

coal crusher, elevator and conveyor, and the ash handling machinery will all be motor driven.

The engine room is 86½ by 25 ft., and 30 ft. high. It will be equipped with one 4,000 k. v. A., 2,400 volt turbo generator 3,600 r.p.m. The field will be excited by a 60 k. w. 125 volt, d. c. generator direct connected to a 90 h. p. 440 volt induction motor. The engine room will also contain a 1,000 k. w. motor generator set.

The Ottawa City Council proposes to reopen with the company the question of the erection of a bridge over the Rideau Canal. The company desires the building of a high level bridge at a cost of \$205,000, while the city favors a low level bridge, with an electrically operated draw span, at a cost of about \$100,000. The city has legislative authority to expend \$80,000 as its share of the cost.

Prince Albert, Sask.—Press reports state that the City Council has not made any investigation of the possibility of building a municipally owned electric railway. An application for a franchise in the city has been made by the interests owning the Moose Jaw Electric Ry., and this is under consideration.

Rainy River Radial Ry.—The Dominion Parliament has granted an extension of time for starting construction of this projected electric railway in the Rainy River District, Ontario. (Jan., 1913, pg. 39.)

Saskatoon Municipal Ry.—The by-law to provide \$15,000 for a site for a new power house, which was defeated in May, was again submitted to the ratepayers of Saskatoon, Sask., June 5, and was carried by 543. The new power house is required to take care of increasing demands of electric railway, power and lighting purposes. (June, pg. 283.)

Sudbury, Copper Cliff Suburban Electric Ry.—Press reports state that grading has been started in Sudbury, Ont., on this line, which is to connect Sudbury, Copper Cliff and other places. The Mayor of Sudbury turned the first sod May 30. C. McCrea, M. P. P., announced that it is the intention of the company to have the line from Sudbury to Copper Cliff completed this year, and after that extensions will be made to the various outlying centres around Sudbury. There are three lines at present contemplated, namely, Copper Cliff route, 5.1 miles; Ramsay Lake route, 1.2 miles, and Frood Mine route, 1.2 miles. The Town Council has the control of the track inside the town limits, and determines the method of construction. The company, therefore, let the contract for the concrete base and pavement to The Warren Bituminous Paving Co., which is doing the paving for the town. Ties are being delivered, and negotiations are in progress for rails. The franchise calls for the laying of girder rails, but the company is desirous of laying T rails, as these can be had at once, while girder rails are not so readily obtained. The Town Engineer favors the T rail, and the matter is in progress of settlement. C. D. Norton is engineer in charge of construction. (May, pg. 232.)

Toronto Eastern Ry.—We are officially advised that active work is in progress on the line. Steel has been laid between Oshawa and Bowmanville, Ont., and that portion is being ballasted. Steel is also laid from Oshawa to within a mile of Whitby. Grading was completed through the town of Whitby last spring, making a continuous grade between Pickering and Bowmanville. It is expected to have that portion of the line completed this year, and it is hoped also to complete a large percentage of the line between Pickering and Toronto. At

present time nothing definite has been decided as to the operation of the line. (June, pg. 284.)

Toronto Suburban Ry.—The steel superstructure for the bridge over the Credit River, north of Meadowvale, Ont., on the extension to Guelph and Berlin, Ont., has been delivered at Cooksville, and will be carried over the company's own tracks to the site. Track has been laid practically from the crossing of the Etobicoke to the crossing of the Credit, and some ballasting has been done. (June, pg. 284.)

Transcona, Man.—The application of the Transcona Town Council to the Lieut. Governor in Council, for approval of the agreement made with J. H. Kern, Moose Jaw, Sask., for the building of an electric railway from Transcona to Winnipeg, was heard June 4. Opposition was made to the contract by the residents of South Transcona on June 5.

The Lieut. Governor in Council confirmed the recommendation of the Public Utilities Commissioner approving of the contract, but made the stipulation that the line to be built in Transcona must serve the South as well as the North side of the tracks of the National Transcontinental Ry.

Windsor, Essex and Lake Shore Rapid Ry.—The Windsor, Ont., City Council has asked the company to remove its tracks on Howard Ave., from the side to the centre of the road. The city has let a contract for paving the avenue, and the proposal is that the tracks will be moved while this work is in progress. (June, pg. 284.)

Winnipeg Electric Ry.—Grading and other work is being pushed on the seven mile extension of the Stony Mountain line of the Winnipeg, Selkirk and Lake Winnipeg Ry., into Stonewall, Man. Kilping Bros. have the general contract, and have sublet a portion to W. Vincent.

The company is reported to have acquired a property with 300 ft. of frontage on Main St., Stonewall, for terminals and station house. Some materials for the buildings on the site were delivered May 27. (June, pg. 284.)

Woodstock, Thames Valley and Ingersoll Electric Ry.—We are officially advised that a rotary converter has been purchased, and is expected to be installed in the power house by July 1, so as to have the line operated by hydro electric power. The extension to the fair grounds, Woodstock, is only a matter of construction along a couple of blocks, and track is expected to be laid on it by October. I. Warfield, Woodstock, Ont., Superintendent; J. G. Wallace, K. C., Woodstock, trustee for bondholders. (June, pg. 284.)

Three Rivers Traction Co.—We are officially advised that it is intended to build the loop line in Three Rivers, Que., with a connection to the water front. The contract for the franchise with the city is practically settled, and it is expected to start construction during July. The company proposes ultimately to build a line connecting the parishes on the north shore of St. Maurier River, from Portneuf to Berthier, about 80 miles. The directors are:—J. E. Aldred, T. McDougall, H. Murray, W. S. Hart, J. G. Smith, Montreal; S. Murphy, Ottawa. (Jan., pg. 39.)

Toronto and York Radial Ry.—The city has given notice to the company that it intends to assume the ownership of 1,220 ft. of the Metropolitan Division, on Yonge St., Toronto, the franchise of which will expire in 1915. The Corporation Counsel advised that while this was not necessary, the giving of such a notice might prevent complications when the franchise expires.

Report and Recommendations to the Ontario Railway and Municipal Board, re Toronto Railway.

Some time ago, on account of various complaints made to the Board in connection with the Toronto Ry. service, the services of C. R. Barnes, J. H. Cane, and J. M. Cameron were engaged, to report on the traffic generally, and to make recommendations for betterment. The report, which was presented recently, states that the quality of the service which a company can furnish is closely related to and must be equitably based on its earning power. Regarding additional cars, the present seating capacity of the cars, taken between 5.15 and 6.15 p.m., is given as 29,069, and it is recommended that this be increased by 10,813, half of this additional capacity to be made by Nov. 1, 1914, and the balance by Nov. 1, 1915. Increases of seating capacity are also recommended during the general rush hours, and on Sundays. Among other suggestions made are that cars be heated during the winter by modern heaters, one third of the cars to be equipped during this year, one third in 1915, and the balance by Nov. 1, 1916, also that the cars be equipped with legible route signs at the sides, and destination signs at the ends. The platforms of 202 double truck cars to be lengthened, 31 single truck cars and 71 closed trailer cars to be replaced by Nov. 1, and 29 new cars to be placed on new lines by the same date, plans of which are to be submitted to the Board for approval within 30 days.

The relaying of about 13½ miles of track, and extensions of existing track, are recommended as follows:—Extension on Wilton Ave. easterly through the new streets which the city is preparing to open, through the proposed subway under the G.T.R. and crossing the G.T.R. coal siding at grade, to Pape Ave., thence north to Danforth Ave., where the city runs a car line. As this would necessitate the building of a subway under the G.T.R. on Pape Ave., it is suggested that a stub line be run temporarily. It is estimated that approximately 9,000 people would be served by this line. A new intersection is suggested at College St. and Spadina Ave., where the congestion is particularly bad, caused by the number of car movements and alleged wrong track location. The intersection at College, Yonge and Carlton Sts. should also be relaid by the installation of special work, with curves so constructed as to permit of more freedom of car movement, and a similar recommendation is made as to the intersection at Broadview and Gerrard St.

A number of changes in routes are also recommended, involving a considerable amount of new construction, as follows:—Extension of tracks on Teraulay St., from Agnes to College, allowing of the removal of the College cars from Yonge St., and as soon as the proposed street extensions are opened up, the Teraulay St. line should be continued through to Bloor St., allowing of further rearrangement of routes; extension of the Bloor St. line from Lansdowne Ave. to High Park, subways to be built under the G.T.R. and C.P.R., pending which the Queen St. cars to be operated through to the Park on tracks to be laid; extension of the Harbord St. line through Ossington, Lappin, Hallam and Antler to Dundas St., requiring subways under the G.T.R. and C.P.R., pending which a stub line should be operated between the G.T.R. Northern Division and the main line; extension of new tracks through Macpherson Ave., from Avenue Road to Yonge St., allowing of the establishment of an additional belt line by connecting the Bathurst and Dupont lines, pending the construction of these lines a belt line to be operated by continuing the Dupont line on