TACOMA EASTERN RAILROAD
VALUATION SECTIONS WASHINGTON 1 to 1e INCLUSIVE.

The main line of the Tacoma Eastern Railroad extends about 68 miles in a general southerly direction from Tacoma to Morton, Wash., and with its several branches serves the rich timber and mining territory in the vicinity of Mount Rainier. The main line, for Valuation purposes, is called Valuation Section Washington 1, and the branches Valuation Sections 1a, 1b, 1c, 1d, and 1e, respectively.

The two important branches are Valuation Sections 1a and 1d. The former is the line about 16-6/10 miles in length between Salsich Junction and McKenna, and the latter is the branch between Park Junction and Ashford, a distance of about six miles, and forms an entrance by rail to Ranier National Park. The other branches, 1b, 1c, and 1e are spur tracks two or three miles in length leaving the main line at Tanwax Junction, Kapowsin and East Creek Junction, respectively, and were built to serve logging and mining industries.

The North Coast Timber Company owned a large amount of valuable timbered land in the vicinity of and south of Tacoma, and in about 1885 or 1890 they built a logging road south from Tacoma to transport this timber to market. Logging operations were carried on vigorously, and as fast as the land was cleared of timber the railroad was extended farther, reaching the present station of Eatonville in July, 1903. Previous to this time the business of the line had consisted of the transportation of logs for the North Coast Timber Company. Other companies had in the meantime established mills and camps in the vicinity of the line, and a common carrier business was now undertaken.

The line was extended to Ashford in July, 1904 and regular passenger trains, carrying mail and express, were put in service to care for the tourist travel to Mount Rainier and the transportation of men to and from the logging camps. Some wagon road development was done and a comfortable hotel built in Ranier National Park by the Railway Company to promote travel thereto. The hotel was later disposed of and is now operated by private parties.

The line was extended south from Park Junction reaching the terminus at Glenavon in July, 1907. In the summer of 1907 the McKenna Branch was decided upon and construction was started immediately, track reaching McKenna in March, 1908.

The grading work for the Tacoma Eastern Company was done under the supervision of an Engineering Department, and exploration trips were made in advance of the line, more especially, however, to investigate the traffic possibilities in the way of timber than

line betterment. The territory traversed was rugged and undeveloped and the grading work was, as a rule, done by hand. The line was built primarily as a logging road, and, consequently, steep gradients and a large amount of sharp curvature was used. Numerous spurs were built from the main line to facilitate the logging operations. The more important ones, as previously described, have been left on the ground and are in use at present.

The Chicago Milwaukee and St. Paul Company acquired a controlling interest in the line in 1908, and soon after, it was decided to extend the line on south to Morton. Surveys developed the fact that it would be more advantageous to depart from the old line, toward Morton, at Cowlitz Junction, a point about three and one-half miles north of Glenavon. The track between this point and Glenavon has since been taken up with the exception of about 900 feet of track, which is maintained for set out purposes.

Prior to the transfer of ownership, the records, maps and profiles were all destroyed by fire. Consequently an entire resurvey was made in 1910.

The extension from Cowlitz Junction to Morton was surveyed and built under the supervision of the Chicago Milwaukee and St. Paul Chief Engineer's office in Seattle, one Resident Engineer having charge of the field work during construction.

Starting south from Tacoma an ascent is made on a three percent gradient for about three miles to a table land approximately 400 feet above sea level; thence south over this plateau with rolling gradients and light work for eight and one-half miles, when another ascending three percent gradient is used to attain a plateau near Salsich Junction. The grading on this section is mediumly heavy.

South from Salsich Junction to Harding, Mile 15, the gradients and work are light. Between Harding and Thrift an ascent of over 200 feet is made in two miles. A short distance south of Thrift the gradient becomes descending and continues until Lake Kapowsin is reached in Mile 24. Grading work to this point is generally light with an occasional heavy cut or fill.

Leaving Kapowsin station the west bank of the lake is followed with medium grading for about two miles to Lakehead, where the Ohop Valley is entered, and from there followed with gradual descending gradients and light construction work to Mile 29, where an ascent is commenced on steep gradients and with heavy construction work, and continues to Mile 32, a rise of about 250 feet being made in three miles. Through Miles 32, 33 and 34 the gradients are rolling and light, the grading is medium heavy, and two important bridges are used to cross Lynch Creek and the Mashell River. In Mile 34 an ascent is begun and from there continued on varying gradients to LaGrande station in Mile 37, where the Canyon of the Nisqually River is reached. The river bank is followed on rolling gradients and medium heavy work to Mile 41 where the headworks for the Tacoma Light & Power Plant is reached. Here Alder Creek empties into the Nisqually and the Railroad turns into Alder Creek Canyon which it follows with steep ascending gradients to a summit in Mile 43. Leaving the summit descent on steep gradients is made to Mile 46, thence an ascent on about a one percent gradient through Elbe to the Nisqually River crossing in Mile 50.

From Mile 50 Mineral Creek and Round Top Creek are followed on rolling and occasional steep gradients to a divide in Mile 58 where the Tilton River drainage is reached. From here the gradient is descending to Morton with a maximum of 2-3/10 percent. The line extends about three miles south from Morton on rolling gradients generally ascending.

As would be indicated from the description, the line lies entirely in a rugged mountainous region and a large amount of sharp curvature was necessarily used.

Clearing and grubbing were required over the entire line, some quite heavy. The grading was variant, some miles running as heavy as 35,000 cubic yards and some very light, the average being about 17,000, of which a large percentage was classified material. As previously stated, the construction was largely done by hand due to the inaccessibility of the country traversed. Since the line has been under the control of the Chicago, Milwaukee and St. Paul Railway a large amount of construction work has been done in the way of betterments, line changes, reducing curvature and gradients, bridge filling, etc.

The line from Salsich Junction to McKenna, Valuation Section Washington 1a, passes partly through timbered and partly through cultivated land. The gradients are rolling with three sharp ascents westbound although the general tendency is descending to the west as the terminus is about 80 feet lower in elevation than the point of beginning. The roadbed construction was light, averaging about 9,000 cubic yards per mile, a large part of which was classified.

The line from Park Junction to Ashford, Valuation Section Washington 1d, was built on steep gradients, a rise of about 440 feet being made in the 6-6/10 miles. The construction work was light, averaging about 3,000 cubic yards per mile.

A rather complicated situation arose in Tacoma where the connection with the Chicago, Milwaukee and St. Paul Railway Company's track was made, necessitating several long pile trestles and changes to the existing city street bridges crossing the canyon.

After leaving Tacoma the bridge work on the first 30 miles is light, only one short pile bridge being used until Lynch Creek crossing in Mile 32 is reached where a 68 foot timber deck Howe truss is used with a high timber trestle approach. In Mile 34 a 66 foot timber deck Howe truss with pile trestle approach is used to cross Mashell River. Bridges of some considerable size are more frequent from Mile 34 to Mile 46 through the Nisqually River and Alder Creek Canyons.

In Mile 51 a crossing of the Nisqually River requires a 120 foot through timber Howe truss with a long pile trestle approach. From Mile 51 to Morton several pile bridges occur, a few of which are more than the average in size; especially between Cowlitz Junction and Morton.

The bridge timber was obtained from local mills and the piling from adjacent standing timber.

Culverts were built of hewn logs obtained on the right of way.

Track laying followed grading closely, being extended as fast as possible. Starting from Tacoma, Kirby was reached in December 1901, Holz in April 1902, Eatonville in July 1903, Elbe in July 1904, Park Junction in October 1904, Mineral in December 1905, Watkins in March 1906, Glenavon in February 1908, Morton in September 1910. The branch from Park Junction to Ashford was laid in December 1904, from Salsich Junction to McKenna in April 1908, and the line from East Creek Junction to Ladd in May 1906. The original track was laid with 60 pound new steel, of which about fifteen miles of the material came from the Krupp Works, Germany, being shipped to Tacoma by boat. The remainder was Illinois Steel Company's stock shipped by rail from the East. The light rail has been replaced with 75 pound and 85 pound material between Tacoma and Salsich Junction, and in Miles 34 to 44. Ties were of native fir.

The line was ballasted from pits located along the line, soon after track was laid, the more important pits being in Miles 2, 13, 22, 31, 54 and 62. The McKenna Branch was ballasted from a pit at Salsich Junction.

Right of way fence with the necessary crossing facilities has been built where required.

Two-story frame 24 by 52 foot combination freight and passenger depots were built at Morton, Watkins, Mineral, Elbe, Alder and Eatonville. A depot 24 by 76 feet with living rooms upstairs was built at Kapowsin, and a 24 by 60 foot depot at Bismarck. Smaller depots were built at Park Junction and Salsich Junction. Engine terminals consisting of a five stall round house, a machine shop, paint shop, coal storage, etc. were built at Bismarck, and section facilities at places convenient to the work.

A 24 by 54 foot one-story frame depot was built at McKenna, Valuation Section Washington 1a. A 24 by 52 foot two-story frame depot was built at Ashford, Valuation Section Washington 1d.

Permanent water stations were established on the main line at Salsich Junction, Kapowsin, Eatonville, Williamson, Elbe, Mineral and at 19-Mile Creek, about ten miles south of Mineral. Fuel oil supply stations are being built at Kapowsin and Mineral.

Telephones were installed in booths at blind sidings and in the depots.

Standard main line equipment is used as the traffic is quite heavy.

Until December 31st, 1918, the Tacoma Eastern Railroad was operated as a separate organization with the C. M. & St. P. Ry. Co. owning all of the outstanding stock. On that date the railway, property and franchises of the Tacoma Eastern Railroad Co. were conveyed to the Chicago, Milwaukee & St. Paul Co. and it is now operated as a part of the Coast Division.