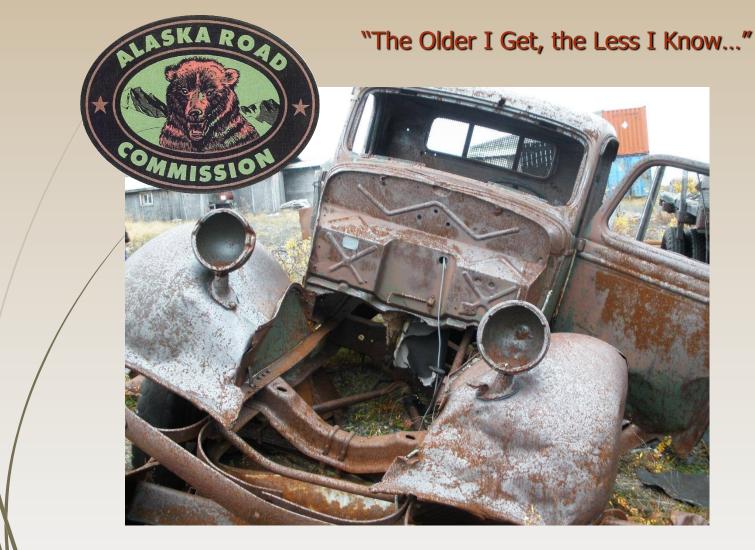
ROW Mapping Case Studies



Alaska Surveying & Mapping Conference 2015

"The Older I Get, the Less I Know..."

This is not <u>always</u> a bad thing!

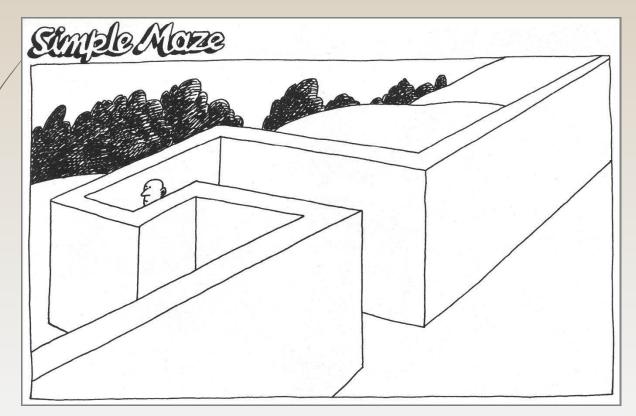


"The Older I Get, the Less I Know..."

- This is not a bad thing!
 - We grow in experience & education
- Unlike our kids, we never know everything!
- The more we know what we don't know
- So relax and peel back another layer of the "Onion"

A Surveyor's Dilemma...

What does a surveyor know about ROW?
 Retracement: Locate existing ROW
 Subdivision: Establish new ROW



A Surveyor's Dilemma...

- What does a surveyor know about ROW? Retracement: Locate existing ROW Subdivision: Establish new ROW
- Existing ROW is anything but uniform! Authorities vary Interests vary Widths vary
- "A Patchwork Quilt of Title Interests..."



Nome-Council Road MP 14-32 ~ Mapping the Right-of-Way at Statehood



This mapping project a long time in the making



1899 Map of Nome Mining District

Getting Started

- This mapping project a long time in the making
- / Why so long? Title transferred in 1959...
- ROW mapping was not considered a priority
- Portions of primary system still without mapping
- MP 14-32 Last gap on Nome-Council road
- Storm damage resulted relocation of road
 2011 "Spowiegne" Equal to Cat 4 Hurrigan
- 2011 "Snowicane" Equal to Cat 4 Hurricane
 Where is the POW2 new Where is the read?
- Where is the ROW?...no...Where is the road?
- Federal funds require ROW "certification"
- ER funds waiver if road reconstructed in original location
- Continual lobbying for mapping funds
- Too much money....too little time

Getting Started

 Mapping funded as a part of "Nome Sea /Storm Permanent Repairs – November 2011"



1913 Nome Storm Courtesy of Carrie M. McLain Memorial Museum



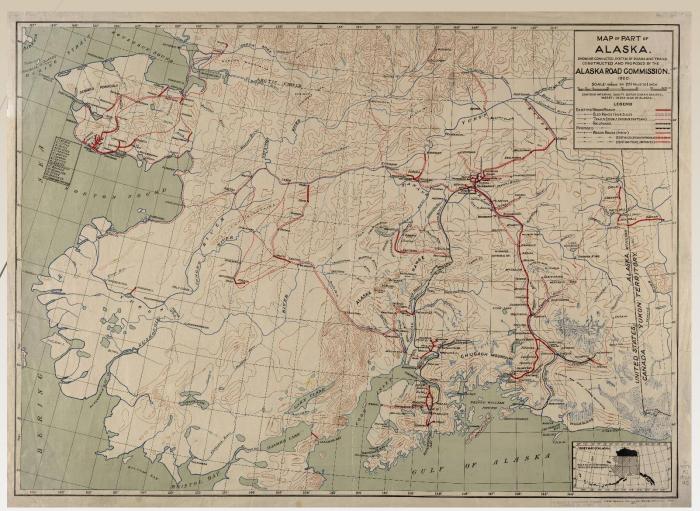
2004 Nome Storm

Getting Started

- Mapping funded as a part of "Nome Sea /Storm Permanent Repairs – November 2011"
- Issued to R&M Consultants under DOT&PF Northern Region Survey Term Contract
- NTP issued August 2013
- Aerial Photography & Field Surveys compete by end of the year
- Retired in May 2014 29 years with Dept. of Highways and DOT&PF
- Joined R&M Consultants Fairbanks
- Great opportunity to see project taken to completion

Finding the Historic ROW

• Mapping PLO ROW – Best Evidence



1920 Alaska Road Commission

Finding the Historic ROW

- Mapping PLO ROW Best Evidence
- Locate Centerline: By Survey or Photography
- Has Centerline Moved Since Statehood?
- Fit Geometry: Tangents & Curves
- Offset PLO Right-of-Way Width
- Ties to Adjoining Surveys & Boundaries
- What is Senior? PLO or Prior Land Actions
- Lands: State, Federal, ANCSA, Private & N/A
- Prior Mapping: USGS Quad 1950
 - Scale 1:63,360
 - Quality of Photography
 - Cartographic License

Research Elements

- Nome-Council Road (Current)
 - Area History
 - Aerial Photography
 - Construction & Maintenance Records
 - Other Public Mapping Records
 - Background Interviews
 - Public Land Orders
 - Public Easements by Prescription
 - Floating Easements
 - Federal Right-of-Way Grants
 - Native Allotment Use & Occupancy

Research Elements

- Nome-Council Road (Old Loop)
 - Public Land Orders
 - Omnibus Act Quitclaim Deed Issues
 - ROW Jurisdiction & Management
 - RS-2477 Trails & Territorial Act of 1917
 - Other Public Mapping Records

Research Elements

- ROW Issue Qualifiers
 - Context What were they thinking?
 - Location Where is it at?
 - Width Specified or?
 - Interest Easement, fee, or?
 - Policy Agency Position
 - !!! Holy Cow! This was kind of cool!!!

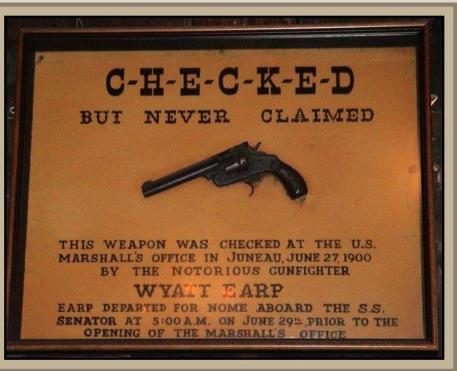
Area History

- 1898 Gold Discovery in Council Initiates Road
- 1904 Road & Bridge to MP3 Private Toll Facilities
- /1905 Alaska Road Commission Established
- Extensive ARC Maintenance in Support of Mining



Area History

- 1913 storm destroys Nome in part, all of Solomon, large sections of the road and all of the bridges!
- 100 years later, Mother Nature still in control...
- If anyone sees Wyatt, tell him to stop in Juneau on his way home to pick up his pistol!!!



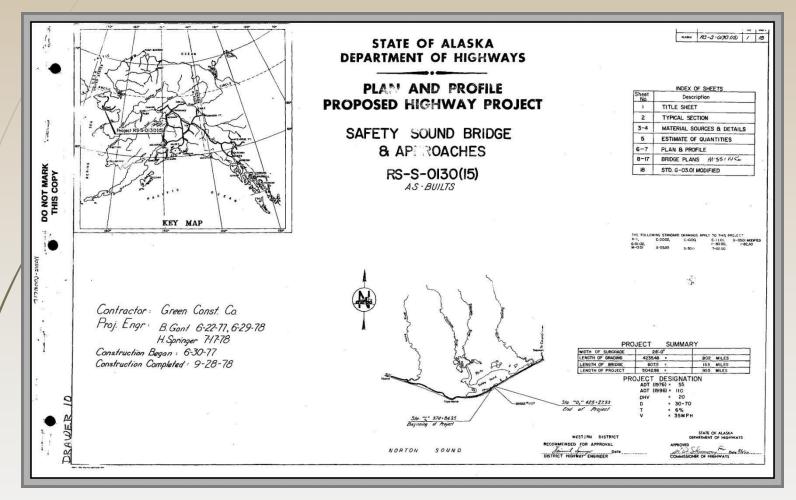
Aerial Photography

Photogrammetry by Kodiak Mapping, Inc.

Aerial Photography

- Photogrammetry by Kodiak Mapping, Inc.
- 2013 photos acquired for as-built & design
- Existing road edge digitized with centerline splits established every 500 feet
- Best fit centerline to DOT&PF 95/5 standard
- 1950 Army Map Service for historical photos basis of USGS Solomon B-6 Quad
- 1962 BLM photos: better imagery & date clearly reflects realignment and old loop

Construction & Maintenance Records

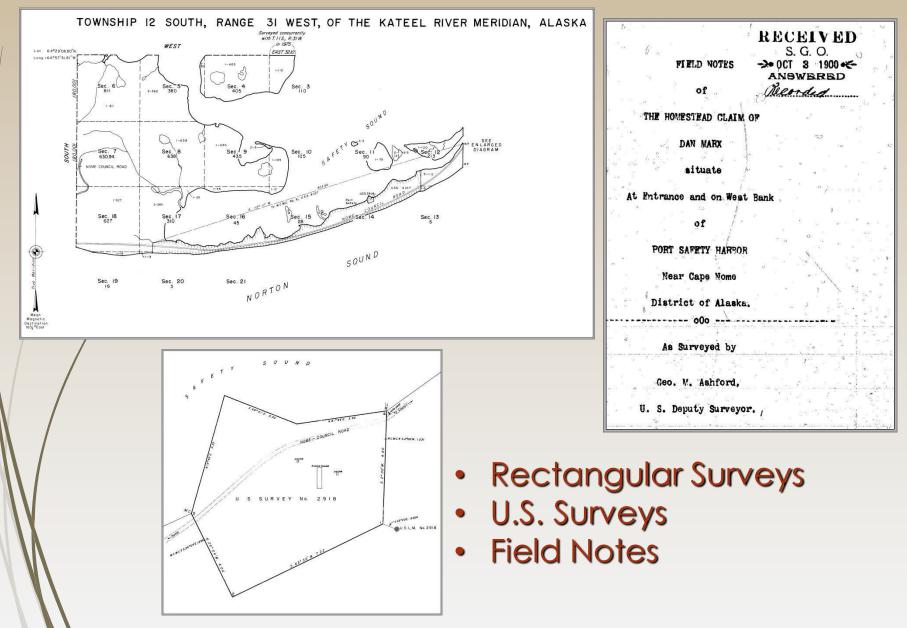


As-builts, ROW Plans, Reports, Control Surveys

Historical Archives

TERRITORIAL HIGHWAY PLAT BOOK FOR ALASKA 1918	UNITED STATES DEPARTMENT OF THE INTERIOR ALASKA ROAD COMMISSION JUNEAU, ALASKA Nome District December 22, 1949
February 6, 1951)A.R.C. GRDER NO. <u>40</u> SUBJECT: Numbering System for Alaska Roads A.R.C. Order No. 34, dated Septembor 15, 1950 is hereby revoked in its entirety, and is supersoled by the provisions of this order.	
Cape N	ome T

Mapping Records - Federal



Land Records - Federal

J.A.G.C.

(18575)

F-14908-B

The United States of America To all to whom these presents shall come, Greeting:

WHEREAS

Sitnasuak Native Corporation

is entitled to a Land Patent pursuant to Sec. 14(a) of the Alaska Native Claims Settlement Act of December 18, 1971 (43 U.S.C. 1601, 1613(a)), for the surface estate in the following described lands:

WAR DEPARTMENT,

WASHINGTON,

September 18, 1905.

THE PRESIDENT:

I have the honor to recommend the reservation, for military purposes, subject to private rights, of all public lands at Safety Harbor and Old Woman, Alaska, included within boundaries described, respectively, as follows, viz:

1.---At SAFETY HARBOR: Starting from an initial stake marked "No. 1, N.E. cor. U.S.M.R." true West

- Land Reservations
- ANCSA Patents
- Allotment Certificates

Fairbanks 031650

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT Anchorage, Alaska

NATIVE ALLOTMENT

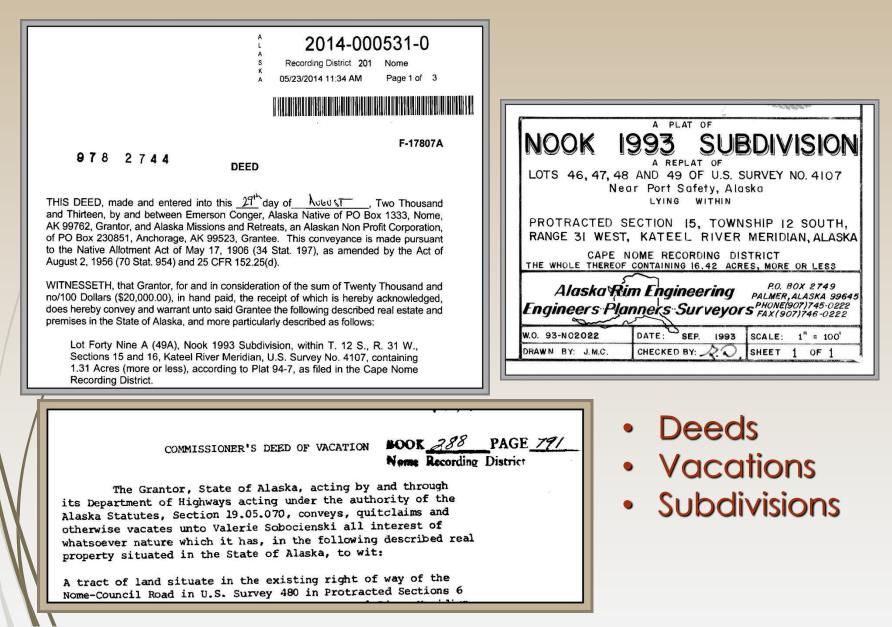
IT IS HEREBY CERTIFIED That pursuant to the authority delegated to him by Bureau Order No. 701, as amended December 18, 1964 (29 F.R. 18393) of the Director of the Bureau of Land Management, the Land Office Manager, Anchorage Land Office on October 25, 1974, approved the application, Fairbanks Serial Number F-031650, of John H. Bahnke of Nome, Alaska, filed pursuant to the Act of May 17, 1906 (34 Stat. 197; 48 U.S.C. 357), as amended, for:

> Lot 87, U.S. Survey No. 4107, Alaska, situated on a spit of land between Norton Sound and Safety Sound.

Containing 3.65 acres:

Therefore, let it be known that pursuant to the said Act of May 17, 1906, as amended, the land above described shall be deemed the homestead of the allottee and his heirs in perpetuity, and shall be inalienable and nontaxable until otherwise provided by Congress or until the Secretary of the Interior or his delegate, pursuant to the provisions of the said Act of May 17, 1906, as amended, approves a deed of conveyance vesting in the purchaser a complete title to the land.

Public Land Records



Background Interviews



- May help to fill in some historical gaps
- Evan Booth: "Yes, the ferry was in operated by the Dept. of Highways until the bridge opened. I was 8 years old when I first crossed."

Nome-Council Road (Current)



Train to Nowhere

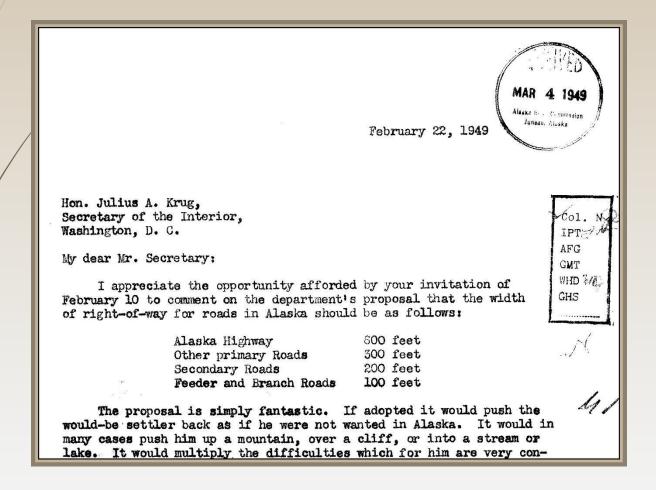
Public Land Orders



Arthur Gibson Map - 1904

Public Land Orders

 The easy part – Most Omnibus QCD ROW are PLO based due to large federal land holdings



Public Land Orders

- The easy part Most Omnibus QCD ROW are PLO based due to large federal land holdings
- Prior to PLO, primary basis for ROW was RS-2477
- PLO 601- August 10, 1949 Withdrawals
 - Classified: "Through", "Feeder" & "Local"
 - Location: centerline based
 - Widths: 300', 200' or 100'
 - Subject to valid existing rights
- SO 2665 1951- Feeder/Local now easements
- Federal/State/ANCSA generally subject to PLO
- Homestead, mineral and other federal patents
 & native allotments require more analysis
- 200' PLO ROW applied to most of project

Public Easements by Prescription

When the road footprint is outside of the ROW

adn.com

Anchorage Daily News

Senate passes bill to stop 'legal thievery' of property SQUATTERS: Measure would stop them from gaining title to land.

The Associated Press

(Published: May 14, 2003)

KENAI -- The Alaska Senate has passed a bill that would wipe the 800-year-old common law doctrine of adverse possession from Alaska law.

Senate Bill 93, sponsored by Sen. Tom Wagoner, R-Kenai, repeals Alaska's adverse possession law. The doctrine, which first was established in the Middle Ages, could allow squatters on private property to legally assume ownership of that property under certain well-defined conditions.

Wagoner said it is a doctrine the state should abandon.

Public Easements by Prescription

- When the road footprint is outside of the ROW
- Adverse Possession By long public use
- For a "prescribed" period of time
- Creates an easement for public access
- No compensation required
- Inverse condemnation
 - By agency with eminent domain authority
 - Inadvertent taking by errant construction
 - Taking by agency representations
 - Generally, the only issue is compensation

Public Easements by Prescription

Is this a viable tool? Maybe not!

