THE GREAT NORTHERN RAILWAY IN CANADA DIARY

C. H. RIFF

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WRECKS, COLLISIONS AND DERAILMENTS REPORTED TO THE RAILWAY COMMISSIONAIRES OF CANADA

GREAT NORTHERN RAILWAY

January 28 1912 Ocean Park, B. C.

August 8, 1912 Victoria and Sydney

May 21, 1912 White Rock, B.C.

December 31, 1912 Vancouver, B.C.

April 22, 1919 Ardley, B. C.

August 5, 1919 Vancouver, B.C.

March 17, 1919 Ardley, B. C.

January 7, 1920 Vancouver, B.C.

November 23, 1920 Colebrook, B. C.

WRECKS, COLLISIONS AND DERAILMENTS

December 27, 1923	British Columbia Electric
May 13, 1929	Sapperton, B. C.
October 20, 1932	Vancouver, B. C.
November 28, 1932	Vancouver, B. C.
January 16, 1934	White Rock, B. C.
July 24, 1941	Endot, B. C.

The Great Northern's Internationals.

by Peter Cox

Dating back to June 18, 1950, daily service between Vancouver, B.C. and Seattle, Washington, has been provided by the Great Northern's streamlined Internationals. Reflecting on the many changes this operation has undergone over the years brings to light varying principles of railway operation and economic overhaul. The International fairly shouts of being a U.S. train and is thereby a completely different spectacle than its rail-borne sisters on this side of the border.

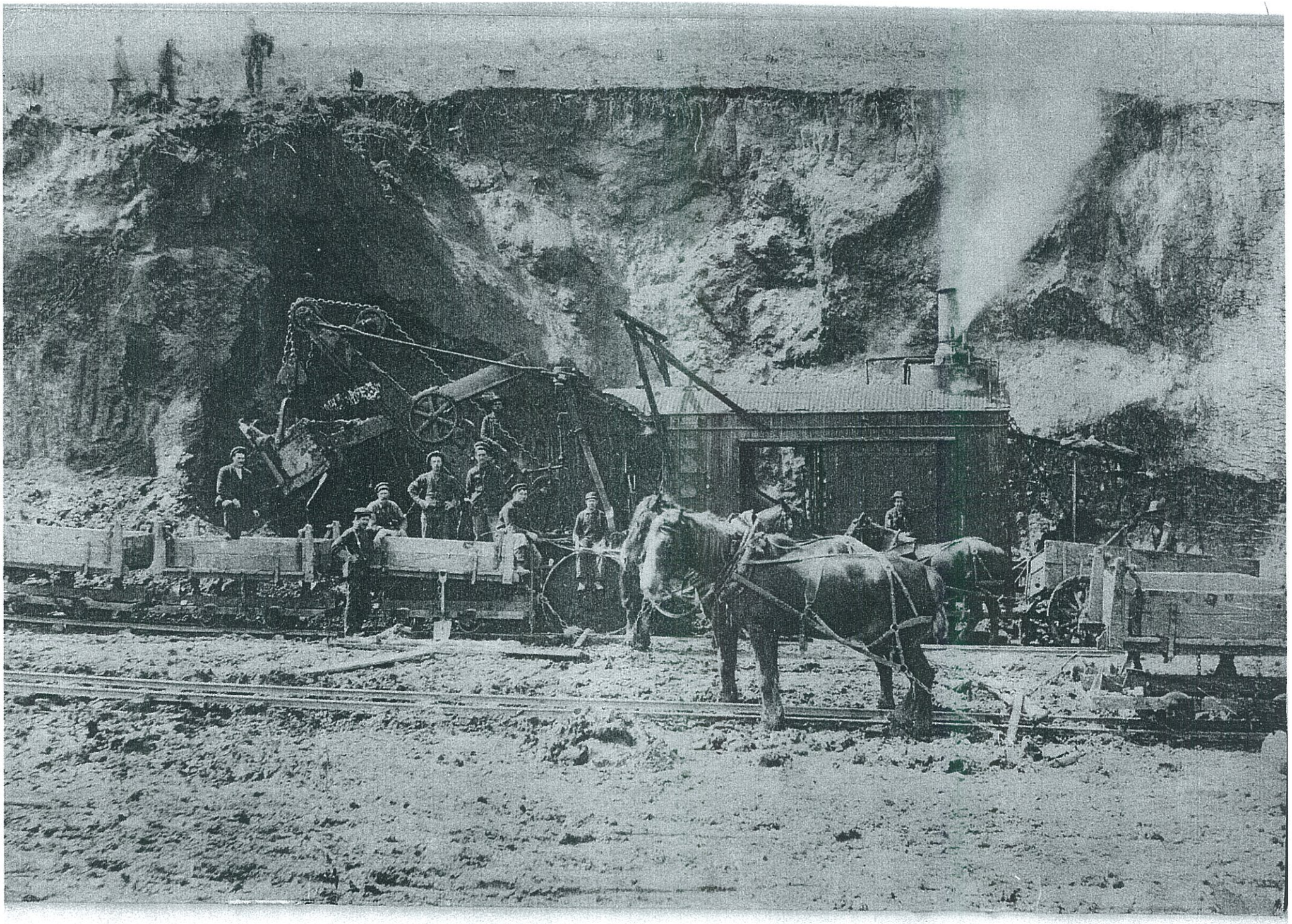
What are the qualities exhibited by this assemblage of wheels, colour and timing which contribute to this difference? Several. Sharing the same route to New Westminster as CN's trans-continentals, the Goat travels the 11.7 miles in 20 minutes, while the CN varnish requires 35. (The Great Northern owns the right of way. - Ed.) Always generously powered, the International steps into town at a brisk 55 m.p.h.; there is no faster way to travel between these two points. Her bright orange and Pullman green are always sparkling clean, her equipment flawlessly maintained. From Mars headlight to oscillating red tail-light, this train differs from anything else on Canadian rails and the U.S. influence takes some getting used to. When first confronted by the brilliant, almost flourescent blue of the conductor's uniform you are likely to be somewhat startled. Elegance is inadequate to describe the luxurious parlour cars "Port of Vancouver" and "Port of Seattle" which trail each train set. A modern richness emanates from their interiors, such that it is a privilege to pay the extra fare required to venture through their automatic doors.

Back in the days when high-wheeled Pacifics hauled passengers over the 156-mile route, heavy twelve-wheel cars in dark green livery made up the consist. Originating in the early thirties, the train, first known as the International Limited, left Vancouver in the morning and consisted of a four to six-car-string ended by an open-platform observation. The first daily northbound train reached Vancouver in the early afternoon, made up of ten cars or more, often including a fruit-laden reefer during the summer months. This was the Canadian, which headed south again later in the afternoon. Finally, a short, high-speed train arrived in the late evening, called the American. In addition, a mail train operated daily using express cars and one coach. This situation worked continuously, with slight variations, until January 1948, when lengthy E-7 units took over the power assignment and the trains underwent a name change: Puget Sounders. In 1950, whole new train sets were introduced, complete with lightweight multi-coloured cars, rounded-end observations, folding steps -- in short, the latest and best that Pullman had to offer and, the Internationals as such were born. The picture remained essentially unchanged until 1957 and the disappearance of the big E units in favour of F units. In 1960, loss of the mail contract to highway vehicles forced a cutback in service from three times a day each way to twice. In the summer of 1961, the third trip was put back on Friday and Sunday and was known as the Weekender. This was discontinued with the change of time in the fall and even though the Century 21 fair brought increased traffic the following summer, frequency remained at two trips each way per day. Fourteen-car trains were common during that period.

A trio of Alco cabs exits Vancouver through the 1.1% "cut" with the Afternoon International in tow.

(Peter Cox)

Today, the Internationals consist of four car train sets (express, two coaches, and observation) powered by a single Geep. Train 357, the Morning International, leaves Vancouver CN station (the GN station was abandoned April 9, 1962) at 7:45 AM, climbs "the cut" and passes through sections of Burnaby visible only from the track, arriving at New Westminster at 8:05. After crossing the long Fraser River bridge (speed limit 8) she turns South along a curving wooden trestle and travels 21 miles to the next stop, along the beach at White Rock. Then on to Blaine (3 miles) where the border is crossed. From here to Bellingham, about 10 miles of tangent track is encountered and the top speed of 79 MPH is attained. Between Bellingham and Mount Vernon (27 miles) the track follows the coastline, employing a number of trestles, fills and tunnels. After this and until Delta Jct., farm land, primarily for dairy usage, is traversed while semaphores drop majestically as the train whizzes past them. Third Subdivision is left behind and during the next 3.5 miles a variety of intricate track manoeuvring occurs, involving use of the Fourth Sub, the Northern Pacific Railway, and finally the Second Sub, the latter being the "high iron". Within a mile, Everett station is reached, and the Northbound International and Eastbound Empire Builder are met. Now it's double track for the remaining 30 miles of the trip and a mile-long tunnel under the city before emerging into downtown Seattle and King Street station at 11:55 AM. The Noon International (No. 359) repeats this performance daily leaving Vancouver at 12:45 PM and arriving Seattle at 4:35 PM. Northbound trains 358 and 360 operate on similar schedules. Average speed of all these trains is 41 MPH including stops, and round trip fare is $7.20.



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Jim Hill's Canadian Railway

John Todd

Forty-odd years later, some of the citizens of Rockwood, Ontario were surely surprised when they learned that James Jerome Hill had become general manager of the St. Paul, Minneapolis and Manitoba Railroad at St. Paul, Minnesota, U.S.A. They never would have thought that this young man, born in this small Upper Canadian community, a little north of Toronto, would achieve such a position.

Jim Hill entered railway service in the United States in 1865 and his advancement was rapid. After less than a year as general manager of the StPM&M, he added "vice-president" to his title and, from 1883 to October 1891, he was president of the road. After September 11, 1889, he was also president of the Great Northern Railway of the United States, a position of considerably greater importance.

While he was a young man, working in St. Paul, Jim Hill read voraciously and, with his phenomenal memory, he soon amassed an encyclopedic knowledge. His specialty was the formation and location of various types of coal deposits. He also learned something about rail transportation, with special emphasis on a local weed-grown undertaking called the St. Paul and Pacific Railroad, which wandered northwest from St. Paul towards the International Boundary and the town of Winnipeg, in Canada.

Donald Smith and Norman Kittson were both employed by the Hudson's Bay Company, the former in Labrador and the latter in Minnesota. By 1870, Kittson had recognized the limitations of his steamboat line in the Minnesota-Red River waterway and, in 1873-74, he and Donald Smith were also looking at the bankrupt St. Paul and Pacific.

↰ WHAT IS AS RARE AS A DAY IN JUNE? THE ANSWER IS ON THIS MONTHS' COVER! A day in November 1955, the 26th., when Canadian Pacific Railway's Train 357, composed of Jubilee-class Number 3004, an RDC-3, an RDC-1 and a lightweight 2200-series coach, accelerated smoothly out of Louiseville, Québec, across the Maskinongé River and off to Lanoraie, the next carded stop, at something better than 90 mph ! Jim Shaughnessy was there at the start, but not when she arrived at Lanoraie!

← THE STEAM SHOVEL EXCAVATES AND THE HORSE-DRAWN DUMP-CARS HAUL AWAY the fill on the bench on the south side of the Souris River valley about 1905.
Photo Gilford Copeland

To summarize the events which followed, Kittson, Smith, Hill and New York banker John S. Kennedy bought the moribund St. Paul and Pacific, together with its land-grants, which were considerable. In May 1880, the company was reorganized as the St. Paul, Minneapolis & Manitoba Railroad. And this partially explains why James Jerome Hill was a member of the "syndicate" who signed the agreement with Sir John A. Macdonald's government in Canada on September 14, 1880, to build the Canadian Pacific Railway. It also explains how W.C. Van Horne brought materials and supplies to start the construction of the CPR west from Winnipeg in the spring of 1882.

Some railway historians believe that even the collusus which was the Canadian Pacific Railway Company could not have contained Jim Hill's ambitions. Certainly, it would have had great difficulty later on in containing both Hill and Van Horne. As plans went forward in 1882, it became increasingly evident that Macdonald's Conservative government in Canada would insist on an all-Canadian route north of Lake Superior, which was squarely opposite Jim Hill's intention to run the line south to St. Paul and then back north to Winnipeg over his St. Paul, Minneapolis & Manitoba, there to rejoin the Canadian Pacific.

This difference in opinion resulted in the resignations of Jim Hill and John S. Kennedy from the Canadian Pacific Railway Company, on May 3, 1883. But Jim Hill did not consider this an admission of defeat. He immediately set about expanding the StPM&M and, in 1889, he incorporated the Great Northern Railway Company, which grew into a vast railway system of nearly 8,000 miles. The Great Northern, under Jim Hill's direction, was the only railroad company with a line from the mid-west United States to the Pacific Ocean that never went bankrupt and never defaulted on a dividend.

One of the conditions in the contract between the Government of Canada and the Canadian Pacific Railway Company was that no other railway would be allowed to build a line south of the CPR's main line for a period of 20 years. This prevented United States railroads from building branch lines north across the International Boundary, or any Canadian companies from building south to join lines in the US. But the connection with the STPM&M at Pembina-Emerson Junction, predated this agreement and considerable traffic moved east over this line before the Canadian Pacific's eastern main line was completed in May 1885.

James Jerome Hill deserved the title of "Empire Builder" and his railroad was rightly known as the "Jim Hill Line". Whatever his reasons, he planned to build a comprehensive network of branch lines in western Canada, to complement his main line to the west coast. But he had to wait until the Canadian Pacific's "Monopoly Clause" was repealed in 1888. In the years following the turn of the century, Jim Hill planned two north-south lines through Brandon, Manitoba and Regina, Saskatchewan, as well as an east-west line from Winnipeg to the Pacific. In a sense, he anticipated Mackenzie and Mann and the Canadian Northern. Hill's plans kept the Canadian Pacific on guard continuously, as they were vulnerable to competition which was ardently advocated by politicians and farmers in Canada's developing prairie provinces.

In the early 1900s, Jim Hill did build three branch lines in Manitoba and running rights were secured over the Canadian Northern from Emerson Junction to Winnipeg. In the ensuing years, about a dozen other branch lines were built from the Great Northern's main

line to the International Boundary, between Winnipeg and Vancouver. In British Columbia, Hill incorporated the Vancouver, Victoria and Eastern Railway and Navigation Company and constructed railways on Vancouver Island and in southern British Columbia. He built a total of 607.26 miles of railway in Manitoba and British Columbia, all of it without a government subsidy of any kind.

When construction on the Canadian Northern Pacific and the Grand Trunk Pacific Railways was commenced, the reasons for Jim Hill's planned Canadian railroad to the Pacific disappeared. But with typical ingenuity, Hill did not abandon the project; he just postponed construction indefinitely.

The Brandon, Saskatchewan and Hudson Bay Railway Company, incorporated in 1903, was one of Jim Hill's first attempts to establish a north-south trunk line in Canada. It proposed to build a railway from a point on the International Boundary in Range 16-18, (Bannerman), to Brandon and thence north and west to The Pas, Manitoba. Two years later, the charter was expanded slightly to permit a second connection to Morden, from the GN's main line at Lakota, North Dakota.

Work on the Brandon line began in 1905. The railway was built from the GN end-of-steel at St. John, North Dakota, 3.55 miles to the southeast of the International Boundary. The portion in Canada continued to Brandon for a distance of 69.5 miles.

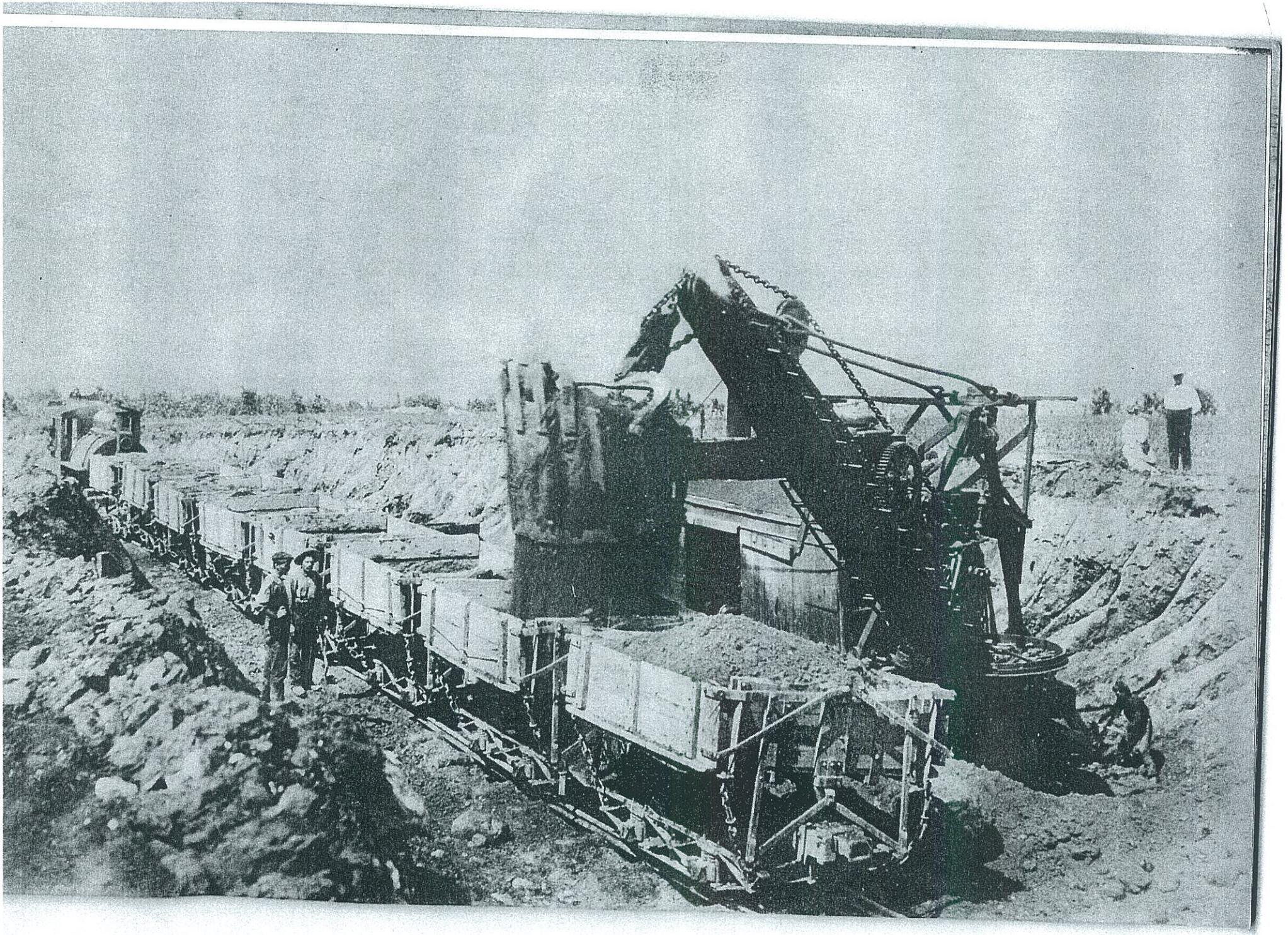
The most difficult section of the BS&HB to construct was the long fill and two-span bridge across the Souris River at Bunclody, Manitoba, about 26 miles south of Brandon. Three large construction camps were established near Bunclody, one on each side of the river valley and the third at the Pete Eamer Ravine, a mile-and-a-half southeast of the village. Each camp was assigned a large steam-shovel and teams of horses, mules and four-drivered "donkey" engines were used to haul the dump-cars full of earth from the cuts and benches to the bridge approaches.

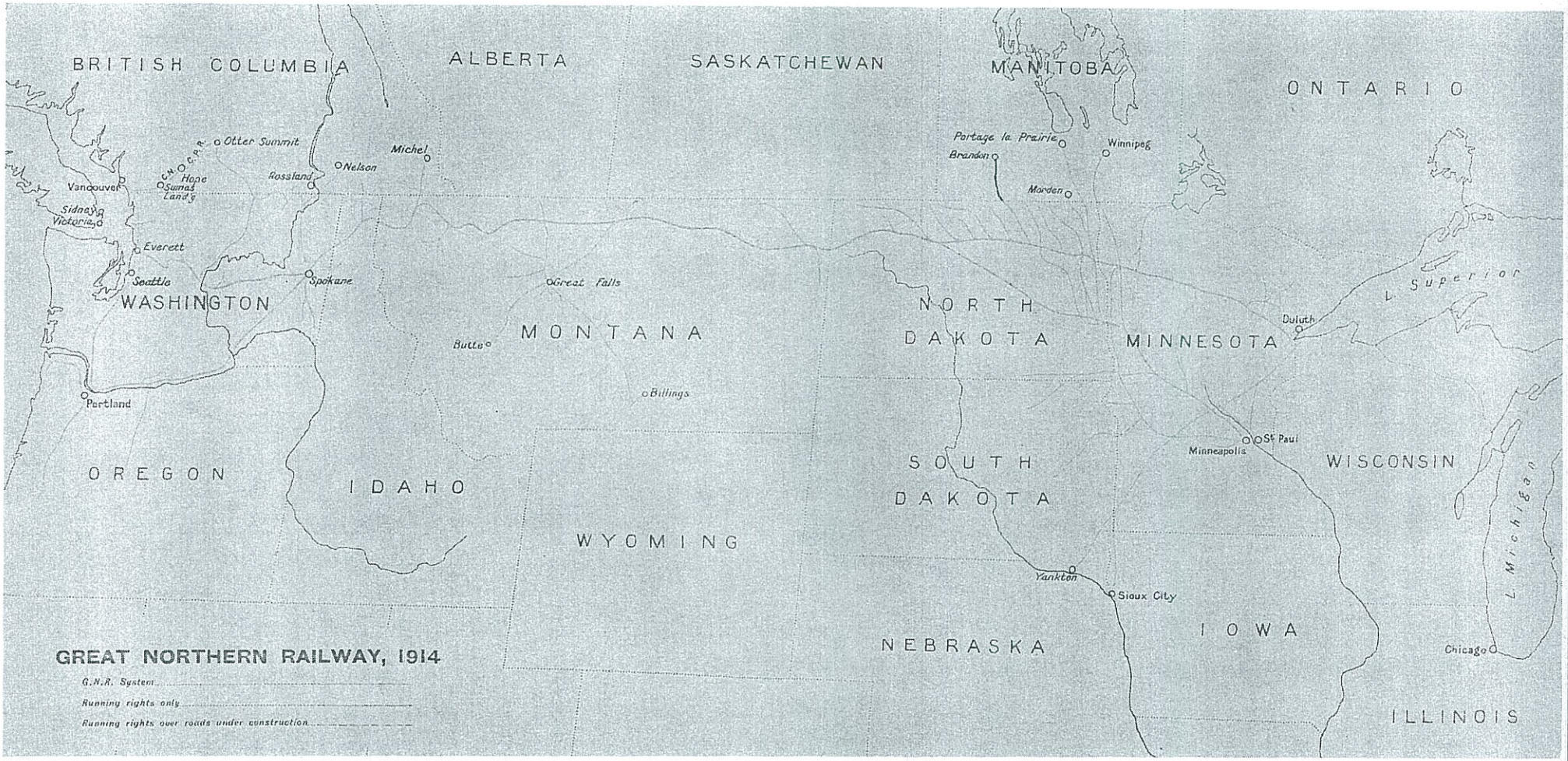
If you suspect that the name Bunclody has an Irish "ring" to it, then you are quite correct. Mr. George McGill, who settled in this area with Mr. James Copeland in 1881, afterwards became Secretary-Treasurer of School District 383, formed in 1884. Mr. McGill was given the privilege of naming the school and he chose Bunclody, the name of the district in Ireland from which he had emigrated.

At Bunclody, the Souris River valley is considerably below the level of the prairie and is quite wide. It was therefore necessary to bring the railway grade down the south side of the valley on a bench and carry the single-track line across the valley and river

A 65-TON STEAM SHOVEL EXCAVATES A CUT AT THE TOP OF THE GRADE OUT of the Souris River valley near Bunclody, Manitoba, in 1905. The train of dump-cars is hauled by a saddle-tank engine.
Photo Gilford Copeland

THE BIG FILL AND THE BRIDGE OVER THE SOURIS RIVER, NEAR BUNCLODY, Manitoba, anout 1905. The two tracks on the fill allowed the train of loaded dump-cars to proceed to the dumping position, while the empties returned on the other track to be refilled.
Photo Gilford Copeland




BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
Otter Summit
C.N.O.&P.R.
Michel
Nelson
Hope
Sumas
Rossland
Vancouver
Sidney
Victoria
Everett
Seattle
Spokane
WASHINGTON
Portland
OREGON
IDAHO
Great Falls
Butte
MONTANA
Billings
WYOMING
Portage la Prairie
Winnipeg
Brandon
Morden
NORTH DAKOTA
MINNESOTA
Duluth
L. Superior
St Paul
Minneapolis
WISCONSIN
L. Michigan
SOUTH DAKOTA
Yankton
Sioux City
IOWA
NEBRASKA
Chicago
ILLINOIS
GREAT NORTHERN RAILWAY, 1914
G.N.R. System
Running rights only
Running rights over roads under construction

cleared a path about 10 feet wide. The crew would take the plow as far forward as possible, until it began to clog, and then backed it out of the cut, while the men shovelled off the top four or five feet of the cut. The rotary was then brought forward again to blow this snow out of the cut. But it also blew down some of the snow-fence that the men had worked so hard to erect. The worst drifts had formed at Wilson Cut, a mile-and-a-half north of Heaslip and three miles south of the Souris River crossing.

That was not the end of the snow that winter. On March 20, there was another big snowfall. The passenger train went through on Friday morning, with two engines and a wedge-plow. About half-an-hour later, Mr. Fraser got word that the train was stuck in Wilson Cut. Hurriedly he called his men together and they walked down the track to the snowbound train. When they found it, the engines, plow and coaches were drifted in solidly, with snow half-way up on the coach windows. The conductor and the engine crews tried to loosen up the frozen drivers on the locomotives with the steam hose, but to no avail. Then, the engine crews got out the jacks and managed to force the two engines apart far enough so that the second engine could "bump" the first engine free. By 2.00 a.m., the train was ready to travel, but the water in the tender of one of the engines was so low that the crew had to reverse into the cut again, so that snow from the top of the cut could be shovelled into the tender tank, to be melted into water for the boiler. This was the wrong decision, as one of the engines became stuck all over again!

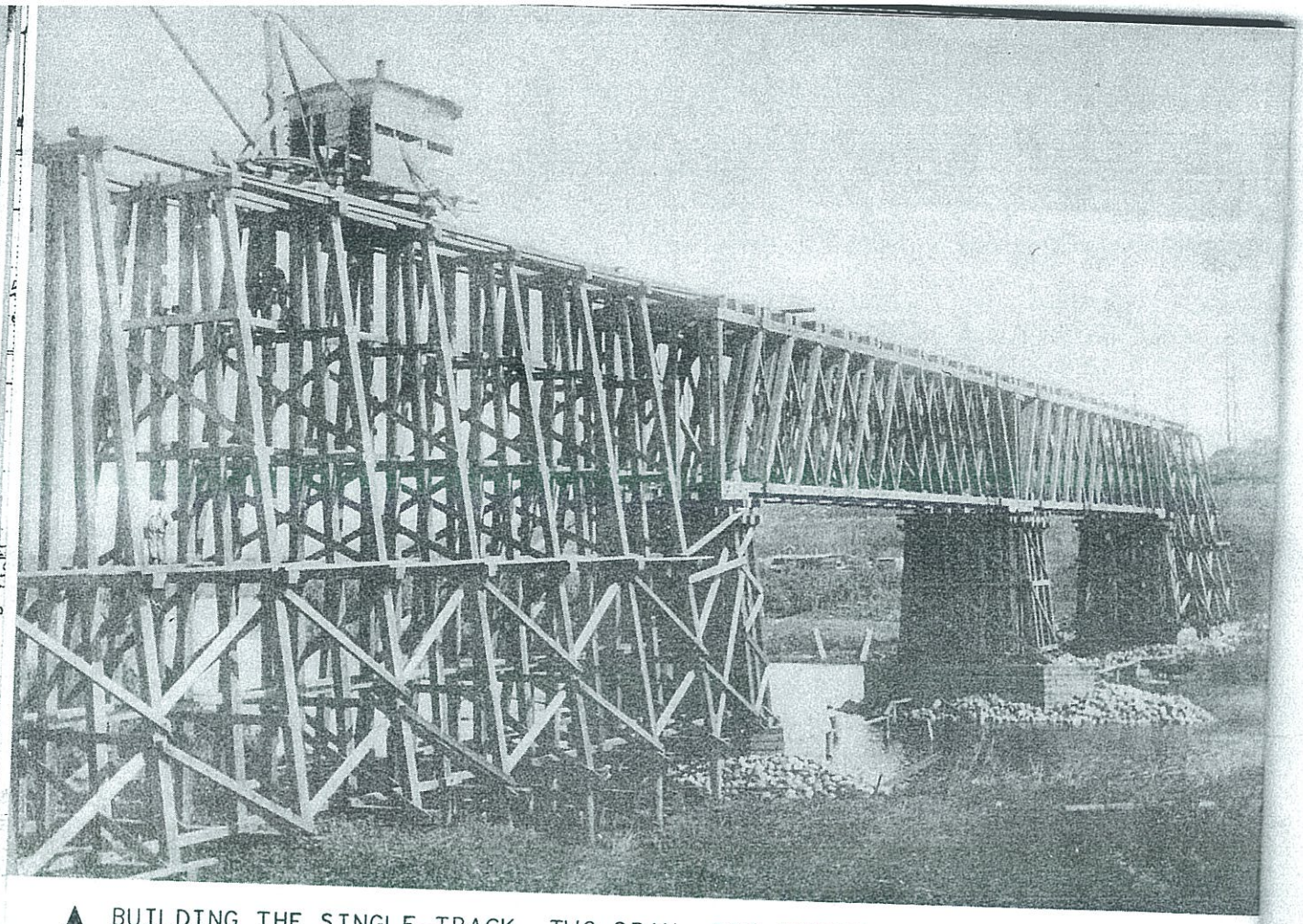
The lady passengers managed to find some bread and coffee in the baggage car and someone brought other supplies from the general store at Heaslip. A midnight lunch was then served. With great effort, the train was thereafter liberated from the snowdrifts and the whole outfit staggered into Minto, 35 miles south of Brandon, at 5.00 a.m. on Saturday. The crew had to let one engine die and the second one was also low on coal and water. The conductor wired St. John, North Dakota, for a replacement engine, which arrived about noon and the run was resumed the following day.

On Monday, the passenger train returned from St. John with two engines and an extra water-car and snowplow. The passenger part of the train spent the night at Bunclody, while the two engines and the plow went ahead to clear the line, returning to the station for the night. Next morning, the whole train went on its way, but the plow jumped the rails, due to the ice which had formed at the place where it had stopped the night before. The Bunclody men were called out again to help re-rail the plow and, before long, the line was opened and the passenger train departed on its way to Brandon.

Episodes like this one prove beyond any doubt that the problems caused by weather to railway operation in Canada were not confined to the railways in the Rocky Mountains, those along the bleak shore of Lake Superior or those that ran through eastern Québec and New Brunswick to Nova Scotia!

The bridge over the Souris River was entirely rebuilt in 1929-30 and service was never interrupted during this reconstruction. Mr. Fraser was joined on the section-gang by his two sons, Murray and Ernie and, in time, together they accumulated a total of 147 years of service on the Great Northern Railway. They held many positions in Manitoba, North Dakota and Minnesota.

The BS&HB entered Brandon from the west, between the Canadian Pacific and Canadian Northern tracks. A large brick-and-stone sta-



BUILDING THE SINGLE-TRACK, TWO-SPAN, BOX-GIRDER, WOODEN BRIDGE OVER the Souris River near Bunclody, Manitoba, on June 19, 1906.
Photo Gilford Copeland

tion was built one block west of the Canadian Pacific station and five blocks from that of the Canadian Northern. A large brick freight shed was built farther to the west. The BS&HB yard ran parallel to the CPR and most of the switching between the CP and Canadian Northern was done by the BS&HB. They also had tracks serving most wholesale and other warehouses in Brandon.

As noted previously, engine crews on the BS&HB ran out of St. John, North Dakota. Here, there was a roundhouse and a turntable, the latter being of the "armstrong" variety. When extra manpower was necessary to turn a heavy engine, volunteers were recruited from the local pool-hall. St. John was also the United States port of entry, while Bannerman, Manitoba, was the Canadian equivalent. McCabe Elevator Company built grain elevators at all stations on the Great Northern Railway's lines in Manitoba and a large grain traffic was handled to Duluth, Minnesota. This was what Jim Hill had planned, all along.

From the fall of 1907 to the spring of 1911, the Great Northern hauled grain south from Winnipeg, Brandon and Portage La Prairie to Duluth, on Lake Superior, for the Grand Trunk Pacific Railway, then under construction. The GTP's Lake Superior line to Fort William, Ontario, could not be used yet, as the Winnipeg-Superior Junction section of the National Transcontinental Railway, which was to form the connecting link, was not completed until April 1911.

After Brandon, the largest town on the BS&HB was Boissevain, 48 miles to the south. There was a good-sized station and freight yard here. On its way north from St. John, the BS&HB encountered several

railways, all of which it crossed at grade. At Bannerman, there was the Greenway-Adelpha branch of the Canadian Northern Railway, which had been opened for traffic on May 31, 1905. At Boissevain, there was the Manitoba and South Western Colonization Railway, or the "Pembina Branch", as it was called. It had been completed to Deloraine in 1886 and was generally called the "Deloraine Line" by the old-timers.

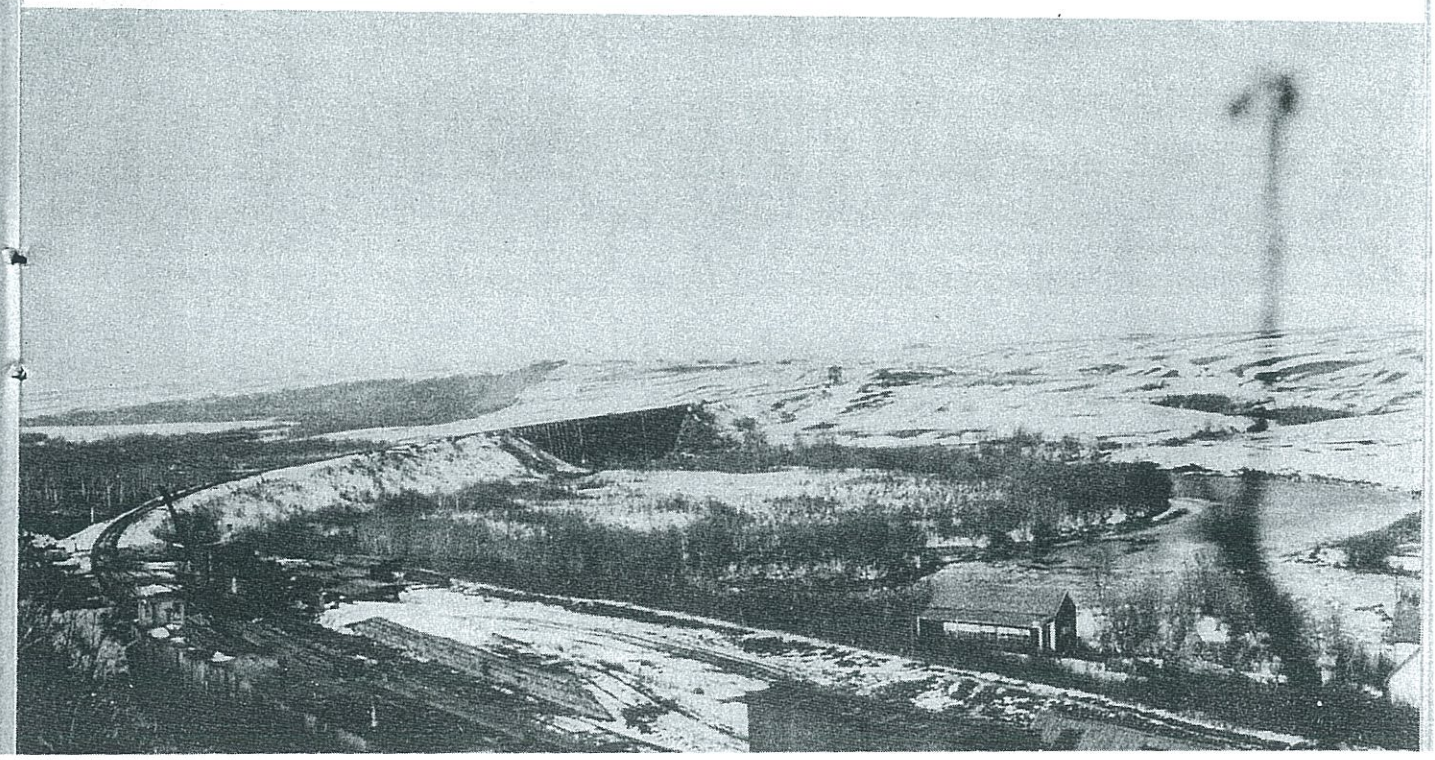
The Northern Pacific & Manitoba's track from Winnipeg, through Carman to Hartney Junction, was bisected by the BS&HB at Minto, Manitoba. This railway had been completed in 1898, being built by the Northern Pacific Railway of the United States. It was first leased to the Government of Manitoba in 1901 and then re-leased to the Canadian Northern Railway in the same year.

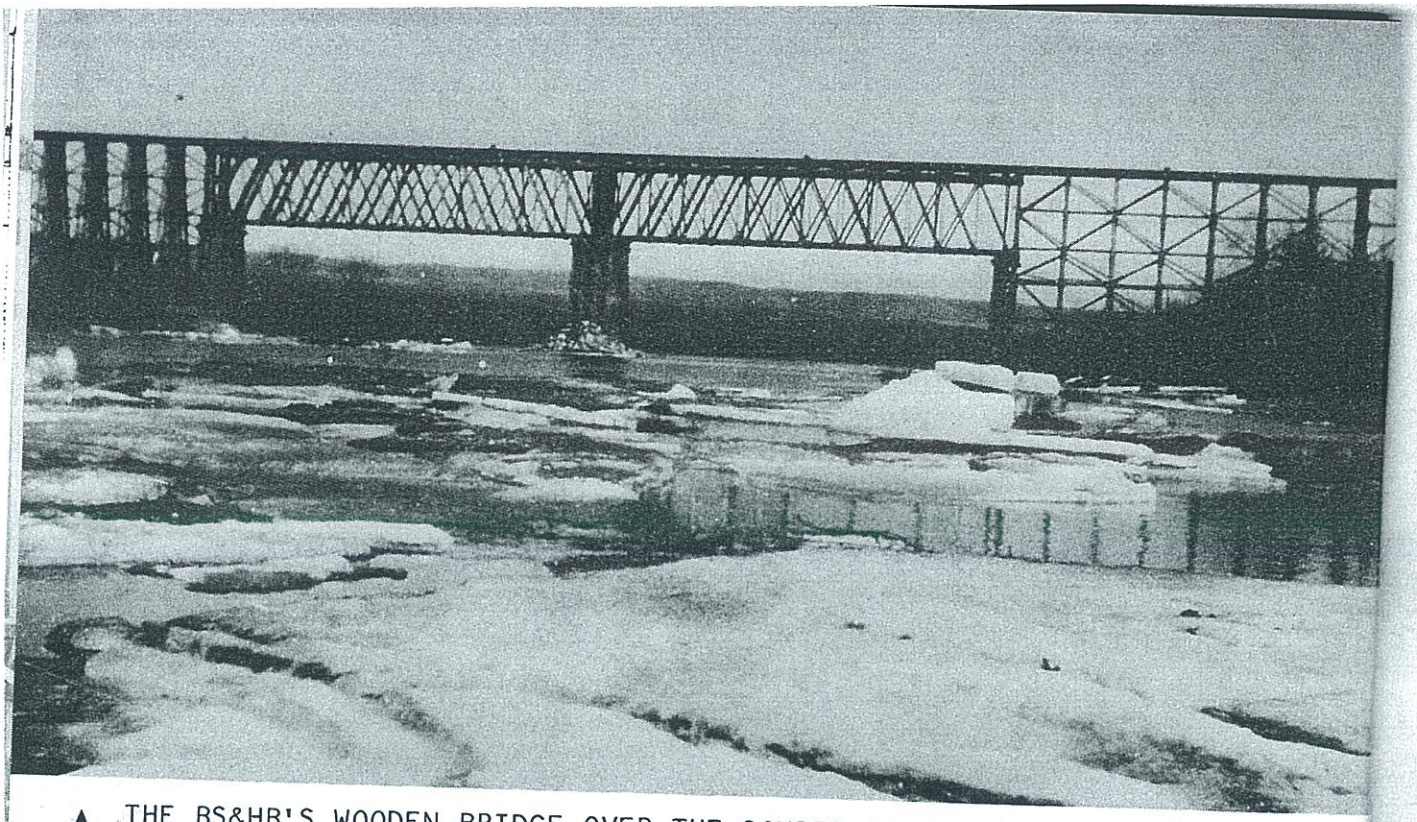
The Souris branch of the Canadian Pacific crossed the BS&HB near Carroll, Manitoba. This railway pursued a curious route from Winnipeg, through Souris to Arcola, Saskatchewan, terminating at Saskatchewan's capital city of Regina.

Just west of Brandon, there was a crossing with the Canadian Northern's line from Winnipeg to Regina, completed in 1905. The Canadian Pacific, of course, was the first railway in Brandon, the first official passenger train having arrived on October 11, 1881.

The BS&HB had a 30-year contract with the Government of Canada to transport the mails. This put a little revenue in the Company treasury. By far the most important event, each year, for the children, that is, was the appearance of the "Midway Train", on its way to Brandon. This was the train that carried all the amusement rides from one Provincial Exhibition to another, in Regina, Calgary, Edmonton and Saskatoon. It was the highlight of the year for the

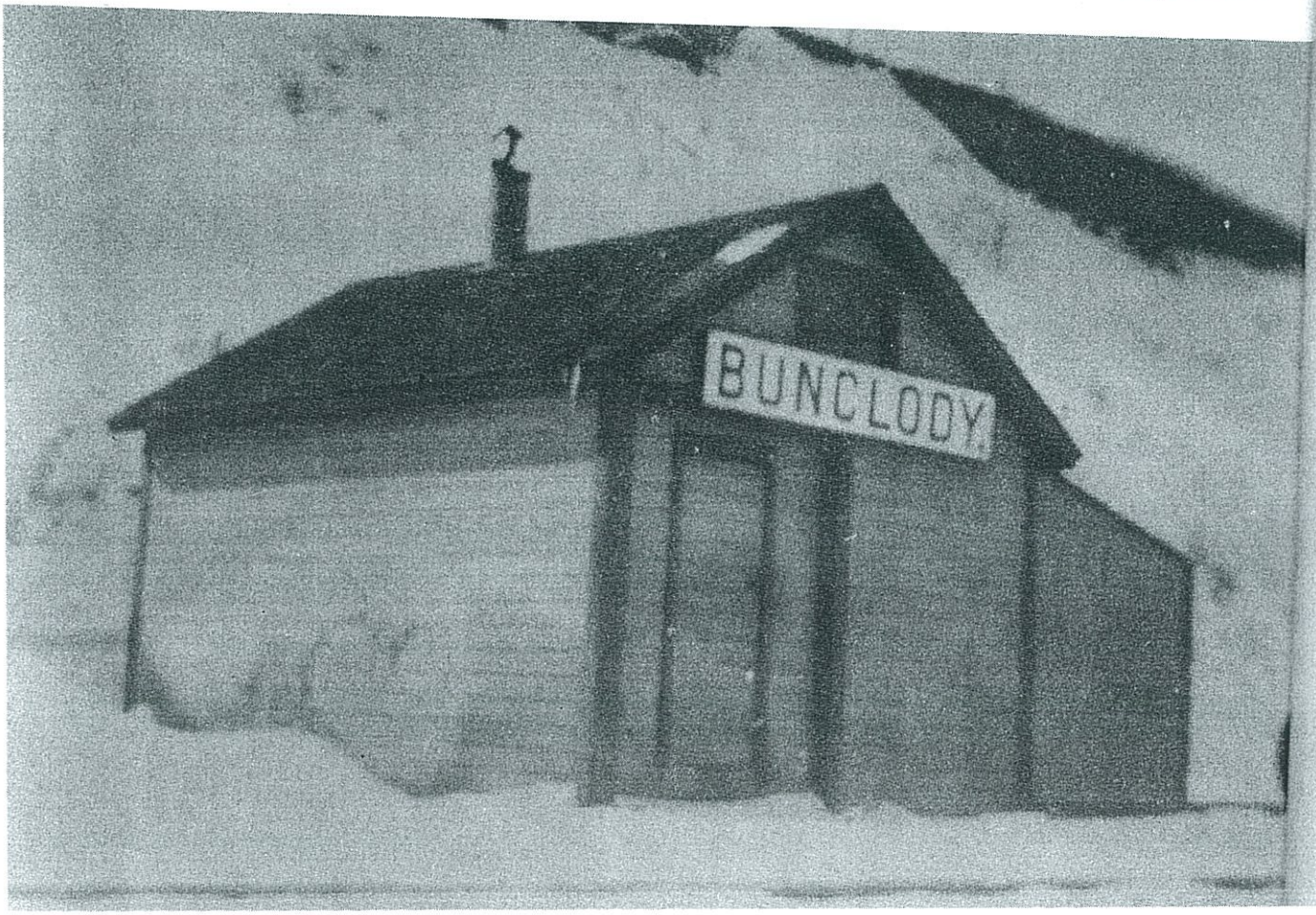
THE STATION, YARD, HIGH FILL AND BRIDGE OF THE BRANDON, SASKATCHEWAN and Hudson's Bay Railway at Bunclody, Manitoba, about 1910, after the railway was in operation. Photo Gilford Copeland

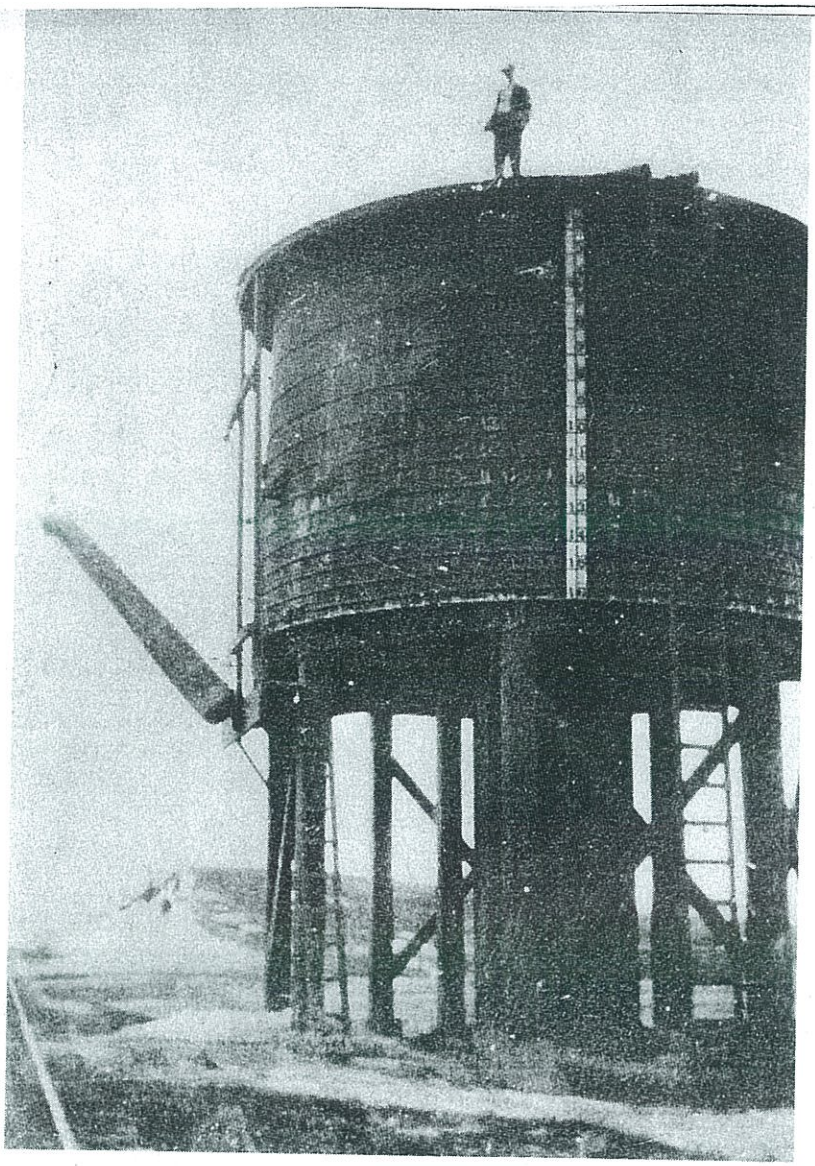




THE BS&HB'S WOODEN BRIDGE OVER THE SOURIS RIVER WAS REBUILT TO A steel box-girder structure in 1929-30. The spring run-off remained substantially the same and the ice-cakes battered the central pier each spring.
Photo Gilford Copeland

AS THE TRAFFIC ON THE BRANDON, SASKATCHEWAN AND HUDSON'S BAY RAILWAY diminished, so did the size of the station at Bunclody. In the final years, it had dwindled to this size.
Photo Gilford Copeland





ONE OF THE ORIGINAL STRUCTURES ON THE BS&HB WAS THE WATER-TANK AT Bunclody, Manitoba. Mr. John Fraser looked after the tank.
Photo Gilford Copeland

THE STATION OF THE GN/BS&HBRy IN BRANDON, MANITOBA. THE FREIGHT TRain, headed by a small-drivered GN consolidation, faces west, ready to depart for Boissevain, Manitoba and St. John, North Dakota.
Photograph courtesy Assiniboine Historical Society.

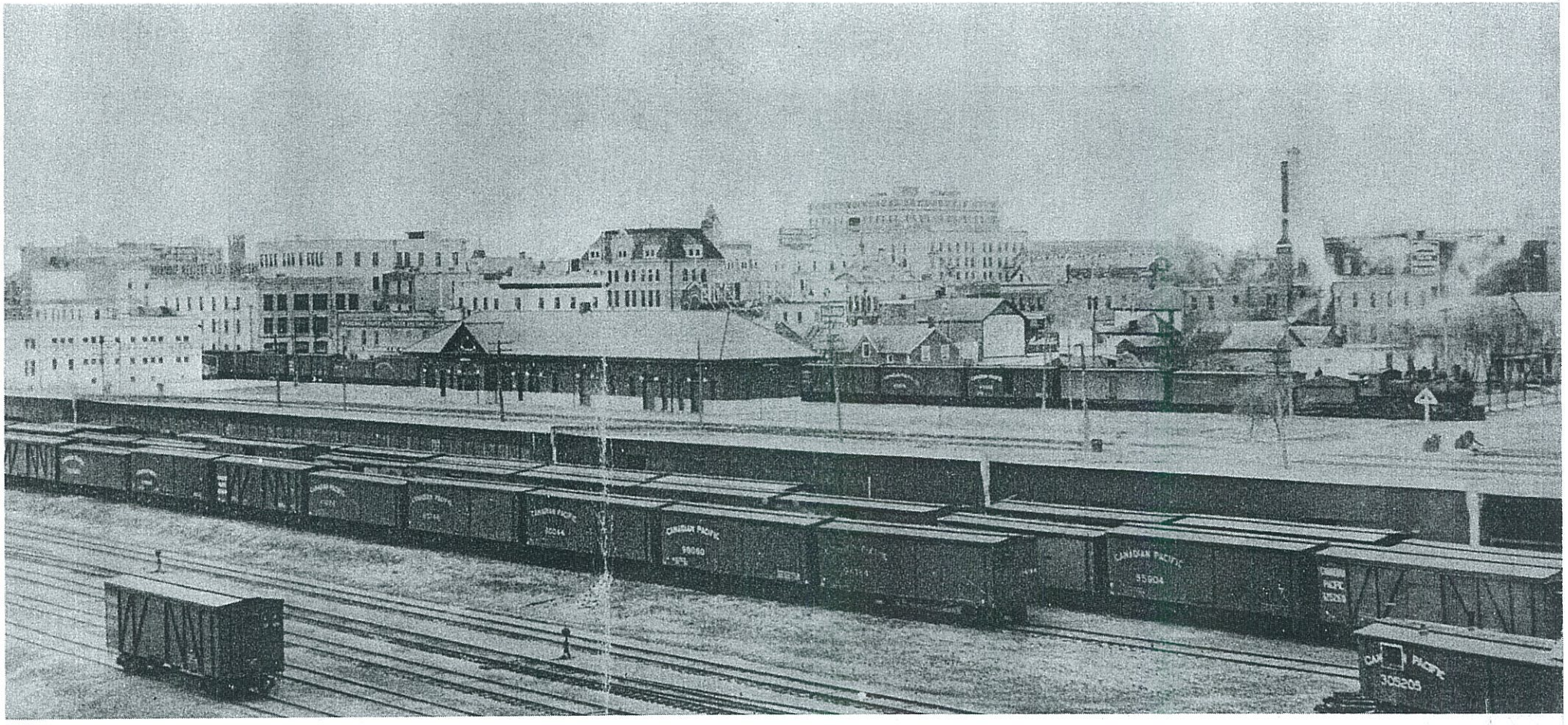
1895-1912

1912-1914

1921-1936

1936-1967

Courtesy Minnesota Historical Society.


CANADIAN PACIFIC
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people under 12 along the BS&HB. The railway also operated many excursions on special occasions, such as Brandon Fair, and on holidays. These excursions were well patronized. Freight business was reasonably good, with import shipments coming in from the United States and grain going south. Passenger service was excellent and very, very friendly.

The "international" passenger train which ran daily except Sunday from Brandon to Church's Ferry and Devils Lake, North Dakota and return, consisted of a small Great Northern 4-4-0 locomotive, a combination baggage/express/mail car, followed by two coaches, one reserved for ladies and non-smokers. The passenger was a name-train, too. Everybody called it "Charley Bryant", or just "Charley".

Charley Bryant was the conductor on this train for almost 40 years, so it was no wonder that passengers and others got into the habit of thinking that it was really Charlie's train. When young passengers grew up, they were surprised to learn that "Charley" really belonged to the Great Northern Railway of the United States. Meeting the evening passenger train was a "must" for all the train-lovers of the district. Whenever it was late, everyone would ask: "What's keeping Charley?"

The daily-except-Sunday passenger train for Devils Lake left Brandon early in the morning and soon it was rattling along the track down the side of the valley and across the high fill and the bridge over the Souris River. Further south, the train ran through the eastern foothills of the Turtle Mountains, where the beautiful International Peace Gardens are located today.

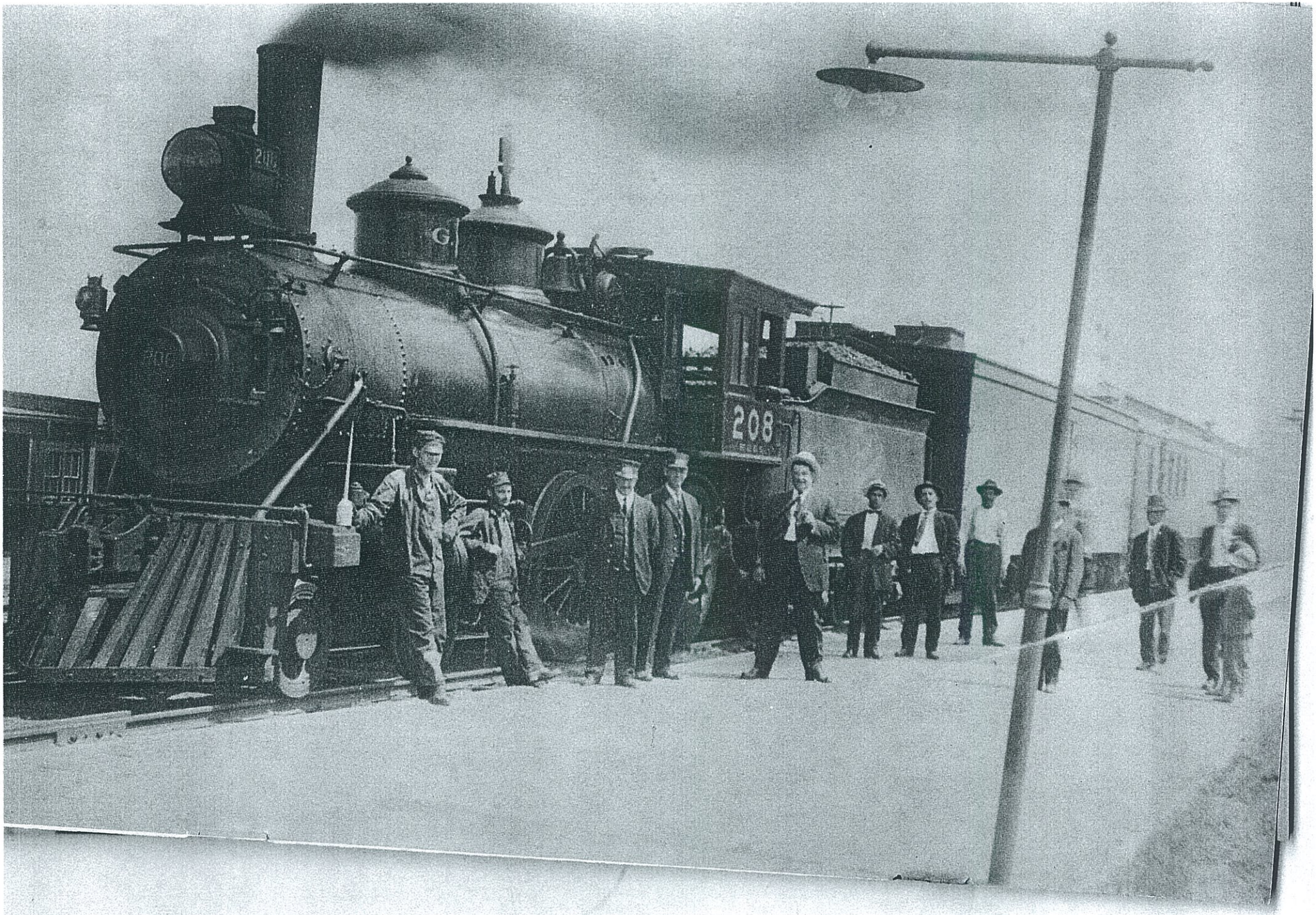
A ten-minute stop was made at St. John, North Dakota, the divisional point and United States customs and immigration inspection point. Two hours and a half and 55 miles later, Train 210 arrived at Church's Ferry, where a connection was made with the main line for Devils Lake, 20 miles to the east.

The afternoon passenger, Train 209, departed Church's Ferry at 3.15 p.m. and arrived at Brandon at 9.30 p.m., in the late evening. Passengers returning from Minneapolis and St. Paul, Minnesota, were described as "coming back from down below".

Conductor Bryant of the BS&HB was also a farmer and his farm was located just south of the International Boundary at St. John. He was a very good neighbour and helped his neighbour-farmers frequently. In the autumn, he would stop the passenger train at various farms between regular station stops to disembark Indian harvest workers from the nearby Turtle Mountain Reservation. Charley sometimes did not pay too much attention to the schedule, but the services he did provide were appreciated by patrons of the Great Northern, all along the line.

The opening years of the economic depression of the 1930s were not good ones for the Brandon, Saskatchewan and Hudson's Bay Railway, or its parent Great Northern, for that matter. The lower freight rates on grain, resulting from the famous Crow's Nest Pass agreement of June 29, 1897, made it cheaper to ship grain to the Canadian ports

GREAT NORTHERN RAILWAY 4-4-0 NUMBER 208 IS READY TO LEAVE BRANDON, Manitoba, with the daily passenger train for St. John and Devils Lake, North Dakota. The crews posed for a group photograph.
Photo L.S. Stuckey.


208

on the Great Lakes. Higher customs' duties on United States goods reduced imports into Canada and the advent of the private automobile resulted in a significant reduction in passenger traffic. As the depression worsened, the BS&HB sank further and further into the "red".

Mr. Fraser, the section-foreman at Bunclody, took his wife and his bousehold goods and moved to Manville, North Dakota. While Mr. and Mrs. Fraser rode in the passenger coach, their carload of household effects was the last car on the last passenger train on the Brandon, Saskatchewan and Hudson's Bay Railway. That was on June 17, 1936. From that day on, the passenger train from Devils Lake terminated at St. John, North Dakota, remaining there over night before returning to Devils Lake, the following day. So ended 30 years of international passenger service via the Great Northern and the Brandon, Saskatchewan and Hudson's Bay Railway.

The Board of Railway Commissioners for Canada, in Order 53231 dated May 14, 1936, authorized the GN/BS&HB to abandon the railway from Brandon to the International Boundary and the Great Northern took up the 3.55 miles of line from the boundary to St. John.

But not all of the Brandon, Saskatchewan and Hudson's Bay Railway was removed. According to the terms of the abandonment order, the terminal facilities of the BS&HB in the city of Brandon were to be taken over by one of the other railways in the city. In 1936, both Canadian Pacific and Canadian National had lines in Brandon, but because of the proximity of the BS&HB to the Canadian Pacific's yards, this latter company took over the BS&HB's terminal facilities.

Thirty-eight years after most of the Brandon, Saskatchewan and Hudson's Bay Railway was taken up, there are still numerous visible remains for the railway archeologist to discover. The cuts, and some of the fills, can still be discovered and the location of the railway in and out of the Souris River valley is still evident. And although the two-span bridge over the river has disappeared, you can still trace the old right-of-way all the way south to the International Boundary. The BS&HB may never have reached Hudson Bay, but it left its mark on the landscape of southern Manitoba.

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Other research notes.

1. The rails of the BS&HB from St. John, North Dakota to Brandon, Manitoba, were taken up in 1937. Those from the Canadian portion of the line were shipped to British Columbia.

2. The two-span bridge over the Souris River at Bunclody, Manitoba, was dismantled later on by a Brandon contractor and the useable timber salvaged. Snow-fences, grain doors and other materials were removed for use on other lines. Buildings and structures were sold; some were demolished on the spot; others were moved away.

3. The Brandon terminal and transfer yard of the BS&HB were taken over by the Canadian Pacific Railway. The station was converted into a merchandise distribution centre and was finally torn down in 1973. The large brick freight shed is still being used by a Brandon lumber company.

June 7, 1906: Plans (have been made) for building a depot for the Great Northern Railroad, coming in from the south.

November 3, 1906: The Great Northern track (Brandon, Saskatchewan and Hudson's Bay Railway) has been laid a short distance west of 18th. Street in Brandon.

December 1, 1906: The first coal train arrived in Brandon from the south (Great Northern Railway) after being stuck and held up for 2 weeks, the results of a bad storm and an acute fuel shortage in Brandon.

April 24, 1907: The first passenger coach, in a mixed train, arrived in Brandon on April 24th., 1907, coming from Devils Lake, North Dakota.

Acknowledgements.

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The Brandon Historical Society	Brandon, Manitoba
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- The Life of James J. Hill — Pyle, J.G. — 1917

THE HEAVY SNOWFALL OF THE WINTER OF 1923 FILLED THE CUTS FOR THREE miles south of Bunclody. A Great Northern 2-8-0 pushed the rotary snow-plow into the deep drifts, while Mr. Fraser, the section foreman and his two sons, Murray and Ernie, helped shovel off the top of the drifts.

Photo Gilford Copeland.

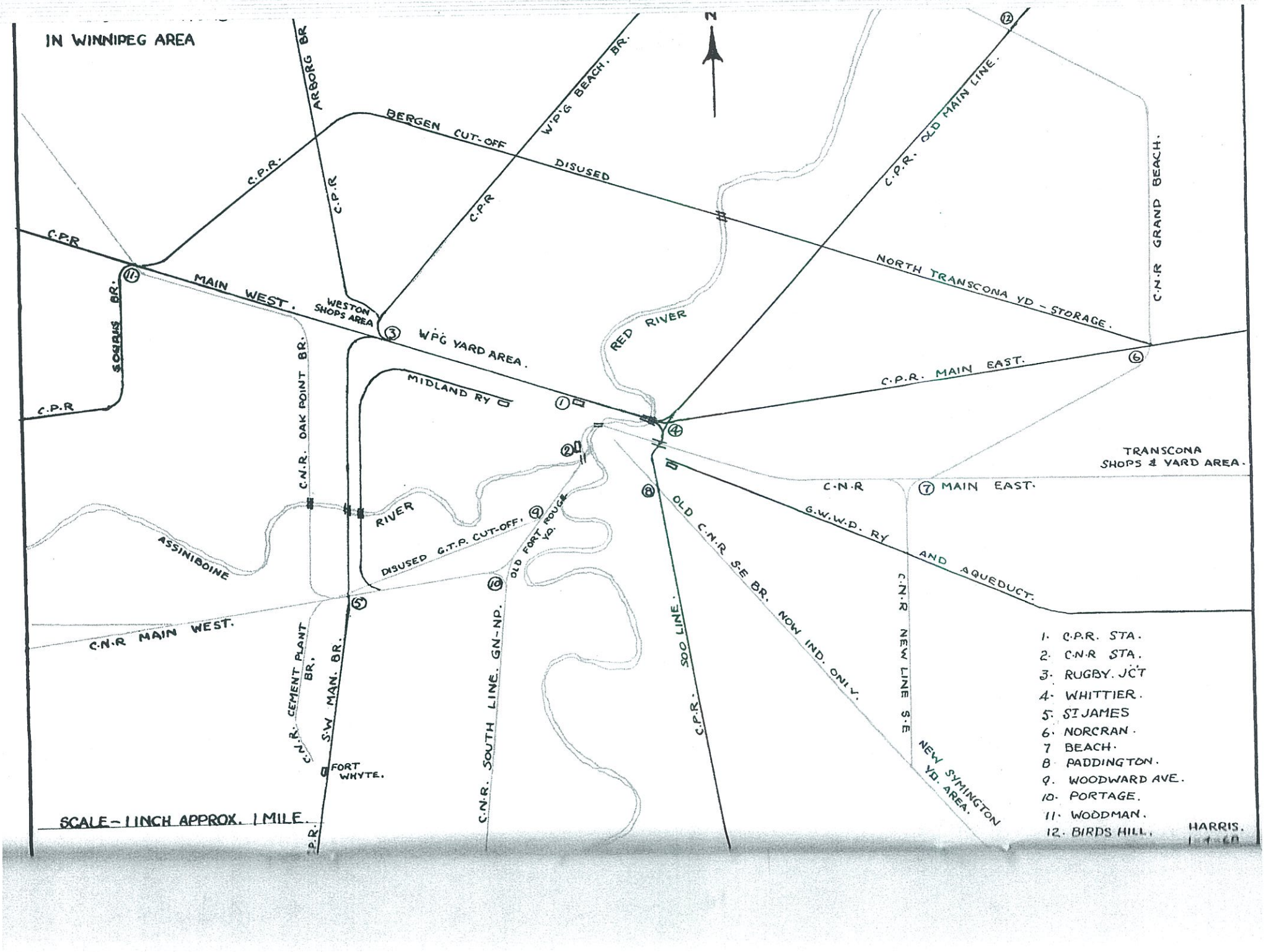
RAILWAY JUNCTIONS IN THE WINNIPEG AREA

George H. Harris

IN ANY EXAMINATION OF WINNIPEG'S HISTORY AS A railway centre, some study must be given to this Manitoba city's past history, and a map of the area, showing the invariable feature,- the Red River, is the best way of doing this. From the map, it is easy to see which railway lines were the first ones to enter the City. The main line of the Canadian Pacific Railway makes a clear division of the City from east to west, indicating that it was located through this area at an early date and that the City more or less grew up around it,- or on each side of it.

THE FORERUNNER OF THE present Canadian National Railway in Winnipeg was known as the Northern Pacific of Manitoba and was, in the beginning, a venture of the Northern Pacific Railroad in the United States. A newcomer from the south, about a decade after the arrival of the Canadian Pacific in 1888, the railroad did not find it too difficult to gain access to the young City. Acreage was bought for a terminal facility on a flat stretch of land to the south of the Red River and near the former site of Upper Fort Garry, which had been razed in the early '80's. Here were established an engine shed car and engine sheds and shops, a freight house and a station,- very close to what is now downtown Winnipeg. This area is presently known as the East Yard.

DIFFICULTIES IN LAND ACQUISITION in the City of Winnipeg occurred shortly after this time, when the expansion of what later became the Canadian Northern Railway took place. Eastward exits from the City ,- as well as westward ones, did not cause too much trouble but branch lines to northern points were difficult to locate. For instance, the line to Oak Point and Gypsumville, to the northwest, practically had to circle the City before turning northwest. Although the line to Grand Beach was not built until 1914, it was forced to detour eight miles to the east, before taking its direction northward along Lake Winnipeg's eastern shore. All of this detouring was necessary in order to get around the existing main line location of the Canadian Pacific.

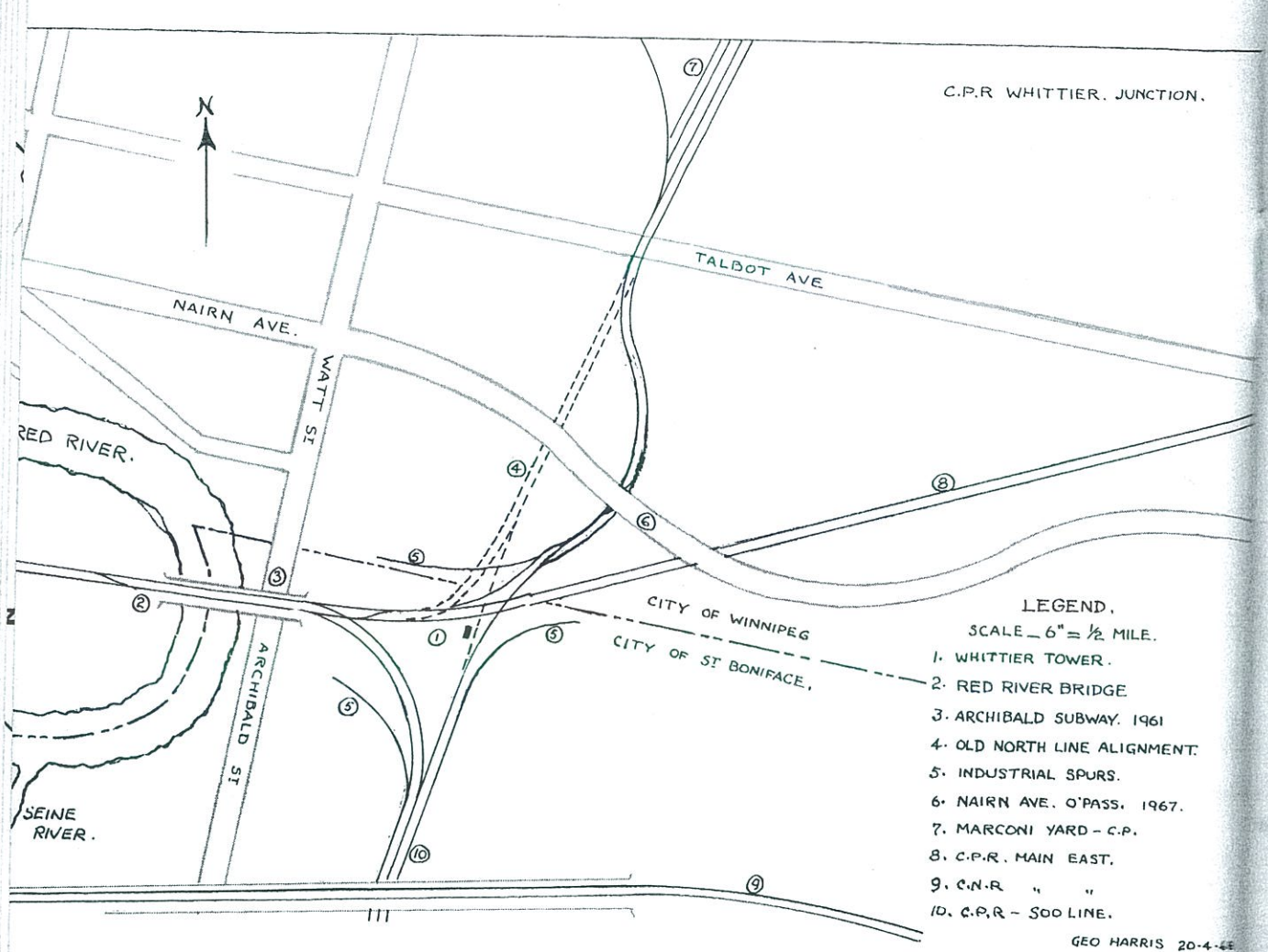

IN WINNIPEG AREA
N
ARBORG BR.
C.P.R.
BERGEN CUT-OFF
DISUSED
W.P.G BEACH. BR.
C.P.R
C.P.R. OLD MAIN LINE.
C.N.R GRAND BEACH.
C.P.R
MAIN WEST.
SOURIS BR.
WESTON SHOPS AREA
WPG YARD AREA.
RED RIVER
NORTH TRANSCONA YD - STORAGE.
C.P.R
C.N.R. OAK POINT BR.
MIDLAND RY
C.P.R. MAIN EAST.
TRANSCONA SHOPS & YARD AREA.
C.N.R
MAIN EAST.
RIVER
ASSINIBOINE
DISUSED G.T.P. CUT-OFF.
OLD FORT ROUGE YD.
G.W.W.D. RY
AND AQUEDUCT.
OLD C.N.R S.E BR. NOW IND. ONLY.
C.N.R MAIN WEST.
C.N.R. CEMENT PLANT BR.
S.W MAN. BR.
C.N.R. SOUTH LINE. GN-NP.
C.P.R. SOO LINE.
C.N.R NEW LINE S.E
NEW SYMINGTON YD. AREA.
FORT WHYTE.
SCALE - 1 INCH APPROX. 1 MILE.
1. C.P.R. STA.
2. C.N.R STA.
3. RUGBY. JCT
4. WHITTIER.
5. ST JAMES
6. NORCRAN.
7 BEACH.
8 PADDINGTON.
9. WOODWARD AVE.
10. PORTAGE.
11. WOODMAN.
12. BIRDS HILL.
HARRIS.
1-1-60

THE FIRST TWO JUNCTION POINTS,- first in point of traffic,at least,are entirely Canadian Pacific and probably the busier is Rugby Junction. Named for the famous railway centre of England's midland district on the London,Midland and Scottish Railway,the Winnipeg junction is situated at the west end of Winnipeg City Yard,where the branch lines to points to the north and south fan out. Moreover,the junction is located between the main yards and the Weston Shops complex,some three miles from the City centre. The system was at one time controlled from a long,wooden tower by a multiplicity of manually-operated signals and switches. The tower was on the south side of the junction. In midsummer of 1947 the whole arrangement was changed. The tower was replaced by a much smaller brick structure,relocated to the north side of the junction,with new electrical signals and switches,of course. It now forms part of the Centralized Traffic Control system. Today,east and west traffic and yard traffic through Rugby Junction is heavier than the traffic to and from the various branches which has decreased considerably. In fact,there is not a single branch passenger train running any more, and most branch-line way freights have been reduced to an "if,as and when" required basis.

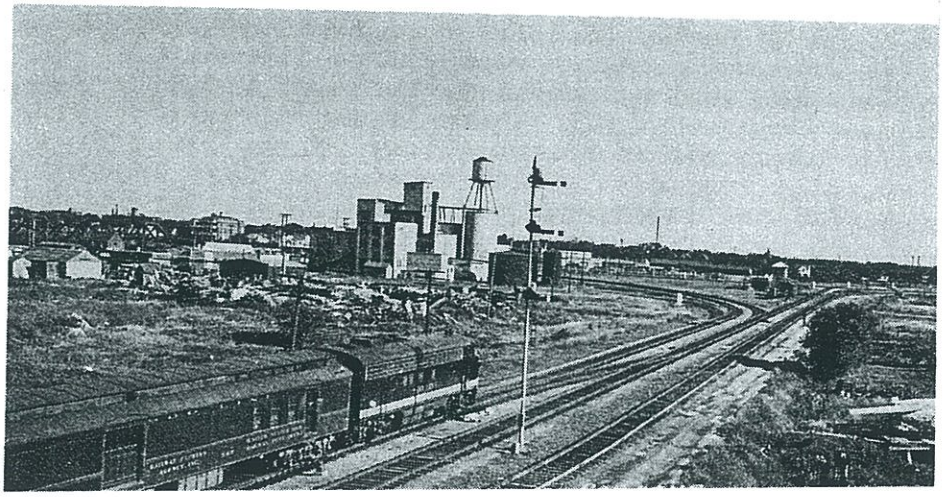
ONCE UPON A TIME,the "Beach" trains to the sunny shores of Lake Winnipeg were very heavily loaded and operated very frequently during the summer months. On Saturdays,the writer has seen as many as 4 fifteen to twenty coach trains,departing for Lake Winnipeg beach points and an equal number returning. This heavy seasonal Canadian National "suburban" traffic dwindled and died,about 1956.

A SECOND JUNCTION OF IMPORTANCE is Whittier Junction,- another name borrowed from Great Britain. This junction is located at the east end of the C. P.'s main line bridge,crossing the Red River. The tower is set back from the tracks at this point,as it was built so as to obtain an unobstructed view westward,straight through the bridge. Historically,this junction would rank first,as it was here that a connection was made with the pioneer rail line of the West,- the railroad which is now known as the $00 Line.

PRACTICALLY SPEAKING,WHITTIER JUNCTION occupies the same position to the east of the City as Rugby Junction does to the west. Whittier is not quite as busy as Rugby though,as there is not the heavy yard switching which occurs at the latter point. There is , however,quite an amount of interchange traffic from St. Boniface and the Stockyards,which are located on tha t side of the Red River. It is interesting to note that in the old days,Whittier was a "wyeing" point for local empty passenger stock trains. Whittier has been a part of the C.T.C. system for some time,but because of the building of the new Nairn Avenue overpass in 1967, a



WHITTIER JUNCTION in August,1953. The $00 Line train is approaching the junction,- with one unit less than usual. The tower is in the right background (on the right side of the track) and the bridge over the Red River is on the far left of the picture.



WHITTIER JUNCTION with Canadian Pacific engine 1418 and the "Canadian" on its way out of Winnipeg. Taken from the new Nairn Avenue overpass, the junction tower can be seen on the far left and the bridge over the Red River is immediately behind the train, in the background. The picture was taken in January, 1968.

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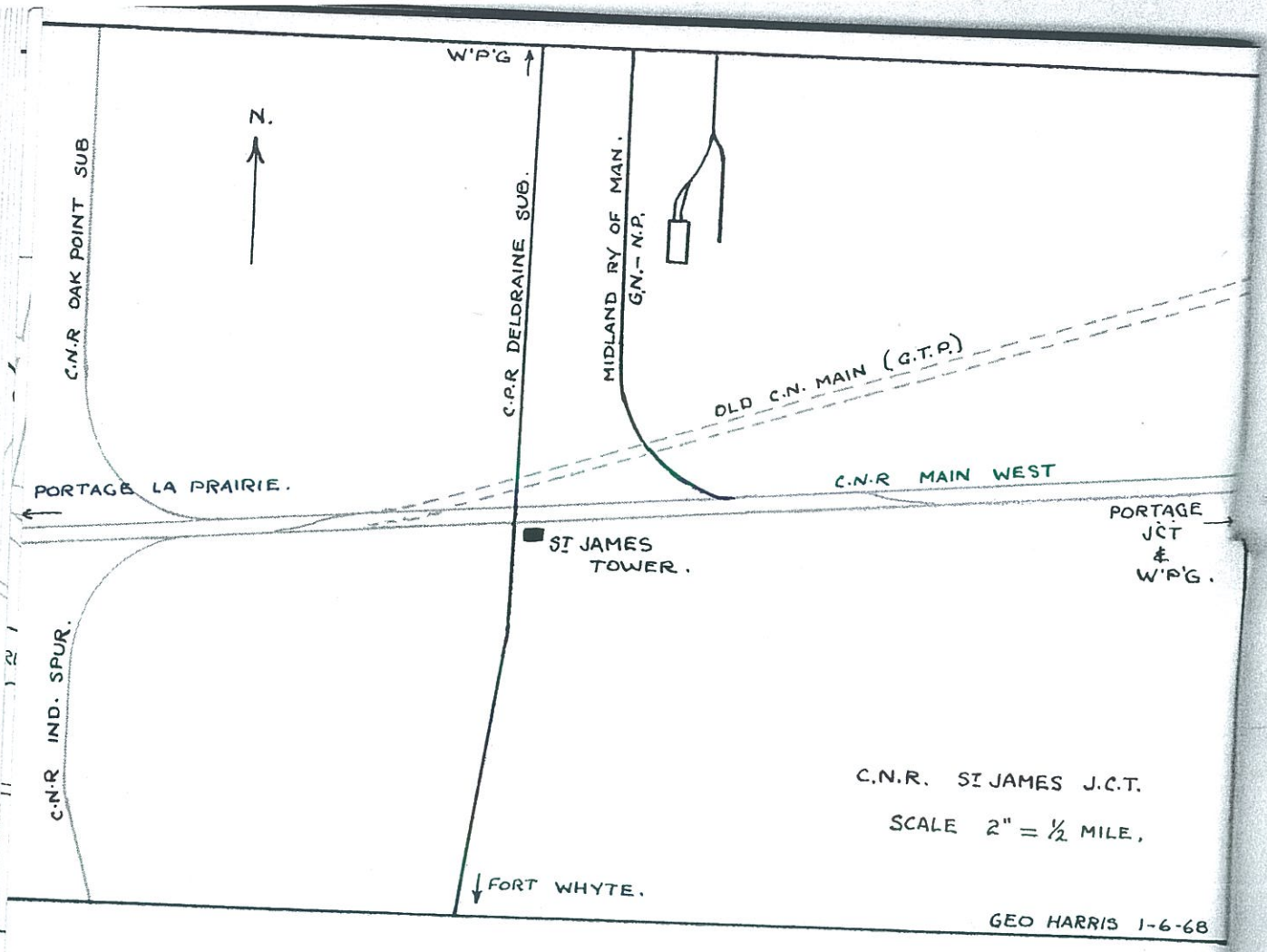
considerable amount of the junction trackage has been torn up and realigned and the whole arrangement modernized. A glance at the map will demonstrate this.

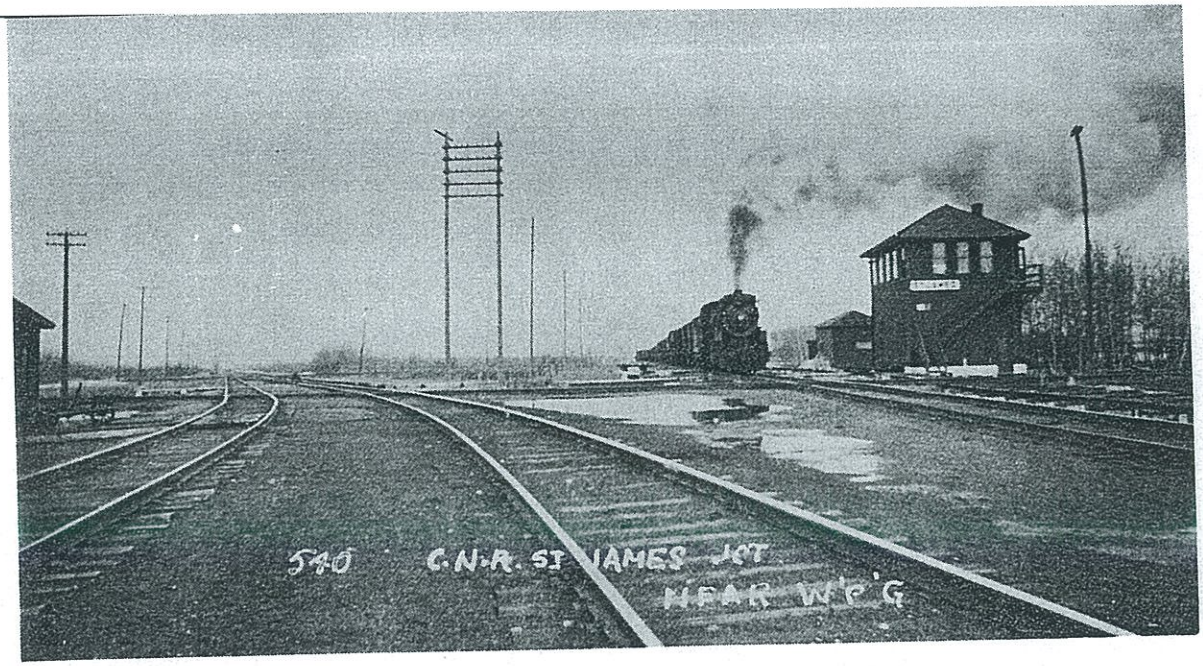
THE THIRD JUNCTION in the Winnipeg area which deserves attention and is perhaps the most interesting is St. James Junction. This operating point is used by three railways and is located on the southwest outskirts of the City. Years ago, (1887-88) when the Red River Valley Railroad was projected to the west by the City of Winnipeg, the Canadian Pacific opposed this extension. The C.P. had already established a branch into southwestern Manitoba and looked upon the newcomer as a rank upstart and potential competitor. So much spontaneous "heat" was generated when the Red River line proposed to cross the C.P.R., that crews from each company almost came to blows. The C.P. ran an engine onto the location of the proposed diamond in their line, to prevent the Red River line from inserting the crossover. In his book on the Canadian National, Colonel Stevens writes that on another occasion, the C.P.R. crew tore up the whole diamond crossing and carried it off as a "prize of war". Some reports say no blows were struck,- physical ones, that is ! Other accounts say that one supporter of the Government got a black eye ! The Courts finally set aside the C.P.'s injunction, preventing the crossing, and the Red River line continued its line into southwestern Manitoba. The location of this diamond crossing was given the name "Fort Whyte",- a humerous title derived from the name of the C.P.R. civil engineer in charge of the project. The Red River Valley Railroad subsequently



came under the control of the Northern Pacific and Manitoba Railroad,- a competitor of the C.P.R.

THE SPOT WHERE ALL THIS FUSS took place more than sixty years ago, is now St. James Junction. The name "Fort Whyte" is still perpetuated on a small way station, about a mile and a half south of the old crossing point,- the place where the Battle of Fort Whyte was fought. Nowadays, the main line of the Canadian National crosses an important branch of the Canadian Pacific here. Moreover, the Midland Railway of Manitoba, a terminal switching line owned jointly by the Great Northern and Northern Pacific Railroads of the United States also crosses the C.N. here, from the south side to their own property and Winnipeg yards, on the north. They have their own terminal facilities just north of St. James Junction. The entire junction is now electrically controlled. When the writer was young and even as he grew older, this was always his favourite spot for train watching and photographing. In those days, it was a long hot bicycle ride out to St. James Junction from the City.

THERE ARE SEVERAL OTHER JUNCTIONS in the Winnipeg urban and suburban area which deserve mention. Some of them have a considerable amount of traffic, but they are mainly straight crossover points and for this reason are of less interest. An examination of the map and a brief descriptive summary should describe adequately the activity at these points. Let us consider then these lesser junctions by classification of activity.



THIS 1933 PHOTO caught a westbound freight on the old Canadian Northern line at St. James Junction. The newer Grand Trunk Pacific cut-off is on the left. The Canadian Pacific crosses north to south, close to the tower.

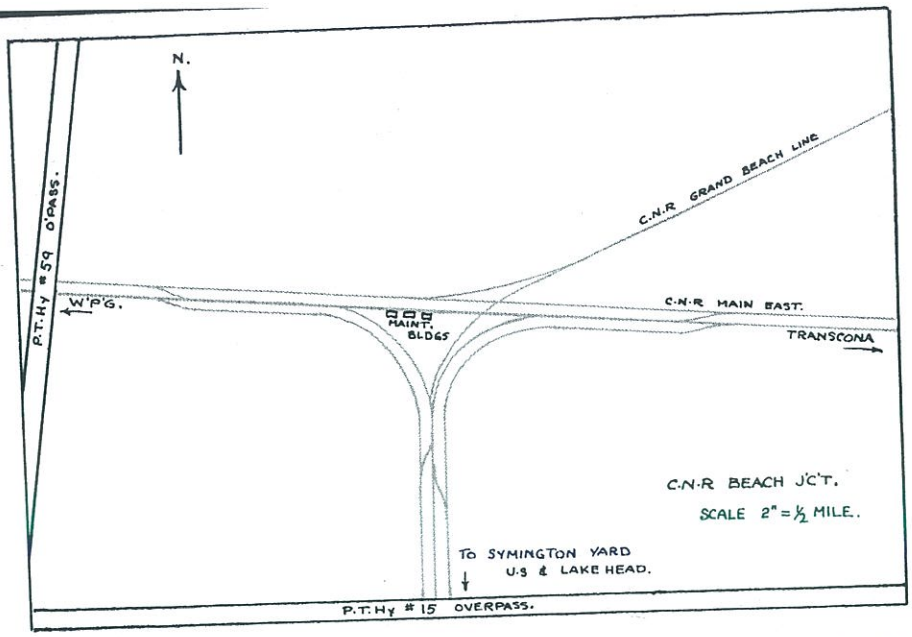
ON THE CANADIAN PACIFIC, about eight miles east of Winnipeg, is Norcran Junction. This is the point where the former C.P.R. North Transcona Yard funnelled into the main line eastbound. The name of this junction designates its location. North Transcona Yard is now no longer actively used, except as a storage yard. What keeps Norcran Junction open is the fact that the Canadian National's Grand Beach line makes a north-south crossing here and facilities must be available to assure the safety of this crossing.

TO THE WEST, is Woodman Junction Tower. Here, the old Bergen cutoff joined the C.P.'s main line west. The last train operated on the cutoff back in 1930 but the junction was not abolished and the track lifted until 1946. The junction tower still controls a Canadian National crossing to the north and a C.P. branch from the southwest. This latter line is the result of the rerouting of a C.P. branch which crossed through a portion of the present Winnipeg International Airport !

THE CANADIAN NATIONAL has a few more scattered junctions, 'round about. Beach Junction, on the east side of the City, was the terminal clearance point for trains on the Grand Beach line. This junction has achieved greater prominence in later years, being the point of divergence for manifest freights entering and leaving the new Symington Hump Yard, which was opened in 1962. This new yard would require a separate article to describe it adequately. The Beach Junction plant is, of course, controlled by C.T.C. nowadays.

PADDINGTON JUNCTION, - another case of borrowing the name from an English railway station, was a straight crossover of the Canadian National's southeast line to the Lakehead and Duluth, Minn. (U.S.A.) with the Canadian Pacific-$00 Line to the Twin Cities of Minneapolis and St. Paul, Minn. The former C.N. main line has

RUGBY JUNCTION on the C.P.R. was rearranged in July of 1947. The track gang was replacing the crossovers, after the new tower on the north side was built. The over-bridge in the distance is the Arlington Street bridge which spans the yards at that point.



been diverted considerably by the construction of Symington Yard complex and thus the old line is merely of industrial switching importance. There is still a great deal of freight traffic through Paddington Junction, but no passenger trains pass here any more. It is interesting to remember that in the old Canadian Northern days the Grand Beach trains used to pass this junction, just before taking their branch. This route was changed about 1924, when Beach Junction was established. It is also remembered that, for a few years, the Greater Winnipeg Water District trains used to run into the Winnipeg Union Station, through Paddington Junction.

STILL LOOKING AT C.N.LINES, there were Portage Junction and Woodward Avenue Junction, to the southwest. Portage Junction was a terminal clearance point for Great Northern and Northern Pacific Railroad's passenger trains, leaving the main C.N.line westbound, for stations on their lines to the south. This junction was at the southwest end of the old Fort Rouge Yard, and freight trains originating in Winnipeg used to swing west here on the old Canadian Northern main line.

WHEN THE GRAND TRUNK PACIFIC WAS BUILT, about 1908, property was bought for a cutoff line, to allow for faster movement of westbound passenger trains and freights originating in Transcona Yard. Woodward Avenue Junction was the point at which the double-track line left the Fort Rouge Yard. It was merely a switch-shanty, not even a terminal clearance point, as no stop was ever made. This line was torn up in 1956 and Fort Rouge yards are no longer in use. The cutoff line right of way reverted to the City of Winnipeg and, as might be imagined, now provides an important road traffic artery. All westbound rail traffic must now go around by Portage Junction.

AS A CONCLUDING REMARK to this brief and rather oversimplified examination of Winnipeg's railway junctions, it is obvious that many, many changes have occurred over the years and many modernizations have been made. Junctions and track arrangements which were thought to be perpetual and unchangeable, thirty or fourty years ago, have been undone and redone two and three times. Thus, the "permanent" things of our youth were really only a few stages in the unalterable progression of the years.

Canadian Rail

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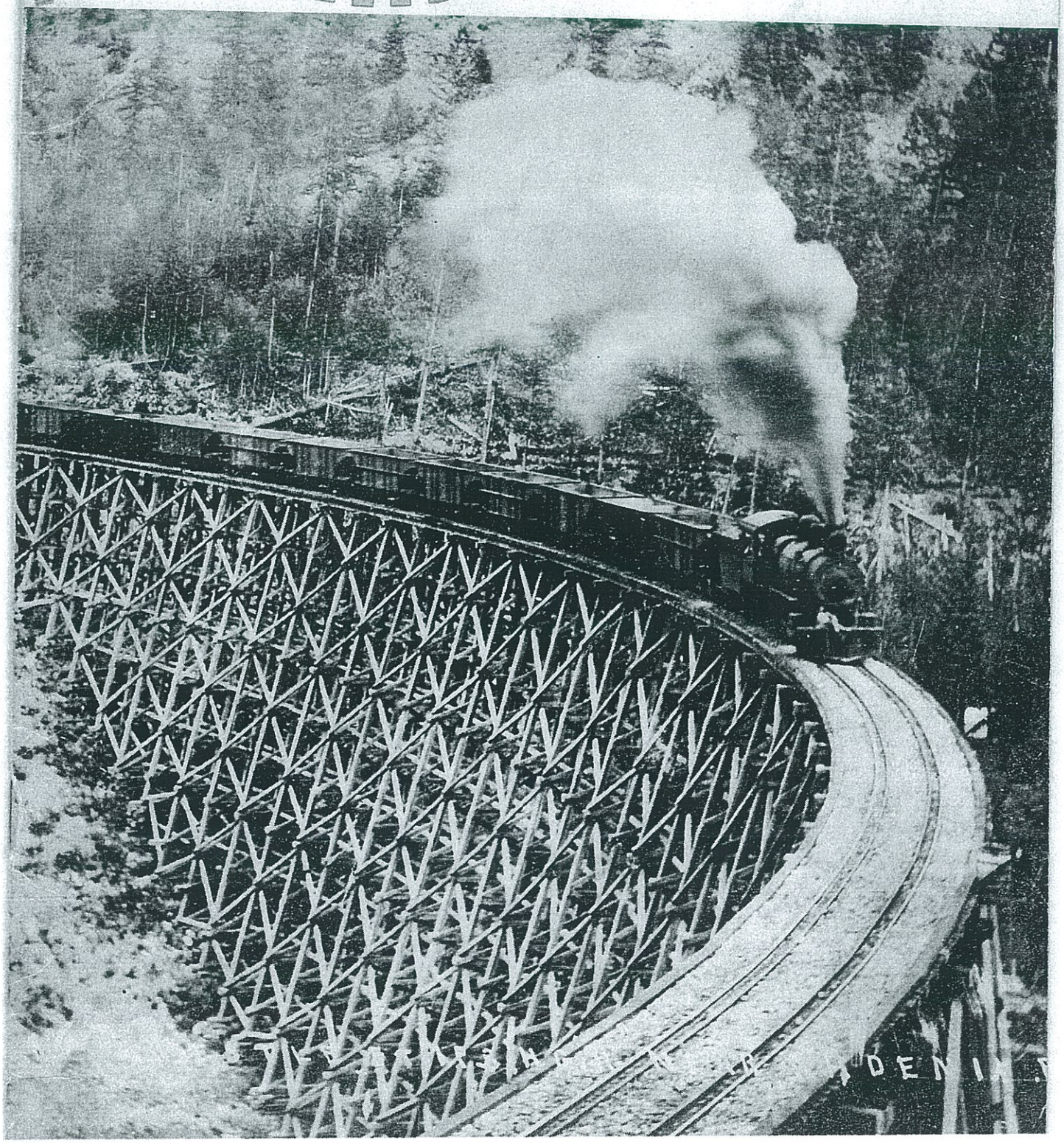
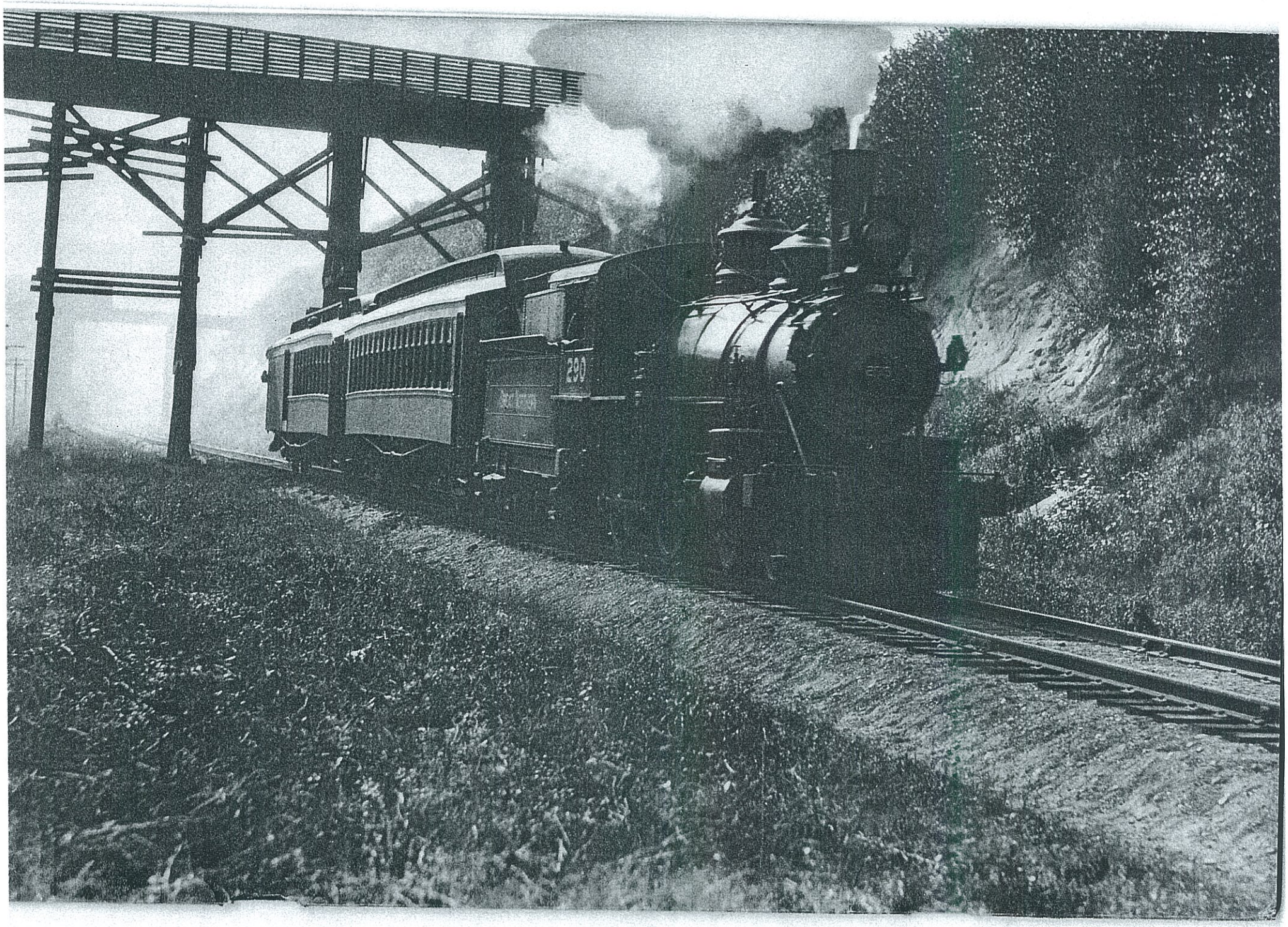
MAY 1977
No 304

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The Great Canadian Railway Bluff

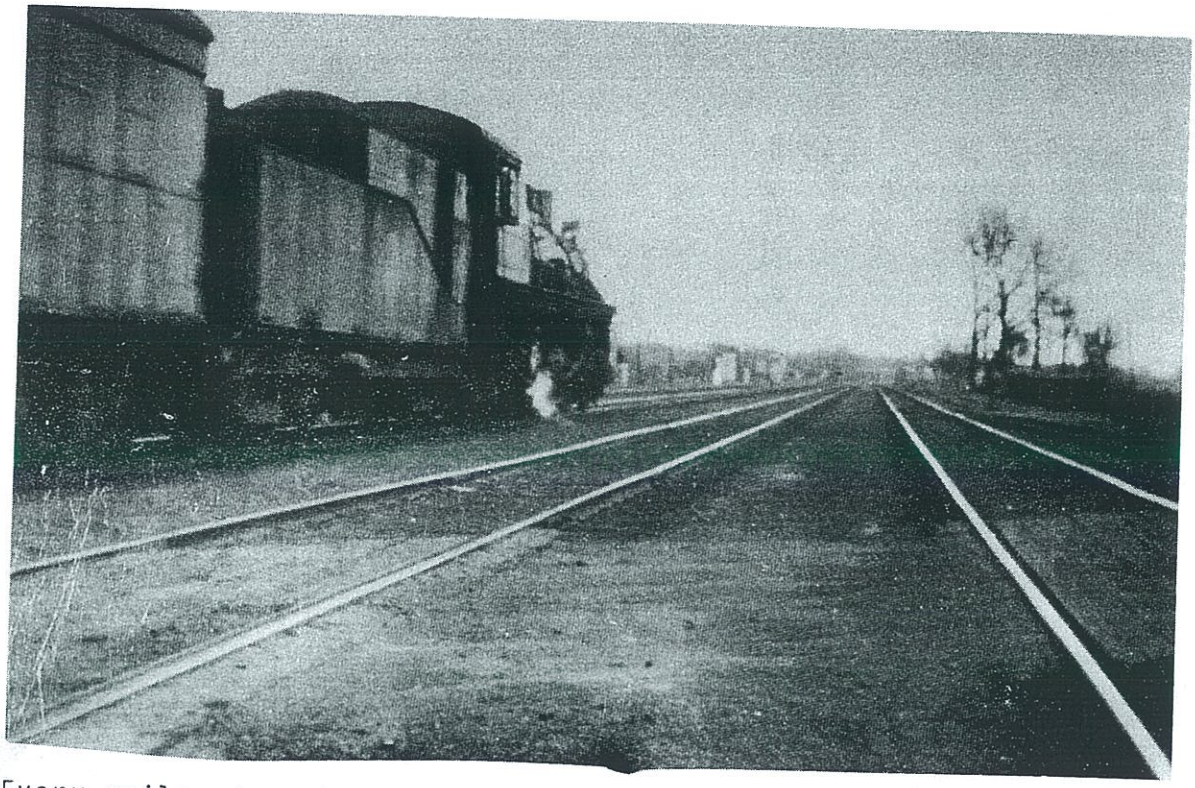
Patrick Webb.

Sidelights of history on the plains of central Canada never did include photographs of Belpaire-fireboxed Northerns, trailing Vanderbilt tanks, racing Royal Hudsons from Belle Plaine to Regina, Saskatchewan. It might, of course, have been different, had the Great Northern Railway's James Jerome Hill accomplished his stated objective of building a fourth western transcontinental railway from Winnipeg to Vancouver. Just how serious J.J. Hill was about this project can only be speculated on at this remove. His biographers agree that James J. Hill would have done it, eventually, and this concept raises a number of interesting questions.

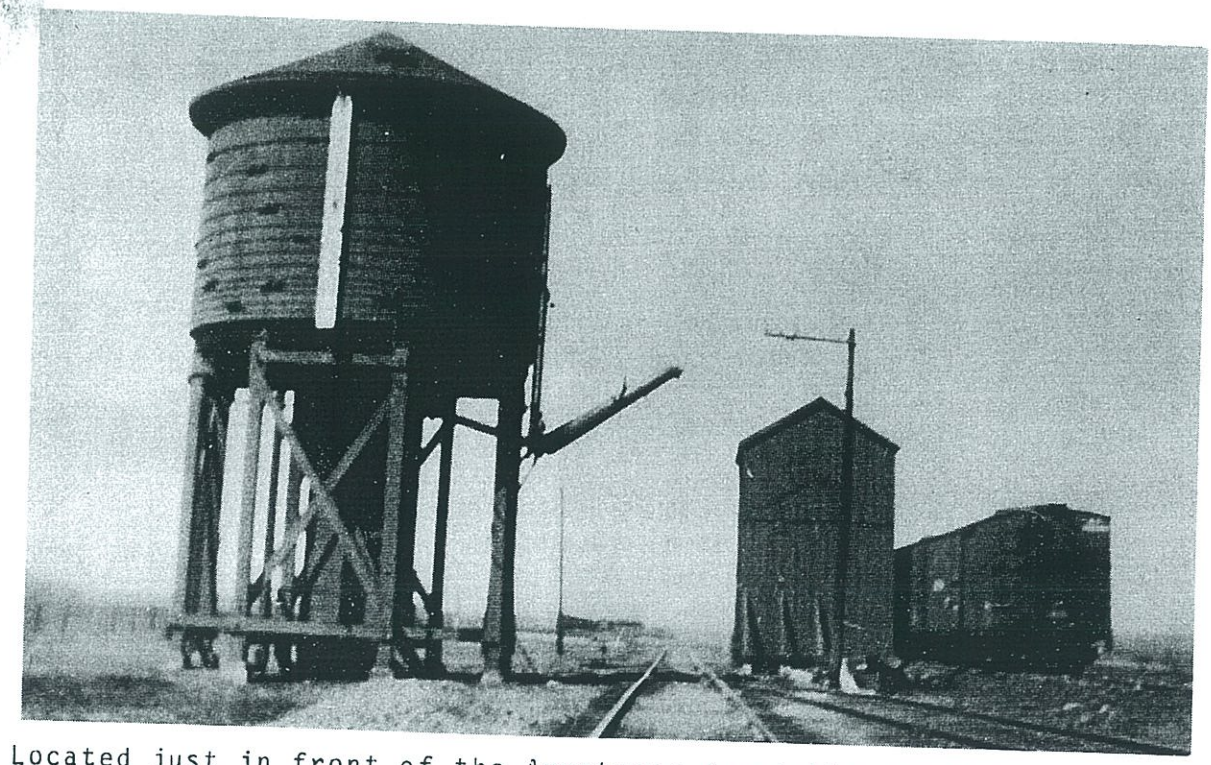
When Hill's threat appeared in print, it was not really something new, but rather a kind of confirmation of a rumor which had been circulating for about 15 years. Hill's proposal appeared in a widely-read United States railroad journal in 1906, in the form of an interview with the famous "Empire Builder". In this interview, he detailed his plans which, if they had been brought to fruition, would have seen a new railway line parallel to the Canadian Pacific Railway almost all the way from Vancouver to Winnipeg, via Fernie, British Columbia, a distance of some 1500 miles, at least. In view of the magnitude and importance of such a proposal, it was easy to see why a hurried meeting of the Directors of the CPR was called, with but one item on the agenda.

Great Northern 4-4-0 No. 290 heads up a passenger coach and combine at the Grandview Cut near Vancouver B.C. in the 1920's. Photo courtesy Norm Gidney from the C.R.Littlebury Collection.

The Great Northern's spectacular curved wooden trestle near Phoenix, British Columbia is the setting for this month's cover. While the date and reason for the photograph are unknown the recliant human on the buffer beam would suggest either a posed shot, or at best a slow moving train. From the look of the fresh ballast on the trestle perhaps this is the work extra topping off the deck. No doubt the ballasted deck was used to help prevent trestle fires caused by falling sparks from brake shoes. Photo courtesy of the B.C.Provincial Archives, Victoria B.C.



Every railroad enthusiast recalls his first railway photograph. Pat Webb's first ever photo was this 1947 shot of GN Pacific, probably class H-4 No. 1472 on the head end of the inbound Winnipeg Limited. Having just passed CN's Fort Rouge yard the train is working the slight up-grade to clear the streets in downtown Winnipeg.



Located just in front of the Armstrong turntable was this sturdy GN water tank. The building behind was a manual coaling station the mechanics consisting of two buckets on a pulley system. This facility was the end of the line for GN and NP crews, had James Hill's plan been carried out a far more elaborate facility would have been required. Photo courtesy of the Author.

In the context of the previous 20 years, this potential threat had to be regarded as only the latest in a series which Van Horne and Jim Hill had exchanged in the battle for a transportation monopoly over half a continent. This running fight was not confined to the two principles alone, but was likely to flare up at any point where the two companies' interests interfaced.

The consequences were generally many and varied. Track gangs of the two railways nearly took a British Columbia saloon apart, when they met during "cocktail hour", after having laid track all day side by side separated by only the width of a shallow river.

While Jim Hill sent Van Horne paintings as tokens of esteem, Great Northern lawyers quietly bought up iron-ore real estate in Minnesota. An irate orient-bound eastern passenger swung at - and knocked down - a Great Northern Railway passenger agent, who refused to sell him a ticket on a Canadian Pacific ship.

Van Horne managed to acquire control of the Minneapolis, St. Paul and Sault Ste. Marie Railroad, but with an increasingly antagonistic Jim Hill saturating Granger country with branch lines, Van Horne knifed a line from Minneapolis to the International Boundary in Saskatchewan and the heart of Hill territory. Simultaneously, both roads scrambled for what we today call "landbridge" traffic, often for the same tonnage. In a letter to George Stephen early in 1891, Van Horne clearly summed up his thinking about his former business associate when the stated, "He (Hill) is the most dangerous enemy of the Canadian Pacific". No doubt his unexpressed sentiments were more concise and less complimentary.

It was at that point that the CPR's chief competitor was confirming his statements with track-laying gangs. With the driving of the last spike of the Great Northern, Hill began acquiring existing charters for railroads in Canada and obtaining new ones from sympathetic governments. In this way, he pushed main lines into Manitoba and British Columbia and further menaced the CPR by building branch-lines north to the International Boundary in every one of the five western United States. Van Horne retaliated where he could, but a constant shortage of funds and an unsympathetic federal government at Ottawa made the contest a somewhat unequal one.

By 1906, however, a fourth transcontinental railway appeared to be a marginal proposition, even if only cursory evidence was considered. The CPR was firmly entrenched in southern Alberta with the Galt lines and southern British Columbia with the Columbia and Western. Farther north, the growing Canadian Northern Railway had reached Stony Plain, near Edmonton and awaited only another spring to reach the shadow of the Rockies. It was the Canadian Northern's stated intention to extend its line from Winnipeg through Portage La Prairie and Brandon to the Crows Nest Pass and on to Penticton, in south-central British Columbia.

Meanwhile, the Grand Trunk Pacific Railway was pushing westward from Manitoba at a rate which would result in the laying of 900 miles of main line by the autumn of 1907. It, too, would be growing a few branches to the south.

Perhaps of more importance was the fact that the Grand

4-4-0 No. 290 headed the Great Northern's first train into Grand Forks B.C. back in 1902. Photo courtesy of the B.C. Provincial Archives, Victoria B.C.

Great Northern south-bound daily passenger train as captured at Paterson Station on the "Red Mountain Rly" on the Canadian side of the International Boundry circa 1920. Photo courtesy of the B.C. Provincial Archives.

Trunk Pacific was Laurier's pet project and was, in his opinion, good for the country. Jim Hill knew very well that he could expect the "bare knuckles" treatment if his Canadian transcontinental were in any way to offer a challenge to the GTP.

To add to his many problems, Jim Hill became aware that his railroad was suffering from the galloping inflation which began about 1896 and peaked in 1906. In that decade, construction and operating costs doubled and recession was openly predicted, despite the fact that the Canadian west was experiencing the greatest period of immigration that it would ever see.

While these same settlers grumbled about boxcar shortages, high freight rates and transportation monopolies, they were also fiercely nationalistic in their support of their adopted homeland. They were not about to switch their loyalty to a "foreign" railroad, no matter how attractive an alternative this was advertised to be.

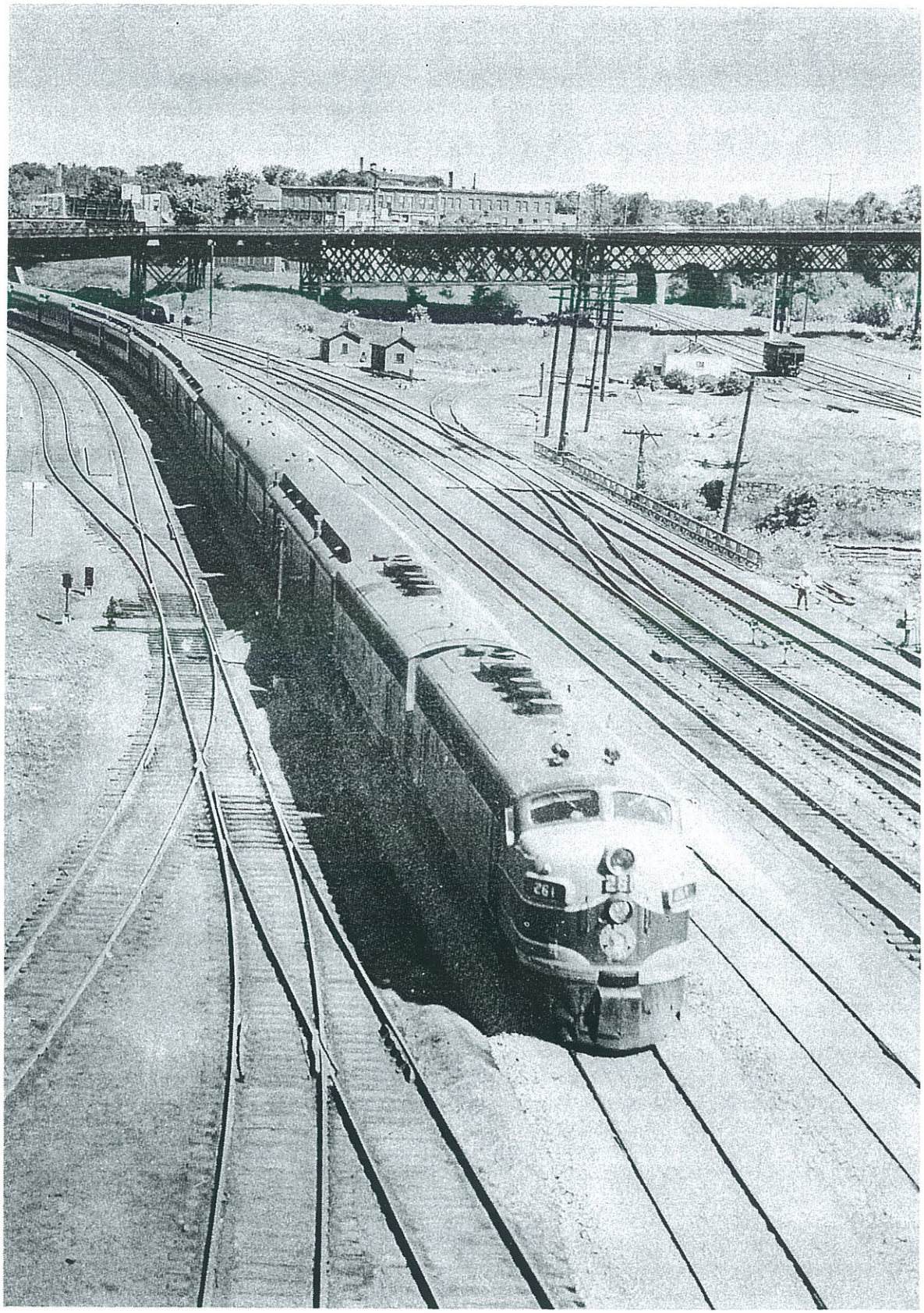
Van Horne calmly exposed his "hole cards" in the 1 June 1906 edition of RAILWAY AGE, the signal for Jim Hill to "put up or shut up"! While the author of the article, "Mr. Hill's New Line Across Canada" was obviously biased and some of the more tender areas - such as construction - were glossed over, the detailed proposal, flying as it did in the face of all reason, must have startled some Canadians. The author's closing comment, obviously made with tongue in cheek, referred to land grants, which had been coolly denied to the Grand Trunk Pacific by governments sensitive to the unpleasant results ever since 1870!

Here is a condensed version of the article from RAILWAY AGE:

> During the past two months, much has been published in regard to the so-called "invasion of Canada" by Mr. James J. Hill, the head of the Great Northern Railway system. In order to ascertain just how extensive the plans for the Canadian "invasion" are, a representative of THE RAILWAY AGE secured an audience with Mr. Hill which enables us to present what is believed to be the most complete and authentic account yet published of the proposed Canadian construction.
>
> At present, the Great Northern system has lines from Seattle, Washington north to Vancouver, B.C.; from Spokane, Wash., to Nelson, Grand Forks and Midway, B.C.; from Bonner's Ferry, Idaho, north to Kuskonook, B.C. and from Rexford, Montana north to Fernie, B.C. Under the charter of the Vancouver, Victoria and Eastern, an east-west line over 300 miles long is being built from Midway via Keremeos and Princeton to Cloverdale, B.C., which is a short distance south of Vancouver. This new line penetrates a rich coal and lumber district... Mr. Hill has reached the conclusion that the rapid development of western Canada will justify the construction of another transcontinental line and therefore he has decided to build from Winnipeg west to Fernie, a distance of about 850 miles.
>
> The two arms extending to Nelson and Kuskonook can be connected on the north by the construction of 14 miles of road. The Vancouver-Winnipeg line will then be from Vancouver

An up the hill view of the Red Mountain Railway curved trestle (Great Northern) at the "Loop" located just west of Rossland B.C. Photo courtesy of the B.C. Provincial Archives.

The "Galloping Goose" of the Great Northern Railway calling in at Waneta British Columbia for passengers and express. Date of the photo is unknown, photo courtesy of the B.C. Provincial Archives.



Burlington Northern's "The Winnipeg Limited" consisting of an A-B combination and eleven cars in both the old green and newer green and orange color scheme rolls into St. Paul Minnesota after its overnight run from Winnipeg Manitoba. Taken in the early fifties the color schemes reflect the image of the old and new Empire Builder. Photo courtesy PR dept. GN Ry. St. Paul Minn.

THE GREAT NORTHERN

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every da

to Wonderful Washington, "The ever-green state"—la
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Chicago to Seattle,
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to Seattle

From other points to Seattle at equally low rates,

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GREAT NORTHERN RAILWAY

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A. J. DICKINSON, P. T. M.
Great Northern Ry., St. Paul, Minn.

ROUTE of the FAMOUS...
EMPIRE BUILDER
AIR-CONDITIONED Dining and Observation Cars

via Midway and Grand Forks to Marcus, Wash.; thence north to Nelson and across (Kootenay Lake) to Kuskonook; thence south to Bonner's Ferry, Idaho; thence over the main line of the Great Northern to Rexford, Montana and thence north to Fernie and on to Winnipeg... The distance by the route outlined will be 1,575 miles, against 1,482 miles by the present line of the Canadian Pacific from Winnipeg to Vancouver.

What are Mr. Hill's reasons for building this new transcontinental line when already the country is served by the Canadian Pacific and the Canadian Northern, with the Grand Trunk Pacific under construction?

In Manitoba, Assiniboia, Saskatchewan and Alberta lie the great wheat-producing fields of western Canada, a territory which is estimated to contain 800,000 square miles of fertile agricultural lands... From Winnipeg west to the Rocky Mountains and south of latitude 54, the country is now half-occupied, but Mr. Hill makes the assertion that there is still room for more people in this region than are contained in all of the old provinces of Canada...

The occupation of these fertile lands means an immense grain traffic for the railroads and Mr. Hill has determined to get a share of it. The mountainous regions are wonderfully rich in coal, minerals and lumber. The farmers on the prairies east of the mountains need this coal and lumber and there will be a large traffic in these commodities when the new line to Winnipeg is built...

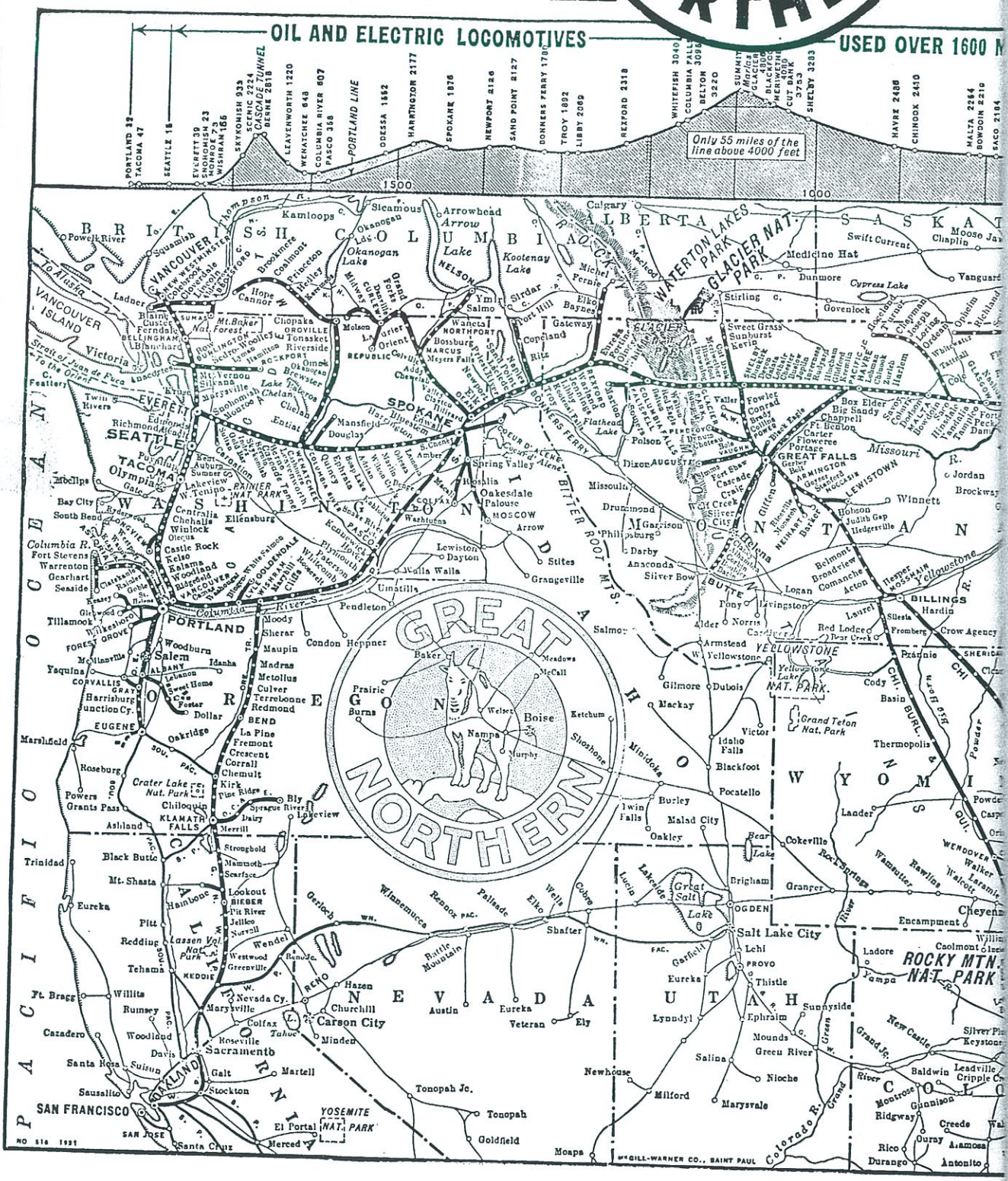
That the main line from Winnipeg will pass through Portage La Prairie and Brandon is certain, but west of this latter point, the proposed route is known only to Mr. Hill and his lieutenants. For obvious reasons, Mr. Hill cannot reveal his plans until the right of way is secured and he has made no statement as to whether the route will be north or south of the main line of the Canadian Pacific. Extensive terminals have been purchased at Winnipeg at a cost of $3,000,000 and terminals have also been acquired at Portage La Prairie and Brandon... Survey parties are now in the field west of Winnipeg and Mr. Hill asserts that the line from that city to Vancouver will be ready for operation by the time the Grand Trunk Pacific is completed to Winnipeg. Then, Mr. Hill says, if the latter road and the Canadian Pacific do not choose to take the traffic which the new road will be prepared to turn over to them at Winnipeg, it will be an easy matter to build from the latter city southeast, by way of Greenbush, Minnessota to Dewey Lake Minn., from which point the Hill lines have their own rails into Duluth...

As to the proposed line from Havre, Montana, northwest, there is nothing definite... After the main line through Canada is completed, north and south roads will be built and one of these doubtlessly will be the line from Havre to Edmonton... "

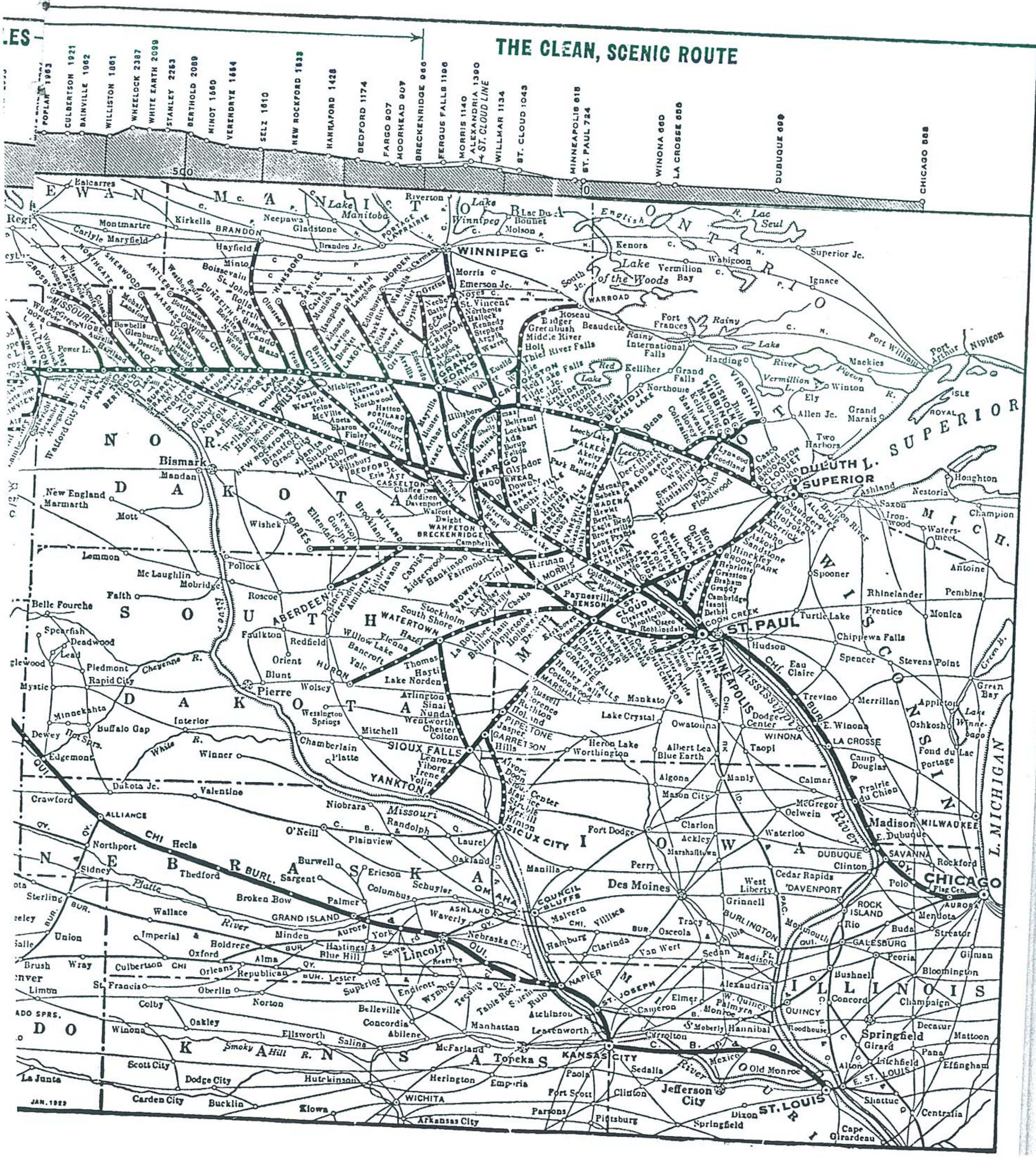
If further developments occurred, THE RAILWAY AGE did not report them, nor is there any historical record of their construction. The Vancouver, Victoria and Eastern built a few more branch

The EMPIRE BUILDER

GREAT NORTHERN



This Great Northern system map is taken from the Oct. - Nov. - Dec 1934 time table courtesy of Dr.R.V.V.Nicholls and the CRHA Archives. By this time the GN arm from Gretna, North Dakota to Portage la Prairie,Manitoba had already been abandoned.



lines in southern British Columbia, including the spectacular line through the Coquahalla Canyon. Had James J. Hill been really serious in his proposition, it is likely that the transportation and economic situations of the time cooled his enthusiams, somewhat, as it did the aspirations of the Canadian Northern Pacific and the Grand Trunk Pacific, along about 1915.

And more to the point: like Van Horne, Jim Hill was reputed to enjoy a good poker game. Can it be that Jim Hill's transcontinental main line was indeed his "great Canadian bluff"?

BN SECOND SUBDIVISION

American double track to Vancouver

ROUTE

CP Junction to Vancouver Jct., 9.9 miles (15.9 km). From CP Junction (M145.3, km233.8), the railway ascends with the Brunette River to Burnaby (M146.9, km236.4). After skirting Burnaby Lake, the line runs to Still Creek (M153.8, km247.5) and descends through the Great Northern cut to Vancouver Junction (M155.8, km250.7).

BRIEF HISTORY

That portion of BN's Second Subdivision which forms part of VIA's passenger route to Vancouver was chartered in 1901 as the Vancouver Westminster & Yukon Railway. Construction of the line, which was a Great Northern Railway project, was begun from New Westminster in 1903 and was completed to Vancouver the following year. The VW&Y became a part of GN's Vancouver Victoria & Eastern Railway in 1908 and the Canadian Northern Railway utilized the route when it began service to Vancouver in 1915. The Canadian Northern is now the Canadian National and GN became a part of the Burlington Northern system in 1970. In addition to CN, passenger trains of VIA Rail Canada and the U.S. Amtrak system also use BN's route to Vancouver.

MILEPOSTS

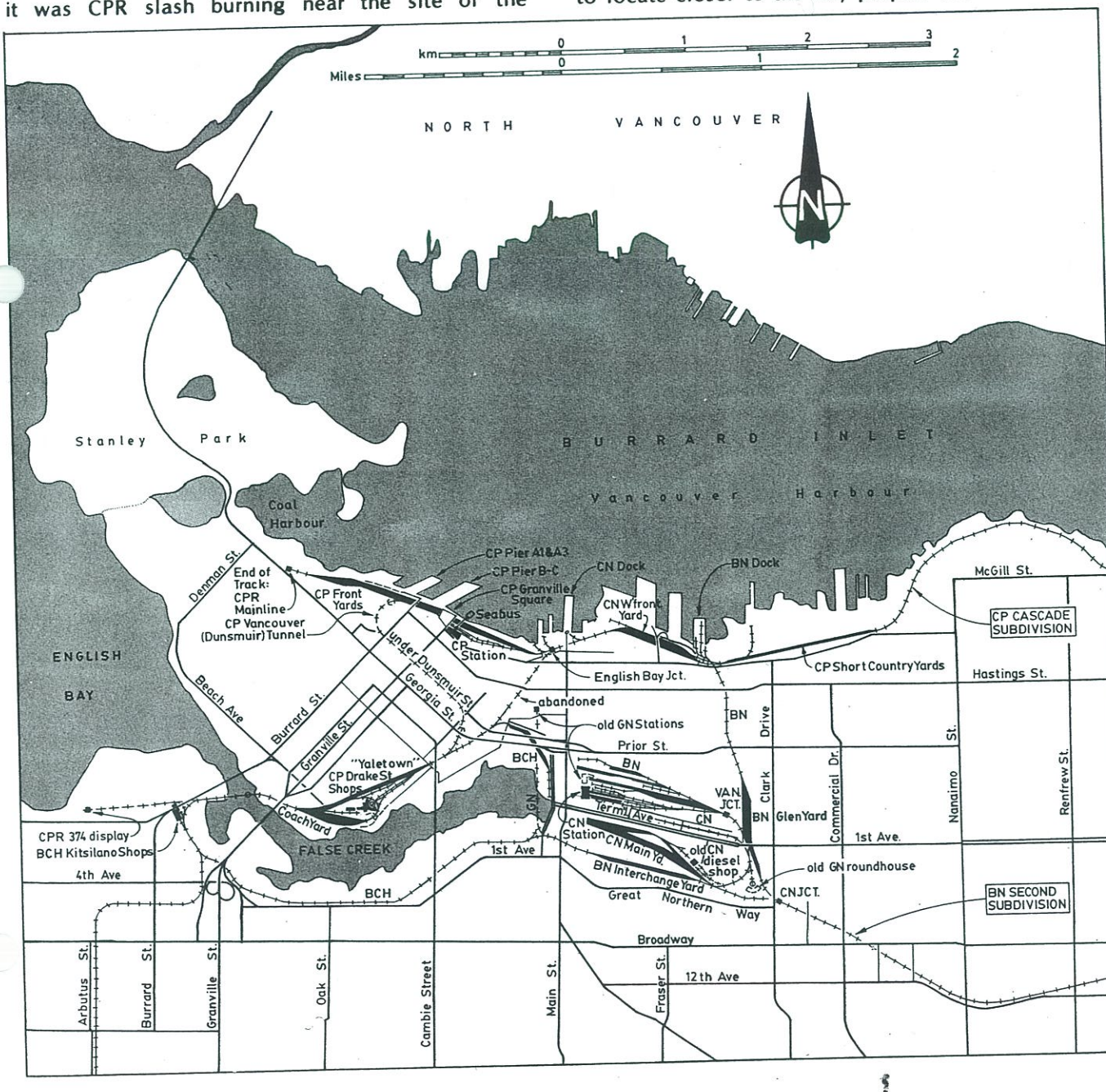
CP Junction (M145.3, km233.8) VIA's passenger train route to Vancouver diverges from mile 5.6 (km9.0) of CP's Westminster Subdivision at Sapperton.
Brunette Street Overpass (M145.2, km233.6)
Brunette River Bridge (M145.3, km233.8) 233 feet long, concrete deck span.
Brunette (M145.4, km233.9) Crossover and CTC control point. BN's yard here is known as Sapperton Yard, or New Yard.
North Road Overpass (M145.9, km234.8)
North Road (M146.1, km235.1) Crossover and CTC control point.
Bridge (M146.2, km235.2) 70 feet long, pile trestle.
Lake City (M146.4, km235.6) Crossover. This CTC control point was named for the adjacent industrial park.
Endot (M146.8, km236.1) A former timetable station named for the **End** of **d**ouble **t**rack.
Highway 1 Overpass (M146.8, km236.2)
BURNABY (M146.9, km236.4) Two main tracks. Named after the large urban municipality which was named for an English surveyor who once worked for Walter Moberly, a surveyor of CPR's mainline route.
Gaglardi Way Overpass (M147.1, km236.7)
Bridge (M147.9, km238.0) 265 feet long, pile trestle.
Piper (M148.0, km238.1) Crossover and CTC control point.
Sperling (M149.8, km241.0) Crossover and CTC control point.
Bridge (M150.4, km242.0) 542 feet long, pile trestle.
Bridge (M150.6, km242.3) 1347 feet long, pile trestle.
BCE Crossing (M151.6, km243.9) The British Columbia Electric Railway's Burnaby Lake Line crossed here until 1953. Electric interurban trains operated on the line from Vancouver to New Westminster.
WILLINGDON JUNCTION (M151.8, km244.2) Crossover, two main tracks end, double track begins and junction with CN's Thornton Subdivision which runs through a long tunnel and across Burrard Inlet to North Vancouver.
Willingdon Street Overpass (M151.8, km244.2)
Ardley (M152.0, km244.6) A former station.
Highway 1 Overpass (M152.9, km246.0)
Crossover (M152.4, km245.2)
STILL CREEK (M153.8, km247.5) End of double track. The railway here enters a deep cut made by the Great Northern Railway. The cut, still called the Great Northern Cut, extends to CN Junction.
Nanaimo Street Overpass (M154.2, km248.1)
Lakewood Drive Overpass (M154.5, km248.6)
Victoria Drive Overpass (M154.7, km248.8)
Broadway Overpass (M154.7, km248.9)
Commercial Drive Overpass (M154.9, km249.2)
Woodland Drive Overpass (M155.1, km249.6)
Clark Drive Overpass (M155.3, km249.9)
CN JUNCTION (M155.3, km249.9) Canadian National freight trains diverge here to terminate at CN's Vancouver Main Yard.
Terminal Avenue Overpass (M155.7, km250.5)
VANCOUVER JUNCTION (BN M155.8, km250.7; CN M131.6, km211.7) BN's Second Subdivision continues to BN's Vancouver Yard, while VIA's passenger route diverges to run into CN's Vancouver passenger station. The run to the transcontinental terminal station is actually part of CN's Yale Subdivision which originates at Boston Bar.
VANCOUVER (M131.8, km212.1)

CP VANCOUVER

During 1884 when the railhead was still in the Rockies, CPR's General Manager William Van Horne visited the west coast and decided that the Coal Harbour area of Burrard Inlet would be the Pacific terminus of the railway. He judged the area surrounding Port Moody at the head of the Inlet insufficient to support a major terminus. Van Horne named the new city Vancouver after the famous navigator, George Vancouver, who had charted the area for the British in 1792. Even as regular service to Port Moody began in 1886, preparations for CPR extensions to Coal Harbour and English Bay were well under way. In fact, it was CPR slash burning near the site of the roundhouse which caused the fire that destroyed the young city in June of 1886.

The city rebuilt quickly and it was a most enthusiastic crowd that surrounded the first *Pacific Express* on its arrival on the 24th of May in 1887. That day, locomotive 374 was lavishly decorated, including a tribute to Queen Victoria (then in her Jubilee year) and a message encircling the wide stack: "Montreal Greets the Terminal City". The first station, at the north foot of Howe Street, was a small wooden depot behind which a 1000 foot railway wharf extended into Burrard Inlet to serve the ships from the Orient.

The CPR roundhouse was to be constructed on the English Bay Branch across False Creek in Kitsilano, but an offer of a tax exemption persuaded the railway to locate closer to the city proper. The roundhouse



using parts of the roundhouse for truck servicing. Fifteen years later, steam returned to Drake Street as CPR Royal Hudson 2860, CPR 2-8-0 3716 and a 2-6-2 were given class overhauls for tourist and museum train service. The roundhouse is one of the few places in North America capable of properly shopping steam locomotives.

On Burrard Inlet too, changes were required. Pier A3 was completed for the new rail-auto-truck ferry *Princess of Vancouver* which began service to Nanaimo in 1955. The 32 story Granville Square tower straddling the Front Yard, was completed in the mid-1970's and the 1913 CPR station was declared a Vancouver Heritage Structure. A terminal for Seabus, a North Vancouver transit link, was added in 1977, with access through the CPR station concourse.

Today, most of CP Rail's facilities in Vancouver are in a state of metamorphasis. The superstructure of Pier B-C has been removed for the construction of a trade and convention centre. The tunnel under Dunsmuir Street and the Kitsilano Trestle have been sold and are expected to become important links in a rail transit system which will probably terminate at CPR's 1913 station. A new covered sports stadium will be built on former CPR lands east of Cambie Street on the north shore of False Creek and the site of CPR's Drake Street Shops will become the site of *Transpo 86*, a major transportation exposition. The historic CPR roundhouse is in jeopardy at the time of writing. How could anyone even consider the destruction of a century-old railway facility for a fair to celebrate the centennial of the arrival of that very railway?

CN & BN VANCOUVER

When the Great Northern's Vancouver Westminster & Yukon Railway first entered Vancouver in 1904, GN passenger trains terminated on the north shore of False Creek, which at that time extended east to Clark Drive. Great Northern trains, operating from a depot south-east of Pender and Columbia Streets, then crossed False Creek on a bridge, the footings of which remain today. With the arrival of the Canadian Northern Pacific Railway, False Creek was filled to west of Main Street, and both Northerns built stations, yards and other facilities on the reclaimed land. Great Northern started on their station in 1915 and Canadian Northern depot construction began the next year. The stations were built side by side, one block east of Main. The GN station, originally called Union Station since the Northern Pacific Railway was then also involved, was completed in 1917, and Canadian Northern's building was completed in 1919, after Canadian National had taken over the railway. The Great Northern station, designed by Vancouver architect F.L. Townley, was an elegant, finely detailed structure trimmed in granite and red brick with a balconied interior of marble and ornamental plaster.

Canadian Northern's terminus was a larger but more formal structure, featuring a classical stone interior. Until the end of steam, both railways shared a GN roundhouse facility at the west entrance of the "Great Northern" cut.

During the transition to diesel locomotives in the mid-1950's, Canadian National built a diesel locomotive shop adjacent to their Main Yard, and the old GN roundhouse was removed. Following the decline of passenger service in the 1960's, GN terminated its trains at the adjacent CN depot and demolished its handsome station in 1964. The CN diesel shop which had been completed only in 1955, was vacated in 1977 after a new locomotive facility was opened at CN's freight terminal of Port Mann (now Thornton Yard).

Today, the CN station serves the passenger trains of VIA Rail Canada and also those of the U.S. Amtrak system. The 1919 edifice continues to serve as the headquarters of many of Canadian National's departments in British Columbia. The park in front of the station was named for Sir Henry Thornton, the first president of the CNR. The diesel shop, a five track brick structure, is now in use as a truck maintenance depot.

VIA's "Canadian" waits for an early afternoon departure from the CN station in Vancouver during the summer of 1980. CPR's all-stainless Budd dome train of 1955 has been integrated with VIA's painted, former CN equipment. The train has retained CP's round end dome-observation "Park" cars which give the train a "finished" appearance. A pair of borrowed CP Rail GP9's are coupled behind former CP Rail FP7 1432, which will soon be renumbered VIA 6563. The station was built by CN's predecessor Canadian Northern Pacific Railway between 1916 and 1919. (RGB)

THE
RAILWAY INTERRELATIONS
OF THE
UNITED STATES AND CANADA

BY
WILLIAM J. WILGUS
CONSULTING ENGINEER

NEW HAVEN : YALE UNIVERSITY PRESS
TORONTO : THE RYERSON PRESS
LONDON : HUMPHREY MILFORD : OXFORD UNIVERSITY PRESS
FOR THE CARNEGIE ENDOWMENT FOR INTERNATIONAL
PEACE : DIVISION OF ECONOMICS AND HISTORY
1937

both sides of the border, separately and in unison, these railways were to open up a region having tremendous possibilities.

Northern Pacific Railway

It was in 1853, the year in which the Grand Trunk Railway started on its course westward from Portland, Maine, and Montreal, Quebec, to Chicago, that Josiah Perham of Boston, Massachusetts, envisioned a "Pacific Railroad" and in response to his pleas Congress granted a charter to the Northern Pacific Railroad in 1864. As already explained,[2] it was backed by American and Canadian interests and had for its purpose the creation of an ocean-to-ocean rail route. It was to proceed from Boston over existing railways in the United States and Canada via northern Vermont to Montreal, thence traverse the Province of Ontario to Sault Ste Marie either through alliance with the Grand Trunk project or otherwise, and thence skirt the southern shore of Lake Superior to the western boundary of the State of Wisconsin, beyond which it was to be so located as to serve the needs of the Northwest on both sides of the border. With the decision of the Dominion Government to build such a line entirely on its own soil, after the Confederation had been made a reality in 1867, this conception of an international transcontinental route fell to the ground and construction, started in 1870, was confined to the portion lying westward from the head of the Great Lakes.

Financial reverses brought the enterprise to a halt at Bismarck, North Dakota, on the Missouri River in 1873. They also resulted in loss of control of its old rival, the St. Paul & Pacific Railroad, with its large land grant as well as completed lines reaching to St. Paul and the Falls of St. Anthony and to the shores of the Red River on the west, and the right to build northerly to St. Vincent on the border where connection was to be made with the branch to be built by the Canadian Government southerly from Fort Garry (Winnipeg).

Shorn of its St. Paul & Pacific holdings, the road restarted its westward course in 1879 and reached its destination on Puget Sound in 1883, fifty years after birth had been given to the idea of a transcontinental rail route and thirty years after Perham had given substance to the idea. Subsequently, its lines were further extended so

2. See pp. 54–56 and 113, *supra*.

as to join Portland, Oregon, Seattle, Washington, and Vancouver, British Columbia, on the Pacific coast, with the head of the Great Lakes and the Twin Cities in Minnesota and with Winnipeg in Manitoba. It was a commercial venture, rooted in the belief that the opening of the Northwest to settlement would in time bring financial reward to the capital invested. The United States Government's interest in the enterprise, secondary to those of commerce, was evidenced by the aid given to it in the form of extensive land grants. Many were its early vicissitudes, in which such outstanding personalities as Jay Cooke and Henry Villard played leading parts. As the pioneer transcontinental line in the Northwest it well served its purpose and blazed the way for others to follow.

In losing the opportunity of reaching Winnipeg via an extension of the St. Paul & Pacific to St. Vincent on the border, the Northern Pacific was forced in the end to another course. The people of Manitoba having become dissatisfied with the monopoly enjoyed by the Canadian Pacific Railway under the terms of its Dominion charter, the Province brought about the construction of a line on the west side of the Red River, parallel to the Canadian Pacific's branch on the east side, from Winnipeg southward to the border at Emerson Junction, Manitoba, where a connection was made with the Northern Pacific's branch extending northward from Manitoba Junction through Grand Forks and Grafton to Pembina, North Dakota. Operation over this line was commenced in 1888 amidst the rejoicings of the people on both sides of the border. The Northern Pacific Railway, through a subsidiary, became the possessor of the Canadian portion of this route, as well as a branch leading therefrom to Brandon and Hartney, and another from Winnipeg to Portage la Prairie and thence to Beaver and Delta, all in the province of Manitoba. This system in Canada, known as the Northern Pacific & Manitoba Railway, totaled 354.6 miles of line which in 1901 were leased for a period of 999 years to the Provincial Government and in turn subleased at that time to the Canadian Northern Railway, now a part of the Canadian National Railways.[3] The Northern Pacific had now withdrawn from the soil of Manitoba. However, two years later, in 1903, the Midland Railway Company of Manitoba was organized in the joint interest of the Northern Pacific and Great Northern

3. See p. 137, *infra*.

railways and a branch 6.4 miles long was built in Winnipeg connecting with the old line, 65.7 miles long, originally owned by the Northern Pacific between Winnipeg and the border at Emerson Junction–Pembina, over which trackage rights were secured in 1912. At the present time the Northern Pacific, jointly with the Great Northern, operates 74 miles[4] of line in Manitoba, through the Pembina–Emerson Junction gateway and along the western side of the Red River into Winnipeg, for all practical purposes as it did when that service was inaugurated in 1888.

At the other end of its system the Northern Pacific, in 1891, effected a connection with the Canadian Pacific at the border near Sumas, Washington, and there still interchanges traffic passing to and from Vancouver and other Canadian points. In 1913 it acquired the joint use of the track of the Vancouver, Victoria & Eastern Railway, a Canadian subsidiary of the Great Northern Railway, from this gateway to Vancouver, and began operation thereover in January, 1918, only to discontinue it in August of the same year. Three quarters of a mile of main line remain in its possession and that of the Great Northern Railway at the Vancouver terminal, but it has ceased to participate in its operation.

At International Falls on the Rainy River in Minnesota the Northern Pacific serves Canadian industrial interests, but does not operate it as a gateway.

It will be seen that through its two gateways to Canada the Northern Pacific, jointly with the Great Northern, in all operates over 74 miles of line beyond the border, of which 6.4 miles are owned and 67.6 miles operated under trackage rights.

Through these gateways the traffic of the Northern Pacific moved in the volume, in tons, set forth in Table 25.[5]

It would thus appear that in the three years for which these statistics are obtainable, the movements into Canada far exceeded those

4. In addition to this the Great Northern operates a 1.7-mile connection between Emerson Junction and West Lynn, over which its traffic moves in and out of Canada at the border, thus making the total Midland Railway mileage 75.7 as reported in *Statistics of Steam Railways of Canada, 1933* (p. 20, *supra*).

5. Correspondence respecting Railway Interrelations of the United States and Canada, 1935–36.

to the United States at the Pembina–Emerson Junction gateway, largely accounted for by coal shipments; and that the reverse was the case at the other cross-border connection where the predominating commodity was forest products. As a whole the major movement was northbound into Canada.[6]

Great Northern Railway

Although ten years later than the Northern Pacific in reaching the coast and seven years behind the Canadian Pacific in the attainment of that end, the Great Northern, through its parent company the St. Paul & Pacific Railroad, was the first to arrive at the border in the Northwest and, in conjunction with the Dominion Government's branch from Winnipeg on the east bank of the Red River, afford the people of Manitoba an all-rail outlet to the outside world in 1878. Eight years more were to elapse before they were to have an outlet to the East for their products exclusively over Dominion soil, and ten years before the rival line on the other side of the Red River was to give them the benefits of competition over an alternative route via the Northern Pacific to the American market.

It should be explained that the predecessor of the St. Paul & Pacific, of which the Northern Pacific had lost the control in the panic of 1873, was the Minnesota & Pacific Railroad which was chartered by the Territory of Minnesota and endowed with a large land grant in 1857, with the purpose of reaching the "great grain and fur bearing regions of the North." The St. Paul & Pacific, too, fell into financial difficulties and was acquired in 1878 by a syndicate consisting of James J. Hill, Canadian born but a resident of Minnesota since 1856; Norman W. Kittson, a former factor of the Hudson's Bay Company; Donald A. Smith, afterward Lord Strathcona, who had been chief commissioner of the Hudson's Bay Company; George Stephen, afterward Lord Mount Stephen, who occupied the influential position of president of the Bank of Montreal; Richard B. Angus, vice president of the same bank; and John S. Barnes of J. S.

6. Data bearing on the history of the Northern Pacific Railway will be found in Smalley's *History of the Northern Pacific Railway* (1883); Hedges' *Henry Villard and the Railways of the Northwest* (1930); and other works listed in the Bibliography, *infra;* also in Correspondence respecting Railway Interrelations of the United States and Canada, 1935–36.

Kennedy & Company of New York. Under the new name of the St. Paul, Minneapolis & Manitoba Railroad, this system in 1879, with the backing of Canadian and American capital, began its policy of westward and northward expansion with a view to the interposition of its rails between the Northern Pacific line and the border and thereby to capture Canadian as well as American business.

Mr. Hill and the Canadian members of the syndicate were led by their success with this venture to undertake a similar rôle in 1880–81 in the building of the Canadian Pacific Railway. High railroad strategy to them meant the command of the railway situation on both sides of the international line; in a word, monopoly. Mr. Hill then advocated the location of the Canadian Pacific from Winnipeg to Sault Ste Marie along the south shore of Lake Superior because he considered that the north shore location on Canadian soil would involve undue cost and unremunerative traffic, and because it would not fit in with the plans of the St. Paul, Minneapolis & Manitoba Railroad in Minnesota. Failing in his purpose he resigned from the directorate of the Canadian Pacific in 1883 and as the directing genius of the successor of the St. Paul, Minneapolis & Manitoba, the Great Northern Railway, he devoted his energies to the development of the northern tier of northwestern states with many branches to the border and beyond. At the same time Mr. Stephen and Mr. Angus retired from the board of the St. Paul, Minneapolis & Manitoba Railroad and in so doing expressed the opinion that both companies "would have much to gain by the maintenance of an intimate and friendly alliance" in which the St. Paul, Minneapolis & Manitoba Railroad for a long time might enjoy the entire railway traffic between the Canadian Northwest and the United States, while the Canadian Pacific would strive for business seeking its natural channel through Canadian territory. Unsuccessful in his attempt, in cooperation with the Canadian Pacific, to gain control of the Northern Pacific in 1889, Hill declared his purpose to remove "all expensive rivalry and competition," and thereupon promptly and vigorously undertook the extension of his road to the Pacific coast, which was reached at Everett, Washington, in 1893. In this he had the support of his Canadian associate, Lord Mount Stephen.

Reference has been made to the joint use of the tracks of the Midland Railway of Manitoba by the Great Northern and Northern Pa-

cific, on the west side of the Red River between the Pembina–Emerson Junction gateway and Winnipeg, involving the operation of 75.7 miles of road inaugurated in 1912. In the handling of Great Northern traffic this route took the place of the Canadian Pacific's line to Winnipeg on the east side of the Red River, already mentioned as having been opened as a through route in 1878, which since 1904 has been the route over which the traffic of the Minneapolis, St. Paul & Sault Ste. Marie Railway is handled to and from Winnipeg. Noyes, on the Minnesota side of the boundary, is the point of interchange of Minneapolis, St. Paul & Sault Ste. Marie and Canadian Pacific traffic, and Emerson on the Manitoba side just north of Noyes is the point where the Great Northern's Midland Railway route to and from Winnipeg joins its line south of the border along the eastern shore of the Red River by means of the aforesaid 1.7-mile connection.

A few miles west of the Red River the Great Northern has a line extending from Grand Forks, North Dakota, to a connection at the border with the Canadian Pacific Railway between Neche, North Dakota, and Gretna, Manitoba, opened in 1882. Originally, these rails extended over the border to Portage la Prairie, Manitoba, but since then they have been removed because of lack of business.

Still farther to the west a branch, opened in 1907, extends from Grafton, North Dakota, on the last-mentioned line to a junction with the Canadian Pacific at Morden, Manitoba, 15.2 miles beyond the border, which lies between Walhalla, North Dakota, and Haskett, Manitoba. Another branch, opened in 1907, leads into Canada from the Great Northern's main line at Church's Ferry, North Dakota, to Brandon, Manitoba, 69.5 miles north of the border crossing between St. John, North Dakota, and Bannerman, Manitoba. These two branches in Canada, 84.7 miles in length, are owned and operated by a subsidiary, the Brandon, Saskatchewan & Hudson's Bay Railway.

At Northgate on the border the Great Northern's branch from Berthold, North Dakota, on the main line, was connected in 1912 with the branch of the Canadian National Railways leading to Regina, Saskatchewan. Beyond this along the border the next contact is between Sweetgrass, Montana, and Coutts, Alberta, where the Great Northern's branch from the main line near Shelby, Montana, meets the Canadian Pacific's branch to Lethbridge, Alberta, both

having been built in 1890 and taken over by those companies, respectively, in 1912 as a means of entrance from Canada to Great Falls, Montana.

Next comes the branch from Rexford, Montana, to Fernie, British Columbia, on the Crow's Nest line of the Canadian Pacific Railway, which crosses the border between Gateway, Montana, and Newgate, British Columbia. Of this the 53.3-mile portion in Canada, known as the Crow's Nest Southern Railway, is made up of 33.7 miles of owned line and 19.6 miles operated under trackage rights. The portion extending to Morrissey was opened in 1903 and thence to Fernie in 1905.

In the State of Washington the Great Northern crosses the border at seven points. Proceeding from east to west the first of these is located between Boundary, Washington, and Waneta, British Columbia, where the branch from Spokane ends at Nelson, British Columbia, on the Canadian Pacific, the portion in Canada being known as the Nelson & Fort Sheppard Railway, opened in 1895, of which 54.9 miles are owned and 6 miles are operated under trackage rights, a total of 60.9 miles. Then come six crossings beyond which in Canada the lines are operated under the name of a subsidiary, the Vancouver, Victoria & Eastern Railway & Navigation Company, comprising 149.2 miles of owned line and 1.3 miles operated under trackage rights, a total of 150.5 miles of line. Two of these crossings—Laurier, Washington, to Grand Forks, British Columbia, to Danville, Washington—are on the branch from Marcus, Washington, opened in 1903–4, to Republic, Washington; two more—Curlew, Washington, to Midway, British Columbia, to Molson, Washington—are on the extension opened in 1906 from Curlew, Washington, through Canada to Molson, Washington;[7] another between Chopaka, Washington, and Similkameen, British Columbia, on the branch opened in 1909–10 from Wenatchee, Washington, to Princeton, British Columbia, on the Canadian Pacific, the portion beyond the latter point to Brookmere, British Columbia, having been discontinued in 1933; and the sixth, effected in 1891, between Blaine, Washington, and White Rock, British Columbia, on the main line from Everett, Washington, to Vancouver, British Columbia.

In all, therefore, the Great Northern in 1933 operated to or

7. Operation discontinued February 28, 1935, thus eliminating two gateways and 28.9 miles of owned line.

through 14 border gateways, beyond which in Canada it operated 96.6 miles under trackage rights and 328.5 miles owned by its subsidiaries, a total of 425.1 miles. In 1935 the number of gateways had fallen to 12 and the total mileage to 396.2, by reason of the discontinuances that have since taken place. The tonnage and character of traffic handled over them in 1933 were as follows:[8]

TABLE 26

Great Northern Tonnages through Northwestern Gateways in 1933

	*Midland Ry. of Manitoba**	*Brandon, Saskatchewan & Hudson's Bay*	*Crow's Nest Southern*	*Nelson & Fort Sheppard*	*Vancouver Victoria & Eastern*	*Total*
Agricultural products	9,698	17,444	45	1,346	21,462	49,99
Animals and their products	205	57	66	0	1,957	2,28
Mine products	12,766	1,154	2,953	16,127	8,829	41,82
Forest products	684	83	558	12,587	42,746	56,65
Manufactures and miscellaneous	7,114	782	177	3,515	60,722	72,31
Total	30,467	19,520	3,799	33,575	135,716	223,07

* Tonnages from the *Statistics of Steam Railways of Canada, 1933,* lessened by the tonnages given by the Northern Pacific Railway for that year over the Midland Railway. These tonnages pass through the Emerson, Manitoba–Noyes, Minnesota, gateway.

These do not include tonnages interchanged with the Canadian Pacific at the border stations of Neche and Sweetgrass, nor with the Canadian National Railways at Northgate, reference to which will be found in the text dealing with those systems.

By far the larger part of this total movement was southbound into the United States, the reverse of which was true in the case of the Northern Pacific.[9]

Canadian Pacific Railway

The building of the Canadian Pacific Railway from Lake Nipissing to the Pacific Ocean may well be termed one of man's most marvelous accomplishments, none the less so because of the bitter disap-

8. *Statistics of Steam Railways of Canada, 1933,* pp. 130–185, inclusive.

9. Information regarding the Great Northern Railway will be found in Pyle's *The Life of James J. Hill* (1917); Willson's *The Life of Lord Strathcona and Mt. Royal* (1915); and other works listed in the Bibliography, *infra;* also in Correspondence respecting Railway Interrelations of the United States and Canada, 1935–36.

pointments of the 1870's, of which mention has been made. Born in the desire of Canadians that their western possessions by all-Canadian means of communications should be brought within the fold of the Confederation of 1867, this enterprise so necessary in a political sense, languished sadly for many years. The thousand miles of rough, wooded country along the Canadian shore of Lakes Superior and Huron and thence to the Red River, the wide sweep of uninhabited prairie lands in which the prospect of remunerative traffic was extremely slim, and the range on range of lofty mountains which barred the way to the sea—all these were obstacles to make even the bold draw back.

In carrying out the Dominion's promise to British Columbia that a railway should be completed from the Pacific Ocean to the Eastern Provinces within ten years from the date of the admission of that Province to the Confederation in 1871, the Government, following the devastating effects of the "Pacific Scandal" in which American interests were involved in the early 1870's, planned an extension of then existing railways up the Ottawa River Valley to Lake Nipissing and thence to Georgian Bay, beyond which steamboats as a temporary measure were to bridge the water gap to Thunder Bay on Lake Superior (the site of Fort William and Port Arthur), thence a railway line to the Rainy River in which steamboats again would be used as a temporary expedient for several hundred miles westward to junction with a railway to be built to the coast. This manner of solution of the problem did not suit those who realized that the water links would be unusable in the winter season and that the transshipment of freight between rail and water carriers would spell inefficiency. Such a line of communication could not hope to compete on anywhere near even terms with the all-rail transcontinental routes completed and under way on the American side of the border. Then, too, the sluggishness of construction under government auspices in the ensuing years resulted in grave dissatisfaction which had become general in Canada when the agreed date of completion came within hailing distance, with comparatively little accomplished toward the desired end.

In consequence of this the people of Canada concluded that the then existing and proposed lines from Toronto and Montreal terminating at Callander at the east end of Lake Nipissing should be

continued westerly as an all-rail route exclusively on Dominion soil for some 2,550 miles to the Pacific. Sir Henry Tyler, on behalf of the Grand Trunk Railway, it will be recalled, had declined in 1876 to back it unless the link north of Lake Superior was omitted in favor of a line through the United States via Chicago—a position to which that company continued to adhere. The provisional contract for this performance was awarded in 1880 to a syndicate, later to be incorporated under the name of the Canadian Pacific Railway Company, of which the personnel was virtually the same as that which had made a pronounced success of the St. Paul, Minneapolis & Manitoba project in Minnesota—George Stephen and Duncan McIntyre of Montreal; John S. Kennedy of New York; Morton, Rose & Company of London; Kohn Reinach & Company of Paris; and Richard B. Angus and James J. Hill of St. Paul. In fact it was considered that the community of interest would be mutually advantageous. It was agreed that the work should be completed within ten years from the date of the final contract in 1881 and that the compensation for the undertaking of such a perilous enterprise should consist of $25,000,000 in cash, 25,000,000 acres of land, freedom from duties on importations of construction materials and from taxation under certain conditions, a monopoly of rail transportation on the south for twenty years, the right to fix railway rates at will so long as profits did not exceed 10 per cent on the capital invested, and other concessions of value.

In addition to this the Government was to turn over to the newly organized company the several stretches of railway on which work had been commenced, after they had been completed in satisfactory form. These embraced some 700 miles of line, in which was included the branch from Winnipeg southerly along the east bank of the Red River to the border, connecting there in 1878 with the St. Paul & Pacific, later the St. Paul, Minneapolis & Manitoba Railroad and now the Great Northern Railway, as has been previously explained. Incidentally the use of this branch in this manner ceased in 1904 when the Great Northern's completion to the coast and the extension of the Minneapolis, St. Paul & Sault Ste. Marie Railway to the border at Noyes, Minnesota–Emerson, Manitoba, led to the transfer of the traffic of the Great Northern from the Canadian Pacific's entrance to Winnipeg to the one built by the Province of Manitoba on the other side of the Red River.

Under the inspired leadership of William C. Van Horne—American born in contrast with the Canadian birth of his contemporary, James J. Hill, on the other side of the border—this stupendous task was so far completed that through train service between Montreal and the Pacific, upward of 2,900 miles, was inaugurated in 1886, five years ahead of the agreed date of completion, and the system so rounded out through new construction and purchase of existing roads, that its service was made to span the continent from sea to sea in 1889.

As has been explained, Mr. Hill left the directorate of the Canadian Pacific in 1883 and failing in association with interests in that company to secure control of the Northern Pacific in 1889, pushed the system he headed, the Great Northern, onward along the southern side of the border to the Pacific, which was reached in 1893. This competition, together with that of the Northern Pacific which, upon the cancellation of the Canadian Pacific's monopoly in 1888, had gained an entrance to Manitoba over that Province's newly created branch on the western side of the Red River from the border to Winnipeg, led the Canadian Pacific to purchase control of the Minneapolis, St. Paul & Sault Ste. Marie in 1890 and extend that system to junctions with its, the Canadian Pacific's, Winnipeg branch at the Emerson-Noyes gateway in 1904 and in 1893 with the branch it built from Pasqua near Moose Jaw on its main line to the border between North Portal, Saskatchewan, and Portal, North Dakota. In this manner the Canadian Pacific came into control of this system now embracing 3,250.2 miles. Adding to this the acquired mileage of the Duluth, South Shore & Atlantic Railway, 559.2 miles, the 43.9 miles of the Mineral Range Railroad, and the 1,119.2 miles of the Wisconsin Central Railway leased by the Minneapolis, St. Paul & Sault Ste. Marie in 1909, the operated mileage controlled by the Canadian Pacific in the Northwestern Region and serving as transcontinental by-passes via Sault Ste Marie and Chicago, mounts up to the striking total of 4,972.5 miles[10] lying in six states of the Union.

Through three other points of contact with the border—Gretna,

10. Correspondence respecting Railway Interrelations of the United States and Canada, 1935–36. Included in the total of 4,972.5 miles are 104.9 miles of intersystem trackage and 2.3 miles of non-operated road, which deducted from the total leaves 4,865.3 miles, exclusive of duplications, etc., as of December 31, 1934.

Manitoba, Coutts, Alberta, and Huntingdon, British Columbia—the Canadian Pacific merely connects with American carriers to which reference has been made; but at the border contact between Kingsgate, British Columbia, and Eastport, Idaho, it possesses a third opening through which access over its own rails is had to United States soil west of the Great Lakes. Here the branch from its Crow's Nest Pass line, first recorded in the timetable in 1906 and connected through to Yahk in 1911, connects with the Spokane International Railway, of which it has control, leading to Spokane, Washington, and embracing 163.6 miles of operated line. The Crow's Nest Pass line, so important in its relation to the border, passes from Lethbridge, Alberta, through Nelson to a junction with the main line east of Vancouver, completed in 1898.

The traffic of the Canadian Pacific, therefore, crosses the border through six gateways in the Northwestern Region, through three of which connection is made with 5,136.1 miles[11] of operated line over which it exercises direct or indirect control on the American side of the border. The approximate tonnages handled through five of these gateways during the past six years are shown in Table 27.[12]

From this it is evident that, taken as a whole, the predominating movement in the years given was from the United States into Canada. At North Portal and Huntingdon, however, the reverse was the case, as was true, too, at Emerson in 1933 and 1934. Of special interest is the pronounced drop of nearly 67 per cent which took place in the interchanges between 1929 and 1932, followed by a partial recovery in the ensuing years.

Canadian National Railways

The Canadian Northern and Grand Trunk Pacific railways, now embraced in the Canadian National Railways system, have had a tremendous effect on the development of the Canadian Northwest, although so far removed from the border as to have had much less to do with American rail carriers than the Canadian Pacific. The Canadian Northern, the child of Mackenzie and Mann, was the first

11. Excluding duplications, etc., this becomes 5,028.9 miles.

12. Correspondence respecting Railway Interrelations of the United States and Canada, 1935–36. Gretna, Manitoba (G.N. connection) is not shown as the tonnage passing there is practically negligible.

BURLINGTON NORTHERN

In 1970, after close relations dating back to the turn of the century, when they jointly acquired the Chicago, Burlington & Quincy, the Great Northern and the Northern Pacific, along with their subsidiaries, the CB&Q and the Spokane, Portland & Seattle railways merged to form the Burlington Northern Railroad. Some subsequent acquisitions have extended lines southward to Mobile, Pensacola and Galveston, on the Gulf of Mexico, and a 1985 agreement with Canadian National Railways makes possible virtual single line service over both these giant systems.

Burlington Northern's own Canadian operations are today very limited but connections to Vancouver, Huntingdon, Nelson, Sweet Grass, Northgate, Winnipeg and International Falls (see CP and CN maps) greatly facilitate Canada–United States freight movement. Forest products and fertilizer (potash and sulphur) top the list of southbound items, while northbound freight involves mainly manufactured goods and coke, the latter from oil refineries at Cherry Point, on the Washington coast. Passenger service was taken over by Amtrak, the American government's agency, in 1970 and the last of it, between Vancouver and Seattle, was discontinued in September 1981.

The BN's predecessor companies, GN and NPR were once prominent in the Canadian West. Northern Pacific built a small network of lines in southern Manitoba, beginning in 1888. Westward expansion included construction of the Midland Railway in 1903, in partnership with the Great Northern but financial reverses eventually led to most NPR Canadian holdings being passed to either Great Northern or the Canadian Northern (now Canadian National Railways).

The Great Northern, under the aggressive leadership of James J. Hill, an ex-patriate Canadian, endeavoured to divert Canadian raw materials to industries south of the border. In addition to the Midland operations alluded to above, which linked Winnipeg, Portage la Prairie, Morden and several other small farm communities, GN began a Brandon, Saskatchewan & Hudson Bay railway. By 1906, rails were laid from St. John, North Dakota to Brandon but little else of the great scheme was ever accomplished. Manitoba lines were abandoned in stages until by 1937 only the Winnipeg yards remained, with trackage rights to them over the CNR from the border.

In British Columbia, Hill's attention focussed on minerals in the southeastern part of the province. The Kaslo & Slocan, a narrow gauge line, was sponsored in the early 1890s to tap lead and silver deposits, while in 1901 Kootenay coal prompted the building of the Crow's Nest Southern from Rexford, Montana to Fernie, Michel and Elko, B.C. The K & S passed eventually to GN's arch rival, the Canadian Pacific, and the CNS like most of the Great Northern's other lines in the province, was abandoned. What has survived includes the Nelson & Fort Sheppard Railway, built in 1893 and taken over by GN five years later, part of the Washington & Great Northern Railway, begun in 1901 and which briefly cuts into Canada near Keremeos, and the remnants of the Vancouver, Westminster and Yukon, the New Westminster Southern and the Victoria Terminal & Ferry Company, built between 1891 and 1909, that lead from downtown Vancouver through White Rock to Blaine, Washington.

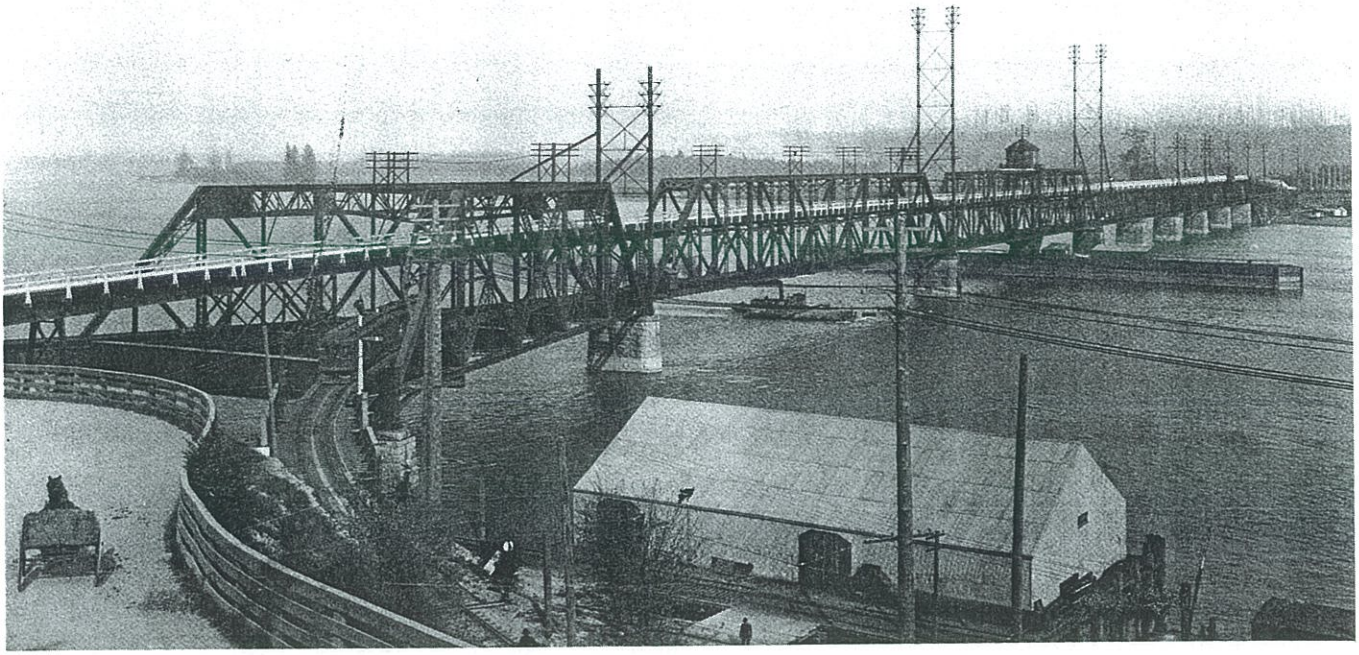
Western Canada's Railways

J Edward Martin

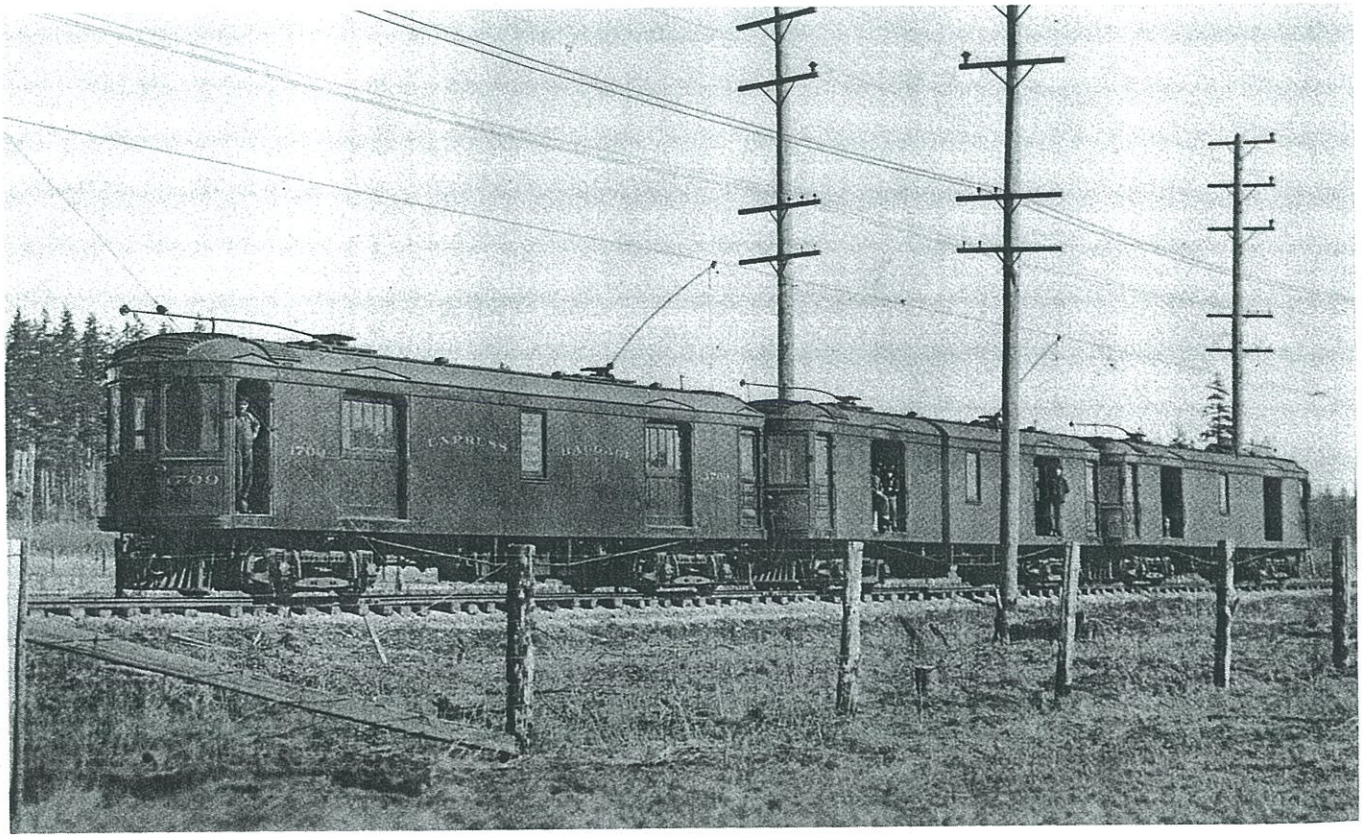
Two of the few Burlington Northern locomotives working in Canada, numbers 390 and 391, at New Westminster, B.C. The nose to nose operation and roof-mounted revolving flashers are peculiarities on this side of the border.

BNR CHRONOLOGY relevant to present Canadian operations

1862 — St. Paul & Pacific R.R. begins operation, 2 July.
1870 — Northern Pacific Railway construction begun.
1879 — St. P&P becomes the St. Paul, Minneapolis & Manitoba Rwy.
1881 — James J. Hill buys the Minneapolis & St. Cloud R.R.
1883 — NPR completed lakehead to Portland. Last spike at Gold Creek, Montana, 8 Sept.
1889 — The M&ST.C. becomes the Great Northern Railway.
1890 — The St.P., M&M Rwy. is merged into the Great Northern.
1891 — GN's New Westminster Southern, from Liverpool (opposite New Westminster, on the south bank of the Fraser) to Blaine via Cloverdale, opens 14 Feb.
1893 — Nelson & Fort Sheppard Railway (Nelson — Waneta) built.
— Last spike on the Great Northern line to the Pacific driven 6 January, at Scenic, Washington.
1898 — Nelson & Fort Sheppard Rwy. becomes Great Northern property.
1901 — Washington & Great Northern Rwy. built through the Kettle Valley to Canada (Keremeos).
1903 — Midland Railway begun in Manitoba jointly by NP and GNR.
— Vancouver, Westminster & Yukon Rwy. (New Westminster–Vancouver) built.
1909 — New shoreline route of the Victoria Terminal & Ferry Co., from Blaine through White Rock, replaces the Blaine–Cloverdale line.
— Great Northern becomes sole owner of the Midland Rwy. Co.
1970 — NP, GN, CB&Q and SP&S merge to form Burlington Northern, 2 March.
— Amtrak takes over passenger services.
1981 — Last Amtrak train, Vancouver–Seattle, 30 September.



ABOVE: The Fraser River Bridge at New Westminster, built in 1902 by the province of B.C. and shared by the BCH, CN and BNR. The roadway seen in this early view was removed in 1937, when the Patullo Bridge was built alongside.
BELOW: A 1916 Fraser Valley milk train. Produce, fish, parcels, mail and newspapers also travelled in these light freight motors.



Northern Pacific In Manitoba

***Left**, a buggy and an open electric trolley, its running boards brimming with male passengers, meet on muddy Main Street, in early 1895. Behind, stands the Northern Pacific Railway's massive Winnipeg station-hotel. It was considered the finest west of Montreal, until it went up in flames one cold February night, in 1899. Fire hoses froze as the fine, chateau-style structure was reduced to ashes.*

The NPR had big plans for expansion in Manitoba, when it built this monument, in 1892. After completing a mainline from the lakehead to Portland in 1883, NPR turned attention northward. Financial problems stalled expansion however, and by 1910, its network of lines in Manitoba had disappeared into the hands of either the Canadian Northern, or the Great Northern railways.

***Top Right, Opposite Page:** Victoria & Sidney Railway's locomotive #1, a diamond stack 2-6-0, arrives in Sidney (Vancouver Island), having just completed the 20-mile trip from Victoria, via Royal Oak, the west shore of Elk Lake, Keating and Saanichton. An unusual feature of the V&S was that it used no dispatcher, only verbal messages between crews by telephone.*

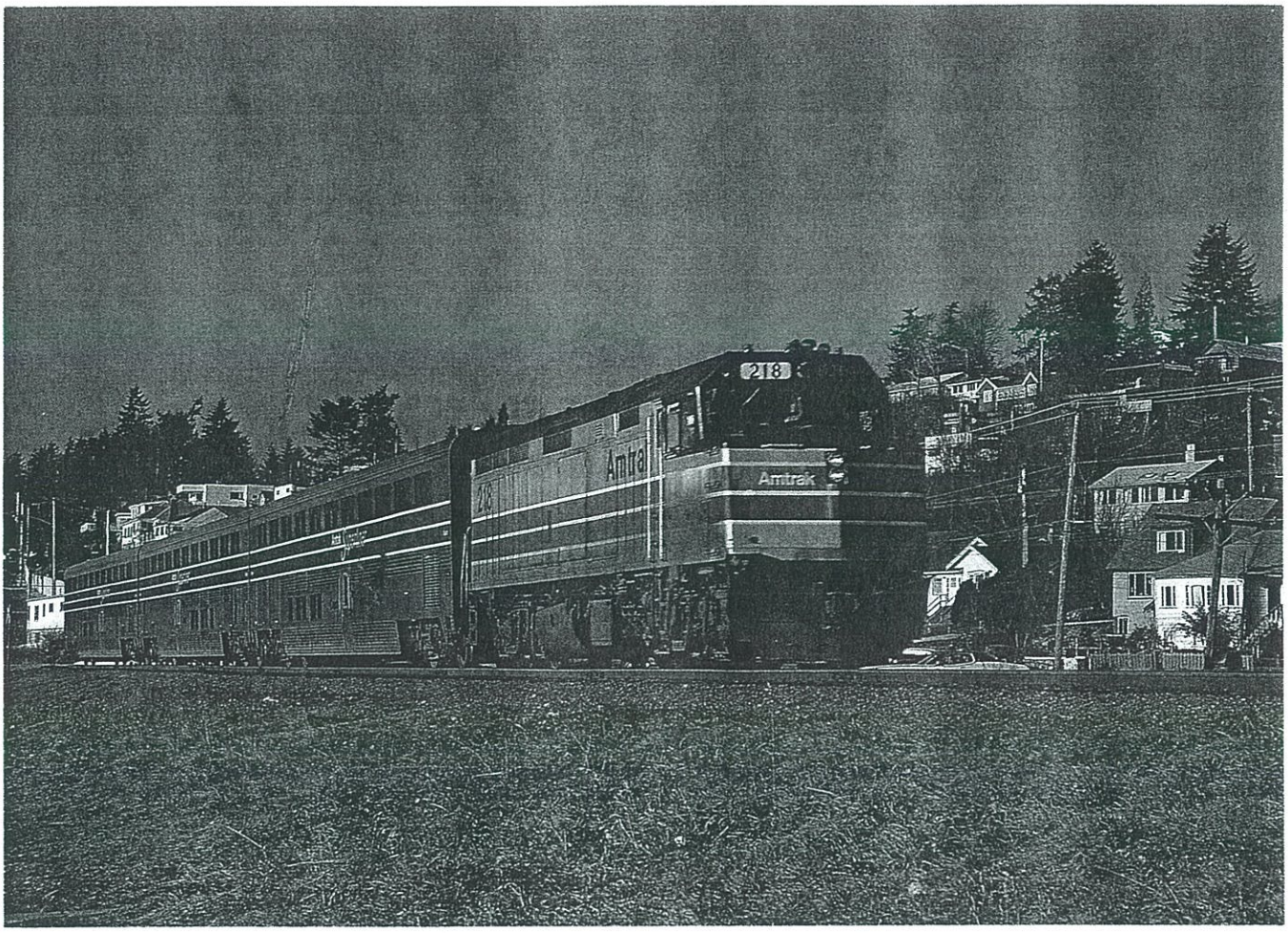
The railway carried cordwood, lumber, farm products and mail. Opened in 1894, it provided a fast route to the Gulf Islands but unable to make a profit, it was sold to the Great Northern Railway, in October 1902. The GNR had no more success and the line closed, on 30 April 1919.

***Bottom Right, Opposite Page:** In a snow-filled landscape, GN #471 approaches the Centre Star Gulch trestle at Rossland, BC, with a train of ore cars for the Le Roi mine's loader, about 1910. The locomotive's squared, Belpaire firebox was a distinguishing feature of GNR steam.*

The Great Northern arrived in Rossland through a takeover of Daniel Corbin's Red Mountain Railway, in July 1898. Corbin's line had reached Rossland from Northport, Washington, in December 1896. Service continued until July 1921, by which time the mines were in decline.

~~Western~~ ~~Can Rys~~ The Great Can Northwest Rail

J Edward Martin Pictorial



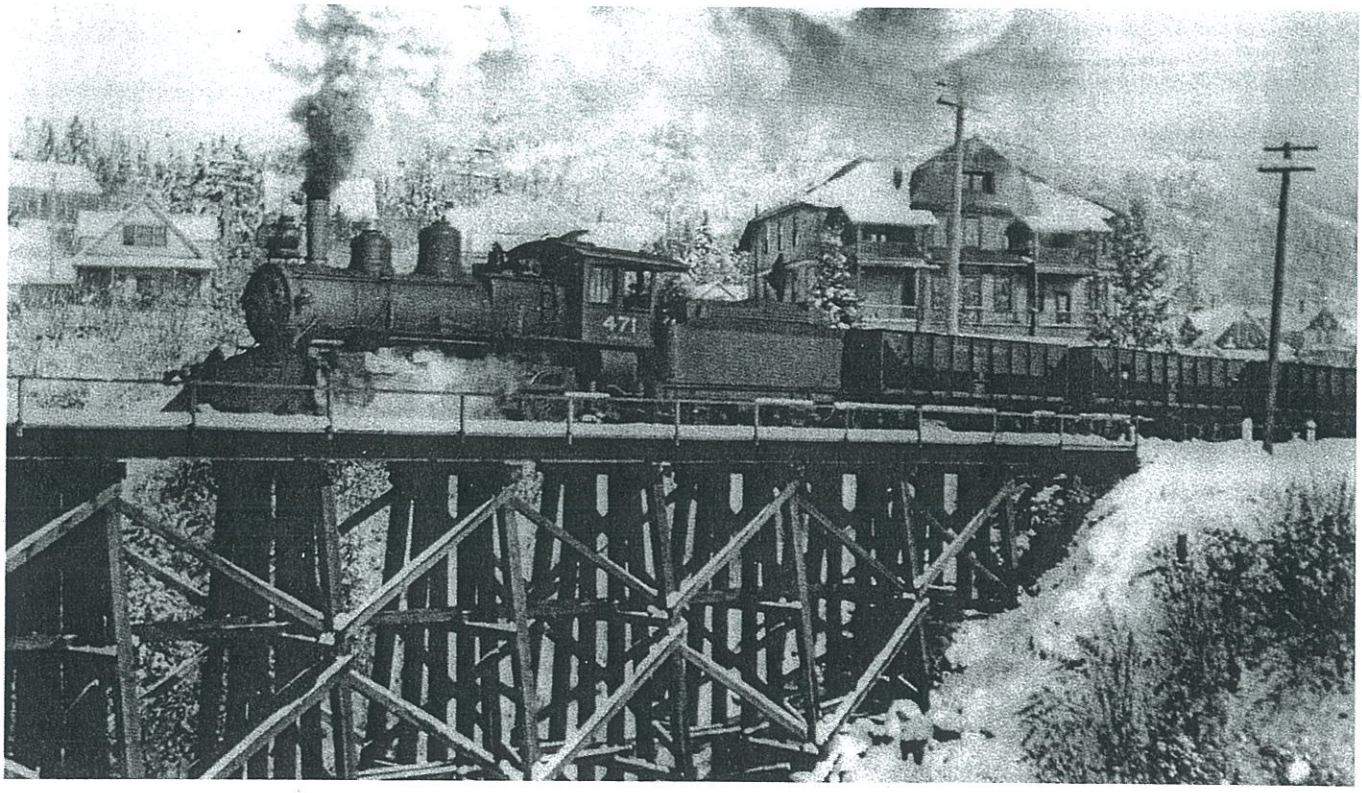
Amtrak at White Rock

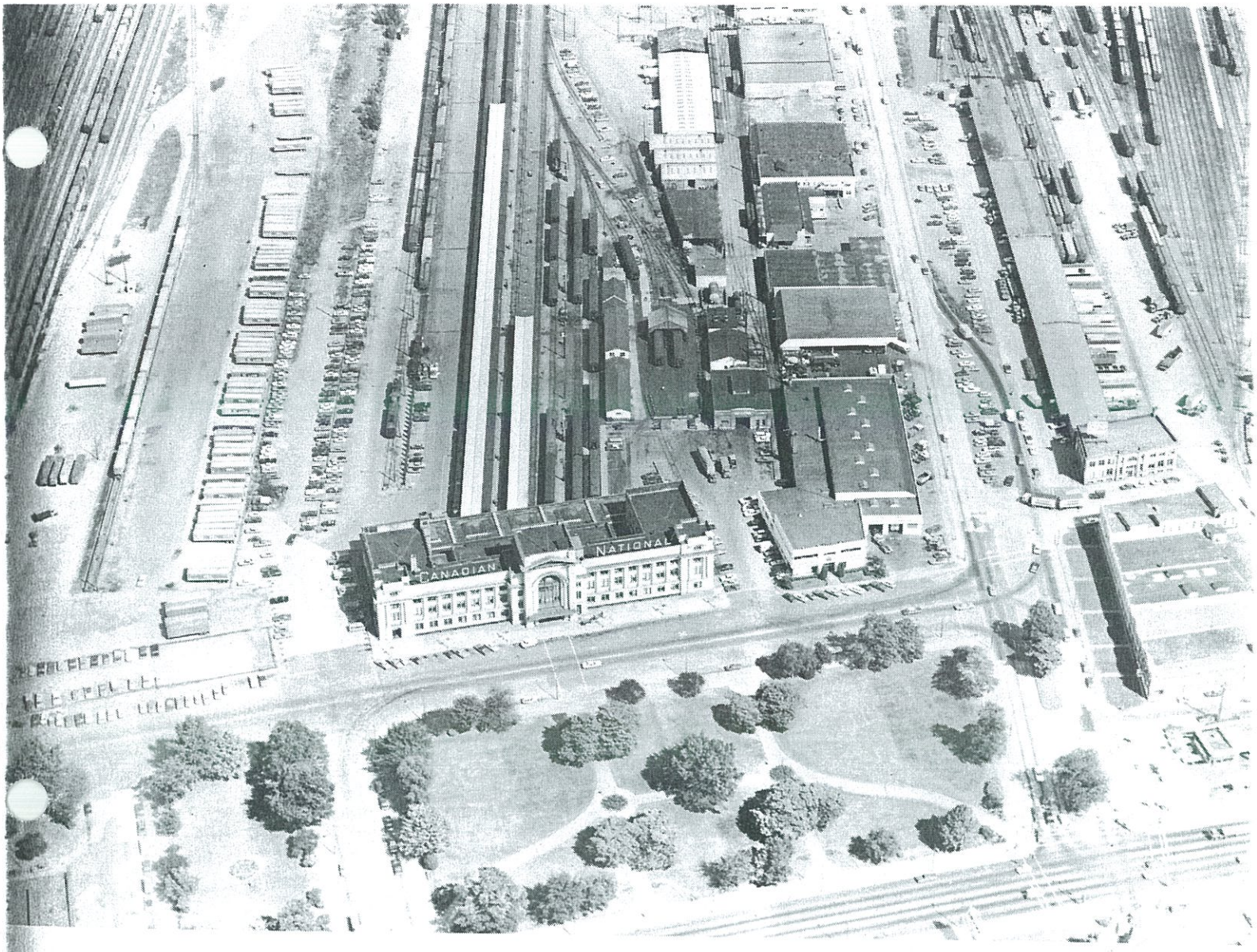
Amtrak's gleaming Pacific International *rolls swiftly through White Rock, BC on a fine autumn morning in 1979. Passengers will enjoy a splendid, relaxing view along the coast from the high, bi-level coaches. The train has left Vancouver at 6:50 a.m. and diesel-electric locomotive #218 will have it into Seattle, 156 miles to the south, by 11:20.*

Great Northern's shoreline route through White Rock opened in 1909, replacing the more steeply graded line from Blaine through Cloverdale to New Westminster, opened in February 1891. The White Rock station was a customs & immigration point and people could be held there under lock and key, if their papers were not in order. Passenger business to the small village itself was light, except in summer, when a Camper's Special was run.

Passenger service on the Seattle-Vancouver run was heavy in the days of steam and 12-car trains were normal. After new highways lured away passengers, patronage dropped and by 1969 service was cut to one train a day. It was suspended altogether, in April 1971. Amtrak (formed in January 1970) decided to try once more in 1975 but passenger trains were again discontinued on 30 September 1981. Burlington Northern continued to operate freights on the line, however. Coal trains need it to reach the Roberts Bank terminal and important interchange is made with Canadian National Railways and BC Rail in New Westminster and Vancouver.

Great Northern In British Columbia





The construction of an urban station means far more than just the erection of a building. This aerial view of the CN Vancouver station shows the layout of the tracks leading to the depot, the location of the servicing facilities for the passenger equipment, as well as the nearby freight yards at the right of the photo. Railways tried to locate their downtown stations in pleasant surroundings. Thornton Park, between the Vancouver terminal and Main Street, made a good impression on arriving travellers. To the left of the CN depot is the site of the former Great Northern terminal, now occupied by a parking lot. The two structures, side by side, made an imposing sight. Today, trains arriving from the United States use the Canadian National station.
(Canadian National photo)

Vancouver, Canada's most important Pacific port, and the largest city in western Canada, was the Pacific terminus of the Canadian Northern mainline. In 1916, the Canadian Northern erected a large three-storey depot measuring 321′ x 105′. Extensive facilities designed to serve the needs of the travelling public were located on the first floor. In addition to a large waiting room and ticket office, a lunch counter, telegraph office, and baggage room were provided. The sleeping and dining car departments also had offices on the first floor. The Vancouver offices of the Canadian Northern were located in the two upper storeys.[11]

The exterior of the Vancouver station was constructed of stone. One contemporary trade journal described the exterior as having been "designed along dignified classic lines with a strong arched feature and supporting features at the extreme corners."[12] The "arched feature" was over the main entrance, and included a prominent clock. Between the entrance and either end, six columns were used along the front of the building, which was inscribed, well into CN times, with the words "Canadian Northern Pacific Railway."

Grand Trunk Pacific did not have a rail line into Vancouver, connections being provided by ship from Prince Rupert.

This brief overview of the urban stations of western Canada underlines the necessity for more extensive study of these interesting stations. Undoubtedly they are worthy of a book-length study in and of themselves.

[11] *Canadian Railway and Marine World*, September 1916, p. 358.

[12] *Canadian Railway and Marine World*, September 1916, p. 358.

Charles Bohl Cdn Nationals Western Depots

Canadian Railway and Marine World

February, 1917.

Great Northern Railway Terminals in Vancouver.

In connection with the erection of its terminals at Vancouver, B.C., the Vancouver, Victoria & Eastern Ry., a subsidiary of the Great Northern Ry., U.S.A., has filled in the whole of the area from the southern boundary of the property, which it purchased from the city, to the shore line on the north side of False Creek. This area was previously part of the bed of False Creek. The average depth of the fill required to bring the property up to the approximate level of Main St. was about 12 ft. The company also owns considerable property on the south side of False Creek.

The Passenger Station, which is about completed, is L shaped, the main front facing west. It is about 375 ft. east of Main St. As the whole property is a fill, the building is supported on a pile foundation, cluster piles being driven and cut off below the line of perpetual saturation. Upon these concrete piers were poured, which support reinforced concrete beams, which in turn carry the exterior walls, columns and floors. The skeleton of the building is reinforced concrete, hollow tile, and concrete floors and roof. The exterior has a granite base, carrying up and around all exterior doors terra-cotta surbase, and red brick above, with terra-cotta trimmings and cornice.

The centre portion, 45 ft. high, and ap- main waiting room, 60 x 100 ft., which runs the full height. Flanked on either side are two wings, about 56 x 65 ft, two stories high. The upper floors of the wings will be used by the Great Northern and Northern Pacific Railways for offices.

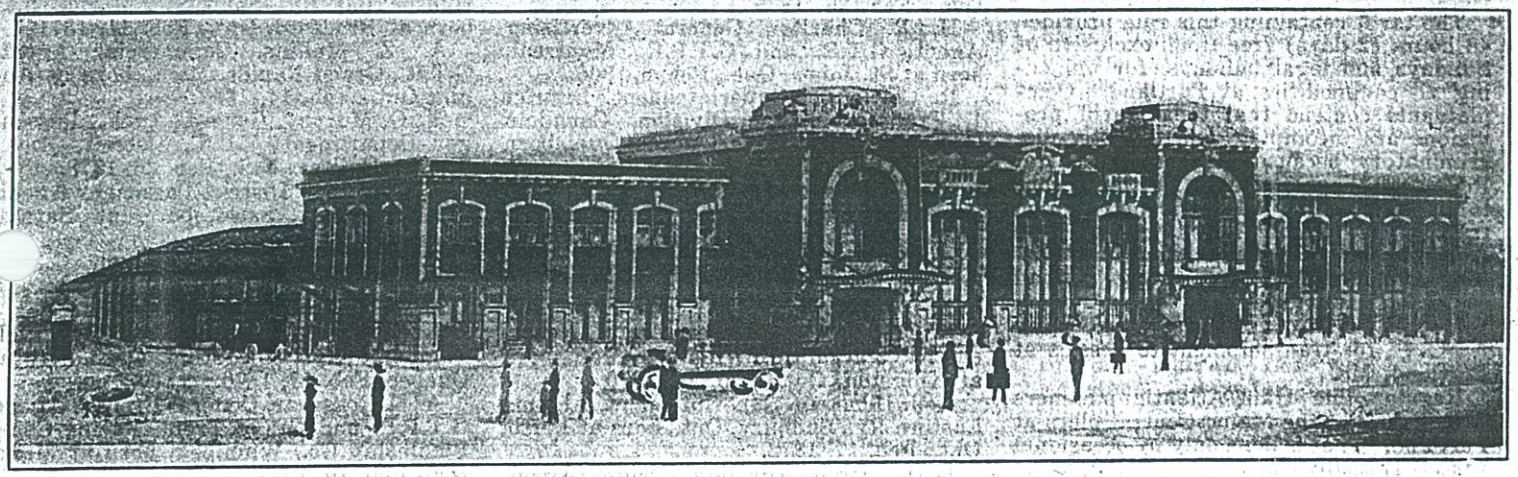
The main waiting room will be panelled in Alaska marble, 7 ft. high, and will have marble and terrazzo floors and ornamental plaster ceiling. Provision has been made in the plastering of the end walls for placing oil paintings showing the Glacier and Yellowstone National Parks. The lighting fixtures are of special design, and will be executed in plaster. Alcoves off the main waiting room will be fitted with seats and tables for the public. The ticket office is in the centre of the east wall, opposite the two main entrances. There are two principal entrances to the main waiting room from the west, directly opposite to which are two entrances leading to a glass covered concourse, running the full length of the building, which in turn leads to 11 tracks, the platforms being covered by umbrella roofs, 700 ft. long. Off the main waiting room in the south wing are located the smoking room, which has access to the concourse, women's retiring room and lavatories. Provision is also made in the south wing for an immigrants' room and lavatories, but having no connection with the main waiting room. A corridor, 12 ft. wide, runs down the centre of the north wing to a carriage entrance. Off the waiting room in the north wing is the parcels and news office and station master's validating and information offices. Off the corridor leading to the carriage entrance are an exhibition room, a room for station officials and a checking lobby which is connected direct to the baggage room.

The leg of the L, or baggage room wing, is a one story building containing the baggage room, bonded baggage, Canadian and United States customs, trainmen's room, lavatory, mail room, Great Northern and Northern Express. The leg of the L is about 228 ft. long by 42 ft.

It is the intention to lay out the ground in front of the passenger station in an attractive manner. The station will be reached by two driveways from Main St., and the remaining portion, not taken up by drives and walks, will be laid out with lawn and trees.

A hundred and fifty feet east of the baggage room wing, and in a direct line, is the power house, 50 ft. x 42 ft., with a brick stack at the east end 90 ft. high. The power house will supply heat to the different buildings through an underground reinforced concrete tunnel, steam to the passenger cars at the stub tracks, and to the passenger car yards. In connection there is a transformer room and a motor driven air compressor. Provision is made in the boiler house for three 125 h.p. return tubular boilers.

There are two freight sheds, the Great Northern one being next the passenger station and the Northern Pacific farther over. They are both 50 x 600 ft. long, set back 15 ft. from Park Lane, providing a small parking strip in front of the buildings. The Great Northern freight shed is separated from the passenger station at the narrowest point by a 60 ft. driveway. Between the two sheds there are six tracks, and on the north side of the Northern Pacific shed there will be a 60 ft. driveway, and then will come the team tracks. The westerly 66 ft. of both sheds, adjoining Park Lane, are two stories high, containing the office portion, the remainder being simply a one story shed, cut in the middle by a fire wall, the easterly half for bonded goods and the westerly half for free goods. Customs accommodation is also provided in both sheds. The foundations for the freight sheds are similar to the passenger station, above grade a granite base, brick with terra-cotta trimmings, wooden floors.



Passenger Station at Vancouver for Great Northern and Northern Pacific Railways' Joint Use.

Locomotive House.—At the east end of the yard there will be a 15 stall locomotive house, with a machine shop and boiler house in connection. The depth of the locomotive house will be 92 ft., and the machine shop and boiler house will be 50 x 160 ft. The foundations will be similar to the passenger station with brick and wood construction above grade. In close proximity to the locomotive house will be an oil house, 20 x 36 ft., and a store house, 30 x 73 ft., of similar construction to the machine shop, etc.

In connection with the passenger car yards there will be built a commissary building, 100 x 40 ft; an oil house, 20 x 20 ft.; car repairers' building, 30 x 20 ft; car foreman's building, 20 x 12 ft.; car cleaners' building, 16 x 20 ft.; carpet cleaning building, 16 x 20 ft., and a coal house, 40 x 20 ft.

Under the direction of A. H. Hogeland, Chief Engineer, G.N.R., the buildings were designed by Fred. L. Townley, architect, Vancouver, in whose office all the drawings were made and under whose supervision the buildings have been erected.

Construction of the line to lakehead proceeded at the brisk pace which was the hallmark of Mackenzie and Mann operations. The Manitoba and South Eastern section, 62 miles from Marchand to Sprague, was opened for traffic on December 9th 1900, as was the United States section, 44 miles from the international boundary to Rainy River. The Rainy River-Fort Frances section of 55 miles was completed on October 10th 1901. On the Fort Frances-Atikokan section some picturesque "island-hopping" by means of trestles carried the tracks across a southerly arm of Rainy Lake; nine years later a causeway three miles in length, requiring a million cubic yards of rock, replaced the trestles. On December 30th 1902 a silver spike was driven at Atikokan to mark the closing of the gap in the 212 miles of rugged construction between Fort Frances and Stanley Junction, where the new railway linked up with the Port Arthur, Duluth and Western tracks for the last miles to the lake front. This date of opening permitted an evilly disposed Winnipeg newspaper to announce, "The first train over the Canadian Northern left Port Arthur last night and will be here next year." The celebration of the occasion on New Year's Eve at the Northern Hotel at Port Arthur lingered long in the memories of 1,500 guests.

With completion of this line the "Muskeg Special" and its firewood traffic became insignificant. In 1901 6,500,000 bushels of Manitoba grain had been delivered to the Northern Pacific at Emerson for shipment to Duluth. Thereafter this traffic in ever-increasing volume flowed to Port Arthur, where a million-bushel Canadian Northern elevator had not been completed before the construction of another began.

The Branch Line Coup

While the lakehead line was under construction Mackenzie and Mann had carried out a resounding coup in southern Manitoba. In 1896, as a consequence of a reorganization, the Northern Pacific emerged from receivership and reclaimed its Manitoba branches. Relations between the provincial government and this system remained cool and on several occasions the Canadian Pacific had endeavoured to buy these lines. On January 14th 1901 the Roblin administration leased them for 999 years; three weeks later it transferred its lease to the Canadian Northern Railway. In this transaction Mackenzie and Mann obtained the following trackage:

Winnipeg-Emerson	66	miles
Morris-Brandon	145	"
Winnipeg-Portage la Prairie	51	"
Hartney Jct.-Hartney	51	"

In order to improve the exchange of traffic the Canadian Northern principals swiftly built or acquired the following link-ups with their existing lines:

Carmen Jct.-Carmen	44	miles	(opened October 5th 1901)
Beaver-Gladstone	18	"	(opened December 4th 1901)
Muir-Hallboro-Neepawa	34	"	(opened November 13th 1902)
Portage la Prairie-Delta	15	"	(acquired December 22 1902)
Oakland-Beaver	20	"	(acquired December 2nd 1902)

The dexterity and despatch of this transaction rocked railway circles. Many and dark were the surmises; in point of fact it was an almost inevitable transaction. It was in Manitoba's interests to support a competitor of the Canadian Pacific and in their first ventures Mackenzie and Mann had proved themselves to be capable operators. The new proprietors undertook to pay a rental rising to $300,000 a year and to give the Manitoba government a mortgage on all Canadian Northern lines in the province. They also agreed to accept control of rates by the province, to forgo exemptions from taxation after 1905, to admit the jurisdiction of the King's Bench of Manitoba over the agreement and never to pool traffic or to amalgamate with the Canadian Pacific.

Mackenzie and Mann—The Farmer's Friends

As soon as these branches were taken over, a reduction of 15% in general freight rates and a corresponding drop in grain rates to lakehead were announced. This move shocked the Canadian Pacific, which until then had regarded Mackenzie and Mann as fly-by-night operators, to be brought to heel in due season. Greatly to the delight of the Manitobans Sir William Van Horne denounced the terms of the lease, declaring it to be unworkable and the burden assumed by the province to be crushing. In point of fact no transaction ever served either participant half so well. In part as a matter of arithmetic, in part because of endless politicizing, the western farmer saw his future in terms of freight rates. It was an article of faith with him that every service that handled his grain between his field and the flour mill was designed to bleed him. The greatest and most obnoxious of these vampires

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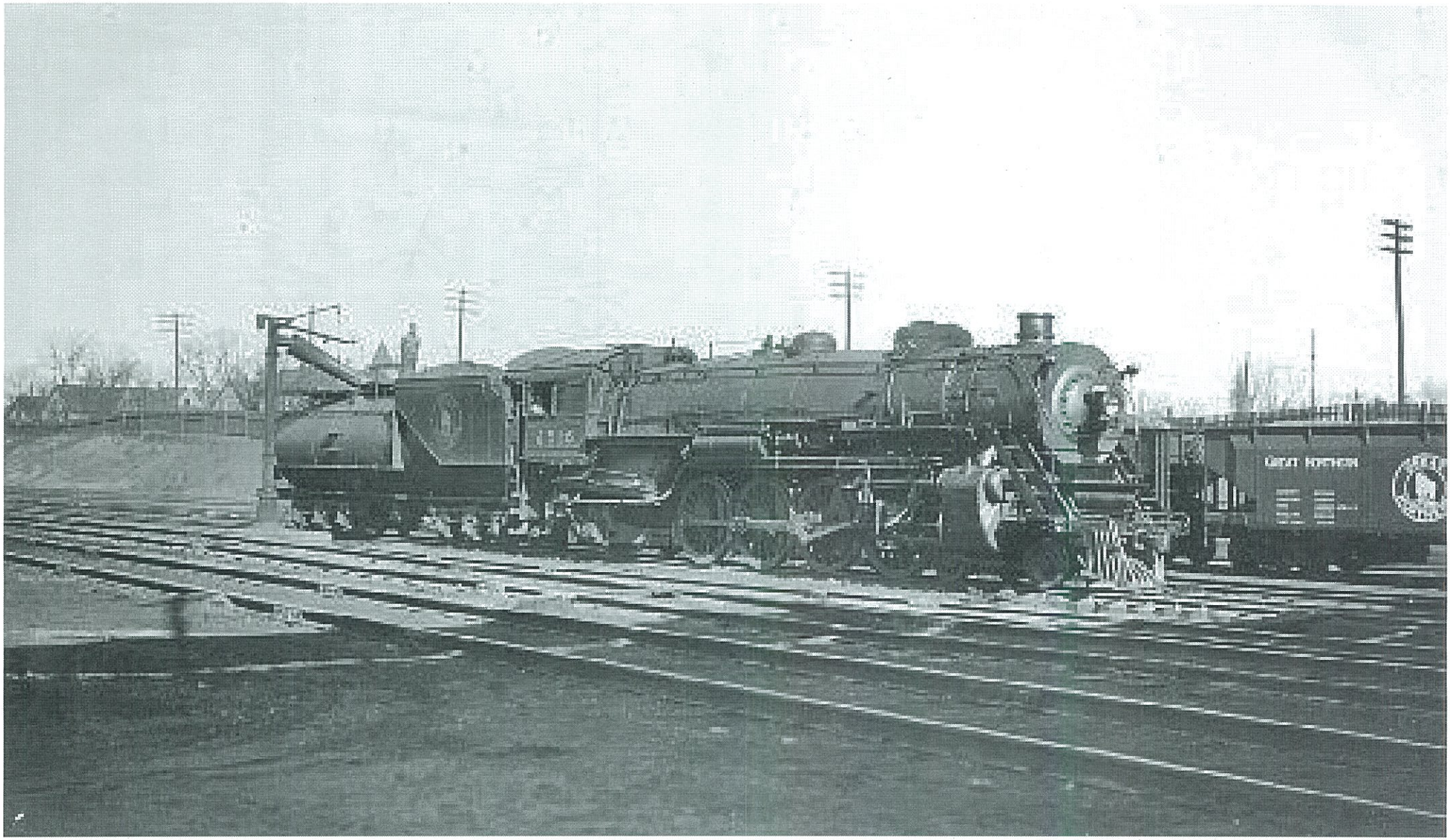


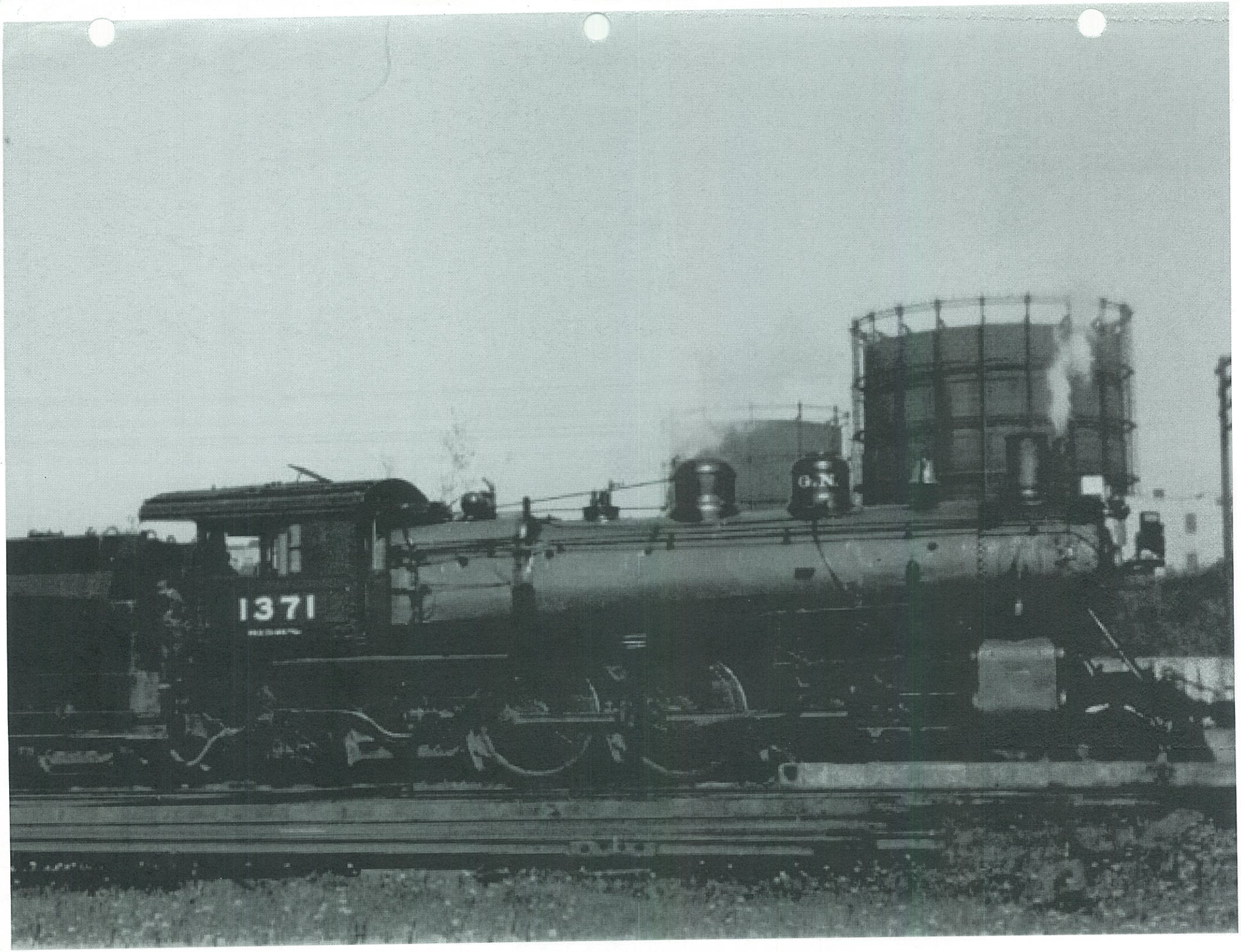
Title: View of swimmers with White Rock's Great Northern ...

P263 1898

The Northern Pacific has this year built the Souris River branch in Manitoba starting from its Brandon branch about midway between Belmont and Hilton stations

Jan 1899 P40
being operated to Elgin 38 miles.
3 trains a week

Northern Pacific 2-1899
Winnipeg Terminal
the building which comprises of the Manitoba Hotel the Station and divisional offices was totally ~~[illegible]~~ destroyed by fire Feb 7 (1899)
The building was erected in 1891 The hotel portion was 7 ~~[illegible]~~ stories high had a frontage of 214 ft on Main St. and 212 ft on Water St. South of the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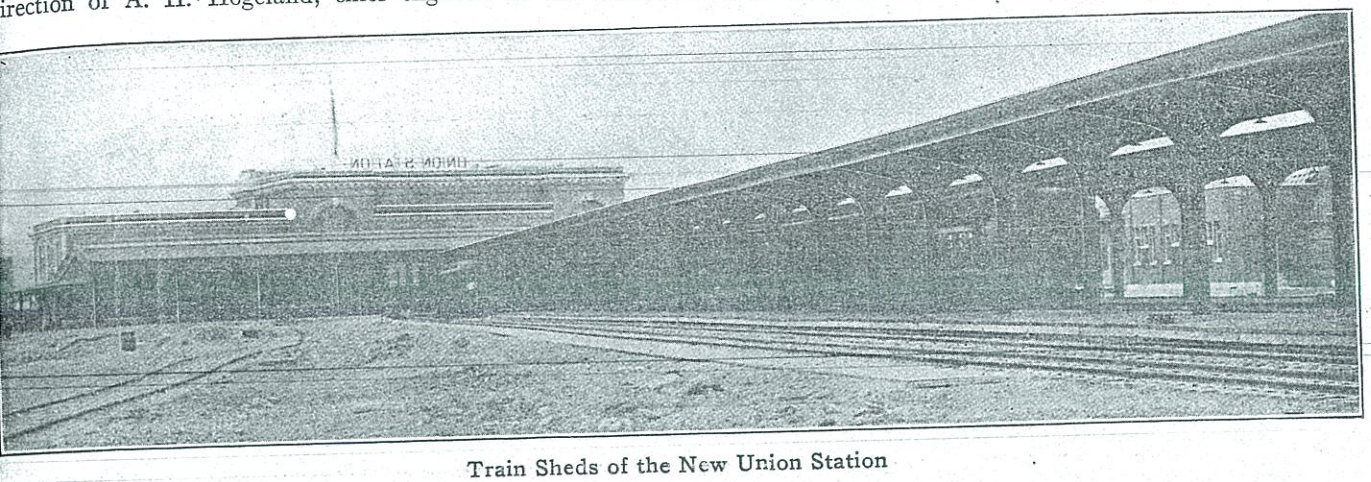
ui. gs were built under contract by Grant Smith & Co., nd McDonnell, Ltd. Fred L. Townley of Vancouver was ne architect. The entire terminal project was under the irection of A. H. Hogeland, chief engineer of the Great Northern, O. S. Bowen, principal assistant engineer at Seattle, and E. B. Ford, engineer in charge.



Train Sheds of the New Union Station

The Canadian Northern Terminal

The map shows the proposed ultimate development of the Canadian Northern terminal in the basin area of False creek. The filling of the submerged land involved over 5,000,000 cu. yd. of material a large portion of which has been completed. A large sewer has also been constructed to drain the terminal property and intercept city sewers which hitherto drained into the basin. The sea wall west of Main street is nearly finished and the outbound freight house, 800 ft. long, has been completed. The contract for the passenger station has been awarded to the Northern Construction Company and Carter, Halls & Aldinger and will be completed early in 1918.

The passenger station is located in the northern half of the area not far from the Great Northern station. The plans provide for a building 321 ft. in frontage with a depth of 105 ft. at the head of a group of 16 station tracks. The design of the building is symmetrical, with a waiting room 148 ft. by 48 ft. located in the center, supported by wings on either hand containing all the necessary auxiliary facilities. Two upper floors in the wings will accommodate general offices of the railroad, but the central waiting room will have a lofty ceiling extending the full height of the structure. A passenger concourse will occupy the space between the station building and the track platforms The plans contemplate the use of high grade materials for both interior and exterior treatment, using material originating in British Columbia as far as possible. The estimated cost of the passenger station is $1,000,000. East of the station tracks the plan provides for a coach yard and passenger engine terminal.

The Main Waiting Room, Northern Pacific-Great Northern Terminal

The freight terminal occupies the center of the terminal area with a team yard in the southern portion. The freight house layout consists of an office building 100 ft. by 50 ft. and two freight warehouses,—an inbound freight house 50

Street Elevation of the Northern Pacific-Great Northern Station.

Terminal Developments at Vancouver, B. C.

New Great Northern-Northern Pacific Station Completed, Canadian Northern Facilities Under Construction

WITH the completion of the Canadian Northern passenger station, upon which work was started recently at Vancouver, B. C., that city will be unusually well supplied with modern passenger terminals. The Canadian Pacific occupies a terminal completed only four years ago, while the Great Northern and the Northern Pacific have only recently commenced running trains into their new station. The newly completed freight and passenger terminal of the Great Northern and the Northern Pacific and the proposed terminal of the Canadian Northern are entirely independent projects so far as ownership, construction or operation are concerned, although the sites are adjacent and the negotiations involved in their acquisition were more or less interdependent. The layouts also bear a striking resemblance.

The new facilities center about False creek, a shallow arm of the Strait of Georgia, in the southeastern part of the city of Vancouver. The original railroad to locate in this vicinity was the Vancouver, Westminster & Yukon, which acquired a right of way on the south side of False creek on which it built a line extending westward across Main street and thence north over a trestle to a terminal fronting on Pender street.

In 1911 the Great Northern as owner of the Vancouver, Victoria & Eastern Railway & Navigation Company, the successor to the Vancouver, Westminster & Yukon, concluded an agreement with the city of Vancouver by which it obtained the title to a U-shaped area around the edges of False creek, east of Main street, leaving a basin in the center about 1,600 ft. wide and 4,500 ft. long that was reserved as public property to be developed as a basin for dock purposes. To fulfill this agreement the railroad was compelled to spend $2,500,000 for the acquisition of riparian rights from property owners around the basin, in addition it spent considerable sums in purchasing lots to secure the necessary street frontage for terminal development. The filling of the area to permit its use for railroad purposes also involved a large expenditure. Subsequent to the conclusion of this agreement the Great Northern sold a half interest in a portion of the property on the north side of False creek to the Northern Pacific and beginning January 1, 1918, the Northern Pacific will use the Great Northern (V. V. & E.) tracks from Sumas, about 60 miles southeast. The Canadian Northern also operates over these tracks under trackage rights from New Westminster to Vancouver, a distance of 12 miles.

In 1913, after the work on the Great Northern and the Northern Pacific terminal was well under way, the Canadian Northern, seeking an adequate terminal for its Pacific Coast extension in Vancouver, entered into an agreement with the city whereby it secured title to the basin surrounded by the V. V. & E. property. This made an area of 162 acres of which 127 acres were available for terminal development, the remainder being reserved for a public street and for several small park sites. In addition to filling the area for its own and the city's use, the railroad was required to extend the fill 150 ft. west of Main street to a sea wall which it was also required to construct. This feature of the project entailed an expenditure of $750,000 for the release of riparian rights. The agreement between the city and the Canadian Northern was founded on a plan of the Vancouver Harbor Commission, contemplating the future construction of a public railroad connecting the two new railway terminals with a public dock, to be located on the Kitsilan Indian Reservation. However, this project has not yet passed beyond the preliminary stages.

The Vancouver, Victoria & Eastern Terminal

The Vancouver, Victoria & Eastern terminal plan contemplates the ultimate development of the entire U-shaped area, but the improvements made thus far are restricted to the north side of the "U" with frontage on Park lane and Prior street, except for a locomotive terminal in the extreme southeast angle. The terminal as built provides a new union passenger station and coach yard, separate freight houses for the Great Northern and the Northern Pacific and a joint team yard. Each unit is designed to allow for material extension in the future and space is provided along the north side of the property for tracks to serve possible industries located along Prior street.

The passenger station occupies the south side of this portion of the property, with two main tracks leading to six station tracks and two coach cleaning and storage tracks. The future development contemplates moving the main tracks further to the south, thereby permitting the addition of five more station tracks and five additional coach yard tracks. The station tracks are arranged in pairs, spaced 12 ft. 6 in. center to center, with platform 20 ft. wide between each pair.

The station building is shaped like an L, the main building being located at the end of the station tracks, while the baggage, express and mail facilities are in a smaller wing alongside the northernmost track. The main building con-

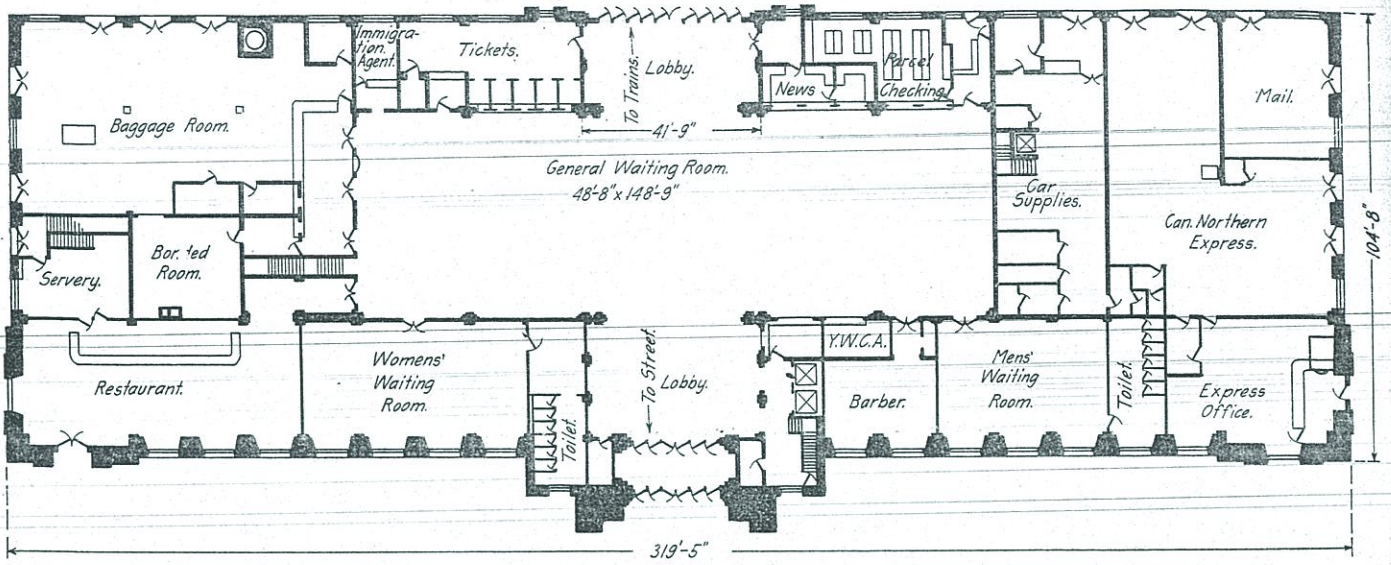
ft. wide and an outbound freight house 40 ft. wide,—with provision for an ultimate length of 1,600 ft. for each house. The freight houses are to be served by six house tracks, arranged in groups of three with a transfer platform in the center.

A section of the outbound freight house, 40 ft. by 800 ft., has been completed. This has a steel frame with steel roof trusses supporting wooden purlins which carry a 2 in. plank roof finished with tar and gravel roofing. The floors are of heavy timber construction. Along the track side of the building the doors are continuous, but on the team side they occur only in each alternate 16-ft. bay. Along the entire length of the building above the door head, continuous glazed transom lights are provided, while the wall portions consist of 7/8-in. sheathing on both sides of the studding, covered on the outside with corrugated iron. Three 13-in. brick fire walls divide the house into four compartments. A cold storage rooms is located at the east end of the building, a custom's office near the center and accommodations for the clerks and truckers at the west end of the building.

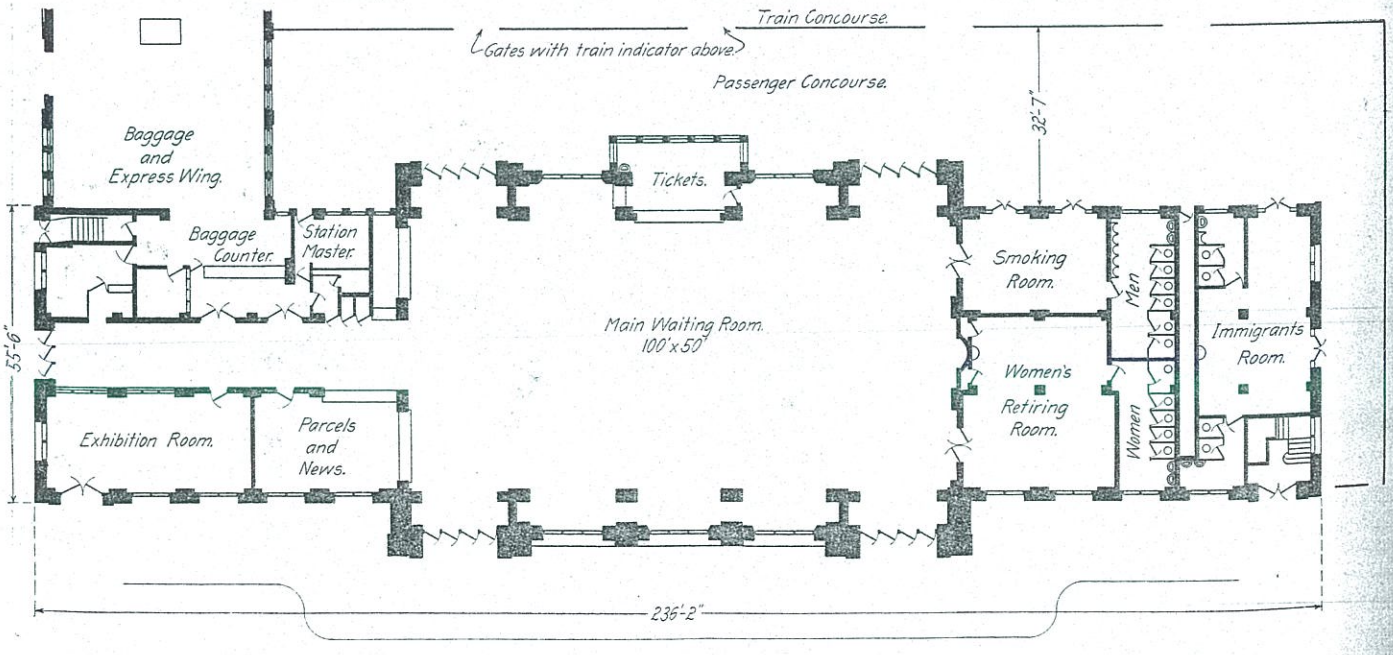
Construction Details

The terminal area required filling to an average depth of 15 ft. The bed of the basin on which this filling was placed consists of a layer of mud and under this a layer of clay, sand and gravel, overlaying hardpan. The two strata varied in thickness but had an average combined depth of about 25 ft. The fill was placed by the hydraulic method with a dredge excavating in False creek west of Main street. The output averaged about 99,000 cu. yd. per month.

The sewer formed an important part of the preliminary work. It consists of a main sewer 20 ft. by 18 ft., 4,400 ft. long with laterals of smaller size having an aggregate length of 6,600 ft. Owing to the soft foundation and the presence of the fresh filling material, it was concluded to be unwise to use anything but timber construction for the



Plan of the Canadian Northern Station



Plan of the New Union Station

sists of a central portion containing the waiting room 100 ft. by 60 ft., with the auxiliary facilities contained in symmetrical wings on either side. Entrance to the main waiting room is afforded by duplicate doors at each end of the street side, each of which is protected by a suitable marquis. Similar doors directly opposite, in the east wall of the waiting room, lead to the train concourse. The ticket office occupies the center of the east or track side of the waiting room. A woman's rest room and a smoking room together with toilet accommodations are located in the south wing of the building. Behind these is the immigrant waiting room, with a separate corridor leading to the train concourse and a separate street door in the south end of the building. The north wing contains a parcel and news stand, an exhibit room, a stationmaster's office and the checking counter for the baggage room. The main waiting room occupies the full height of the central portion of the building, but the two wings are arranged with second floors that are occupied as local offices by the Great Northern and the Northern Pacific.

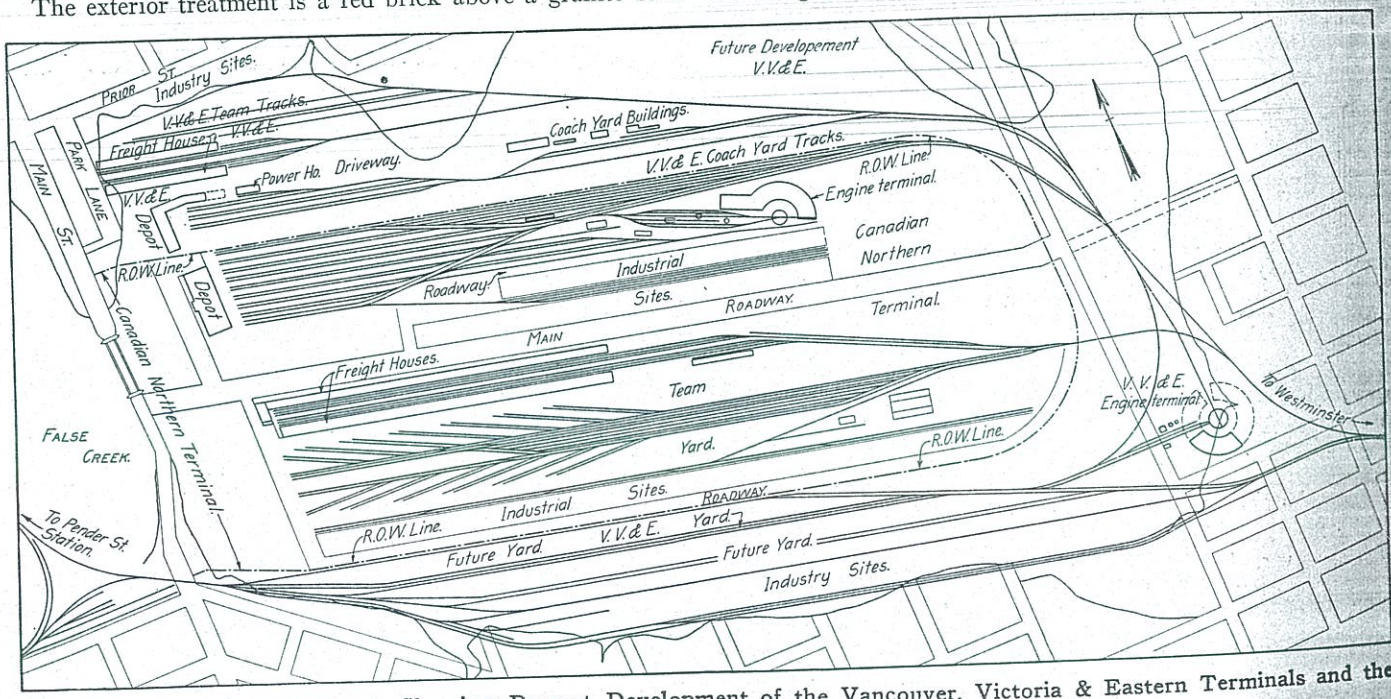
The exterior treatment is a red brick above a granite base and a terra cotta dado. Extensive use is also made of terra cotta for the trim. The main waiting room is paneled in Alaskan marble and a cast plaster ceiling. All of the floors in the building are finished with terrazo tile.

The wing north of the tracks has a width of 42 ft. and a length of 228 ft. Commencing at the west end it is occupied in turn by a baggage room 97 ft. long divided equally between general baggage and bonded baggage, a mail room 48 ft. 6 in. long and two express rooms having a combined length of 81 ft.

The main building has a reinforced concrete frame supporting reinforced concrete floors. The walls are of brick, terra cotta and hollow tile. The longitudinal wing is of ordinary brick wall construction. Owing to the fact that the structure stands on filled ground it was necessary to support it entirely on piles capped with concrete pedestals which carry the system of reinforced concrete girders that support the walls and floors.

The Freight Houses

Duplicate freight houses are provided for the Great Northern and the Northern Pacific, north of the passenger terminal. They are located on opposite sides of a grid of 6 house tracks, each house having its own driveway on the side opposite the tracks. These houses are 50 ft. wide and 600 ft. long but space is available for an ultimate extension to a maximum of 1,700 ft. A two-story portion at the west end of each of these buildings fronting on Park lane is used for office purposes. The remaining portions of the houses are divided equally into two sections by transverse fire walls, one section serving for bonded freight and the other for free goods. The storage portions of the freight houses have timber roof trusses spaced 22 ft. center to center and spanning the full 50 ft. The entire wall space between columns along the track sides of the storage portions of the freight houses is enclosed by steel roller doors; two to each 22-ft. bay, with windows and wooden sheathing in the space above the doors. The team side has one door 10 ft. wide and 9 ft. high in each bay. The freight house floors are of timber on earth filling, it being the intention to replace these floors with more permanent construction after the filling has had an opportunity to settle. The office portions of the freight houses are of ordinary brick construction with



The False Creek Improvements Showing Present Development of the Vancouver, Victoria & Eastern Terminals and the Ultimate Plan of the Canadian Northern

wooden floors. As in the case of the passenger station the freight houses are supported entirely on pile foundations.

A power plant for heating the terminal buildings is located east of the baggage building. It contains two 125-hp. return tubular boilers with space for a third boiler. The steam pipes for heating the passenger station are conducted through a 6-ft. by 6-ft. pipe tunnel.

As a large part of the area occupied by the terminals was submerged and most of the rest of it was only slightly above tide level, 2,600,000 cu. yd. of filling was required, most of which came from a pit at Sapperton, 10 miles away. A small portion of the material was secured in excavating the cut required to depress the tracks through Grand View, a section of Vancouver southeast of the terminal. The latter project involved eight street viaducts over the track, three of which were steel structures and five timber structures.

Except for a small portion done by the operating department of the Great Northern, the filling was done by A. Guthrie & Co., of St. Paul, Minn., and Portland, Ore., who used two Marion 80-ton steam shovels and 40 Kilbourne & Jacobs air-dump cars of 16-cu. yd. capacity which were operated in trains of 16 cars each. All of the terminal