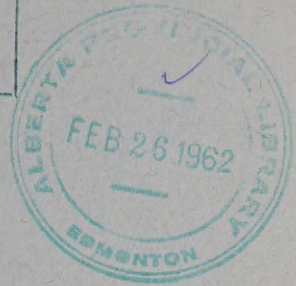


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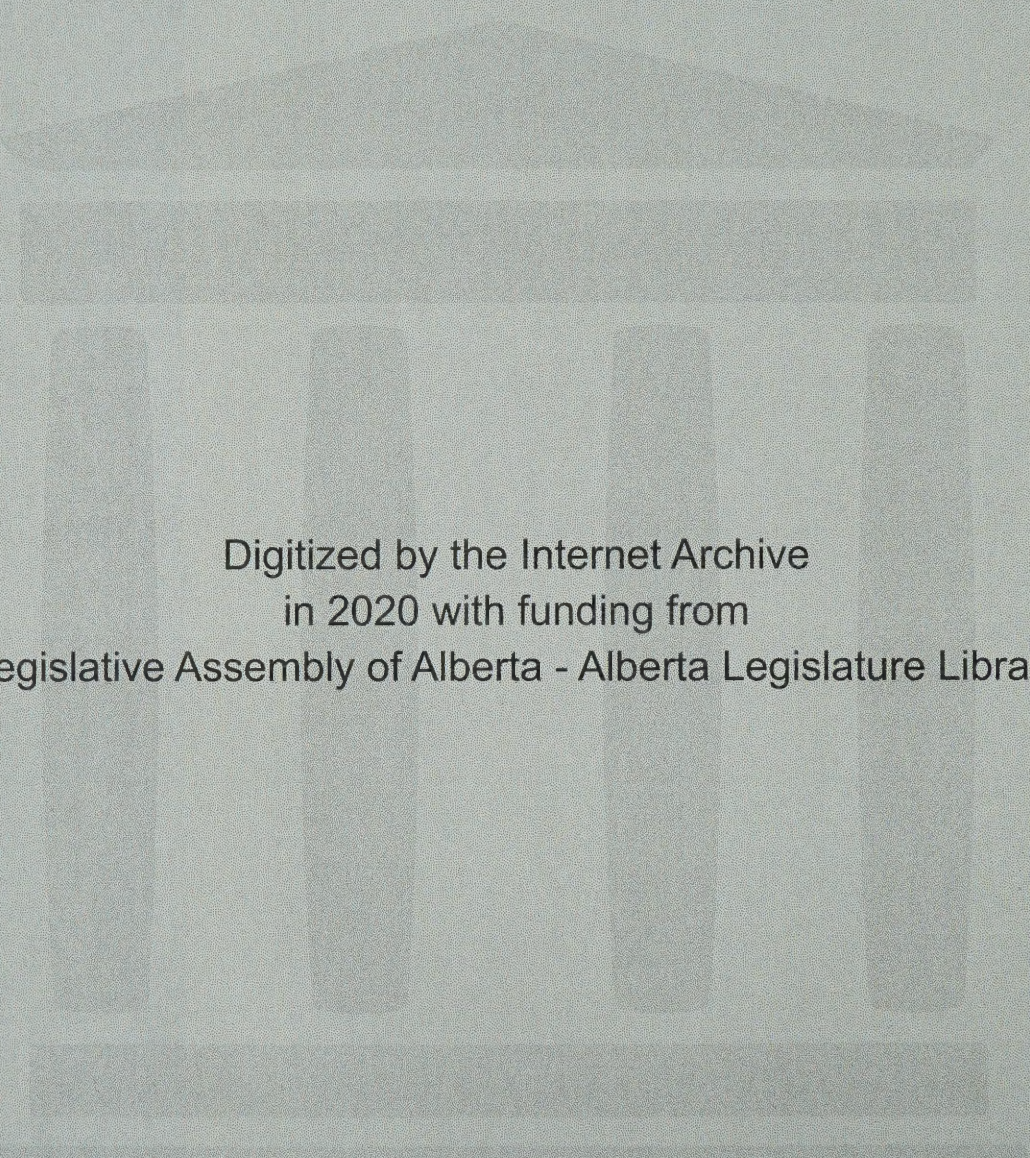
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ANNUAL REPORT
OF THE
Department of Public Works
OF THE
PROVINCE OF ALBERTA
1960-61

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON, ALBERTA
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1962



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EDMONTON, January 3, 1962

To His Honour,
J. PERCY PAGE,
Lieutenant Governor of the
Province of Alberta.

Sir:

The undersigned has the honour to submit herewith the Report of the Department of Public Works for the year ended March 31, 1961.

Respectfully submitted,
JAMES HARTLEY,
Minister of Public Works.

DEPARTMENT OF PUBLIC WORKS

Edmonton, Alberta,

January 3rd, 1962.

TO:

The Honourable James Hartley,
Minister,
Department of Public Works:

Sir:

I have the honour to submit herewith a report covering the activities of the Department of Public Works for the fiscal year ending March 31, 1961.

During this past year the Department undertook an extensive programme of construction and maintenance, the details of which are contained in this report. As in other years, a number of photographs have been included to illustrate some of the more distinctive buildings that were under construction or completed in 1960-61.

The Mechanical Branch, which is responsible for the operation and maintenance of the power and heating plant steam services at sixteen Provincial Institutions, continued this year to expand its services.

In addition to the projects under the attached report, the Architectural Branch of this Department continued to provide its services by way of detailed planning and design of a large volume of work for the Alberta Government Telephones. The Department also continued to design and construct facilities for the Alberta Liquor Control Board throughout the province.

Respectfully submitted,

ARTHUR ARNOLD,

Deputy Minister of Public Works.

THE FUNCTION OF THE DEPARTMENT OF PUBLIC WORKS

The Department of Public Works is required to provide suitable accommodation, the necessary furnishing and equipment to all Departments of the Government so that the Departments may carry out the various functions required of them. Such accommodation is provided in buildings rented, purchased or constructed by the Department of Public Works.

The Department is responsible for the construction of all Provincial Government Buildings.

The chief officials of the Department are:

Minister of Public Works	Hon. J. Hartley
Deputy Minister of Public Works ..	Mr. A. Arnold
Assistant Deputy Minister of Public Works (Administration)	Mr. S. E. Kenworthy
Chief Architect	Mr. H. A. Henderson
Chief Engineer	Mr. J. Hunt
Mechanical Superintendent	Mr. F. E. Coe
Administrative Accountant	Mr. K. C. Thomas
Supervisor of Maintenance	Mr. H. Brettelle
Supervisor of Construction	Mr. H. Kinsey
Co-ordinator of Works and Maintenance	Mr. V. C. Heim

The Department is also responsible for the servicing and maintenance of all Provincial Government owned buildings, with the exception of various self-contained institutions, such as the Provincial Gaols, the Schools of Agriculture, and the University of Alberta. The maintenance and servicing of these buildings needs the services of a large group of men of assorted technical skills. Carpenters, plumbers, electricians and other tradesmen keep these buildings in good repair. Gardeners maintain the surrounding grounds which are quite extensive at some points, namely, the Provincial Mental Institute, Oliver and the Institute of Technology and Art, Calgary. Caretakers keep the buildings clean, men operate the elevators, and watchmen guard the buildings at night.

The extensive programme of construction which we are presently undertaking requires the services of a large staff of architects, engineers, draughtsmen, surveyors and building inspectors, who design and plan the buildings and supervise the work of the contractors. Some urgent and also minor construction work is undertaken by our own forces. This requires the Depart-

ment to maintain a staff of tradesmen which is augmented by temporary staff as the requirements of the work necessitates.

The Department operates various trade shops where furniture and equipment such as laboratory benches, etc., are made.

A group of engineers, firemen and tradesmen working under the direction of the Mechanical Superintendent is responsible for the supply of electrical power, heat, water and sewage disposal at the fourteen largest institutions. These men also design, install and maintain the special equipment necessary.

At these institutions, farm machinery, milking, canning, laundry, kitchen and fire fighting equipment are also maintained and kept in good repair by the staff. The utilities and maintenance servicing of a large institution is comparable to the servicing of a town of two to three thousand people.

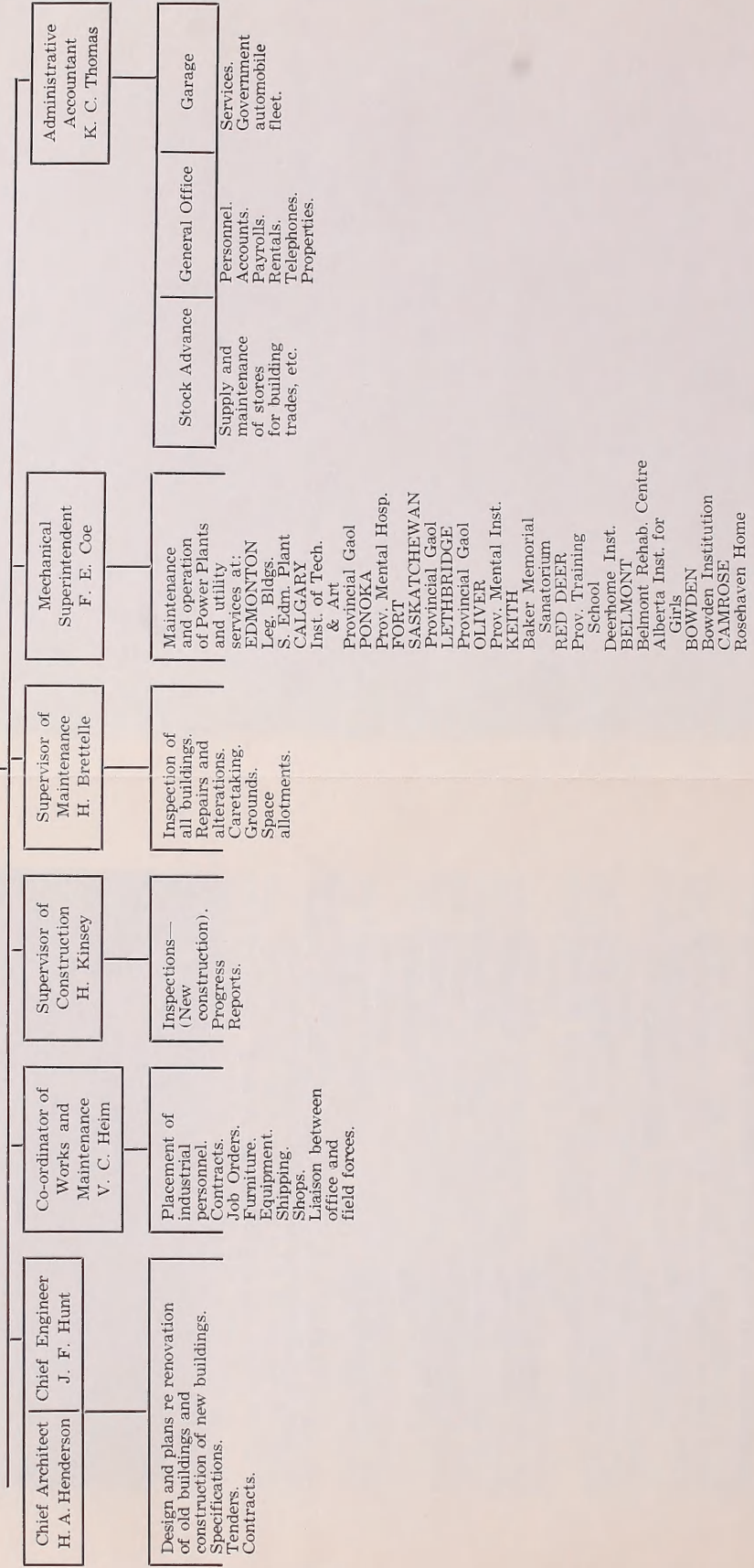
The Department also has a number of other functions, including the arrangements for the installation and rental of telephones, and when required the buying and leasing of lands for building sites.

A large modern garage located on the ground floor of the Public Works Building No. 2 in Edmonton services the automobile fleet of the Government.

MINISTER
Hon. James Hartley

DEPUTY MINISTER
Arthur Arnold

ASSISTANT DEPUTY MINISTER (Administration)
& PERSONNEL OFFICER
S. E. Kenworthy





Home for the Aged — Ponoka

The programme for constructing Homes for the Aged was continued this year with thirty-one Homes completed at the following locations:

Berwyn	Wetaskiwin
Bow Island	Brooks
Drumheller	Edson
Innisfail	Fort Macleod
Ponoka	High Prairie
Westlock	Lacombe
Athabasca	Mayerthorpe
Bonnyville	Medicine Hat
Camrose	Olds
Cardston	Pincher Creek
High River	Raymond
Lethbridge	Stettler
Rocky Mountain House	Vermilion
Spirit River	St. Paul
Stony Plain	Viking
Three Hills	

Each Home is designed to accommodate fifty active elderly people.

The Government bears the total cost of construction and furnishing, including furniture, bedding, kitchen and dining room

wares and equipment, towels, janitor equipment; everything necessary for the proper operation of these Homes.

The Homes are constructed on acceptable lands provided by the municipalities in the areas where they are located. The Homes when completed were turned over to the municipalities which will maintain and manage the Homes.

The basic idea of the final plan is the result of a province-wide competition which invited all residents of Alberta to submit sketch plans. The accepted sketch plan featured a "U" shaped single storey structure with an enclosed court yard between the arms of the "U". The bottom of the "U" contains:

1. A large visitors' room, where residents meet visiting friends and relatives, and a large library. Both of these rooms are located at either side of the main entrance, well lighted with full height windows.

2. A large and bright lounge facing west or south-west at most localities. This room is furnished with sofas and chairs arranged in small groups where the occupants may gather and entertain themselves or watch the burning logs in the large fireplace.

3. The room adjacent to the lounge is the dining room where the guests will be served by the staff. The dining room and lounge are divided by a 20 feet wide by 61 feet long hall which can be used for concerts, stage plays, etc.

4. The kitchen is completely equipped for every need. It contains a large walk-in cooler, a pump operated stainless steel dish washing unit, and a gas range. The kitchen is located along the service corridor with direct entrance from outside.

The legs of the "U" contain the single and double bedrooms. There are nine double and seven single bedrooms in each wing. Each bedroom has a private washroom equipped with washbasin, toilet and medicine cabinet. There is also a bathroom, shower room, janitor's room, and a day room opening into the courtyard in each wing. Total square footage of the main floor is approximately 13,000.

The basement is of reinforced concrete wall and wood joists except over the boiler room and locker room which is reinforced concrete slab. Walls are wood and concrete blocks. The floors are scaled concrete, slab reinforced.

Included are a locker room with fifty-one large lockers where personal belongings can be stored and a storage room which can be converted into a workshop eventually. The total area of the basement is 1,900 square feet.

The construction of the building is built-over crawl space. The roof is a low pitched build-up roof on 2 inches thick insulation deck. The interior finish of walls and ceiling is gypsum lath and plaster. Acoustic tile fields cover the ceiling in the dining

room and lounge. Another feature of the dining room lounge, occupational therapy room, library and visitors' room, and kitchen is that no ceiling joists have been installed, thus creating a feeling of spaciousness when entering these rooms. Floor tile and sheet linoleum have been used throughout the entire building except in shower room where ceramic tile was installed. In colouring of rooms, pastel colours have been selected for quiet appearance. The same principle was applied when selecting drapes and carpets for the home.

The exterior finish is predominantly stucco. In selecting a stucco finish, economy and ease of maintenance were the deciding factors since some of the homes, especially in rural areas, may lack skilled labour for repair and replacement of some other type of finish. Cedar siding has also been installed, mainly at main entrance and on exterior walls of lounge, dining room and bedroom wings.

The courtyard is enclosed by a fence providing complete privacy for residents. It is completely landscaped, lawn surfaces extending the full length and width. Concrete slab walks connect the entrances, the day rooms, the occupational therapy room, and the gravelled patios. All around the courtyard perennial plants and shrubs will be planted to provide a homelike and quiet atmosphere.

Mechanical services for the homes include a hot water heating system, a ventilation system, an exhaust system from certain areas and all plumbing services.

In all the bedrooms heating is from hot water radiation fin vectors, pneumatically controlled by thermostats.

In the lounge, the library, the office, the waiting room and the corridors, a fin vector radiation system is used with supply air brought from the ventilation unit.

Exhaust from the kitchen, washrooms and laundry room is via separate multi-speed exhaust fans, some automatically and some manually controlled.

Complete self-contained refrigeration and freezer units are utilized in each home. Each home contains a large kitchen, completely equipped.

Natural gas or propane gas is utilized for all gas burning equipment which includes the boiler, the hot water heating tank, the kitchen stove and oven and miscellaneous equipment.

All controls such as valves, thermostats, ventilation machine controls, boiler controls and hot water heating system are controlled by automatic pneumatic control system with manual controls incorporated.

Hot water for domestic use is obtained from a hot water heater supplying hot water to all washrooms and the kitchen.

BARRHEAD

Tenders were called and construction commenced on the Provincial Building at this point in April 1960.

The building houses a branch of the Provincial Treasury and a Liquor Store on the main floor. On the second floor is a court room and its supporting offices. Office space is provided on the second floor for the following Departments: Agriculture, Lands and Forests and Public Welfare. The full basement houses a vault, staff rooms and washrooms, and storage for the Provincial Treasury Branch; the remainder of the basement being devoted to mechanical equipment and general storage.

The foundations are reinforced concrete pad footings, combined footings on property line next to existing building. Framing is reinforced concrete with exposed columns. Floors and roof construction is of a steel formed ribbed pan system. Exterior walls are brick faced with concrete block backup. Stairwell walls are reinforced concrete as are the stairs themselves. Exterior partitions are basically block with some studwalls. The heating system is hot water radiation type with space heaters at entrances.

It is anticipated that the building will be completed and ready for occupancy in the early spring of 1961.

BEISEKER

Grading was completed at the Weigh Scale at this point.

BELMONT

The Department completed construction of a gymnasium at the Belmont Rehabilitation Centre for men. The gymnasium is connected via tunnel with the main building and is constructed of precast concrete roof beams and cast in place columns and concrete block walls.

At the Alberta Institution for Girls, which is located on a five acre site adjacent to the Belmont Rehabilitation Centre, a skating rink and dressing room were constructed. Additional fencing was installed to complete the layout of the site.

BLACK DIAMOND

At the site of the Oil Conservation Board the Department completed the construction of fences, sidewalks and a parking area as well as the landscaping of the grounds.

BONNYVILLE

Plans were completed and a contract awarded in November 1960 for an addition to the existing Provincial Building at this point. The addition is to house the Department of Municipal Affairs, Welfare, Agriculture, Game Department, Inspection Services, Court Room and Judges' Room, Juvenile Offenders, Solicitors. It is constructed on slab on grade, concrete block

walls, glue-lam beams with wood joist framing, stud partitions and glazed wood screens. Existing building housed the Liquor Store, Treasury Branch, Provincial Offices, boiler room and lavatories and the addition will contain a boiler room, lavatories and electrical rooms.

The existing building front will be remodelled and the general exterior re-stuccoed. A new vault will be constructed in the Treasury Branch and the Manager's office will be relocated, along with the alterations of the counter and tellers' cages. New shelving and counters were included in the Liquor Store.

The back area will be regraded and made into a parking area. The front of the new addition will be set back from the front of the existing building to provide adequate space for a flag pole and a memorial.

BOWDEN

Work was completed on the first phase of a new storm sewer system at the Bowden Institution. This work was necessary to replace wooden service pipes which had been installed during World War II and had deteriorated to the point where they were unserviceable. This area of the Province experiences a particularly high water table which tends to aggravate normal drainage problems. Plans are being made for the completion of the storm sewer system during the summer of 1961.

During the past year an intensive programme of well drilling and testing has resulted in the development of an assured water supply. This area is noted for the absence of reliable ground water sources and the success of water well drilling operations depends upon whether a local lense of gravel and sand can be found.

Following the development of the new well, construction began on an iron removal plant and water storage system. Completion of the plant will permit the delivery of water which is free from excessive amounts of iron and manganese, both of which have undesirable effects for the domestic consumer.

Construction of a water storage reservoir is also planned for late 1961. Completion of this reservoir will provide badly needed fire protection for the institution as well as assuring the satisfaction of the normal domestic demand.

The Department commenced construction of a Maintenance Building and Fire Hall in late 1960. This building will provide badly needed space for the operations of the Department's maintenance staff.

A skating rink was also constructed to provide facilities for the juvenile section.

BROOKS

No major construction was undertaken at the Brooks Demonstration Farm. The problems connected with sewage disposal appear to be solved now that the septic tank is operating properly.

CALGARY

A contract was let and construction commenced on a new sewage disposal system for the Baker Memorial Sanatorium. In recent years the existing treatment plant had become increasingly overloaded. With the installation of a sewerage system in the Town of Bowness immediately across the Bow River, it was possible to design a disposal system which pumps the sewage across the river. It is expected that the new system will go into operation during the summer of 1961 thereby helping to clean up the Bow River.

Construction was completed on two weigh scales at Calgary East (Strathmore) and Calgary West (Bowness).

During the past year a number of changes were made in the layout of roadways at the Southern Alberta Jubilee Auditorium. The result has seen a greatly increased efficiency in traffic control. Additional flood lighting was also provided for the parking area.

The Department continued an extensive programme of landscaping and parking lot construction at the site of the Southern Alberta Institute of Technology. Also included was the grading and construction of a playing field. The street lighting programme also continued.

In preparation for construction of the Home for the Aged, Bow Valley, the Department installed the necessary sewer and water systems and co-operated with the City of Calgary in the grading of the site.

Work continued at the Calgary Provincial Gaol with the initial phase of construction being completed. The description of Phase II of this institution which was begun in the year 1959 is as follows: Work has started on the second phase to construct a maximum security cell block and a medium security dormitory which are to supplement the existing minimum security institution. When completed, this addition will provide the following accommodation: 92 inmates in individual cells in a cell block wing with three floors, 84 inmates in dormitories of 14 in a dormitory wing. In addition to sleeping accommodation, a gymnasium and a library, together with a laundry and power plant, are to complete the whole institution. Some changes are anticipated in the existing administration section to take care of the more than doubled population of the finished project. The new cell block, gymnasium and dormitory, together with the library and storage wing, form an "E" shaped plan to complement the "E" layout of the existing building. The two buildings are to be connected with the centrally located power plant, laundry and new reception area, all arranged in a straight wing at the east. The construction of this addition is in strict accordance with existing standards established in Phase I. The maximum security portion, the cell block, is poured-in place reinforced concrete construction throughout with the exception of exterior walls where precast concrete

“sandwich” panels will be used in keeping with the balance of the building. All windows, cell fronts and the majority of doors are that of security type. All units, like the cell block and the dormitory, have their own enclosed exercise yards immediately adjoining, providing a degree of separation of different groups in outside recreation. These yards are to be paved and are to have high concrete walls between buildings. During the past year construction was completed on the new water supply system. This water supply system provides for the domestic and fire supply to the Gaol as well as to the Baker Memorial Sanatorium. The source of supply is the Bow River at a point near the western extremity of the Sanatorium. Water is drawn from an infiltration gallery beneath the river bed and pumped to a rapid sand treatment plant on the river bank. This plant in turn supplies the demands of both institutions by means of a dual-purpose high pressure distribution system. The Department also completed the construction of new roads and walks as well as an extensive landscaping programme.

A major project in the Calgary area is the new Court House. This building will fill the pressing need for the Southern area of the Province and is designed to meet the needs of this area for many years to come. This new Court House, which is scheduled for completion in July 1962, is a steel framed building with reinforced concrete sub-structure and prestressed concrete floors. The building is faced on the exterior with granite and marble and has extensive panelling of exotic woods throughout the interior. The quality of materials generally is in keeping with the dignity of the function of the building. The first contract for the foundations and structural steel was commenced in April 1959. The building will contain a total of 135,750 square feet and as well as accommodation for an R.C.M.P. Court, Citizenship Court and a Small Debts Court, houses twelve main courtrooms with their ancillary accommodation. Also provided will be Judges' Chambers, Judges' Private Rooms and Library, Lawyers' Library, offices for the Sheriff and the Clerk of the Court and their staff, and accommodation for Court Reporters and for Adult and Juvenile Probation Services. A cafeteria will also be provided. Completion and occupation of the building is anticipated well ahead of the scheduled date of completion in July 1962.

At the University of Alberta, Calgary, the Arts and Education Building and the Science and Engineering Building were completed in the early Fall of 1960. They were formally handed over to the University on October 28th, 1960.

Construction was started on the third major building at the University of Alberta at Calgary. This is the Physical Education Building and covers an area of 52,000 square feet. It contains both a men's and women's gymnasium as well as ample facilities for minor sports such as wrestling, tumbling, as well as a remedial gymnasium. The structure of the building is of precast concrete, using precast concrete beams over the major areas. The exterior of the building is of precast terrazzo panelling and

natural stone facing. This building is a pleasant addition to the nucleus of the campus now in existence.

Due to an expansion of pumping facilities by the City of Calgary, the construction of a water booster station for the University of Alberta site, Calgary, was rendered unnecessary. The underground electrical system was extended to accommodate the new Gymnasium Building. Grading, curbing and paving continued as well as an extensive landscaping programme. The City of Calgary completed the construction of University Drive as part of a co-operative effort to provide main arteries to the site.

CAMROSE

A contract was awarded in April, 1960 for a new Provincial Building at Camrose. This building houses the Treasury Branch, the Court Room and Attendants' Offices for the Departments of Agriculture, Highways, Labour and Lands and Forests. The building has a concrete foundation and is of frame construction. It has a concrete ribbed slab floor system. The exterior wall is brick faced with tile back-up. The roof is flat and of built-up construction. The front elevation has some precast facing. Interior partitions are of tile or studwall construction. Heating is by hot water radiation. It is expected that the building will be completed in April, 1961.

CANMORE

The Department completed a fencing programme at the Ranger Station at this point.

A four-stall Snow Plow Shed was constructed for the Department of Highways.

CARDSTON

An Oil Storage Shed was constructed on the site of the Snow Plow Shed at this point.

CLARESHOLM

At the Provincial Auxiliary Hospital, construction was completed on the new Kitchen, Laundry and Power House Building in January 1961.

A second dormitory, similar to the one completed in 1959, was constructed this year. It contained approximately 110 beds. The one storey building was constructed in frame and stucco and provides day rooms, an infirmary and kitchen, and dining room facilities.

A third new patient building, which is an infirmary, was constructed at Claresholm this year. This building, although similar in appearance to the second dormitory, is an infirmary building for the patients. This building is also of frame construction with a stucco and brick veneer exterior.

COLD LAKE

Construction was commenced on an office and warehouse for the Fisheries Branch.

COLEMAN

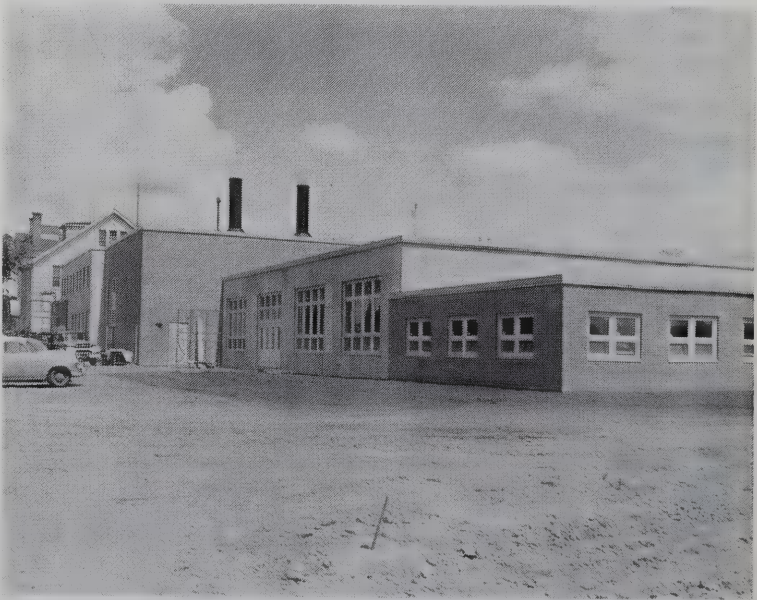
An Oil Storage Shed was constructed on the site of the Snow Plow Shed at this point.

COUTTS

Grading was completed preparatory to paving the Weigh Scale approaches at this point.



The Provincial Building in Barrhead shown previous to its occupancy in early spring of 1961.



The Services Building at the Provincial Auxiliary Hospital, Claresholm, showing the kitchen, laundry and power house.



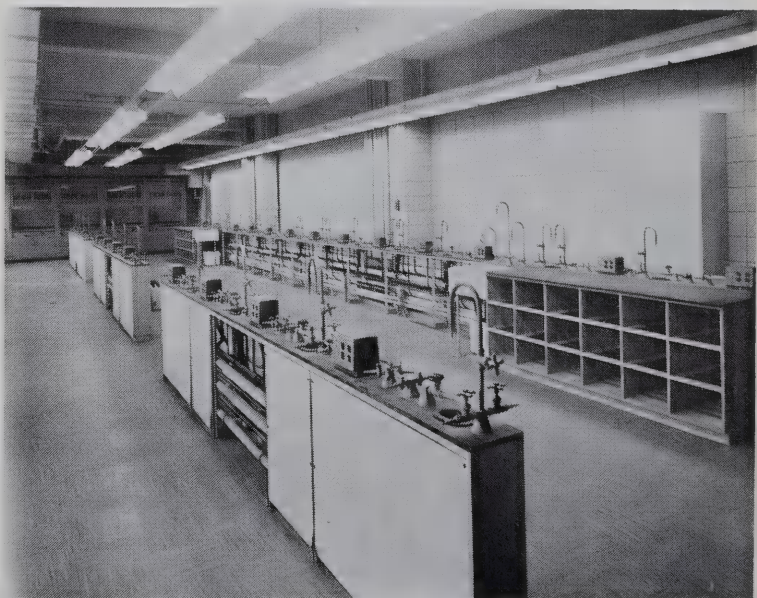
Exterior of the Court House, Calgary.



Clinical Services Building at the University of Alberta Hospital in Edmonton showing the emergency entrance.



Physics, Chemistry, and Mathematics Building shown from the south at the University of Alberta in Edmonton.



A chemistry laboratory in the Chemistry Wing of the above Building.

EDMONTON

The Department is proceeding with the renovation of the former Sun Building to provide accommodation for the Department of Municipal Affairs. The building has concrete foundations and heavy timber frame and floors. The exterior wall is of solid brick and the roof is of built-up construction. The interior partitions are studwall and plaster board. Heating is by hot water radiation.

The Department commenced construction on a new addition to the Single Men's Hostel in September 1960. The building consists of a basement, main and second floor. The basement has a corridor, four wards, mechanical room, two washrooms, linen room, storage, two stairwells, shower room and janitor room. The main floor has an entrance, corridor, six wards, two washrooms, linen room, two stairwells, shower room and janitor room. The second floor has a corridor, six wards, two washrooms, linen room, two stairwells, staff room, shower room and janitor room. The basement floor and walls are of concrete. Outside walls are of dual type block, brick veneer and terrazzo panels. Inside walls, floors and roof slab are of dual type blocks and the walls and ceilings are plastered. Terrazzo is used in the corridor, washrooms, stairs, shower room, entrance and janitor room. All other rooms have lino floor finish.

At the University of Alberta, construction commenced in October 1960, on a new President's Residence which is being built on Saskatchewan Drive. The new Residence is a two storey building with concrete basement and of frame construction with face brick veneer and horizontal cedar siding. Ceramic tile has been provided on the washroom walls. Living areas have hardwood floors and vinyl asbestos tile is used in utility areas. Slate has been used on the floors of the hallway and the sun room. A large Norwegian marble fireplace occupies the living room and there is a brick fireplace in the recreation room and basement. The building also incorporates a double garage. It is expected construction will be completed in the summer of 1961.

The Physical Education Building was completed in March 1960 and was officially opened and handed over to the University on May 17th, 1960. The accommodation and details of construction of this large project were described in the previous report.

At the new Physics-Chemistry-Mathematics Building, construction of the adjoining roadways and landscaped areas was completed. The building itself was turned over to the University in the Fall of 1960 in some parts and will be completed in its entirety by May 1961. The accommodation and details of construction of this project are as described in last year's report.

This year saw the completion of the addition to the Engineering Building which was described in last year's report.

At the University Hospital work was completed on the Clinical Services Addition. Last year's report provided a complete description of the facilities which were provided.

Plans are proceeding for the renovation of the existing 1912 and 1929 buildings of the Hospital.

A contract was awarded in May, 1960 for a new Laundry and Maintenance Building to serve the University Hospital. This building was planned to accommodate a number of varied functions. These were as follows: laundry and laundry storage, carpenters' shop, morgue, paint shop, gardeners' shop, lunchroom. These functions work independently of each other and were grouped in a manner that they do not interfere. A steel structural system was used above the first floor level to allow the large spans in the laundry; the basement and the first floor structure is reinforced concrete to accommodate trenches and drainage in the laundry area. Material finishes were also chosen to suit the condition of each area, e.g., glazed concrete block in the laundry and morgue and exposed concrete block in the storage and work shops. For heating, steam from the existing power plant was used. Extra steam piping was provided for future connections around this area. Mechanical ventilation and cooling were also provided to maintain proper working conditions in the various portions of the building.

EDSON

Construction continued on a new Provincial Building on the site of the present Provincial Building. Construction is such that all departments using the old building will be able to carry on with their work as the new building rises around them. This has created a major construction problem but, because of the desirability of the site, it was felt that this was the proper location in which to erect a new and more efficient building. The construction is of steel framed structure, 130 feet by 100 feet of concrete block masonry exterior and interior walls and concrete floor and roof slabs supported by short span steel joists. The front or west elevation has brick veneer panels between windows with columns and beams faced with a unique new material known as Marblex. This is a precast type of material which gives the effect of granite and is manufactured in Edmonton. Windows are of wood and double hung. The three separate entrances are aluminum. This building initially has a basement floor, first and second floors with provision made for a future third floor. Space is provided for a Treasury Branch and Liquor Store, the Department of Highways Maintenance Branch and Driver Examination on the first floor. The Department of Lands and Forests, Forestry Branch and Fish and Wildlife Branch, also the Attorney General's Department, with space for a Court Room, Magistrate's Office and Judge's Office, are all located on the second floor. In addition to the above, there are two locations designated unassigned office space, one on the basement floor and the other on the first floor. On the basement floor is a meeting room for the use of various associations or societies, etc. The Treasury Branch and Liquor Store each have their own basement floor accommodation. Completion is planned for the summer of 1961.

The department constructed a Mechanics' and Radio Technicians' Repair Room for the Forestry Protection Branch.

FORT SASKATCHEWAN

Construction was begun on a new Administration Building at the Provincial Gaol. The site, in front of an existing building, dictated the shape of the new building. This is in the form of a crescent with the curved ends allowing the maximum of light into the existing building. The main floor contains administrative offices and visitors areas while the second floor contains medical facilities for the inmates, including hospital and dental facilities as well as staff living quarters. The basement contains storage and recreational facilities as well as punishment cells for the inmates. Construction is of reinforced concrete with exterior walls of block and brick veneer.

GRANDE PRAIRIE

The department commenced construction of a Four Stall Garage and Warehouse for the Department of Lands and Forests at this point.

HINTON

A new Forestry Ranger School, as described in last year's report, was completed in June, 1960. Further improvements to the access road and general landscaping of the area were made.

LAC LA BICHE

Construction was commenced in December, 1960 on a Repair and Storage Building and a Four Stall Garage for the Department of Lands and Forests at this point. It is expected that in the Spring of 1961 services can be installed and the site made ready for use.

LETHBRIDGE

Plans for complete renovation to the Administration Building were completed in 1959. Government departments occupying space in this building include the following: Highways (Motor Vehicles), Health, Labour, Welfare, Provincial Secretary, Municipal Affairs, Mines and Minerals, Agriculture, Lands and Forests. The structure, consisting of a full basement and four floors, contains 58,480 square feet and 795,300 cubic feet. The building has concrete foundations and heavy timber frame and floors. The exterior walls are of solid brick and the roof is of built-up construction. The interior partitions are of studwall and plaster board. Heating is by hot water radiation.

An Oil Storage Shed was constructed on the site of the Snow Plow Shed at this point.

OLDS

A new Dairy Barn is under construction at the School of Agriculture. This will also contain a livestock classroom for the students. This steel clad, arch frame structure contains 7,500

square feet and is the first of its kind in Alberta for teaching modern methods of milk collection and processing as well as stock care and housing. It also contains facilities for classroom demonstration and exhibition to replace its counterpart destroyed by fire in February, 1960.

A contract was awarded in February, 1961 for a new Plant Science Building at the School of Agriculture. This building is a school designed for agricultural students. The building is to be used for the teaching of pure sciences, chemistry and physics as well as agricultural studies of irrigation, field crops, horticulture and botany. Greenhouses, although not included in this construction stage, have been planned for. The building, as designed, suited the site and allowed for preservation of much of the existing tree areas.

OLIVER

The department constructed a Heated Storage Building as an addition to the Maintenance Shops at the Provincial Mental Institute.

The paving and landscaping programme also continued.

PONOKA

At the Provincial Mental Hospital the department installed water and sewer systems to accommodate the new Administration and Reception Building.

The department undertook renovation of the Old Nurses' Home in 1960. The building was constructed in about 1900 and has housed a great number of nurses who were trained to serve other hospitals or to work in other mental institutions but signs of deterioration started showing in this old building and some sort of rejuvenation was needed. It was then decided to carry out a thorough job to repair squeaky floors, crumbling plaster, replace decaying woodwork and obsolete light fixtures, remove rusty and inefficient heating elements, etc. Now that the first part of this endeavour is completed, this residence is providing a home for this and the following generation of nurses—a home which is now in line with fire safety regulations, full of colours and comfortable. In one word, this building looks like a new one. The second part is under completion and will be completed in the near future.

This past year saw the commencement of remodelling of the Female Ward Building. This building, which was constructed in the early 1900's and stands in the middle of the plant, created a major problem for the operation of the institution. The building itself was antiquated and patient facilities were at a minimum. To make full and efficient use of the site it was either necessary to demolish or remodel the existing building. Demolition would create many problems with the continued operation of the plant and much time would be lost. It was, therefore, more economical to strip the building of all interior plumbing,

partitions, etc., and remodel the building. In place of the accommodation in very large wards, much smaller and more personal wards were created and new therapy areas and dining rooms were placed in the basement. The original building of steel frame and brick veneer was reconstructed with clay tile partitioning plaster, etc., and as a result approximately two years of time was saved over construction of a new building and the end result will serve the institution for many years.

Due to increased staff and lack of accommodation in the Town of Ponoka, the construction of the two houses and a ten stall garage was decided. Each house contains two bedrooms, living room, dining room, kitchen, bathroom and entry. The construction is frame and stucco with hardwood floors in the living and dining rooms and the other rooms have floor tile. There is a full basement which was left unfinished. The garage was an overdue and much needed building for years. It is constructed of concrete block with insulated wood roof deck.

PEACE RIVER

At the Provincial Building, renovations were completed of the exterior brickwork.

PINCHER CREEK

An Oil Storage Shed was constructed for the Department of Highways at this point.

RED DEER

Construction was completed on a new Administration Building at the Deerhome Institution in August, 1960. The building houses the administrative offices, business management offices and office for the medical staff. In connection with these are the medical records storage and a library for the medical staff and nurses. In the basement there is a private dining room, a staff dining room and their servery. A lounge and lunch room, locker rooms and washrooms have been provided for non-resident staff.

A residence for the male staff members was completed at the Deerhome Institution this year. This is a modern building with private room accommodation for staff, with ample lounge and recreational facilities. The building is a two-storied structure with a half basement. It is of frame construction and stucco and brick veneer exterior.

Construction commenced on Dormitory #5, Deerhome Institution, in July, 1960. This building is being erected to accommodate mentally retarded children. The building is a two storey, "E" shaped dormitory with a full basement. The basement accommodates the mechanical, electrical, storage, locker and shower rooms. The main floor accommodates two dormitory wings with washroom facilities along with clothes and linen storage. The central core consists of three day rooms, dining

room, servery, utility room, nurse station centrally located, staff room and visitors' room. The second floor accommodates two dormitory wings similar to that on the main floor. The central core of the second floor is similar to the main floor except for dining room and servery facilities. This steel frame building contains 43,000 square feet. The walls are plastered masonry and the floors are covered by vinyl asbestos and terrazzo on concrete. The roof is of built-up construction and heating is by steam radiation.

A laundry, Linen and Boiler Plant Addition at the Deerhome Institution was completed. Additional ventilation and cooling was provided in the kitchen.

The street lighting programme continued.

In order to alleviate the imposing problem of housing shortage for new medical staff and also to provide an accommodation of prestige for the doctor-in-chief, it was decided to construct a new residence and garage at the Provincial Training School so that the existing one can be used for new staff. This residence is of frame and stucco construction with some siding at front and gables. It contains three bedrooms, a large living room with fireplace, dining room, kitchen and bath. It has a full basement which was left unfinished.

A new incinerator was completed at the Provincial Training School.

Grading was completed at the Weigh Scale site to permit its use during the winter of 1960-61.

VEGREVILLE

Alterations to the Court House were completed this year.

ALBERTA LIQUOR CONTROL BOARD

This Department has carried out in the past year several projects for rural retail outlets for the Alberta Liquor Control Board.

These buildings, costing in the neighborhood of \$30,000.00, are of varied design, basically of concrete block construction. Large amounts of glass were used on the main elevation to make them bright and airy.

These buildings are located at the following centres:

Alix	Empress
Beaverlodge	Hardisty
Bow Island	Provost
Claresholm	Rimbey
Derwent	Turner Valley
Edmonton — 98th Street	Vilna

MECHANICAL BRANCH

This report covers the operation and maintenance of eleven Government Power Plants and five Government Heating Plants and the supply and maintenance of utility services at these major Provincial Institutions. This number of plants, totalling sixteen, includes two additional, namely, the Provincial Auxiliary Hospital Power Plant, Claresholm, and the Provincial Gaol Heating Plant, Calgary, since last year's report.

The addition of these plants, together with some increase of utility services output at all plants, shows a greater overall expenditure on the attached statistical sheets for operation and maintenance. Capital expenditure at the plants is little more than last year. The following notes refer briefly to operation and these expenditures.

Legislative Buildings — Edmonton

A new engine room type lathe, complete with accessory equipment, was purchased and installed for plant maintenance requirement, replacing a small tool room lathe in use since about 1915. The latter lathe has, however, been sent to the Provincial Auxiliary Hospital plant at Claresholm and is now in service there.

An atmospheric type heat exchanger has been purchased and delivered to the plant and preparation is started for installation. The exchanger, rated at 21,000 P.P.H., will function largely to condense excess exhaust steam now going to the atmosphere and return for plant use.

Southern Alberta Institute of Technology — Calgary

A new domestic service water heater, complete with controls and return circulating pump, has been purchased and delivered to the plant. This equipment will be installed in early summer and replaces a heater in operation since 1922 and now in poor condition.

Provincial Mental Hospital — Ponoka

Renovation of the power plant in conjunction with overall project of kitchen-bakery extension and plant addition has progressed steadily and is nearing completion. Items of new equipment purchased: vacuum pumps, feed pump, evaporator, cooling water heat exchanger, receivers, etc., are installed and in service. New switchboard installation is in operation. The Belliss & Morcom 250 KVA engine-alternator unit is returned to service, erection of two new 750 KVA Brown Boveri turbo-alternator units is completed and the machines in operation. All distribution piping renovation is nearing completion. Plant clean-up and painting will follow.

Provincial Gaol — Fort Saskatchewan

A motor driven centrifugal boiler feed pump for emergency service has been purchased and installed to supplement the steam driven pumps.

A hydropneumatic tank, complete with pump and controls, has been purchased and installed and is now operating to provide river water for boiler and feed make-up. The investment is justified in reduced feedwater treatment costs.

Some expenditure was committed for repair and spare parts for the 125 KVA engine-alternator unit and overhaul effected. The unit, however, is some thirty-five years old and near the end of useful service. Funds have been provided in current appropriations for its replacement by a larger unit.

Baker Memorial Sanatorium — Calgary

An additional service water heater, complete with controls, was purchased and installed. This installation completes a program of hot water service renovation and increased supply for the institution started in 1956.

Provincial Training School — Red Deer

Suitable combination gas/oil burners were purchased and installed for operation on two V.K. - 5,000 P.P.H. boilers, replacing burners temporarily installed in 1950 and now providing satisfactory fuel oil firing for emergency and standby service.

Public Works South Power Plant (University Site) — Edmonton

This plant, noted last year as an additional new plant housing a 2,200 KW gas turbine alternator unit with waste heat boiler, switchboard installation and all auxiliary equipment, has been in partial operation. An auxiliary 25,000 P.P.H. boiler temporarily installed was also in operation to augment heating steam supply for the area during the winter months.

The boiler room addition to the plant is near completion and two 150,000 P.P.H. boilers are under erection. Auxiliary equipment is largely installed. The first boiler is scheduled for operation next winter.

Miscellaneous tools and equipment have been supplied for our routine plant operation and maintenance work.

Provincial Auxiliary Hospital — Claresholm

This is a new power plant. Its construction, in conjunction with a large kitchen and laundry services building, was necessitated by the planned enlargement of the hospital as an institution and the construction of dormitories and other new buildings are in progress.

The plant houses two 10,000 P.P.H. boilers, one 500 KVA turbo-alternator unit, switchboard installation, feed pumps, feed

heater, service water heaters, softeners and other auxiliary equipment. Ample floor area is reserved for future additional equipment.

Our staffing at the plant for operation commenced April 1st, 1960 and was completed as installation of equipment progressed and transfer of utility services from the old boiler room to the new plant was effected.

Rosehaven Home — Camrose

A new replacement boiler blowdown tank has been purchased and installed and renovation of fuel oil piping, pumping and burners has been effected to provide reliable emergency and standby firing of the boilers.

This plant is operating at prolonged peaks of over boiler capacity. Purchase and installation of a third 50 H.P. utility boiler has been requested to ensure continuity of service to the institution.

Bowden Institution — Bowden

Purchase of certain needed replacement tools and new items of equipment (lathe chuck, drill press, etc.) for maintenance shop use was made for this plant.

Provincial Gaol — Calgary

This is a new heating plant constructed to serve the Provincial Gaol and located west of Calgary and north of the Baker Memorial Sanatorium.

The boiler room is housed in a portion of the main cell block and dormitory building. Installation includes boilers, vacuum and return pumps, feed pumps, water heaters, softeners, other auxiliary equipment and emergency electric generator set. Normal electric power supply is purchased. Fuel oil is used for firing of the boilers. Water supply to the Gaol is by pipeline from pumping station and treatment plant located at the Baker Memorial Sanatorium. The Bow River is the source of supply.

Our staffing of the plant commenced on November 1st, 1960 and is now complete and the plant in operation.

GAS, WATER AND POWER CONSUMPTION

at the five below mentioned Heating Plants
under the jurisdiction of the

MECHANICAL BRANCH — DEPARTMENT OF PUBLIC WORKS

for period April 1, 1960 to March 31, 1961

	HEATING OIL (Gallons)	GAS (cu. ft.)	WATER (Imp. Gallons)	POWER (Kilowatt Hrs.)	EXPENDITURE Plant, Operation and Maintenance
Rosehaven Home,					
Camrose		60,969,000	12,034,625	637,872	\$ 70,853.25
Bowden Institution,					
Bowden		38,884,000	13,465,800	901,074	73,094.99
Belmont Rehabilitation					
Centre		29,468,000	3,018,375	396,900	51,138.68
Alberta Institution for					
Girls		17,705,000	3,018,375	292,640	34,812.96
Provincial Gaol,	145,600				
Calgary	145,600		10,220,000	621,000	30,285.08
	145,600	147,026,000	38,738,800	2,849,486	\$260,184.96

Total Heating Oil Used	145,600	gallons
Total Gas Used	147,026,000	cubic feet
Total Water Used	38,738,800	gallons
Total Power Used	2,849,486	kilowatt hours

STATISTICS ON CAPITAL EXPENDITURES, PROVINCIAL GOVERNMENT POWER PLANTS
For Year Ending March 31, 1961
(F. E. Coe, Mechanical Superintendent)

	Oil Storage Tanks, Hot Water Storage Tanks, Pumps, Piping, Insulation, etc.	Generating Equipment & Foundations, Piping, Insulation, Wiring, etc.	Replacement of Old Service Lines, Heaters, Pumps, Controls, Pipe Covering, Wiring, etc.	Renovation & Extension of P.M.H. Plant consisting of moving Lines, Heater, Dealkalizer, Softeners, Evaporators, Pumps, & other Allied Equipment	Power Plant Mechanical Equipment	Boiler Setting Repairs, etc. Burners, etc.	Atmospheric Condenser	Expenditure
Legislative Buildings and Administration Buildings, Edmonton Southern Alberta Institute of Technology, Calgary	\$	\$	\$	\$	\$4,794.29	\$	\$20,255.61	\$25,049.90
Provincial Mental Hospital, Ponoka Provincial Gaol, Fort Saskatchewan	.....	.....	2,352.19	44,880.05	.....	.....	.....	2,352.19
Baker Memorial Sanatorium, Calgary	5,774.78	1,089.33	.....	.....	.....	.....	.....	44,880.05
Provincial Training School, Red Deer	4,206.29	.....	.....	.....	.....	2,208.77	.....	6,864.11
Public Works Power Plant, University Site, Edmonton	.....	.....	.....	.....	1,376.40	.....	.....	4,206.29
Rosehaven Home, Camrose	.....	.....	.....	.....	.....	.....	.....	2,208.77
Bowden Institution, Bowden	.....	.....	.....	.....	497.77	.....	.....	.....
	\$9,981.07	\$1,089.33	\$2,352.19	\$44,880.05	\$6,668.46	\$4,090.44	\$20,255.61	\$89,317.15

PROVINCIAL GOVERNMENT POWER PLANT STATISTICS
for year ending March 31, 1961

Location of Plant	WATER			ELECTRICITY			STEAM OUTPUT		
	Gas (cu. ft.)	Pumped from Local Sources (Imperial Gallons)	Purchased (Imperial Gallons)	Generated (Kilowatt Hours)	Purchased (Kilowatt Hours)	To Building Heating (Pounds)	To Other Services (Pounds)	Expenditure Plant Operation & Institutional Maintenance	
Legislative Buildings and Administration Buildings, Edmonton	294,016,000	162,918,750	4,161,600	5,804,900	148,150,000	98,766,000	\$ 176,641.96		
Southern Alberta Institute of Technology, Calgary	131,191,000	19,296,000	2,507,200	865,660	69,910,000	17,478,000	113,492.77		
Provincial Mental Hospital, Ponoka	167,107,000	66,385,000	1,474,400	2,177,600	91,724,000	39,310,000	178,192.66		
Provincial Gaol, Fort Saskatchewan	64,466,000	23,251,700	568,900	305,600	37,906,000	9,476,000	64,625.70		
Provincial Gaol, Lethbridge	52,241,000	37,711,365	428,350	14,160	30,611,000	7,653,000	69,895.15		
Provincial Mental Institute, Oliver	243,133,000	71,618,000	3,282,570	153,820,000	51,273,000	150,190.48			
Baker Memorial Sanatorium, Calgary	75,690,000	31,877,000	717,840	68,960	42,874,000	14,291,000	81,291.38		
Provincial Training School, Red Deer	98,215,000	32,829,625	1,061,370	389,800	55,670,000	23,858,000	102,306.96		
Deerhome Institution, Red Deer	97,806,000	25,894,000	2,271,800	57,369,000	19,123,000	111,354.42			
Public Works Power Plant, University Site, Edmonton	68,801,000	1,663,625	2,215,000	17,087,200	33,320,000	337,000	238,946.72		
Provincial Auxiliary Hospital, Clarsholm	19,581,000	4,342,000	15,640	209,600	10,106,000	1,783,000	51,673.52		
Total Gas used	1,312,247,000	121,513,700	356,273,395	15,107,650	29,193,520	731,460,000	283,348,000		
Total Water used		1,312,247,000	Imperial gallons						
Total Electricity used		477,787,065	Imperial gallons						
Total Electricity used		44,301,150	Kilowatt hours						
Total Steam Generated		1,014,808,000	Pounds						

