

SEWARD HIGHWAY
GIRDWOOD to BIRD POINT MP 90-97

Right of Way Base Mapping

Contract signed: May 8, 2013

NTP signed: May 9, 2013

Gene LeQuire started work: June 6, 2013

Additional ROW corners supplied by AKDOT: June 17, 2013

Charlie Parr supplied Land status Chronology: June 18, 2013

Additional ROW corners supplied by AKDOT: July 8, 2013

Alaska Railroad As built Centerline received August 9, 2013

Aerial Mapping received August 14, 2013

R&M Utility drawing received August 16, 2013

Additional Cadastral corners supplied by AKDOT: August 22, 2013

Mining Site corners supplied by AKDOT: September 20, 2013

OLD ROAD

U.S DEPARTMENT OF COMMERCE, BUREAU OF PUBLIC ROADS DIV. NO. 110
SEWARD-ANCHORAGE HIGHWAY, TURNAGAIN ARM Sec. F-2

Portion from Girdwood to Indian

Sta. 1304+40 to Sta. 2013+05.74 PLAN-PROFILE

Constructed 1949-1951, Traced March 1951 A. Tabor

Computed the centerline holding the station at Main Street. Treated the bearing equation at Sta. 1415+72 as a common line. This breaks the alignment into two different base bearings at that point. I just rotated them together at that common line as the whole alignment would be rotated later.

ALASKA ROAD COMMISSION
PLAN AND PROFILE OF PROPOSED HIGHWAY
SEWARD-ANCHORAGE HIGHWAY
ANCHORAGE TO GIRDWOOD

Submitted June 22, 1951

This is the paving project and other than the beginning stationing and tangent bearing, nothing matches the previous survey. The centerline was computed from PI to PI and saved.

STATE OF ALASKA, DEPARTMENT OF HIGHWAYS, RIGHT OF WAY MAP,
ALASKA PROJECT, ROUTE NO. F-031
CONTROL SECTION 003109,
SEWARD HIGHWAY, GIRDWOOD TO INDIAN.

There is no date on this set of maps.

Compared centerline data with the data on the 1951 BPR plan set and found them to be identical. The alignment was computed as far as the long tangent adjacent to USS

3202(the South boundary of USS 3680) in an attempt to get a closure. The plan centerline came in somewhat parallel but did not match so the centerline was left intact and saved.

STATE OF ALASKA, DEPARTMENT OF HIGHWAYS, RIGHT OF WAY MAP,
ALASKA PROJECT, ERAO-27(1), SEWARD HIGHWAY
S.R.-1 FROM GIRDWOOD WEST TO MILE 101.6

Dated March 1, 1966

This project runs from the township line west of Girdwood west approximately a mile. It picks up again after Bird Point and runs west approximately two miles. There were monuments set and some on the west end have been recovered. The alignments were computed and saved.

In 1992 the centerline of the existing road was asbuilt between the sections laid out in Project ERAO-27(1). This is mainly the portion on the side of the hill. The centerline was turned into an alignment with circular curves completed at a best fit. In 1993 a right of way supermap was created in preparation for the new Girdwood to Bird Point reroute. This alignment was inserted in to the same drawing with the previously created alignments and the existing survey control monuments.

The existing road centerline matched the 1966 alignment on the Girdwood end but was 2.5 feet different on the Bird Point end. The original 1951 alignment held the same configuration as the existing road for the most part. It crossed the existing centerline at two points so I could rule out a shift in the alignments. The 1951 alignment crossed to the uphill side where the road went up the hill and crossed back when it came down.

NEW ROAD

The right of way supermap was created in 1993. Seward Highway construction, Girdwood to Bird Point M.P. 90.3 to M.P. 97 was completed in 1997. In 2012, Seward Hwy. MP 89 to 96.6 Resurfacing, Project No. IM-0A3-1(047)/52991 was completed and the alignment is the one being used for this project.

RAILROAD

The BLM U.S. Surveys 9011, 9012 and portions of 9013 are being used to compute the existing ROW. The existing property line was run with record dimensions between found points and grant adjusted. The curves are then put in holding the tangents and the record radius. The position of the PC computed and the record chord ends are compared. The length of tangent and curve are also checked to minimize mistakes. In areas where the record curve data does not work and cannot be recomputed the chord endpoints or found monuments are held and the record radius in fit between them creating a non-tangential curve. Because of lack of control on the downhill side of the tracks the property line is offset from the computed side.

The meanders were computed using the grant adjustment method stated above. The seaward lots are created holding the position on the right of way as computed or offset

with the computed figure grant adjusted by the meanders. The record data (including area) was checked after the lot was computed.

USS 9011

The existing monumentation along T10N R1 and 2E was held for line and the meander corner was set at record distance south of Point No. 1405(NE Cor. Lot 1 USS 4805). The meander line of Lot 11 was computed record and grant adjusted into the ROW at the NW corner.

USS 9012

Curve 86R did not work at all. Set in non-tangential between monuments.

Curve 86AR did not work at all. Set in non-tangential between monuments.

Curves 86B-1 and 86B-2 are not compound. The PT is the PT of the next curve. Set in non-tangential.

Curve 89 doesn't work at all. I couldn't get any part of it to work. All the chords and tangents computed between found *control*. The end result was to create a bunch of non-tangential curves. The good thing is that there was enough control to nail it down.

PROTRACTED TOWNSHIP PLACEMENT

T10N R1E was rotated and scaled between the found WCMC between sections 25 and 30 on the west boundary of the township and the Protracted Northeast corner of the township as computed from record 1986 NAD 83 BLM and adjusted to the current datum 2011 epoch.

T10N R1W was rotated and scaled between the found WCMC between sections 25 and 30 on the east boundary of the township and the found WP between sections 1 and 6 in the west boundary of the township.

T10N R2W was rotated and scaled between the found WP between sections 1 and 6 in the east boundary of the township and the witness point between sections 3 and 34 on the north boundary of the township.

NEW NORTH RAILROAD BOUNDARY

The 2005 centerline supplied by ARRC was inserted into the drawing. It was offset 100 feet to the north. In realignment areas the new ROW was transitioned into the old ROW at the closest possible point. Preferably a tangent but were it was adjacent to a curve the old curve was used as a whole or at least a part. The curve adjacent to Station 1124+88.47 was designed by AKDOT. The information from the phase III plans was used to link the new curve to the old one.

UTILITIES

AA 039417- 100' CEA ROW-FERC (Federal Energy Regulatory Commission)/FPC (Federal Power Commission Power) Project 2170 Transmission line from Cooper Landing to Anchorage. The line was rerouted toward Turnagain Arm when the highway was. According to Chugach Electric the permit is expired and they are in the process of getting it renewed. ADL 17933-100' ROW Elec. Trans. Line in tidelands.

ADL 32417-100' CEA ROW (Electric Transmission Line) from Girdwood Substation to AA-39417

A 029885-100' CEA ROW-Potter to Portage-Runs up on the hill along the old road.

ADL 032606-30' Department of Army-Corps of engineers ROW (Anchorage –Whittier Pipeline)

A 46811-100' CEA ROW EXPIRED June 30, 2009