

VISITS TO WORKS

Auckland.

A group of approximately 150 delegates were taken on a tour past a number of recently erected Government, Municipal and private multi-storey office buildings, car parking buildings and residential flats.

The major projects visited were:-

1. Auckland City Council and Administration Building.

A 22-storey structural steel frame office building, which is the tallest building in Auckland. This project featured light-weight construction.

2. Auckland University, Science Block.

This project consisted of three parts:-

- a. A single storey Plasma Laboratory
- b. 4-storey Chemistry Teaching Laboratories
- c. 10-storey Link tower

A number of interesting features were shown to participants, including methods of separating the individual structures and designs adopted for reducing deflections in the Link tower by the use of vertical prestressing of the shear walls.

3. Newmarket Viaduct.

This 6-lane motorway bridge, 2,260 ft long, is to carry the main motorway outlet from the city over Broadway Newmarket - one of New Zealand's busiest roads - and over two railway tracks. This project, approximate value £1,000,000, was the largest prestressed concrete bridge to be designed by the Ministry of Works for the National Roads Board.

VISITS TO WORKS

Wellington.

1. Wellington & West Wairarapa.

A small party visited sites showing outstanding evidence of recent fault movements. On the route to the Wairarapa stops were made to view prominent features on the Wellington fault scarp. The examination of the Waihine Terraces on the West Wairarapa Faults formed the highlight of this tour. These terraces are one of the world's best examples, clearly recording a series of substantial earthquakes on the same fault line.

2. Ministry of Works Central Laboratories & Dominion Physics & Engineering Laboratory.

a. One group visited the Ministry of Works Central Laboratories. These laboratories are part of the Ministry of Works Head Office and are established primarily for design testing and for quality control on a national basis. On display were: research projects on hydraulics, the experimental analysis of structural models, research activities in soil mechanics, cement and concrete, bitumen and tar production.

b. The party visiting the Dominion Physics & Engineering Laboratory were shown research equipment of the Seismology section. The display included the following items:-

- i. special purpose analogs for the rapid calculation of elastic responses of tall buildings under earthquake forces,
- ii. a three-component recording accelerograph, type MO2 (commercially available in New Zealand),
- iii. a low-cost heat recording accelerograph (a large number of which have been installed throughout New Zealand),
- iv. a shaking table and an impact table, used to test these instruments.

3. Buildings under construction.

Two buildings were inspected. Firstly, the Aitken Street Government Department Building, a 17-storey tower with a structural steel-reinforced concrete core and flat plate waffle-slab floors spanning the perimeter steel columns. Secondly, the Government Printing Office, a 6-storey reinforced concrete frame and shear wall building, designed to carry floor loads of 224 lbs per square foot on a total floor area of 194,000 sq ft.