

Addendum 1

To: Frank King, King Valuation Co.	
From: HDR Alaska, Inc.	Project: South Wasilla Track Realignment
CC: Chris Anderson, Alaska Railroad Corporation (ARRC); Kristina Swanson, ARRC	
Date: 9-22-05	Job No: 09585-4566

RE: Ranch Subdivision Right-of-Way Impacts (Rev. 2)

Memo Revision: This is the second revision to this memo. Originally, parcels 48, 49, 50, and 17 were originally assumed to be made accessible from the lot frontage facing the main street through the subdivision. However, through conversation between ARRC’s real estate appraiser and the Mat-Su Borough, the Borough said they do not want driveways facing this road because it would serve as an arterial road rather than a collector road, meaning the speed limit would be faster than the speed on a local, residential road. So these four parcels are no longer accessible.

This memorandum responds to a request by the ARRC to determine the right-of-way (ROW) impacts to the platted Ranch subdivision, which is affected by the Proposed Action of the South Wasilla Track Realignment project. The ARRC requested that the ROW impact be calculated under two options:

1. With no mitigation, assuming that the proposed subdivision parcel boundaries cannot be replatted and therefore must remain as currently drawn; and
2. With possible mitigation, assuming that the proposed subdivision parcel boundaries can be replatted and the parcels and access roads can be reconfigured.

The ARRC prefers a minimum of 100 feet of ROW on each side of the track centerline, which creates a 200-foot wide ROW. However, the embankment necessary for the relocated tracks in the location of the Ranch subdivision would require more than 100 feet of ROW on each side due to the height of the needed embankment. Where the realigned track traverses across the northwest portion of the Ranch subdivision, the proposed embankment would be at its widest because of the height of the embankment required in this area. The footprint of impact would extend beyond 200 feet.

To calculate the ROW impacts to Ranch subdivision parcels, an ‘impact footprint’ was created. The ‘impact footprint’ where the embankment is at its widest is 280 feet. The ‘impact footprint’ tapers in closer towards a 200-foot wide ROW as the embankment narrows towards the southeast. The ‘impact footprint’ is designed with enough ROW for a 15-foot wide access road along both sides of the embankment. The actual impact footprint may vary during final design, so the ‘impact footprint’ was conservatively calculated.

Ranch Subdivision Impacts with No Mitigation: Under this option, it is assumed that the proposed subdivision parcel boundaries cannot be replatted and therefore must remain as currently drawn. Fifty-one parcels are impacted under this option and all 51 are assumed to be fully acquired. Of the 57 parcels, 27 parcels would be directly impacted by the ‘Impact Footprint’ and are assumed to be acquired in full. The remaining 24 parcels would be made inaccessible even though the impact footprint does not touch these parcels. See Figure 1.

Ranch Subdivision Impacts with Possible Mitigation (Reconfigured roads and parcels): This option assumes that the proposed subdivision parcel boundaries can be replatted and the parcels and access roads reconfigured as mitigation so the least number of parcels are impacted. Forty-two parcels are impacted under this option. Out of the 42 parcels impacted, 18 parcels are assumed to be fully taken, and to mitigate for these, 14 parcels would be reconfigured and are assumed to be made usable for potential development (as depicted on the corresponding figure, Figure 2). The required parcel ‘take’ is broken down into the following:

- Full Take – 18 parcels
- Partial Take – 15 parcels (these parcels would be reconfigured for potential development use)
- No Take – 9 parcels (even though no acreage is assumed to be taken from these 9 parcels, it is assumed they would be used in the parcel reconfiguration to make adjacent parcels accessible/usable).

Fourteen parcels (parcels 8, 9, 10, 11, 38, 39, 44-51) that were made inaccessible under the no mitigation option are now made accessible with the road and parcel reconfiguration as proposed with the mitigation option. The 14 parcels that would be reconfigured and are assumed to be usable for potential development range in acreage from 0.48 acre to 0.87 acre, slightly larger in acreage than what is currently platted.

Ranch Subdivision Right-of-Way Impacts With and Without Possible Mitigation

Parcel Number ¹	Parcel Size (acres)	'Impact Footprint' Size ² (acres)	Parcel Impact Description	No Mitigation	Possible Mitigation (with reconfigured roads and parcels)
				Take ³	Take ⁴
01	0.47	0.04	Direct Impact	Full	Partial
02	0.47	0.19	Direct Impact	Full	Partial
03	0.46	0.39	Direct Impact	Full	Full
04	0.51	0.50	Direct Impact	Full	Full
05	0.68	0.42	Direct Impact	Full	Full
06	0.47	--	Parcel Inaccessible ⁵	Full	No Take (reconfigure)
07	0.52	--	Parcel Inaccessible	Full	No Take (reconfigure)
08	0.48	--	Parcel Inaccessible	Full	--
09	0.46	--	Parcel Inaccessible	Full	--
10	0.47	--	Parcel Inaccessible	Full	--
11	0.46	--	Parcel Inaccessible	Full	--
12	0.47	--	Parcel Inaccessible	Full	No Take (reconfigure)
13	0.46	--	Parcel Inaccessible	Full	Partial
14	0.47	0.14	Direct Impact	Full	Full
15	0.50	--	Parcel Inaccessible	Full	Partial
16	0.46	--	Parcel Inaccessible	Full	No Take (reconfigure)
17	0.48	--	Parcel Inaccessible	Full	Partial
18	0.46	0.12	Direct Impact	Full	Full
19	0.46	0.45	Direct Impact	Full	Full
20	0.47	0.38	Direct Impact	Full	Full

¹ The Parcel Numbers correspond with the numbers on the corresponding figure.

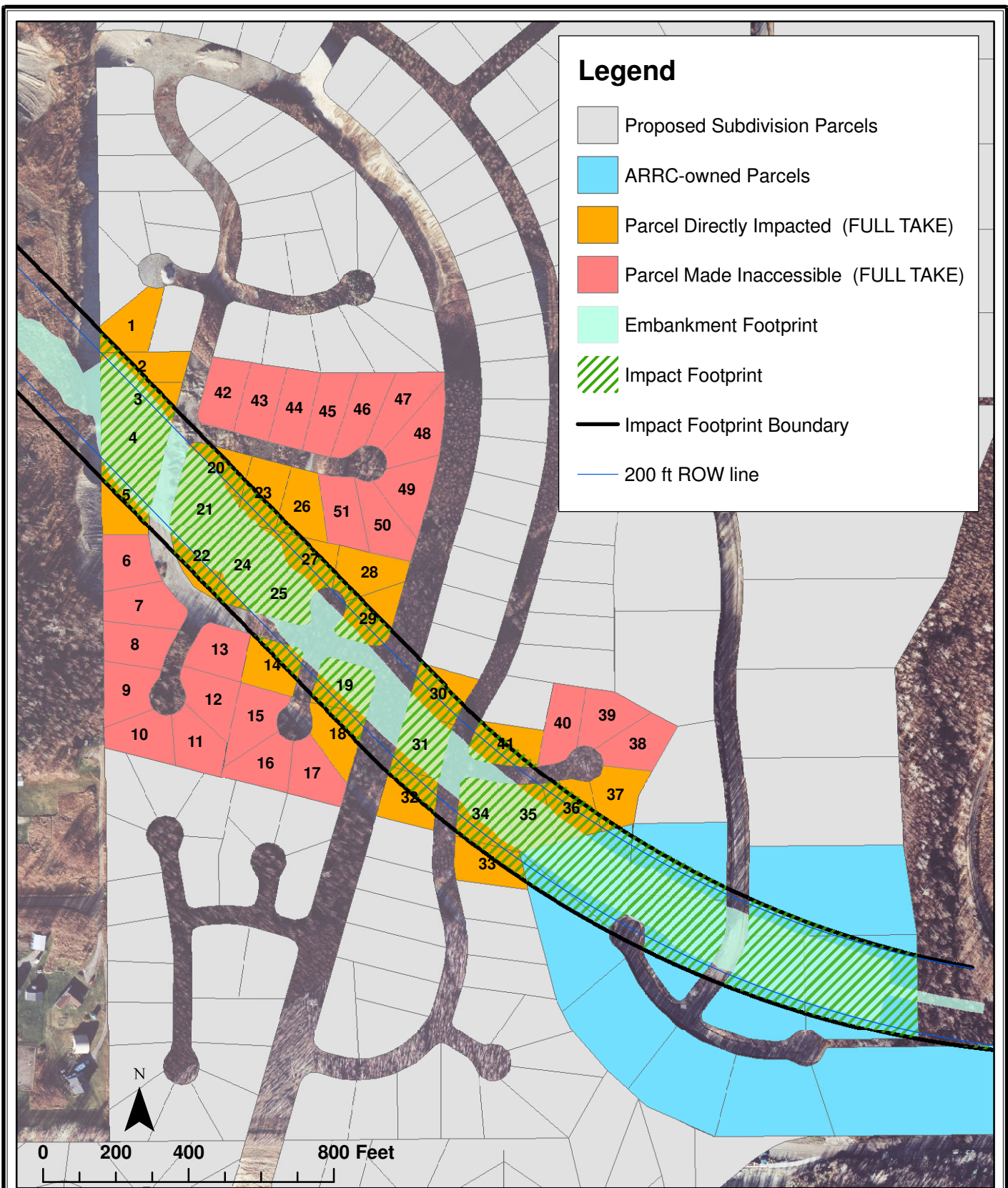
² Impact Footprint is a conservative estimate of the potential footprint needed for ARRC ROW for the Proposed Action at this design level. The true impact footprint may vary during final design. The Impact Footprint is 280ft wide where the embankment is at its widest and then the Impact Footprint tapers as the embankment narrows. The Impact Footprint is designed for enough ROW for a 15-foot access road to the tracks on either side of the embankment.

³ The take analysis with no mitigation assumes that the proposed subdivision parcel boundaries cannot be replatted and therefore must remain as currently drawn.

⁴ The take analysis with possible mitigation assumes that the proposed subdivision parcel boundaries can be replatted and the parcels and access roads have been reconfigured.

⁵ Parcel Inaccessible is defined as a parcel that is not directly impacted by the Footprint, but is made inaccessible because the Footprint has blocked access to the parcel.

Parcel Number ¹	Parcel Size (acres)	'Impact Footprint' Size ² (acres)	Parcel Impact Description	No Mitigation Take ³	Possible Mitigation (with reconfigured roads and parcels) Take ⁴
21	0.47	0.47	Direct Impact	Full	Full
22	0.48	0.42	Direct Impact	Full	Full
23	0.47	0.20	Direct Impact	Full	Partial
24	0.54	0.54	Direct Impact	Full	Full
25	0.47	0.47	Direct Impact	Full	Full
26	0.47	0.03	Direct Impact	Full	Partial
27	0.49	0.40	Direct Impact	Full	Full
28	0.48	0.05	Direct Impact	Full	Partial
29	0.47	0.29	Direct Impact	Full	Partial
30	0.48	0.34	Direct Impact	Full	Full
31	0.49	0.49	Direct Impact	Full	Full
32	0.49	0.18	Direct Impact	Full	Partial
33	0.47	0.12	Direct Impact	Full	Partial
34	0.54	0.53	Direct Impact	Full	Full
35	0.47	0.47	Direct Impact	Full	Full
36	0.47	0.39	Direct Impact	Full	Full
37	0.47	0.03	Direct Impact	Full	Partial
38	0.48	--	Parcel Inaccessible	Full	--
39	0.46	--	Parcel Inaccessible	Full	--
40	0.46	--	Parcel Inaccessible	Full	Partial
41	0.47	0.28	Direct Impact	Full	Full
42	0.47	--	Parcel Inaccessible	Full	Partial
43	0.46	--	Parcel Inaccessible	Full	No Take (reconfigure)
44	0.47	--	Parcel Inaccessible	Full	--
45	0.47	--	Parcel Inaccessible	Full	--
46	0.48	--	Parcel Inaccessible	Full	--
47	0.49	--	Parcel Inaccessible	Full	--
48	0.47	--	Parcel Inaccessible	Full	--
49	0.49	--	Parcel Inaccessible	Full	--
50	0.48	--	Parcel Inaccessible	Full	--
51	0.48	--	Parcel Inaccessible	Full	--
Parcels only impacted under the mitigation option					
52	0.47	--	Reconfigured	--	No Take (reconfigure)
53	0.48	--	Reconfigured	--	No Take (reconfigure)
54	0.47	--	Partially Impacted & Reconfigured	--	Partial
55	0.47	--	Reconfigured	--	No Take (reconfigure)
56	0.47	--	Reconfigured	--	No Take (reconfigure)



Impact Footprint	Conservative estimate of the potential footprint needed for ARRC ROW for the Proposed Action at this design level; the footprint is 280ft wide where the embankment is at its widest and then the 'Impact Footprint' tapers as the embankment narrows.
FULL TAKE	The 'Impact Footprint' clips the entire parcel, makes the parcel too small for development, or makes the parcel inaccessible.

South Wasilla Track Realignment

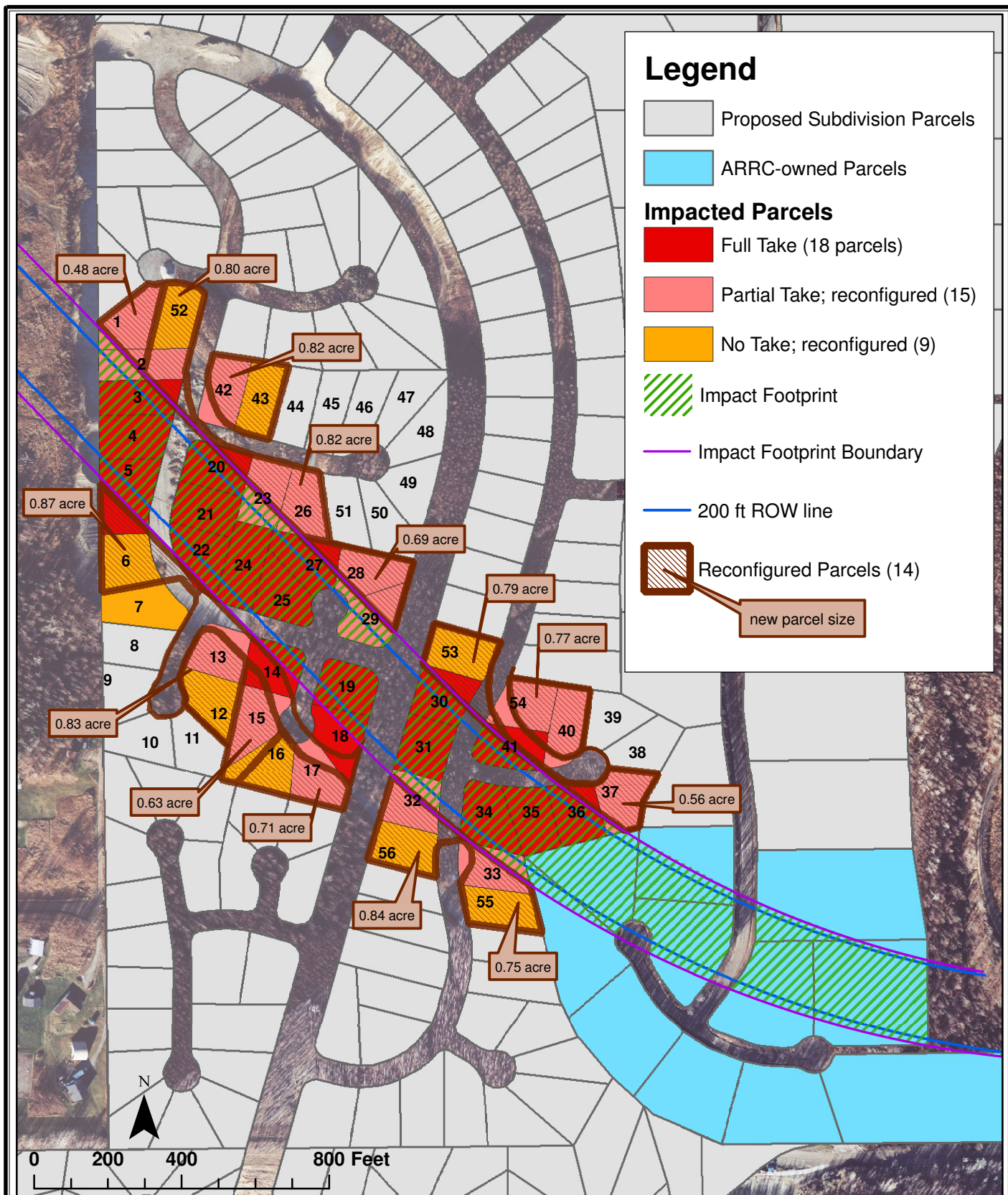
Ranch Subdivision Impacts With No Mitigation



Figure 1

See Corresponding Table for Parcel Impacts by Acreage

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Legend

- Proposed Subdivision Parcels
- ARRC-owned Parcels

Impacted Parcels

- Full Take (18 parcels)
- Partial Take; reconfigured (15)
- No Take; reconfigured (9)
- Impact Footprint
- Impact Footprint Boundary
- 200 ft ROW line
- Reconfigured Parcels (14)
new parcel size

Impact Footprint	Conservative estimate of the potential footprint needed for ARRC ROW for the Proposed Action at this design level; the footprint is 280ft wide where the embankment is at its widest and then the 'Impact Footprint' tapers as the embankment narrows.
Full Take	The 'Impact Footprint' clips the entire parcel or makes the parcel too small for development.
Partial Take	The 'Impact Footprint' or the 'Reconfigured Roads' clip part of the parcel; these parcels would be reconfigured for potential development.
No Take	The entire parcel acreage would be retained; these parcels would be reconfigured for road access and/or development potential.

South Wasilla Track Realignment

Ranch Subdivision Impacts With Possible Mitigation (Reconfigured roads & parcels)



Figure 2

See Corresponding Table for Parcel Impacts by Acreage