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## Algoma Central and Hudson Bay Railway Terminals at Sault Ste. Marie.

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The Algoma Central and Hudson Bay Ry. Co. is constructing terminal facilities at Sault Ste. Marie, Ont., in connection with the work of completing the railway through to the National Transcontinental Ry. at Hearst, which are intended to pro-vide accommodation for the expected busi-ness of that road. These terminals con-sist of locomotive house, machine shop, combined general stores and mechanical de partment office building, new station and combined general stores and mechanical de-partment office building, new station and yard office, all located in a new terminal yard at Tagona (town of Stelton, a suburb of Sault Ste. Marie), a new terminal station and office building at the foot of Bruce St., in Sault Ste. Marie, and a freight house at the foot of Dennis St. close by.

In addition to the building construction, the main line is being extended to Bruce St., and a siding extension to the New

there is provided a sidewalk 7 ft. wide on extension cross girders. The whole structure is 35 ft. wide and 190 ft. long, consisting of one 108.7 ft. and one 81.3 ft. spans. At present a tem-porary structure carries the electric railway over, pending the installation of the steel structure. On the west side of this crossing a pile trestle was driven to carry crossing a pile trestle was driven to carry the electric railway temporarily, and this is now being filled and embankment widened to accommodate the highway and sidewalk. The concrete work for this structure was built in 1902, but the bridge was never completed. Due to the peculiar spacing and argle at which the abutments and the pier were located, the designing of the steel was much complicated. The Canadian Bridge Co. has the contract for erecting the steel structure complete, upon erecting the steel structure complete, upon

veneered building, with basement of con-crete. It is 26 by 40 ft. in size, with small waiting room, baggage room and office on ground floor, trainmen's locker room in basement, and Car Accountant, Trainmaster and road department offices on the 2nd floor.

LOCOMOTIVE AND CAR REPAIR SHOPS. \*The shop layout consists of a locomotive house, machine shop and store house, with provisions made for adding a freight car

provisions made for adding a freight car repair shop, a woodworking shop and a passenger car repair shop in the future. The yard layout provides through tracks for passenger and freight service, storage and switching tracks, and tracks serving all present and proposed buildings, with two tracks into locomotive house from the west and the proposed buildings the west and two into the machine shop from the



Algoma Central and Hudson Bay Railway Mechanical Buildings and Yard.

Ontario Dock, to provide for temporary dock facilities. A new freight and ter-minal yard is also being built at the site of the locomotive house and machine shop, together with an overhead combined electric railway and highway bridge crossing over this yard.

The new yard layout will provide yard tracks, entrance to locomotive house and a new transfer yard at that point. About six miles of new tracks are being laid, to pro-vide for which it is necessary to excavate about 70,000 cu. yds. of mixed clay and boulder material. This excavated material is used to fill up areas below grade in the new yard, build approaches to the over-head bridge and to grade the main line extension to Bruce St. and on to the dock referred to.

The overhead structure consists of earth The overhead structure consists of earth embankments leading up to steel trusses on concrete spanning the opening. This steel structure is designed under the Dominioh Government specification for electric railwa and highwas doadings and is 26 ft. wide  $\epsilon$  o c. of main trusses, carry-ing a single h of electric railway across on the south side. A roadway 15½ ft. wide in the clear is provided for alongside the car track. Outside the north truss

competitive plans submitted.

The locomotive house, machine shop, store building, coaling station, ash pit, sand store building, coaling station, ash pit, sand house, etc., are all being constructed under contract with the Arnold Co. of Chicago, P. L. Battey being Chief Engineer of its industrial and railway shops department. This firm was called upon by the writer to submit preliminary plans for the entire layout in the spring of 1911. The plans submitted were then carefully gone into in conjunction with the Master Mechanic and Superintendent. and after long deliberation conjunction with the Master Mechanic and Superintendent, and after long deliberation a plan was evolved, based upon the general plan submitted, which filled the require-ments. The Arnold Co. was then awarded the contract to provide detail plans and construet the locomotive house, machine shop, store building, and the outlying struc-tures and accessories, einder pit, coal dock, tank, racks, etc. The Arnold Co. also in-stalls the machinery and all other shop and locomotive house equipment. The railway stalls the machinery and all other shop and locomotive house equipment. The railway company's forces are doing all track work, including the filling behind the abutments of the overhead crossing. The station and yard office building at this site is let by contract to the McPhail & Wright Con-struction Co., Sault Ste. Marie. This station building is a two-story brick

east. On the two tracks to the locomotive house are located the cinder pit (having a single depressed track, with provision for another pit in the future), coaling station, and water tank of 50,000 gallons capacity. A line through the locomotive house and machine shop is in a northeast and south-west direction, but hereinafter will be called east and west to simplify explanations.

tions. LOCOMOTIVE HOUSE: The present loco-motive house covers an area of 178 by 266 ft. and is designed for a future extension of 88 by 266 ft. on the west side. The building is a departure from the ordinary locomotive house in that it completely shelters and encloses an 80 ft. deck turn-table. There are at present 14 locomotive pit tracks radiating from the turntable within the building, and, with the future extension, the building will enclose 24 loco-motive pit tracks in addition to the turn-table. The operating advantages thus afforded by the enclosed turntable, elimin-ating many causes for delays due to weather conditions, and saving in the expense of conditions, and saving in the expense of handling locomotives in bad weather, will be readily appreciated by those familiar with the climate and deep snows prevalent in this or similar locations. There are two