

Guide To
The Grand Trunk Pacific Railway
Cartographic Series



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Introduction

During the 22nd to 26th of August 1988, archivists from the Government Archives Division discovered a very rich collection of maps and plans in a vault at Canadian National Railway's Union Station in Winnipeg. These maps and plans illustrate the period of construction of the western portion of the Transcontinental Railway (known as The Grand Trunk Pacific Railway) at the beginning of the 20th century. Discussions were undertaken the following year between the Cartographic and Architectural Division (presently the Cartographic and Architectural section of the Visual and Sound Archives Division) and the Prairie regional office of Canadian National over the transfer of custody of the cartographic records to the National Archives of Canada. Transfer was granted in the month of February 1990, and the following month the cartographic records were taken to the Winnipeg Federal Records Centre where they were given preliminary conservation treatment (dusting and cleaning) during the course of 1990-1991. As the Winnipeg Centre was then unable to provide the necessary space, the cartographic records were sent to the Provincial Archives of Manitoba's Records Centre on Muir Road. Descriptions were performed between 1991 and 1995. A database entitled G.T.P. was created containing such descriptive elements as title, date, scale, drawing number, location, dimensions, etc., to which was later added extended fields concerning creatorship, physical description and condition. In 1997 the G.T.P. cartographic records were transferred to the National Archives' new Manitoba Region Federal Records Centre on Inkster Boulevard, where they are presently situated.

In May 1995, the project received funding from a special budget pertaining to Native Land Claims administered by the Treasury Board of Canada. Research was undertaken by Brian Hubner under the direction of the Visual and Sound Archives Division of the National Archives of Canada to identify those cartographic records in the G.T.P. sub-series relating to the Native peoples of Western Canada and the Pacific coast. (In addition to creating a special database relating to Native peoples, he revised and corrected the entire G.T.P. database.) These maps will be of great interest to researchers because many concern the acquisition of reserve lands by the Grand Trunk Pacific Railway. For the convenience of researchers interested in Native land issues, Hubner created a finding aid that identifies all G.T.P. cartographic records containing subject matter pertaining to First Nations peoples, and organizes this information

according to current provincial jurisdictions. It also explains the structure and content of the Native fields that were created for the G.T.P. database. Individuals interested in this area of research are encouraged to consult this finding aid.

The primary purpose of the present guide is to provide a global description of the cartographic records of the Grand Trunk Pacific Railway sub-series and to indicate to researchers the most effective access points for identifying records of interest to them. The various diagrams, tables, maps and images accompanying the text are visual aids to assist the researcher in this task. However, In order to use the records most effectively for research, it is necessary to *understand* them, particularly the contextual information relating to their creation, as well as the means whereby they were classified, filed, and retrieved by their creators, as this has a direct bearing on their present condition. To further this end, a brief history of the Grand Trunk Pacific is outlined, a description of the types of cartographic records in the G.T.P. sub-series is provided, significant factors in their creation and use are related, as well as an explanation of the record keeping system in which they were originally maintained. To further facilitate research, the database for the G.T.P. cartographic records is also discussed.

Historical Outline of The Grand Trunk Pacific Railway

At the beginning of the 20th century, the Grand Trunk Railway company had a third of Canada's railway mileage, all of it in Quebec and Ontario. Although its western terminus in the United States was in Chicago, in Canada the Grand Trunk ran no farther west than North Bay. The company was headquartered in London, England and in 1895, Sir Charles Rivers Wilson became president of the Grand Trunk. To reverse the company's declining fortunes and to improve efficiency, Wilson hired an American expert - Charles Melville Hays - as general manager of the Grand Trunk.

Hays came to the conclusion that unless the company expanded westward, it was doomed. Concentrated as it was in Ontario and Quebec, he believed that eventually The Grand Trunk would become no more than a feeder line for the Canadian Pacific Railway's western freight. Furthermore, the Canadian Northern, hauling grain from the northern prairies where the CPR did not run to the Lakehead, was boxing in The Grand Trunk's Great Lakes operations. Thus, Hays was able to persuade the chief officers of the Grand Trunk in London that the company could only survive and prosper by launching the construction of a new line into Western Canada and beyond to the Pacific ocean. It was anticipated that the company would thereby prosper from an immigration boom to the rapidly growing Canadian prairies as well as the increasingly important Pacific trade.

Hay's ambitions coincided with the demand for a new transcontinental rail line by the Liberals under Sir Wilfrid Laurier. They hoped that such a line would open the Western prairies and the hinterlands of eastern Canada and British Columbia to settlement and development, and to increase the traffic destined for the ports of the Maritime Provinces. While the building of such a line was beyond the power of the Grand Trunk to finance, negotiations were entered into with the Government, and it was arranged that the road should be divided into two sections. The eastern portion of the National Transcontinental line from Moncton to Winnipeg - a distance of 1804 miles - was to be built and owned by the government. The western portion from Winnipeg to the Pacific coast - 1746 miles, and the Lake Superior branch from Sioux Lookout to Fort William - 258 miles, was to be

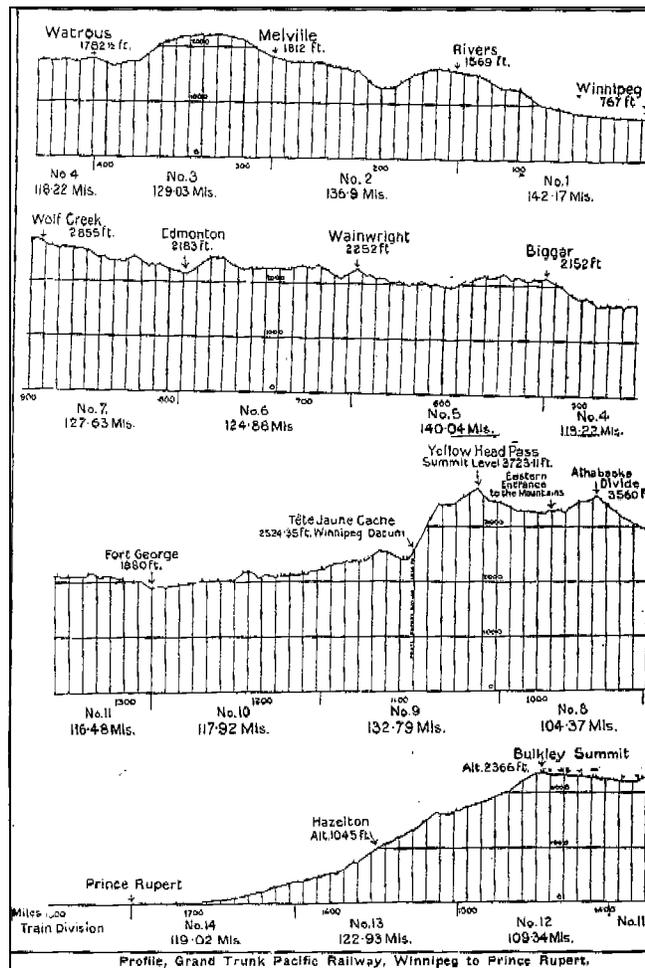


Figure 1. Western Portion of the National Transcontinental - The Grand Trunk Pacific Railway. Source: *The Railway and Marine World*, January 1912, p.31.

constructed by a newly created subsidiary of the Grand Trunk, the Grand Trunk Pacific Railway (G.T.P.) at its own cost. Incorporated October 24, 1903, a major part of the Grand Trunk Pacific's principal and interest on its bond issue was guaranteed by the government. It was envisioned that the company would operate the entire line, with the eastern portion leased from the government free for the first seven years after its completion and thereafter for three percent of the cost for forty-three years.

Construction of the Grand Trunk Pacific commenced in 1905 simultaneously from Fort William, Winnipeg, and Prince Rupert, the latter being an uninhabited part of northern British Columbia chosen by Hays and Wilson because they believed that its greater proximity to the Orient gave it an advantage over Vancouver for Pacific trade. The Grand Trunk Pacific was organized into three major operating divisions, the Eastern (Lake Superior branch), Prairie, and Mountain. The latter two divisions were further subdivided into sections. The Prairie East section extended from Winnipeg to Biggar, Saskatchewan, while the Prairie West section ran from Biggar to Wolf Creek, Alberta. The Mountain division had an Eastern Slope section from Wolf Creek to Goat River, B.C., as well as a Mountain section from Goat River to Prince Rupert.

The Winnipeg to Edmonton section of the Prairie Division was planned as the "backbone" of the Grand Trunk Pacific system. Costs of construction along the prairies were comparatively low as the geography did not present substantial engineering difficulties. Furthermore, the potential earning power of shipping grain to eastern markets was relatively high, as was the westbound transport of immigrants and the shipment of manufactured goods from Eastern Canada.

The Grand Trunk Pacific created a number of ancillary companies to support its various operations in the west, the most important including **The Grand Trunk Pacific Branch Lines Company** (RG 30 I E 2) and **The Grand Trunk Pacific Saskatchewan Company** (RG 30 I E 3), incorporated on 13 July 1906 and 15 March 1912 respectively. Both companies were supposed to provide the western branch lines so essential to the traffic of the main line, and the G.T.P. expected that the Provinces of Alberta and Saskatchewan would bonus construction of the projected feeders by guaranteeing bonds.

In addition, The Grand Trunk Pacific obtained control of **The Pacific Northern and Omineca Railway Company** (RG 30 I E 4) in 1909 in order to build a railway line

from Kitimat Inlet on the Pacific Coast to Hazelton, B.C. The G.T.P. also hoped to obtain entrance into Vancouver through a traffic agreement reached with an independent railroad, the **Pacific and Great Eastern**, after its completion.

Unlike earlier railway projects, the Grand Trunk Pacific did not receive land grants from the federal or provincial governments to help finance operations. **The Grand**

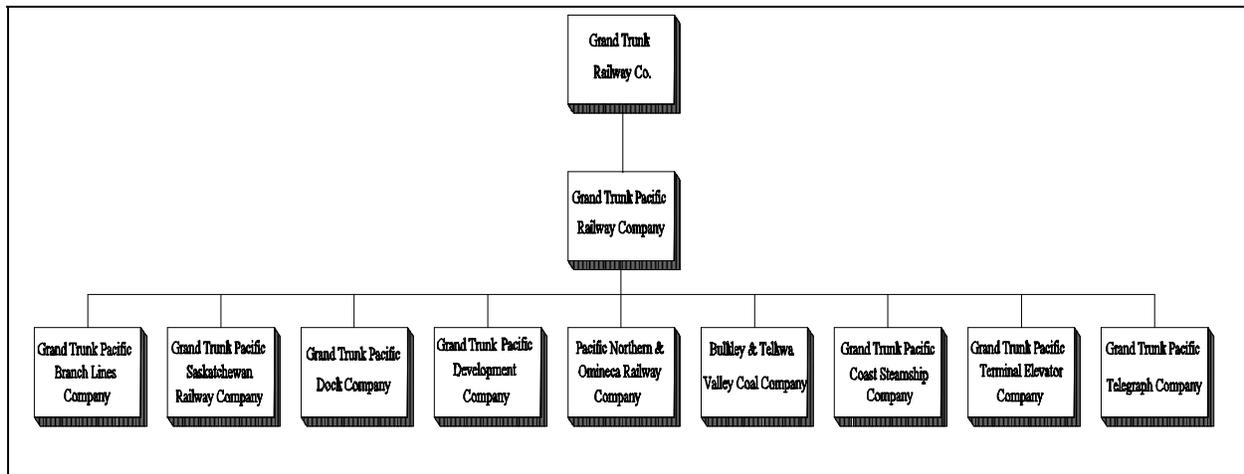


Figure 2. Relationship of Grand Trunk Railway to Grand Trunk Pacific Railway and Ancillary Companies.

Trunk Pacific Town and Development Company, later renamed **The Grand Trunk Pacific Development Company** (RG 30 I E 8) was therefore established on 3 August 1906 to buy up land along the main- and branch-lines prior to their construction, and to promote land sales in ready-made town sites it subsequently developed.

In the east the Lake Superior Branch, from the Sioux Lookout junction with the National Transcontinental to Port Arthur and Fort William, was anticipated to be among the more profitable lines, transporting eastbound grain shipments from the West and attracting traffic from the St. Lawrence route. It was hoped that together, revenues from the Winnipeg-Edmonton mainline and the Lake Superior branch - originally projected to be opened for traffic in 1907 - would begin to defray the mounting debt. Due to a shortage of labour and materials as well as delays following from the very high construction standards adopted, the Winnipeg-Edmonton line was not open until 1910, and the Fort William-Sioux Lookout-Winnipeg mileage followed a year later.

Last to be completed and the most arduous to construct was the Mountain section from Prince Rupert, the roadbed being blasted from solid rock along the banks of the turbulent Skeena river and a passage pierced through granite 2,200 feet thick along the "Hole in the Wall." The last spike to complete the G.T.P. line between Prince Rupert and Winnipeg was driven on April 7, 1914, with the first train to Prince Rupert arriving the following day. The G.T.P.'s operating expenses were much lower in the mountains than their rivals as superior engineering permitted heavier trainloads. However, the heavy cost of construction and the high standards adopted in the mountains increased the amount of interest that had to be capitalized, and the volume of traffic in the region was disappointingly low.

By embarking on a major railway construction project at the same time as their rival The Canadian Northern, The Grand Trunk Pacific experienced an acute shortage of material and labour. Coupled with inflation and the very high construction standards adopted by the Company, costs were drastically increased. Furthermore, the overcapacity of railways became apparent as branch-line construction by the CPR, Canadian Northern and G.T.P. proliferated - especially in Saskatchewan - beyond what could be sustained by local traffic. By the beginning of the First World War, The G.T.P.'s level of indebtedness had drastically increased, but it was unable to raise funds as hostilities had closed capital markets. Costs soared, but the rates charged for railway transport was fixed by the government. An important source of revenue was eliminated as immigration practically halted.

In 1915, the Company appealed to the Dominion Government for assistance. As the Canadian Northern Railway was also in difficulties, a Royal Commission was appointed by the Government in 1916 to investigate the railway situation in Canada. In 1917, the findings of the majority "Drayton-Acworth" report recommended that both railways should be acquired by the Government and integrated into one system. The Grand Trunk Pacific declared bankruptcy in 1919 and passed into Government receivership, after which it was placed under the control of the Minister of Railways and Canals.

The collapse of The Grand Trunk Pacific Railway increased the financial difficulties of the parent Grand Trunk system. Negotiations began concerning the terms for the acquisition of the Grand Trunk Railway by the Government. On 18 May 1921, a government appointed Board of Directors took office and operated the line as part of

the Canadian National System. On 31 January 1923, the operations of the Grand Trunk were amalgamated with those of the Canadian Northern, the Intercolonial and several other Government railway companies to form the Canadian National.

Cartographic Records of the Grand Trunk Pacific Railway Sub-series

There are 6996 maps, plans, blueprints and drawings in the G.T.P. sub-series that were produced and maintained by the Grand Trunk Pacific Railway or its subsidiary companies between the years 1903-1930. The majority (close to 75%) of plans and drawings concern rail-lines from Melville, Saskatchewan (the second terminal) to the Prince Rupert, British Columbia terminus on the Pacific Coast. The plains region, Great-Lakes to Winnipeg, only represents about 11% of the plans, while there are only a handful depicting regions east of the Great Lakes.

While most of the maps and plans illustrate the construction of the Grand Trunk Pacific Railway main-line, a large number deal with various branch) lines in Saskatchewan and Alberta created by The Grand Trunk Pacific Branch Lines Company, The Grand Trunk Pacific Saskatchewan Railway Company and The Pacific Northern and Omineca Railway. Of the three, the first is by far the more numerous, as it was incorporated in 1906 to construct thirty-nine branches in various locations in Saskatchewan and Alberta, 13 of which were actually built before it passed into Government receivership with the rest of The Grand Trunk Pacific system in 1919.

Far less are the maps and plans of The Grand Trunk Pacific Saskatchewan Railway Company, which was incorporated later in 1912. It was authorized to construct several branch-lines in Saskatchewan, of which only one (known as the Weyburn Branch) totaling 14.64 miles was actually constructed before it too went into Government Receivership in 1919. In addition, there are several surveys and preliminary plans for the Pacific Northern and Omineca Railway in British Columbia although no construction was actually undertaken.

There are several different types of cartographic records in The Grand Trunk Pacific sub-series. About 85% are various maps and plans that constitute valuable evidence of the construction of the third Canadian transcontinental railway at the beginning of the twentieth century. Several are reconnaissances or preliminary surveys of the general route - particularly in the Mountain Division of British Columbia - highlighting the geographical features of the area. As much of the region from Prince Rupert to the Rockies was almost unexplored territory, these G.T.P. surveys often constitute the first map of the area.

Branch	Index Section #	Built	Company
Brandon Br. (to Regina)	65	no	GTPSR
Harte - Brandon Br.	65	no	GTPBL
Qu'Appelle River Br.	66	no	GTPSR
Wattsvie - Boundary Br.	70A	no	GTPSR
Regina Southwest Br.	70B	no	GTPSR
Melville - Watrous Br.	70M	no	GTPSR
Saskatoon - Battleford Br.	71S	no	GTPSR
Melville - Yorkton Br.	73	yes	GTPBL
Yorkton Extension Br.	73	yes	GTPBL
Yorkton - Canora Br.	73	yes	GTPBL
Hudson's Bay Br.	73	no	GTPBL
Melville - Regina Br.	74	yes	GTPBL
Weyburn Br.	75B	yes	GTPSR
Weyburn - Talmage Br.	75B	yes	GTPSR
Regina - Boundary Br.	75	yes	GTPBL
Prince Albert Br.	76	yes	GTPBL
Young - Pr. Albert Br.	76	yes	GTPBL
Regina - Moose Jaw Br.	77	yes	GTPBL
Moose Jaw - Elbow Br.	78	yes	GTPBL
Moose Jaw - North West Br.	78	yes	GTPBL
Tofield - Calgary Br.	83	yes	GTPBL
Biggar - Calgary Br. S.E.	84	no	GTPSR
Biggar - Calgary Br.	84	no	GTPBL
Calgary - Lethbridge Br.	86	no	GTPBL
Calgary - Coutts Br.	86	no	GTPBL
Lethbridge - Aldersyde Br.	86	no	GTPBL
Battleford Br.	87	yes	GTPBL
Oban - Battleford Br.	87	yes	GTPBL
Cut Knife Br.	88	yes	GTPBL
Alberta Coal Br.	90	yes	GTPBL
Mountain Park Coal Br.	90	yes	GTPBL

Table 1. Branch Lines of Grand Trunk Pacific - Affiliated Companies
 GTPBL = Grand Trunk Pacific Branch Lines Company
 GTPSR = Grand Trunk Pacific Saskatchewan Railway Company

There are also much more detailed surveys of projected lines, showing the profile or contour of topographical features with distances clearly indicated in chainage. Other kinds of maps or plans are construction records that depict the right-of-way and the area of the rail-line, the degree of track curvature and profile of the grade and level of the supporting road bed, or the laying of steel and ballast, the quantity of which is sometimes indicated. Maps and plans of constructed lines usually indicate some of the following: right of way obtained by the railway, geographical features, mileage points, names of Indian reserves or town sites traversed, station houses, yards and switches, or highway and railway crossings and deviations. The other 15% of the G.T.P. cartographic collection are technical drawings relating to railway operations, such as the gauge, weight, and characteristics of its track compared to the Canadian Northern or the Canadian Pacific; technical drawings of various railway structures such as bridge plans, buildings, loading docks, station houses, cattle gratings, water towers, etc.

It should be noted that there are some maps, plans, and blueprints in the G.T.P. collection that were not necessarily created by it or its subsidiaries, but were acquired for their use and maintained in their system, especially land survey maps and townsite plans acquired from various land title offices, as well as some maps of the Canadian Northern Railway and Canadian Pacific Railway.

The 6961 maps, plans, blueprints and drawings in the collection represent about 50% of those registered in the original "G.T.P. Plan Filing Ledger." Although it is not entirely clear what happened to the rest, there are annotations found in the ledger and on index cards that suggest that they were either destroyed or transferred to other sections. This is particularly true of standard plans relating to bridges & steel works and timber structures & buildings. Notes on index cards state, "all plans to Bridge Department, Oct.9, 1920." This would explain the small proportion of bridge plans and drawings.

In many instances, the authorship of the maps can be discerned from signatures written on them by Grand Trunk Pacific engineers, and often their position within the Department is also indicated. Records created by individuals occupying positions at the lower levels within the Engineering Department are more likely to be concerned with

railway construction at its earlier stages (preliminary routes, projected lines, etc.), while those signed by individuals at higher levels are more likely to be dealing with lines as constructed (approved plans). Thus, an understanding of the organizational structure of the G.T.P. Engineering Department is often useful in establishing the stage in the construction process which an individual map or plan represents.

The chart in figure 3 depicts the organizational structure of the Grand Trunk Pacific Railway's engineering department circa 1910-1916 and was prepared from various sources of information. These included statistics presented in a report prepared January 1, 1916 for the President of the Grand Trunk Railway System,¹ from various secondary sources, and from the cartographic records themselves.

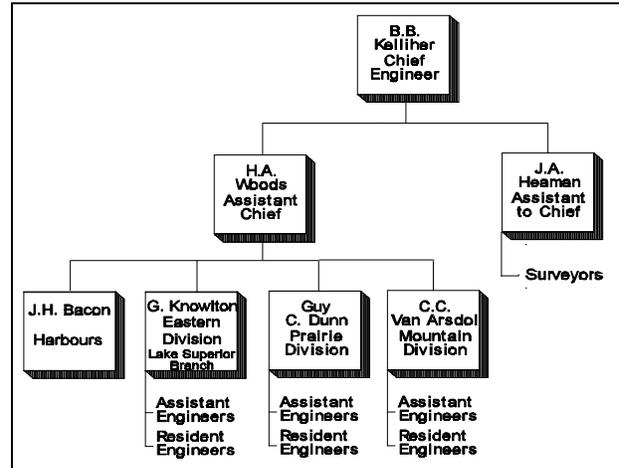


Figure 3. Engineering Department, Grand Trunk Pacific Railway, circa 1910-1916.

For example, the *Statistics* indicate that the Chief Engineer administered his office from the Montreal offices of The Grand Trunk, the parent company of The Grand Trunk Pacific. There B.B. Kelliher, later succeeded by H.B. Safford, received the most important maps and plans requiring the highest authorized **approval**, such as those in the “100” range (“approved maps and plans”).

According to the *Statistics*, the highest ranking engineer directly associated with The Grand Trunk Pacific was the assistant chief based in Winnipeg, H.A. Woods. Beneath him were two divisional chiefs, one for the prairie and mountain sections respectively. Maps and plans frequently bear the signature of Guy C. Dunn, “Division Engineer, Prairie Division, Winnipeg,” but curiously those of the Mountain Division refer only to an “Office of Division Engineer” most often based in Edmonton. While lacking an

¹Office of the President. *Statistics, Grand Trunk Railway System. Grand Trunk Pacific Railway, Constituent and Affiliated Companies.*(comp. June 30th, 1897; rev. Jan. 1st, 1916).

individual's signature, they most certainly were created under the auspices of C.C. Van Arsdol, Divisional Engineer, Mountain Division from 1903-1914.²

The Grand Trunk Pacific Railway was built - like the Canadian Pacific Railway - in segments. Construction was organized into units called residencies under the supervision of on-site engineers. There were more than 50 such residencies on the main-line from the Lake Superior branch to Wolf Creek, Alberta, and another 40 or so from Prince Rupert to Wolf Creek, not to mention those on the various branch-lines in Saskatchewan and Alberta. Both divisional engineers had a number of assistant engineers who superintended and worked with the on-site engineers during construction, and this association is often indicated on the cartographic records.

We also know that J.H. Bacon was The G.T.P.'s Engineer of Harbours, as he is so indicated on several maps of Fort William, Ontario and Prince Rupert, B.C., and as J.A. Heaman was a surveyor, it is more than likely that his position as "Assistant to the Chief Engineer" was to lend his expertise to the various railway land surveys undertaken by such men as A.W. Barrow in British Columbia and E.C. Brown in Saskatchewan and Alberta.

G.T.P. Plan Classification Record keeping System

The original finding aids for the maps, blueprints, plans, and drawings of the Company were also transferred to the National Archives of Canada along with the cartographic records. They consist of a "G.T.P. Plan Filing Ledger" that registered every cartographic record created and/or maintained by the Company, and index filing cards with subject and geographical categories that demonstrate the process whereby the maps, blueprints, plans, and drawings were classified, stored and retrieved.

²McKay, Donald. *The Asian Dream. The Pacific Rim and Canada's National Railway.* (Vancouver: Douglas & McIntyre Ltd., 1986), p.78.

The "G.T.P. Filing Ledger" records the title, subject, date, scale, etc. of each new map, plan or design as soon as it was created or received by the company, utilizing a double number notation. Maps were assigned a number in sequential order according to the date they were incorporated into the system, and this is referred to in the ledger as the "consecutive number," of which slightly more than 10,000 were recorded. As this number represents drawing numbers and not the actual number of items, the potential total of drawings might be more than this amount.

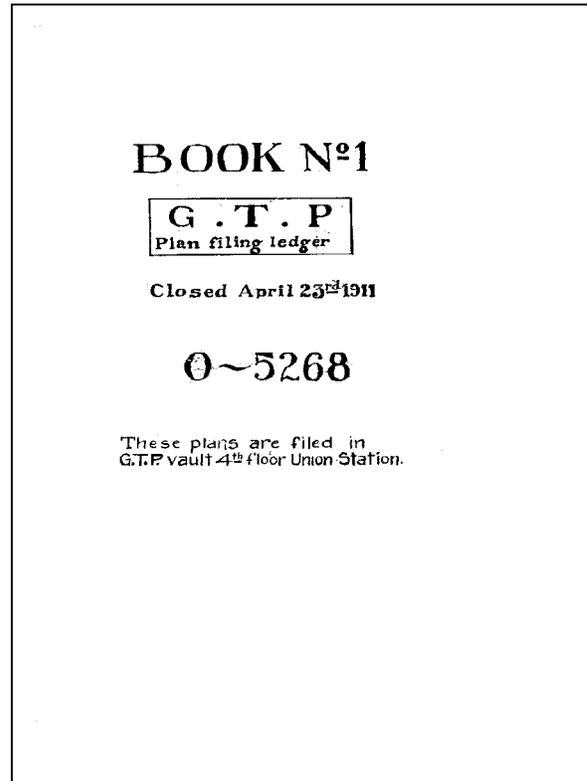


Figure 4. Front cover of GTP Plan Filing Ledger.

Another number associated with the map or plan is in fact a numerical classification system. Thus, each of the sequential numbers is grouped under an "index number" which facilitates the retrieval of the record. An index card aggregates all the sequential numbers by their index number.

The classification system used by the G.T.P. combines a thematic category and a geographic category. Consequently, the index number is divided into two parts: a thematic or subject component and a geographical component. The first part, numbered from one to 10, identifies the categories of plans and drawings according to their thematic or subject content (standards, routes, buildings, etc.). This subject component is often problematical for two reasons: some drawings did not have this number recorded directly on them and the tag which recorded this information was misplaced (these maps are entered in the database with a "0" classification number); the

obtain the plans and drawings of the level crossings around Portage La Prairie, for example, one consults the index number 263; 2, for the level crossings, and 63, for the region of Portage La Prairie.

Most G.T.P. cartographic records have the individual sequential number and the index classification number inscribed thereon, but in some cases, maps were lacking the latter number. The index number for these maps were easily reassigned by looking up the sequential number in the "G.T.P. Filing Ledger," which records this number as well. In a smaller number of cartographic records, both numbers are absent. To keep track of all documents, a control number was assigned by the Archives and placed on the record.

Maps and plans were produced by the railways in various stages related to the process of construction, and it is helpful to understand the "evolution" of these cartographic records in order to determine what exactly a particular cartographic record documents. To illustrate the process whereby several types of cartographic records were produced, used, and categorized for filing during the various stages of construction, the building of the Yellowhead Pass section in the Mountain Division may be taken as an example.

Initially, surveyors like R.W. Jones carried out preliminary surveys in the Rockies and discovered no less than forty possible passes which were investigated and charted, with major topographical features indicated. These preliminary surveys - classified in the "990-991" range - were received by the Divisional Engineer in Edmonton, C.C. Van Arsdol. Adept at finding superior railway grades, Van Arsdol was able to reduce the number of routes for consideration from six to three: the Peace River and Pine River passes, some 250 miles northwest of Edmonton, and the Yellowhead Pass, southwest of Edmonton. A series of maps of preliminary lines and projected locations were produced by the Divisional Engineer's office, classified in the "881-891" range.

The advantages and disadvantages pertaining to each of these lines were put before the consideration of B.B. Kelliher, the Engineer-in-Chief, who decided to use the Yellowhead Pass which crosses the Rockies at a far lower altitude than that achieved

by the Canadian Pacific Railway at either Kicking Horse Pass and Crows Nest Pass. As the line was approved, authorized copies of the map were classified as "190-191." As sections of the rail line were actually completed, "maps of constructed lines" were made indicating rights-of-way, station grounds, mileage points, degrees of curve, etc.

Notwithstanding, a large number of surveys continued to be made of the Pine and Peace River Passes at the same time that engineers were working out the actual route along the Yellowhead. Apparently these surveys were made to obscure The Grand Trunk Pacific's selection of the Yellowhead route from its rivals, the Canadian Northern Railway, which was also interested in the area at that time.

Eventually, the two rival lines both followed the same defile, and for some distance were laid with clearances as for a double line, although with no physical track connection. However, plans of track details "290" from the year 1917 show the two lines consolidated. During WW I, portions of each track were removed and shipped to France, the two routes consolidated by construction of short lines connecting the remaining sections, and stations in some cases moved bodily from the abandoned right of way to the existing track.

The intense rivalry between the competing railway companies is nowhere better illustrated than in Saskatchewan, where G.T.P. cartographic records with index section numbers 70-78 show the various branch-lines operated by the G.T.P. intersecting and crisscrossing C.N.R. and C.P.R. tracks at regular intervals. This is not to say that the railway companies did not cooperate with each other, at least as far as their self-interest dictated. The G.T.P. and the C.N.R. shared terminal facilities in both Winnipeg and Edmonton (see drawing number 6686-882), and plans with index numbers with the thematic prefix "200" (track details) show various devices like offset angle bars to accommodate freight from other lines.

G.T.P. Database

A database entitled "GTP" was created on dBASE IV software containing a preliminary description of 6996 documents of the Grand Trunk Pacific Railway sub-series. The principal descriptive elements include the sequential number (drawing number), the index number (which is further broken down into classification and section number for more flexible searches), creator (mostly Grand Trunk Pacific), title, date, location and dimensions. There are additional text fields such as physical description which indicates whether the record is a map, plan, blueprint, etc.; physical condition is noted where the record may require special handling or future conservation work; creator's notes on the author of the record if this is indicated thereon; and finally a series of fields that specially note references on G.T.P. cartographic records to the

	Thematic Number	Standard/Geographical Number	
Approved Plans right of ways, profiles, highway crossings, etc.	← 1	1-19	→ Standards
Track Details yards, spurs, crossings, sidings, etc.	← 2	20-29	→ Halifax to Quebec
Masonry & Bridges piers, dams, subways & tunnels	← 3	30-39	→ Quebec to Ontario to Border
Steelwork & Bridge Superstructures steel buildings, draw span machinery, crossings, etc.	← 4	40-49	→ Ontario to Lake Superior Junction
Timber Structures bridging, docks & wharves, elevators, snow sheds, etc.	← 5	50-54	→ Fort William & Lake Superior Junction to Winnipeg
Buildings stations, freight sheds, hotels, immigration sheds, pumping stations,	← 6	60-66	→ Winnipeg to 2nd terminal - St. Boniface, Portage La Prairie, Brandon via Brandon & Qu'Appel Valley Branch
Tools & Miscel. Structures engine houses, shops, interlocking plants, signalling layouts, heating, etc.	← 7	70-78	→ 2nd to 4th Terminal - Regina, Yorkton, Regina-Boundary, Prince Albert
Maps Plans & Land Surveys town plans, marine charts, land acquired, etc.	← 8	80-88	→ 4th to 5th Terminal - Edmonton, Biggar- Calgary, Calgary- Coutts, Battleford, Cutknife
Tables, Notes & Surveys contours	← 9	90-94 98-99	→ Edmonton to Pacific Coast - Prince Rupert, FN&O, Vancouver, Foreign Lines

Figure 6. Guide to Index Numbering Plan Filing System

Native peoples of Western Canada and the Pacific coast. These fields provide access points to locate records of interest to researchers, but they are reminded of the limitations of using the classification number (based on subject or thematic category) for this purpose.

To make global searches faster, the database has a pop-up screen that retrieves records by drawing number, location, classification number, index number, section number, and control number. Searches may be viewed as individual records (in the EDIT mode) or in aggregate (in the BROWSE mode). In addition, queries involving conditions specified for a variety of fields may be made and a variety of reports created using the database's CONTROL CENTER panel.

Identification of Records Pertaining to Research Interests

The section on the Plan Filing and Record keeping system explained that the cartographic records of the G.T.P. were assigned an individual plan number, and were filed according to an index classification system utilizing a double notation number. The first digit of the index number was based on a numerical subject classification, and the second component of the index number, consisting of two digits, referred to either standard plans (0-19) or geographical area (20-99). Accordingly, the two major access points for identifying records pertaining to particular research interests are subject area and/or standard plan/geographical area. As discussed above, there are limitations to the reliability of the subject classification to identify records of interest to researchers. The geographical component of the index number requires visual aids such as figure 7, a schematic map reproduced here from the index system utilized by the engineering department of the Grand Trunk Pacific Railway.

Figure 7 indicates the G.T.P.'s main- and branch-lines. It provides the index number associated with the geographical location of most G.T.P. rail lines at a glance, and this number can be utilized to query the database. The researcher should be cautioned, however, that there are many preliminary maps and plans for branch-lines that were never constructed (particularly in Saskatchewan), indicated in table 1.

The researcher may also notice that the titles of many maps refer to a great number of geographical terms, such as division (Mountain, for example), train division number, railway section number, among others. These were employed by The G.T.P. to specify various units of railway operations or construction, and it is rare that a map combines all these elements as they represent different foci for the areas

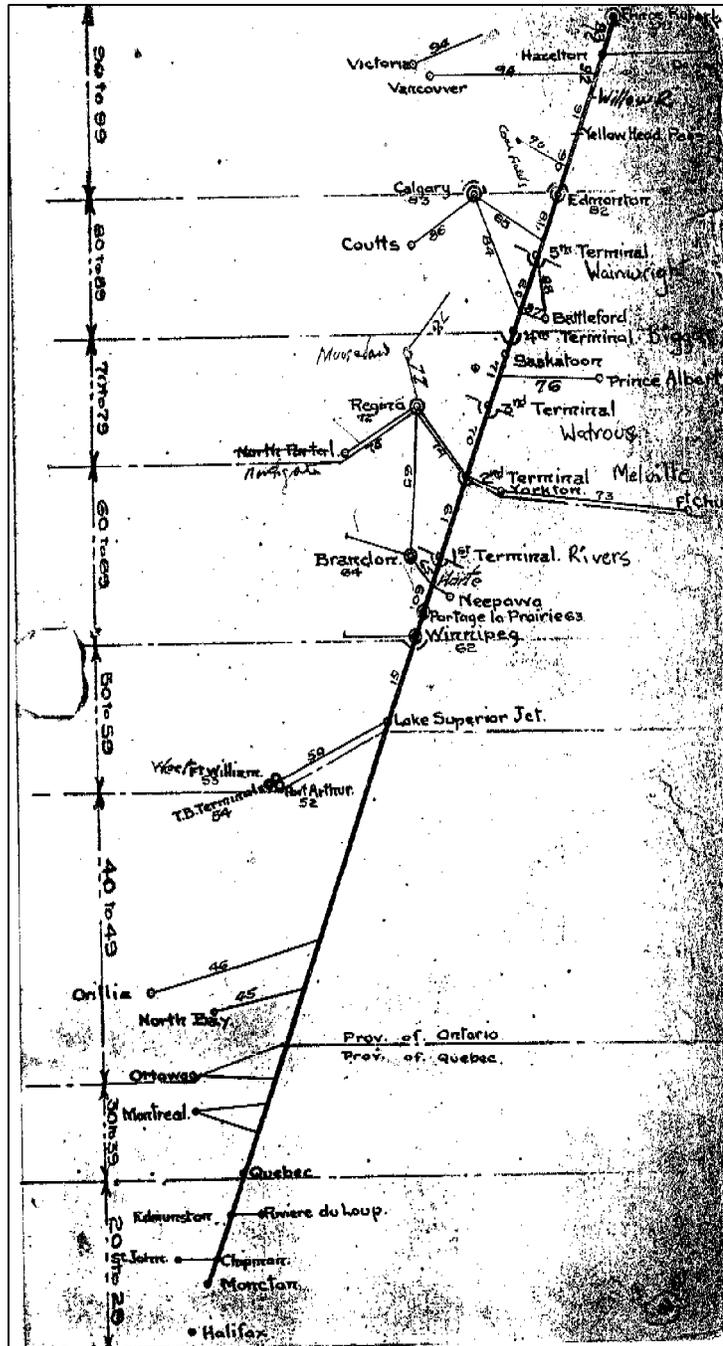


Figure 7. Schematic Map of G.T.P. Railway System Indicating Geographical Section of Index Numbers

concerned. However, a collation of these geographical terms is useful to an understanding of the scope of the Company's operations, and this was made possible by referencing the G.T.P. database.

Table 2 cross-references the various terms employed by the Grand Trunk Pacific Railway to establish the proper geographical foci of the maps and plans created and subsequently filed for reference and use.

Major Division	Index No.	Train Division No.	Railway Section No.	Divisional Points
East (Lake Superior Branch)	50-51	-----	9	Ft. Wm. & Lake Superior Jctn. to Winnipeg.
Prairie (East)	60	1	10	Winnipeg to 1st Terminal (Rivers)
Prairie (East)	61	2	11	1st Terminal (Rivers) to 2nd Terminal (Melville)
Prairie (East)	70	3	12	2nd Terminal (Melville) to 3rd Terminal (Watrous)
Prairie (East)	71	4	13	3rd Terminal (Watrous) to 4th Terminal (Biggar)
Prairie (West)	80	5	14	4th Terminal (Biggar) to 5th Terminal (Wainwright)
Prairie (West)	81	6	15	5th Terminal (Wainwright) to Edmonton
Prairie (West)	90	7	16	Edmonton to Wolf Creek (Edson)
Eastern Slope	90	8	17	Wolf Creek (Edson) to Yellowhead Pass (Fitzhugh/Jasper)
Eastern Slope	91	9	18	Yellowhead Pass Westerly (Fitzhugh/Jasper) to Goat River (McBride)
Mountain	91	10	19	Goat River (McBride) to Willow River (Pr. George)
Mountain	92	11	20	Willow River (Pr. George) to Bulkley Summit Westerly (Endako)
Mountain	92	12	21	Bulkley Summit Westerly (Endako) to Hazelton Easterly (Smithers)
Mountain	93	13	22	Hazelton Easterly (Smithers) to Prince Rupert Easterly (Pacific)
Mountain	99	14	22	Prince Rupert and Vicinity

Table 2. Geographical Location of G.T.P. Main Line Divisions

Research on Subjects Relating to Native Peoples in Western Canada & B.C.

As mentioned previously in the introduction, researchers interested in G.T.P. cartographic records relating to Native peoples are encouraged to consult the finding aid prepared by Brian Hubner for the Visual and Sound Archives Division of the National Archives of Canada in October 1995.

Access

The Grand Trunk Pacific Railway cartographic records are presently stored at the Manitoba Region Federal Records Centre in Winnipeg. An on-site archivist is available at the MRFRC to facilitate research, respond to research requests and to retrieve the records. While there are no restrictions to the consultation and to the reproduction of these records, the lack of on-site reproduction facilities for the larger items in this accession require prior consultation with the on-site archivist to make special arrangements for their reproduction to ensure that NAC's conservation and preservation requirements are met.

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