

NORTH YONGE RAILWAYS

C H RIFF

The flooring will be in 2 thicknesses, with 3-ply waterproof paper between. The lower floor will be of 2 1/4 in. face 3/4 in. thick t. and g. white pine laid diagonally, and the upper of 2 1/4 in. face 1 1/16 in. thick t. and g. B.C. fir. There will be no motor trap doors in the floor. The top flooring in the baggage compartment, and also the rear vestibule, will be 1 5/16 in. yellow pine. The entire floor of car will be covered with 3/16 in. inlaid rubber of two-tone grey color and diamond pattern.

The body framing will be of steel throughout. The side posts will be of o.h. steel rolled T bars inserted in white ash wood posts; the side girder plates below the windows will be 12 gauge o.h. cold rolled box annealed steel, the letter board will be 14 gauge steel of similar quality, and the belt rail, of flat steel bar 1/2 in. thick by 3 in. at base and 2 3/4 in. on face, will be continuous between the body corner posts and side door openings on both sides of the car, and around the vestibules. The sash rests will be 16 gauge o.h. steel pressings, rivetted to belt rail and side sheathing, and electrically welded to provide waterproof joints.

The roof, of the plain arched design, will have poplar roof boards 1/2 in. thick by 2 1/4 in. face, t. and g., covered with no. 8 duck laid in white lead and oil. Steel angle carlines will be used at each post, with white ash carlines bolted to the steel ones, and 2 wood carlines will also be provided between each pair of steel ones.

The front vestibule will be fitted with 3 stationary single windows, and the rear one with 2 stationary side windows, and a middle window arranged to drop, with rubber cushion at bottom of sash pocket. The headlining will be 5/16 in. Agasote, and the vestibules will be fitted with bronze grab rails. The rear vestibule floor will be covered with 1/4 in. rubber tile. The stationary steps at each side of the rear vestibule will each have 2 oak treads, with sheet steel risers and hangers.

Outside appliances will include 2 running boards, of yellow pine, supported on oak saddles, on the roof; a trolley bridge consisting of 2 planks 7 1/2 ft. long, at each end of roof, on which trolley bases will be mounted; round iron trolley rope guard at each end of car; gutters in roof over all doors; Commission's standard ladder steps at right front corner, back of baggage door, and 2 trolley hooks at each end of car.

The interior finish, except baggage compartment and partitions, will be in genuine African mahogany, and the headlining will be in 5/16 in. Agasote, formed to the roof radius. The advertising racks will be arranged to take 11 in. cards, and will have wood mouldings top and bottom. The wainscoting or inside lining will be of 1/4 in. mahogany-faced Haskelite.

Lavatories are to be provided at the rear left side of the car, in the main passenger compartment, for women, and in the front right side of the smoking compartment, for men. Each will contain flush-type car closet, nicked corner washstand, beveled plate mirror, drip-type disinfecting appliance, etc., and a round copper tank of not less than 25-gall. capacity will be located in the space between the car roof and the ceiling in each lavatory. These tanks will be removable from inside the car. A sanitary water cooler with ice and water in separate compartments will be installed in the aisle side of each lavatory, with drinking cup container nearby.

There will be 13 windows on each side of the car, each with single sash arranged to raise. All sash will be of brass, and of lockless type, and weather stripped with rubber on the bottom and fabric on the top. The window guards will be of seam-

less steel tubing, 3 rods per guard.

The door in the steel bulkhead at the rear will be of swing type, of mahogany, with upper and lower portions glazed with 3/16 in. non-tempered glass. A double leaf folding door will be provided on each side of the rear platform, swinging outward; these will be of mahogany, glazed in the upper and center portions, with the lower portion panelled. The doors will be arranged for separate manual operation from the conductor's location in the rear of the car body. These doors will be interlocked with the control circuit. Single swing-type doors will be placed between the main passenger room and smoking compartment, and between the smoking and baggage compartments; these will be of mahogany, and glazed in the upper portion and panelled in the lower. All interior doors will have door checks. The partition at the rear, with a window on one side of the door, that between the main passenger room and smoking compartment, with windows at each side of door, and that between the smoking and baggage compartments, with windows at each side of door, will all be of steel. Iron grills on the baggage room side will be fitted on the windows in the latter partition.

The side doors in the baggage compartment will be of ash, with 3 ft. 8 in. opening, and glazed in the upper portion. Brackets for storing marker lamps, metal cupboards and coat hooks will be installed in the baggage compartment, the control apparatus will be arranged for center drive, and a railing will be installed back of the motorman's position.

The seating arrangement will be as shown on the accompanying plan. The seats are to be of the double bucket semi-individual stationary type, equipped with suitable foot-rest. Those in the smoking compartment will be upholstered entirely in genuine hand-buffed leather, and those in the main passenger room, similarly, except that the back spring pads and the air spring cushions will be covered with mohair plush or velvet velour. A leather-upholstered drop seat will be provided for the conductor, and a revolving leather-upholstered spring-back seat for the motorman.

Two illuminated signs will be provided at the front; Peacock staffless hand brakes will be provided at each end; a lightweight steel locomotive type pilot will be fitted at each end; the cars will be equipped with 2 air sanders at each end, complete with valves and hose, and drawbar couplings, to be supplied by the Commission and installed by the builder, will be applied at the rear end. The front end will be equipped with a drawbar anchorage for use with the Commission's standard detachable drawbar and cast steel head, and the same kind of drawbar and head, with adapters for use when coupling to train coupler, will be provided with each car. Drawbar pockets will be provided in both the front and rear bumpers.

The cars will be heated by 28 electric heaters in passenger space and lavatories, and 2 in the baggage compartment, arranged 5 in series. An aluminum duct will extend the full length of the passenger space on each side, in which the heater units will be mounted, and the conduits conveying the heater wires will be below the car floor. There will be removable grills in the heater duct opposite each heater unit. The heater circuits will have control switches and fuses; the heaters will be controlled by thermostatic appliances, and a snap switch will be provided at the motorman's position for by-passing the thermostat while passing under electric track switch contacts. A 600-volt cab heater, to be controlled by a separate switch, will be installed in the baggage

compartment near the motorman's position.

The lighting circuits will provide for 5 lights in the baggage compartment, 4 in the illuminated signs, a center dome fixture in the rear vestibule, two 2-lamp dome fixtures in the smoking compartment, four 2-lamp dome fixtures in the main passenger room, a light at the motorman's air gauge, a light in each lavatory, 2 lights above the rear steps, and a light in each electric marker box on the corner posts. There will be an incandescent headlight on the front vestibule roof, and in addition a city-type headlight in the center of the front and rear dashes. The latter will be arranged for illumination through a shunt switch, by shunting the current from one of the car lights to the headlight. Red and green signal lights will be installed in the rear dash. The marker light boxes will be equipped with discs having red, green and white glass. There will be a switch cabinet in the baggage compartment in which all light switches will be installed, unless otherwise specified, the cabinet to be of steel with transit board lining, with switches and fuses mounted on a separate panel. All wiring in the car will be installed in galvanized steel conduit, except the cable from trolley to pothead and lightning arrester, which will be open, and the wiring for the buzzer and single stroke bell systems.

The truck specifications called for trucks of other than arch-bar type, with spring equipment of the graduated type, and with semi-steel journal boxes for 4 x 8 in. journals. The axles are to be in accordance with A.E.R.A. standards, and the wheels will be 28 in. diam. rolled steel, A.E.R.A. standard, with 3 1/2 in. tread. Brake hangers will be of the ball joint type. The truck bolsters will be of cast steel, and fitted with non-rattling ball joint bolster guides, to prevent excessive side-swaying and horizontal movement of the car body.

Body equipment other than that specified in the foregoing will include trolley retriever on rear dash, bronze vertical grab handles at rear doors and forged iron grab handles at baggage compartment doors, 14 ventilators per car, motor-driven exhaust fan for each lavatory, rotary alarm gong at each end of car, parcel racks at each side of main passenger room and smoking compartment, double-faced Morocco-grain Pantasote curtains on all-metal rollers on all side windows, and on windows and doors in partitions, mahogany or cherry storm sashes for side windows, easily removed and installed, fare collection devices and registers to be installed by the Commission, meter to register current used by motors, wrecking tools, first aid cabinet, fire extinguishers, flag box with hinged lid and glass front in rear bulkhead, marker brackets for flags and lamps on all 4 corners of car, 6 match strikers in smoking compartment, mirrors mounted to give motorman a clear view of rear steps, 25-bronze ticket holders per car, high voltage push button buzzer system, single stroke bell signal system, 2 deep toned air whistles per car, and control equipment cabinet at rear end of car.

The braking ratio for the cars is to be figured at 100% of light weight, based on 50 lb. per sq. in. cylinder pressure. The piston travel will be 5 in., and emergency application brake cylinder pressure will be 75 lb. per sq. in. All holes in the foundation brake rigging levers and jaws will be fitted with case-hardened seamless steel bushings, and all connecting pins will be case hardened.

In asking for tenders for complete air brake equipment, the Commission specified weight of car, less equipment, as 40,000 lb., seated passenger load as 7,800 lb., total passenger load 15,000 lb., trolley

