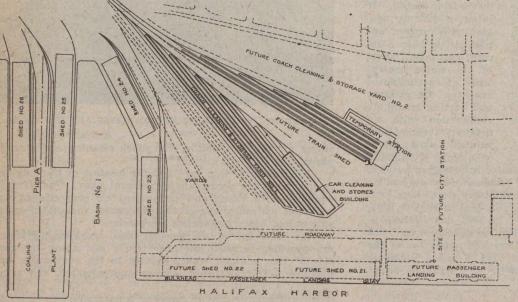
In the service room are installed an air compressor, Pintch gas compressor, a motor-generator set for car-charging, switchboards, etc. The ice storage located near the north end occupies one bay for the full height of the building.

Refrigerator compartments are placed in the extreme north bay of the building. The bay immediately north of the car-cleaning shop is fitted up for locker rooms and lavatories.

The site of the building is made ground, composed of from 20 ft. to 35 ft. of rock fill, handled by steam shovel from railway cutting, and built out from the original shore line by side-dumping cars, about three years ago. The harbor bottom here was rock covered by a few feet of mud. The foundations of the building, which were designed for a maximum unit pressure of 3% tons per sq. ft., were placed directly on the rock fill.

The shell of the building consists of a plain concrete base wall rising to the level of the windowsills, a series of narrow wall piers between the windows and a reinforced concrete entablature and parapet wall above the window openings. The base wall is supported on its own footings.



GENERAL PLAN OF PART OF HALIFAX OCEAN TERMINALS, SHOWING COACH CLEANING AND STORAGE YARD

The wall columns of the main bents, which are spaced 20 ft. centre to centre, are of reinforced concrete. Below the windowsills they are carried down with their reinforcement as pilasters of the base wall to enlarged sections of the footing. Midway between the column bents are placed the intermediate wall piers.

In the single-story portion, the wall columns support steel roof trusses extending the width of the building and carrying a 3-in. timber mill roof on steel channel purlins. The connections between the wall columns and the steel trusses, together with the knee braces, form a series of transverse portals.

The second-story portion of the building has a wall construction, similar to that described above, except that the long windows are divided by a spandrel section at the second floor. Two rows of inside columns are used under the second floor and the roof. The floor is of flat slab construction and the roof is of timber. A live load of 150 lbs. per sq. ft. was assumed in designing the floor slab.

The type and details of the insulation for the ice storage and refrigerator compartments received special study owing to the difficulty of obtaining cork and the usual insulating materials. Ten inches of well-packed spruce shavings, enclosed by two plies of %-in. T. & G. spruce sheeting, separated by two layers of heavy, deodorized, asphalted felt, were used for the walls and ceilings. The floors of the refrigerator compartments were insulated by 2½-in. layers of cork placed in a concrete slab.

Considerable filling was required under the lower floor. Broken stone from the foundation pits was used in the carcleaning shop. In the remainder of the building, 3 or 4 ft. of sand filling were placed by dump wagons. The concrete floor slab was placed directly upon the filling after it was compacted.

The building was originally designed to be constructed, above the base wall, of precasts, but the contractor chose to pour the concrete in place. This necessitated the restudy of the problem of preventing cracking of the long entablature and parapet walls. The base wall was divided by keyed tar-paper joints located under the intermediate wall piers into sections 20 ft. long and poured in alternate lengths. The entablature and parapet walls were also divided by keyed joints into 20 ft. lengths. Alternate sections were poured integral with the columns, thus providing a series of longitudinal portals to give rigility to the building. After the columns were poured, the spandrel sections were placed with slip joints at the ends, and they were made separate from the floor system. By this layout, the use of heavy, temporary reinforcement was avoided and also the

possibility of cracking, due to slightly uneven settlement of the foundations, was minimized.

Steel sash was originally called for, but owing to the high prices obtaining, wooden sash has been used throughout. The side sashes of the windows are made to open as hinged casements.

The interior partitions were built of cement-sand brick which were manufactured at the site by the general contractors.

Five-play tar and gravel roofing was used.

It is the intention to tooldress all the exposed exterior concrete surfaces. For plain concrete a 1:2:5 mix (2-in. stone) was specified, and for reinforced concrete a 1:2:4 mix (¾-in. stone) was required. Materials were shunted in cars directly to the site.

A gasoline-drive mixer, with hoist and placing plant, was used. This machine was set up inside the building and discharged into a hopper at the second floor level. From this hopper, concrete was wheeled to the forms. For the second story portion, staging was built at the level of the forms for the top sections of columns, entablature and parapet walls, and concrete was wheeled up to this staging by long ramps.

For the single-story section, the concrete columns were poured to the level of the bottom chords of the roof trusses, and the bolts for the bearing plates and knee braces of the trusses were set in templates in the forms and concreted in. The steel trusses were then set in place with the wall bolts inserted in the end connection angles, with a sufficient number of purlins and bracing members bolted on to steady them, and plank staging placed on top of the trusses along the forms on both sides of the building. From this staging, the remaining lengths of the columns which received the wall bolts from the ends of the trusses, together with the entablature and parapet walls, were poured.

The concrete for the greater part of the entablature and parapet walls was placed in the early winter, when the temperature ranged between 15 degs. and 20 degs. above zero. By using heated water, warm sand and aggregate, and tarpaulins at night over the new work, good results were obtained.

Ross & Macdonald, of Montreal, were the architects and prepared the general plans and specifications. The lay-