



E1-5826

GREGORY E. STRONG

Mayor Curtis Menard
350 E. Dahlia Ave.
Palmer, AK 99645

November 28th, 2007

RE: The Castle Mountain Earthquake Fault in Houston, Alaska

Dear Mayor Menard,

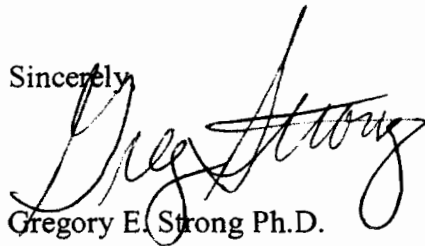
At last week's Assembly Meeting you were provided with an "Evaluation Matrix" for the proposed routes for the Port MacKenzie Rail Extension Project (Exhibit A). The Matrix reviewed ten (10) categories for eight (8) proposed routes. A map reflecting each of the proposed routes is included (Exhibit B).

What is of concern, and the reason for this letter is that the status of the sub surface geologic estate is NOT part of the Evaluation Matrix. The proposed Houston South route runs perfectly parallel for its entire length of travel with the Castle Mountain Earthquake Fault (Exhibit C). Let me be clear, we're not talking about the proposed rail line merely crossing the fault, but rather the proposed route runs directly on top of or directly along side of the fault from the Susitna River to the Parks Highway. Dr. Peter Haeussler of the USGS states that this fault could fail at anytime with an expected 7.2 magnitude earthquake.(1) This fault line has failed every 650-700 years for the last 2500 years. The last time this fault line failed was 650 years ago.

The construction of a portion of a quarter of a billion dollar rail project paid for with taxpayer dollars on top of a known, well documented and well studied earthquake fault is something prudent officials, such as your self, should avoid.

Even minor quakes could create frequent rail alignment failures resulting in numerous, expensive derailments. Before this process gets passed along to persons in Washington D.C. with the Surface Transportation Board, let me urge you to remove from consideration the Houston South route as it is certainly not a safe, viable, commercial transportation route.

Sincerely,



Gregory E. Strong Ph.D.

(1) Haeussler, Peter J., Seismic Disturbances of Upper Quaternary Deposits along the
Castle Mountain Fault near Houston, Alaska: US Geological Survey Open File
Report 1998
Attachments (3)

Cc:
John Binkley, The Alaska Railroad Corporation
Sen. L. Green
Sen. C. Huggins
Rep. M. Neuman
Mayor C. Menard
Surface Transportation Board

Evaluation Matrix

PROPOSED ROUTES	CRITERION										Preliminary Cost Estimate (millions) \$
	1	2	3	4	5	6	7	8	9	10	
	Poor or highly compressible soils (cubic yards)	New road crossings (#)	Land availability ³ (acres/mile)	Developed parcels (#)	Designated land use ⁴ (acres)	Train Energy (horsepower-hours)	Wetlands (acres)	Mapped anadromous fish streams (#)	High potential for archeological sites ⁵ (acres)	Fragmentation of designated refuges and recreation areas (yes/no)	
Mac West - Willow	0	+	0	0	-	0	0	0	-	-	\$320
Mac West - Houston North	-	+	0	+	-	+	-	0	+	-	\$250
Mac West - Houston South	0	+	0	+	-	0	-	0	+	0	\$220
Mac West - Big Lake	+	-	-	-	-	-	0	-	-	0	\$290
Mac East - Willow	0	0	0	+	+	0	+	+	-	-	\$330
Mac East - Houston North	-	0	0	+	+	+	0	0	+	-	\$260
Mac East - Houston South	0	0	+	+	+	0	+	+	+	+	\$230
Mac East - Big Lake	+	-	0	-	+	-	+	-	-	+	\$285

1. (+) Positive; (0) Neutral; (-) Negative

2. Criteria not weighted / Routes are unranked

3. Large parcels of undeveloped land owned by State of Alaska MSB, University of Alaska, Mental Health Trust and Alaska Native associations

4. Lands that are designated for parks, refuges, residential, or agricultural uses

5. Costs do not include approximately \$10 million for loop track construction within the port (all alternate



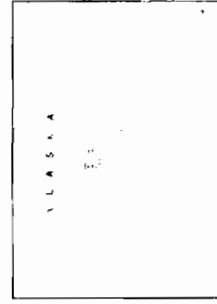
ALTERNATIVES

PORT MACKENZIE
RAIL EXTENSION

LEGEND

- Preliminary Alternatives*
- Mac East
 - Mac West
 - Conn 1
 - Conn 2
 - Conn 3
 - Houston
 - Houston North
 - Houston South
 - Willow
 - Big Lake
- ARRC Milepost
- ARRC Track
 - Highway
 - Medium Rd.
 - Minor Rd.
 - Iditarod Trail
 - City Boundary
 - Proposed Prison
 - Point MacKenzie Correctional Farm
 - Park or Refuge

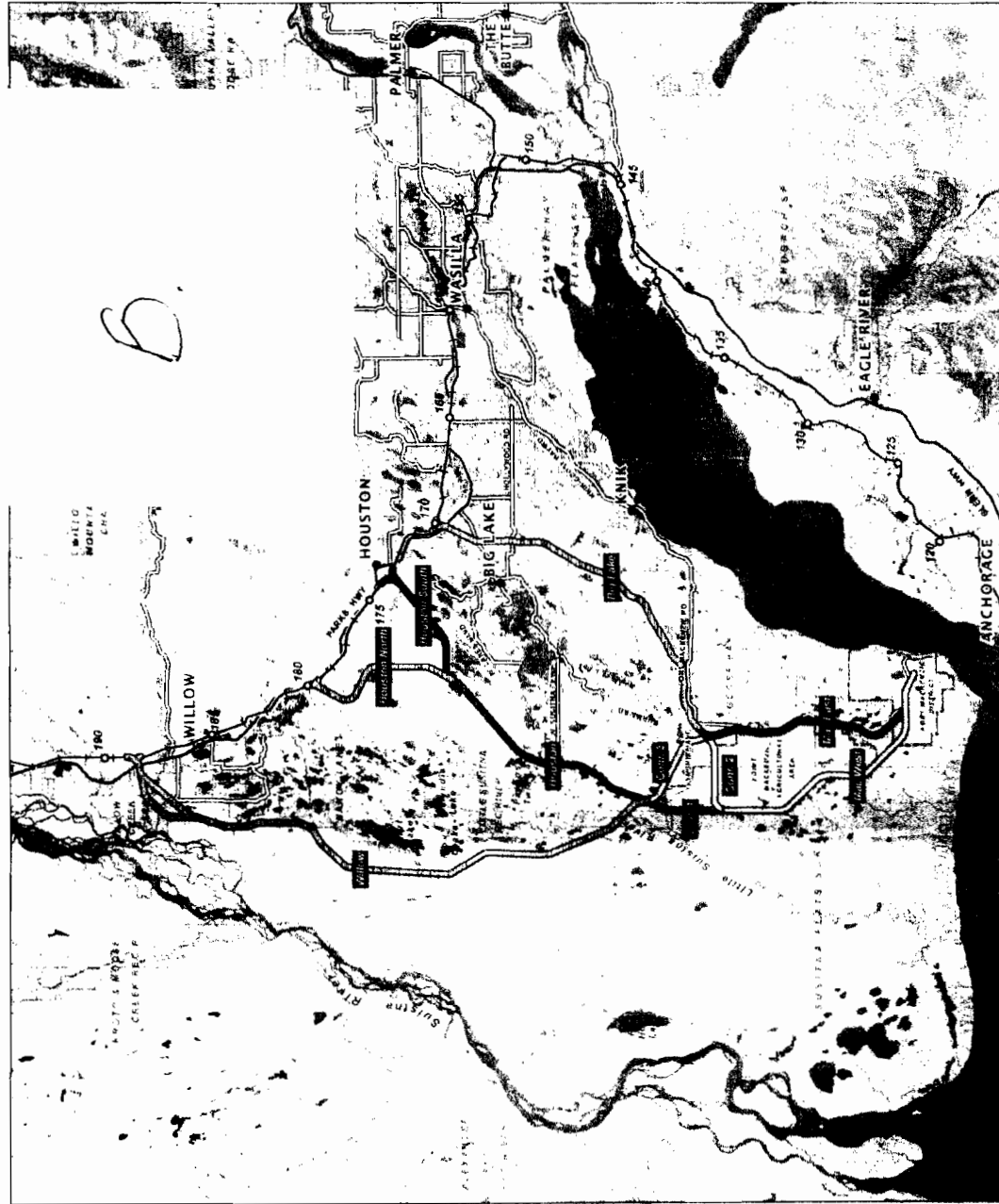
*These lines generally represent corridors which are subject to further refinement.



This map represents a conceptual view of study area and displays the information contained herein is for planning purposes only. Some information shown may be subject to change and is not intended for use in making decisions, design or for construction purposes.



Date: September 20, 2007
 Projection: NAD 83
 Author: HDR, ARRC, HDR Alaska, Inc.
 Sources: ADNR, ARRC, HDR Alaska, Inc.,
 MSB GIS, TNC, Hanson, USGS



Western portion Castle Mountain Fault

