block Making Plant, Clarence Harbour Works

#### Clarence River

In addition to the routine maintenance of navigation beacons and flood gauges, the reconstruction was undertaken of the Maritime Services Board tug berth at Yamba, with concrete protected piles and a concrete deck.

Dredging operations by the dredges *Maclean* and *H. E. Street* removed a total of 147,425 tons of silt from the river.

#### Clarence Harbour Works

Concentration of work was on the southern breakwater on which 82,800 tons of material was tipped, consisting of 1,590 40-ton concrete blocks and 19,200 tons of stone which resulted in an advance of 390 feet to chainage 1,790 ft. This represented 54 per cent. of the length of the proposed extensions. The total material tipped to date in the southern breakwater is 180,000 tons which includes 3,292 blocks.

The cyclone in April caused some damage to the northern breakwater. 2,214 tons of stone and 200 tons of concrete were used to repair this damage. No advance was attempted, the chainage remained at 2,360 ft., i.e., 56 per cent. completed.

At Woodford Island the production of 40-ton concrete blocks continued. 3,435 blocks have been cast of which 1,582 were cast this year. This represents 32 per cent. of the estimated requirements and an annual rate of 15 per cent.

Expenditure for the year was £360,335.

At the entrance the maximum depth remained well north of the entrance leads as was the case last year. The depth has not varied greatly showing 11-12 feet on the lead and 13½-14½ feet north of the leads. No dredging was necessary and no shipping was delayed except during cyclonic disturbances.

#### Ashby Dock

The enlarged dock has been used by Dredge Service, Clarence Harbour Works, Department of Main Roads and others. The enlargement of the dock and modernisation of the facilities have proved to be of considerable benefit.

#### Coff's Harbour

Routine maintenance work was carried out to the harbour installations. Repairs to the jetty to the extent of £4,449 were undertaken comprising the replacement of piles, girders, decking, ironwork, etc. No maintenance work was required on the breakwaters.

#### Macleay River

The Shark Island diversion training wall was completed with the closing of the western gap on the 27th September, 1961, and the eastern gap on the 7th December, 1961. Construction works closed down at the end of April, after carrying out further bank protection along the southern pilot channel. This year a total of 35,652 tons of large stone was used for the training wall works while 1,042 tons of stone was used for the maintenance of access roads.

Expenditure was £44,968.

Repairs were carried out to the northern and southern breakwaters and the southern training wall. For the northern breakwater 55 10-ton concrete blocks were made; 26 of these blocks were tipped, the balance being kept in reserve. Following the April floods one serious side slip was repaired on the northern breakwater with 455 cubic yards of large stone. Expenditure on the northern breakwater was £4,595.

The work on the southern breakwater consisted of making 40 10-ton blocks which will be tipped to complete the current programme. Expenditure for the year was £2,581. Minor repairs were undertaken on the southern training wall.

#### Hastings River

Repairs to the southern breakwater continued with 15 10-ton concrete blocks made and tipped and 990 tons of large stone placed in the breakwater completing the maintenance of this wall. Cost for the year was £4,834.

#### Camden Haven River

To provide safe conditions at the entrance to the Camden Haven River, the dredge *Antleon* was used to dredge 9,600 tons from the bar and 1,500 tons from the inner crossing.



### Forster

Repairs were undertaken on the northern training wall at the entrance to Wallis Lake. Approximately 1,200 feet of the wall was repaired and raised to approximately R.L.6. Sand dunes have formed behind the wall providing added bank protection.

In Lake Wallis four danger indicators were erected on obstructions in navigable channels.

### Newcastle

Islands Reclamation.—The Departmental dredges *Richard Vowell*, *William J. McKell*, *C.S.I.* and *Gosford* pumped a total of 1,036,250 cubic yards of sand and silt ashore to Dempsey, Walsh and Moscheto Islands.

In addition 997,022 cubic yards of sand was pumped ashore to Walsh Island from the north arm of the Hunter River by contract dredges.

Levee banks of 15,000 feet were constructed at Dempsey and Moscheto Islands. Low lying parts of the access road from Ash Island to Walsh Island were brought up to the designed level. A training wall from pump ashore berth No. 1 to the proposed pump ashore berth No. 3 was constructed; length approximately 4,000 feet.

Carrington Depot Store.—The extension to the Depot Wharf was commenced with the pouring of the cast in place deck and the installation of a special fender system; maintenance requirements were the replacement of some piles, fenders and deck lengths.

The two-storey brick office block was completed and occupied by the Depot's office staff and Dredge Service Personnel.

Steel work and flooring for the workshop loft have been completed and an external access stairway constructed. The installation of an electric hoist was commenced.

A stationary electric compressor was installed in the workshop and connected with air reservoirs and reticulated throughout the area.

Normal maintenance work was carried out at the Depot and to the Dredge Service tie-up berth and the Carrington slipways.

(See also—Work for other Departments—Maritime Services Board.)

### Metropolitan

Hawkesbury River.—The dredging of a navigable channel in Patonga Creek to serve the needs of the fishermen was 50 per cent. completed.

Cooks River.—The steel sheet piling was completed on the right bank between Wardell Road Bridge and Lang Road footbridge, and a short section of piling on the left bank downstream of Lang Road footbridge was constructed.

Port Hacking.—Work was completed on the dredging of a channel in Fishermen's Bay to Maianbar to provide access at low tide.

### South Coast

Wollongong Harbour.—The construction of a slipway with power winch was completed and handed over to the M.S.B. Maintenance of the slipway, involved removal of sand from the running rails and the construction of two (2) sets of heavy arms. Chafing pieces were replaced along the basin, and minor maintenance of the access road carried out.

Dredging of the area in front of the Fish Markets Wharf was carried out and 15,520 cubic yards of sand and silt removed. Repairs and strengthening were carried out on the breakwater, necessitating the use of 114 20-ton blocks.

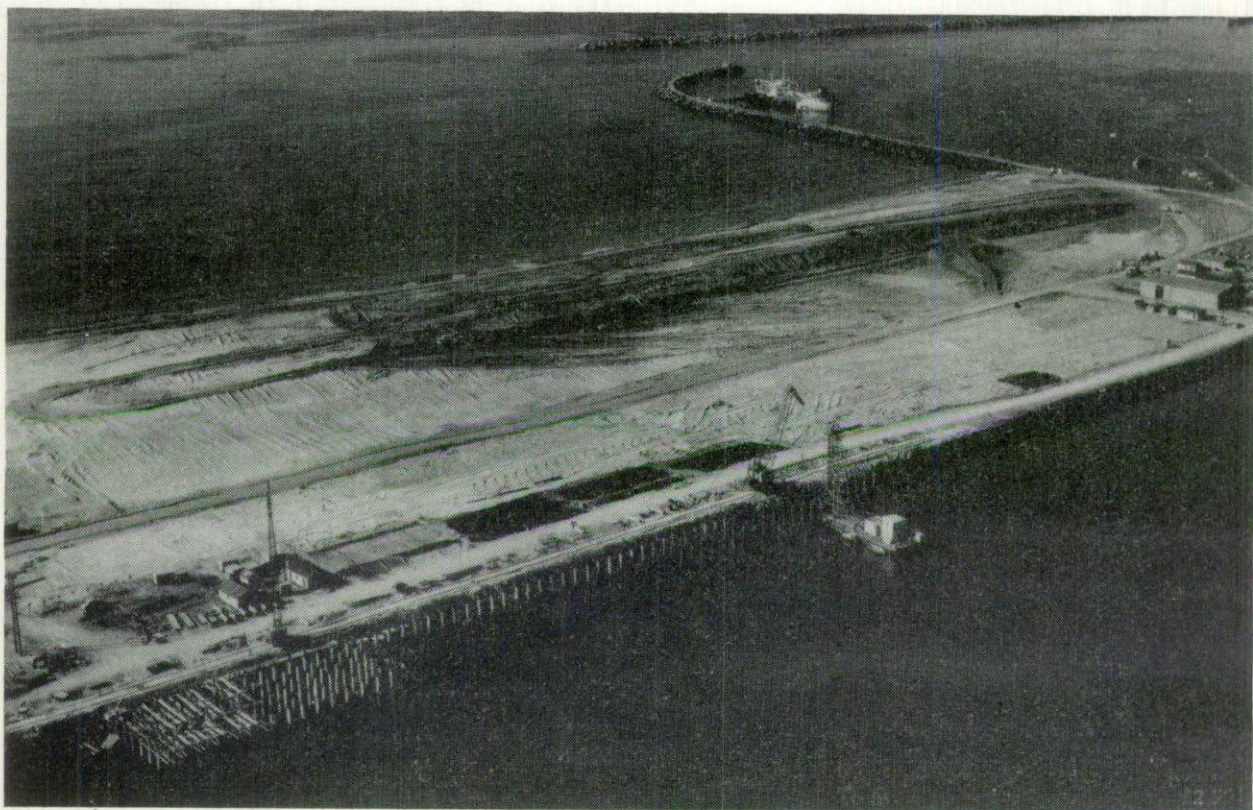
### Port Kembla

Port Kembla Harbour.—The extension of the eastern breakwater commenced last year was completed with the tipping of eight 40-ton and three 20-ton concrete blocks, the tipping head remaining at ch. 3,892 feet. The capping of the northern breakwater was completed.

No. 1 Jetty.—Further modifications were made to the existing coal loading plant including the installation of a dust extracting system in the belt tunnel. Repairs to the sub-structure were made by way of replacement of various pile timbers.

No. 3 Jetty structure was repaired and the conversion of the fender structure to rubber buffer type units progressed a further stage.

No. 4 Jetty.—A major maintenance programme was carried out on this jetty and fender structures, 68 piles were placed 100 piles patched, 1,777 feet of girders and kerbing laid, and 13,619 square feet of decking replaced. Miscellaneous maintenance of the jetty was also carried out.



Site of Coal Loading Plant with Berth under Construction, Port Kembla Inner Harbour



**Inflammable Liquids Berth.**—Maintenance only was required. The construction of the two new dolphins was 95 per cent. completed, all piles having been driven and only concrete blocks remaining to be placed.

**No. 6 Jetty.**—Maintenance of the fender rubbing strips was carried out as berths became available as well as miscellaneous repairs.

**Tug and Launch Berth.**—The construction of the berth was completed at a total cost of £61,018.

General mechanical and electrical maintenance was carried out as required and preventive maintenance procedure was continued.

Miscellaneous repairs were carried out on all buildings used by the waterside workers, Maritime Services Board employees, etc. Drainage improvements to the workshop and store area, and improvements to the office area were completed. The workshop store was extended westward thirty feet.

**Inner Harbour and Coal Loading Berth.**—Both the Stage II dredging and the rock removal contracts were completed during the year, except for final cleaning up of rock areas.

The dredging was completed on 16th December, 1961; the material dredged during the year was 1,780,234 cubic yards, making a final revised total of 8,040,235 cubic yards. Other work included in this contract was the placing during the year of 10,690 cubic yards of rock in training walls and ballasted banks for a grand total of 116,690 cubic yards. Excavation of underwater rock was completed on 3rd March, 1962. The quantity of material removed was 57,000 cubic yards, making a total of 578,160 cubic yards of rock excavated from the inner harbour.

Construction of the coal berth commenced on 16th December, 1961, and a total of 471 95-foot steel piles were driven by the end of the year. Pouring of the reinforced concrete gravel-beam was commenced on 4th May, 1962, and 265 feet had been completed by the end of the year. The pouring of reinforced concrete pile sleeves and cores was commenced on 4th April, 1962.

A contract was let to John Holland (Constructions) Pty. Ltd., for the design, fabrication and erection of the coal handling plant. Work has commenced with the driving of piles for the footings to towers and trestles.

Work commenced on the earthworks for the rail access to the Coal Loader. The first section of embankment adjacent to Springhill Road has been completed to approximately R.L. 12.00 for a distance of 2,244 feet as far as to the Old Port Kembla Road.

The Department of Railways has commenced construction between Coniston Railway Station and Springhill Road, and on the foundations of the bridge which is to be constructed across the Springhill Road. The northern approach bank, which provides for a double track, was approximately 30 per cent. completed. Work commenced on drilling for concrete cylinders for the northern abutment.

Tenders will shortly be called for the construction of a culvert adjacent to the bridge over Springhill Road now under construction. Tenders will also be called during next financial year for the construction of the bridge over the main western drain.

A rock wall on the seaward side of the coal berth peninsula extending from the northern breakwater of the outer harbour for approximately 2,300 feet was commenced. A groyne was constructed at the end of this wall. A total of 74,300 cubic yards of rock was placed in the seawall and groyne and an additional groyne was constructed at approximately 2,200 feet along the foreshore to the north.

**Eden Jetty.**—Repairs were effected to fenders and new boom and hoist ropes fitted to the hand-operated shore crane. Work was commenced on the Waterside Workers' Amenities Building, all concrete piles being cast, and the first seven piles driven.

**Bermagui.**—The old shipping jetty at Bermagui was closed down and barricaded off.

**Comerong Island.**—The bank of Comerong Island, along the Canal between the Crookhaven and Shoalhaven Rivers, was sheeted with broken stone to arrest erosion and a levee bank 3,600 feet long erected.

**Kiama Harbour.**—Repairs were carried out to the roadway and additional ballast placed on the western side to replace that lost in the heavy seas.

**Bateman's Bay.**—Three missing markers on the training wall were replaced and the pilot's boatshed and slipway were demolished. The bar was dredged to a minimum depth of 8 feet 6 inches with the removal of 45,100 tons of spoils.

**Ulladulla Harbour Works.**—Work commenced on erection of depot buildings, at the quarry near Milton, and the construction of access roads were completed.

Tipping was commenced on 18th June, 1962, and 260 tons of stone placed in the southern breakwater and 170 tons in the northern breakwater.

## Work for Other Departments

### MARITIME SERVICES BOARD

The construction and maintenance of boatsheds, slipways, navigation aids, wharves, jetties and their appurtenances, were carried out by this Department at all coastal ports except Sydney Harbour, Botany Bay and Newcastle.

At Newcastle this Department, as Constructing Authority for the Maritime Services Board, carried out the construction and maintenance of wharfage, sea and river marks and other Harbour and River installations, dredging for maintenance and improvement of navigable channels and hydrographic surveys.

**Harbour Works.**—To deepen the harbour 13,500 tons of sand and rock previously broken by the rock breaker *T. J. Paul* were removed from the entrance channel by the dredge *Juno*. A contract was let for the removal of 619,100 cubic yards of rock and 808,400 cubic yards of over burden. This work is expected to provide a depth of 36 feet below I.S.L.W.

**Wickham Wharf.**—The amenities building and sub-station were completed. Two Hodgkinson 5-ton level luffing electrical travelling cranes were constructed on the wharf. Transformers were installed in the sub-station and power connections made to the wharf cranes and the floodlight tower, on which floodlights were installed and focussed. Kerbing and asphalt paving of the storage area at the rear of the wharf has been completed and concrete paving laid between the amenities building and the wharf.

**Throsby Basin.**—The temporary oil berth was completed. A steel pile frame was erected for construction at Throsby Basin Wharf Berth No. 1 where 13 fender piles and 37 back row short piles have been driven. A concrete test pile was driven in the third row of the new wharf and test loaded at several depths.

**Lee Wharf.**—Work undertaken at Lee Wharf was renewal of the deck. A 6-inch concrete deck was constructed to replace the existing timber decking over 400 lineal feet of this wharf. This completed the concrete decking of berths 1, 2 and 3 of Lee Wharf. General maintenance was carried out to Lee Wharf with the replacement of some piles, girders, fenders and general repairs to the cargo sheds.

**General.**—Maintenance was undertaken on a number of wharves and other structures including fendering; the driving of piles; the extraction of piles and pile stumps; the repair of the rock seawall and the demolition of the old Dyke Wharf. Fourteen 60-ton concrete blocks were tipped from the end of the southern breakwater and design investigation carried out on a replacement rear leading light tower.

Dredging was carried out by the Departmental dredge fleet, and 3,369,320 tons of silt, sand and rock was removed from navigable channels, including the 2,000,000 tons approximately used in the Islands Reclamation. A programme of dredging to provide 36 feet I.S.L.W. depth in the Harbour was commenced and 277,500 tons of silt has been removed from the basin.

A total of 51 harbour surveys were carried out on the wharves and in the harbour channels during the year. This work was of immense value both as an aid to dredging channels and for purposes of navigation.

### DEPARTMENT OF LANDS AND MINES DEPARTMENT

This Department acted as technical adviser to the Department of Lands and the Mines Department. Numerous applications for permissive occupancies, special leases, leases and dredging leases were investigated and reported on.

### CHIEF SECRETARY'S DEPARTMENT, FISHERIES BRANCH

The maintenance of boatsheds, slipways and other structures belonging to the Chief Secretary's Department was carried out and investigations and construction undertaken for similar new structures.



## POLICE DEPARTMENT

Maintenance work was carried out to police boatsheds, slipways and jetties as required.

## WATER CONSERVATION AND IRRIGATION COMMISSION

Inspections and investigations were made in connection with applications under the Water Act.

## FLOOD MITIGATION

At present seven authorities are carrying out flood mitigation works to Departmental design and the works being subsidised on a two-thirds basis.

**Tweed River.**—The Tweed Shire Council commenced the diversion of Lavender Creek at Murwillumbah to enter the river through a floodgate structure. This work was 80 per cent. complete.

**Richmond River.**—The Richmond River County Council, although hampered by wet weather and flooding, has shown good progress with its programme of works. Major works undertaken by the Richmond River County Council were:—Buckendoon Levee Bank, Tuckurimba Area Drains, Breakfast Plains Levee, Tickles Creek Floodgates, and Keith Hall Drain and Floodgates.

The April floods proved the efficiency of work constructed in the Broadwater area.

**Clarence River.**—The Clarence River County Council completed a number of drains and floodgates in the Sportsman's Creek, Edwards Creek, Camp Creek and Maclean areas. Two large floodgates and drains were nearing completion between Ulmarra and Cowper.

Flooding in April indicated that the completed works are operating in an efficient manner.

**Bellinger River.**—An investigation was commenced into possible flood mitigation works for the lower river valley.

**Macleay River.**—The Macleay River County Council continued work on the Belmore-Kinchela drains and headworks. Main works started were Christmas Creek floodgates and bank protection in the Glenrock-Frederickton area. Work was delayed by floods and wet weather.

The quick release of flood waters where flood mitigation works had been completed proved to be satisfactory.

A model is under construction, at the Department's Manly laboratory to study the effects of flood mitigation works adjacent to Kempsey. Laboratory staff obtained data from floods during the year which will be used in the model.

**Hunter River.**—Investigations continued on a number of future projects. An analogue computer was constructed at Sydney University for the analysis of the Howes Lagoon Proposal. Data was obtained on an unusual type flood which occurred in May. This flood showed that completed works had functioned in an efficient manner.

The major construction works undertaken by the Department as constructing authority for the Hunter Valley Conservation Trust were:—

**Eskdale Swamp and Nelson's Plains—Drainage and Levees.**—All work on this project was carried out by day labour as follows:—

Two 5-ft. diameter floodgates which were 50 per cent. complete at the end of 1960-61 were completed and four twin-cell 5-ft. diameter floodgates were also constructed. Four 3-ft. diameter drain crossings were completed.

**Berry Park Bank Protection.**—This day labour work was completed by the rock protection of a further 3,365 lineal feet of river bank with 16,340 tons of rock.

**Shoalhaven River Flood Mitigation.**—A report on flood mitigation proposals for the lower river was completed.

## HYDRAULIC AND SOILS LABORATORY, MANLY VALE

The volume of work in both hydraulic and soils investigations increased considerably during the year.

Major investigations in the hydraulic laboratory during the year were:—

**Newcastle Harbour Siltation Investigation.**—The model was constructed and field data for proving the model obtained. Following an overseas visit to major laboratories by the Assistant Director and the Principal Engineer Harbours and Rivers the Wallingford Hydraulic Research Station, England, was retained as advisor and consultant in this investigation. A number of special instruments have been ordered from overseas and a tide and littoral current generator from Wallingford. An analysis of the historical changes in the topography of the harbour is in progress.

**Ulladulla Harbour.**—Model investigation of proposals were completed and works designed.

**Port Kembla Inner Harbour.**—Changes in the shape of the harbour made necessary by the coal loader location were checked for resonance effects.

**Wave Flume.**—A new and larger wave flume for study of wave problems is nearing completion.

**Soils Testing.**—A triaxial soils testing machine is on order and when received the laboratory will be equipped to handle all types of testing required.

Some of the works for which testing was carried out were: Mardi Dam; Hunter, Tweed and Macleay Rivers levees and structure foundations; Nowra Swimming Pool; Port Kembla Inner Harbour and coal loading wharf; Newcastle Siltation Investigation and foundations for a number of country town service reservoirs.

## REPRESENTATION ON COMMITTEES

There was branch representatives on behalf of the Department on the following:—

- Newcastle Port Advisory Committee.
- Newcastle Port Development Committee.
- Hunter Valley Research Foundation.
- The Hunter Valley Conservation Trust.
- Committee of Advice on Flood Control and Mitigation.
- State Flood Warning Committee.
- Botany Bay Northern Foreshore Committee.
- Botany Bay Control and Development Committee.
- Port Kembla Advisory Committee.
- Port Kembla Coal Loading Facilities Committee.
- Pokolbin Soil Conservation Trial Committee.
- The Board of Advice and Reference.
- The Patents' Committee.
- The Crown Employees (Dredges, etc.) Conciliation Committee.

## DREDGE SERVICE OPERATIONS

The Dredge Service now operates as a trading undertaking with a financial year 1st October to the 30th September.

The fleet continued to provide an overall service in maintaining navigable channels where required in coastal rivers and entrances and ports excluding Sydney, Newcastle and Botany Bay. Dredging at Newcastle was carried out on behalf of the Maritime Services Board.

In addition to this work two hydraulic type dredges were engaged on the Islands Reclamation work in Newcastle Harbour.

Progressive improvements to channels at Newcastle were possible as only one medium flood occurred during the year.

Normal general maintenance and modification of plant were carried out as required. A major overhaul which included the repositioning of the side suction pipes, was commenced on the bar dredge *Neptune*.

The new diesel-electric ladder bucket dredge, *John Main*, was launched on the 24th November, 1961, and should be operating early in 1963.



## Particulars of Operations on Coastal Rivers and Ports

YEAR ENDED 30TH JUNE, 1962

River or Port	Vessel Engaged	Tonnage Lifted	Total Tonnage	Cost	Total Cost
Tweed .....	<i>Harwood</i>	19,221	19,221	£ 13,235	£ 13,235
Richmond .....	<i>Hermes</i> <i>Coraki</i>	108,968 43,050	152,018	82,750 18,788	101,538
Clarence .....	<i>H. E. Street</i> <i>Maclean</i>	102,800 44,625	147,425	84,261 19,827	104,088
Camden Haven .....	<i>Antleon</i>	11,100	11,100	15,000	15,000
Myall River, Cowie Island .....	<i>Forster</i>	45,750	45,750	2,044	2,044
Lake Macquarie .....	<i>Forster</i>	148,528	148,528	15,669	15,669
Wollongong .....	<i>Antleon</i>	15,520	15,520	30,622	30,622
Bateman's Bay .....	<i>Antleon</i>	45,100	45,100	38,284	38,284
Port Kembla Wharves .....	<i>E. O. K. Green</i>	1,000	1,000	617	617
Total Tons Dredged .....			585,662		

## Dock Transactions 1961-1962

	Rileys Hill Dock Richmond River	Terranora Dock Tweed River	Ashby Dock Clarence River
(1) Number of vessels docked—Departmental .....	2	1	7
(2) No. of vessels docked—DMR .....	6	..	4
Gross tonnage .....	1,100	..	790
3) No. of vessels docked—private .....	Nil	1	2
Gross tonnage .....	..	75	174

The operational costs for the year were £2,399 4s. 8d.



## APPENDIX IIIA

### WATER SUPPLY AND SEWERAGE

#### FUNCTIONS

The functions of the Branch include technical and administrative activities associated with the works of water supply, sewerage and stormwater drainage throughout the State, with the exception of the area under the control of the Metropolitan Water, Sewerage and Drainage Board in Sydney, the Hunter District Water Board in Newcastle, the Grafton and South Grafton Water Board and Broken Hill Water Board.

These functions comprise:—

- (1) Water Supply and Sewerage schemes—
  - (a) the construction of works in country towns by the departmental day labour organisation and by contract;
  - (b) supervision of works being constructed by Councils, and Broken Hill Water Board;
  - (c) provision of services for State institutions and hospitals;
  - (d) investigation of schemes, augmentation and extensions in country towns, institutions and hospitals;
- (2) Water Supply purification—
 

The investigation, supervision of design, construction, installation and inspection of plant and equipment for the purification of trade wastes, domestic water supplies and bathing pools in country towns, institutions and hospitals and public schools.
- (3) Miscellaneous—
  - (a) operation and maintenance of water supply works controlled by the Department;
  - (b) supervision of the mechanical and electrical activities in connection with water supply and sewerage construction;
  - (c) construction, operation and maintenance of River Murray Works on behalf of the River Murray Commission;
  - (d) finalisation of handover of stormwater drainage structures in the Newcastle and Metropolitan areas to the Water Boards; technical advice to councils on stormwater drainage proposals outside the areas of operation of the Metropolitan and Newcastle Water Boards; stormwater problems in Government Institutions.

#### OPERATIONS

##### 1. Water Supplies

##### (A) CONSTRUCTION

*Works Under Construction or Completed by the Department*

Attunga.—Construction was commenced by Contract.

Bendemeer.—Construction by Contract was commenced.

Bulahdelah.—Tenders have been invited for construction of a weir across the Crawford River, and tenders are about to be invited for the pumping station, reservoir and reticulation.

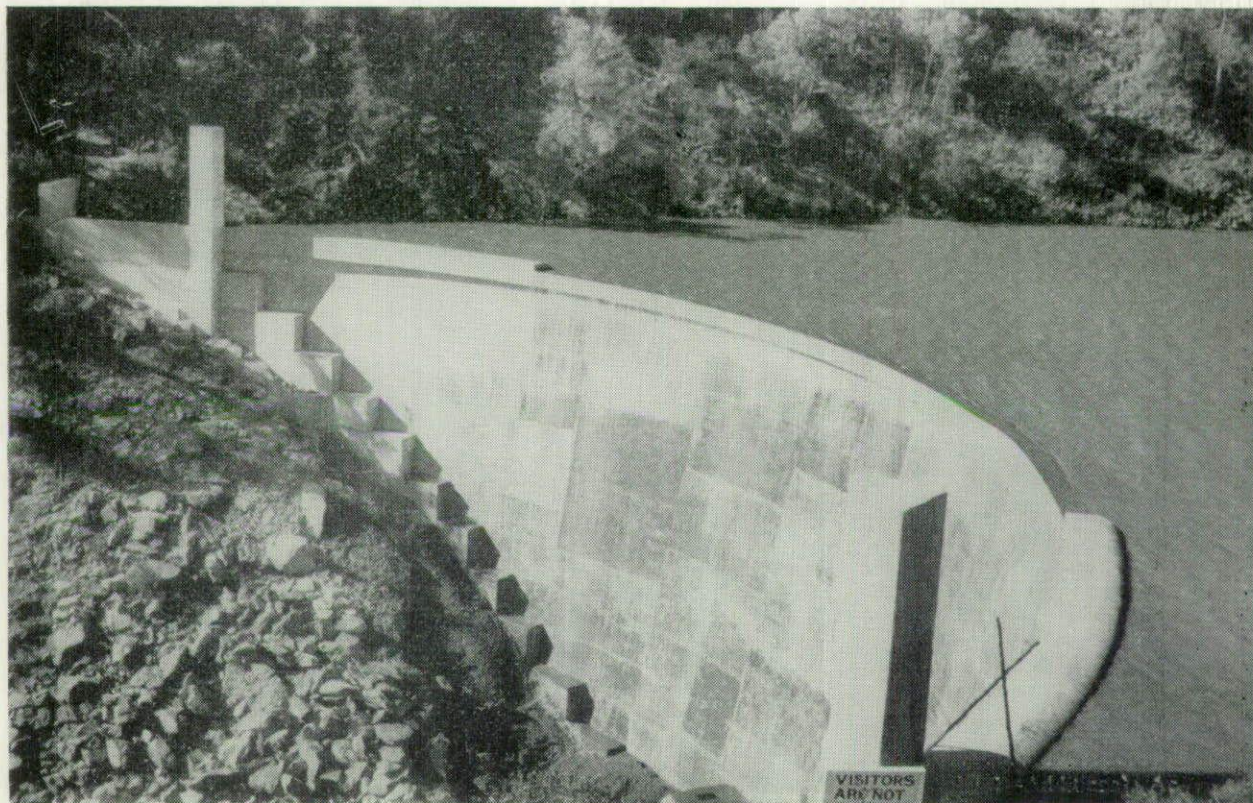
Coonabarabran Augmentation.—Timor Dam, on the Castlereagh River, was completed by departmental day labour during the year. It is a concrete arch dam 62 feet high with a storage capacity of 250 million gallons. The gravitation main, consisting of 8 miles of 10 in. C.I. pipe, was completed by Coonabarabran Shire Council. Total cost was approximately £210,000.

Fish River Augmentation.—Oberon Dam was completed in 1958 to its full capacity of 10,000 million gallons and supply of water is being provided for Oberon, Wallerawang, Wallerawang Power Station, Lidsdale, Portland, Cullen Bullen, Glen Davis and Lithgow.

Work continued on the extension of supply to the Blue Mountains City Council Area by pipeline and tunnel. The pipeline to Leura, approximately 29 miles long, was 25 per cent completed and the tunnel through the range at Hampton approximately 60 per cent completed. Provision has been made for stock and domestic supplies to be made available in the Cox's Valley and to supply water for fire fighting purposes.

Gilgandra.—Well points are being sunk in the bed of the Castlereagh River, which ceases to flow in dry periods, as a proposed source of permanent supply. Should this intake prove satisfactory, implementation of the remainder of the scheme will proceed.

Gunning.—Construction of pumping station, reservoir and mains by contract is approaching completion.



Timor Dam, Castlereagh River



**Hume Reservoir and other River Murray Works.**—As a result of enlarging the storage capacity to 2.5 million acre-feet, certain strengthening measures involving the installation of 382 post tensioned cables in the main wall of the dam were carried out. This work was done by contract and completed on 3rd October, 1961. Since that date work has proceeded on the modifications necessary to the storage gate lifting machinery and control mechanism, an approach span to the New South Wales end of Bethanga Bridge, and on the construction of a temporary plug in the unused hydro-electric penstock in the dam.

**Lower Clarence Water Supply System.**—This is a £1,200,000 scheme designed to supply stock and domestic water throughout the Lower Clarence from Grafton to Yamba and will involve the laying of approximately 100 miles of pipeline varying from 21 in. to 4 in. diameter. This is the first occasion on which the Department has used large diameter asbestos cement pipes. It is considered that recent improvements in manufacturing processes warrant the use of this material in larger pipes for moderate heads and material economy has resulted from the use of 21 in. asbestos cement pipes on this project. Construction has been commenced by day labour, and some five miles of piping laid.

**Moss Vale.**—Construction of this scheme comprising a dam and gravitation and reticulation mains was virtually completed.

Tenders have been called for a service reservoir for New Berrima.

**Rylstone-Kandos.**—Construction of a water filtration plant by contract approaches completion.

**Stroud.**—The scheme has been completed and is in operation except for installation of chlorination plant.

**Tea Gardens.**—Preparatory work has begun for the sinking of five production bores by Hunter District Water Board.

**Tibooburra.**—The original work has been completed and is in operation, but further reticulation extensions are now being carried out.

**The Entrance.**—Construction is being carried out by a series of contracts.

The pumping station on Wyong Creek was completed whilst the rising main, Mardi Dam, the outlet tower and the first section of the gravitation main were in varying stages of completion.

Plans and specification for the second section of the gravitation main and Service Reservoir were almost completed.

#### *Works Under Construction or Completed by Councils with Departmental Supervision*

**Barham (Wakool Shire).**—The Department has prepared plans and specifications for new intake works and pumping station, and also a new service reservoir, for Council to call tenders. The Department has invited tenders for pumping machinery on behalf of the Council. Government subsidy is not involved.

**Camden Haven (Hastings Shire).**—The main scheme has been in operation since 1957, but extensions were recently constructed to serve Bonny Hills and Cathie, at an estimated cost of £78,000. The work was approaching completion and in partial operation.

**Hay.**—Council has let contracts, using departmental plans and specifications, for new intake works, pumping station, and a service reservoir. The Department has let a contract on Council's behalf for new pumping machinery and has provided a welding inspector to supervise the work on the steel reservoir. Government subsidy is not involved.

**Molong.**—The Council has let a tender for the construction of a water filtration plant to a departmental specification, and construction has commenced.

**Nimmitabel (Monaro Shire).**—Contracts for the reticulation, pumping station and the service reservoir have been let and construction commenced.

**Tweed District (Tweed Shire).**—This is a district scheme to serve or augment supply to Murwillumbah, Tweed Heads, and villages on the Lower Tweed, including Kingscliff, Cudgen, Fingal, and possible extensions made to serve Cudgera and Potts Point. The design, plans and specifications were prepared by the Department and the work commenced by Council day labour staff. Estimated total cost is £1,452,000.

The headworks weir was practically complete and storage has commenced for partial operation of the scheme as far as Kingscliff. Pipelines were approximately 75 per cent. complete and in process of being linked by two major crossings over the Tweed River at Barney's Point and Boyds Bay.

Service reservoirs at Murwillumbah, Tweed Heads, Kingscliff and Fingal have been completed and work by Council's day labour staff is about to commence on the balance tank at Kurrara. Of three pumping stations, two are in operation and tenders for the third at Chinderah are about to be invited, as also are tenders for the filtration plant; the chlorination plant at No. 2 pumping station is in operation. A contract for supply of pumping machinery at No. 3 station has been let.

**Walgett.**—New intake works, pumpwell and filtration plant were under construction by contract to plans and specifications prepared by the Department. A 250,000 gallon steel reservoir was completed.

**Wauchope Augmentation (Hastings Shire).**—Council has accepted the Department's recommendation for a joint intake works with Port Macquarie Council.

#### *Water Supplies to State Institutions and Hospitals*

**Allandale Hospital—Cessnock.**—A water supply scheme, constructed by the Hunter District Water Board, has been completed except for connection of the reservoir to the Board's supply.

**Farrer Memorial Agricultural High School—Tamworth.**—The fully filtered swimming pool has been completed.

#### (B) INVESTIGATION

Investigations were carried out or continued during the year in connection with water supply proposals for the following:—

##### *District schemes.—*

Tweed Shire, Wyong Shire, Central Tablelands Water Supply, Lower Macleay, Tantawanglo water supply, Berrima, Lower Manning.

##### *Towns.—*

##### *New schemes.—*

Bullahdelah, Cassilis, Crescent Head, Denman, Gulgandra, Gol Gol, Jindabyne, Mathoura, Nimmitabel, Nundle, Rankins Springs, Tea Gardens, The Entrance, Tuncurry-Foster, Walcha, White Cliffs, Woolgoolga, Woolli.

##### *Augmentations.—*

Armidale, Ballina, Barooga, Bermagui, Buronga, Cobar, Coolah, Coonabarabran, Cowra, Guyra, Ivanhoe, Kempsey, Lavington, Leeton, Merriwa, Mittagong, Narooma, Narrabri, Nyngan, Orange, Parkes, Peak Hill, Port Macquarie-Wauchope, Rous County Council, South Bowenfels, Tibooburra, Wilcannia, Yass.

##### *Institutions—Augmentations—*

##### *Hospitals—*

Coff's Harbour District, Gunnedah District, Mater Misericordiae Waratah, Moree District, Morisset, Newington, Nyngan, Peat and Milson Islands Mental, Rydalmere Mental.

##### *Schools—*

Borenore, J. J. Cahill Memorial High (playing fields), Cassilis, Emu Plains High, Epping Boys' High, Kogarah Technical College, Lithgow, Narrabeen High (playing fields), Nerigundah, Penrose, West Kempsey High.

##### *Other Establishments—*

Cassilis Police Station and Court House, Cubawee Aborigines' Reserve, Emu Plains Prison Farm, Goodooga Police Station, Kosciusko State Park Trust's Chalet and Lakeside Inn, Moree Aborigines' Reserve, Mt. Penang Training School, National Fitness Camp Narrabeen, St. Helier's Child Welfare Home, State Penitentiary Malabar, University of New South Wales, Nanima Aborigines' Reserve.

##### *Special—*

Fish River Water Supply scheme, South-west Tablelands Water Supply scheme, proposed flood forecasting system for the River Murray above Hume Reservoir.



## (C) PURIFICATION

Investigations have been made regarding water treatment for Bourke and Nimmitabel schemes. Plans were reviewed for water treatment plants for Baradine, Mathoura, Molong, Rylstone-Kandos, Tweed Heads District, Walgett and Wellington water supplies and specifications prepared for Mathoura, Molong and Wellington. Specifications for Tweed District Plant were well advanced.

Chlorination plants have been installed at Junee (June Water Supply) and Murwillumbah (Lower Tweed District Supply).

Four new rate control valves have been installed at the Jugiong Plant (South-west Tablelands Water Supply).

## II. Sewerage

## (A) CONSTRUCTION

*Works either Completed or Under Construction by the Department*

Boorowa—The treatment works and pumping station, constructed by departmental day labour, have been practically completed. The reticulation, constructed by contract, was approximately 85 per cent. complete.

Coonabarabran—The treatment works and pumping stations, under construction by departmental day labour, were 80 per cent. complete. A contract has been let for the reticulation and work has commenced.

Coonamble—Construction of the treatment works by departmental day labour was 40 per cent. complete. Pipes were supplied and a contract let for the reticulation construction.

Crookwell—The treatment works and pumping station and portion of the reticulation have been completed by the Department's day labour. Portion of the contract section of the reticulation has yet to be completed.

Mullumbimby—Construction of the treatment works and pumping stations by departmental day labour was 40 per cent. complete. Tenders have been let for pipes and tenders will shortly be called for the reticulation.

Oberon—Construction of the treatment works and pumping station by day labour was about 60 per cent. complete. The portion of the reticulation being carried out by day labour approached completion, whilst a tender has been let for the balance.

Portland—The work, carried out by departmental day labour, has been completed and placed in operation.

Springwood—This scheme, constructed by departmental day labour, has been completed and placed in operation.

Wentworth—Construction of the treatment works and pumping station by departmental day labour was approximately 70 per cent. complete and the contract for reticulation has been commenced.

*Works Under Construction or Completed by Councils with Departmental Supervision*

Broken Hill—The sewerage treatment works at South Broken Hill by the Board's day labour staff was commenced.

Lismore Augmentation—This work has been completed except for an approved extension in South Lismore.

Tumbarumba—This work has been designed by a private consultant and construction was in progress by contract, the reticulation being approximately 25 per cent. complete and treatment works and pumping station 20 per cent. complete.

Wauchope—This scheme was designed by a private consultant. Contracts have been let for construction of the treatment works and the supply of pumping machinery.

Wingham—This scheme was designed by a private consultant. It has been completed by contract and handed over to the Council.

*Provision of Systems for State Institutions, Hospitals and Schools*

Farrer Memorial High School, Tamworth—Construction of a small treatment works by contract has commenced.

## (B) INVESTIGATION

Investigation and design for new sewerage schemes were continued for the towns of Blayney, Broken Hill South, Coonamble, Lawson, Mullumbimby and Wentworth. Preliminary investigations were carried out for Brunswick Heads, Byron Bay, Bangalow, Kingscliff, Mungindi, Port Macquarie, Sawtell, Ulmarra, Urunga, Woodburn, Jindabyne, Kyogle (extensions).

Councils' and consultants' proposals were reviewed for Queanbeyan, Tumbarumba and Wauchope schemes. Technical assistance was given to Armidale, Dubbo, Leeton, Muswellbrook, Orange, Tamworth and Wagga Councils. Numerous proposals were reviewed for extensions to existing schemes referred by the Department of Local Government in connection with loan applications.

Further investigations were carried out for Peat and Milson Islands Mental Hospital.

In addition to 90 routine inspections of country town sewage treatment works and water filtration plants, investigation has been made into the practicability of installing septic tanks at 174 public schools, 7 hospitals, 27 police stations and court houses, and 8 public buildings. Special inspections were made of three sullage disposal areas and five septic tank installations. Sewage treatment works operators have been instructed in the operation and maintenance of the sewage treatment works at Crookwell, Boorowa and Portland. Trade waste problems at Deniliquin, Mudgee, Cootamundra and Tenterfield were investigated.

## III. Stormwater Drainage

Newcastle.—No drainage works were carried out by the Department during the year, but Council completed, with subsidies from the Department, renewal of two bridges over stormwater channels. Other bridges in the area are to be progressively replaced with structures of a permanent nature.

Metropolitan Area.—The Department carried out minor maintenance work on a number of channel crossings which have now been transferred to the Metropolitan Water, Sewerage and Drainage Board. Gradual progress has been made on the work of desilting the Cooks River main channel from River-street to the railway bridge at Canterbury, for which a contract was let in 1960.

## IV. General

## PUMPING MACHINERY

Investigation was made and technical data compiled for pumping machinery in the following schemes: Barham, Berri, Lavington, Leeton, New Jindabyne, Port Macquarie, Tea Gardens and Yeoval Water Supplies, and Coonamble, Kempsey, Mullumbimby, Taree, Wentworth and Tamworth Sewerages.

Contracts were placed for supply, delivery and installation of pumping machinery in the following schemes: Attunga, Bendemeer, Bulahdelah, Camden Haven, Gunning, Hay, Moonbi, Narrandera, Nimmitabel, South-west Tablelands, Tweed District, The Entrance, Walgett, Wellington, Yanco, Moss Vale and Mittagong Water Supplies, Boorowa and Coonabarabran Sewerages, and Bathurst Sewerage.

Pumping machinery was installed and acceptance tests carried out at South-west Tablelands and Rylstone-Kandos Water Supplies and Broken Hill, Crookwell, Portland, Springwood and Taree Sewerages, and on behalf of Cooma, Glen Innes, Grafton and Lithgow Councils.

Installation of pumping machinery was completed at Cootamundra, Coonamble, Inverell, Ivanhoe, Narrandera, Goulburn, Hay and Moree hospitals and Jenolan Caves House. Plants were ordered for Dunedoo and Urbanville Hospitals and Armidale Teachers' College, Smith House, at Armidale.

Effluent pumps for installation of septic tanks and water supply booster and fire service pumps were provided for 18 schools and 6 public buildings.

Investigations have been carried out for water treatment at Armidale, New England, Molong, Mona Vale, Tingha, North Shore, Walcha District Hospitals and University of New South Wales.



#### FLUORIDATION

Fluoridation of water supplies was commenced at Goulburn and Orange and joint inspections were carried out at Forbes, Uralla, Manilla, Guyra and Moss Vale.

#### SWIMMING POOLS

Tenders for school pool treatment plants at Berrigan, Cobar, Cudal, Finley, Gloucester, Hillston, Kandos, Macksville, Maclean, Manildra, Moruya, Murwillumbah, Narromine, Springwood, Trangie, Wee Waa, Wentworth, Wollongong West have been reviewed.

A treatment plant for the Pool at Farrar Memorial High School, Tamworth, has been installed.

A specification was prepared and a contract let for a treatment plant for the pool at Thornleigh Girls' Training School.

Investigations were made regarding new plant for the Young pool.

#### MISCELLANEOUS ACTIVITIES

##### V. Operation

This branch continues to be responsible for the Head Office supervision of the operation and maintenance of the South-west Tablelands, Junee, Mulwala and Fish River water supply schemes.

The 1-million gallon capacity steel reservoir at Wyalong has been completed together with the associated pumping station.

The 500,000 gallon reinforced concrete service reservoir at Cootamundra including inlet and outlet mains has been completed and is in service.

Duplication of the main between Harden P.R.V. and the Harden service reservoir (2.8 miles) was completed using 8-in. C.I.C.L. pipes.

Aurville extension reticulation mains have been completed and the new 50,000 gallon capacity tank is about to be connected to the system.

Reticulation extensions have been carried out at Young, Temora, Cootamundra and Wyalong.

#### FINANCIAL

During the year expenditure on Fish River water supply was £476,000, and on South-west Tablelands water supplies £73,000. New South Wales Government Contribution to River Murray Commission for capital works was £81,000, and for maintenance and operations £79,000. Government assistance towards construction of water supply and sewerage works for shires and municipalities was approximately £643,000 and councils contributed slightly more than this amount. An additional £12,000 was financed from Revenue funds for dredging of Cooks River stormwater channel and other stormwater drainage work.

#### VI. REPRESENTATION ON COMMITTEES

The Water Supply and Sewerage Branch is represented on the following committees:—

- Pollution of streams.
- Pollution of navigable waters.
- Inter-Departmental sewage treatment works.
- Fluoridation of water supplies.
- Hydrogen sulphide corrosion.
- Association of Water Supply and Sewerage Treatment.
- Inter-Departmental Swimming Pool Standards.
- Shoalhaven Water Supply investigation.
- Water Research Foundation of Australia—New South Wales State Committee.
- Catchment Areas Protection Board.
- Water Resources Conference—New South Wales Sub-Committee.
- Plumbing Trades Advisory Committee.
- Standards Association of Australia, Explosives Committee.



## APPENDIX IIIB

### RIVER MURRAY WATERS

#### HUME RESERVOIR

##### CONSTRUCTION

Investigation and design work was carried out in respect of the temporary plug for the No. 3 Hydro-electric penstock and modifications to the Bathanga Bridge. Measurements were made of the deflection of the dam under load. In order to lessen maintenance investigation was commenced into the possible use of lightweight concrete replacement slabs for the decking of the Bethanga Bridge. A suitable concrete mix has been developed and construction commenced on test forms.

In the field, the post-tensioning contract was completed on 3rd October, 1961. Since that date construction of the approach span to the New South Wales pier of the Bethanga Bridge has been carried to an advanced stage, the fitting of control switchgear to the stoney gate winches for the irrigation outlets continued, reconstruction of the roadway over the dam and construction of the temporary plug to the No. 3 Hydro-electric penstock commenced, and reconstruction of the protective fences across the spillway gate bays were completed. Completed quantities for the post-tensioning were as follows:—

Drilling 4½ in. x 4½ in. holes	382	69,393.5 ft.
Waterproofing holes	360	4,932 bags cement
230 tons cables installed	382	47,509.5 ft.
Protecting grouting	382	5,510 cu. ft.

##### MAINTENANCE

The surface level of the reservoir rose from R.L. 598 ft. 2½ in. on 1st July, 1961, to a level of R.L. 609 ft. 7½ in. on 31st August, 1961, and fluctuated gradually to reach a maximum level of R.L. 614 ft. 11 in. on 18th and 19th October, 1961, following which the level dropped to a minimum R.L. of 574 ft. 7½ in. on 4th and 5th May, 1962, and rose again to 589 ft. 6½ in. at the close of the year, corresponding maximum and minimum storages being 1,525,000 acre feet and 408,900 acre feet. Spillway gates were not operated during the period.

The quality of stored water was generally good throughout the year. The total evaporation for the year was 48.62 inches.

The quarterly readings of pH values were as follows:—

Quarter ending	Reservoir	Valves	Murray Arm	Nitta Arm
30th September, 1961...	7.4	7.4	7.2	7.0
31st December, 1961...	7.3	7.4	7.1	7.2
31st March, 1962...	7.5	7.5	7.3	7.1
30th June, 1962.....	7.3	7.5	7.4	7.4

Needle valves were operated regularly and maintained in good working condition. Penstocks No. 1 and No. 2 were operated regularly for power generation and No. 3 valve remained closed during the whole of the year. Stoney sluice gates were operated as required and routine maintenance of gates and winches and painting of penstock liners carried out.

The auxiliary turbine operated satisfactorily, the total amount of power supplied to the State Electricity Commission of Victoria being 915,600 K.W.H. and the amount of power obtained from that Authority was 319,000 K.W.H.

Recording gauges and water level indicators operated satisfactorily.

The road to Doctor's Point has been regravelled and arrangements have been made for the rehabilitation of the existing telephone line to this gauge.

Painting and general maintenance of Bethanga Bridge and routine maintenance on machinery, fire breaks, foreshore plantations, and buildings was carried out.

#### WEIRS AND LOCKS ON RIVER MURRAY

##### Weir and Lock 10 at Wentworth

The weir was in position throughout the whole of the year. The maximum and minimum levels recorded during the year were 104.6 and 100.8 respectively.

A tender was let during the year for the mechanisation of the cranes and design is proceeding for the electrification of the hoists at the stacking ground.

A contract was let for the supply of spalls for remedial treatment to the scoured area of the lock and some two-thirds of the order has been delivered.

Work was commenced to improve the road access to the lock.

Routine maintenance of machinery, grounds, lawns and buildings was carried out.

##### Weir and Lock 15 at Euston

The weir was in position throughout the whole of the year. The level remained fairly steady with a level of 158.5 at the beginning of the period and was 159.15 at 30th June, 1962.

The Lockmaster's residence was completely renovated.

Tenders have been let for the construction of a stacking area, and the mechanisation of the cranes.

Design is proceeding for the electrification of hoists to be installed at the new stacking ground.

Routine maintenance of weir equipment, grounds, fire-breaks, and buildings were carried out. Work was continued on the control of noxious weeds.

#### WEIRS ON THE MURRUMBIDGEE RIVER

##### Weir 5 at Redbank

Flooding was commenced on 17th July, 1961, and continued till 30th October, 1961. Operations for storage commenced on 30th October, 1961, and terminated on 29th November, 1961. There was an open river from 29th November, 1961, till 19th February, 1962, when the gates were operated for storage; this operation was still continuing at 30th June, 1962. The maximum and minimum levels were R.L. 223.5 and R.L. 214.5. During the period that the gates were out the gates and all their components and auxiliaries were subject to detailed maintenance.

Beaching continued on the South Bank and was completed in February, 1962, when work commenced on the North Bank.

Routine maintenance of machinery, lawns, water supply, road, buildings and telephone line were carried out.

##### Weir 7 at Maude

The weir was operated frequently. At the beginning of the period the pool stood at R.L. 245.1. The gates were operated for both flooding and storage till 17th June, 1962, from which date the River was open till 21st June, 1962. On 24th June, 1962, storage began and was still continuing at the end of the year when the level was R.L. 242.3. The maximum level of R.L. 251 was attained on 6th October, 1961, and the minimum level was R.L. 241.7 at 19th December, 1961. At 30th June the R.L. was 242.30.

Routine maintenance was carried out on machinery, grounds and buildings.

#### NAVIGATION

Details of river traffic passing the various structures during the year 1961-1962 were as follows:—

Month	Steamers	Barges	Launches and Boats	Total Craft
<b>Lock 10 at Wentworth</b>				
1961 July .....	...	...	2	...
August .....	...	...	1	...
September ...	...	...	1	...
October .....	...	...	3	...
November.....	...	...	2	...
December ...	...	...	3	...
1962 January .....	...	...	6	...
February .....	...	...	4	...
March .....	...	...	1	...
April .....	...	...	2	...
May .....	...	...	4	...
June .....	...	...	2	...
Totals .....	...	...	31	31



## APPENDIX IV

### ARCHITECTURAL

#### FUNCTIONS

The functions of the Government Architect's Branch comprise:—

- (1) the preliminary investigation, design and preparation of plans and specifications for the construction and equipment of public buildings and extensions and alterations thereto; including mechanical and electrical engineering services, e.g., lifts, steam raising and heating equipment; sterilizing equipment, operating theatres, laundry equipment, X-ray, radio and telephone equipment;
- (2) the supervision of the works referred to in (1) above;
- (3) the research on behalf of and technical advice and assistance on architectural matters (including mechanical and electrical engineering services) to other departments and instrumentalities.

#### OPERATIONS

The branch was again fully employed in designing and supervising the construction of a wide variety of buildings required by State Departments and Authorities. The emphasis was once more on buildings required for health and educational services.

The expenditure on projects supervised by the branch increased to approximately £23,000,000. This expenditure was incurred on 512 projects.

The brief details of planning and construction set out are fully detailed in the summary on the following pages.

An increased number of sketch plans and working drawings was prepared, the total estimated cost of projected work amounting to £46,773,700.

The larger projects on which construction commenced were:—

	£
Port Kembla District Hospital—new hospital	1,751,200
Mona Vale Hospital—new hospital . . . . .	1,715,800
Registrar-General's Department—alterations and additions . . . . .	769,000
Macleay District Hospital—new buildings and alterations . . . . .	496,000

and a further 34 projects each estimated to cost over £100,000.

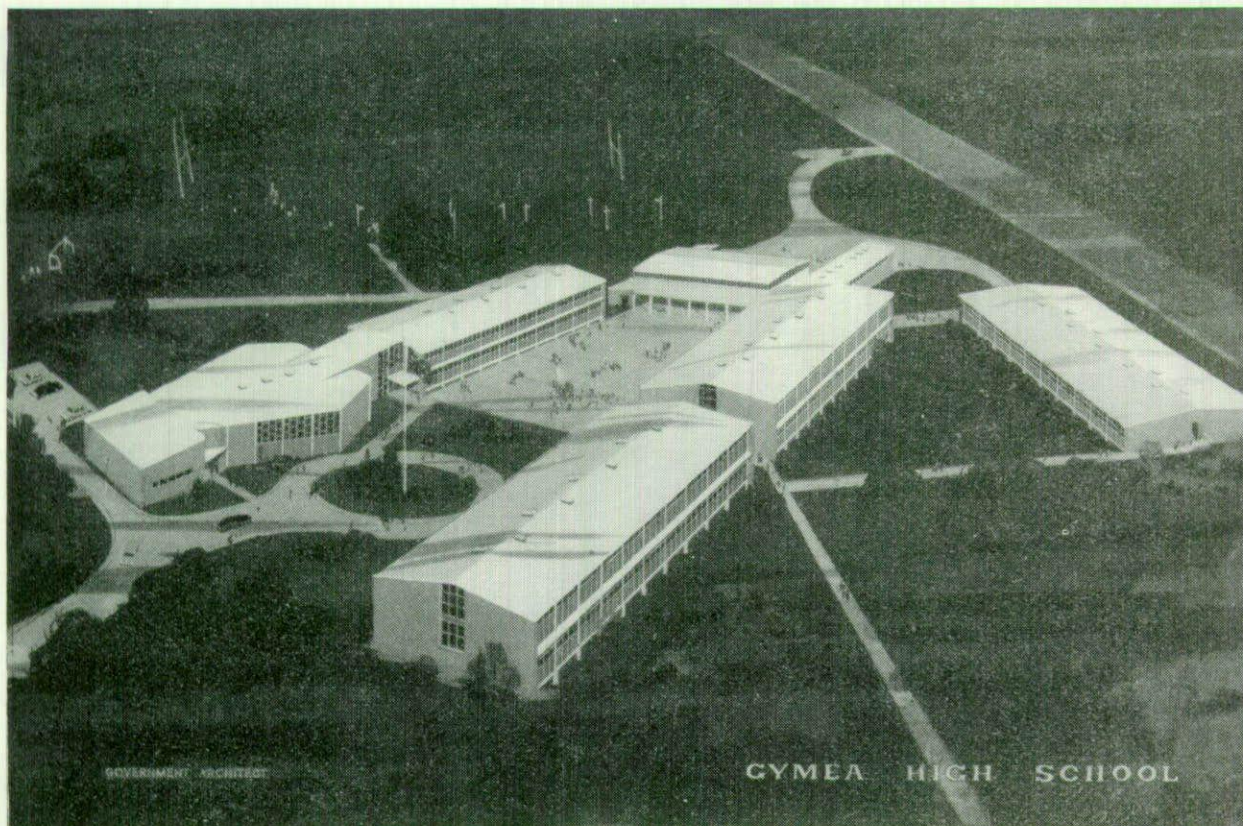
#### DESIGN

##### Sketches

Sketch proposals for new hospitals, expansion of existing hospitals, etc., covered 59 schemes while designs were prepared for some 281 school buildings, technical colleges and additions to Universities, 22 court houses and police buildings, plus 13 works of a miscellaneous nature, a total of 375 projects.

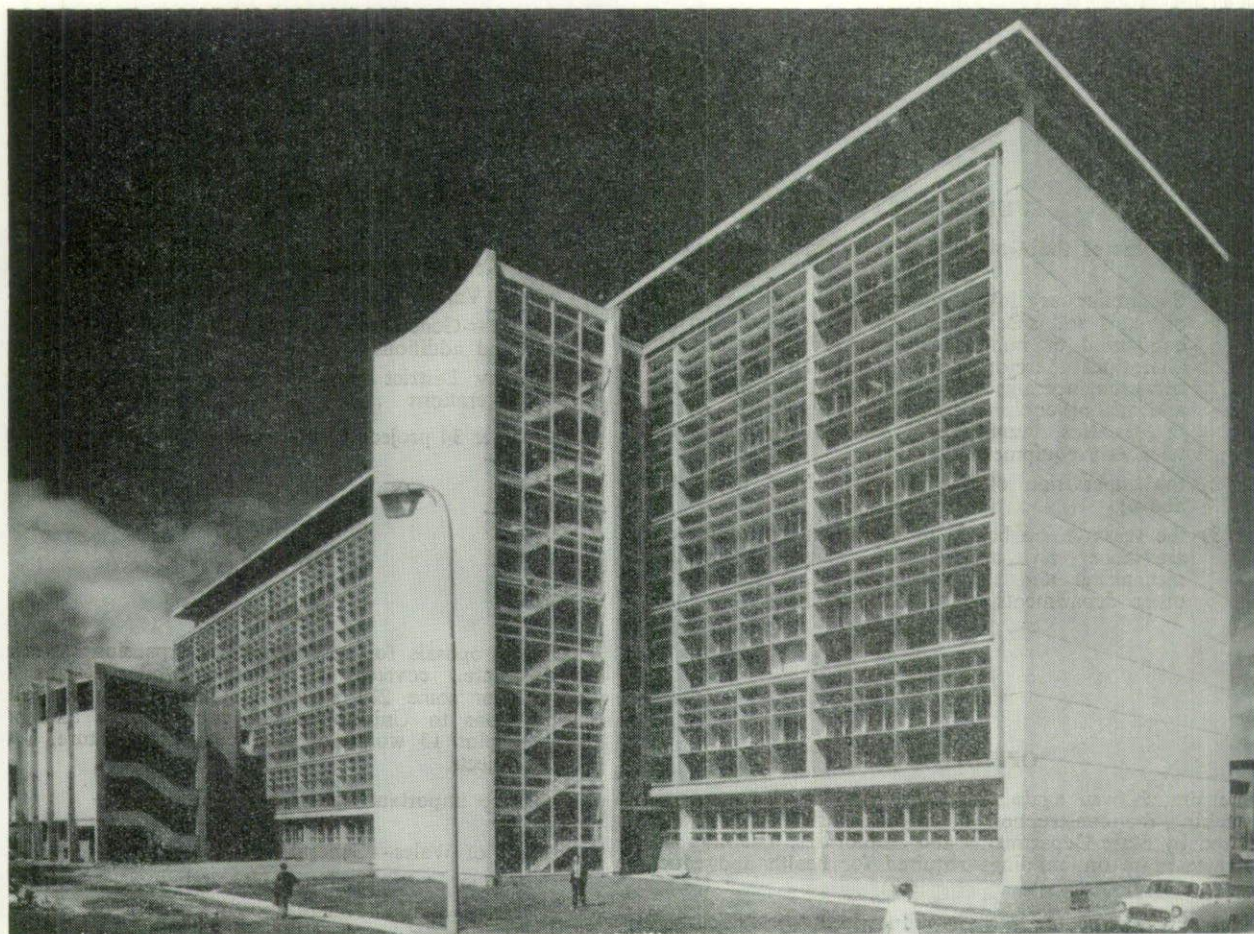
The more important sketch proposals were:—

	£
Prince of Wales—General Hospital . . . . .	4,000,000
Lidcombe State—Geriatric Hospital . . . . .	2,250,000
Prince of Wales—Nurses' home . . . . .	2,000,000
Prince of Wales—Children's Hospital . . . . .	1,500,000
Cessnock Gaol—Development Plan . . . . .	1,500,000
Bathurst Teachers' College—Development plan . . . . .	1,000,000
Eastern Suburbs Technical College—new college . . . . .	1,000,000
Registrar-General's Department—Additions	750,000



Gymea High School, Perspective Drawing of Proposed Development





School of Chemistry—University of New South Wales

	£
Wollongong Technical College—Stage 3 ....	700,000
Orange Base—Additional Accommodation ..	614,000
University of Sydney—Stack Block—Fisher Library .....	530,000
Sydney Technical College—Graphic Arts Block, Stage 2 .....	520,000
Gymea Technical College—Stage 2 .....	500,000
Hornsby Technical College—Development Scheme .....	500,000
Cessnock Gaol—New Buildings .....	500,000
Gymea Technical College—Stage 2 .....	500,000
Hornsby Technical College—development plan	500,000

and a further 84 proposals each estimated to cost over £100,000.

### CONSTRUCTION

The branch expenditure approximated £23,000,000 in respect of 512 hospital, school, university, technical college and public building projects and at the close of the year 193 schemes estimated to cost £20,199,450 were under construction.

Some of the major projects completed were:—

	£
University of New South Wales—Building A	1,429,500
Royal Prince Alfred Hospital—Professorial block .....	601,200
Port Kembla High School—Stages 1 and 2 ..	413,100
Sydney Technical College—New Permanent Building, 2nd section .....	404,100
Wollongong Technical College—Automotive and Electrical Engineering Building ..	383,800
Matraville High School—Stage 1 and 2 ....	382,500
Rozelle Admission Centre—new Buildings ..	332,100

	£
University of New South Wales—Union Building .....	316,400
Callan Park Psychiatric Hospital—2 Ward Blocks .....	306,900

and a further 36 projects each estimated to cost over £100,000.

### Engineering Division

The Engineering Division was engaged in the investigation, planning, design and supervision of the very wide range of engineering works associated with the building programmes, including thermal engineering, air-conditioning and refrigeration, ventilation, sterilization, lifts, electronics, lighting, power and general mechanical/electrical engineering. The magnitude and complexity varied with the nature and extent of the architectural projects concerned.

In addition to playing its part in the many architectural works listed in this report, the Engineering Division also carried out many substantial works not directly involved with building activities, such as the installation of a high temperature high pressure heat distribution scheme at Morisset Mental Hospital, a major boiler plant at Manly District Hospital, and the design and supervision of lighting and ventilation equipment with complex safety and automatic control gear for the tunnel of the Cahill Expressway.

The Housing Commission of New South Wales and the Government Insurance Office of New South Wales were again assisted by departmental inspectors.

Other activities of a miscellaneous nature such as the Electrical Services Workshop and the routine mechanical inspection provided to hospitals in the Public Works District of Bathurst continued as in previous years with highly satisfactory results.

Special attention was directed during the year to the increasing importance of sterilisation in hospitals, firstly, in regard to the administrative and technical problems associated with central sterilisation procedures, and secondly, to the design and manufacturing difficulties of automatic sterilising equipment. Expenditure in this field is now of the order of



£300,000 per annum, and a senior mechanical engineer has now been assigned to the special task of studying the problem in all its aspects. It is foreshadowed that it may become necessary to constitute a permanent specialist sterilisation section similar to the long established X-ray section.

In the last few years there has been a large increase in the variety of equipment offering both locally and overseas. This equipment has been the subject of a special survey, particularly in relation to major steam raising plant to be installed in hospitals. This has lead to a change of policy in the manner of specifying this type of plant and the department will now be in a position to gain the maximum advantage of the wide field of boiler equipment available with greater security as to performance and efficiency.

### REPRESENTATION ON COMMITTEES

The branch is represented on the following committees:—

- Public Buildings Advisory Committee.
- Macquarie Street Replanning Committee.
- Prince Henry Hospital Building Committee.
- Observatory Hill Re-development Committee.
- Heights of Buildings Advisory Committee.
- Building Regulations Advisory Committee.
- Education Department School Standards Committee.
- Inter-departmental Building Committees of Education and Technical Education Departments.
- Anaesthetic Safety Committee—Hospitals Commission.
- Sterilisation Committee—Hospitals Commission.
- Building Committee—Hospitals Commission.
- Working Drawings Reviewing Committee.
- University of New South Wales Building Committee.
- Health Department—Mental and State Hospitals and Homes Planning and Reviewing Committee.
- Standards Association of Australia—various Committees.
- Department of Technical Education Building Advisory Committee.
- National Trust of Australia investigating classification and recording of Historic Buildings.
- Sterilisation Research and Advisory Council of Australia.
- Anaesthetic Explosion Hazards in Operating Theatres.

The Principal Engineer is chairman of the State X-ray Committee, and of the Electrical Safety Publicity Committee (for the Electricity Authority of New South Wales).

## GENERAL

### Schools

During the year regular liaison was maintained with the Department of Education, and many changes effected in room layouts to keep up-to-date with modern educational practice. On 31st October, 1961, the Minister for Education introduced the Education Bill, 1961, into the Legislative Assembly outlining the plan for re-organisation of secondary schooling, which is the prelude to some of the most far reaching reforms in the history of secondary education in New South Wales.

Introduction of these reforms necessitated a complete revision of accommodation requirements for secondary schools and a complete re-planning of standard room layouts for some specialist teaching rooms. Work progressed on the necessary planning and new standard drawings for typical room layouts were well advanced.

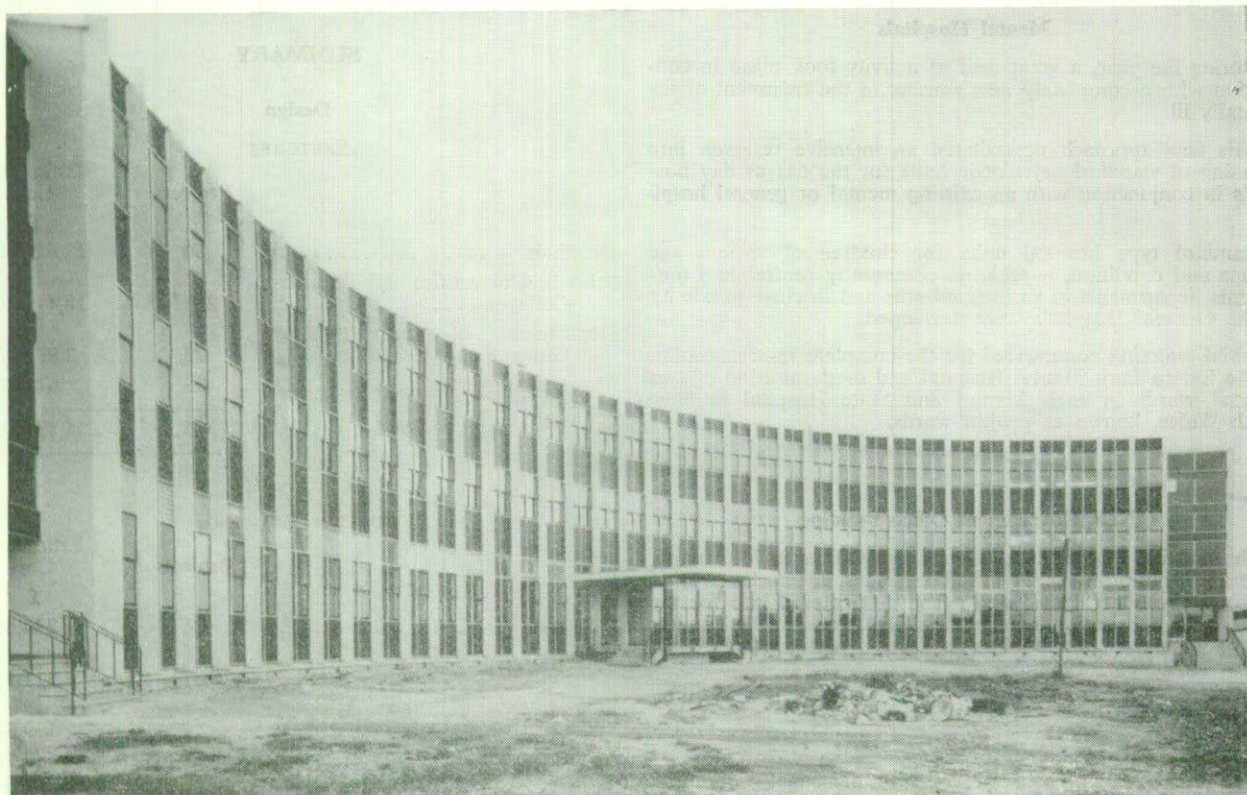
It was necessary to replan the standard 1,000 pupil high school to comply with the amended accommodation requirements. This work was given priority and the results will be availed of in planning new high schools for the 1964 year.

Resources made available were fully committed in keeping up with the very pressing demands for additional school accommodation, and there was little time available for research into experimental school types. Some work was done on a new primary type classroom and research was also conducted into requirements for one teacher schools, and this will be pursued further after completion of a prototype now under construction near Kurrajong. It is pleasing to report that working drawings are in course of preparation for two experimental type schools at Oak Flats East and Belmont, for which sketch designs were completed in the previous year, with a view to their being constructed at an early date.

### Hospitals

Regular meetings with the Hospitals Commission to discuss major problems and policy matters continued throughout the year and covered such items as the more extensive use of cast iron boilers in lieu of steel boilers, treatment of water from Warragamba Dam for boiler use, and many other aspects of hospital work.

The Prince of Wales Hospital scheme, a new teaching hospital for training post graduates and under graduates of the University of New South Wales, was designed in sketch plan form and an intensive planning programme was adopted during the period December, 1961, to June, 1962, resulting in sketch



Quadrant Block, North Sydney Technical College





Mona Vale Hospital (under Construction)

plans of a general acute hospital of 700 beds, a children's hospital of 250 beds, accommodation for 1,000 nurses, a boiler house and laundry, a radiotherapy institute to handle 1,000 to 1,500 new patients per annum, plus many smaller ancillary units.

The Lidcombe State Hospital was designed to contain 400 beds and represents a completely specialised unit for the care of the aged which is without precedent in this State.

Mental Hospitals

During the year, a great deal of activity took place in connection with a completely new concept in the treatment of the mentally ill.

This new approach necessitated an intensive research into planning of standard psychiatric units for the use as day hospitals in conjunction with an existing mental or general hospital.

Standard type hospital units for children of various age groups and condition, psychiatric community centres and out-patients departments in various suburbs and in close proximity to the General Hospitals were developed.

Initial planning commenced for the complete re-organisation of the Callan Park Mental Hospital and modernisation of two selected wards in each Mental and State Hospital in New South Wales, known as project wards.

New Government Office Building

The erection of the State Government Offices in Macquarie, Bent and Phillip Streets advanced a further stage. Excavation of the site was completed and a contract entered into for the supply and fabrication of the structural steelwork. Tenders for the erection of the building itself are expected to be invited during November, 1962.

Staff

Additional appointments of overseas personnel were most beneficial to the branch but, as in previous years, it was necessary to allot the preparation of working drawings to a

panel of over 257 private architects and consulting engineers to avoid serious delays in the calling of tenders for important projects.

Thirty-three trainees are employed. The regular recruitment of trainees is considered to be the most satisfactory way to overcome the shortage of trained staff.

SUMMARY

Design		Estimated Cost £
SKETCHES		
	Projects	
Hospitals .....	59	13,616,300
Schools, Universities and Technical Colleges .....	281	18,410,200
Department of the Attorney- General and of Justice ....	22	2,901,900
Miscellaneous .....	13	642,400
Totals .....	375	£35,570,800

WORKING DRAWINGS

	Projects	Estimated Cost £
Hospitals .....	26	1,234,650
Schools, Universities and Technical Colleges .....	137	8,211,350
Department of the Attorney- General and of Justice ....	10	179,700
Miscellaneous .....	28	1,577,200
Totals .....	201	£11,202,900



## CONSTRUCTION

WORK COMMENCED PRIOR TO 1ST JULY, 1961, AND COMPLETED DURING THE YEAR 1961-1962

DURING THE YEAR 1961-1962		Estimated Cost £
	Projects	
Hospitals .....	54	3,956,700
Schools, Universities and Technical Colleges .....	125	9,047,300
Department of the Attorney- General and of Justice ....	7	125,000
Miscellaneous .....	23	795,200
Totals .....	209	£13,924,200

WORK COMMENCED PRIOR TO 1ST JULY, 1961, AND STILL IN  
PROGRESS

	Projects	Estimated Cost £
Hospitals .....	7	3,966,300
Schools, Universities and Technical Colleges .....	6	2,183,500
Department of the Attorney- General and of Justice ....	1	4,300
Miscellaneous .....	3	558,300
Totals .....	17	£6,712,400

WORK COMMENCED AND COMPLETED DURING THE YEAR  
1961-1962

	Projects	Estimated Cost £
Hospitals .....	9	173,900
Schools, Universities and Technical Colleges .....	89	2,487,900
Department of the Attorney- General and of Justice ....	3	31,800
Miscellaneous .....	9	117,600
Totals .....	110	£2,811,200

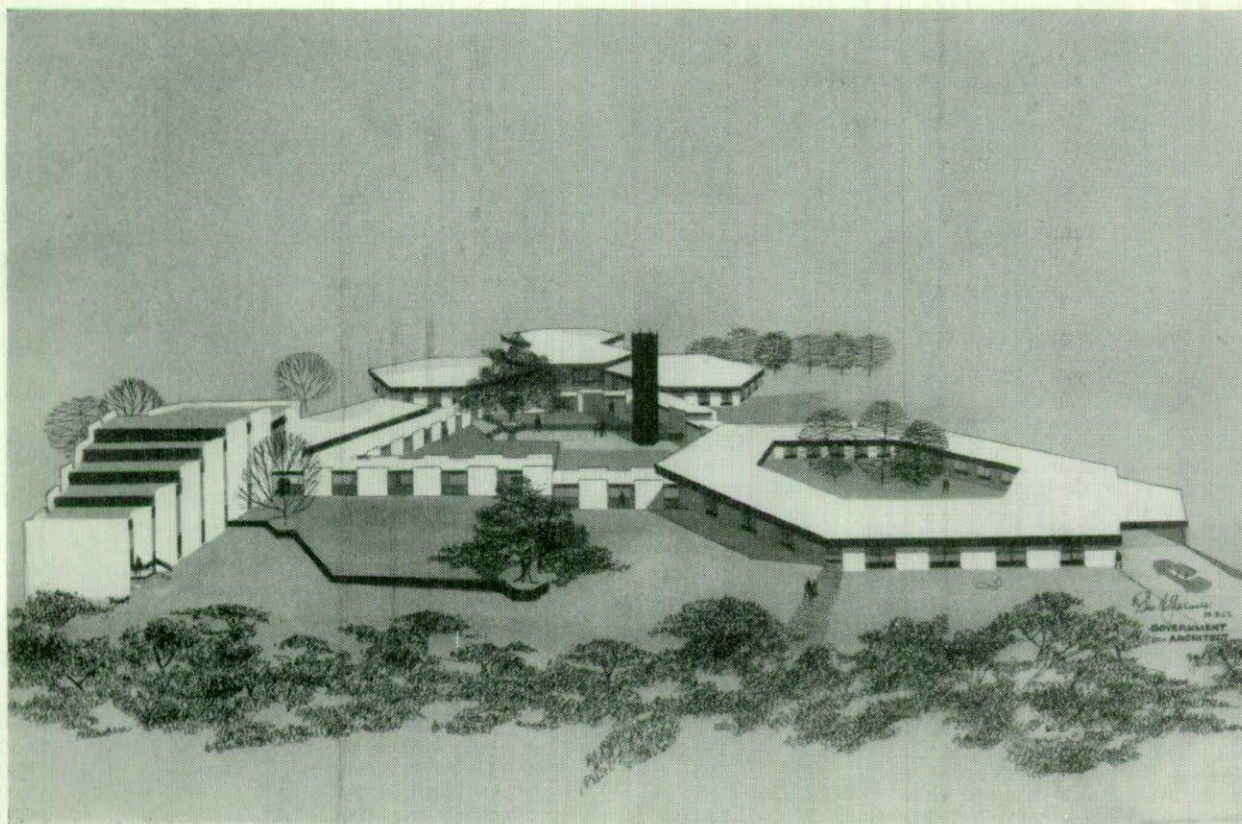
WORK COMMENCED DURING THE YEAR 1961-1962 AND STILL  
IN PROGRESS

	Projects	Estimated Cost £
Hospitals .....	22	4,882,800
Schools, Universities and Technical Colleges .....	124	6,198,350
Department of the Attorney- General and of Justice ....	19	755,800
Miscellaneous .....	11	1,650,100
Totals .....	176	£13,487,050

## Design

## SKETCHES

Hospitals—	£
Prince of Wales—General Hospital .....	4,000,000
Lidcombe State—Geriatric Hospital .....	2,250,000
Prince of Wales—Nurses' Home .....	2,000,000
Prince of Wales—Children's Hospital .....	1,500,000
Orange Base—Additional Accommodation ..	614,000
Prince of Wales—Boiler House and Laundry	400,000
Broughton Hall—Psychiatric Centre .....	295,500
Prince of Wales—Radio Therapy .....	280,000
Lidcombe State—Nurses' Home .....	275,000
Royal Prince Alfred—Teaching Accommodation .....	200,000
Bathurst—Theatre Block and X-ray .....	200,000
Rydalmere Mental—New Nurses' Home ....	183,000
Wallsend District—Outpatients, Pathology and Casualty Block .....	176,000
Wallsend District—Stage 2 .....	176,000
Standard Psychiatric Unit .....	85,000
Parkes District—Boiler House, Laundry and Amenities .....	80,000
Garrawarra—New Nurses' Home (Amended Scheme) .....	80,000
Standard Geriatric Unit .....	63,800
Tibooburra District—New Nurses' Home and Alterations .....	55,000
Bathurst—New Boiler House .....	53,000
Prince of Wales—Childrens' Interim Accom- modation .....	50,000
Randwick Chest Hospital—New Surgical Block .....	40,000



### New Psychiatric Clinic—Broughton Hall, Perspective Drawing



## Hospitals—continued—

	£
Prince of Wales—Out-Patients .....	40,000
Tweed District—New Boiler House .....	35,500
Prince of Wales—Accident Unit .....	35,000
Eastern Suburbs—Extensions to Children's Ward and Nursing Accommodation ....	34,200
Rylstone District—New Nurses' Home .....	30,000
Allandale, Cessnock—Bulk Store .....	30,000
Lidcombe State—Three Medical Officers' Residences .....	27,000
Narramine District—Ten-bed Ward Unit ....	26,000
Womens, Crown Street—Lift to Founders' Block .....	21,000
Parramatta Mental—Construction of Modern Swimming Pool, etc. ....	20,500
McCaughy Memorial—Urana—Nurses' Home .....	20,000
North Ryde Psychiatric Centre—Single Resi- dent Medical Officers' Block .....	20,000
Bankstown District—Enlarging of Laundry Facilities .....	19,900
Rylstone District—Ward Accommodation ..	19,500
Gladesville Mental—Remodelling Existing Dining room, etc., for Stores purposes .	17,000
Sutherland District—Enlarging of Laundry Facilities .....	16,100
Boggabri District—Proposed P. and I. and Children's Wards .....	14,000
Goulburn District—Labour Ward .....	12,000
McCaughy Memorial—Extensions .....	12,000
Eastern Suburbs—Recovery Room, etc. ....	11,700
North Ryde Psychiatric Centre—Animal House, Oliver Latham Laboratory .....	9,600
Wellington District—Outpatients and Casual- ties Facilities .....	9,200
Lidcombe State—Additional Accommodation for Sterilising Department .....	8,700
North Ryde Psychiatric Centre—Alterations to Ward 5 to provide Solarium .....	8,600
Canterbury District—Roof Repairs to Mater- nity Units and Nurses' Home .....	8,300
North Ryde Psychiatric Centre—Tennis Courts etc., for Use of Staff .....	8,300
Parramatta Mental—Erection of Solarium and Dayroom, Female Wards .....	8,200
North Ryde Psychiatric Centre—Conversion of Main Kitchen to Store .....	8,000
Temora District—New Plant Room .....	5,000
Peat and Milson Island Mental—Provision of Toilet Facilities, Ward 3 .....	4,800
Coonabarabran District—X-ray Department .	4,400
Broughton Hall Psychiatric Clinic—Central Sterilising Unit .....	4,100
Callan Park Admission Centre, Rozelle—New Sub-Station .....	2,500
Werris Creek—Casualty Room .....	2,500
Kenmore Mental—Provision of Garages for Motor Vehicles .....	2,200
Canowindra Memorial—X-ray Department Extensions .....	2,100
Strickland Convalescent—New Recreation Room in Loft of Workers' Quarters ..	2,100
<b>Total</b>	<b>£13,616,300</b>

## Schools, Universities and Technical Colleges—

	£
Bathurst Teachers' College—Development Plan .....	1,000,000
Eastern Suburbs Technical College—New College .....	1,000,000
Wollongong Technical College—Stage 3 ....	700,000
University of Sydney—Stack Block—Fisher Library .....	530,000
Sydney Technical College—Graphic Arts Block, Stage 2 .....	520,000
Gynea Technical College—Stage 2 .....	500,000
Hornsby Technical College—Development Scheme .....	500,000
University of New England—Duval College	450,000
Mona Vale High School—Stage 1 and 2 ..	350,000
University of New South Wales—College Buildings, High Street .....	333,000
Standard One Thousand Pupil High School— New Design .....	330,000
Forbes High School—Stage 1 .....	260,000
Seaforth Technical College—New College ..	255,800
Meadowbank Technical College—Stage 2 ..	250,000
Newcastle Technical College—New Trades Workshop Block .....	250,000

Schools, Universities and Technical Colleges—  
continued—

	£
Emu Plains High School—Stages 1 and 2 ..	250,000
Granville Technical College—Stage 2 .....	250,000
Swansea High School—Stage 1 .....	245,000
Narrandera High School—New School .....	231,000
Moss Vale High School—Stages 1 and 2 ....	228,000
Castle Hill High School—Stages 1 and 2 ..	225,000
Moree Public School—New Primary School and Additions to Infants' School (Amended) .....	223,000
Hurlstone Agricultural College—Stage 3 ..	220,000
Wagga Wagga Technical College—Stage 3 ..	200,000
Armidale Demonstration School—New Pri- mary Department .....	200,000
Moree High School—New School .....	200,000
Moree Public School—New Primary School and Additions to Infants' School .....	200,000
University of New England—School of Chemistry .....	185,000
Greystanes High School—Stages 2 and 3 ..	180,000
Haberfield Demonstration Primary School— Consolidation of Primary Department ..	161,000
Whitebridge High School—Stages 1 and 2 ..	160,000
Busby—New School .....	156,500
Ingleburn—New School .....	155,400
Heckenburg—New School .....	155,000
Wyong High School—Additional Accom- modation .....	153,000
Gynea High School—Stage 1 .....	150,000
Castle Hill High School—Stages 1 and 2 ...	150,000
West Wyalong High School—New Accommo- dation .....	145,000
Cumberland High School—Stages 2 and 3 ...	140,000
Bathurst Teachers' College—New Female Dormitory Block .....	140,000
Kogarah Girls' High School—Additions and Conversions .....	140,000
Gilgandra Intermediate High School—New School .....	135,800
Sadlier—New School .....	124,700
Wallsend West High School—Stage 2 Development .....	121,000
Rooty Hill High School—Stage 3 .....	120,000
Belmont Primary School—Consolidation of Primary Department .....	117,000
Narrabri Public School—Additional Accom- modation .....	112,000
Ultimo Public School—New School .....	111,600
The Forest High School—Stage 3 .....	104,300
Wagga Wagga Teachers' College—New Library .....	94,500
University of New England—Psychology Education .....	90,000
University of New England—Agricultural Economics .....	87,000
Oak Flats East Public School—Stage 1 ....	82,000
Walters Road—New School .....	80,500
Blacktown North Public School—Develop- ment Plan .....	80,000
Manilla Intermediate High School—Stage 1	80,000
Old Guildford Public School—New Primary School .....	76,000
Pennant Hills West Public School—Develop- ment Plan .....	75,000
Westlawn—New Primary School .....	72,000
Picnic Point High School—Stage 3 .....	70,000
Coff's Harbour Public School—Development Plan .....	70,000
Lindfield East Public School—Development Plan .....	70,000
Lindfield East Public School—Amended Development Plan .....	70,000
Revesby—New School .....	69,900
Avalon—Stage 2 .....	69,200
Oak Flats High School—Stage 2 .....	69,200
Cowra High School—New Classroom Block and Amenities .....	67,000
Riverstone High School—Stage 2 .....	66,200
North Ryde High School—Stage 3 .....	66,000
Albury North High School—Stage 3 .....	64,600
Chester Hill High School—Stage 2 .....	62,100
Port Macquarie High School—Assembly Hall	60,000
Wentworth Central School—New Accom- modation .....	59,000
Marayong South—New School .....	59,000
Riverwood—New School .....	58,500
Ashcroft—New School .....	57,800
Ingleburn North—New School .....	57,000
Brookvale—New Primary .....	55,000
Haberfield Demonstration Primary—Hall and Administration Block .....	50,600



Schools, Universities and Technical Colleges—  
*continued—*

	£
Merrylands High School—Assembly Hall (Amended) .....	50,000
Toukley Public School—Development Plan ..	50,000
University of New England—Store and Workshop .....	50,000
Harrington Street—New School .....	50,000
St. George Girls' High School—Stage 2 Additions .....	50,000
Birrong Girls' High School—Provision of two extra laboratories and Additional Accommodation .....	50,000
Ariah Park Central—Secondary Accommodation .....	49,000
St. Marys North—Accommodation .....	48,300
Bennett Road—Accommodation .....	47,300
Marayong North—Accommodation .....	47,200
Peakhurst Heights—New School .....	45,100
Ringrose—New School .....	45,000
Newcastle Teachers' College—Gymnasium ..	45,000
Sydney Teachers' College—Gymnasium .....	45,000
Wagga Wagga Teachers' College—Gymnasium	45,000
Bathurst Teachers' College—Gymnasium ..	45,000
Narwee Bays' High School—Assembly Hall	43,400
Batlow Central School—New School Building	42,500
Berkeley South Public School—New Infants' School .....	42,000
Beecroft—New Primary Department .....	41,000
Terrigal Public School—Development Plan	40,000
Oyster Bay Public School—Additional Accommodation .....	39,000
Temora High School—New Assembly Hall ..	38,100
Farrar School for the Deaf—New Special School .....	37,500
Hay Public School—Four Brick Veneer Classrooms .....	36,700
Broken Hill High School—New School Building .....	36,000
Pennant Hills West Public School—New Classroom and Administration Block .....	35,000
Casula—Accommodation .....	34,300
Denistone East—New Primary Department	34,000
Mullumbimby High School—Additions .....	34,000
Penrith South—Accommodation .....	33,300
Kogarah Public School—New Primary Department .....	32,000
Elanora Heights—Accommodation .....	31,800
North Sydney Demonstration School—New Assembly Hall .....	30,600
Allambie Heights—Accommodation .....	30,200
Blayney Public School—New Infants' School	30,000
Oatley West—Accommodation .....	29,800
Yowie Bay—Accommodation .....	28,300
Old Guildford—Accommodation .....	27,900
La Pouse Primary School—New Assembly Hall .....	26,300
Morisset Central School—New Secondary Accommodation .....	26,000
Coonabarabran Intermediate High School—New classroom, cookery building .....	25,800
Cowra High School—Toilet Accommodation	25,500
Blayney Intermediate High School—Additional Accommodation .....	25,000
Dee Why Public School—New Assembly Hall	25,000
French's Forest Public School—Alterations and Additional Accommodation .....	25,000
Parkes High School—New Classroom and Conversion of Assembly Hall .....	23,500
Warrimoo South Public School—Stage I .....	23,500
Marsden Road—Accommodation .....	23,400
Oxley Park—Accommodation .....	23,100
Blaxland East—New School .....	23,000
Wollongong West Public School—Additional Two Classrooms .....	23,000
University of New England—Domestic Quarters .....	22,000
Queanbeyan High School—New Science and Manual Training Block .....	21,500
Balgowlah North—Accommodation .....	21,300
Ramsgate—Accommodation .....	21,300
Cambridge Park—Accommodation .....	21,200
Old Guildford—Accommodation .....	21,200
Armidale Teachers' College—New Hospital Unit .....	20,400
Bennett Road—Accommodation .....	20,300
Kent Road—Accommodation .....	20,300
Arthur Phillip High School—New Toilet Blocks .....	20,200
Gore Hill Technical College—Ground Improvements .....	20,000
Padstow Heights—Accommodation .....	19,800
Collaroy Plateau West—Accommodation ..	19,700

Schools, Universities and Technical Colleges—  
*continued—*

	£
Helensburgh Public School—Accommodation	19,700
Seven Hills West—Accommodation .....	18,300
St. Mary's South—Accommodation .....	18,200
Harbord—Accommodation and Library .....	18,100
Toukley Public School—Kindergarten, Two Classrooms, etc. ....	17,800
Blacktown South—Accommodation .....	17,700
Alexander Mackie Teachers' College—Provision of Biology Preparation and Workshop .....	17,000
Armidale Teachers' College—C. B. Newling House Hospital Block .....	16,900
Bathurst Teachers' College—Provision of Hospital Block .....	16,900
Holsworthy—Accommodation .....	16,800
Turrumurra North—Accommodation .....	16,500
Cambridge Park—Accommodation .....	16,000
Ingleburn High School—Additions .....	16,000
Matraville South Public School—Stage 2 Development .....	16,000
Bexley South—Accommodation .....	15,500
Gordon East—Accommodation .....	15,100
Burwood Visual Education Centre—Proposed Extensions and Renovations .....	15,000
Ryde North Public School—New Classroom Building .....	14,000
Kirrawee Public School—Additional Accommodation .....	14,000
Lynwood Park Public School—Additional Accommodation .....	13,700
Waitara—Accommodation .....	13,600
Woolooware—Accommodation .....	13,400
Ryde North—Library .....	13,400
Heathcote—Accommodation .....	13,000
Maroubra Bay—Accommodation .....	13,000
Forestville—Accommodation .....	12,900
Castle Hill—Accommodation .....	12,800
Padstow Park—Accommodation .....	12,700
Panania North—Accommodation .....	12,300
Sylvania—Accommodation .....	11,800
Kingswood—Accommodation .....	11,800
Lindfield—Accommodation .....	11,800
Sylvania Heights—Accommodation, Library	11,000
Lindfield—Accommodation .....	10,900
Glenbrook Primary School—Additions .....	10,100
North Sydney Boys' High School—Replanning of Science Building .....	10,000
University of New England—Sports Pavilion	10,000
Birrong—Accommodation .....	10,000
Camden South—Accommodation .....	10,000
Dartford (Normanhurst West)—Accommodation .....	10,000
Mona Vale—Accommodation .....	10,000
Narrabeen North—Accommodation .....	10,000
Paddington—Toilets .....	10,000
Seven Hills—Accommodation .....	9,900
Hornsby Park—Accommodation .....	9,700
Blacktown West—Accommodation .....	9,700
Maroubra Junction Central School—Accommodation .....	9,400
Mt. Pritchard East—Accommodation .....	9,400
Bowral High School—Alterations to Cycle Shed .....	9,200
Point Clare Public School—Additional Accommodation .....	9,200
Macquarie Fields Public School—New School Building and Installation of Septic Tank	9,000
Asquith—Accommodation .....	9,000
Kemps Creek—Accommodation .....	9,000
Leppington—Toilets .....	8,900
Barraba Central School—Extensions to Food Service and Laboratory .....	8,900
Engadine West—Accommodation .....	8,900
Seven Hills Public School—Septic Tank and Sewerage .....	8,600
Epping West—Accommodation .....	8,500
Kahibah Public School—Additional Classroom Accommodation, Toilets and Ground Improvements .....	8,500
Condell Park—Accommodation .....	8,400
Comleroy Road Public School—New Brick Veneer Classroom Block .....	8,300
Camden Public School—Two Classrooms and Clinic .....	8,000
Chullora Public School—New Administration Unit .....	8,000
Yates Avenue—Accommodation .....	8,000
Guildford West Public School—Septic Tank and Sewerage .....	7,900



Schools, Universities and Technical Colleges—  
*continued—*

	£
Deniliquin South Public School—Additional Classroom, Accommodation, Toilets, Ablutions and Ground Improvements	7,900
Turramurra—Toilets	7,800
Mooney Mooney Public School—Additional Accommodation	7,600
Eastwood—Library	7,500
Peakhurst West—Accommodation	7,500
Peak Hill Central School—Additional Classroom Accommodation, Manual Training, Ground Improvements	7,500
Belmont North Public School—Additional Accommodation, Toilet Ablution and Ground Improvements	7,400
Birrong—Accommodation	7,000
Moree High School—New Showers and Change Rooms	7,000
Granville Boys' High School—Extension of Gymnasium	7,000
Salty Creek Public School—Additional Accommodation and Ground Improvements	6,900
Regentsville Public School—Septic Tank and Sewerage	6,800
Mount Ku-ring-gai Accommodation	6,400
Clinton Park—Food Service Unit	6,300
Oakville—Accommodation	6,300
Green Valley—Accommodation	6,200
Sylvania—Septic Tank and Sewerage	6,100
Liverpool Boys' High School—Structural Alterations	6,000
Morgan Street, Broken Hill Primary School—Ground Improvements	6,000
Werrington Park Public School—Proposed Classroom Block	6,000
Berowra—Accommodation	6,000
Borrells Bay Public School—Additional Accommodation, Toilets, Ablutions and Ground Improvements	6,000
Kellyville—Toilet and Septic Tank	5,800
Doonside Public School—Septic Tank and Sewerage	5,700
Green Valley Public School—Septic Tank and Sewerage	5,700
Cudal Central School—Additional Accommodation—Demolition and Conversion, Ground Improvements	5,700
Appin—Accommodation	5,700
Gosford High School—Toilets	5,600
Blacktown West—Accommodation	5,600
St. Ives North—Accommodation	5,600
Plumpton—Accommodation	5,400
Gulgambone Central School—Accommodation (Additional) and Ground Improvements	5,200
Kurnell—Accommodation	5,200
Camperdown Public School—Proposed Staff-room, Conversion and Alterations	5,000
Toukley Public School—Toilet and Ablution Block	5,000
Cromehurst Special School—Toilets	5,000
Mosman—Office	5,000
Murrinbridge Aboriginal School—Additional Accommodation, Toilets, Showers and Ground Improvements	5,000
Braidwood Central School—Additional Accommodation—Conversion of Buildings, and Ground Improvements	4,600
Ringrose Public School—Septic Tank and Sewerage	4,600
Bribbaree Public School—Additional Accommodation and Ground Improvements	4,500
Cassilis Public School—Additional Accommodation, Toilets and Ablutions	4,500
Inverell Public School—Additional Accommodation	4,300
Mangoola Public School—Additional Accommodation, Ground Improvements	4,200
Trundle Central School—Additional Accommodation, Science Accommodation Alterations and Additions	4,200
Taree West Public School—Additional Accommodation, Ground Improvements	4,100
Yowie Bay—Accommodation	4,100
Manly West Public School—Main Building Extension	4,000
Wentworthville North Public School—Additional Accommodation	4,000
Baulkham Hills—Accommodation	4,000
Nords Wharf Public School—Additional Accommodation, Toilets, Ground Improvements	3,800

Schools, Universities and Technical Colleges—  
*continued—*

	£
Thornton Public School—Additional Accommodation, Toilets, Ablutions, Ground Improvements	3,800
Goonellabah Public School—Additional Accommodation, Toilets, Ablutions	3,700
Cowan Public School—Septic Tank and Sewerage	3,700
Baulkham Hills—Accommodation	3,700
Pymble—Accommodation	3,600
Camden Suburb Public School—Additional Accommodation, Toilets and Ablutions	3,600
Kelso Demonstration School—Additional Accommodation, Ground Improvements	3,500
Mayrung Public School—Additional Accommodation, Ground Improvements	3,500
Doonside Public School—New Food Preparation Unit	3,500
Padstow Heights—Food Preparation Unit	3,500
Tullamore Public School—Additional Accommodation, Ground Improvements	3,500
Tottenham Public School—Additional Accommodation, Ground Improvements	3,500
Binya Bay Public School—Additional Accommodation, Toilets, Ablutions and Ground Improvements	3,400
Blacktown West—Accommodation	3,200
Baldry Public School—Additional Accommodation	3,200
Dunedoo Central School—Additional Accommodation, Ground Improvements	3,000
Eastwood—Additional Accommodation	3,000
Terrandra Public School—Additional Accommodation, Toilets, Ablutions, Ground Improvements	2,800
Sydney Teachers' College—Clerical Accommodation	2,700
Wyrallah Road Public School—Additional Accommodation	2,600
Orange East Public School—Additional Accommodation	2,000
Total	£18,410,200

Department of Attorney-General and of Justice—  
Court Houses, Gaols and Police Premises—

	£
Cessnock Gaol—Development Plan	1,500,000
Cessnock Gaol—New Buildings	500,000
Newcastle Court Houses—Additions	180,000
Long Bay State Penitentiary—Additional Accommodation for Unconvicted Prisoners	143,650
Eastwood Police Station—New Building	76,000
Dubbo Police Station and Cell Block—New Building	70,500
Blacktown Court House and Police Station—New Buildings	70,000
Port Kembla Court House—Additions	62,750
Merrylands Police Station—New Station	40,000
Revesby Police Station—New Station	40,000
Bourke Police Station—New Cells and Additions to Police Station	35,000
Coonabarabran—New Police Station and Clerk of Petty Sessions Office and Renovations to Court House	30,000
Kingswood Police Station—New Station	30,000
Toronto Police Station—New Police Station and Motor Registry	24,600
Cooma Court House—Additions	21,700
Hillston—New Court House	20,000
Warren Court House—New Court House	20,000
Walgett Police Premises—Alterations and Additions to Cell Block	11,900
Maitland Police Premises—Accommodation for Inspector of Sub-District	9,000
Mona Vale Police Station—New Cells and Conversion of Residence	8,000
Dareton Police Station—New Police Office and Cells	7,000
Parramatta Police Station—New Awnings	1,800
Total	£2,901,900



## Miscellaneous—

	£
Government Motor Garage—Accommodation for Testing Branch and Electrical Services Workshop .....	200,000
Cootamundra—State Office Building .....	157,000
Child Welfare Department—Additional Accommodation, Head Office, William Street ..	96,800
Wollongbar—Tick Research Station—New Building .....	41,000
Ultimo Tramway Depot—Conversion to Transport Museum .....	40,000
Chatswood Child Guidance Centre—New Building .....	26,000
Condobolin Soil Conservation Office—New Building .....	20,000
Sydney Harbour Transport Board—Development of Shopping Centre at Mosman Ferry Wharf .....	20,000
Berry Training Farm for Boys—Amended Layout of Wardens Flat and Single Men's Quarters .....	14,000
St. Helier's, Muswellbrook—Additional School Building .....	12,000
Hydraulics Laboratory, Manly Vale—Building to House Newcastle Model .....	7,300
The Australian Museum—Transfer of Photographic Work Room to South Wing ....	6,300
Yarra Bay House, Child Welfare Home—Alterations and Additions .....	2,000
<b>Total</b>	<b>£642,400</b>

## WORKING DRAWINGS

## Hospitals—

	£
Broughton Hall Psychiatric Centre—New Building .....	363,000
Prince Henry Hospital—Diagnostic and Radiology Building .....	285,000
Prince Henry Hospital—Occupational Therapy Building .....	116,000
Auburn District Hospital—Pathology Block .....	80,000
Gladesville Mental Hospital—New Workshop .....	61,300
Rozelle Admission Centre—Six Residences for Medical Officers .....	54,000
Randwick Chest Hospital—New Surgical Block .....	40,000
Braidwood District Hospital—New Nurses' Home .....	33,600
Bombala District Hospital—New Nurses' Home .....	31,200
Allandale Hospital, Cessnock—Bulk Store ..	30,000
Queanbeyan District Hospital—New Boiler House .....	20,400
Fairfield District Hospital—Additional Maternity Accommodation .....	18,350
Dunedoo War Memorial Hospital—New Nurses' Home .....	18,000
North Ryde Psychiatric Centre—Animal House, Latham Laboratory .....	13,900
Eastern Suburbs Hospital—Additional Male and Female Ward Accommodation ....	13,800
Bombala District Hospital—Septic Tank ...	9,200
Kenmore Mental Hospital—New Nurses' Home, Provision of Four-Car Garage and Carport .....	8,300
Crown Street Women's Hospital—New Bed Passenger Lift .....	8,000
Garrawarra Hospital—New Lift .....	8,000
Garrawarra Hospital—Kitchen Canopies ....	5,200
Temora District Hospital—Air Conditioning and Plant Room .....	5,000
Callan Park Mental Hospital—New Service Lift .....	3,000
Kenmore Mental Hospital—New Nurses' Home, Provision of Male and Female Toilets .....	2,500
Callan Park Administrative Centre, Rozelle—New sub-station .....	2,500
Randwick Chest Hospital—Provision of Waiting Room and Toilets for Public .....	2,400
Grafton District Hospital—Cool Rooms ....	2,000
<b>Total</b>	<b>£1,234,650</b>

## Schools, Technical Colleges and Universities—

	£
GyMEA Technical College—Stage 2 .....	500,000
Hornsby Technical College—Development Plan .....	500,000
Mona Vale High School—Stage 1 and 2 ...	350,000
University of N.S.W.—College Buildings ...	280,000
Seaforth Technical College—New College ..	255,800
Emu Plains High School—Stage 1 and 2 New School .....	250,000
Swansea High School—Stage 1 .....	245,000
Wollongong Teachers' College—Stage 1A ..	238,000
Moss Vale High School—Stage 1 and 2 .....	228,000
Hurlstone Agricultural College—Stage 3 ....	220,000
University of New England, Robb College—Stage 2 and 3 .....	215,700
University of New England—School of Chemistry .....	185,000
Greystane High School—Stage 2 and 3 .....	180,000
Greystane High School—Stage 1 .....	171,000
Fairfield West High School—Stage 1 .....	166,600
Whitebridge High School—Stage 1 and 2 ..	160,000
GyMEA High School—Stage 1 .....	150,000
West Wyalong High School—New Accommodation .....	145,000
Cumberland High School—Stages 2 and 3 ..	140,000
Gilgandra Intermediate High School—New School .....	136,000
Bathurst Teachers' College—New Women's Dormitory Block .....	136,000
Rooty Hill High School—Stage 3 .....	120,000
Gloucester High School—New Building, Stage 2 .....	119,300
Narrabri Public School—Additional Accommodation .....	112,000
Bega High School—Additions and Alterations .....	111,600
The Forest High School—Stage 3 .....	104,300
Walgett Secondary School—New Accommodation .....	102,400
Mosman Co-Educational High School—New Block .....	90,900
University of New England—Psychology Education Building .....	90,000
University of New England—School of Agriculture Economics Building .....	87,000
Berkley South Public School—New Building, Stage 1 .....	83,000
Oak Flats East Public School—Stage 1 ...	82,000
Westlawn Public School—New B./V. School Building .....	75,000
Bulli High School—Alterations and Additions and New Assembly Hall .....	72,700
Picnic Point High School—Stage 3 .....	70,000
Oak Flats High School—Stage 2 .....	69,200
University of New England—Mary White College, Additions .....	68,000
Riverstone High School—Stage 2 .....	66,200
Campbelltown High School—Assembly Hall ..	66,100
North Ryde High School—Stage 3 .....	66,000
Albury North High School—Stage 3 .....	64,600
Chester Hill High School—Stage 2 .....	62,100
Port Macquarie High School—Assembly Hall ..	60,000
Wentworth Central School—New Accommodation .....	59,000
Brookvale Public School—New Primary Department .....	55,600
Ballina High School—New Additions and Alterations .....	50,600
Wyong Public School—New School .....	50,200
Birrong Girls' High School—2 Extra Laboratories and Additional Accommodation ..	50,000
Ingleburn North Public School—New School ..	48,400
Dapto High School—Assembly Hall and Toilet Block .....	44,500
Wyong High and Junior Technical College—Assembly Hall .....	44,000
Harrington Street Public School—New School ..	43,600
Narwee Boys' High School—Assembly Hall ..	43,400
Penshurst Girls' High School—Science, etc. .	39,700
Batlow Central School—New School Building ..	39,000
Newcastle Teachers' College—New Assembly Hall .....	38,500
Kogarah Public School—New Primary Department .....	37,800
Hunters Hill High School—Accommodation ..	36,800
Walters Road Public School—New School ..	35,200
Marayong South Public School—New School ..	30,000
Queanbeyan High School—New Building—Stage 2 .....	26,000
Warrimoo South Public School—Alterations and Additions .....	25,000



Schools, Universities and Technical Colleges—  
*continued—*

	£
Blaxland East Public School—New School ..	23,100
Albury North Public School—Additional Accommodation .....	23,000
Yanco Agricultural High School—Additions, Stage 2 .....	23,000
University of New England—Squash Courts	22,000
Asquith Public School—Special School for Partially Sighted .....	20,500
Lidcombe Public School—Special School for Partially Sighted .....	20,400
Epping Heights Public School—Accommodation .....	20,400
Bennett Road Public School—Accommodation	20,300
Toukley Public School—Alterations and Additions .....	20,000
Heathcote East Public School—Additional Accommodation .....	18,600
Gosford East Public School—Additional Accommodation .....	18,400
Padstow Park Public School—Septic Tank and Sewerage .....	18,000
Berry Public School—Toilet Block .....	17,600
Tempe Public School—Special School for Partially Sighted .....	17,600
Laguna Street Public School—Additional Accommodation .....	17,400
Alexander Mackie Teachers' College—Provision of Biology Preparation and Work-room .....	17,000
Lynwood Park Public School—Additional Accommodation .....	16,400
Northmead Public School—Special School for Partially Sighted .....	16,200
Kingsgrove North Public School—Special School for Partially Sighted .....	16,200
Helensburgh Public School—Additional Accommodation .....	16,000
Manly Far West Hospital—School—Additional Accommodation .....	13,700
Fairvale Public School—Additional Accommodation .....	13,400
Chullora Public School—New Administration Unit .....	12,000
French's Forest Public School—Accommodation .....	11,800
Miranda Public School—Septic Tank and Sewerage .....	11,500
Truscott Street Public School—Accommodation .....	10,600
North Sydney Boys' High School—Replanning of Science Building .....	10,000
New England University—Sports Pavilion ..	10,000
New England University—Masters House, Wright College .....	10,000
Austral Public School—Septic Tank and Sewerage .....	9,500
Thornleigh Public School—Septic Tank and Sewerage .....	9,100
Barraba Central School—Science and Food Preparation Rooms .....	8,000
Hunters Hill Public School—Accommodation	7,800
Berry Public School—New Kindergarten—Alterations and Additions .....	7,700
Vardys Road Public School—Accommodation	7,700
Weilmoringle Public School—New School ..	7,700
Manly Vale Public School—Septic Tank Sewerage .....	7,000
Ingleburn Public School—Septic Tank Sewerage .....	6,400
Appin Public School—Additional Classroom Accommodation Septic Tank, etc. ....	6,200
Umina Public School—Additional Classroom Accommodation, Septic Tank, etc. ....	6,200
Brewarrina Central School—Shower Facilities	6,000
Oaklands Public School—Additional Accommodation .....	6,000
Burraneer Bay Public School—Accommodation .....	6,000
Thornleigh West Public School—Septic Tank and Sewerage .....	5,900
Coonamble High School—New Woodwork and Metalwork Room .....	5,900
Richmond High School—Septic Tank and Sewerage .....	5,800
Terrey Hills Public School—Accommodation	5,700
Umina Public School—Accommodation ....	5,500

Schools, Universities and Technical Colleges—  
*continued—*

	£
Springwood Public School—Septic Tank and Sewerage .....	5,400
Mendooran Public School—Additional Classroom Accommodation, Ground Improvements .....	5,350
Tower Street Public School—Septic Tank and Sewerage .....	5,300
Minto Public School—Additional Classroom Accommodation, Storage Shed and Ground Improvements .....	5,200
Macquarie Fields Public School—Classroom Accommodation Storage .....	5,100
Narrabeen Lakes Public School—Septic Tank and Sewerage .....	5,100
St. Johns Park Public School—Septic Tank and Sewerage .....	5,000
Bossley Park Public School—Septic Tank and Sewerage .....	4,800
Finley High School—Food Service Unit ....	4,800
Minto Public School—Septic Tank and Sewerage .....	4,600
Wyalong Public School—Additional Classroom .....	4,600
Oldfields Road Public School—Septic Tank and Sewerage .....	4,300
Coonamble High School—New M.T. Accommodation .....	4,000
Coonamble—Standard Food Preparation Unit	4,000
Cobbity Public School—Septic Tank and Sewerage .....	3,500
Lawson Public School—Additional Classroom Accommodation—Alteration to weather shed and Ground Improvements .....	3,500
Erina Heights Public School—Classroom Accommodation Alterations and Ground Improvements .....	3,300
Appin Public School—Septic Tank and Sewerage .....	3,200
Oakville Public School—Additional Classroom Accommodation, Ablutions and Ground Improvements .....	3,100
Binnaway Central School—Timber Classroom and Ablutions .....	3,000
Sydney Teachers' College—Clerical Accommodation .....	2,800
Thirlmere Public School—Septic Tank and Sewerage .....	2,800
Terrigal Public School—Additional Accommodation .....	2,700
Hazelbrook Public School—Septic Tank and Sewerage .....	2,600
Horsley Park Public School—Septic Tank and Sewerage .....	2,300
Wetherill Park Public School—Septic Tank and Sewerage .....	2,000
Menangle Park Public School—Septic Tank and Sewerage .....	2,000
Total .....	£8,211,350

## Department of Attorney-General and of Justice—

	£
Deniliquin Police Premises—New Police Station .....	50,000
Gunnedah Police Premises—New Buildings ..	38,400
Warren Court House—New Court House ..	19,900
Redfern Police Station—Additions .....	16,500
Walgett Police Premises—New Cell Block ..	12,000
Ivanhoe Police Premises—New Court House and Office .....	11,000
Buronga Police Premises—New Residence and Garage .....	9,300
Taree Lock-up Keeper's Quarters—New Residence .....	8,000
Picton Police Station—New Residence and Garage .....	7,600
Dareton Police Station—New Police Office and Cells .....	7,000
Total .....	£179,700



## Miscellaneous—

	£
Register-General's Department—Additions ..	750,000
Thornleigh Training School for Girls—New Buildings .....	380,000
Wagga Agricultural Research Institute—Extensions .....	65,000
St. Heliers, Muswellbrook—Erection of Two Dormitory Blocks .....	59,800
Sydney District Nursing Association, Glebe—New Garage .....	40,000
Cowra Soil Conservation Service—New Office Building .....	33,400
Bellbrook Aborigines Settlement—Twelve New Cottages .....	25,800
Forster Aborigines Settlement—Twelve new Cottages .....	25,000
Wellington Aborigines Settlement—Twelve New Cottages .....	25,000
State Dockyard—Administrative Building ..	18,700
Coraki Aborigines Settlement—Nine New Cottages .....	18,500
Bexley Child Health Centre—Conversion of School Building .....	18,300
Bidura Depot, Glebe—Alterations and Additions .....	16,000
Yanco Experimental Farm—Reconditioning Kitchen and Scullery .....	16,000
St. Heliers, Muswellbrook—Additional School Building .....	12,000
Port Kembla Aborigines Settlement—Six New Cottages .....	12,000
Jenolan Caves House—New Recreation Hall	10,000
Griffiths Aborigines Settlement—Six New Cottages .....	9,600
Hydraulics Laboratory, Manly Vale—Building to house Newcastle Model .....	7,300
Gulgambone Aborigines Settlement—Three Ablution Units .....	6,000
Hydraulics Laboratory, Manly Vale—New Guides Hut .....	5,000
Cootamundra Aborigines Settlement—Sanitary Arrangement .....	5,400
Museum of Applied Arts and Sciences—New Fire Escapes .....	5,000
Burnt Bridge Aborigines Settlement—Two Ablution Units .....	4,000
Alexandria Canal (Shea's Creek)—Toilet Facilities .....	3,000
Royal Botanic Gardens—Rebuilding Hot House, No. 4 .....	2,400
Abercrombie Caves House—Public Lavatories	2,000
Condobolin Aborigines Settlement—One Ablution Unit .....	2,000
<b>Total .....</b>	<b>£1,577,200</b>

## Construction

WORK COMMENCED PRIOR TO 1ST JULY, 1961, AND COMPLETED DURING THE YEAR 1961-1962

## Hospitals—

	£
Royal Prince Alfred Hospital—Professorial Block .....	601,200
Rozelle Admission Centre—New Buildings ..	332,100
Callan Park Mental Hospital—Two Ward Blocks .....	306,900
Berrima District Hospital—New Maternity Block and Alterations and Additions ..	235,400
Maitland District Hospital—Nurses Home ..	163,700
Manly District Hospital—New Boiler House and Laundry Block .....	161,600
Wallsend District Hospital—Boiler House, Workshop, Laundry, etc. ....	147,000
Moree District Hospital—Boiler House, Kitchen, etc. ....	134,000
Prince Henry Hospital—Laundry Block .....	114,500
Stockton Mental Hospital—Female Wards Nos. 14 and 15 .....	134,100
Wagga Base Hospital—New Nurses' Home ..	118,100
Morisset Mental Hospital—New Main Kitchen Block .....	115,900
Bloomfield Mental Hospital—New Main Kitchen Block .....	110,800
Parramatta Mental Hospital—New Women's Ward .....	103,500

## Hospitals—continued—

	£
Lidcombe State Hospital—Extensions to Pathological Laboratories .....	94,300
Urbenville District Hospital—New Hospital	92,000
Callan Park Mental Hospital—New Recreation Building, etc. ....	66,400
Ryde North Mental Hospital—Administration Block .....	55,100
Berrima District Hospital, Bowral—Laundry, Boiler House, etc. ....	77,300
Ryde North Mental Hospital—Main Kitchen Block .....	73,200
Parramatta Mental Hospital—New Nurses' Quarters .....	68,000
Ivanhoe District Hospital—New Buildings ..	55,000
Gladesville Mental Hospital—Staff Kitchen and Dining Room .....	53,800
Royal Prince Alfred Hospital—3rd floor, Albert Pavilion .....	45,100
Goulburn Base Hospital—New Boiler House, Workshop and Amenities Building ....	50,500
Broughton Hall Psychiatric Clinic—Canteen and Staff Amenities Building .....	37,200
Ryde North Psychiatric Centre—Artisans' Workshop .....	33,800
Kuringai Community Hospital, Chatswood—Alterations and Additions .....	31,100
Morisset Mental Hospital—New Boiler House	29,700
Royal North Shore Hospital—Radiotherapy Unit .....	28,900
Armidale and New England District Hospital—Administration and Outpatients Hospital .....	28,200
St. Vincents Convalescent Hospital—Babworth House .....	24,400
Gunnedah District Hospital—New Nurses' Home .....	23,700
Grafton Benevolent Home—New Female Block .....	21,800
Rydalmere Mental Hospital—New Morgue	13,100
Gladesville Mental Hospital—Medical Officers' Residence .....	16,200
Lidcombe State Hospital—Medical Officers' Residence .....	16,000
Callan Park Mental Hospital—Medical Officers' Residences .....	15,500
Peat and Milson Island Mental Hospital—New Mortuary .....	13,000
Hay District Hospital—Boiler House and Laundry .....	10,900
Kenmore Psychiatric Hospital—Alterations and Additions to Staff Kitchen .....	10,100
St. Vincent Hospital, Lismore—Bed Passenger Lift .....	10,400
Kenmore Mental Hospital—Medical Officers' Residences and Garage .....	9,000
Cootamundra District Hospital—Alterations and Additions .....	8,800
Rydalmere Mental Hospital—Medical Officers' Residences .....	8,700
Rydalmere Mental Hospital—New X-ray Facilities .....	8,300
Narrandera District Hospital—Boiler Room	7,800
Peat and Milson Islands Mental Hospital—Medical Officers' Residences and Garage	7,700
Henty District Hospital—Alterations and additions and installation of sewerage systems	7,100
Walgett District Hospital—Sewerage .....	7,400
Lismore, St. Vincents Hospital—New Brick Morgue .....	5,900
Glen Innes District Hospital—New Mortuary	5,100
Murrumburrah—Harden District Hospital—New Casualty Room .....	4,100
Lidcombe State Hospital—Three Bus Shelters	3,300
<b>Total .....</b>	<b>£3,956,700</b>

## Schools, Universities and Technical Colleges:—

	£
University of New South Wales—Building "A"	1,429,500
Port Kembla High School—Stage 1 and 2 ..	413,100
Sydney Technical College—New Permanent Building—2nd section .....	404,100
Wollongong Technical College—Automotive Electrical Engineering Building .....	383,800
Matraville Co-educational High School—Stage 1 and 2 .....	382,500



Schools, Universities and Technical Colleges—  
*continued—*

	£
University of New South Wales—Union Building .....	316,400
Lithgow High School—Stage 2 .....	254,400
Penrith Technical High School—New Buildings .....	231,600
Canterbury-Bankstown Technical College—Trades and General Purpose Block ..	228,400
University of New England—Zoology and Botany Building .....	204,900
North Sydney Technical College—New Quadrant Building .....	204,500
Armidale High School—Additional Accommodation .....	197,900
Griffith High School—Alterations and additions .....	165,200
Armidale Teachers' College—Smith Hostel ..	156,600
Armidale Demonstration School—New Infants' Building .....	153,300
Port Macquarie High School—New Buildings ..	146,300
University of New England—Geology and Geography Building .....	135,600
Yass High School—New Building .....	133,600
North Sydney Technical College—New Classroom Block .....	130,400
Monaro High School—Administrative Building ..	127,500
University of New England—Wright College—Dining Hall and Kitchen .....	123,800
University of New England—Robb College—Dormitory Block No. 2 .....	103,000
Lurnea Public School—Stage I .....	100,300
Macarthur Girls' High School—Science Block and Assembly Hall .....	96,700
University of New England—Dormitory Block for Third College .....	91,000
Richmond River High School—Classroom building .....	89,400
Wagga Teachers' College—Men's Dormitory Block .....	84,000
North Sydney Girls' High School—Additions ..	82,800
North Sydney Technical High School—New Library and Manual Training Block ..	81,600
Wagga Teachers' College—Additional Male Dormitory (No. 2) .....	78,700
Cabramatta Secondary School—Stage 4 ....	76,200
Arthur Phillip High School—Science Block ..	75,700
James Ruse Agricultural High School—Biology Block and Extensions .....	72,000
Gloucester Hill School—New School .....	71,000
Dapto High School—Stage 3 .....	68,700
North Ryde Public School—Infants', Primary Block and Toilets .....	63,100
Meadowbank Boys' Secondary School—Assembly Hall and Administrative Block ..	61,800
Avalon Public School—Classroom Block and Toilet .....	60,600
Lakelands Public School—Four Room Timber Unit .....	59,600
Katoomba High School—Assembly Hall ..	56,300
Lismore High School—Science Block .....	55,500
Forster High School—New Buildings .....	55,400
Willoughby Girls' High School—Alterations and Additions .....	54,400
Vardys Road, Seven Hills Public School—Infants' Classroom Block .....	49,400
Camden High School—Additional Accommodation .....	47,000
Wagga Teachers' College—New Lecture Rooms .....	46,200
Hawkesbury Agricultural College—Additional Kitchen Block .....	42,800
Alexander Mackie Teachers' College—Gymnasium and Ancillaries .....	42,600
Enmore Boys' High School—Assembly Hall ..	41,200
Fairfield High School—Assembly Hall .....	40,700
Oyster Bay Public School—Additional Accommodation .....	40,200
Campbelltown Public School—Infants' Block ..	39,000
University of New England—Extensions to Union Building .....	38,000
Parkes East Public School—Brick Veneer Building .....	38,000
Campbelltown North Public School—Primary Classrooms "A" and "B" and Toilets ..	37,500
Hunter Girls' High School—Assembly Hall ..	36,600
Forbes Central Infants' School—Additional Accommodation .....	36,600
Murwillumbah Technical College—New Building .....	35,500
Camden South Public School—Stage I ....	35,500
Kiama High School—Assembly Hall .....	34,800

Schools, Universities and Technical Colleges—  
*continued—*

	£
St. Marys (Bennett Road) Public School—Infants' Block and Toilets .....	33,300
Quirindi High School—Additions .....	31,700
Tumbarumba Central School—Toilet Extensions .....	31,500
Condobolin Intermediate High School—Additions .....	31,400
Dorrigo Central School—Alterations and Additions .....	29,800
North Sydney Boys' High School—New Gymnasium .....	29,000
Glenbrook Public School—New Buildings ..	28,100
Matrville School—Site Works .....	27,700
Broken Hill North Public School—Toilets and Ablutions .....	24,700
Sydney Technical College—Forsters Building, Alterations and Additions .....	23,100
Tarro Public School—Accommodation for New School .....	22,100
Grenfell Intermediate High School—Additions ..	21,100
Inverell High School—Alterations and Additions .....	18,200
Blayney Intermediate High School—Laboratory and Library .....	18,400
Castlereagh Camp Teachers' College—Recreation Hall .....	18,000
Heaton Public School—Additional Accommodation .....	17,700
Meadowbank Boys' High School—Music Room and Two Classrooms .....	16,600
Oak Flats Public School—Additional Accommodation .....	15,600
Cessnock Public School—Alterations and Repairs .....	15,400
Lavington Public School—Classrooms, Toilets and Septic Tank .....	14,600
Shellharbour Public School—Additional Accommodation .....	13,100
Tower Street, Panania Public School—Classroom Block .....	12,600
Turrumurra Public School—Classroom Block ..	12,200
Dubbo South Public School—Additional Accommodation .....	12,200
Towradgi Public School—Additional Accommodation .....	12,000
Kurri Kurri High School—New Needlework and Art Rooms .....	11,300
Bombaderry Public School—Additional Accommodation .....	11,200
Macksville High School—Additional Accommodation .....	11,200
Villawood East Public School—Primary Classrooms .....	11,100
Wingham District Rural School—Additional Accommodation and Library .....	11,000
Gymea Bay Public School—Additional Accommodation .....	10,600
Chester Hill Infants' School—Ablution Block and Drainage .....	10,500
Kanwal Public School—Additional Accommodation .....	9,800
Wingham District Rural School—Connection of sewer and toilets .....	9,700
Como West Public School—Toilet Block and Septic Tank .....	9,100
Northmead Public School—Ejector Station and Toilets .....	9,100
Ben Lomond Public School—Additional Accommodation .....	8,900
Broken Hill (Morgan Street) Infants' School—New Toilets and Ablutions Block....	8,800
Narrabri West Public School—New Classroom Building .....	8,400
Coonabarabran Intermediate High School—Alterations and New Woodwork Room ..	8,200
The Junction Demonstration School—Additional Accommodation .....	8,100
Cardiff South Public School—Additional Accommodation .....	7,900
Booragul High School—Laboratory Additions ..	7,500
Tooleybuc Central School and Residence—Additions, Renovations and Repairs ....	7,400
Asquith Boys' High School—Septic Tank ...	7,000
Merriwa Public School—Painting and Repairs ..	6,600
Lennox Head Public School—New School ..	6,500
Yatta Public School—Additional Accommodation .....	5,800
Merriwagga Public School—Additional Accommodation .....	5,600



Schools, Universities and Technical Colleges—  
*continued*—

	£
Willow Tree Public School—Additional Accommodation .....	4,900
Farrar Memorial Agricultural High School—Purification Plant .....	4,800
Kars Springs Public School—Additional Accommodation .....	4,800
Hillston Central School—Toilets and Septic Tank .....	4,700
Gilgai Public School—Additional Accommodation .....	4,400
Nowra Technical College—New Classroom and Store .....	4,300
Molong Central School—Additional Accommodation .....	4,100
Telegraph Point Public School—Additional Accommodation .....	3,900
Branxton Public School—Office, Store and Toilets .....	4,500
Sydney Teachers' College, Castlereagh Camp—New Toilet Block .....	4,200
Comboyne Public School—Additional Accommodation .....	3,500
Armidale Teachers' College—Machinery Shed .....	3,400
Jannali Public School—Septic Tank .....	3,200
Pennant Hills Public School—Primary Department—Septic Tank .....	3,000
Denman Public School—Additional Accommodation .....	2,900
Trundle Central School—Additional Accommodation .....	2,500
<b>Total</b> .....	<b>£9,047,300</b>

## Department of the Attorney-General and of Justice—

	£
Casino Police Station—New Station and Residence .....	38,000
Lake Cargelligo Court House and Police Station—New Building .....	34,400
Coonamble Police Station—New Station and Residence .....	22,200
Canowindra—New Police Premises .....	19,700
Tumut Court House—Additions and Alterations .....	4,000
Drummoyne Police Station—Alterations .....	3,900
Bathurst Gaol—Cool Room .....	2,800
<b>Total</b> .....	<b>£125,000</b>

## Miscellaneous—

	£
Public Library of New South Wales—Additions, Stage 1 .....	260,900
Department of Agriculture (Day Street)—Fumigation Building .....	122,800
Tamworth—Building for Department of Agriculture .....	59,000
Brisbane Street, Sydney Child Guidance Centre, New Buildings .....	44,300
Tourist Activities Department—Renovation of Premises, Challis House .....	42,700
Island Fisheries Research Station, Narrandera—New Building .....	33,000
Georges Hall, After Care Association, Bankstown—Men's Hostel .....	32,600
Armidale Aborigines' Reserve—Fourteen Cottages .....	30,400
Newcastle Morgue—New Building on New Site .....	28,000
Deniliquin Aborigines Welfare Board—Twelve Cottages .....	22,500
Maclean Aborigines' Reserve—Four New Cottages .....	16,400
Jenolan Caves House—Additional Bathroom and Toilet Facilities .....	13,200
King Edward Home for Girls, Newcastle—Alterations, Extensions and Repairs .....	11,000
Young Government Office Building—Alterations, and Repairs .....	11,000
Yass District Office—Soil Conservation Service, New Buildings .....	10,000
Mungindi Aborigines Reserve—Three Cottages .....	9,500
Forster Aborigines' Reserve—Erection of Two Cottages .....	8,600

Miscellaneous—*continued*—

	£
Narrandera Government Offices—Repairs and Additions .....	8,000
Public Works Department Carrington Depot—New Offices .....	7,400
Mittagong Training School for Boys—Deputy Superintendent's Residence .....	6,800
Old Government Printing Office—Purchase, Demolition and Removal .....	6,800
Moree Lock-up and Keeper's Residence—Conversion to Offices for Department of Agriculture .....	5,800
Walgett Aboriginal Reserve—Two Timber Framed Residences .....	4,500
<b>Total</b> .....	<b>£795,200</b>

## WORK COMMENCED PRIOR TO 1ST JULY, 1961, AND STILL IN PROGRESS

## Hospitals—

	£
Auburn District Hospital—New Hospital ...	1,509,000
Cessnock Psychiatric Centre—New Buildings	1,285,700
Wagga Base Hospital—New Hospital Block and Nurses Training School .....	617,000
Lidcombe State Hospital and Home—Recreation Hall and Chapel .....	153,300
Tumut District Hospital—Alterations and Additions .....	146,800
Rydalmere Mental Hospital—New Male Ward Block .....	131,600
Gundagai District Hospital—Alterations and Additions .....	122,200
<b>Total</b> .....	<b>£3,966,300</b>

## Schools, Universities and Technical Colleges—

	£
University of Sydney—Fisher Library .....	979,500
Sydney Technical College—School of Graphic Arts .....	569,700
Cardiff Co-Educational High School—New Building .....	305,700
Conservatorium of Music—Alterations and Additions .....	153,700
Gundagai Secondary School—New Buildings	140,300
Windang Public School—Additional Accommodation .....	34,600
<b>Total</b> .....	<b>£2,183,500</b>

## Department of the Attorney-General and of Justice—

	£
Holbrook Police Station—Repairs and Alterations .....	4,300

## Miscellaneous—

	£
Australian Museum—New William Street Wing, Stage 2 .....	344,600
"Werrington Park", Werrington, for Child Welfare Department—New Building ...	181,700
Wickham Wharf—New Amenities Building ..	32,000
<b>Total</b> .....	<b>£558,300</b>

WORK COMMENCED AND COMPLETED DURING THE YEAR  
1961-62

## Hospitals—

	£
Rozelle New Admission Centre—Six Medical Officers Residences .....	41,200
Lismore Base Hospital—Conversion of Nurses' home to Ward Block .....	34,300
Ryde North Psychiatric Centre—Erection of Three Medical Officers' Residences ....	21,600
Peak Hill District Hospital—Alterations and Additions to Maternity Unit .....	22,700
Lidcombe State Hospital—Three Medical Officers' Residences .....	21,000



## Hospitals—continued—

	£
Nepean District Hospital—Extensions to Laundry Block .....	20,200
St. George District Hospital—New Roof to Outpatients' Department .....	6,300
Sydney Hospital—Remodelling X-ray Department, Casualty Section .....	4,400
Randwick Auxiliary Hospital—Alterations and additions to Medical Superintendent's Residence .....	2,200
<b>Total</b> .....	<b>£173,900</b>

## Schools, Universities and Technical Colleges—

	£
Picnic Point Co-Educational High School—Stage 1 .....	274,400
Rooty Hill High School—Stage 1 .....	244,100
Toronto New Co-Educational High School ..	220,900
Chester Hill (Lexington Crescent) School—New School .....	216,400
Mayville (Carlingford) Co-Educational High School .....	184,500
Riverstone High School—Stage 1 .....	165,200
French's Forest High School—Stage 2 .....	71,000
East Maitland Boy's High School—Extensions .....	59,200
Wallsend West Secondary School—New Buildings .....	54,100
Bathurst High School—New Assembly Hall ..	50,000
Blacktown High School—New Assembly Hall ..	43,200
Kingsgrove North High School—New Assembly Hall .....	43,200
Penshurst Girls' High School—Science and Art Wing .....	43,000
Hunter's Hill High School—Additional Classroom Blocks .....	43,900
Albury North High School—Stage 2 .....	33,000
Kogarah Public School—New Primary Department .....	30,200
Warrimoo South Public School—Stage 1, Classroom and Toilet Block .....	27,000
Canterbury Bankstown Technical College—Removal and Re-erection of Two Armco Huts .....	22,800
Toukley Public School—Additional Accommodation .....	22,800
Asquith Public School—Classroom Block for Partially Sighted Children .....	21,400
Lidcombe Public School—3 B/V Classrooms for Partially Blind .....	20,500
St. Mary's Public School (Bennett Road)—Infants' Classroom Block .....	21,100
Narrabri High School—Additional Accommodation .....	21,500
Tempe Public School—Primary Classroom Block for Partially Sighted Children ..	18,300
Dubbo North Public School—New Nursery School .....	18,100
Murwillumbah High School—New Timber-framed Classroom Block .....	17,600
Gosford East Public School—Infants' Classroom Block, Stage 1 .....	20,100
Heathcote East Public School—Additional Accommodation .....	19,300
Laguna Street Public School, Yowie Bay—Primary Classroom Block .....	19,000
Armidale High School—Additional Woodwork Room and Home Science Kitchen .....	17,700
Kingsgrove North High School—Classroom Block for Partially Sighted Children ..	16,900
Northmead High School—Classroom Block for Partially Sighted Children .....	16,700
Fairvale Public School—Extension to Primary Girls' Department .....	14,100
Ben Venue Public School—B/V Two Classroom building, etc. ....	13,500
Lynwood Park Public School—Additional Accommodation .....	12,700
Oak Flats Public School—Two Classrooms, Office, Clinic, Staffroom, etc. ....	12,300
Orange East Public School—Kindergarten Building .....	12,100
Merimbula Public School—Additional Classroom and Toilets .....	12,000
Trundle Central School—Additional Accommodation, Home Science and Manual Arts .....	11,600

Schools, Universities and Technical Colleges—  
continued—

	£
Truscott Street (North Ryde) Public School—New Classroom Block .....	11,100
Broken Bay National Fitness Camp—New Shower Blocks and Alterations .....	11,000
Lindsay Park Public School—New Classroom Clinic .....	10,700
Cooma Public School—Additional Accommodation .....	10,200
Speers Point Public School—Additional Accommodation .....	9,600
Warren Central School—Alterations and Additions .....	9,300
Chatham Public School—Additional Accommodation .....	9,200
Tweed Heads South Public School—Additional Accommodation .....	8,600
Broken Hill Primary School—New Toilet Blocks .....	8,200
The Entrance Public School—T/F Classroom Block, Additional Toilets, etc. ....	8,400
Ryde North Public School—Toilet Facilities and Soil Drainage .....	8,400
Lavinton East Public School—Additional Accommodation .....	8,300
Kempsey South Public School—Two Additional Classrooms .....	8,100
Yetman Public School—Two Timber Classrooms, Office, Storeroom, etc. ....	7,900
Cassilis Public School—Additional Accommodation .....	7,300
Barham Central School—Laboratory Classroom .....	7,000
Fennells Bay Public School—Additional Accommodation .....	6,900
Springwood Public School—New Toilet, Sewer Connection .....	6,800
Adamstown Public School—New Dental Clinic .....	6,800
Ryde North (Truscott Street) Public School—Septic Tank .....	6,700
Railway Town Public School—Timber Classroom Building, Paving, Fencing, Incinerators, etc. ....	6,600
Wards Mistake Public School—Additional Accommodation .....	6,200
Berowra Public School—Septic Tank and Additional Toilets .....	6,200
Lake Munmorah Public School—Additional Accommodation .....	6,200
Macksville Public School—New Classrooms, Clinic, Store and Ground Improvements ..	6,150
Mulyan Infants' School—Kindergarten Building, Office, etc. ....	6,150
Terry Hills Public School—Infants' Classroom and Clinic Block .....	5,900
Inverell Primary School—Additional Accommodation .....	5,700
Umina Public School—Two Classroom Building .....	5,500
Coonamble High School—Composite Metal-work Woodwork Room .....	5,300
Darnick Public School—Additional Accommodation and Alterations .....	5,200
Bonshaw Public School—Additional Accommodation .....	5,200
Glenreagh Public School—Additional Accommodation .....	5,100
Bletchington (Orange North) Public School—Two Room T/F Unit .....	5,100
Minto Public School—Two Roomed T/F Classroom, Brick Storage Shed and Paving .....	4,700
Moree East Public School—Food Preparation Unit .....	3,800
Merriwa Public School—Additional Kindergarten Room .....	3,600
Newcastle Boys' High School—Woodwork Room .....	3,900
Oldfield Road (Seven Hills) Public School—Septic Tank Installation .....	3,400
Lawson Public School—Additional Classroom Paving, etc. ....	3,300
Elderslie Public School—Additional Accommodation, etc. ....	3,300
Terranora Public School—Single Classroom Building .....	3,200
Wickham School Maintenance Depot—Additions to Store .....	3,200



Schools, Universities and Technical Colleges:—  
*continued*—

	£
Newcastle Technical College, Wood Street—Repairs and Alterations to Storm Damage .....	3,100
Pennant Hills Public School, Infants' Department—Septic Tank .....	3,100
Coal Point Public School—Additional Accommodation .....	3,100
Curlwaa Public School—New Toilets and Septic Tank .....	2,700
Thirlmere Public School—Septic Tank .....	2,500
Terrigal Public School—Timber-framed Classroom .....	2,300
Orange High School—Additional Concrete Paths and Paving .....	2,300
<b>Total</b>	<b>£2,487,900</b>

## Department of the Attorney General and of Justice—

	£
Narromine Court House—New Building ....	20,500
Wentworth Police Premises—Alterations and Additions to Lock-up and Residence ...	8,900
Peak Hill Police Premises—Additional Accommodation .....	2,400
<b>Total</b>	<b>£31,800</b>

## Miscellaneous—

	£
State Government Offices—Excavation of Site	67,600
Leeton Department of Agriculture—Additions and Alterations to Registrar's Office ....	14,400
Hay Gaol for Girls Training establishment—Renovations .....	10,000
Coonamble—Three Cottages for Aborigines	6,700
Old Public Library and Other Buildings—Demolition .....	6,700
Wickham School Maintenance Depot—Additions to Store .....	3,800
Coonabarabran Aborigines' Reserve—Two New Cottages .....	3,600
Scone—Conversion of Bus Depot to Depot for Prickly Pear Commission .....	2,400
Lockmaster's Residence, Lock 15, Euston—General Renovations and Painting ....	2,400
<b>Total</b>	<b>£117,600</b>

WORK COMMENCED DURING THE YEAR 1961-1962 AND STILL  
IN PROGRESS

## Hospitals—

	£
Mona Vale Hospital—New Buildings .....	1,715,800
Port Kembla District Hospital—New Building	1,751,200
Macleay District Hospital, Kempsey—New Buildings and Alterations .....	496,000
Rozelle Admission Centre—New Nurses' Quarters .....	201,000
Prince Henry Hospital, Little Bay—Extensions to Pathology Building .....	142,100
Coff's Harbour District Hospital—New Maternity Block .....	81,700
Rozelle Admission Centre—Laundry and Boiler House .....	74,700
Prince Henry Hospital—R.M.O.'s Quarters ..	65,700
Fred Birks Hospital School—New Building	52,500
Prince Henry Hospital—Cafeteria Block ....	50,500
Prince Henry Hospital—Nurses' Training School .....	42,500
Gladesville Mental Hospital—New Workshop	40,000
Braidwood District Hospital—New Nurses' Home .....	35,400
Bombala District Hospital—New Nurses' Home .....	32,600
Callan Park Mental Hospital—Admission Centre Rozelle—New Single Medical Officers' Block .....	24,000
Fairfield District Hospital—Additional Maternity Accommodation .....	20,200
Manly Far West Hospital—Additional Classrooms .....	14,300
Eastern Suburbs Hospital—Extensions .....	12,000

Hospitals—*continued*—

	£
Bombala District Hospital—New Mortuary and Septic Tank .....	9,200
Oberon District Hospital—Renovations, Additions and Ground Improvements .....	7,300
Pambula District Hospital—Two Toilet Blocks .....	7,300
Kenmore Mental Hospital—Car Port and Garages .....	6,800
<b>Total</b>	<b>£4,882,800</b>

## Schools, Universities and Technical Colleges—

	£
East Maitland Girls' High School—New Buildings .....	343,900
University of New South Wales, Newcastle College—P.O. Riddell Building .....	304,700
Ryde North Co-Educational High School—Stage 1 .....	258,700
Hurlstone Agricultural High School, Glenfield—Additions and Alterations .....	225,900
Wollongong Teachers' College—Stage 1 A ..	248,800
University of New England, Armidale—Dormitory Block 3 and Dining Block 4 at Robb College .....	225,400
Armidale Technical College—New Buildings	222,700
University of New England, Armidale: Physics Research Block .....	217,500
Tamworth Technical College—New Building	210,000
Yanco Agricultural High School—Two Dormitory and Hospital Blocks .....	191,200
Taree Technical College—New Building ...	183,700
Greystanes Co-Educational High School—New Building .....	182,500
Oak Flats High School—New Buildings .....	181,700
Wagga Agricultural College—Dormitory Block	166,000
Bonnyrigg High School—Stage 3 .....	160,000
Parramatta High School—New Buildings and Alterations and Additions .....	147,600
Gloucester High School—Stage 2 .....	124,100
Lismore Technical College—New Building (Conway Street) .....	120,200
Kempsey West High School—New Building	118,100
Ryde North High School—Stage 2 .....	118,000
Bega High School—Additional Accommodation .....	116,000
Mosman Co-Educational High School—Classroom Block .....	96,300
Berkeley South Public School—New Buildings, Stage 1 .....	85,800
Albion Park Public School—Brick Veneer Infants Building, Septic Tank .....	82,400
Richmond High School—Additional Accommodation .....	74,400
Bonnyrigg High School—Stage 2 .....	74,000
Broken Hill High School—Assembly Hall ..	72,700
Berkeley West Public School—Additional Accommodation .....	72,600
Bathurst High School—Classroom Block and Alterations .....	71,500
Campbelltown High School—Assembly Hall and Administration Block .....	67,200
Chester Hill High School—Stage 2 .....	64,700
Brookvale Public School—Classroom Block	57,800
Young High School—Additional Accommodation .....	53,800
Ballina High School—Alterations and Additions .....	52,800
Warialda Central School—Additional Accommodation .....	50,000
Dapto High School—Assembly Hall .....	46,300
Jannali Boys' High School—Assembly Hall ..	45,200
Narrabeen Boys' High School—Assembly Hall	45,300
Wollongong High and Keira Boys' High Schools—Assembly Hall .....	45,000
Narwee Boys' High School—Assembly Hall	45,000
Balgowlah Boys' High School—Assembly Hall .....	41,400
Kandos Intermediate High School—Alterations and Additions .....	38,400
Newcastle Teachers' College—Assembly Hall	35,600
Windang Public School—Additional Accommodation .....	34,600
St. George Girls' High School—Additional Accommodation .....	33,200
Unanderra Public School—Additional Accommodation .....	27,800
Blacksmiths Public School—Classroom Block, Septic Tank .....	26,900



Schools, Universities and Technical Colleges:—  
*continued—*

	£
Matraville Soldiers' Settlement Public School—Assembly Hall .....	26,900
Muswellbrook Public School—Additional Accommodation .....	24,600
Primbee Public School—Additional Accommodation .....	24,600
Mount St. Thomas Public School, Wollongong—Additional Accommodation, Toilets .....	24,500
Blaxland East Public School—Stage 1 .....	24,000
Queanbeyan High School—Alterations and Additions .....	23,600
Epping Heights Public School—New Classrooms and Toilet Block .....	21,200
Yanco Experiment Farm—Re-conditioning Kitchen .....	21,100
Glendale East Public School—Additional Accommodation .....	17,600
Albury North Public School—Additional Accommodation .....	17,200
Vardys Road Public School—Additional Accommodation and Toilet .....	15,800
Eden Central School—Brick Veneer Building .....	13,000
French's Forest Public School—Additional Accommodation and Toilet .....	12,500
Taree West Public School—Additional Accommodation .....	12,300
Bathurst Technical College—Extensions ....	11,400
Seven Hills West Public School—Additional Washing, Drinking Facilities, Septic Tank .....	10,300
Warners Bay Infants' School—Brick Veneer Classroom Building and Canteen .....	10,300
Windale Public School—Classroom and Administration Blocks .....	9,800
Harrington Public School—New Classroom Building .....	9,450
Kyogle High School—Two Additional Classrooms .....	9,000
Tenambit Public School—Additional Accommodation .....	8,800
Narromine District Rural School—Three Classrooms and Store .....	8,500
Berry Public School—New Kindergarten and Alterations .....	8,500
Jerilderie Public School—Additional Accommodation .....	8,400
Bendemeer Public School—Additional Accommodation .....	8,300
Hunter's Hill Public School—New Classroom Block, Alterations to Toilets ....	8,100
Nowendoc Public School—Additional Accommodation .....	8,000
Kempsey South Public School—Two Additional Classrooms .....	8,000
Vardy's Road, Lalor Park Public School—Additional Accommodation .....	8,000
Delegate Public School—New Septic Tank and Toilet Block .....	8,000
Armidale Teachers' College—Fire Service and Lecture Block .....	7,800
Manly Vale Public School—New Toilet Block .....	7,400
Dunedoo Central School—Additional Accommodation .....	7,100
Wollongong Public School—New Dental Clinic .....	7,000
Parramatta Central School—New Dental Clinic .....	7,000
Hurstville Public School—New Dental Clinic .....	7,000
Naremburn Public School—New Dental Clinic .....	7,000
Oaklands Public School—Additional Accommodation .....	7,000
Portland Intermediate High School—New Administrative Block .....	6,900
Weilmoringle Public School—Single Classroom Building .....	6,900
Nerringundah Public School—New Classroom and Toilet Block .....	6,800

Schools, Universities and Technical Colleges:—  
*continued—*

	£
Moulamein Public School—New Classroom, Library and Sewing Room .....	6,700
Mumbil Public School—Septic Tank .....	6,400
Ashford Central School—Classroom Building .....	6,300
Burraneer Bay Public School—Additions ...	6,200
Nulkaba Public School—Toilets, Washing Facilities and Septic Tank .....	6,000
Tullibigeal Public School—Kindergarten ...	5,500
Grafton High School—Additional Accommodation .....	5,500
North Star Public School—Additional Accommodation .....	5,500
Kelvin Public School—Classroom Building ..	5,400
Grafton High School—Additional Accommodation .....	5,400
Tambar Springs Public School—Classroom, Store, Office, Drink and Wash Unit ....	5,300
Newton Boyd Public School—New Buildings .....	5,300
Blackville Public School—Additional Accommodation .....	5,200
Thornleigh Public School—Extension of Toilet and Septic Tank .....	5,200
Gulgargambone Central School—Septic Tank .....	5,000
Ingleburn Public School—Septic Tank Installation .....	4,700
Wagga Wagga Agricultural College—Graham Block Roofing .....	4,600
The Oaks Public School—Classroom, Electrical Services and Ground Improvements .....	4,400
Coolatai Public School—Additional Accommodation .....	4,400
Mayrung Public School—Classroom and Store .....	4,300
Coff's Harbour Public School—Connection to Town Sewerage .....	4,300
Binnaway Central School—New Classroom and Ablutions Unit .....	4,100
Mendooran Central School—Classroom Building .....	4,100
Macquarie Fields Public School—Septic Tank .....	3,800
Shortland Public School—Connection to Sewer Drainage .....	3,800
St. John's Park Public School—Septic Tank .....	3,700
Wyalong Public School—Classroom Building .....	3,500
Geurie Public School—Septic Tank .....	3,400
Bossley Park Public School—Septic System, Wash and Drink Unit .....	3,400
Coff's Harbour High School—Connection to Town Sewerage .....	3,200
Cobbity Public School—Toilets and Ablution Block—Septic Tank .....	3,200
Anglewood Special School—Burradoo—New Toilet Block .....	3,100
Tahmoor Public School—Classroom Buildings .....	3,100
Stanwell Park Public School—Toilet and Septic System .....	2,600
Removal of School at Willina to Bunyah Public School Site .....	2,400
Chipping Norton Public School—Septic Tank .....	2,300
<b>Total .....</b>	<b>£6,198,350</b>

## Department of the Attorney-General and of Justice—

	£
Darlinghurst Court House—Alterations and Additions .....	200,000
Coff's Harbour—New Court House, Departmental Offices and Police Premises ....	141,000
Penrith New Court House .....	90,000
Belmont New Court House—Police Premises, New Buildings .....	68,700
Albury Police Station—New Building .....	62,000
Gunnedah Police Station—New Buildings ..	37,100
Oberon—New Police Buildings and Court House .....	34,200
Warren Court House—New Building .....	23,700



Department of The Attorney-General and of Justice—  
*continued—*

	£
Redfern Police Station—Additional Accommodation .....	20,300
Corrimal New Police Premises .....	15,900
Buronga Police Premises—Garage and New Residence .....	10,300
Quirindi Police Station—Office and Garage Accommodation .....	9,500
Oaklands Police Station—Residence, Office and Garage .....	8,200
Waratah Police Wireless Station—Additional Accommodation .....	7,800
Picton Police Premises—New Residence and Garage .....	7,400
Taree Lock-up Keeper's Residence—Demolishing Old Residence and Erecting New Premises .....	7,000
Wollongong Court House—Alterations to Holding Room and Store .....	5,100
Broken Hill Police Station—Meal Room Accommodation .....	4,100
Goulburn Police Premises—Alterations and Additions to Garages and Paving .....	3,500
Total .....	<u>£755,800</u>

## Miscellaneous—

	£
Registrar-General's Department—Alterations and Additions .....	769,000
Training School for Girls, Thornleigh—New Building .....	380,000
Public Library of N.S.W.—Additional Accommodation .....	253,300
"Mena House", Macquarie Street—Construction of Partitioning for Courts and Office for Minister of Housing .....	81,600
St. Helliers, Muswellbrook—Two New Dormitory Blocks .....	62,600
Coff's Harbour—New District Works Office .....	28,300
Eden Jetty—New Amenities Building for Port Workers .....	26,500
State Dockyard, Newcastle—Extension to Administration Building .....	19,500
Commaditchy (Port Kembla) Aborigines' Reserve—Erection of 6 Cottages .....	12,500
Aborigines' Reserve, Griffith—Erection of Six Cottages .....	10,000
Aborigines Girls' Training Home, Cootamundra—Additions and Alterations ....	6,800
Total .....	<u>£1,650,100</u>



## APPENDIX V

### BUILDING CONSTRUCTION AND MAINTENANCE

#### FUNCTIONS

The functions of the Building Construction and Maintenance Branch are:—

- (1) the maintenance and renovations of public buildings, including state and mental hospitals;
- (2) construction, remodelling and additions to public buildings, including state and mental hospitals by day labour;
- (3) construction, alterations and maintenance of buildings for other departments and instrumentalities including the Hospitals Commission of New South Wales, Forestry Commission, Government Real Estate Office, Government Insurance Office, Department of Technical Education, etc.;
- (4) maintenance of schools from funds provided by the Education Department;
- (5) prefabrication and erection of timber and brick veneer classrooms from funds provided by the Department of Education;
- (6) inspection and treatment of termite, borer and other pest infestation in public buildings and institutions;
- (7) inspection and preparation of reports and estimates for general maintenance and miscellaneous works within the metropolitan area;
- (8) preparation of bills of quantities and specifications for major works carried out by the branch;
- (9) arranging continuous supply of materials and plant for works carried out by the branch;
- (10) the maintenance of emergency services after normal working hours in respect of plumbing, building and electrical services in public buildings.

#### OPERATIONS

##### Finance

The upward trend in branch activities is reflected in the following expenditure figures for the current year compared with the previous two years.

	1959-60	1960-61	1961-62
	£	£	£
Revenue Vote, Public Buildings	888,966	916,088	868,800
Special Deposit Public Building	....	....	58,610
Revenue Vote not elsewhere included	11,304	10,619	71,589
Special Deposits Account Police Buildings	....	15,000	10,000
Loan Votes	286,118	328,477	351,753
Other Departments	2,368,140	2,940,833	3,648,993
	£3,554,528	£4,211,017	£5,009,745

The activities of the various Sections of the Branch are summarised as follows:—

##### Maintenance

Expenditure on maintenance and alterations to public buildings in the metropolitan area totalled £1,665,000, distributed as follows:—

	£
Revenue Vote Public Buildings	869,000
Special Deposits Account Public Buildings	58,000
Loan Vote Public Buildings, Police Buildings, etc.	159,000
Loan Vote State Hospitals	30,000
Loan Vote Mental Hospitals	165,000
Child Welfare	39,000
Technical Education	109,000
Hospitals Commission	236,000
	<u>£1,665,000</u>

The main work carried out under these approvals were:—

Revenue Vote (Public Buildings)—	£
Lidcombe State Hospital	22,000
Newington State Hospital	15,000
Callan Park Mental Hospital	75,000
Broughton Hall Mental Hospital	7,000
Gladesville Mental Hospital	94,000
Parramatta Mental Hospital	122,000
Rydalmere Mental Hospital	69,000
Police Premises	31,000
Court House	53,000
Public Buildings generally	195,000
Contracts various	75,000
Urgent Minor Works under £50	150,000

##### Loan Vote (Public Buildings)—

Agriculture Department	4,000
Courts and Prisons	37,000
Bidura Depot	12,000
National Art Gallery	7,000
Police Headquarters	66,000

##### Loan Vote (State Hospitals)—

"Garrawarra" Hospital	7,000
Lidcombe State Hospital	4,000
Strickland	18,000

##### Loan Vote (Mental Hospitals)—

Broughton Hall	7,000
Callan Park	43,000
Peat Island	51,000
Rydalmere	5,000
North Ryde	11,000
St. Vincent's Hospital Mental Health Unit	42,000

##### Child Welfare—

Mt. Penang	10,000
Montrose	8,000
Parramatta Girls' Training School	8,000
Winbin	8,000
Yarra Bay	3,000

##### Technical Education—

Liverpool Technical College	20,000
East Sydney Technical College	70,000

##### Hospitals Commission—

Prince Henry Hospital	214,000
Prince of Wales Hospital	7,000

The work covered by the Revenue Vote public buildings was mainly maintenance work and in the case of the mental hospitals comprised largely the modernisation of pantries, ser-veries, toilets and ablutions, dining rooms, kitchens, etc., and overhaul of the electrical services, hot water services and internal and external painting.

Court Houses were given a great deal of attention, Darlinghurst Court, Supreme Court, Queens Court and Central Court all having extensive renovations.

Contractors were engaged to assist with the large programme principally for painting and plumbing.

##### LOAN VOTE (PUBLIC BUILDINGS)

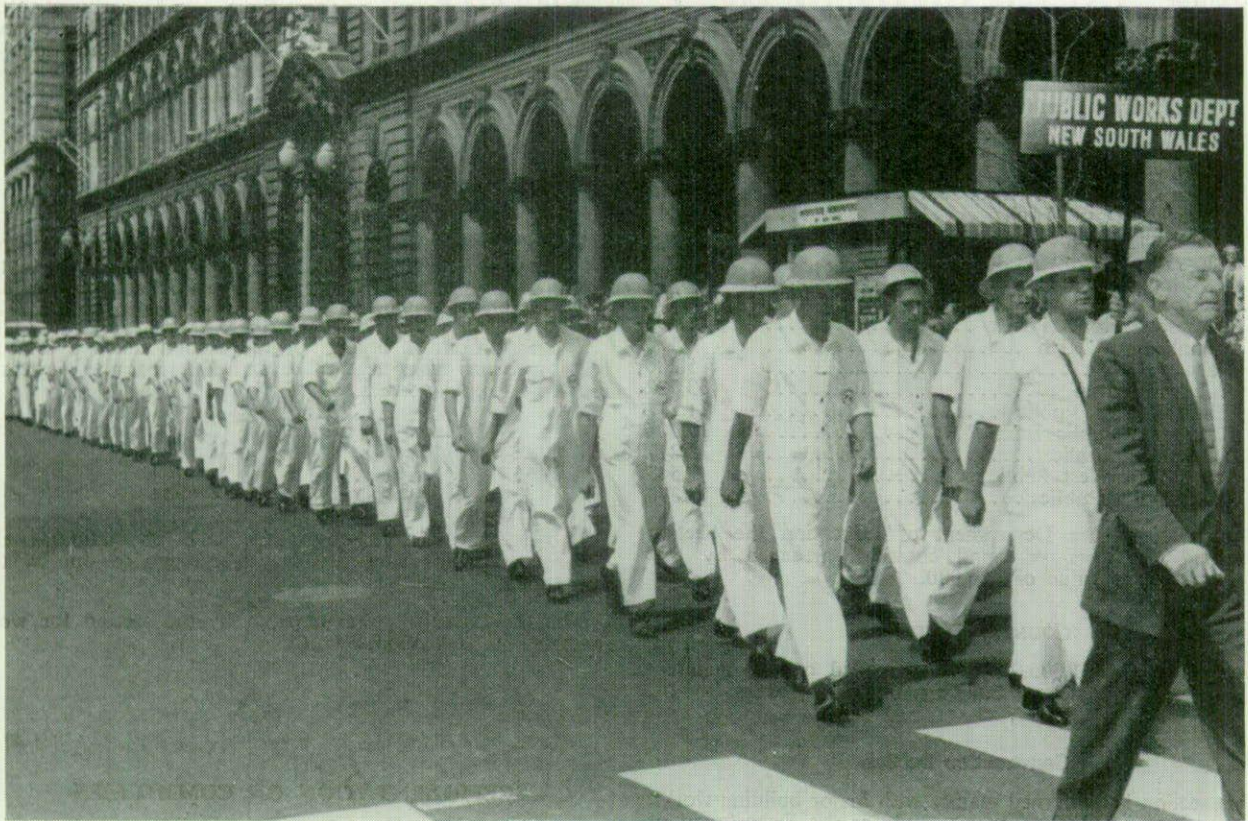
Expenditure from this vote covered alterations and extensions including work done at the National Art Gallery, Agriculture Department and the new Police Headquarters building.

An extensive lighting scheme in the Art Gallery of New South Wales was completed, extra accommodation provided at the District Court and extensions to services at Long Bay, Bathurst and Goulburn Gaols are in progress.

##### LOAN VOTE (STATE HOSPITALS)

Works financed from this vote included very extensive alterations at "Garrawarra" Hospital and Strickland Convalescent Home.





Public Works Department Apprentices—Marching in Apprenticeship Week, 1962

#### LOAN VOTE (MENTAL HOSPITALS)

Work at all of the metropolitan mental institutions such as Medical Officers accommodation at Broughton Hall, office accommodation at Callan Park and additional toilet accommodation at Peat Island was financed from this vote.

#### CHILD WELFARE FUNDS

Child Welfare funds were expended mainly on the maintenance of Child Welfare Institutions and this year general renovations were carried out at Mt. Penang Training School, Montrose Burwood, Parramatta Girls' Training School, Bidura Depot, Winbin and Yarra Bay Home, and "Myee".

#### TECHNICAL EDUCATION

The main work done for this Department was the completion of the conversion of Liverpool State Hospital to the Liverpool Technical College and alterations to the Bakery School and Theatre accommodation at East Sydney Technical College.

#### HOSPITALS COMMISSION

Work was completed on the renovation of Block "B" Prince Henry Hospital and the Catherine Hayes Block at Randwick Hospital.

#### SCHOOL MAINTENANCE SECTION

Maintenance works on schools and school properties in the metropolitan area were carried out to a value of £1,550,000. Funds were provided by the Department of Education and the works carried out to a programme mutually agreed upon by Officers of the Departments of Education and Public Works.

The Department of Education funds of £1,550,000 were expended as follows:—

	£
(1) Central, southern and northern areas—maintenance works .....	1,004,000
(2) Western area—maintenance works .....	230,000
(3) Western area—minor and urgent minor works .....	30,000
(4) Central, southern and northern areas—minor urgent works .....	170,000

	£
(5) Maintenance works carried out from a special deposits account .....	70,000
(6) Sewerage allocation, also Teachers' College Maintenance and local tender allocation .....	50,000

Major maintenance works were carried out or are in progress at the following schools:—

Schools—	£
Belmore Boys' High .....	2,216
Balgowlah Public .....	10,479
Bexley Central .....	7,320
Bondi Beach Public .....	47,843
Boronia Park Public .....	12,019
Carlton Public .....	4,805
Caringbah Public .....	8,703
Como West Public .....	4,589
Condell Park Public .....	9,112
Cronulla South Public .....	1,480
Croydon Public .....	7,000
Double Bay Public .....	9,729
East Hills Girls' High .....	6,565
Enmore Boys' High .....	10,674
Epping Public .....	7,338
Erina West Public .....	1,111
Erina Heights Public .....	3,535
Ettalong Public .....	8,033
Ferncourt Public .....	9,392
Fort Street Boys' High .....	41,409
Homebush Boys' High .....	10,655
Hurstville Public .....	5,055
Hurstville Grove Public .....	1,750
Jannali Public .....	4,129
Kegworth Public .....	2,046
Kogarah Boys' High .....	3,172
Lane Cove Public .....	2,237
Leichhardt Public .....	45,723
Lindfield Public .....	12,679
Lindfield East Public .....	4,500
Mangrove Mountain Public .....	1,185
Manly Public .....	5,913
Manly Infants .....	3,110
Manly West Public .....	10,407
Milsons Point Public .....	6,765
Miranda North Public .....	1,780
Mortlake Public .....	13,033
Mount Lewis Public .....	2,049
Narrabeen Infants' .....	2,920
Narrabeen Public .....	2,345



## Schools—continued—

	£
Neutral Bay Public .....	11,331
Newtown Public .....	28,505
Northbridge Public .....	4,894
North Sydney Demonstration .....	13,039
Orange Grove Public .....	16,773
Oxford Falls Public .....	2,313
Padstow Park Public .....	2,042
Pennant Hills Public .....	1,879
Randwick Boys' High .....	2,241
Canterbury Public .....	3,160
Daceyville Public .....	8,462
Rozelle Public .....	18,397
South Sydney Boys' High .....	47,702
Caringbah North Public .....	3,005
Jannali Boys' High .....	6,170
Narwee Public .....	5,200
Auburn Central .....	33,732
Hilltop Road Public .....	11,271
Katoomba Public Infants' .....	19,204
Katoomba Public .....	13,277
Seven Hills West Public .....	7,540
Seven Hills Public .....	8,370

On behalf of the Department of Education the Section supervised the work of small contracts arranged by that Department to a value of £20,000.

## COUNTRY DISTRICTS

An amount of £1,006,000 was expended on the maintenance and repair of school buildings in country areas.

## Construction Section

This section is concerned mainly with major building works, the majority of which are carried out for the Department of Education.

A total of 216 classrooms at 80 schools in the metropolitan area were completed, expenditure being £1,986,235.

Major school projects completed during the year by day labour:—

School—	£
Jannali Girls' High .....	40,000
Dee Why West .....	42,000
Maroubra Bay .....	32,963
Loftus .....	22,600
Cambridge Park .....	21,226
Marayong .....	33,786
Chester Hill .....	22,500
Lansvale .....	26,500
Sydney Boys High .....	79,000
Balgowlah North .....	21,234
Farrer .....	15,000
Oxley Park .....	20,000
Matraville South .....	50,000
Kent Road .....	19,700
Oatley West .....	29,780
Elanora Heights .....	29,000
St. Mary's North .....	48,259
Rooty Hill .....	19,000
Ringrose .....	42,000
Old Guildford .....	27,895
Marayong South .....	30,000
Harrington Street .....	36,172
Ingleburn North .....	45,000

Works carried out for the Education Department other than school accommodation, such as septic tanks, connections to sewerage, alterations and renovations, additions of staff rooms, clinics, stores and conversions, etc., accounted for expenditure to the extent of £150,079.

## Inspection Section

The Clerks of Works, an Electrical Inspector and Pest Control Officers prepared 1,828 reports and estimates to the value of £914,375 in respect of general maintenance and construction of buildings in the metropolitan area.

The Pest Control Officers of the section made a total of 562 inspections from head office and 300 from the Newcastle and Port Kembla offices.

## Quantity Surveyor's Section

This section prepared estimates, bills of quantities and materials lists for construction projects carried out by the Department.

Bills of quantities were prepared by the section for work estimated to cost £215,491.

## REPRESENTATION ON COMMITTEES

Standards Association Committee (Terra Cotta tiles), Scaffolding and Riggers Committee (Department of Technical Education), University of New South Wales Building Advisory Committee, Carpentry and Joinery Advisory Committee (Department of Technical Education), Building Foreman and Clerk of Works Certificate Course Advisory Committee (Department of Technical Education).

## GENERAL

## Day Labour Staff

The day labour staff in the metropolitan area increased considerably during the year, the total employed on 30th June, 1962, being 2,064 as compared with 1,860 on 30th June, 1961.

## Improvements in Methods of Work

Increased use was again made of mechanical equipment such as brick elevators, trenchers for the excavation of foundations, sewer and power lines, etc., and of motorised vibrating rollers for tar paving.



## APPENDIX VI

### LOCAL GOVERNMENT ENGINEERING

#### FUNCTIONS

The functions of the Local Government Engineers Branch are:—

- (1) The examination of detailed applications, plans, specifications and estimates submitted by Shire, Municipal and City Councils in respect of:—
  - (a) annual allocation for rural road construction of funds provided under the Commonwealth Aid Roads Act, 1959;
  - (b) grants in respect of approved proposals for the construction of bridges to replace subsidised ferries on rural roads under the C.A.R. Act, 1959;
  - (c) grants towards the restoration of flood and bush-fire damage to roads, bridges and Councils' properties;
  - (d) grants towards the cost of construction, repair and renewal of works;
  - (e) grants towards the construction of swimming pools in country towns;
  - (f) grants for the relief of unemployment.
- (2) The overriding supervision of the construction of works approved in the foregoing programmes.
- (3) The overriding supervision on behalf of the Local Government Department of grants programmes for road construction, public buildings and improvements to public recreation reserves.
- (4) The examination of Loan Applications, plans, specifications and estimates submitted by Councils to the Local Government Department for roads, bridges, drainage schemes, swimming pools, town improvements, etc.
- (5) The maintenance of landing grounds in the Western Division for the Flying Doctor service.
- (6) The planning, including survey, plans specifications and estimates and supervision of construction and maintenance of roads, bridges, drainage and ground improvements for Hospitals, Schools, Universities, other public buildings and for other departments.

#### OPERATIONS

##### Grants to Councils

Four hundred and twenty-one grants totalling £5,179,340 were allocated to local-government authorities from the following sources:—

	£
Commonwealth Aid Roads Act, 1959 .....	4,559,644
Revenue Vote .....	49,696
Loan Vote .....	70,000
Unemployment Relief .....	500,000
	<hr/>
	£5,179,340

##### SUBSIDISED WORKS UNDERTAKEN BY COUNCILS

108 grants totalling £47,491 were approved to assist Councils towards repair, renewal and construction programmes. In addition there were many deferred applications awaiting the availability of funds.

##### RESTORATION OF FLOOD DAMAGE

Grants totalling £172,133 were distributed to 60 Councils from Commonwealth Aid Roads Act Funds towards the restoration of flood damage to roads, bridges, etc.

£2,205 was paid to one Council from Revenue Vote to from Commonwealth Aid Roads Act Funds towards the tion of levee banks.

Adjustments to grants for the 1955 flood damage programme from Special Deposit Funds (£ and £ expenditure by the Federal and State Government) brought the final expenditure on this account to £860,196.

#### SWIMMING POOLS—COUNTRY TOWNS

29 grants totalling £70,000 were approved towards the construction of swimming pools in terms of the policy to subsidise the construction of swimming pools in country towns on the basis of 25 per cent of the actual cost to a maximum of £10,000 in each instance. The distribution of this amount represents the final payment to seven Councils and instalments to the balance. The Department distributes these grants in instalments over a period not exceeding three years to enable the maximum number of projects to proceed.

#### UNEMPLOYED RELIEF GRANTS

An amount of £75,000 was allocated from Commonwealth Aid Roads Act Funds to the Department of Main Roads for roadworks in the Cessnock area being undertaken for the relief of unemployment while £126,000 was allocated by the Treasury to the Cessnock City Council for drainage works. The work was supervised by this branch. In addition a Federal grant of £500,000 was distributed to 77 Shires and 51 Municipalities in the State.

#### COMMONWEALTH AID ROADS ACT, 1959

Funds totalling £689,000 were made available to the Department of Main Roads for expenditure on developmental roads and works and unclassified roads in the Western Division of the State, classified as rural roads under the Act.

A total of 274 grants were made to Shire and Municipal Councils, aggregating £4,559,644 as follows:—

	£
Grants to Shires and Cities .....	3,835,373
Grants to Municipalities .....	470,926
Flood Damage .....	172,133
Bridges to Replace Ferries .....	59,663
Special Investigations, etc. ....	4,547
Special Grants Item 13 .....	14,000
Road Dedication surveys .....	3,002
	<hr/>
	£4,559,644

There was a reciprocal arrangement for exchange of funds of £200,000 between this Department and the Department of Main Roads. The funds to the D.M.R. being used for the construction and maintenance of roads, bridges, etc., and for this Department to construct works associated with water transport.

The construction of prestressed or post-tensioned concrete bridges to replace ferries on rural roads were advanced to the following stages:—

Manning Shire, Scotts Creek Bridge, completed; Manning Shire, Wingham Bridge, under construction; Tomki Shire, Tatham Bridge, under construction; Hastings Shire, Laurieton Bridge, design in hand.

£3,002 was disbursed to Councils for road dedication surveys in their areas.

£14,000 was distributed to six Councils as a special grant for the construction of bank protection works and access roads to special facilities.

#### Local Government Department

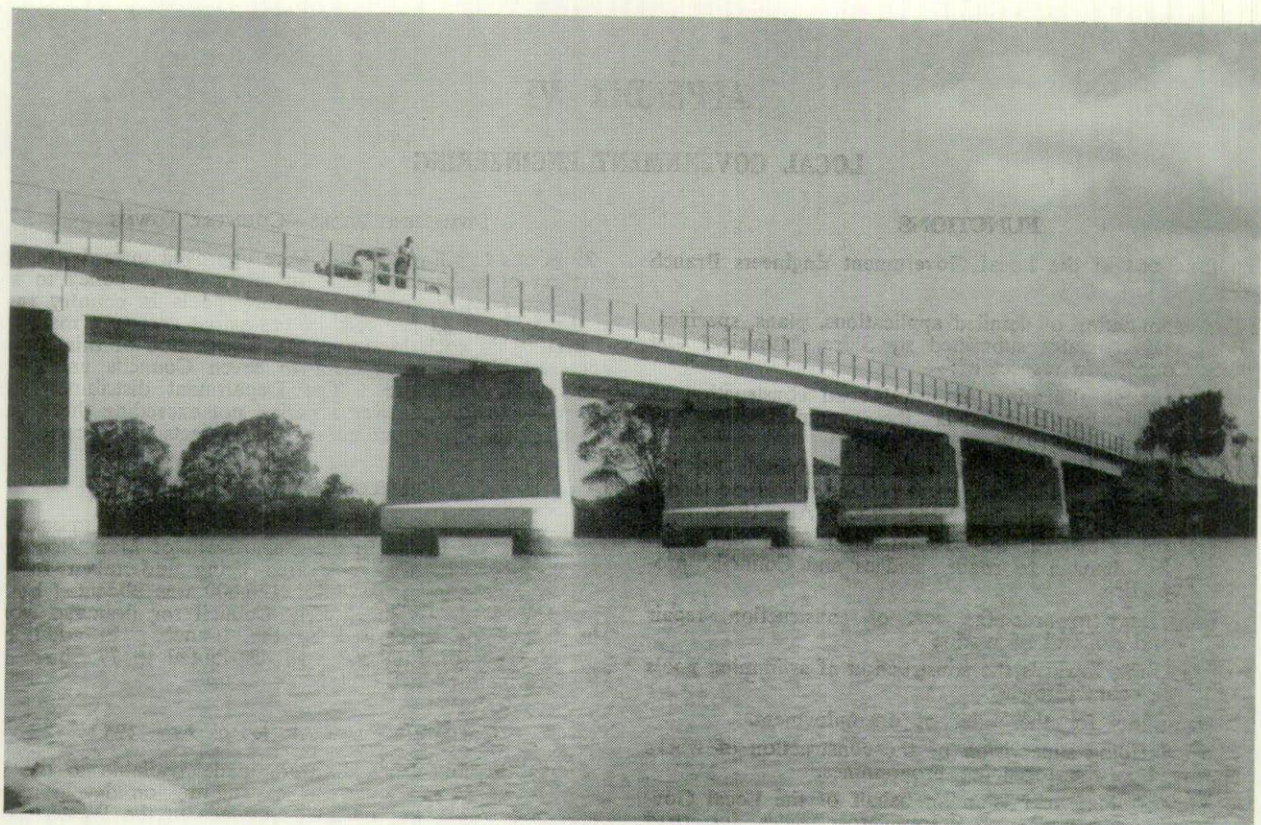
Numerous requests from the Local Government Department for technical advice were dealt with in connection with applications for loans for the construction of roads, bridges, swimming pools, drainage, kerbing and guttering, foot paths, etc.

Arrangements were also made for the supervision of grant programmes determined by the Local Government Department.

#### Landing Grounds in the Western Division

The maintenance of Flying Doctor Service landing grounds continued. £370 was expended on the landing ground improvements at Tibooburra during the year.





Scotts Creek Bridge—Manning River

Roads and Other Works in Government Institutions

Reports, estimates, designs and construction of works were arranged on behalf of the Lands Department, Hospitals Commission of New South Wales, Department of Education and Health Department.

The construction and maintenance of roads, bridges and all works in Government Institutions were arranged as required and carried out under supervision in the Metropolitan and Country areas.

Representation on Committees

- Circular Quay Supervisory Committee.
- Committees of the Standards Association of Australia.
- Interdepartmental Committee on Swimming Pools.
- Interdepartmental Committee for the Abolition of Railway Level Crossings.
- Committee for Road Sign Standards.
- Committee for School Swimming Pools—Department of Education.
- Committee for School Playing Fields—Department of Education.
- Supervision of Crown Lands Committee—Department of Lands.

Details of Grants

REVENUE VOTE FOR CONSTRUCION, REPAIR AND RENEWAL OF WORKS

Council—	Amount £
Armidale .....	500
Ballina .....	500
Barraba .....	500
Bathurst .....	500
Baulkham Hills .....	500
Berrigan .....	500
Bingara .....	500
Bland .....	500
Booolooroo .....	240
Boorowa .....	235
Boree .....	500
Boomi .....	500

Council—continued—	Amount £
Bowral .....	500
Broken Hill .....	500
Byron .....	500
Canobolas .....	500
Casino .....	290
Central Darling .....	357
Cessnock .....	500
Coff's Harbour .....	500
Colo .....	500
Condobolin .....	202
Coolah .....	500
Cooma .....	500
Coonabarabran .....	500
Coonamble .....	375
Cootamundra .....	500
Corowa .....	500
Culcairn .....	500
Glen Innes .....	500
Gloucester .....	471
Goobang .....	500
Goodradigbee .....	126
Gosford .....	500
Goulburn .....	500
Gunnedah .....	500
Guyra .....	500
Hastings .....	500
Hume .....	500
Jemalong .....	300
Jerilderie .....	412
Jindalee .....	458
Junee .....	500
Kempsey .....	500
Kyeamba .....	266
Lachlan .....	28
Leeton .....	500
Lockhart .....	500
Maclean .....	500
Manilla .....	500
Manning .....	500
Merriwa .....	360
Mittagong .....	500
Molong .....	500
Mumbulla .....	400
Mudgee .....	242
	500



Council—continued—	Amount £
Murray .....	500
Murrumburrah .....	375
Murrurundi .....	325
.....	135
Muswellbrook .....	500
Namoi .....	500
Narrabri .....	500
Narraburra .....	500
Narrandera .....	500
Narromine .....	114
Nyngan .....	500
Oberon .....	500
Orange .....	500
Peel .....	500
Penrith .....	500
Port Stephens .....	263
Queanbeyan .....	500
Quirindi .....	150
Rylstone .....	500
Singleton .....	500
Snowy River .....	500
Stroud .....	500
Sutherland .....	500
Tallaganda .....	83
Tamarang .....	432
Tamworth .....	500
Taree .....	500
Tenterfield .....	250
Timbregongie .....	445
Tintenbar .....	405
Tumbarumba .....	500
Tweed .....	500
Ulmara .....	500
Uralla .....	325
Urana .....	500
Walgett .....	500
Warren .....	500
Wellington .....	500
.....	486
Windsor .....	470
Wingham .....	500
Woodburn .....	500
Wyong .....	448
Yallaroi .....	352
Young .....	475

47,500 0 0  
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Less Refund Dungog

£47,491 9 4

#### REVENUE VOTE GRANT FOR RESTORATION OF FLOOD DAMAGE

	Amount £
Windsor .....	2,205

#### SPECIAL DEPOSITS—COMMONWEALTH AND STATE GRANTS FOR THE RESTORATION OF FLOOD DAMAGE

Council—	Amount £ s. d.
Maitland .....	88 6 6
Less Credits—	£ s. d.
Yallaroi .....	201 10 0
Darling .....	1,192 5 10
	1,393 15 10 Cr.
	£1,305 9 4 Cr.

#### COMMONWEALTH AID ROADS ACT, 1959

Council—	Amount £ s. d.
Abercrombie .....	27,460 0 0
Ashford .....	27,540 0 0
Balranald .....	27,740 0 0
Barraba .....	25,680 0 0
Baulkham Hills .....	15,200 0 0
Bellingen .....	29,620 0 0
Berrigan .....	26,620 0 0
Bibenluke .....	28,440 0 0

Council—continued—	Amount £ s. d.
Bingara .....	24,600 0 0
Blacktown .....	15,200 0 0
Bland .....	28,340 0 0
Blaxland .....	27,660 0 0
Blue Mountains .....	15,200 0 0
Bogan .....	29,240 0 0
Boolooroo .....	28,420 0 0
Boomi .....	30,300 0 0
Boorowa .....	27,500 0 0
Boree .....	28,380 0 0
Brewarrina .....	29,980 0 0
Burrangong .....	28,360 0 0
Byron .....	27,560 0 0
Canobolas .....	28,180 0 0
Carrathool .....	30,960 0 0
Central Darling .....	30,520 0 0
Cessnock .....	31,340 0 0
Cobar .....	30,160 0 0
Cockburn .....	30,040 0 0
Coff's Harbour .....	29,860 0 0
Colo .....	30,060 0 0
Conargo .....	26,480 0 0
Coolah .....	28,720 0 0
Coolamon .....	26,140 0 0
Coonabarabran .....	31,500 0 0
Coonamble .....	32,500 0 0
Copmanhurst .....	31,120 0 0
Corowa .....	27,600 0 0
Crookwell .....	29,500 0 0
Cudgegong .....	30,600 0 0
Culcairn .....	26,280 0 0
Darling .....	30,660 0 0
Demondrille .....	27,160 0 0
Dumaresq .....	30,620 0 0
Dungog .....	31,840 0 0
Eurobodalla .....	30,800 0 0
Forbes .....	9,300 0 0
Gilgandra .....	27,880 0 0
Gloucester .....	29,480 0 0
Goobang .....	29,340 0 0
Goodradigbee .....	29,240 0 0
Gosford .....	29,440 0 0
Gundagai .....	28,960 0 0
Gundurimba .....	25,980 0 0
Gunning .....	26,140 0 0
Guyra .....	29,060 0 0
Hastings .....	31,633 4 6
Holbrook .....	27,460 0 0
Hornsby .....	15,200 0 0
Hume .....	29,180 0 0
Illabo .....	28,060 0 0
Imlay .....	28,560 0 0
Jemalong .....	29,460 0 0
Jerilderie .....	28,080 0 0
Jindalee .....	25,240 0 0
Kiama .....	14,200 0 0
Kyeamba .....	28,320 0 0
Kyogle .....	35,820 0 0
Lachlan .....	30,540 0 0
Lake Macquarie .....	28,580 0 0
Leeton .....	25,080 0 0
Liverpool Plains .....	28,500 0 0
Lockhart .....	27,980 0 0
Lyndhurst .....	29,320 0 0
Macintyre .....	25,840 0 0
Maclean .....	27,240 0 0
Macleay .....	31,980 0 0
Maitland .....	12,700 0 0
Manilla .....	26,140 0 0
Manning .....	35,460 0 0
Merriwa .....	26,900 0 0
Mitchell .....	26,660 0 0
Mittagong .....	25,340 0 0
Molong .....	26,860 0 0
Monaro .....	30,480 0 0
Mulwaree .....	31,060 0 0
Mumbulla .....	29,900 0 0
Murray .....	30,280 0 0
Murrumbidgee .....	24,200 0 0
Murrurundi .....	27,080 0 0
Muswellbrook .....	27,500 0 0
Nambucca .....	31,800 0 0
Namoi .....	31,140 0 0
Narraburra .....	27,440 0 0
Narrandera .....	29,320 0 0
Newcastle .....	12,700 0 0
Nundle .....	25,600 0 0
Nymboida .....	30,560 0 0
Oberon .....	27,460 0 0
Patrick Plains .....	31,320 0 0



Council—continued—	Amount		
	£	s.	d.
Peel .....	29,740	0	0
Penrith .....	15,200	0	0
Port Stephens .....	26,300	0	0
Rylstone .....	27,080	0	0
Scone .....	28,380	0	0
Severn .....	31,800	0	0
Shoalhaven .....	36,180	0	0
Snowy River .....	31,180	0	0
Stroud .....	29,800	0	0
Sutherland .....	15,200	0	0
Talbragar .....	26,880	0	0
Tallaganda .....	28,560	0	0
Tamarang .....	26,780	0	0
Tenterfield .....	32,980	0	0
Terania .....	30,020	0	0
Timbreebongie .....	26,040	0	0
Tintenbar .....	25,380	0	0
Tomki .....	29,320	0	0
Tumbarumba .....	28,680	0	0
Tumut .....	29,060	0	0
Turon .....	27,920	0	0
Tweed .....	31,740	0	0
Ulmarra .....	28,680	0	0
Uralla .....	28,320	0	0
Urana .....	27,800	0	0
Wade .....	26,780	0	0
Wakool .....	31,740	0	0
Walcha .....	30,700	0	0
Walgett .....	33,220	0	0
Waradgery .....	27,080	0	0
Warren .....	32,080	0	0
Warringah .....	15,200	0	0
Wangool .....	29,180	0	0
Weddin .....	28,160	0	0
Wellington .....	28,360	0	0
Wentworth .....	29,600	0	0
Windouran .....	26,080	0	0
Wingecarribee .....	26,400	0	0
Wollondilly .....	28,900	0	0
Wollongong .....	15,200	0	0
Woodburn .....	27,380	0	0
Wyong .....	29,440	0	0
Yallaroi .....	28,740	0	0
Yarrowlumla .....	26,740	0	0
	£3,911,373	4	6

## Municipalities (Classified)—

Camden .....	9,300	0	0
Campbelltown .....	9,300	0	0
Condobolin .....	9,300	0	0
Deniliquin .....	9,300	0	0
Fairfield .....	9,300	0	0
Forbes .....	9,300	0	0
Glen Innes .....	9,300	0	0
Hay .....	9,300	0	0
Inverell .....	9,300	0	0
Liverpool .....	9,300	0	0
Parkes .....	9,300	0	0
Peak Hill .....	9,300	0	0
Port Macquarie .....	9,300	0	0
Shellharbour .....	9,300	0	0
Tenterfield .....	9,300	0	0
Windsor .....	9,300	0	0
Yass .....	9,300	0	0
	£158,100	0	0

## Municipalities and Cities (Unclassified)—

Albury .....	5,500	0	0
Armidaale .....	5,500	0	0
Ballina .....	5,500	0	0
Bathurst .....	5,500	0	0
Bega .....	5,500	0	0
Bombala .....	5,500	0	0
Bowral .....	5,500	0	0
Broken Hill .....	5,500	0	0
Casino .....	5,500	0	0
Cooma .....	5,500	0	0
Cootamundra .....	5,500	0	0
Cowra .....	5,500	0	0
Dubbo .....	5,500	0	0
Goulburn .....	5,500	0	0
Grafton .....	5,500	0	0
Grenfell .....	10,700	0	0

Council—continued—	Amount		
	£	s.	d.
Gunnedah .....	5,500	0	0
Holroyd .....	5,500	0	0
June .....	5,500	0	0
Kempsey .....	5,500	0	0
Lord Howe Island Board .....	3,726	6	3
Lismore .....	5,500	0	0
Lithgow .....	5,500	0	0
Manilla .....	—	—	—
Moree .....	5,500	0	0
Mudgee .....	5,500	0	0
Mullumbimby .....	5,500	0	0
Murrumburrah .....	5,500	0	0
Muswellbrook .....	5,500	0	0
Narrabri .....	5,500	0	0
Narrandera .....	2,400	0	0
Narromine .....	5,500	0	0
Nyngan .....	5,500	0	0
Orange .....	5,500	0	0
Parramatta .....	5,500	0	0
Queanbeyan .....	5,500	0	0
Quirindi .....	5,500	0	0
Singleton .....	5,500	0	0
Tamworth .....	5,500	0	0
Taree .....	5,500	0	0
Temora .....	5,500	0	0
Wagga Wagga .....	5,500	0	0
Wingham .....	5,500	0	0
Young .....	5,500	0	0
	£236,826	6	3

## COMMONWEALTH AID ROADS GRANTS FOR FLOOD RESTORATION

Council—	Paid		
	£	s.	d.
Baulkham Hills .....	1,335	0	0
Blacktown .....	555	0	0
Bland .....	1,893	0	0
Blue Mountains .....	5,285	0	0
Boorowa .....	254	0	0
Broken Hill .....	452	0	0
Campbelltown .....	335	0	0
Central Darling .....	150	0	0
Cobar .....	1,400	0	0
Cockburn .....	55,000	0	0
Coff's Harbour .....	2,250	0	0
Colo .....	4,330	0	0
Cooma .....	600	0	0
Coonabarabran .....	1,653	0	0
Coonamble .....	325	0	0
Cudgegong .....	523	0	0
Darling .....	200	0	0
Dungog .....	2,322	0	0
Eurobodalla .....	400	0	0
Gloucester .....	2,690	0	0
Gundagai .....	225	0	0
Hastings .....	283	0	0
Imlay .....	1,225	0	0
Kiama .....	182	0	0
Kyeamba .....	415	0	0
Lachlan .....	1,564	0	0
Lismore .....	1,265	0	0
Liverpool Plains .....	20,000	0	0
Macintyre .....	673	0	0
Maclean .....	379	0	0
Manilla .....	5,280	0	0
Manning .....	939	0	0
Mulwaree .....	1,450	0	0
Mumbulla .....	932	0	0
Nambucca .....	715	0	0
Namoi .....	2,943	0	0
Nymboida .....	416	0	0
Peel .....	315	0	0
Penrith .....	1,550	0	0
Port Macquarie .....	386	0	0
Scone .....	1,271	0	0
Severn .....	995	0	0
Shoalhaven .....	1,095	0	0
Sutherland .....	1,500	0	0
Tallaganda .....	5,992	0	0
Tamworth .....	7,110	0	0
Tenterfield .....	391	0	0
Tenterfield .....	1,102	0	0
Tintenbar .....	65	0	0
Tweed .....	550	0	0
Ulmarra .....	725	0	0
	1,050	0	0
	1,475	0	0



Council—continued—	Paid		
	£	s.	d.
Walcha .....	3,500	0	0
Warringah .....	5,380	0	0
Weddin .....	503	0	0
Wingecarribee .....	192	0	0
Wollondilly .....	1,505	0	0
Wollongong .....	5,130	0	0
Woodburn .....	3,870	0	0
Windsor .....	3,450	0	0
Yallaroï .....	1,320	0	0
	£172,260	0	0
Less Refunds—	£	s.	d.
Illabo .....	58	19	9
Companhurst ...	4	7	6
Tallaganda ....	63	0	0
	126	7	3
	£172,133	12	9

## BRIDGES TO REPLACE FERRIES

Shires—	Amount £
Hastings .....	1,451
Manning .....	17,089
Mumbulla .....	1,680
Tomkin .....	18,402
Wingham .....	21,041
	£59,663
Design charges .....	6,110
	£65,773

Experimental design of culverts, causeways, etc. £1,563 Cr.

## SWIMMING POOLS

Council—	Amount £
Berrigan .....	1,400
Bingara .....	3,000
Blue Mountains .....	1,600
Boree .....	6,000
Cobar .....	4,000
Coolah .....	1,000
Coonabarabran .....	4,500
Cudgegong .....	1,500
Eurobodalla .....	3,000
Kiama .....	1,000
Kyogle .....	1,100
Lake Macquarie .....	4,000
Leeton .....	1,600
Lithgow .....	1,600
Maclean .....	6,000
Macleay .....	1,000
Molong .....	2,500
Murrumburrah .....	1,000
Namoi .....	4,000
Narromine .....	1,000
Peak Hill .....	1,000
Penrith .....	1,000
Rylstone .....	1,600
Tallaganda .....	1,500
Timbregongie .....	2,500
Tumut .....	1,600
Tweed .....	3,500
Wentworth .....	3,500
Yass .....	3,000
	£70,000

## COMMONWEALTH AID ROADS GRANTS: SPECIAL PURPOSES

Council—	Amount £
Cessnock .....	4,000
Hastings .....	2,000
Macleay .....	2,000
Manning .....	2,000
Port Macquarie .....	2,000
Tumbarumba .....	2,000
	£14,000

## COMMONWEALTH AID ROADS GRANTS: ROAD DEDICATION SURVEYS

Council—	Amount £ s. d.		
Balranald .....	1,479	5	0
Brewarrina .....	1,186	8	6
Darling .....	336	16	0
	£3,002	9	6

## UNEMPLOYED RELIEF GRANT

Municipality—	Amount £
Albury .....	20,000
Armidale .....	3,100
Ballina .....	2,800
Bathurst .....	7,000
Bega .....	840
Blue Mountains .....	20,000
Bowral .....	840
Broken Hill .....	20,000
Casino .....	2,550
Cessnock .....	20,000
Cooma .....	2,240
Cootamundra .....	500
Cowra .....	2,800
Dubbo .....	5,040
Forbes .....	2,000
Glen Innes .....	2,000
Goulburn .....	6,500
Grafton .....	6,200
Grenfell .....	840
Gunnedah .....	2,550
Hay .....	500
Inverell .....	3,100
Junee .....	1,150
Kempsey .....	4,500
Kiama .....	840
Lismore .....	9,800
Lithgow .....	12,100
Maitland .....	14,000
Moree .....	1,400
Mudgee .....	2,300
Mullumbimby .....	500
Murrumburrah .....	840
Muswellbrook .....	2,300
Narrabri .....	2,000
Narromine .....	500
Nyngan .....	1,400
Orange .....	3,700
Parkes .....	3,400
Peak Hill .....	840
Port Macquarie .....	2,300
Shell Harbour .....	5,100
Singleton .....	2,800
Tamworth .....	11,200
Taree .....	7,000
Temora .....	840
Wagga Wagga .....	8,400
Wingham .....	2,000
Wollongong .....	20,000
Yass .....	840
Young .....	1,150
Newcastle .....	20,000
	£274,600

## Shires—

Abercrombie .....	1,150
Barraba .....	500
Bellingen .....	1,700
Bingara .....	500
Bland .....	840
Blaxland .....	11,200
Boree .....	840
Brewarrina .....	500
Burrangong .....	500
Byron .....	2,800
Central Darling .....	1,400
Coff's Harbour .....	7,000
Colo .....	3,400
Coolamon .....	500
Coonabarabran .....	1,150
Coonamble .....	500
Copmanhurst .....	500
Corowa .....	500
Cudgegong .....	2,000
Culcairn .....	840
Darling .....	1,150



Shires—continued—	Amount £		Amount £
Dumaresq .....	500	Port Stephens .....	5,320
Dungog .....	2,300	Rylstone .....	1,700
Eurobodalla .....	840	Scone .....	5,000
Gilgandra .....	500	Shoalhaven .....	9,800
Gloucester .....	1,150	Stroud .....	3,360
Goobang .....	500	Terania .....	3,080
Gosford .....	19,900	Tintenbar .....	3,360
Gundagai .....	2,300	Tomkij .....	1,400
Gundurimba .....	1,700	Tumbarumba .....	840
Guyra .....	3,100	Tumut .....	1,700
Hastings .....	2,250	Turon .....	2,520
Holbrook .....	500	Tweed .....	17,080
Hume .....	1,700	Ulmorra .....	1,150
Imlay .....	500	Uralla .....	500
Jemalong .....	500	Wade .....	1,150
Kyeamba .....	1,400	Walcha .....	1,400
Kyogle .....	3,650	Walgett .....	840
Lake Macquarie .....	20,000	Wellington .....	2,520
Leeton .....	2,250	Wingecaribee .....	1,150
Liverpool Plains .....	1,150	Wollondilly .....	1,680
Macintyre .....	2,000	Woodburn .....	2,800
Macleay .....	3,100	Wyang .....	16,800
Macleay .....	5,900	Yarralumla .....	2,800
Manilla .....	1,150		
Manning .....	8,400		£225,400
Mitchell .....	840		
Mittagong .....	1,400		
Nambucca .....	4,200		
Namoi .....	1,400	Municipalities .....	£
Narrandera .....	500	Shires .....	274,600
Oberon .....	500		225,400
Patrick Plains .....	500		
Peel .....	1,400		
		Total .....	£500,000



## APPENDIX VII

### ENGINEERING DESIGN

#### FUNCTIONS

The functions of the Branch comprise:—

- (1) preparation of preliminary designs, quantities and estimates for engineering works undertaken by the Department;
- (2) preparation of final designs, drawings and specifications for such works;
- (3) work as for (1) and (2) on behalf of local government and other authorities;
- (4) analysis of tenders and making of recommendations thereon;
- (5) examination and reporting on contractors' plans; and
- (6) review of designs, estimates and specifications for works proposed by local government and other authorities.

#### OPERATIONS

The more important works are listed below:—

##### Bridges and Major Structures—

The design of the coal loading wharf at Port Kembla was well advanced. The wharf is of the flat plate type, supported on steel piles which are to be cathodically protected. This type of design is a new departure for Departmental works and is estimated to cost about £600,000.

For the rail approaches to this wharf designs for a bridge and a culvert have been commenced. These are estimated at £110,000.

To implement Government policy of replacing ferries by bridges a bridge was designed over the Manning River at Wingham.

##### Water Supply—

Work was continued on Fish River and Tweed District Water Supplies and recommenced on Berrima District. Schemes were completed for Kootingal-Moonbi, Attunga, Bendemeer, Yeoval and Bulahdelah. Work was also done on Lower Clarence Water Supply, Stage I, and for Tea Gardens and Gilgandra.

##### Sewerage—

Schemes for Wentworth, Coonamble and Coonabarabran were completed, while Lawson and Blayney are in hand. A relatively large sludge treatment plant is being designed for Bathurst, involving sludge heating by digestion gases.

##### Local Government and Stormwater Drainage—

Plans and specifications were prepared for the filtration plant building for Tweed District Water Supply, and a considerable amount of work done in connection with the new cattle saleyards at Flemington for the Metropolitan Meat Industry Board.

##### Harbours and Rivers—

The main works carried out were the design of services and fendering for the coal loading wharf at Port Kembla and of flood mitigation structures for the Hunter Valley.

##### Electrical and Mechanical—

Contract documents were completed for pumping equipment for eleven country town water supplies, the largest being for the Chinderah booster station for Tweed District, with duplicate 120,000 and 60,000 g.p.h. pumps.

Contract documents were also completed for pumping plants for three country sewerage schemes.

The Port Kembla Coal Loading Plant Contract was dealt with largely by a special section of the branch created for the purpose. Tender documents were prepared and tenders reviewed. The tender was let to John Holland (Constructions) Pty. Ltd., at a price of approximately £1,350,000, and their designs are being reviewed as received.

#### REPRESENTATION ON COMMITTEES

The branch is represented on Committees of the Standards Association of Australia as under:—

Concrete in Building, Steel in Building, Pre-stressed Concrete, Steel Plate, Steel Sections, Concrete Pipes, Asbestos Cement Pipes, Corrugated Steel Pipes, Glazed Earthenware Pipes, Rubber Rings for Pipes, Precast Concrete Box Culverts, Cranes, Small Septic Tanks, Boilers and Pressure Vessels, Electrical Cables.

#### General

The approximate value of work done by the branch was as follows:—

	£
Tender documents completed .....	2,469,000
Designs for day labour works completed ..	1,563,000
Designs of works reviewed on behalf of Councils, etc. ....	3,582,000

#### SPECIAL INVESTIGATION SECTION

Details of the work of the various sections of the branch are as follows:—

Documents were prepared and tenders reviewed for—

- Port Kembla Inner Harbour—Wharf.
- Manning Shire—Wingham Bridge.
- Lock 15 Euston—Stacking Area and Gantry.
- Tomki Shire—Tatham Bridge.
- Woodburn Shire—Evans Head Bridge.
- Bowral Municipal Council—Bridge over Mittagong Creek.
- Hume Reservoir—Cable Test, Deflection Survey, Special Grout Design.
- Hume Reservoir, Hydroelectric Penstocks—Surge Suppression.
- Aboriginal Welfare Board—Cabbage Tree Island Bridge.
- Hume Reservoir—Temporary Plug for No. 3 Penstock.

Contract documents are in course of preparation for:—

- Port Kembla Inner Harbour—Railway Bridge.
- Port Kembla Inner Harbour—Railway Culvert.
- Hume Reservoir—Bethanga Bridge (raising of the bridge, new expansion bearings, redecking and new approach span).
- Hastings Shire—Laurieton-Dunbogan Bridge.
- Redfern Police Radio Tower, Baptist St., Redfern.
- Prince Henry Hospital—Robot Messenger for Pathology Specimens.

Reviews were carried out for:—

- Gloucester Shire—Dead Bird Crossing Bridge.
- Goodradigbee Shire—Bridge over Yass River at Thompson's Crossing.
- Glen Innes Municipal Council—Shannon Vale Bridge.
- Newcastle Harbour—Throsby Basin Wharf.
- Kyeamba Shire—Burrandona Bridge.
- Burrangong Shire—Standard Bridge.
- Dungog Shire—Massey's Creek Bridge.
- Canobalas Shire—Orange-Ophir Road Bridge.
- Newcastle City Council—Mayfield Bridge.
- Shoalhaven Shire—Bundewallah Creek Bridge.
- Tumbarumba Shire—Mannus Creek Bridge.
- Walcha Shire—Cobrabald Creek Bridge.
- Shellharbour Municipal Council—Marshall Creek Bridge.



Goodradigbee Shire—Bowning Creek Bridge.  
Wollongong City Council—Fairy Creek Bridge.  
Berrima District Water Supply—Medway Dam.  
Public Library—Drainage Pumps.  
The Entrance Water Supply—Mardi Dam.  
Cudgegong Shire—Goodman Creek Bridge.  
Cockburn Shire—Dungowan Creek Bridge.  
Mumbulla Shire—Tathra-Tanja Bridge (lifting of the bridge, bearing repairs).  
Tomki Shire—Cooley's Lane Bridge.  
Gundagai Shire—Wambidgee Bridge.  
Gloucester Shire—Billabong Bridge.  
Oberon Shire—Wiseman's Creek Bridge.  
Shoalhaven Shire—Milton Ulladulla Dam.  
Inverell Municipal Council—Mansfield Street Bridge.  
Tweed Shire—No. 2 Bridge, Burringbar.  
Wollondilly Shire—Cawdor-Westbrook Road Bridge.  
Gloucester Shire—Copeland Road Bridge.  
Wollondilly Shire—Bridge at Douglas Park.  
Manning Shire—Charity Creek Bridge.

Severn Shire—Bridge over 9-mile Creek.  
Manning Shire—Cox's Bridge.  
Port Kembla Inner Harbour—Coal Loading Plant (partial review).  
Narrandera Fish Hatchery—Sticking of Penstocks.  
Mitchell Shire—Galore Bridge, Beam Tests.  
Port Kembla No. 6 Jetty—Cranes.  
Cootamundra Municipal Council—Mackay Street Bridge.  
Windouran Shire—Forest Creek Bridge.  
Tenterfield Water Supply—Raising of Storage Dam.  
Lake Macquarie Shire—Stoney Creek Bridge.  
Hume Reservoir—Restoration of Bridge Roadway (review of contractor's proposals).  
Bowral Municipal Council—Bridge over Mittagong Creek.  
Redbank Weir—Proposed Irrigation Scheme.  
Berkeley Public School—Footbridge.  
Gladesville Psychiatric Hospital—Retaining Wall.  
Review of Draft S.A.A. Code for Prestressed Concrete in Structures.  
Review of Draft S.A.A. Code for Steel Tendons for Prestressed Concrete.

### WATER SUPPLY SECTION

LOCATION	WORK	ACTION
Attunga .....	Service reservoir, pump well, chlorination house and meter.	Plans and specifications; review tenders.
Barham.....	Service reservoir, suction main and staging, pump well.	Plans and specifications.
Batlow .....	Augmentation plans by Rankine & Hill.	Review.
Bendemeer .....	Materials, meter, D.A.V. ....	Quotes and requisitions.
Berrima District .....	Rising main; gravitation main.	Plans and requisitions.
Blue Mountains .....	Blaxland reservoir.	Review plans.
Boomi .....	Elevated tank and stand.	Review plans.
Bourke .....	Reservoir.	Report.
Bulahdelah .....	Weir, fish ladder, pump well, suction main, reservoir, chlorination house, meter, reticulation.	Plans and specifications and quotes.
Bundanoon .....	New Berrima reservoir and reticulation, float valve for Moss Vale reservoir.	Plans and specifications, review tenders and quotes.
Camden Haven .....	Mains and reticulation, Bonny Hills reservoir inlet valve.	Review tenders, Plans and requisition.
Cessnock Psychiatric Hospital....	Reservoir valve pit, meter pit.	Plans and requisition.
Coonabarabran .....	Gravitation main, float valve.	Requisitions, specifications and review tenders.
Coonamble .....	Meters (3).	Specification, requisition.
The Entrance .....	Soils exploration, bridge crossings, venturi meter, gravitation main, reticulation, pumping station, service reservoir.	Review, plans, specifications, requisitions, review quotes.
Fish River .....	Minor consumers, meter, H.P. valves and valve chamber.	Plans.
Gilgandra .....	Tube wells, header main, pump well, balance tank.	Plans, requisition, review quotes.
Gunning .....	Pumping station, rising main reticulation, service reservoir, meter and pit, railway crossing.	Plans, quotes, requisitions, and reviews.
Hay .....	Service reservoir, suction main, staging, pump well.	Plans, specifications, review tenders.
Hospitals .....	Mater Misericordiae; elevated tank on stand.	Plans, specifications, review tenders.
Howlong .....	Gladesville; retaining wall.	Plan.
Kempsey .....	Elevated tank—painting.	Specifications.
Kootingal-Moonbi .....	Reservoir	Review tenders.
Bendemeer .....	Pump well and house, chlorination house, service reservoir, rising main, reticulation, balance tank.	Specifications.
Attunga .....	Suction main, pump well, service reservoir, rising main, reticulation.	Specifications.
Lithgow High School .....	Pump well, chlorination house, rising main, reticulation.	Specifications.
Leeton .....	Water tank.	Review tenders.
Lower Clarence .....	Service reservoir repainting.	Advice.
Mathoura .....	Gravitation main, Stage I, reticulation, meter.	Plans, Specifications, requisition.
Milton-Ulladulla .....	Site plan for filtration plant.	Plan.
A.S.A. 126, 127 .....	Plans and specifications by Gutteridge, Haskins & Davey.	Review.
Molong .....	Corrosion protection for M.S. pipes.	Review.
Moree Aboriginal Reserve .....	Meters	Specifications and review.
Narrandera .....	Water supply.	Review tenders.
Nimmitabel .....	Service reservoir.	Plans, specifications.
Nundle .....	Service reservoir, pump house, rising main, reticulation.	Plans, specifications, review tenders.
Nyngan .....	Test well.	Plans, specifications, requisition.
Peat and Milson Is. ....	Service reservoir.	Plans, specifications.
Rylstone-Kandos .....	Scheme, work-as-executed.	Plans.
Shoalhaven District .....	Augmentation by Gutteridge, Haskins & Davey.	Review.



LOCATION	WORK	ACTION
S. W. Tablelands .....	Aurville tank.	Specifications.
Stroud .....	Kingsvale-Wombat-Prunevale.	Estimate.
Tantawangalo .....	Chlorination house.	Plan, specifications.
Tea Gardens .....	Air valves, cover and control valve.	Requisitions.
Tweed District .....	Service reservoir, aerators, bore headworks.	Plans and requisitions.
	Bridge crossings at Boyds Bay, Murwillumbah and Barneys Pt., Chinderah pumping station, Fingal service reservoir, Kingscliff service reservoir, Kurrara balance tank.	Plans, specifications and review tenders.
Uralla .....	Reservoir, cost of design.	Estimate.
Walgett .....	Intake works .....	Review tenders.
W. S. Generally .....	Special pipe castings	Review tenders.
	C.I. surface boxes.	Review tenders.
	Valves and hydrants.	Review tenders.
	Reservoir—Standard drawings.	Plans.
	Foot valve—Standard drawings.	Plans.
	C.I. pipes—Mettters Clow.	Review.
	Collapsible ladder.	Plan.
	D.A.V.	Specification.
	C.I. pipes—Stanton.	Review.
	Meter pit—Standard drawings.	Plan.
Wellington .....	Intake works.	Requisition.
Windsor Boys Welfare Home ....	Water level indicator.	Plan, requisition.
Yeoval .....	Pump well, suction main, rising main, service reservoir, reticulation.	Plans, specifications.

## MECHANICAL AND ELECTRICAL SECTION

### Pumping Plants

Tendering plans and specifications were prepared in connection with the following:—

Chinderah Booster Station for Tweed District Water Supply—Four pumps, pipework and electrical control equipment for one pumping station.

Nimmitabel Water Supply—Two pumps, pipework and electrical control equipment.

Bega Water Supply Augmentation—One pump, pipework and electrical control equipment.

Yeoval Water Supply—Two pumps, pipework and electrical control equipment.

Moonbi Water Supply—Two pumps, pipework and electrical control equipment.

Wellington Water Supply—Two pumps, pipework and electrical control equipment.

Bulahdelah Water Supply—Two pumps, pipework and electrical control equipment.

Hay Water Supply—Two pumps, pipework and electrical control equipment.

Taralga Water Supply—Low water pump control.

Walgett Water Supply—Two pumps, pipework and electrical control equipment.

Gunning Water Supply—Two pumps, pipework and electrical control equipment.

Coonabarabran Sewerage—Five pumps, pipework and electrical control equipment.

Oberon Sewerage—Two pumps, pipework and electrical control equipment.

Mona Vale District Hospital—Three pumps, pipework and electrical control equipment.

Plans and specifications are being prepared for the following:—

Wentworth Sewerage—Pumps, pipework and electrical control equipment.

Lavington Water Supply Augmentation—Replacement of pumping machinery.

Kempsey Sewerage Extensions—Pumps, pipework and electrical control equipment.

Port Macquarie Water Supply Augmentation—Pumps, pipework and electrical control equipment.

Camden Haven Water Supply Extensions—1½ ton overhead travelling crane for No. 1 pumping station.

Coonamble Sewerage—Pumps, pipework and electrical control equipment.

Barham Water Supply—Pumps, pipework and electrical control equipment.

Taree Sewerage, Chatham Area, Stokes Circuit—Pumps, pipework and electrical control equipment.

Molong Water Supply—Filtration plant electrical control equipment.

Mullumbimby Sewerage—Pumps, pipework and electrical control equipment.

### Miscellaneous

Plans and specifications were completed for the following:—

River Murray Works—Lock 10 Wentworth and Lock 15 Euston—Electrification of overhead gantry cranes.

Newcastle Harbour—Inflammable Liquids Berth 3 Throsby Basin: electrical installations.

Newcastle Harbour, Wickham Wharf—Low tension electrical switchgear.

Port Kembla Inner Harbour—Coal loading plant.

Plans and specifications are being prepared for the following:—

Port Kembla Inner Harbour—Coal loading wharves: electrical supply.

Designs are being prepared or have been started for the following:—

No. 3 Jetty, Port Kembla—Electrical switchgear, electrical transformers, wiring, conduits, substations, etc.

Throsby Basin Wharves, Newcastle—New 10 and 15 ton cranes.

Newcastle District—Throsby Basin wharves, berths 1 and 2: electrical services.

Hume Reservoir—Modifications to auxiliary turbine and ancillary equipment.

Tweed District Water Supply—Filtration plant, electrical control equipment.

Reviews of proposals submitted by outside bodies:—

Newcastle Harbour—Inflammable Liquids, Berth 3, Throsby Basin—electrical installations—Review of tenders.

Wauchope Sewerage—Pumping machinery—review of Consultant's plans and specifications.

Murray Waters—Lock 10, Wentworth and Lock 15 Euston—Job cranes—motorisation—Review of tenders.

Milton-Ulladulla Water Supply—Pumping plant—Review of Consultant's plans and specification.

Port Kembla Inner Harbour—Coal loading plant—Review of tenders.

Contractor's drawings of pumping plants for the following schemes:—

Tamworth Sewerage; Moss Vale Water Supply Section III, Booster Station; Wellington Water Supply; Camden Haven Water Supply Extensions; South Broken Hill Sewerage; Nimmitabel Water Supply; Narrandera Water Supply Augmentation.

Newcastle and Port Kembla Harbours—Contractor's drawings—new electrically driven, level luffing, portal, jib cranes.

Port Kembla Inner Harbour—Contractor's drawing for coal loading plant.



## SEWERAGE SECTION

### Work for Councils:—

- Bathurst—Work on design of sludge digestion plant and specifications for mechanical equipment.
- Blayney—Design of sewerage system started.
- Coonabarabran—Further design work on treatment works, pumping stations and reticulation.
- Coonamble—Further design work on treatment works, pumping stations and reticulation.
- Dubbo—Design work on further extensions of sewerage system.
- Kempsey—Plans and specification for pumping station.
- Lawson—Design work on treatment works and reticulation.
- Mullumbimby—Further design work on treatment works, pumping stations and reticulation.
- Oberon—Design work on treatment works, pumping station and reticulation.
- Springwood—Design of pumping station.
- Wentworth—Further design work on treatment works, pumping stations and reticulation.

### Work for Hospitals and Government Institutions—

- Forster Central School—Design and specification for septic tank.
- Lake Cargelligo Court House—Design and specification for septic tank.
- Mona Vale Hospital—Specifications for equipment for treatment works.
- Windang Public School—Design for septic tank.

### Review—

- Wauchope—Consultant's design for pumping station.

## LOCAL GOVERNMENT AND FILTRATION PLANT SECTION

### Work undertaken for Local Government and other Authorities:—

#### Filtration Plants—

- Molong—Amendments for plant and machinery.
- Walgett—Contractors' designs reviewed.
- Wellington—Extensions to plant: tenders reviewed.
- Tweed District—Plans and specifications completed.
- Baradine—Contractor's designs reviewed.

#### Swimming Pools—

- Wagga Agricultural College—Estimate.
- Ashton Park Trust—Estimate.
- Government House—Estimate.
- Standard pool 165 feet x 50 feet x 6 feet deep—Plans completed.

#### Other Works—

- University of N.S.W.—Stormwater drainage—estimate and advice.
- Precast Concrete Box Culverts—Report for S.A.A. Committee.
- Jenolan Caves—Parking area—investigation.
- Metropolitan Meat Industry Board—New saleyards—design in progress.

### Reviews of Plans, Specifications and Tenders for Local Government and other Authorities:—

#### Bridges—

- Punchbowl—Vesting of stormwater channels—Cullens Road bridge.
- Campbelltown—Bunbury Curran Creek, St. Andrews Road.
- Fairfield—Orphan School Creek, Liverpool Road—Loscove Bridge, Fairfield Road.
- Glen Innes—Beardy River, Shannon Vale Road.
- Tweed—Hopkins Creek.
- Waugoola—Sheet of Bark Creek.
- Brewarrina—Langboyde Bridge, Birrie River—Burbar Creek.
- Guyra—Darbys South Branch Creek.

#### Swimming Pools—

- Rylstone—Kandos pool.
- Namoi—Wee Waa pool.
- Bega—Bega pool, Learners pool.
- Tumut—War Memorial pool.
- Cessnock—Branxton-Greta pool.
- Leeton—Reconstruction—tenders only.
- Coolah—Dunedoo pool—tenders only.
- Timbregongie—Trangie pool—plans.
- Maclean—Maclean pool—tenders only.
- Kyogle—Bonalbo pool—advice. Woodenbong pool—advice.
- Boree—Cudal pool, Manildra pool, Eugowra pool.
- Tweed—Murwillumbah pool.
- Wentworth—Wentworth pool.
- Blue Mountains—Buttenshaw Park pool, Springwood—tenders only.
- Namoi—Boggabri pool.
- Kiama—Jamberoo pool.
- Cudgegong—Gulgong pool—advice.
- Cobar—Cobar pool.
- Tallagandra—Braidwood pool.
- Macleay—Lower Macleay Memorial Baths.
- Berrigan—Berrigan pool, Finley pool.
- Lake Macquarie—Speers Point pool.
- Carrathool—Hillston pool.
- Eurobodalla—Moruya pool.
- Narromine—Narromine pool.
- Newcastle—Lambton Park pool.
- Ashfield—Baily Park pool, Croydon.
- Gloucester—Advice.
- Barraba—Barraba pool—advice.
- Denistone East Public School—
- Loftus Street Public School—

#### Drainage—

- Fairfield—Yennora, Bellingers Drain, Stubbs Estate and Wrentmore Street.
- Warren—
- Cessnock—Daniel and Francis Streets, West Avenue, Kurri Kurri, Hampden, Brunner and Allsworth Streets, Weston No. 1 scheme, Stephen Street.

## HARBOURS AND RIVERS SECTION

### Preparation of Specifications:—

- Hunter Valley Flood Mitigation—Oakhampton penstock tower.
- Newcastle Harbour—Reclamation of Islands—Foundation boring.
- Bonnie Vale—Tipped stone sea wall.
- Dredge Service—Shore pipe line details. Pontoons. Floating pipe line details. Telescopic pipes. M.S. pipe.

### Review of Designs—

- Richmond River Flood Mitigation—Wyrallah—Tickle's Creek. Floodgate No. 1 Keith Hall Arm.
- Macleay River Flood Mitigation—Christmas Creek.
- Clarence River Flood Mitigation—Camp Creek Arm.

### Work in hand but not completed:—

- Hunter Valley Flood Mitigation—Oakhampton Drain, Stage 2. Floodgates at Albion Drain. Floodgate No. 1 Drain, Swan Reach. Floodgate No. 2 Drain, Swan Reach. Farm crossings Drains 5 and 6, Eskdale Swamp. Maitland cribbing. Phoenix Park—gate modification.
- State Dockyard—Southern fitting out berth.
- Port Kembla—Coal loading jetty, fendering and services. Inner Harbour—Co-ordination.
- Newcastle Harbour—Rock removal contract.
  - (a) Rock areas—Co-ordination.
  - (b) Rock areas—Plotting jettings to rock.
- Throsby Basin berths 1 and 2.



## APPENDIX VIII

### SURVEY AND SURVEY DRAFTING

#### FUNCTIONS

The functions of the Branch are—

- (1) surveying and survey drafting for the Department and other government instrumentalities;
- (2) the custody of Engineering plans and the printing and mounting of plans;
- (3) recording all actions affecting land owned or being acquired by the department, e.g., resumptions, easements, reservations, purchases, sales and leases of surplus land and any other circumstance affecting departmental land;
- (4) checking, on behalf of the Department of Local Government, plans and descriptions submitted by the local government bodies in connection with the acquisition of land;
- (5) preparation of descriptions of amendments to local government boundaries and the recording of same; preparation of descriptions for the proclamation of residential areas, brick areas, urban areas, etc., and recording thereof;
- (6) the Principal Surveyor administers matters in connection with the acquisition control and disposal of departmental land, and is responsible for the implementation of the Survey Co-ordination Act, 1949, insofar as it affects the Department.

#### OPERATIONS

##### Survey

All classes of surveys have been carried out for the Department, other government instrumentalities and local governing bodies.

Details of the work performed are as follows:—

Water Supply—Engineering surveys for Berrima (Medway Scheme (3)), Emu Plains, Tea Gardens and The Entrance.

Land Matters Surveys for Berrima—Moss Vale (7), Bulahdelah, Camden Haven, Clarencetown, Fish River, Gunning, Reid's Flat, Rye Park, The Entrance and Yeoval.

Sewerage—Engineering surveys for Bellingen, Blayney, Braidwood, Gloucester, Jugiong, Lawson (3), Peat and Milson Island, South Tamworth, Taree (2), and Tweed Heads.

Land Matters surveys for—Blayney, Coonamble, Lawson, Mullumbimby and Portland.

Stormwater Drainage—Engineering survey at Cook's River.

Harbours and Rivers—Hydrographic surveys at Berkeley, Blackwall Channel, Coff's Harbour, Cook's River, Fisherman's Bay, Forster, Macleay River, Newcastle, Patonga, Sandon River, Tweed River, Ulladulla, Wooli River.

Flood Mitigation Surveys at—Maitland (3) and Macleay River.

Engineering survey at The Islands.

Land Matters Survey at Port Kembla (2) and Newcastle.

Departmental Buildings—Engineering surveys for Commonwealth—State Law Courts (2), Conservatorium of Music, State Government Offices (4).

Land matters surveys for—Australian Museum, Conservatorium of Music, Lismore Public Works, State Government Offices (2).

Height of Building Act—A.M.P. Building.

Sales, Purchase, Leases—Land matters surveys at Goulburn, Grafton, Newcastle (2), Port Kembla (4), Tamworth and Wollongong.

Hospitals—Engineering surveys at Mona Vale (3), Morisset, Rydalmere, Land matters surveys at Graythwaite, Macleay District, Port Kembla, Rozelle.

Education—Engineering surveys (details, contours and sewerage) of sites for high schools at Asquith, Birrong, Bourke, Cardiff, Caringbah, Castle Hill, Cronulla, Doonside, Emu Plains, Fairfield West, Forbes North, J. J. Cahill Memorial, Katoomba, Lithgow, Manilla, Manly Vale, May Villa, Moss Vale, Mt. Austin, Mt. Druitt, Peakhurst Heights, Peakhurst South, Scone, St. Marys, Swansea, Sydney Boys, Wallsend West (2), Warner's Bay, primary schools at Bass Hill, Baulkham Hills, Greystanes, Gulgong, Manildra, Matraville South, Normanhurst, Thornleigh, Windsor South and technical colleges at Eastern Suburbs, Gympie, North Sydney, Shortland.

Land matters surveys for high schools at Avalon, Caringbah, Castle Hill, Cronulla, Doonside, French's Forest, Mona Vale, Pendle Hill, Port Macquarie (4), St. Mary's, Swansea, Wallsend West, Woonona, Young, Wallsend; primary schools at Albion Park, Bellevue, Blacktown (3), Blaxland (3), Bletchington, Cabramatta, Carlingford South, Cronulla South, Ellimeak, Epping West, Ermington West, Hornsby North, Ingleburn, Kendall, Leumeah, Lower Portland, Lowlands, Malla, Merewether Heights, Mt. Druitt, Mt. Pritchard (2), Narara, Neringundah, Orange East, Peat's Ridge, Pennant Hills, Prospect, Toongabbie, Tooraweenah, Turramurra, Turramurra South, Vineyard, Wallerawang, Wialla, Warilla, Werrington, Wyrallah Road and University of New South Wales at Shortland.

Existing sites were pegged out for high schools at Armidale, Asquith, Blacktown, Canterbury, Cronulla, Dapto, Fairfield, Forbes North, Hunter's Hill, Lithgow, Maroubra Bay, Narrandera, Northmead, Riverstone Co-Educational, Sydney Boys', for public schools at Ashcroft (2), Balgowlah North, Blacktown West, Blacktown, Cabramatta, Castle Hill, Eastwood Heights, Ermington West, Gordon, Helensburgh, Hornsby South, Ingleburn East, Kegworth, Kellyville, Kempsey West (2), Kingswood, Kogarah, Lake Macquarie, Lindfield, Lindfield East, Liverpool, Loftus, Marayong, Marrickville South, Matraville South, Merrylands West, Narrabeen, Nelson's Bay, Panania North, Parramatta North, Peakhurst Heights, Penrith South, Prospect, Riverwood, Ryde North, Stanmore, Thalgarrah, Thornleigh, Windang, Woronora, Yowie Bay and for a teachers' college at Wollongong.

Police Premises—Surveys for the acquisition of sites at Broken Hill, Gloucester and Tooraweenah. Peg-outs and identification surveys of existing sites at Blayney, Canowindra, Casino, Engadine, Gunnedah and Wollongong.

Court Houses—at Newcastle (details and peg-out).

Agriculture Department—Survey for lease of Macquarie Fields House.

Aboriginal Reserve—Survey for sewerage at Moree.

Electricity Commission—Hydrographic survey at Munmorah.

Local Government—Engineering surveys for swimming pools at Ashton Park and Government House, bridge over Camden Haven River at Laurieton.



## SUMMARY OF SURVEYS

	Engineering	Land
Water Supply .....	6	16
Sewerage .....	13	5
Stormwater Drainage .....	1	—
Harbours and Rivers .....	18	3
Departmental Buildings .....	7	5
Heights of Building Act .....	—	1
Sales, Purchases, Leases .....	—	10
Hospitals .....	5	4
Schools .....	42	121
Police Premises and Court Houses	1	10
Agriculture Department .....	—	1
Aboriginal Reserve .....	1	—
Electricity Commission .....	1	—
Local Government .....	3	—
	98	176

## Survey Drafting

Survey drafting and recording were carried out in connection with the following works of the Department, other governmental instrumentalities and local-government bodies:—

Water Supply—Berrima, Dubbo, The Entrance, Fish River, Merriwa, Leeton.

Sewerage—Bellingen, Blayney, Batlow, Gloucester, Lawson, Tamworth, Taree, Greystanes Co-Educational High School, May Villa High School, Mona Vale District Hospital, Peat and Milson Island Psychiatric Hospital and Moree Aboriginal Station.

Harbours and Rivers—Coff's Harbour, Newcastle, Port Hacking, Sandon River, Tweed River, Ulladulla Harbour, Nambucca River Hydrographic Surveys; Cook's River Dredging; Ulladulla Harbour, Port Kembla Inner Harbour and Tweed Harbour Works; Clarence River, Hawkesbury River, Macleay River, Shoalhaven River and Hunter Valley Flood Mitigation.

Hospitals—Contour and detail plans for Sydney Hospital and Telephone Cable Route plan for Morisset Psychiatric Hospital were prepared.

Schools—Contour, detail and sectional plans were prepared for Baulkham Hills Primary, Birrong Boys' High, Bourke High, Casino High, Cardiff High, Castle Hill High, Ashton Park Public, Bass Hill Public, Denison Public, Emu Plains Public, Fairfield Secondary, Forbes High, Gilgandra High, Grafton South High, Katoomba High, Lithgow High, Moss Vale High, Manilla Intermediate High, Mt. Druitt High, Narrandera High, Nerrigundah Public, South Strathfield High, Sydney Technical High, Swansea Secondary, Scone High, Warner's Bay High, Windsor South Public, Woonona High and Wallsend West High Schools; Eastern Suburbs Technical College, Gympie Technical College, North Sydney Technical College, Thornleigh Girls' Training School.

Swamp Drainage—Plans were prepared in connection with Hexham and Chilcott's Creek Swamp Drainage.

Drainage—Plans and sections were prepared in connection with Cronulla High School and St. Mary's High School.

Roads—Plans and sections were prepared in connection with Camden Haven Bridge site, Caringbah High School, Mona Vale District Hospital, Newcastle (Reclamation of the Islands) and Rydalmere Psychiatric Hospital.

Miscellaneous—Contour plan for Newcastle Court House, development plan for University of N.S.W., and plans for annexure to Port Kembla Inner Harbour Act were prepared.

Local Government—100 descriptions were prepared for the alteration of internal and external boundaries in respect of 31 shires and municipalities, 26 descriptions were prepared for the proclamation of Urban and Building areas and 101 descriptions were prepared of residential districts. A considerable number of illustrative plans and sketches was prepared in connection with this work.

Town Planning—Investigations were made into the effect of town planning on State-owned properties within the Municipalities of Willoughby, Camden and Bega, the City of Parramatta (Rydalmere Golf Course scheme), County of Cumberland (Greenbelt re-zoning at Rooty Hill), City of Wagga Wagga and Illawarra District.

Search and Investigation—Information was obtained in respect of legal and land matters in connection with departmental and Local Government resumptions, for the disposal or lease of departmental properties and for the surveys of water supply and sewerage schemes, school sites, hydrographic surveys and departmental investigations generally. 505 Certificates of Identity and 16 Technical Descriptions for Release were prepared, 1,094 search and survey investigations were dealt with.

General Drafting—A total of 327 plans were drawn for resumptions, easements, appropriations, sales, purchases, leases, etc. 234 applications for resumption of land under the provisions of the Local Government Act were referred to the branch for examination of the accompanying plans and descriptions. 241 plans submitted with applications for resumption for the Electricity Commission were examined. 247 applications for resumption by the Electricity Commission were prepared for gazettal. 199 drawings, plans, sections, etc., were prepared in connection with engineering works generally; a total of 756 descriptions for resumptions, sales and leases were prepared, inscriptions were made on 114 qualification certificates issued by the Local Government Examination Committee.

## SUMMARY

	Engineering survey plans	Land survey plans
Water Supply .....	35	19
Sewerage .....	48	13
Harbours and Rivers .....	22	6
Hospitals .....	2	21
Schools .....	33	111
River Murray Waters Act ..	—	4
Swamp Drainage .....	2	—
Roads .....	29	—
Miscellaneous .....	3	27
Local Government .....	—	63
Police and Court House .....	—	22
Flood Mitigation .....	21	—
Stormwater Drainage .....	4	—
Staff Housing .....	—	41
	199	327
Local Government—		
Alteration of boundaries .....		100
Urban and building areas .....		26
Residential districts .....		101
Search and Investigations—		
Certificates of Identity .....		505
Technical descriptions .....		772

## PLAN PRINTING AND MOUNTING

In addition to this Department's requirements, plan printing and mounting services were carried out for the Departments of Agriculture, Attorney-General and Justice, Chief Secretary, Education, Federal Taxation, Health, Interior, Labour and Industry, Lands, Land Tax, Local Government, Main Roads, Mines, Postmaster-General, Police, Premier, Registrar-General, Technical Education and Valuer-General and for the Australian Museum, Conservatorium of Music, Commonwealth Scientific and Industrial Research Organisation, Electricity Authority, Electricity Commission, Forestry Commission, Government Printer, Housing Commission, Maritime Services Board, Mitchell Library, Registrar of Co-operative Societies, Rent Control Office, Soil Conservation Service, Stamp Duties Office, State Superannuation Board, Teachers' College, and for various municipal and shire councils.



## SUMMARY

Helios (paper) .....	131,685
Helios (sensitised linen and copymaster) .....	1,094
Mounts .....	6,389
Field camera negatives .....	4,209
Field camera prints .....	8,164
Barcro negatives .....	2,413
Barcro positives .....	9,357
35 m.m. microfilm negatives .....	11,422
35 m.m. microfilm prints .....	1,903
35 m.m. microfilm rolls of film .....	20
16 m.m. microfilm negatives .....	524,942
16 m.m. photocopy prints .....	39,530
16 m.m. microfilm rolls of film .....	207

The daily output of all negatives and prints was 2,964.

Of the 16 m.m. negatives prepared, approximately 500,756 were of records of other departments and instrumentalities for convenient storage.

## Plan Room

Plans registered .....	1,463
Field and level books registered .....	300
Plans and books issued and returned ....	27,200

## REPRESENTATION ON COMMITTEES

Surveying Advisory Panel—University of N.S.W.

Surveying Certificate Course Advisory Committee—Sydney Technical College.

Land and Engineering Survey Draftsman's Course—Sydney Technical College.

State Mapping Advisory Committee.

## GENERAL

Administrative work was performed in connection with the acquisition of land, the sales, leases and various forms of tenancies of departmental properties and advice was given to a number of councils concerning the procedure for acquiring the lands and easements necessary for water supply and sewerage works.

Several town planning schemes were examined with respect to their effect on Crown properties and representations were made in some cases with a view to effecting re-zoning of certain lands.



## APPENDIX IX

### STORES BRANCH

#### FUNCTIONS

The functions of the Stores Branch are:—

- (1) Purchase of goods, materials, plant and equipment required by the Department;
- (2) all incidental work associated with (1), such as arranging import licences, customs entries, customs duty, etc.;
- (3) administration of the Department's store and engineering workshop at Leichhardt;
- (4) inspection of pipes (cast iron, fibrolite, steel, earthenware, etc.), fittings, valves, fabricated steelwork and other inspections associated with the metal trades;
- (5) preparation and despatch of samples of cement at the various cement works for testing and the release and despatch of tested cement;
- (6) issuing and recording postage and railway stamps for departmental purposes;
- (7) arranging insurance except that in respect of workers' compensation and motor vehicles;
- (8) supervision of Head Office motor cars and vehicles;
- (9) hire of owner-driven lorries and utilities in the metropolitan area.

#### OPERATIONS

##### Purchasing

There was an increase in the volume of work associated with the purchase of materials, etc., caused in part by the Department becoming responsible for the initial equipping of State Psychiatric Institutions and Child Welfare establishments.

##### SUMMARY OF OPERATIONS

Head Office—	
Number of requisitions received .....	16,373
Number of orders issued .....	15,870
Number of quotations received .....	1,450
Leichhardt Depot—	
	£
Value of stock purchased .....	384,257
Value of stock issued .....	418,822
Value of jobs completed .....	240,390

##### Inspection

##### GENERALLY

The Branch has 13 inspectors employed at:—

- Head Office (2)—General inspections, steelwork, cranes, etc.  
 Port Kembla (3)—Cast iron pipes and specials.  
 Camellia (3)—Fibrolite pipes and specials.  
 Leichhardt Depot (1)—Earthenware and concrete pipes.  
 Newcastle (2)—Valves, cast iron pipes and specials, steel, earthenware and reinforced concrete pipes.  
 Regents Park (2)—Steel pipes for Fish River Water Supply.

Inspections continued to be made for this and other State departments, local government bodies and public companies. Inspections were also undertaken for interstate authorities.

Fibrolite pipes tested at Camellia were:—

Tested .....	3,734,245 feet
Rejected .....	117,964 feet
Total accepted .....	3,616,281 feet

This was a reduction of 307,991 feet over the number accepted in 1960-1961. 6,029 special castings and sewer fittings were tested.

17,364 tons of spun pipes, 4,764 tons of mild steel piling bar and 44 tons of special castings were inspected at Port Kembla. Overall activities at this centre showed a marked increase.

The major inspection work at Newcastle involved 1,252 stop valves, 6,426 special castings, 13,396 feet of mild steel pipe, 16,236 feet glazed earthenware pipes, 7,200 feet concrete pipe, 2,085 specials and miscellaneous earthenware and reinforced concrete fittings.

188,050 feet of earthenware pipes, 31,690 earthenware junctions and 35,570 feet of reinforced concrete pipes were inspected in the metropolitan area. 72 reinforced concrete fittings, 1,674 miscellaneous items (manhole covers, etc.), and 560 feet of reinforced concrete vent shaft were also inspected.

Several important new assignments carried out were:—

Inspection at a new manufacturing plant at Regents Park of mild steel pipes and specials for the Fish River Water Supply Scheme and two municipal council projects. During the year 75,674 feet of piping was passed as satisfactory.

Another new plant at Tamworth manufacturing reinforced concrete sewer pipes required inspection, 58,968 feet of pipes and 1,797 junctions being tested and accepted.

Inspection was also carried out of fabrication of steelwork for the Robert White Bridge at Lismore and prestressed reinforced concrete beams for Hastings River Bridge.

Inspection fees totalled £27,727, an increase of approximately 28 per cent.

##### CEMENT

Officers are located at the various cement works to take samples of cement submitted for testing and release to various consumers when approved. Two inspectors are employed on two shifts at the works of the Southern Portland Cement Company at Berrima, one inspector covers both Kandos and Charbon works which are only three miles apart, and one inspector each is located at Portland and Maldon.

##### LEICHHARDT DEPOT

The overhaul of the Department's No. 1 Plant and the mechanical maintenance of equipment in Government Institutions continued.

The workshop again carried out many large fabricated steelwork jobs, the more important being:—

- (1) The manufacture of large quantities of mild steel roof trusses and stanchions plus the necessary balustrading for new school classrooms;
- (2) the manufacture of numerous mild steel fabrications for additions and alterations to public buildings.

##### Store

The store continued to supply departmental branches, works and projects with a wide range of materials required in the course of the Department's activities.

The financial operations of the Depot are shown in Appendix I.

##### CAR SERVICE

The Branch operates a fleet of nine motor cars with eight drivers which are retained for the use of departmental officers in the metropolitan area. Additional cars are hired from the contractor when required.

##### REPRESENTATION ON COMMITTEES

State Contracts Control Board.



## APPENDIX X

### TESTING AND INSPECTION

#### FUNCTIONS

The Testing Branch provides facilities for testing all types of building materials, for State, Commonwealth and Local Government authorities and for the public generally.

The functions of the Branch are:—

- (1) The physical and chemical testing of all classes of cement, bricks, building blocks, roofing tiles, concrete pipes sections and all classes of dampcourse.
- (2) The physical testing of steel wire rope, wire, steel pipes and fittings and structural steel products and other metals.
- (3) The design and testing of concrete.
- (4) Sieve analysis of sand, metal and other aggregate.
- (5) The chemical analysis of water, clay, coke, soil, paint, mortar, fibrous plaster, coal and other materials.

#### OPERATIONS

##### Details of Testing

##### CEMENT TESTING

924 certificates covering the testing and analysis of 3,558,000 bags of cement were issued to cement manufacturers. The decrease of approximately 32 per cent. was brought about by the decrease in tested cement requirements for the Warra-gamba Dam project and the Snowy Mountains Hydro-Electric Authority. In addition, clients other than cement manufacturers submitted 73 samples of cement for testing. Fees charged for this work amounted to £27,429 5s. 6d.

##### INSPECTION FEES FOR SYDNEY, NEWCASTLE AND PORT KEMBLA

The fees charged for inspection of steel, concrete, fibro and earthenware pipes and fittings by Stores Branch Inspectors were:—

	1960-61			1961-62		
	£	s.	d.	£	s.	d.
Sydney .....	10,939	0	7	15,107	11	9
Port Kembla .....	6,996	7	8	8,006	15	10
Newcastle ...	3,649	12	6	4,613	1	9
	£24,585	0	9	£27,727	9	4

The increase in fees was derived from an expansion in inspections for projects as undermentioned:—

##### Sydney inspections—

Fish River Water Supply Scheme,  
The Orange City Council and the  
Shoalhaven Shire Council.

##### Newcastle inspections—

Taree,  
Kempsey,  
Coonabarabran and  
Mullumbimby Sewerage Works.

##### Port Kembla inspections—

Lower Clarence Water Supply Scheme, and

The Octagonal steel piles for the Coal Loader  
Berth,  
Port Kembla Inner Harbour.

#### SUMMARY

Particulars of Service	Number of Tests	Fees		
		£	s.	d.
Cement tested for Cement Companies.	3,558,000 bags	27,429	5	6
Steelworks inspections as previously detailed .....	.....	27,727	9	4
Physical and chemical tests—				
Compression tests of concrete cylinders, cubes, etc. ....	10,826	19,070	10	1
Tensile, bend impact, and other tests carried out on steel, wire rope, bolts and nuts, etc. ....	736			
Other chemical tests, analysis of mortar, clay, sand, etc. ....	230			
Compression absorption and other tests of bricks, tiles, concrete building blocks, etc. ...	1,051			
		£74,227	4	11

#### FINANCIAL

Details of the financial operations of the Branch are shown in Appendix I.

#### REPRESENTATION ON COMMITTEES

National Association of Testing Authorities.

Cement Sectional Committee, Standards Association of Australia.

Paint Testing Sub-Committee, Standards Association of Australia.

Committee on Galvanised Products, Standards Association of Australia.

Committee on Bitumen and Roadmaking, Standards Association of Australia.



## APPENDIX XI

### PLANT

#### FUNCTIONS

The functions of the Plant Branch include:—

- responsibility for the acquisition, use, movement, repair and maintenance of all No. 1 Plant held by the Department;
- advice to other branches as to suitability of equipment for specific requirements;
- inspection of plant in operation and advice on use and maintenance; and
- disposal of obsolete plant and replacement as required.

#### OPERATIONS

##### New Plant and Equipment

The branch specified and acquired plant to a value of £210,018 for items included in the category of "A" classification plant. In addition, purchases of plant were carried out under "C" classification heading to the value of approximately £56,000. "A" classification plant is under the control of the Plant Engineer for use where required; "C" classification plant is plant allocated direct to a project and charged thereto. The major items of equipment included in these purchases are shown hereunder:—

"A" Class No. 1 Plant—	Cost £
14 tractors .....	51,960
2 H.D. loaders 2½-3 cubic yards .....	29,987
8 compressors .....	20,420
2 dump trucks 7½ cubic yards .....	16,450
2 graders .....	11,540
17 vibrators (elect. and pneum.) .....	4,106
4 rock drills .....	3,371
1 digger (hydraulic) .....	2,090
3 rollers .....	1,823
6 concrete mixers .....	1,566
4 welding sets .....	1,554
5 pumps .....	1,445
4 saws .....	792
12 paving breakers .....	762
5 descaling pistols .....	456
1 air motor .....	372
2 emulsion sprayers .....	370
4 hydraulic jacks .....	366
1 rotary screed .....	310
4 tampers, backfill .....	232
1 boat .....	215
2 electric drills .....	65
	<hr/>
	£150,252
Motor vehicles .....	59,766
	<hr/>
	£210,018

"C" Class Other Projects—	Cost £
Construction equipment .....	25,419
Workshop equipment .....	6,097
Miscellaneous equipment .....	3,565
Motor vehicles .....	20,815
	<hr/>
	£55,896

#### TECHNICAL SERVICES TO BRANCHES

##### Water Supply and Sewerage Branch

Plant requirements for new water supply and sewerage works were fulfilled, and constant liaison was maintained with all projects to ensure that proper use and maintenance were effected.

##### Harbours and Rivers Branch

Plant was issued to new construction works at Tweed Heads and Ulladulla, and, in addition, continual liaison was maintained with existing harbour works projects at Newcastle, Port Kembla, Evans Heads and Clarence Harbour Works.

Assistance has been given by this branch in connection with the contract for the supply of coal handling plant at Port Kembla, as part of the new Inner Harbour Construction, and this co-operation is continuing on work connected with manufacture, testing and installation of this important equipment.

##### Building Construction and Maintenance Branch

Plant and equipment was purchased for the Building Construction and Maintenance branch commensurate with increased activity on building construction works for the Education Department and others, and all plant requirements have been fulfilled. Inspection and technical assistance was continued and has continued the good relationship with this Branch.

##### State Brickworks

New plant items for quarry operation were obtained and installed and consultative advice given as required.

##### Scientific Instrument Section

This section maintained technical and advisory assistance to the Department and continued to extend its activities to other State Departments in respect of service and repairs to instruments.

A considerable number of commemorative plaques were supplied as required during the year.

The overall standard of instrument holdings has improved steadily during the past several years.

##### Hire of Plant to Other Authorities

Items of plant were hired to other State Departments or Instrumentalities and to Local Government bodies as required, in terms of the Interdepartmental Schedule.

#### REPRESENTATION ON COMMITTEES

The Plant Engineer is represented on the following committees:—

State Plant Committee.  
Motor Vehicle Committee.  
Riggers and Scaffolding Advisory Committee.  
Oils and Lubricants Committee.  
Standards Association of Australia—various committees.

#### FINANCIAL

The following is a comparison between current and previous years for the No. 1 Plant Control Account.

	1958-59	1959-60	1960-61	1961-62
	£	£	£	£
Revenue .....	293,454	329,998	315,350	333,427
Working expenses ...	227,084	246,060	236,714	250,346
Overhead .....	32,880	23,198	24,837	38,150
Capital charges .....	43,367	41,325	33,427	35,140
Capital costs of equipment held .....	1,292,065	1,279,021	1,266,131	1,384,648

Details of the financial operations of the branch are shown in Appendix I.

The following graphs show:—

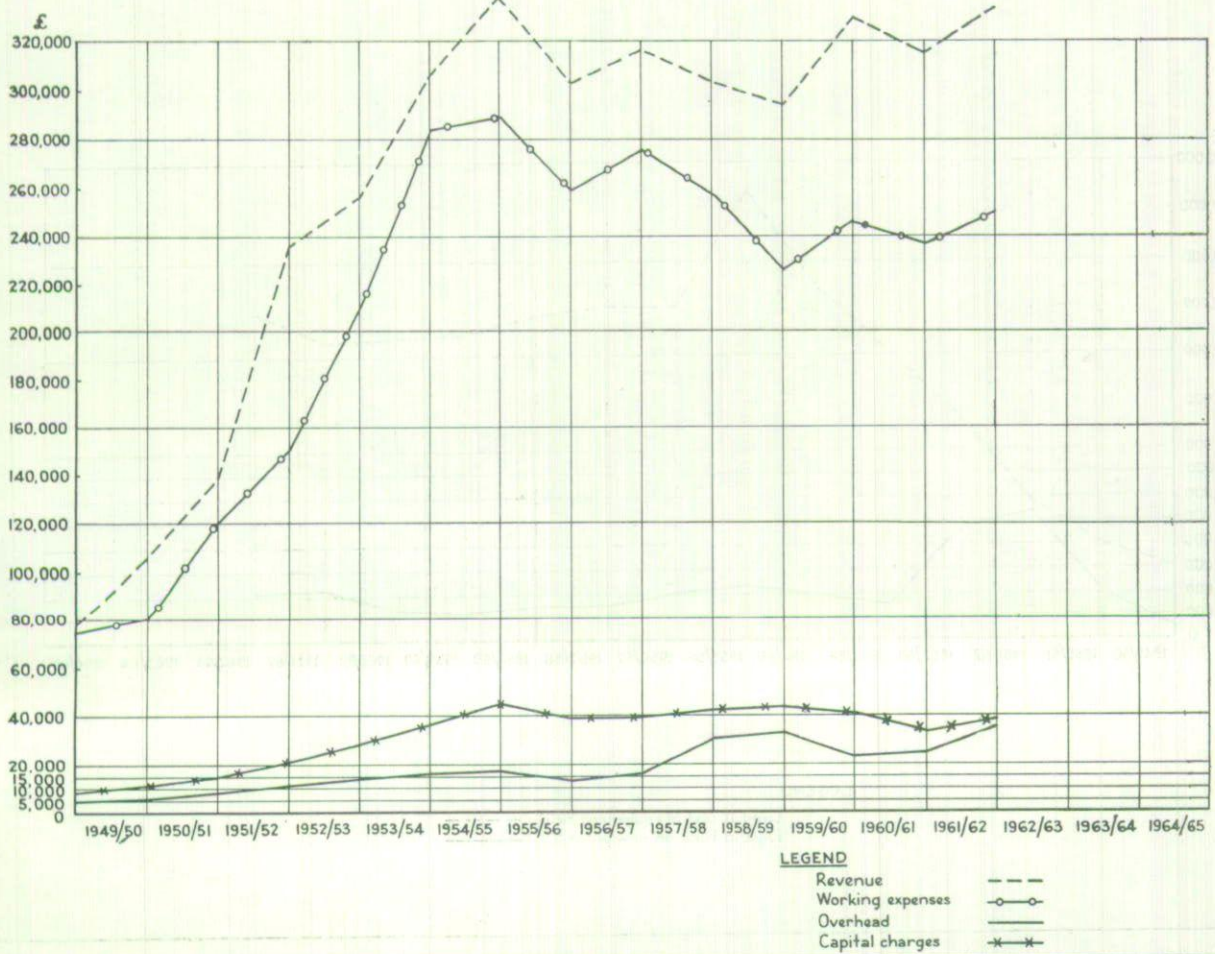
- a comparison between revenue working expenses and other charges since the financial year 1949-50; and
- the capital cost of equipment held and the expenditure on new plant for the same period.



### APPENDIX N°1

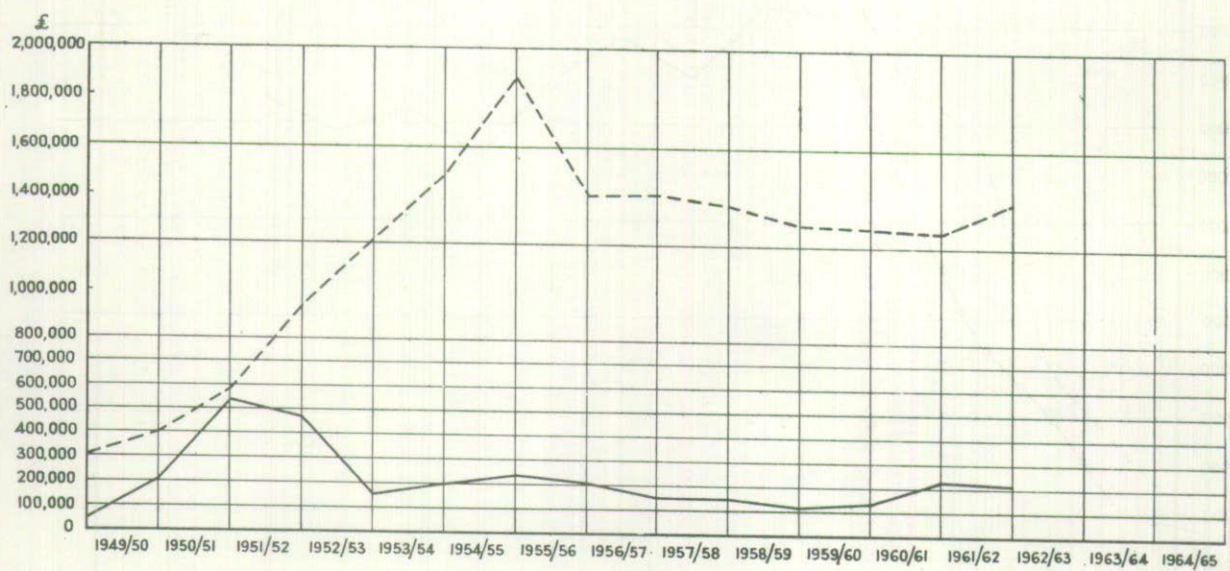
GRAPH SHOWING COMPARISON BETWEEN REVENUE  
WORKING EXPENSES AND OTHER CHARGES

PLANT BRANCH  
DEPT OF PUBLIC WORKS





**APPENDIX N° 2**  
GRAPH SHOWING COMPARISON BETWEEN CAPITAL  
COST OF EQUIPMENT HELD & EXPENDITURE ON NEW PLANT  
**PLANT BRANCH**  
**DEPT OF PUBLIC WORKS**



**LEGEND**

Capital cost of equipment held -----  
 Expenditure on new plant —————



## APPENDIX XII

### STATE DOCKYARD

#### FUNCTIONS

The State Dockyard, Newcastle, was established by the New South Wales Government Engineering and Shipbuilding Undertaking Act, 1943, which empowered the Undertaking to do all types of engineering, shipbuilding, ship repair, docking and work of an incidental character.

#### OPERATIONS

##### Additional Facilities

**Buildings**—Work was completed on the 320-foot extension of the Shipyard Trades Building for use as a boiler and steel fabrication shop.

**Extension to the Administrative Building** by way of a third floor on the eastern wing was commenced.

**Work was commenced on widening No. 3 Building Berth** to give 100-ft. width, and an additional 40-ton Portal type travelling jib crane was ordered to ensure adequate craneage facilities for this longer berth.

**Plant and Machinery**—Additional plant provided included a 5-ton electric overhead crane, a diesel engine test bed, a plate-cleaning machine, a compressor and a dynamometer.

##### Vessels under Construction

**Australian Shipbuilding Board—Yard No. 68**—Work continued on a single-screw diesel-driven lighthouse supply vessel of approximately 2,500 tons gross for the Commonwealth Lighthouse Service, launched 28th May and nearing completion, and preliminary work commenced on another similar vessel for the same Authority in Yard No. 70 whilst work proceeded on another similar vessel in Yard No. 69.

**Yard No. 72**—Work commenced on a single-screw diesel container vessel for McIlwraith McEachern Ltd. of approximately 5,750 tons gross.

**Royal Australian Navy—Yard No. 71**—Work commenced on a twin-screw diesel-electric survey vessel of approximately 3,000 tons gross.

**Department of Public Works—Yard No. 63**—Work proceeded on a bucket dredge of 46-60 feet dredging depth for the Department of Public Works. The work is nearing completion.

##### Vessels Completed and Handed Over for Service

A single screw diesel driven cargo vessel of 2,000 tons d.w. capacity for William Holyman & Sons Pty. Ltd. to the order of the Australian Shipbuilding Board.

A hopper barge of 700 tons capacity for the Department.

Ship construction activities since the inception of the Dockyard in March, 1942, to the 30th June, 1962, are:—

54 vessels have been constructed and are in service;  
6 vessels are under construction.

##### Marine and General Engineering

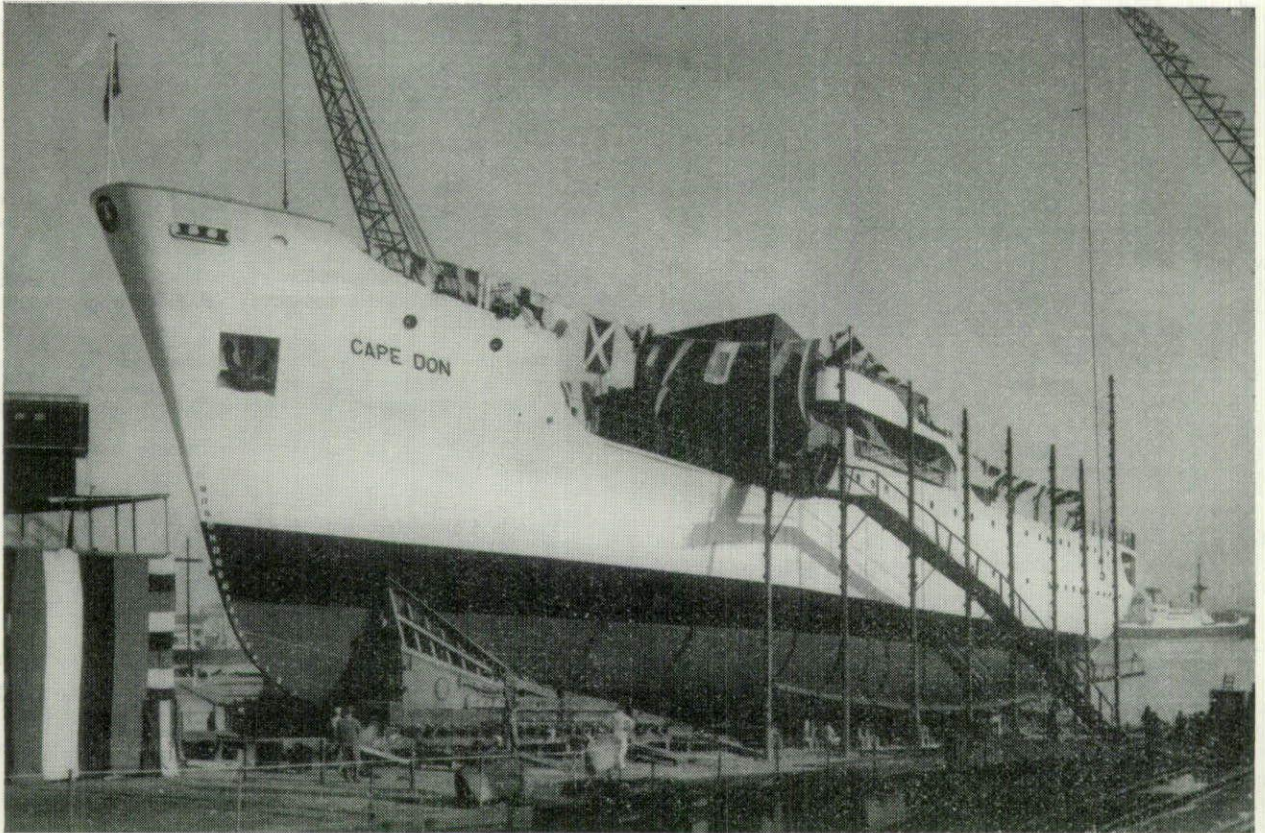
Work proceeded in connection with the manufacture of 3 "Australian Polar" M.65.T diesel marine engines of 2,000 b.h.p. at 250 r.p.m. for installation in the 3 lighthouse supply vessels under construction, one engine being close to completion for installation in the *Cape Don*, launched in May.

Other engineering work completed or in progress at the end of the year included spiral casings for Barron Gorge Hydro-Electric Power Station, cement kiln tyres for Noyes



M.V. "William Holyman" Proceeding on Trials





Lighthouse Service Vessel "Cape Don" ready for Launching

Bros. Limited, double furnace pusher, furnace delivery table and furnace charging table for Australian Iron & Steel Limited.

In addition, a considerable volume of heavy engineering and steel fabrication work was carried out to meet the requirements of industry generally.

The major contracts undertaken for the twelve months' period 1st July, 1961, to 30th June, 1962, were in respect of:—

*Lake Torrens, Iron Yampi, Straat Madura, Iron Wyndham, Bilkurra, Lake Boga, Stanvac Pretoria, Chakrata, Lake Illawarra, Chakdina, Stanvac Singapore, Iron Duke.*

#### Condensing and Feed Heating Plant

Construction work is proceeding on the manufacture of condensing, feed heating and deaerating plant for three 200 M.W. alternator sets for Vale's Point Power Station. The first set has been delivered and the second set was almost completed at the close of the period. Preliminary work has commenced on two 300 M.W. condensers for the new Munmorah Power Station.

#### Ship Repair Activities

The following is a summary of the ship repair activities during the period:—

	Tonnage
From 1st July, 1961 to 30th June, 1962—	
69 vessels docked and repaired (including Dredge Service vessels) .....	338,982
358 vessels not docked but repaired at wharves and slips (excluding Dredge Service vessels) .....	1,925,570
Repairs on Dredge Service vessels (excluding dockings) .....	169
From the inception to 30th June, 1962—	
1,686 vessels docked and repaired (including Dredge Service vessels) ..	6,978,747
5,478 vessels not docked but repaired at wharves and slips (excluding Dredge Service vessels) .....	21,477,658

#### EMPLOYEES

At the close of the period under review the number of employees totalled 1,789.

#### FINANCIAL

For the twentieth successive year the Undertaking returned a substantial surplus.

The turnover for the year ended 31st March, 1962, was £3,836,770, and the net profit (after providing for depreciation, interest and statutory reserves, etc.), was £317,049.

Aggregate results under the same headings (before providing for dividends to employees) for the full period of trading to 31st March, 1962, are:—

Turnover .....	£38,833,887
Net profit .....	£2,688,606

#### Profit Sharing Scheme

An amount of £188,459 has been set aside from the 1961-62 profits for payment of weekly dividends during the year 1962-63. It is expected that the average dividend rate for tradesmen will exceed £2 0s. 0d. per week. The total amount set aside for distribution since the commencement of the scheme in 1951 is £1,352,545.



## APPENDIX XIII

### STATE BRICKWORKS

#### FUNCTIONS

The re-establishment of the State Brickworks was authorised by the State Brickworks Act No. 16 of 1946. The functions of the brickworks include the production, manufacture, distribution and sale of all classes of bricks and any work or activity incidental or supplementary thereto.

#### OPERATIONS

There was a net profit of £90,975 after making adequate provision for liabilities such as interest on capital, depreciation of capital assets accrued, repairs and maintenance and leave due to employees. This result was lower by £28,411 on the previous year's operations, the difference being attributable to increases in manufacturing expenses, a decrease in sales and damage to bricks during handling. A strike of employees in October, 1961, would have also had some effect in the overall result.

Among the factors leading to an increase in manufacturing expenses were the abnormally heavy rain in November, 1961, and the need to store bricks.

During the year an extensive programme was instituted to remedy kiln leaks and the expenditure incurred in this work together with the painting of buildings and structures increased the cost for repairs and maintenance.

#### Trading and Administration

Road tax levied on the cartage of bricks, which private brick manufacturers charge to customers, cost the Undertaking £5,022 for the twelve months.

A supervision rate for bricks carted and charged against the brick cartage contractors showed a revenue of £1,183 for the year after allowing for extra payment for cut brick handling and cartage adjustments.

Brick production for the year was maintained at a high level and bricks produced ex machines and sales made for each quarter are shown hereunder:

Quarter ended	Bricks produced ex Machines		Sales	
	Face	Commons	Face	Commons
June, 1961 .....	3,689,350	11,039,450	3,071,274	9,710,543
September, 1961 .....	3,787,900	11,260,000	3,638,755	11,046,375
December, 1961 .....	2,988,450	8,152,500	3,205,044	9,002,373
March, 1962 .....	3,584,600	9,508,650	3,370,841	7,930,299
	14,050,300	39,960,600	13,285,914	37,689,590

The selling prices of bricks per 1,000 ex-yard varied during the year as shown:—

Period	Face	Commons
	£ s. d.	£ s.
1st April, 1961, to 2nd May, 1961 .....	20 1 0	15 2 0
3rd May, 1961, to 1st August, 1961 .....	20 2 0	15 3 0
2nd August, 1961 to 31st October, 1961	20 3 6	15 4 6
1st November, 1961 to 6th February, 1962	20 3 0	15 4 0
7th February, 1962 to 31st March, 1962 ...	20 2 6	15 3 6

The above prices were £1 17s. 0d. per 1,000 for face bricks and 12s. 0d. for common bricks below the trade rate and represented a saving of £48,500 to the Brickworks' customers. The rates undoubtedly have an effect on brick prices generally.

Capital assets as at 31st March, 1962, totalled £759,128 financed as to £504,720 from loan funds and as to £254,408 from Working Account. During the year £63,537 was expended from Working Account funds for capital works and £20,018 for plant, tools and office equipment. Repayments of £5,028 reduced the Capital Debt account to £379,720.

The personnel of the State Brickworks at 31st March, 1962, comprised 40 Public Service Board appointees and 400 Ministerial employees. There were also fifty contract brick carters and six hired vehicle drivers.

The attached graphs show:—

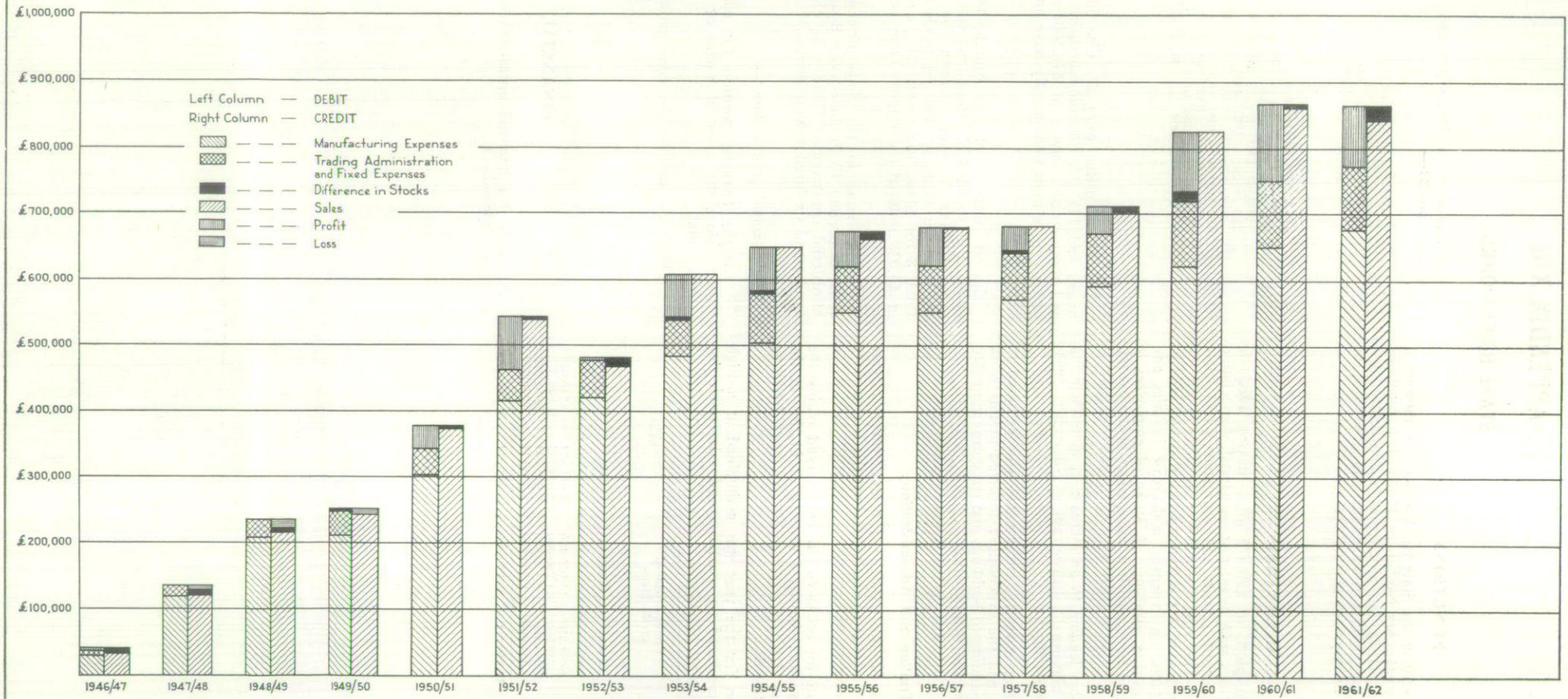
- the financial position for each year of operation since the re-establishment of the State Brickworks, and
- bricks sold for the same period.

#### FINANCIAL

Details of the financial operations of the Undertaking are shown in Appendix I.

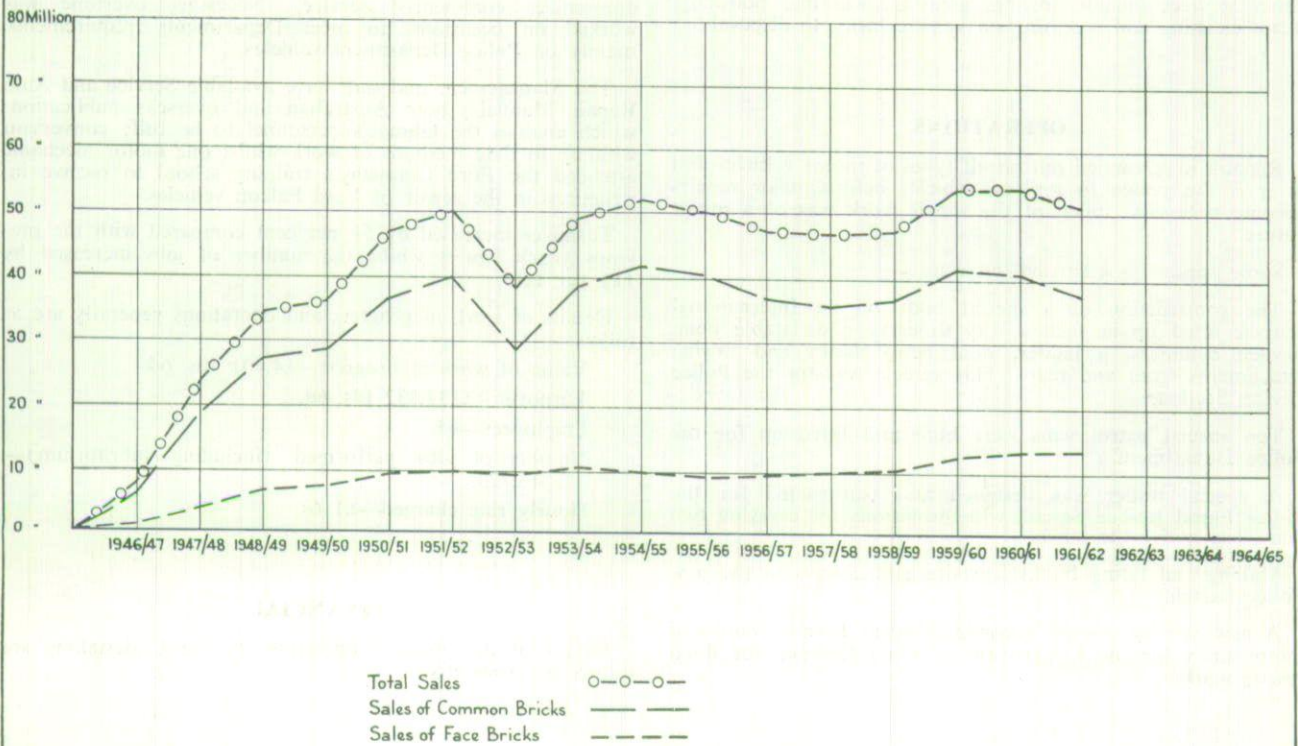


# STATE BRICKWORKS YEARLY FINANCIAL CHART





# APPENDIX VII GOVERNMENT HOUSE CHART STATE BRICKWORKSBRICK SALES CHART





## APPENDIX XIV

### GOVERNMENT MOTOR GARAGE

#### FUNCTIONS

The Government Motor Garage was established for the servicing, maintenance and repair of motor vehicles used by State Government Departments.

The undertaking is divided into three workshop sections, viz.:—

- (1) repair to motor cars and trucks;
- (2) repairs to motor cycles and lawn mowers; and
- (3) repairs to motor vehicle bodies and bodybuilding.

A comprehensive range of spare parts is carried in stock.

Services provided include major and minor repairs to almost every type of motor vehicle such as trucks, vans, cars, cycles and caravans. Lawn mowers, cultivators, tractors and launch engines are reconditioned and the conversion of utilities to small police patrol vans is carried out. Vehicles damaged in accidents (smash work) are repaired including privately owned vehicles insured with the Government Insurance Office. Other services include towing, greasing, washing, polishing, steam cleaning and reporting on vehicles prior to disposal.

#### OPERATIONS

Repairs were carried out on all types of motor vehicles and as it is the policy to replace vehicles before major repairs become necessary, much of the repair work was of a minor nature.

Some special jobs carried out were:—

The construction of a special body on an International chassis, fitted up in such a way to carry a deflatable boat, oxygen cylinders, a ladder, dual petrol tanks and towing attachments front and rear. This vehicle was for the Police Diving Section.

Ten special patrol vans were built and fitted up for the Police Department.

A special trailer was designed and constructed for the Police Flood Rescue Squad, with provisions for carrying two boats one above the other.

Making and fitting bunks, curtains and carpets to the new Police launch.

A new activity was the reconditioning of Johnson outboard motor units for the Department of Civil Defence for flood rescue work.

#### General

The Garage's equipment is in good condition, new machines are constantly being investigated with a view to improving our methods of production. Owing to the installation of a new brake shoe grinder and brake drum lathe and redesigning of the brake repair section, brake relining is now more efficient.

New equipment purchased during the year was:—

- Brake drum lathe and attachments.
- Brake shoe grinder and attachments.
- Cesco headlighter tester.
- Electric metal cutter.
- Pneumatic windscreen sealing gun.
- Infra-red ray drying lamps for the paint shop.

Thirteen motor mechanics and five panel beaters resigned whilst two apprentices completed their indentures and six new apprentices commenced service. Necessary overtime was worked on occasions, to meet Departments' requirements, mainly on Police Department vehicles.

The Management and staff have available Service and Auto Repair Manuals, both Australian and overseas publications which enables the Garage's personnel to be fully conversant with up to date methods of work whilst one motor mechanic attended the Ford Company's training school to receive instructions in the repair of Ford Falcon vehicles.

Turnover increased by 5½ per cent compared with the previous year's figures whilst the number of jobs increased by 11½ per cent.

Details of work in progress and operations generally are as follows:—

Value of work in progress—£4,401 10s. 6d.

Turnover—£137,332 14s. 6d.

Employees—65.

Number of jobs performed (including lubratorium)—13,723.

Hourly rate charged—£1 6s.

#### FINANCIAL

Details of the financial operations of the Undertaking are shown in Appendix I.



## APPENDIX XV

### PERSONNEL MANAGEMENT

#### FUNCTIONS

The personnel functions of the Department comprise:—

The induction of new officers and employees; the planning and organisation of training programmes; counselling; dissemination of and advising on current personnel practice; liaison with the Public Service Board on personnel and employment matters; staff housing; staff welfare.

#### OPERATIONS

##### Induction

258 new officers and employees under the Public Service Act commenced duty in the Department during the year comprising 215 in Head Office and 43 in country offices. The total comprised 58 professional officers, 85 clerical, 43 general division, 51 apprentices and 21 University trainees. The induction also included 16 professional officers recruited from overseas who were met and welcomed and for whom accommodation arrangements were made.

##### Training

(a) The Higher Management Group met on seven occasions during the year and activities consisted of a film screening and discussions on Communications, addresses on Industrial Relations, Leadership, and Public Relations.

One member of the group attended the Australian Administrative Staff College. Two members attended the Residential Administrative Staff Conference and one other member a special course in Civil Engineering Construction Management arranged by the Institute of Administration at the University of New South Wales whilst sixteen senior officers from the professional and clerical divisions attended a special course in "Management Principles and Techniques" at the Sydney Technical College.

(b) Apprenticeship Training Schemes—211 indentured apprentices are now employed in the various trades in metropolitan and country areas and the practice of commenting on term reports was continued. The special pilot study apprentices training scheme in fitting and machining at Leichhardt Depot has continued to operate smoothly.

(c) Rotation of Assignments—Planned rotation of assignments for both permanent and temporary clerical officers was continued during the year. This is now an accepted part of the Department's training procedure and is proving a successful technique for increasing on-the-job efficiency.

(d) Colombo Plan Students—Training facilities were provided for eight Fellows visiting Australia under the Colombo Plan. The Water Supply and Sewerage branch, Plant branch, Testing branch and Leichhardt Depot co-operated in the training.

(e) University Trainees—69 sponsored trainees are now attending full-time courses at the Universities. Numbers are as follows:—

##### Sydney University—

- 13 Architectural.
- 21 Engineering.
- 3 Science.

##### University of New South Wales—

- 10 Architectural.
- 17 Engineering.
- 5 Surveying.

Eight trainees graduated at the 1961 examinations.

(f) Part-time Courses—A total number of 153 officers of the Department are undertaking part-time courses of study, of whom 74 have been granted study leave concessions as laid down by the Public Service Board. Two cadets were awarded free training by the Board in part-time courses in Engineering and scholarships were awarded to three other officers. Free training in Explosives and Shotfiring through the Railways Institute was again provided for officers and employees, both in the metropolitan and country districts.

#### Exit Interviews

92 Officers of the professional and clerical division resigned during the year.

#### Housing Accommodation

Through close liaison with the Government Real Estate Office, houses were allocated to thirteen unfavourably housed officers in country towns and one in the metropolitan area.

#### Welfare and Staff Amenities

The various welfare and staff activities, which now number 19, promoted by the Department's Staff Association have been well patronised. The theatre was used regularly during lunch hours for film screenings, orchestral recitals, choral recitals, and other recreational activities. The Speakers' Club, Bible Study Group, and the Photographic Society held regular meetings, the various sporting clubs arranged weekend activities and the Staff Association library was well patronised.

The Co-operative Credit Union has continued to progress. Membership now totals 507 and total assets exceed £60,000.

The departmental staff canteen continues to operate as a valuable staff amenity. The general appearance of the premises was improved considerably as a result of painting, repairs, and structural alterations, which were carried out during the year. New furniture was also provided.



For Year ended 30th June, 1962