



**SEWARD HIGHWAY RIGHT OF WAY STUDY
MP 90-97
PROJECT No. 59765**

BOUNDARY RESOLUTION

OLD ROAD

A set of asbuilt drawings was compiled by the Bureau of Public Roads (BPR) in 1951 titled Seward-Anchorage Highway, Turnagain Arm, Sec. F-2. This section of road is from Girdwood to Indian. A Plan and Profile set of Proposed Highway drawings was created by the Alaska Road Commission and dated June 22, 1951. This project appeared to be the paving project and other than the beginning stationing and the first tangent bearing, nothing matched the asbuilt set of plans. There was a follow up set of Right of Way Maps produced by the State of Alaska Department of Highways (DOH) which is undated. The DOH map was called Route No. F-031 and was broken up into sections. Control section 003108 was from Portage to Girdwood and section 0031090 was from Girdwood to Indian. The centerline data was identical with the 1951 BPR plan set. This centerline was held to compute the original centerline of the highway. Most of the curves had spiral transitions. The alignment was computed from P.I. to P.I. and the curves were completed between the tangents. The alignment was placed on the monumented centerline of the long tangent west of Girdwood with the stationing beginning at the intersection with the Alyeska Highway from DOT Project No. S-0501(1) GIRDWOOD-ALYESKA dated March 10, 1964.

On April 7, 1966 two sets of Seward Highway Right of Way plans were approved by the Department of Highways. ERFO-20(1) ended just west of the Girdwood townsite. ERAO-27(1) continued west from ERFO-2(1). These projects match on the long tangent west of Girdwood. It is believed that this tangent has remained the same throughout these projects. ERAO-2(1) runs from the township line along the long tangent to the west approximately 1.4 miles. This portion of the alignment was computed and placed on the monumented centerline of the long tangent. The project starts again just west of Bird Point and runs approximately two miles west. This portion of the alignment was computed and placed holding found monumentation remaining from project ERAO-2(1).

In 1992 the centerline of the existing road was asbuilt between the sections laid out in Project ERAO-27(1) by the State of Alaska Department of Transportation (AK DOT&PF) survey section. This is mainly the portion on the side of the hill. A best fit centerline was created from the asbuilt information. In 1993 a right of way supermap was created in preparation for the new Girdwood to Bird Point reroute. The asbuilt centerline was shown in the supermap drawing. A copy of the alignment was obtained from AK DOT&PF. This alignment was inserted into the same drawing with the previously created alignments and the existing survey control monuments.

The existing road centerline matched the 1966 alignment within a foot everywhere. The original 1951 alignment held the same configuration as the existing road for the most part. It went from matching the existing centerline to as much as 10 feet different. It crossed the existing centerline at two points so an even shift in the alignments is not possible. The 1951 alignment crossed to the uphill side where the road went up the hill and crossed back over when it came down.

The 1992 asbuilt centerline of the road was held for the Right of Way placement of the old road. The centerline was offset 150 feet either side for the right of way line.

**NEW ROAD**

The Seward Highway centerline is based on record data from AK DOT&PF Project No. IM-0A3-1(47)/52991 Survey Control Sheet. The centerline was created from tied monuments in the centerline of the highway. The monuments were held to fix the tangents and the record radius was held to create the curves. The centerline was offset 150 feet either side for the right of way line.

RAILROAD

U.S. Survey 9011 and portions of 9010 and 9012 were used to compute the existing Right of Way of the Alaska Railroad. The Right of Way lines were computed using record dimensions between found monuments and then grant adjusted. The curves were set by holding the tangents and the record radius. The length of tangent and curve were then checked. In areas where the record curve data did not work and could not be recomputed, non-tangential curves were created holding the record radius from computed PC's or PT's. Because of lack of control on the water side of the tracks, the Right of Way line was offset 200 feet from the computed side.

The meanders were computed using the grant adjustment method stated above. The seaward lots were created holding the lot configuration and grant adjusting the position along the meanders. The record data (including area) was checked after the lot was computed.

According to the Memorandum of Agreement (MOA), the railroad is entitled to a 200 foot corridor. The railroad centerline was located in 2005. The asbuilt centerline was offset 100 feet wherever it exceeded the existing Railroad Right of Way to create the MOA Railroad Right of Way. The tangents were computed to best fit the asbuilts and simple curves were created with a best fit radius. The AK DOT&PF had designed a new railroad curve with Project No. IM-0A3-1(18)/51698. This is the railroad curve adjacent to road station 1121+00. The asbuilt tangents were held and the length of curve from the design was held to create the new curve.

PROTRACTED TOWNSHIP

The record NAD 1927 protracted drawing of T10N R1E was rotated and scaled between the found monument for the WCMC of sections 25 and 30 on the west boundary of the township and the Protracted Northeast corner of the township translated to BOWL 2000 coordinates.

MATERIAL SITES

The north, west and east boundaries of MS 31-2-022-1(ADL 22793) were computed from the aliquot part description provided in the permit. The surveyed range line (R1E/R1W) was held and the northwest corner of section 30 set proportionately. The southwest corner of section 30 was set record distance from the computed northwest corner. The protracted corners of section 30 were held on the east side. The north Right of Way line of the old road was held as the south boundary.

The north, west and east boundaries of MS 31-2-023-1(ADL 23920) were computed from the aliquot part description provided in the permit. The protracted corners of section 23 were used to break the section down. The north Right of Way line of the old road was held as the south boundary.

The north, west and east boundaries of MS 31-2-008-1(ADL 25342) were computed from record ties to VABM Hemlock 2 that were provided in the permit. The north Right of Way line of the old road was held as the south boundary.