

VENANA FARM

PROJECT

BRIEFING

2-6-81



STATE OF ALASKA
OFFICE OF THE GOVERNOR
Special Projects Office
ALASKA AGRICULTURAL ACTION COUNCIL

The Alaska Agricultural Action Council today approved the following motion. Members voting in the affirmative were: Paul Huppert, Nick Carney and W. I. Palmer.

Motion:

Whenever there are agricultural lands with commercial timber growing on these lands, it is the policy of the AAAC that the Division of Forestry shall cruise that timber and place a reasonable price on the timber. The land shall then be sold to the farmer with the timber intact. The farmer will pay the price for the timber, in addition to the regular price of the land.

In each case where there is commercial timber on such farms, the farm development plan required by the AAAC of the farmer will allow sufficient time for the best utilization of the timber.

Signed at Fairbanks, Alaska, this 6th day of January, 1981.

Handwritten signature of W. I. Palmer in cursive.

W. I. "Bob" Palmer, Chairman

Handwritten signature of Paul Huppert in cursive.

Paul Huppert, Vice-Chairman

Handwritten signature of Domonic L. Carney in cursive.

Domonic L. Carney, Member

Handwritten signature of Charles R. Webber in cursive.

Charles R. Webber, Member

DATE: February 5, 1981

REQUEST FOR PROPOSALS

The City of Nenana, Alaska, is seeking proposals from private companies involved with harvesting, processing and marketing wood fiber resources to conduct a two year program designed to accomplish the objectives described below.

The City of Nenana has determined that these objectives are essential to the completion of Phase 1 of a 20 year program of Agricultural Development in an undeveloped region west of Nenana, Alaska. The region comprises a gross area of over 300,000 acres under extensive forest cover of which 175,000 acres have been classified as Class II and Class III agricultural soils by the Soil Conservation Service. This region is more commonly known as Totchaket.

The City, under the general authority of the Special Projects Office of the Governor, and with the cooperation of the Agricultural Action Council, is the prime sponsor of the Totchaket Development Program and will be the contracting authority for that company which submits the successful proposal. During the period of the clearing, harvest and marketing program, the City will act as a single point of contact and permit coordination center, on behalf of the company conducting the program, and all agencies of State, Federal and local governments with permitting jurisdiction over Totchaket.

OBJECTIVES:

1. Through the use of clear cutting, shear cutting, de-stumping, root plowing and other appropriate methods the harvest of all wood fiber resources within two contiguous townships comprising 46,080 acres, described legally as follows: Township 4 South, Ranges 10 and 11 West, Fairbanks Meridian;
2. The processing, grading, marketing, and sale of wood fiber resources such as wood chips and other products for which a market exists;
3. The stockpiling and/or windrowing as appropriate to minimize fire risks, of all remaining wood fiber resources for future use as hog fuel, energy and/or power production, or other recommended applications toward the eventual use of the cleared area for agricultural production;
4. The general contouring and preparation of the cleared land for plowing and further preparation for planting scheduled to begin the summer of 1982.

PROPOSAL REQUIREMENTS:

Companies responding to this request for proposals will need to demonstrate their familiarity with and ability to use standard practices within the industry and within applicable regulatory procedures to accomplish the following tasks in advance of any clearing activity:

1. Development of overland access along a route designed by the City from Nenana to the two townships, and within the two townships to proposed clearing areas;

REQUEST FOR PROPOSALS (CONT.)

2. Based on micro-meteorological data for the designated townships, design, survey and delineation of clearing area, and proposed clearing schedule by area, subject to approval by the City of Nenana;
3. Survey, appraisal and preparation of preliminary estimates by grade and quantity of the market value of all wood fiber resources;
4. A proposed method of transporting marketable resources to market;
5. The development of a method by which the City of Nenana and other interested parties will be able to monitor program progress; to assess its cost effectiveness for future clearing; and to evaluate its value in stimulating the long term economic development of Interior Alaska;
6. The method required under 5. above shall include, at a minimum the selection of one test site--subject to location and timing approval by the City--within the area for the purpose of completing an actual field test and system evaluation of the proposed program methodology prior to July 15, 1981.

All proposals shall include a design for the general contouring, stock-piling, and/or windrowing of non-marketable resources in a manner which, after thorough analysis and evaluation of the constraints imposed by the macro and micro environment affecting Totchaket will yield the greatest agricultural productivity over the long term in the cleared areas.

PROGRAM FINANCING:

The City of Nenana expects to finance its costs of the program primarily with the sale proceeds of marketable resources, and companies preparing proposals should include an outline of contractual consideration designed to yield an equitable share of such proceeds to both parties.

Additional contractual consideration involving financing and other matters may be included in the proposal as appropriate.

In addition to the descriptive information included with this request for proposals the City of Nenana, the Special Projects Office and appropriate agencies of the State and Federal government are conducting and have completed several studies of the Totchaket region. The City has established a library and data resource and access system for the purpose of assuring that existing information is readily available to interested parties. Companies interested in responding to this proposal should plan to discuss this data with the following people at their earliest opportunity:

1. The Honorable John B. Coghill, Mayor
City of Nenana
(907) 832-5476 in Nenana, Alaska

REQUEST FOR PROPOSALS (CONT.)

2. Mr. Jerry Smetzer, Principal
Northern Development Associates;
Development Representative for the
City of Nenana
(907) 479-6816 in Fairbanks, Alaska

PROPOSAL DEADLINES AND EVALUATION PROCEDURES:

Deadline for receipt of proposals shall be 2:00 p.m. Tuesday, December 2, 1980, at the City Hall in the City of Nenana, Alaska. All bids received shall be opened during a public bid opening beginning at 3:00 p.m. The City anticipates a thorough review and analysis of all proposals received and expects to select 3 proposals for intensive interviews prior to Saturday, December 20, 1980, in Nenana. As part of its evaluation process on the 20th of December, the City of Nenana will require a public presentation of the three top ranked proposals before a group of interested citizens and participating government and industrial interests.

Depending on the results of the December 20th evaluation the City hopes to select a company to initiate the Harvest, Processing and Marketing Program by January 5, 1981.

The City of Nenana reserves the right to reject any and all proposals; to request interviews with two or more top-ranked companies; or to request resubmittals either jointly or individually by one or more top-ranked companies prior to final selection and award.

The City of Nenana, Alaska, is an equal opportunity employer and all qualified bidders will receive consideration for award without regard to race, religion, color, national origin, physical handicap, sex or marital status.

MEMORANDUM

State of Alaska

TO: Robert C. Pollock, Exec. Director
Alaska Agricultural Action Council

DATE: July 14, 1980

FILE NO: J-66-800-80

TELEPHONE NO: 465-3666

FROM: WILSON L. CONDON
ATTORNEY GENERAL

SUBJECT: Agricultural devel-
opment problems

By:

Rodger W. Pegues
Assistant Attorney General



This responds to your request of June 16, 1980, for advice on several problems and confirms our discussion of July 11, 1980.

First, to the extent that the authority has been given to it by the head of the Special Projects Office, the Agricultural Action Council has control over the money appropriated to that office for the Totchaket agricultural project. The legislature's naming of an outside, non-governmental corporation as a joint administrator would exceed the power of the legislature, would breach the separation of powers, and would therefore, be a nullity. Accordingly, the language in the appropriation concerning the Totchaket corporation must be read as being advisory or precatory in nature, requiring nothing more than reasonable efforts to harmonize the work of the state and the corporation.

Second, the council can contract for specific tasks with contractors other than the Totchaket Corporation.

Third, the money can be expended only in accordance with state law just as for the Delta project.

The Point McKenzie project can go forward through cooperative arrangements with the Department of Natural Resources. The Delta II project cannot without further approval.

RWP/pjg

RECEIVED JUL 16 1980



STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU
MEMORANDUM

To: Mrs. Resa King
Senate Resources Committee

From: W. I. "Bob" Palmer *WB*
Special Projects Coordinator
Office of the Governor

Date: February 5, 1981

Re: Nenana Agricultural Project

The Nenana/Totchaket Agricultural Project is located in two townships directly west of the City of Nenana, 60 miles south of Fairbanks. The preliminary project is in its first phase and is only 46,000 acres; however, an additional 130,000 acres have been soil surveyed by the USDA Soil Conservation Service and have been determined to have excellent agricultural soils.

The 1980 Legislature initiated the planning process for this project with an appropriation to determine transportation access, feasibility of livestock and vegetable production and the analysis of other developmental stages. The appropriation, contained in Chapter 50, SLA 1980, Sec. 281 reads:

The sum of \$560,000 is appropriated from the general fund to the Office of the Governor, special projects office, to be administered in conjunction with the Totchaket Development Corporation for development of the Totchaket agricultural project.

Several difficulties arose with respect to the inherent problems in the interpretation of this section. Accordingly, the Special Projects Office sought an Attorney General's Opinion to clarify the following questions:

1. Can the Special Projects Office assign to the Alaska Agricultural Action Council (AAAC) the responsibility for administering the funds for the contractual work between the State and potential contractors?
2. Is the Totchaket Development Corporation a joint administrator and is the Special Projects Office mandated to contract with a specific entity, namely the Totchaket Development Corporation? (As of the time of the signing of the bill, May 30, 1980, no such entity had been legally incorporated. Additionally, there was a local dispute in Nenana as

to whom would be legally bestowed (by the Department of Commerce) the incorporating name because there were two groups vying for the name.)

3. How should the funds be administered?

The Attorney General's formal Opinion is attached for your information. Briefly, it states:

1. that if the Special Projects Coordinator gave the authority to do so, the AAAC could have control over the appropriated funds;
2. the Legislature's naming of a private corporation as a joint administrator for the project exceeded the Legislature's powers and was nullified;
3. the language regarding the Totchaket Corporation should be read as advisory in nature, with nothing more required than reasonable efforts to harmonize the project work between the State and the Corporation;
4. the ability of the AAAC to contract with whomever it chooses, not being legally bound to contract with the Totchaket Corporation; and
5. the requirement that the funds should be expended in compliance with state law.

After these initial questions were answered, the Special Projects Office contracted with the City of Nenana to provide the basic data needed for the design of a realistic, successful agricultural development project, with project implementation likely in 1982 or 1983. In all, there are six signed contracts, with no final studies resulting from the contracts in yet. Copies of these contracts are also attached for your information.

A concerted effort has been made by the Alaska Agricultural Action Council to keep abreast of the wishes of Nenana's residents. The Council held a public hearing in Nenana on August 29, 1980, which was well attended. Additionally, AAAC staff attended a workshop in Nenana sponsored by the City of Nenana on December 20, 1980, in which the goals and objectives and problems encountered in developing the agricultural potential of Western Alaska were laid out.

Additionally, the AAAC has a contract with the Nenana Native Council to clear 25 acres of land in the area for a small-scale agricultural project. A cover crop on this acreage will be planted in the spring.

Stalled in past years due to uncertainties regarding land ownership by State and Federal governments and Native corporations, this contractual planning process has added a significant momentum towards a major agricultural development near Nenana. Long considered one of the State's prime agricultural areas, the Nenana/Totchaket Project is located adjacent to the Alaska Railroad, which connects between Fairbanks and the State's tidewater ports. In addition to the positive aspects of this transportation link, the area has the capability of expanding agriculture into the river valleys to the west.

Attachments

Alaska State Legislature

See page 2

BETTYE FAHRENKAMP, CHAIRMAN
VIC FISCHER, VICE-CHAIRMAN
DHAD BRADLEY
DICK ELIASON
DUN GILMAN
BOB MULCAHY
ARLISS STURGULEWSKI



POUCH V
STATE CAPITOL
JUNEAU, ALASKA 99811
(907) 465-3034
(907) 465-3035

Senate

Committee on Resources

February 6, 1981
1:37 p.m.

Beltz Room
211 Capitol Building

MEMBERS PRESENT

SENATOR FISCHER
SENATOR MULCAHY
SENATOR STURGULEWSKI

OTHERS PRESENT

SENATOR SACKETT

The Committee was briefed on the Nenana Farm Project by the Mayor of Nenana Jack Coghill, Jerry Smetzer, Development Representative, City of Nenana, Bob Palmer, Special Projects Coordinator, Governor's Office, Nick Carney, Director Division of Agriculture, Department of Natural Resources, and Art Davidson, Department of Natural Resources.

Jerry Smetzer, stated that the project is west of Nenana and south of Fairbanks and consists of 300-500,000 acres. There is an immediate need for \$500,000 for continuation of the bridge design program.

Mayor Coghill stated that the \$500,000 appropriated last session was spent for feasibility studies to determine if vegetables or cattle could be raised on the land. The studies showed that cattle are very viable. Because of the short growing season there are still some questions to be answered about vegetable production.

Bob Palmer stated that the Nenana project is important to Alaska's overall agricultural program. He indicated that grain, livestock and ethenol can be produced in the area.


Nick Carney and Art Davidson stated that the development of this area is crucial if the State is to have an agricultural industry. They went over their chart of "aspects of planning".

Art Davidson, indicated that the key to agricultural development

is to identify the best soils. He indicated that it is crucial that the access to the land is begun prior to disposal to the farmers.

In response to the question, is there an integrated 3-5-10 year plan that shows priorities? Bob Palmer stated that there was more than enough to accomplish with the short-term projects before they could get involved with long-term planning. The funds appropriated by the legislature have gone into projects not into organizational planning. Nick Carney stated that there is a need for a long-term statewide plan for agriculture. He indicated there has been rapid expansion of state agriculture land. Two years ago the state had 17,000 acres of agriculture land compared to 50,000 today.

It was requested that in two weeks a comprehensive plan be submitted to the Committee. Mr. Carney stated that the Division of Agriculture will have a comprehensive plan for the Committee in two weeks. (This will be presented to the Committee as a portion of the Department of Natural Resources briefing presentation on February 23rd.)



AUTHORITY TO ENTER CONTRACT NEGOTIATIONS

This form must be executed prior to entering negotiations regarding PROFESSIONAL SERVICE CONTRACTS when the contract amount is in excess of \$2,000 in an annual period. This includes the PROFESSIONAL SERVICES CONTRACTUAL RELATIONSHIP QUESTIONNAIRE on the back side of this form. Refer to Purchasing Regulations Manual, Chapter 5, for further instructions.

DEPARTMENT: Office of the Governor DATE: 9-2-80
 DIVISION: Special Projects Office AMOUNT OF CONTRACT: \$68,000.00
 PREPARED BY: W.I. Palmer/S. Boyer PERIOD COVERED FROM: 9-1-80
 TELEPHONE: 465-3568 TO: 12-15-81

Purpose(s) of contract:

Planning analysis for agricultural transportation system in the Nenana area to be coordinated and reviewed by the Department of Transportation.

We intend to negotiate with the following persons or firms. Agencies SHOULD list at least three choices or explain why it is not possible.

<u>NAME</u>	<u>ADDRESS</u>	<u>ALASKA BUSINESS LICENSE</u>	
<u>City of Nenana, Box 177, Nenana, Alaska 99760</u>		YES _____	NO <u>X</u>
_____		YES _____	NO _____
_____		YES _____	NO _____

Budgetary Data:

BRU NAME Special Projects Office COMPONENT _____
 8 DIGIT CODE 01-71-1-097

The concurrence of the Department of Administration is sought so that we may proceed to negotiate the above contract.

FOR THE DEPARTMENT:

CONCUR:

DEPARTMENT HEAD OR AUTHORIZED REPRESENTATIVE

DEPARTMENT OF ADMINISTRATION

DATE

DATE

The proposed contract must be forwarded to the Department of Administration after contractor and Departmental signatures have been affixed but prior to execution or effective date, for final approval.



**STANDARD AGREEMENT FORM
FOR PROFESSIONAL SERVICES CONTRACT**

This contract, which is effective only if it is approved by the Department of Administration, is between the State of Alaska,

Department of Office of the Governor/Special Projects Office					<i>hereafter, The State, and</i>
Contractor City of Nenana					<i>hereafter, the Contractor</i>
Mailing Address Box 177	Street or P. O. Box	City Nenana	State Alaska	Zip Code 99760	
Alaska Business License Number			Internal Revenue Service Number		

This is a contract for professional services. AS 44.37.030 authorizes the State to make this contract. The parties to the contract agree as follows:

AS03.05.010

ARTICLE 1. Appendices. Appendices referred to in this contract and attached to it are considered part of it.

ARTICLE 2. Performance of Services:

- 2.1 Appendix A, Articles 1 through 16, governs the performance of services under this contract.
- 2.2 Appendix B sets forth the services to be performed by the contractor.

ARTICLE 3. Period of Performance. The period of performance under this contract begins September 1, 1980, and ends December 15, 1981. Performance may be extended for additional periods by the written agreement of the parties.

ARTICLE 4. Consideration.

- 4.1 In full consideration of the Contractor's performance under this contract, the State shall pay the Contractor in accordance with the provisions of Appendix C.
- 4.2 When billing the State, the Contractor shall refer to the State Contract Number and send the billing to:

Department of Office of the Governor	Attn: Division of Special Projects Office
Mailing Address Pouch AN, Juneau, Alaska 99811	
CONTRACTOR	STATE
Name of Firm City of Nenana	Department or Agency Office of the Governor/Special Projects
Signature of Authorized Representative	Signature of Certifying Officer
Typed or Printed Name of Authorized Representative	Typed or Printed Name of Certifying Officer
Title	Title

APPROVAL BY THE DEPARTMENT OF ADMINISTRATION

NOTICE! This contract has no effect except as an offer by the Contractor until it is approved by the Department of Administration.

Signature of Authorized Official of the Department of Administration	Date
Typed or Printed Name of Authorizing Official	Title

APPENDIX A

Article 1. Definitions.

- 1.1 In this contract and appendices, "Certifying Officer" means the person who signs this contract on behalf of the Department and includes a successor or authorized representative.
- 1.2 "Department" means the agency for which this contract is to be performed and for which the Certifying Officer acted in signing this contract.

Article 2. Inspection and Reports.

- 2.1 The Department may inspect, in the manner and at reasonable times if considers appropriate, all the Contractor's facilities and activities under this contract.
- 2.2 The Contractor shall make progress and other reports in the manner and at the times the Department reasonably requires.

Article 3. State Saved Harmless.

The Contractor shall indemnify and hold and save the State, its officers, agents and employees harmless from liability of any nature or kind, including costs and expenses, for or on account of any and all legal actions or claims of any character whatsoever resulting from injuries or damages sustained by any person or persons or property arising from its performance of this contract in any way whatsoever.

(OVER)

APPENDIX B

The Services to be Performed by the City of Nenana for the Office of the Governor/Special Projects.*

A. The Contractor agrees to perform the following services: Planning analysis for agricultural transportation system in the Nenana area. The entire analysis, including original contract, will be reviewed and coordinated with the Department of Transportation to determine the most feasible routing in main agricultural area and to establish:

1. size and location of roads,
2. gravel pits,
3. river and stream crossings,
4. utility corridor,
5. coordination of main access routes with respect to the basic agricultural program intentions -
 - a. grain production
 - b. livestock production
 - c. vegetable production,
6. establish a boundary between state and private lands,
7. to arrive at estimated cost of all transportation facilities ie.; roads, bridges, etc.,
8. to include preliminary designs,
9. to identify any permits needed for transportation (environmental overview),
10. to determine maintenance needs.

B. Time Frame:	Commence	September 1, 1980
	Expire	December 15, 1981

C. Consideration	Professional Services	\$60,000.00
	<u>Administration</u>	<u>8,000.00</u>
	Total	<u>\$68,000.00</u>

* The Office of the Governor/Special Projects Office reserves the right to review all professional contract bids relative to this agreement and to have final approval of the contractor selected. The Office of the Governor/Special Projects Office reserves the right to review all activities relating to this agreement during the contract period and have final approval prior to any public distribution. All information gathered will be routed through the City of Nenana and the Agricultural Action Council prior to public distribution.

APPENDIX C

Consideration:

In full consideration of the Contractor's performance hereunder, the State shall pay the Contractor an amount not to exceed \$68,000.00 based on submission of monthly billings to the Special Projects Office, Office of the Governor, Juneau, covering expenditures occurring in the period. The final billing date shall occur not later than 30 days following the expiration date of the contract.

AUTHORITY TO ENTER CONTRACT NEGOTIATIONS

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DEPARTMENT: Office of the Governor DATE: December 15, 1980
DIVISION: Special Projects Office AMOUNT OF CONTRACT: \$50,100
PREPARED BY: W.I. Palmer/J. Hickey PERIOD COVERED FROM: November 12, 1980
TELEPHONE: 465-3568 TO: May 1, 1981

Purpose(s) of contract:
To coordinate all activities associated with determining public access and to establish a survey baseline approximately 31 miles in length along a surface transportation access corridor identified by the City of Nenana as the Totchaket Agricultural Development Area

We intend to negotiate with the following persons or firms. Agencies SHOULD list at least three choices or explain why it is not possible.

<u>NAME</u>	<u>ADDRESS</u>	<u>ALASKA BUSINESS LICENSE</u>	
<u>City of Nenana</u>	<u>Box 177, Nenana, AK 99760</u>	YES <u> </u>	NO <u>x</u>
<u> </u>	<u> </u>	YES <u> </u>	NO <u> </u>
<u> </u>	<u> </u>	YES <u> </u>	NO <u> </u>

Budgetary Data:

BRU NAME Special Projects Office COMPONENT
8 DIGIT CODE 01-71-1-097

The concurrence of the Department of Administration is sought so that we may proceed to negotiate the above contract.

FOR THE DEPARTMENT:
[Signature]
DEPARTMENT HEAD OR AUTHORIZED REPRESENTATIVE

DATE

CONCUR:
[Signature]
DEPARTMENT OF ADMINISTRATION
12-24-80
DATE

The proposed contract must be forwarded to the Department of Administration after contractor and Departmental signatures have been affixed but prior to execution or effective date, for final approval.

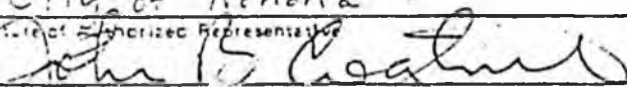
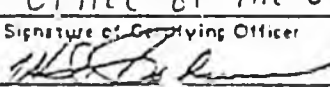
FOR PROFESSIONAL SERVICES CONTRACT

This contract, which is effective only if it is approved by the Department of Administration, is between the State of Alaska,

Department of Office of the Governor/Special Projects Office					<i>hereafter, The State, and</i>				
City of City of Nenana					<i>hereafter, the Contractor</i>				
Mailing Address Box 177		Street or P. O. Box		City Nenana		State Alaska		Zip Code 99760	
State Business License Number None					Internal Revenue Service Number 92 6001390				

This is a contract for professional services. ASAA 37.030 authorizes the State to make this contract. The parties to the contract agree as follows:

- ARTICLE 1. Appendices. Appendices referred to in this contract and attached to it are considered part of it.
- ARTICLE 2. Performance of Services.
 - 2.1 Appendix A, Articles 1 through 16, governs the performance of services under this contract.
 - 2.2 Appendix B sets forth the services to be performed by the contractor.
- ARTICLE 3. Period of Performance. The period of performance under this contract begins November 12, 1980 and ends May 1, 1981. Performance may be extended for additional periods by the written agreement of the parties.
- ARTICLE 4. Consideration.
 - 4.1 In full consideration of the Contractor's performance under this contract, the State shall pay the Contractor in accordance with the provisions of Appendix C.
 - 4.2 When billing the State, the Contractor shall refer to the State Contract Number and send the billing to:

Department of Office of the Governor		Attn: Division of Special Projects Office	
FOURMAN, Juneau, Alaska 99811			
CONTRACTOR		STATE	
Name of Firm City of Nenana		Department or Agency Office of the Governor / Special Projects	
Signature of Authorized Representative 		Signature of Certifying Officer 	
Typed or Printed Name of Authorizing Representative JOHN B. COGHILL		Typed or Printed Name of Certifying Officer	
MAJOR City of NENANA		Title	

APPROVAL BY THE DEPARTMENT OF ADMINISTRATION

NOTICE! This contract has no effect except as an offer by the Contractor until it is approved by the Department of Administration.

Signature of Authorized Official of the Department of Administration		Date
Typed or Printed Name of Authorizing Official		Title

APPENDIX A

Article 1. Definitions.

- 1.1. In this contract and Appendices, "Certifying Officer" means the person who signs this contract on behalf of the Department and includes a successor or authorized representative.
- 1.2. "Department" means the agency for which this contract is to be performed and for which the Certifying Officer acted in signing this contract.

Article 2. Inspection and Reports.

- 2.1. The Department may inspect, in the manner and at reasonable times if it considers appropriate, all the Contractor's facilities and activities under this contract.
- 2.2. The Contractor shall make progress and other reports in the manner and at the times the Department reasonably requires.

Article 3. State Saved Harmless.

The Contractor shall indemnify and hold and save the State, its officers, agents and employees harmless from liability of any nature or kind, including costs and expenses, for or on behalf of any and all legal actions or claims of any character whatsoever resulting from injuries or damages sustained by any person or persons or property arising from its performance of this contract in any way whatsoever.

(OVER)



**STANDARD AGREEMENT FORM
FOR PROFESSIONAL SERVICES CONTRACT**

ATN 81-610

This contract, which is effective only if it is approved by the Department of Administration, is between the State of Alaska,

Department of				
Office of the Governor/Special Projects Office			hereafter, The State, and	
Contractor				
City of Nenana			hereafter, the Contractor	
Mailing Address	Street or P. O. Box	City	State	Zip Code
Box 177		Nenana	Alaska	99760
Alaska Business License Number		Internal Revenue Service Number		
None		92 6001390		

This is a contract for professional services. AS44 37 .030 authorizes the State to make this contract. The parties to the contract agree as follows:

- ARTICLE 1. Appendices.** Appendices referred to in this contract and attached to it are considered part of it.
- ARTICLE 2. Performance of Services.**
- 2.1 Appendix A, Articles 1 through 16, governs the performance of services under this contract.
 - 2.2 Appendix B sets forth the services to be performed by the contractor.
- ARTICLE 3. Period of Performance.** The period of performance under this contract begins November 12, 1980, and ends May 1, 1981. Performance may be extended for additional periods by the written agreement of the parties.
- ARTICLE 4. Consideration.**
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 - 4.2 When billing the State, the Contractor shall refer to the State Contract Number and send the billing to:

Department of Office of the Governor Juneau, Alaska 99811		Attn: Division of Special Projects Office	
CONTRACTOR		STATE	
Name of Firm City of Nenana		Department or Agency Office of the Governor / Special Projects	
Signature of Authorized Representative		Signature of Certifying Officer <i>[Signature]</i>	
Typed or Printed Name of Authorized Representative		Typed or Printed Name of Certifying Officer	
Title		Title	

APPROVAL BY THE DEPARTMENT OF ADMINISTRATION

NOTICE! This contract has no effect except as an offer by the Contractor until it is approved by the Department of Administration.

Signature of Authorized Official of the Department of Administration <i>Kenneth T. Rab</i>		Date 12-24-80
Typed or Printed Name of Authorizing Official		Title

APPENDIX A

- Article 1. Definitions.**
- 1.1. In this contract and appendices, "Certifying Officer" means the person who signs this contract on behalf of the Department and includes a successor or authorized representative.
 - 1.2. "Department" means the agency for which this contract is to be performed and for which the Certifying Officer acted in signing this contract.
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 - 2.2 The Contractor shall make progress and other reports in the manner and at the times the Department reasonably requires.
- Article 3. State Saved Harmless.**
- The Contractor shall indemnify and hold and save the State, its officers, agents and employees harmless from liability of any nature or kind, including costs and expenses, for or on account of any and all legal actions or claims of any character whatsoever resulting from injuries or damages sustained by any person or persons or property arising from its performance of this contract in any way whatsoever.

(OVER)

2.2 Appendix B

The Services to be Performed by the City of Nenana for the Office of the Governor/Special Projects Office*

Purpose of Contract: ESTABLISH SURVEY BASELINE ALONG TOTCHAKET AREA ACCESS CORRIDOR

- A. The contractor agrees to perform the following services:
- Coordination of all activities associated with determining public access and establishing a survey baseline approximately 31 miles in length along a surface transportation access corridor identified by the City of Nenana to the Totchaket Agricultural Development Area located within R8W, R9W, R10W, and R11W of T4S, Fairbanks meridian.
- B. The contractor agrees to subcontract for performance of the following services:
1. Establish a survey baseline; brush and clear along the designated route;
 2. Maintain field notes on significant terrain features and changes in fauna along the baseline;
 3. Set 30-inch-long x 3 and one-quarter-inch diameter aluminum monuments with bearing trees at every section corner on the survey baseline, using the Alaska State Plane, or retraced positions;
 4. Provide a plot map which shows the control diagram and monumentation diagram for the above survey. This plot shall meet all applicable State and/or Federal standards.
- C. Time Frame:

Completion of Field Work:	February 1, 1981
Completion of Final Plat:	May 1, 1981

*The Office of the Governor/Special Projects Office reserves the right to review all professional contract bids relative to this agreement and to have final approval of the contractor selected. The Office of the Governor/Special Projects Office reserves the right to review all activities relating to this agreement during the contract period and have final approval prior to any public distribution. All information gathered will be routed through the City of Nenana prior to public distribution.

4.1 In full consideration of the Contractor's performance hereunder, the State shall pay the Contractor an amount not to exceed \$56,100, based on submission of monthly billings to the Special Projects Office, Office of the Governor, Juneau, covering expenditures occurring in the period. The final billing date shall occur not later than 30 days following the expiration date of the contract. The amount to be paid to the Contractor is divided into the following categories:

Professional Services	\$55,000
Administration	<u>1,100</u>
TOTAL	\$56,100

AUTHORITY TO ENTER CONTRACT NEGOTIATIONS

This form must be executed prior to entering negotiations regarding PROFESSIONAL SERVICE CONTRACTS when the contract amount is in excess of \$2,000 in an annual period. This includes the PROFESSIONAL SERVICES CONTRACTUAL RELATIONSHIP QUESTIONNAIRE on the back side of this form. Refer to Purchasing Regulations Manual, Chapter 5, for further instructions.

DEPARTMENT: Office of the Governor DATE: 9-2-80
 DIVISION: Special Projects Office AMOUNT OF CONTRACT: \$53,000.00
 PREPARED BY: W.I. "Bob" Palmer / S. Boyer PERIOD COVERED FROM: 9-1-80
 TELEPHONE: 465-3568 TO: 3-31-81

Purpose(s) of contract:
To coordinate all activities in regards to determining the feasibility of an economic vegetable production, processing and marketing industry in the Nenana area.

We intend to negotiate with the following persons or firms. Agencies SHOULD list at least three choices or explain why it is not possible.

<u>NAME</u>	<u>ADDRESS</u>	<u>ALASKA BUSINESS LICENSE</u>	
<u>City of Nenana, Box 177, Nenana, Alaska 99760</u>		YES _____	NO <u>X</u>
_____		YES _____	NO _____
_____		YES _____	NO _____

Budgetary Data:

BRU NAME Special Projects Office COMPONENT _____
 8 DIGIT CODE 01-71-1-097

The concurrence of the Department of Administration is sought so that we may proceed to negotiate the above contract.

FOR THE DEPARTMENT:

CONCUR:

 DEPARTMENT HEAD OR AUTHORIZED REPRESENTATIVE

 DEPARTMENT OF ADMINISTRATION

 DATE

 DATE

The proposed contract must be forwarded to the Department of Administration after contractor and Departmental signatures have been affixed but prior to execution or effective date, for final approval.



**STANDARD AGREEMENT FORM
FOR PROFESSIONAL SERVICES CONTRACT**

Page

This contract, which is effective only if it is approved by the Department of Administration, is between the State of Alaska,

Department of Office of the Governor/Special Projects Office hereafter, *The State, and*

Contractor City of Nenana hereafter, *the Contractor*

Mailing Address Box 177 Street or P. O. Box _____ City Nenana, Alaska State _____ Zip Code 99760

Alaska Business License Number _____ Internal Revenue Service Number _____

This is a contract for professional services. AS 44.37.030 authorizes the State to make this contract. The parties to the contract agree as follows:

ARTICLE 1. Appendices. Appendices referred to in this contract and attached to it are considered part of it.

ARTICLE 2. Performance of Services.

2.1 Appendix A, Articles 1 through 16, governs the performance of services under this contract.

2.2 Appendix B sets forth the services to be performed by the contractor.

ARTICLE 3. Period of Performance. The period of performance under this contract begins September 1, 1980, and ends March 31, 1981. Performance may be extended for additional periods by the written agreement of the parties.

ARTICLE 4. Consideration.

4.1 In full consideration of the Contractor's performance under this contract, the State shall pay the Contractor in accordance with the provision, of Appendix C.

4.2 When billing the State, the Contractor shall refer to the State Contract Number and send the billing to:

Department of Office of the Governor Attn: Division of Special Projects Office

Mailing Address Pouch AN, Juneau, Alaska 99811

Name of Firm City of Nenana Department or Agency Office of the Governor/Special Projects

Signature of Authorized Representative _____ Signature of Certifying Officer _____

Typed or Printed Name of Authorized Representative _____ Typed or Printed Name of Certifying Officer _____

Title _____ Title _____

APPROVAL BY THE DEPARTMENT OF ADMINISTRATION

NOTICE! This contract has no effect except as an offer by the Contractor until it is approved by the Department of Administration.

Signature of Authorized Official of the Department of Administration _____ Date _____

Typed or Printed Name of Authorizing Official _____ Title _____

APPENDIX A

Article 1. Definitions.

1.1. In this contract and appendices, "Certifying Officer" means the person who signs this contract on behalf of the Department and includes a successor or authorized representative.

1.2. "Department" means the agency for which this contract is to be performed and for which the Certifying Officer acted in signing this contract.

Article 2. Inspection and Reports.

2.1 The Department may inspect, in the manner and at reasonable times it considers appropriate, all the Contractor's facilities and activities under this contract.

2.2 The Contractor shall make progress and other reports in the manner and at the times the Department reasonably requires.

Article 3. State Saved Harmless.

The Contractor shall indemnify and hold and save the State, its officers, agents and employees harmless from liability of any nature or kind, including costs and expenses, for or on account of any and all legal actions or claims of any character whatsoever resulting from injuries or damages sustained by any person or persons or property arising from its performance of this contract in any way whatsoever.

(OVER)

APPENDIX B

The Services to be Performed by the City of Nenana for the Office of the Governor/Special Projects Office.*

A. The Contractor agrees to perform the following services: Coordination of all activities in regards to determining the feasibility of an economic vegetable production, processing and marketing industry in the Nenana area. Contract to research, survey and recommend a course of action to establish a viable economic vegetable industry project, with due consideration of, but not limited to, the following:

1. establishment of necessary criteria to determine the economic units needed, by size and quantity, in order to support the first phase of a processing facility to market fresh, frozen or dehydrated vegetables,
2. profitability and economic analysis,
3. time frame and scheduling required,
4. number and size of farms,
5. infrastructural needs ie.; seed, fertilizer, machinery, cooperatives, etc.,
6. total funding necessary to implement,
7. recommended legislation.

B. Time Frame:	Preliminary analysis	November 15, 1980
	Final analysis	March 31, 1980 1981
C. Consideration:	Professional Services	\$45,000.00
	<u>Administration</u>	<u>8,000.00</u> 5/24/1981
	Totals	\$53,000.00

* The Office of the Governor/Special Projects Office reserves the right to review all professional contract bids relative to this agreement and to have final approval of the contractor selected. The Office of the Governor/Special Projects Office reserves the right to review all activities relating to this agreement during the contract period and have final approval prior to any public distribution. All information gathered will be routed through the City of Nenana prior to public distribution.

APPENDIX C

Consideration:

In full consideration of the Contractor's performance hereunder, the State shall pay the Contractor an amount not to exceed \$53,000.00 based on submission of monthly billings to the Special Projects Office, Office of the Governor, Juneau, covering expenditures occurring in the period. The final billing date shall occur not later than 30 days following the expiration date of the contract.

AUTHORITY TO ENTER CONTRACT NEGOTIATIONS

This form must be executed prior to entering negotiations regarding PROFESSIONAL SERVICE CONTRACTS when the contract amount is in excess of \$2,000 in an annual period. This includes the PROFESSIONAL SERVICES CONTRACTUAL RELATIONSHIP QUESTIONNAIRE on the back side of this form. Refer to Purchasing Regulations Manual, Chapter 5, for further instructions.

DEPARTMENT Office of the Governor DATE September 3, 1980
 DIVISION: Special Projects Office AMOUNT OF CONTRACT: \$53,000.00
 PREPARED BY W.I. Palmer/S. Bover PERIOD COVERED FROM 9/1/80
 TELEPHONE: 465-3568 TO: 3/31/81

Purpose(s) of contract:

Coordination of all activities in regards to determining the feasibility of an economic livestock production, processing and marketing industry in the State of Alaska and specifically in the Nenana area.

We intend to negotiate with the following persons or firms. Agencies SHOULD list at least three choices or explain why it is not possible.

<u>NAME</u>	<u>ADDRESS</u>	<u>ALASKA BUSINESS LICENSE</u>	
<u>City of Nenana, Box 177, Nenana, Alaska 99760</u>		YES _____	NO <u>X</u>
_____		YES _____	NO _____
_____		YES _____	NO _____

Budgetary Data:

BRU NAME Special Projects Office COMPONENT _____
 8 DIGIT CODE 01-71-1-097

The concurrence of the Department of Administration is sought so that we may proceed to negotiate the above contract.

FOR THE DEPARTMENT:

CONCUR:

DEPARTMENT HEAD OR AUTHORIZED REPRESENTATIVE

DEPARTMENT OF ADMINISTRATION

DATE

DATE

The proposed contract must be forwarded to the Department of Administration after contractor and Departmental signatures have been affixed but prior to execution or effective date, for final approval.



**STANDARD AGREEMENT FORM
FOR PROFESSIONAL SERVICES CONTRACT**

J. Weir

This contract, which is effective only if it is approved by the Department of Administration, is between the State of Alaska,

Department of
Office of the Governor/Special Projects Office *hereafter, The State, and*

Contractor
City of Nenana *hereafter, the Contractor*

Mailing Address Street or P. O. Box City State Zip Code
Box 177 **Nenana** **Alaska** **99760**

Alaska Business License Number Internal Revenue Service Number

This is a contract for professional services. AS 4 37 .030 authorizes the State to make this contract. The parties to the contract agree as follows: AS03.05.010

ARTICLE 1. Appendices. Appendices referred to in this contract and attached to it are considered part of it.

ARTICLE 2. Performance of Services.

- 2.1 Appendix A, Articles 1 through 16, governs the performance of services under this contract.
- 2.2 Appendix B sets forth the services to be performed by the contractor.

ARTICLE 3. Period of Performance. The period of performance under this contract begins September 1, 1980 and ends March 31, 1981. Performance may be extended for additional periods by the written agreement of the parties.

ARTICLE 4. Consideration.

- 4.1 In full consideration of the Contractor's performance under this contract, the State shall pay the Contractor in accordance with the provisions of Appendix C.
- 4.2 When billing the State, the Contractor shall refer to the State Contract Number and send the billing to:

Department of Attn: Division of
Office of the Governor **Special Projects Office**
Mailing Address **PO Box AN, Juneau, Alaska 99811**

CONTRACTOR	STATE
Name of Firm City of Nenana	Department or Agency Office of the Governor/Special Projects
Signature of Authorized Representative	Signature of Certifying Officer
Typed or Printed Name of Authorized Representative	Typed or Printed Name of Certifying Officer
Title	Title

APPROVAL BY THE DEPARTMENT OF ADMINISTRATION

NOTICE! This contract has no effect except as an offer by the Contractor until it is approved by the Department of Administration.

Signature of Authorized Official of the Department of Administration Date
Typed or Printed Name of Authorizing Official Title

APPENDIX A

Article 1. Definitions.

- 1.1. In this contract and appendices, "Certifying Officer" means the person who signs this contract on behalf of the Department and includes a successor or authorized representative.
- 1.2 "Department" means the agency for which this contract is to be performed and for which the Certifying Officer acted in signing this contract

Article 2. Inspection and Reports.

- 2.1 The Department may inspect, in the manner and at reasonable times it considers appropriate, all the Contractor's facilities and activities under this contract.
- 2.2 The Contractor shall make progress and other reports in the manner and at the times the Department reasonably requires.

Article 3. State Saved Harmless.

The Contractor shall indemnify and hold and save the State, its officers, agents and employees harmless from liability of any nature or kind, including costs and expenses, for or on account of any and all legal actions or claims of any character whatsoever resulting from injuries or damages sustained by any person or persons or property arising from its performance of this contract in any way whatsoever.

(OVER)

APPENDIX B

The Service to be Performed by the City of Nenana for the Office of the Governor/Special Projects Office.*

A. The Contractor agrees to perform the following services: Coordination of all activities in regards to determining the feasibility of an economic livestock production, processing and marketing industry in the State of Alaska and specifically in the Nenana area. Contract to research, survey and recommend a course of action to establish a viable economic livestock project after due consideration of, but not limited to, the following:

1. establishment of necessary criteria to determine the economic units needed, by size and quantity, in order to support the first phase of a processing facility,
2. number and size of farms,
3. profitability and economic analysis,
4. time frame and scheduling required,
5. infrastructural needs ie.; seed, fertilizer, veterinary, machinery and transportation,
6. total funding necessary to implement,
7. recommended legislation,
8. possible coordination with other industries ie.; fresh water fisheries of interior, vegetable processing and grain production.

B. Time Frame:	Preliminary analysis	November 15, 1980
	Final analysis	March 31, 1981

C. Consideration:	Professional Services	\$45,000.00
	<u>Administration</u>	<u>8,000.00</u>
	Total	\$53,000.00

* The Office of the Governor/Special Projects Office reserves the right to review all professional contract bids relative to this agreement and to have final approval of the contractor selected. The Office of the Governor/Special Projects Office reserves the right to review all activities relating to this agreement during the contract period and have final approval prior to any public distribution. All information gathered will be routed through the City of Nenana prior to public distribution.

APPENDIX C

Consideration:

In full consideration of the Contractor's performance hereunder, the State shall pay the Contractor an amount not to exceed \$53,000.00 based on submission of monthly billings to the Special Projects Office, Office of the Governor, Juneau, covering expenditures occurring in the period. The final billing date shall occur not later than 30 days following the expiration date of the contract.

AUTHORITY TO ENTER CONTRACT NEGOTIATIONS

This form must be executed prior to entering negotiations regarding PROFESSIONAL SERVICE CONTRACTS when the contract amount is in excess of \$2,000 in an annual period. This includes the PROFESSIONAL SERVICES CONTRACTUAL RELATIONSHIP QUESTIONNAIRE on the back side of this form. Refer to Purchasing Regulations Manual, Chapter 5, for further instructions.

DEPARTMENT: Office of the Governor DATE: December 15, 1980
DIVISION: Special Projects Office AMOUNT OF CONTRACT: \$40,000
PREPARED BY: W. I. Palmer/J. Hickey PERIOD COVERED FROM: November 12, 1980
TELEPHONE: 465-3568 TO: January 1, 1983

Purpose(s) of contract:
To prepare a long-range agricultural development program for the Totchaket area west of Nenana. This, in effect, would be research for Totchaket land use planning.

We intend to negotiate with the following persons or firms. Agencies SHOULD list at least three choices or explain why it is not possible.

<u>NAME</u>	<u>ADDRESS</u>	<u>ALASKA BUSINESS LICENSE</u>	
<u>City of Nenana</u>	<u>Box 177, Nenana, AK 99760</u>	YES <u> </u>	NO <u>X</u>
<u> </u>	<u> </u>	YES <u> </u>	NO <u> </u>
<u> </u>	<u> </u>	YES <u> </u>	NO <u> </u>

Budgetary Data:

BRU NAME Special Projects Office COMPONENT
8 DIGIT CODE 01-71-1-097

The concurrence of the Department of Administration is sought so that we may proceed to negotiate the above contract.

FOR THE DEPARTMENT:
[Signature]
DEPARTMENT HEAD OR AUTHORIZED REPRESENTATIVE

DATE

CONCUR:
[Signature]
DEPARTMENT OF ADMINISTRATION

12-24-80
DATE

The proposed contract must be forwarded to the Department of Administration after contractor and Departmental signatures have been affixed but prior to execution or effective date, for final approval.

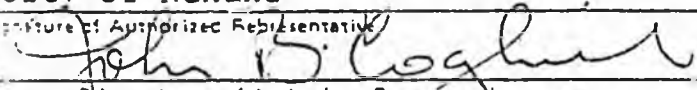
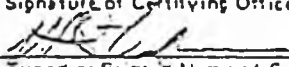
FOR PROFESSIONAL SERVICES CONTRACT

This contract, which is effective only if it is approved by the Department of Administration, is between the State of Alaska,

Department of Office of the Governor/Special Projects Office <i>hereafter, The State, and</i>				
Contractor City of Nenana <i>hereafter, the Contractor</i>				
Billing Address Box 177		Street or P. O. Box	City Nenana	State Alaska
			Zip Code 99760	
State Business License Number			Internal Revenue Service Number 92 6001390	

This is a contract for professional services. AS 44.37.030 authorizes the State to make this contract. The parties to the contract agree as follows:

- ARTICLE 1. Appendices.** Appendices referred to in this contract and attached to it are considered part of it.
- ARTICLE 2. Performance of Services.**
- 2.1 Appendix A, Articles 1 through 16, governs the performance of services under this contract.
 - 2.2 Appendix B sets forth the services to be performed by the contractor.
- ARTICLE 3. Period of Performance.** The period of performance under this contract begins November 12, 1980, and ends January 1, 1983. Performance may be extended for additional periods by the written agreement of the parties.
- ARTICLE 4. Consideration.**
- 4.1 In full consideration of the Contractor's performance under this contract, the State shall pay the Contractor in accordance with the provisions of Appendix C.
 - 4.2 When billing the State, the Contractor shall refer to the State Contract Number and send the billing to:

Department of Office of the Governor		Attn: Division of Special Projects Office
Billing Address PO Box 23, Juneau, Alaska 99811		
CONTRACTOR		STATE
Name of Firm City of Nenana		Department or Agency Office of the Governor/Special Projects
Signature of Authorized Representative 		Signature of Certifying Officer 
Typed or Printed Name of Authorized Representative JOHN B. COGHILL		Typed or Printed Name of Certifying Officer
MAJOR - City of NENANA		Title

APPROVAL BY THE DEPARTMENT OF ADMINISTRATION

NOTICE! This contract has no effect except as an offer by the Contractor until it is approved by the Department of Administration.

Signature of Authorized Official of the Department of Administration		Date
Typed or Printed Name of Authorizing Official		Title

APPENDIX A

Article 1. Definitions.

- 1.1. In this contract and appendices, "Certifying Officer" means the person who signs this contract on behalf of the Department and includes a successor or authorized representative.
- 1.2. "Department" means the agency for which this contract is to be performed and for which the Certifying Officer acted in signing this contract.

Article 2. Inspection and Reports.

- 2.1 The Department may inspect, in the manner and at reasonable times it considers appropriate, all the Contractor's facilities and activities under this contract.
- 2.2 The Contractor shall make progress and other reports in the manner and at the times the Department reasonably requires.

Article 3. State Saved Harmless.

The Contractor shall indemnify and hold and save the State, its officers, agents and employees harmless from liability of any nature or kind, including costs and expenses, for or on account of any and all legal actions or claims of any character whatsoever resulting from injuries or damages sustained by any person or persons or property arising from its performance of this contract in any way whatsoever.

(OVER)



**STANDARD AGREEMENT FORM
FOR PROFESSIONAL SERVICES CONTRACT**

81-611

This contract, which is effective only if it is approved by the Department of Administration, is between the State of Alaska,

Department of				
Office of the Governor/Special Projects Office			<i>hereafter, The State, and</i>	
Contractor				
City of Nenana			<i>hereafter, the Contractor</i>	
Mailing Address	Street or P. O. Box	City	State	Zip Code
Box 177		Nenana	Alaska	99760
Alaska Business License Number		Internal Revenue Service Number		
		92 6001390		

This is a contract for professional services. AS 44.37.030 authorizes the State to make this contract. The parties to the contract agree as follows:

- ARTICLE 1. Appendices. Appendices referred to in this contract and attached to it are considered part of it.
- ARTICLE 2. Performance of Services.
- 2.1 Appendix A, Articles 1 through 16, governs the performance of services under this contract.
 - 2.2 Appendix B sets forth the services to be performed by the contractor.
- ARTICLE 3. Period of Performance. The period of performance under this contract begins November 12, 1980, and ends January 1, 1983. Performance may be extended for additional periods by the written agreement of the parties.
- ARTICLE 4. Consideration.
- 4.1 In full consideration of the Contractor's performance under this contract, the State shall pay the Contractor in accordance with the provisions of Appendix C.
 - 4.2 When billing the State, the Contractor shall refer to the State Contract Number and send the billing to:

Department of		Attn: Division of	
Office of the Governor		Special Projects Office	
Mailing Address			
Pouch AN, Juneau, Alaska 99811			
CONTRACTOR		STATE	
Name of Firm		Department or Agency	
City of Nenana		Office of the Governor/Special Projects	
Signature of Authorized Representative		Signature of Certifying Officer	
Typed or Printed Name of Authorized Representative		Typed or Printed Name of Certifying Officer	
Title		Title	

APPROVAL BY THE DEPARTMENT OF ADMINISTRATION

NOTICE! This contract has no effect except as an offer by the Contractor until it is approved by the Department of Administration.

Signature of Authorized Official of the Department of Administration		Date
		12-24-80
Typed or Printed Name of Authorizing Official		Title

APPENDIX A

Article 1. Definitions.

- 1.1. In this contract and appendices, "Certifying Officer" means the person who signs this contract on behalf of the Department and includes a successor or authorized representative.
- 1.2. "Department" means the agency for which this contract is to be performed and for which the Certifying Officer acted in signing this contract.

Article 2. Inspection and Reports.

- 2.1 The Department may inspect, in the manner and at reasonable times it considers appropriate, all the Contractor's facilities and activities under this contract.
- 2.2 The Contractor shall make progress and other reports in the manner and at the times the Department reasonably requires.

Article 3. State Saved Harmless.

The Contractor shall indemnify and hold and save the State, its officers, agents and employees harmless from liability of any nature or kind, including costs and expenses, for or on account of any and all legal actions or claims of any character whatsoever resulting from injuries or damages sustained by any person or persons or property arising from its performance of this contract in any way whatsoever.

(OVER)

2.2 Appendix B

The Services to be Performed by the City of Nenana for the Office of the Governor/Special Projects Office.*

Purpose of

Contract: TOTCHAKET LAND USE PLANNING

- A. The Contractor agrees to perform the following services:
1. to prepare and seek concurrence in a long-range agricultural development program for the Totchaket area west of Nenana, Alaska;
 2. to work with the Alaska Agricultural Action Council and with State, Federal and local officials and all private consultants conducting studies related to the Totchaket area in order to assure overall communication and coordination, avoidance of duplication, and resolution of conflict;
 3. contract to research, survey and recommend courses of action when necessary to resolve key policy or technical problems or issues not covered by other studies;
 4. conduct or contract to conduct market assessment and market development based on agricultural industries in the Totchaket region which are shown to be feasible after due consideration of relevant technical studies and objectives established by the following activities:
 - a. to work with the Department of Natural Resources and other associated Federal and State agencies to develop an overall land use plan for the Totchaket area;
 - b. establishment of general scheduling of development of Totchaket agriculture in five (5) phases through the period 1980 to 2000, objectives to be accomplished in each phase and specific tasks and projected costs necessary to complete each objective;
 - c. to form a five-member (5) committee sponsored by the City of Nenana to be called the Totchaket Land Use Planning Committee;

d. to seek nomination of members to serve on the committee as follows:

- (1) the Mayor of the City of Nenana or his designee;
- (2) the City Council of the City of Nenana;
- (3) Toghettelle Corporation;
- (4) the Alaska Agricultural Action Council;
- (5) one at-large member selected by the other four members.

B. The function of the Committee shall be:

1. to provide assistance in the long-range development program for Totchaket;
2. to provide continuity and assistance and support needed for market development, general promotion, financing and needed legislation;
3. to determine long-range financing and sources of financing for each phase of development;
4. to recommend legislation.

C. Date for completion: January 1, 1983

ARTICLE 4. CONSIDERATION

4.1 In full consideration of the Contractor's performance hereunder, the State shall pay the Contractor an amount not to exceed \$40,000, based on submission of monthly billings to the Special Projects Office, Office of the Governor, Juneau, covering expenditures occurring in the period. The final billing date shall occur not later than 30 days following the expiration date of the contract. The amount to be paid to the Contractor is divided into the following category:

Administration	\$40,000
TOTAL	\$40,000

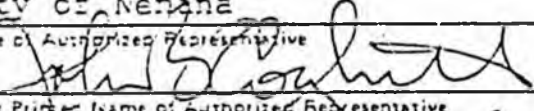
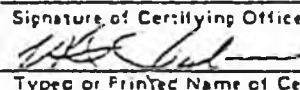
FOR PROFESSIONAL SERVICES CONTRACT

This contract, which is effective only if it is approved by the Department of Administration, is between the State of Alaska,

Department of		<i>hereafter, The State, and</i>	
Office of the Governor/Special Projects Office			
City of Nenana		<i>hereafter, the Contractor</i>	
Box 177	Street or P. O. Box	City Nenana	State Alaska
			Zip Code 99760
None		Internal Revenue Service Number 92 6001390	

This is a contract for professional services. AS 44.37.030 authorizes the State to make this contract. The parties to the contract agree as follows:

- ARTICLE 1. Appendices. Appendices referred to in this contract and attached to it are considered part of it.
- ARTICLE 2. Performance of Services.
 - 2.1 Appendix A, Articles 1 through 16, governs the performance of services under this contract.
 - 2.2 Appendix B sets forth the services to be performed by the contractor.
- ARTICLE 3. Period of Performance. The period of performance under this contract begins November 12, 1980, and ends March 1, 1981. Performance may be extended for additional periods by the written agreement of the parties.
- ARTICLE 4. Consideration.
 - 4.1 In full consideration of the Contractor's performance under this contract, the State shall pay the Contractor in accordance with the provisions of Appendix C.
 - 4.2 When billing the State, the Contractor shall refer to the State Contract Number and send the billing to:

Department of Office of the Governor		Attn: Division of Special Projects Office	
Pouch AN, Juneau, Alaska 99811			
CONTRACTOR		STATE	
City of Nenana		Office of the Governor/Special Projects	
			
JOHN B. ROGHILL		Typed or Printed Name of Certifying Officer	
MAYOR City of NENANA		Title	

APPROVAL BY THE DEPARTMENT OF ADMINISTRATION

NOTICE! This contract has no effect except as an offer by the Contractor until it is approved by the Department of Administration.

Signature of Authorized Official of the Department of Administration		Date
Typed or Printed Name of Authorizing Official		Title

APPENDIX A

- Section 1. Definitions.
 - 1.1 In this contract and appendices, "Certifying Officer" means the person who signs this contract on behalf of the Department and includes a successor or authorized representative.
 - 1.2 "Department" means the agency for which this contract is to be performed and for which the Certifying Officer acted in signing this contract.
- Section 2. Inspection and Reports.
 - 2.1 The Department may inspect, in the manner and at reasonable times it considers appropriate, all the Contractor's facilities and activities under this contract.
 - 2.2 The Contractor shall make progress and other reports in the manner and at the times the Department reasonably requires.
- Section 3. State Saved Harmless.

The Contractor shall indemnify and hold and save the State, its officers, agents and employees harmless from liability of any nature or kind, including costs and expenses, for or account of any and all legal actions or claims of any character whatsoever resulting from injuries or damages sustained by any person or persons or property arising from its performance of this contract in any way whatsoever.

(OVER)



**STANDARD AGREEMENT FORM
FOR PROFESSIONAL SERVICES CONTRACT**

This contract, which is effective only if it is approved by the Department of Administration, is between the State of Alaska,

Department of		<i>hereafter, The State, and</i>	
Office of the Governor/Special Projects Office			
Contractor		<i>hereafter, the Contractor</i>	
City of Nenana			
Mailing Address	Street or P. O. Box	City	State
Box 177		Nenana	Alaska
			Zip Code
			99760
Alaska Business License Number		Internal Revenue Service Number	
None		92 6001390	

This is a contract for professional services. AS 44.37.030 authorizes the State to make this contract. The parties to the contract agree as follows:

- ARTICLE 1. Appendices.** Appendices referred to in this contract and attached to it are considered part of it.
- ARTICLE 2. Performance of Services.**
- 2.1 Appendix A, Articles 1 through 16, governs the performance of services under this contract.
 - 2.2 Appendix B sets forth the services to be performed by the contractor.
- ARTICLE 3. Period of Performance.** The period of performance under this contract begins November 12, 1980, and ends March 1, 1981. Performance may be extended for additional periods by the written agreement of the parties.
- ARTICLE 4. Consideration.**
- 4.1 In full consideration of the Contractor's performance under this contract, the State shall pay the Contractor in accordance with the provisions of Appendix C.
 - 4.2 When billing the State, the Contractor shall refer to the State Contract Number and send the billing to:

Department of	Office of the Governor	Attn: Division of	Special Projects Office
Mailing Address	Pouch AN, Juneau, Alaska 99811		
	CONTRACTOR	STATE	
Name of Firm	City of Nenana	Department or Agency	Office of the Governor/Special Projects
Signature of Authorized Representative		Signature of Certifying Officer	
Typed or Printed Name of Authorized Representative		Typed or Printed Name of Certifying Officer	
Title		Title	

APPROVAL BY THE DEPARTMENT OF ADMINISTRATION

NOTICE! This contract has no effect except as an offer by the Contractor until it is approved by the Department of Administration.

Signature of Authorized Official of the Department of Administration	Date
	12 24 80
Typed or Printed Name of Authorizing Official	Title

APPENDIX A

Article 1. Definitions.

- 1.1. In this contract and appendices, "Certifying Officer" means the person who signs this contract on behalf of the Department and includes a successor or authorized representative.
- 1.2 "Department" means the agency for which this contract is to be performed and for which the Certifying Officer acted in signing this contract.

Article 2. Inspection and Reports.

- 2.1 The Department may inspect, in the manner and at reasonable times it considers appropriate, all the Contractor's facilities and activities under this contract.
- 2.2 The Contractor shall make progress and other reports in the manner and at the times the Department reasonably requires.

Article 3. State Saved Harmless.

The Contractor shall indemnify and hold and save the State, its officers, agents and employees harmless from liability of any nature or kind, including costs and expenses, for or on account of any and all legal actions or claims of any character whatsoever resulting from injuries or damages sustained by any person or persons or property arising from its performance of this contract in any way whatsoever.

(OVER)

ARTICLE 2. PERFORMANCE OF SERVICES

2.2 Appendix B

The Services to be Performed by the City of Nenana for the Office of the Governor/Special Projects Office*

Purpose of Contract: CONDUCT BRIDGE SITE CORE DRILLING AND DETERMINE SUBSURFACE CONDITIONS WITHIN TRANSPORTATION ACCESS CORRIDOR

- A. The contractor agrees to perform the following services: Coordination of all activities related to determining the subsurface conditions at the proposed bridge sites; to contract for the performance of the following services:
1. Drilling and logging a minimum of one test bore hole of 100-foot depth at each of three areas designated for river crossings at the Nenana River, East Middle River and West Middle River;
 2. Drilling and logging of one test bore hole of sufficient depth at each of the bridge abutments and bridge piers to identify the load-bearing strata;
 3. Drilling and logging of center-line test bore holes of 10-foot depth every 1300 feet on center along the estimated 31 miles of proposed Transportation Access Corridor in Township 4 South, Ranges 8, 9, 10, and 11 West, Fairbanks Meridian;
 4. Classification of soils with analysis and interpretation of the soils data found along the proposed transportation corridors;
 5. Recommendations as to
 - a. Suitable roadbed construction methods;
 - b. Adequate bridge abutment and bridge pier design criteria based on the above soils data.

B. Time Frame:

Completion of drilling and logging of test holes: February 15, 1981

Final Report: March 1, 1981

*The Office of the Governor/Special Projects Office reserves the right to review all professional contract bids relative to this agreement and to have final approval of the contractor selected. The Office of the Governor/Special Projects Office reserves the right to review all activities relating to this agreement during the contract period and have final approval prior to any public distribution. All information gathered will be routed through the City of Nenana prior to public distribution.

ARTICLE 4. CONSIDERATION

4.1 In full consideration of the Contractor's performance hereunder, the State shall pay the Contractor an amount not to exceed \$61,200, based on submission of monthly billings to the Special Projects Office, Office of the Governor, Juneau, covering expenditures occurring in the period. The final billing date shall occur not later than 30 days following the expiration date of the contract. The amount to be paid to the Contractor is divided into the following categories:

Professional Services	\$60,000
Administration	<u>1,200</u>
TOTAL	\$61,200



City of Nenana

State of Alaska

The Honorable Senator John Sackett
Pouch V.
Juneau, Alaska 99811

Dear Senator Sackett:

Per your request of last week I have asked the City's Development Consultant to prepare a list of priority development planning tasks to be completed by the City of Nenana during fy '82 in order to assure a Phase I Nenana-Totchaket disposal no later than January 1983. A general outline of the list-which is attached-and the bottom line total financing required (\$300,000.) was telephoned to Lee Stoops last Friday.

I want to emphasize that we have included the 500,000 for Road and bridge design (CSSB 222 am) in the total amount. However, we would prefer to see that bill passed in its present form and the remainder, 399,000., included in the final budget as an appropriation to the City of Nenana via the Municipal Grant statute...AS. 35.05.315. for intensive development planning on the Nenana-Totchaket Agricultural Project.

Thank you again for your efforts with the City's legislative requests this session, and for the meeting with Governor Hammond and his staff. I and others involved and interested in the project are very pleased with the results, and we will be working closely with the Governor and other interested legislators on capital financing for the project early in the second session.

Please convey my personal thanks and appreciation to the other members of the Senate --particularly Senator Fahrenkamp--and staff members for helping bring the Nenana-Totchaket project this far.

Sincerely,

John B. Coghill, Mayor
CITY OF NENANA, ALASKA

Bettye

Jack wanted to get together with you for a minute today, but didn't want to ask you to leave the hearing. This letter to John Sackett when you return to Juneau if you care. He and I would appreciate it very much.

TASKS REQUIRED DURING fy 82 FOR CONTINUED PROJECT DEVELOPMENT OF PHASE I-
 NENANA-TOTCHAKET AGRICULTURAL PROJECT. PLANNED DISPOSAL DATE: January 1983.

The City of Nenana, following discussions with Governor Jay Hammond concerning Phase I financing for the Nenana-Totchaket Agricultural Project (SB 294 and HB 333), has agreed to postpone the planned disposal date for Phase I from early 1982 to January 1983.

The later disposal date will allow for more thorough and more comprehensive development planning for Phase I and for more detailed long range planning for Phases II, III, IV, and V.

Governor Hammond has agreed that construction financing for roads and bridges and expanded financing for appropriate loan programs will be thoroughly analyzed by the Governor's staff and proposed for financing by the legislature in the Governor's fy 83 budget.

In order to assure that essential development planning necessary for a January 1983 disposal date is completed on time the City of Nenana believes that the tasks listed below need to be initiated as soon as possible during the fy 82 fiscal year.

Finally. The City further believes that, based on the results of the several preliminary studies completed by the City during fy 81 and the excellent working relationships established with participating agricultural interests in Alaska that fy 82 funds for continued project development will be more effective in terms of costs and time if appropriated by the legislature to the City of Nenana by means of a municipal grant authorized by AS. 37.05.315. In order to assure that the City's development planning for the project is compatible with the state's agricultural programs, work will be coordinated with established agencies of the University, and state and federal governments conducting agriculture development and regulatory programs.

Project development tasks which must be completed during fy82 include the following. Estimated man/months required are shown with estimated total costs.

TASKS	Man/Months	Other Costs	Total
1. DNR concurrence, Disposal date	.25		\$ 1,000.
2. Including T&S, R9W in Phase I.	.25		\$ 1,000.
3. Engineerin, roads and bridges (CSSB 222)			\$ 500,000.
4. Farm lot design			
a. meteorology			
b. hydrology			
c. agronomy	1.5	90,000.	97,000.

Development Planning
Phase I
Page 2

TASKS	Man/Months	Other Costs	Total
5. Wood fiber harvest, clearing, ground prep, fiber processing	3.	30,000. (timber cruise)	\$ 45,000.
6. Market development, market organizations, production scheduling.	8.	20,000 (market consultations)	\$ 60,000.
7. "Cash flow, costs of money" analysis; financing procedures, financing sources.	2.	(fiscal evaluation) 10,000.	\$ 20,000.
8. Availability, suppliers, F.O.B. costs, and dates for buildings equipment, livestock and supplies.	12.		\$ 60,000.
9. Disposal and farm development procedures.			
a. #fee simple, ag covenant"			
b. pre-qualifications			
c. title conveyance			
d. farm development requirements			
e. land use regulations			
f. penalties	3.	20,000. (legal work)	\$ 35,000.
10. Cost estimating and site selection			
a. grain drying, storage, transfer			
b. warehousing, farm businesses			
c. administration			
d. research			
e. livestock processing			
f. wood fiber processing			
g. vegetable processing	6.		\$ 30,000.
11. socio-economic impact analysis, on the City of Nenana	6.		\$ 30,000.
12. Reveiw of current ag statutes	1.		\$ 5,000.
13. development planning, Phases II, III, IV, V.	1.		\$ 5,000.
14. Compilation and reveiw of applicabl3 studies	1.		\$ 5,000.

Development planning
Phase I
Page 3.

TASKS	Man/Months	Other costs	Total
15. Recommendations on required support institutions for long term ag development.	1.		\$ 5,000.
TOTALS	Man/Months: 46.	Total costs:	<u>\$ 899,000.*</u>

*Includes the costs of Engineering design for roads and bridges which is being considered as a separate bill numbered CSSB 222 am.

NOTE: For additional information on the detailed work to be completed in each of these tasks, please contact:

1. Jerry Smetzer, agricultural development consultant to the City of Nenana.

479--6816 in Fairbanks or
452--6500 24 hour message phone.

2. Steve Bainbridge, City Engineer, City of Nenana.

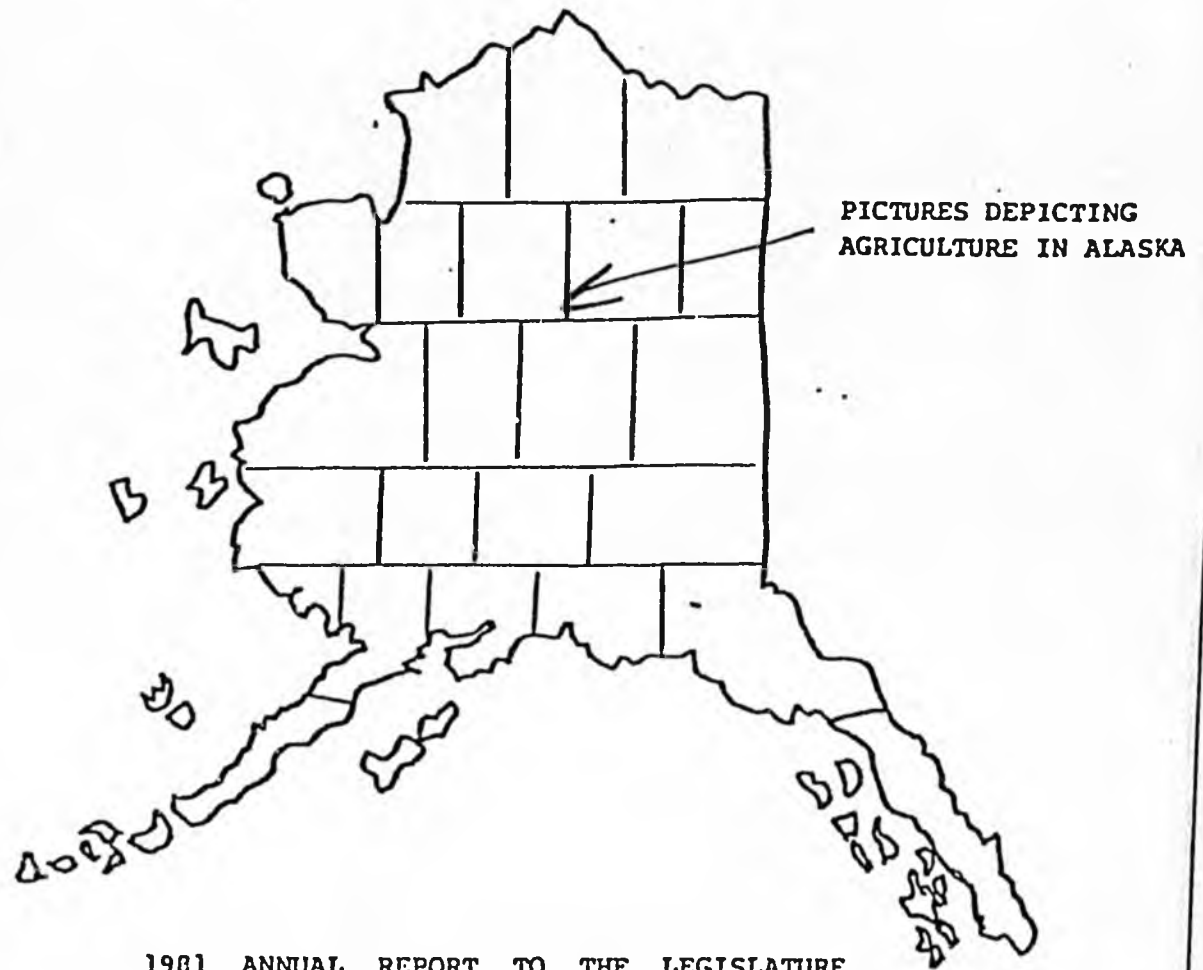
832-5441

3. Mayor John B. Coghill, City of Nenana

832-5688

A

POSITIVE FUTURE



1981 ANNUAL REPORT TO THE LEGISLATURE



- need
- ① Raindeer
 - ② Research
 - ③ Research
 - ④ Grazing Plot
 - ⑤ Game
 - ⑥

Inside Cover

ALASKA AGRICULTURAL ACTION COUNCIL

W. I. "Bob" Palmer, Chairman
Coordinator-Special Projects Office
Office of the Governor
Pouch AN
Juneau, Alaska 99811

Charles Webber
Commissioner
Department of Commerce and Economic Development
Pouch D
Juneau, Alaska 99811

Domonic Carney
Director
Division of Agriculture
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Wasilla, Alaska 99687

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Palmer, Alaska 99645

Steve Hamilton
Box 239
Palmer, Alaska 99645

James Drew, ex-officio

Wayne Long, ex-officio

ACKNOWLEDGEMENTS

The Alaska Agricultural Action Council wishes to thank the many individuals and organizations who have contributed to this annual report. It is only through the combined efforts of these people that the true potential of Alaska's agriculture will be developed: Agricultural Experiment Station, University of Alaska; Cooperative Extension Service, University of Alaska; U.S.D.A. Soil Conservation Service; Division of Agriculture, Department of Natural Resources; Alaska Farmers Cooperative, Inc.; Commercial Fishing and Agriculture Bank; Department of Commerce and Economic Development; The Alaskan Farmers; and the Mat-Su Borough.

General Statement addressed to the Governor and Legislature from W. I. "Bob"
Palmer, Chairman of the Alaska Agricultural Action Council.

SUMMARY AND OUTLINE

In 1976, Governor Hammond announced that a major goal of State government was to encourage the economic development of renewable resources, including agriculture. He set up the following goals;

- *broadening the economic base of the State through agricultural production;
- *stabilizing real food costs by increasing local food;
- *providing alternative job opportunities through expanded agriculture;
- *improving rural life by developing an economic base through agriculture;
- *assisting in meeting national goals of increased food production for world needs.

In 1977, the Alaska State Legislature allocated the first funding toward the goals of developing a self-sustaining commercial agricultural industry. Since that time, each legislature has approved additional funding, several major projects have been started and more are planned, beginning infrastructure facilities are under construction, and many other activities have been taking place. This report will attempt to summarize many of those activities, analyze past events, and focus both on the present and the future.

Agriculture is a tremendously diverse industry, but yet totally interdependent. It would be easy to concentrate on any one individual sector, but initially it is critical to maintain an "overall approach" to development. It is not only important to do a good job planning individual elements of the system but to plan how each separate element will coordinate with the entire system.

This report is divided into several sections, each consisting of a summary discussion, outline of past progress, current status, and recommendations of the Alaska Agricultural Action Council for the future.

SUMMARY PAGE

Alaska Agricultural Action Council	Page
1980 Major Accomplishments	
1980 Activities	
1981 Legislative Recommendations	
What is Alaskan Agriculture?	Page
Agricultural Projects	Page
Agricultural Infrastructure	Page
1. Financing	
2. Marketing	
3. Transportation	
4. Grain and Fertilizer	
5. Livestock Processing	
6. Research and Extension	
Agricultural Activities not under control of Agricultural Action Council	Page
1. Non Project Farmlands	
2. Subsistence Agriculture	
3. Reindeer industry	
4. Grazing Programs	

MAJOR 1980 ACCOMPLISHMENTS

- A. Delta Agricultural Project
 - 1. Land clearing
 - a. 54,000 acres knocked down
 - b. 37,000 acres piled
 - 2. Land in production
 - a. 8000 project acres, 3000 non-project acres doubled in 1979 production (new State record)
 - 3. Entire 1979 production sold in-state
 - 4. Barley feed trials with reindeer started
 - 5. Exported 15 tons barley for Japanese feeding trial
 - 6. Major world-class fertilizer plant completed
 - 7. Utility Road improvement completed (Hanson Road)
 - 8. Farmer owned and controlled grain marketing system
 - 9. First Major swine operation started
 - 10. Two dairies began operations
 - 11. Beef cattle population doubled
 - 12. Major grass-seed operation started

- B. Point MacKenzie Agricultural Project
 - 1. Entire project surveyed and platted
 - 2. Access road system connecting all farms completed
 - 3. Qualification and disposal process completed

- C. Delta Agricultural Project Expansion
 - 1. Project area identified and survey started

- D. Nenana
 - 1. Initial feasibility studies for transportation, livestock and vegetable production were implemented.

As directed by the State Legislature, the Alaska Agricultural Action Council is involved in many areas of the State's agricultural development. Following is not only a summary of the Council's 1980 activities, but an indication of the complexity of this type of development:

1. Marketing - Research and coordination of test marketing programs and any other areas of state agriculture marketing involvement.
 - a. Assist in organizing a state-wide marketing system and related functions (processing and transportation);
 - b. Investigate new markets for Alaskan agricultural products;
 - c. Maintain contact with "Lower 48" and world markets to remain informed of pricing direction and market trends.
2. Transportation
 - a. Promote and coordinate State's efforts to set up an agricultural transportation system;
 - b. Work with all modes of transportation (truck, rail, air) and the facilities to complement the system.
3. Research and Extension - Promote and review agricultural research and extension.
4. Financial - Maintain contact with various agricultural financial institutions and encourage the development of private financing.
5. Livestock - Coordinate efforts to expand State livestock industry. Work both in processing, transportation and marketing.
6. Energy Coordination
 - a. Investigate and encourage alternate energy programs for agriculture
7. Farmer Contact
 - a. Offer assistance to various farmer organizations
8. Public Relations - Coordinate a detailed planned program aimed at informing and educating the general public about agriculture in general and Alaskan agriculture specifically.
9. Contracts Administration - Administer contracts involving project implementation, land clearing, road construction, transportation system, marketing programs, state equipment and facility construction.
10. Intergovernmental Coordination - Maintain communication between various Federal and State agricultural departments, i.e., SCS, ASCS, USDA, AMS, CES, etc.
11. Legislation
 - a. Make recommendations on existing and proposed legislation;
 - b. Offer assistance on any agricultural legislation;
 - c. Maintain contact with "Lower 48" agricultural legislation, both Federal and State.

MEETINGS

The Council had 21 scheduled meetings during 1980. The dates and locations were as follows:

<u>DATE</u>	<u>LOCATION</u>
January 14, 1980	Juneau
January 29, 1980	Anchorage
February 8, 1980	Juneau
February 22, 1980	Anchorage
March 13, 1980	Delta Junction
March 28, 1980	Anchorage
April 10, 1980	Juneau
April 24, 1980	Anchorage
May 12, 1980	Anchorage
June 6, 1980	Anchorage
June 27, 1980	Anchorage
July 11, 1980	Anchorage
July 25, 1980	Anchorage
August 13, 1980	Palmer
August 14, 1980	Anchorage
September 12, 1980	Anchorage
September 29, 1980	Anchorage
October 16, 1980	Anchorage
October 31, 1980	Anchorage
December 8, 1980	Anchorage
December 29, 1980	Anchorage

PUBLIC HEARINGS

In addition, there were six public hearings held on various projects under consideration by the Agricultural Action Council:

<u>DATE</u>	<u>LOCATION</u>	<u>PROJECT UNDER CONSIDERATION</u>
March 13, 1980	Delta Junction	Delta Expansion
August 13, 1980	Palmer	Point MacKenzie
August 14, 1980	Anchorage	Point MacKenzie
August 29, 1980	Nenana	Nenana Agricultural Development
October 6, 1980	Fairbanks	Point MacKenzie
October 8, 1980	Soldotna	Point MacKenzie

MISCELLANEOUS ACTIVITIES ACCOMPLISHED IN 1980*

1. Appointment of Export-Transportation Committee
2. Consultation Services of George Figdor (Develop a documentary slide presentation of agricultural development)
3. Consultation Services of Ray Fendenheim, Transportation Expeditor
4. Chairman's Trip to Australia and New Zealand
5. Participation of AAAC in Deltana Fair in Delta Junction
6. Participation of AAAC in Tanana Fair in Fairbanks
7. Visit of three agricultural consultants to Delta to organize Alaska Grain Exchange
8. Pacific Northwest Grain and Feed Dealers
9. Canadian Institute of Agriculture
10. Marketing Symposium
11. Met with Nicholson, Incorporated on Wood Utilization
12. Feeding Trails in Hokkaido
13. Reindeer Feeding
14. Interior Development Conference in Fairbanks
15. Governor's Visit
16. Lieutenant Governor's Visit
17. Argentina Attache's Visit
18. Denmark Attache's Visit
19. Various Tours of Project
 - a. Successful Farming magazine
 - b. Time-Life
20. Donated grain to Future Farmers of America
21. Donated grain to Fairbanks Kiwanas for Waterfowl Project

*Details concerning individual activities available upon request

REIMBURSABLE SERVICES AGREEMENTS

University of Alaska for hydrological/meteorological studies
at Point MacKenzie, Nenana and Delta

DNR for Point MacKenzie Project Planning Costs

DNR for Preliminary Survey of Ag Lands in Nenana Area

DNR for Cadastral Survey of Point MacKenzie

Contract with Matanuska-Susitna Borough for Point MacKenzie
Road Construction

Office of the Governor for Delta Ag Development Documentary

DCED for Preparation of Proposal to DOE to Fund a Phased
Program to Continue Biomass Utilization Study

DNR to Fund Collecting Ag Statistics from 1979 Crop Year

University of Alaska for Policy Information Needs

Hanson Road Construction

AGRICULTURAL RECOMMENDATIONS

The Alaska Agricultural Action Council was created by Chapter 75, SLA 1979, First Session, Eleventh Alaska Legislature. AS44.33.425 (a) states "Before January 15 of each year the council shall report to the governor and the legislature concerning the activities of the council during the current fiscal year. The report shall contain recommendations for the development of agriculture in the state during the next fiscal year."

The Council's duties as charged by the legislature range from coordination of agricultural data collection, recommendation of agricultural promotion activities and land classification to the administration of the Delta Agricultural Project and any other agricultural development projects as authorized by the Legislature. In addition, the council is charged with the clearing, draining, and breaking of land located in the Delta Agricultural Project and any other project authorized under AS44.33.425.

The Council is mandated to report to the Legislature annually with recommendations for one or more agricultural projects; to propose legislation identifying the tasks of various state agencies necessary to accomplish the development project; and to propose legislation granting to the Council sufficient authority to insure cooperation of all state agencies involved in the implementation of the agricultural development project.

Considering the critical timeliness and need for orderly progression of agricultural development, the Alaska Agricultural Action Council recommends to the governor and the legislature the following items.

1. Appropriation to final phase of land clearing on Delta Agricultural Project
2. Appropriation to continue administration and provide two items of specialized land preparation equipment for Point MacKenzie Agricultural Project
3. Expansion of the Delta Agricultural Project
4. Construction of a livestock slaughter and processing facility
5. Construction of a Grain Export Terminal
6. Implementation of a state-wide grain marketing system
7. Reenactment of the State's Homesteading Credit
8. Continuation of Nenana feasibility, environmental baseline studies, and project development.
9. Implementation of a program to compensate farmers for bison damage.

WHAT IS ALASKAN AGRICULTURE?

IN TERMS OF DOLLARS: The Alaska State Legislature has earmarked several million dollars to begin the development of expanded agriculture in the Delta and Point MacKenzie Projects. Over the next several years, private and State sources are expected to invest as much as 100 million dollars in a statewide development program. Most of the state funding will be loan money.

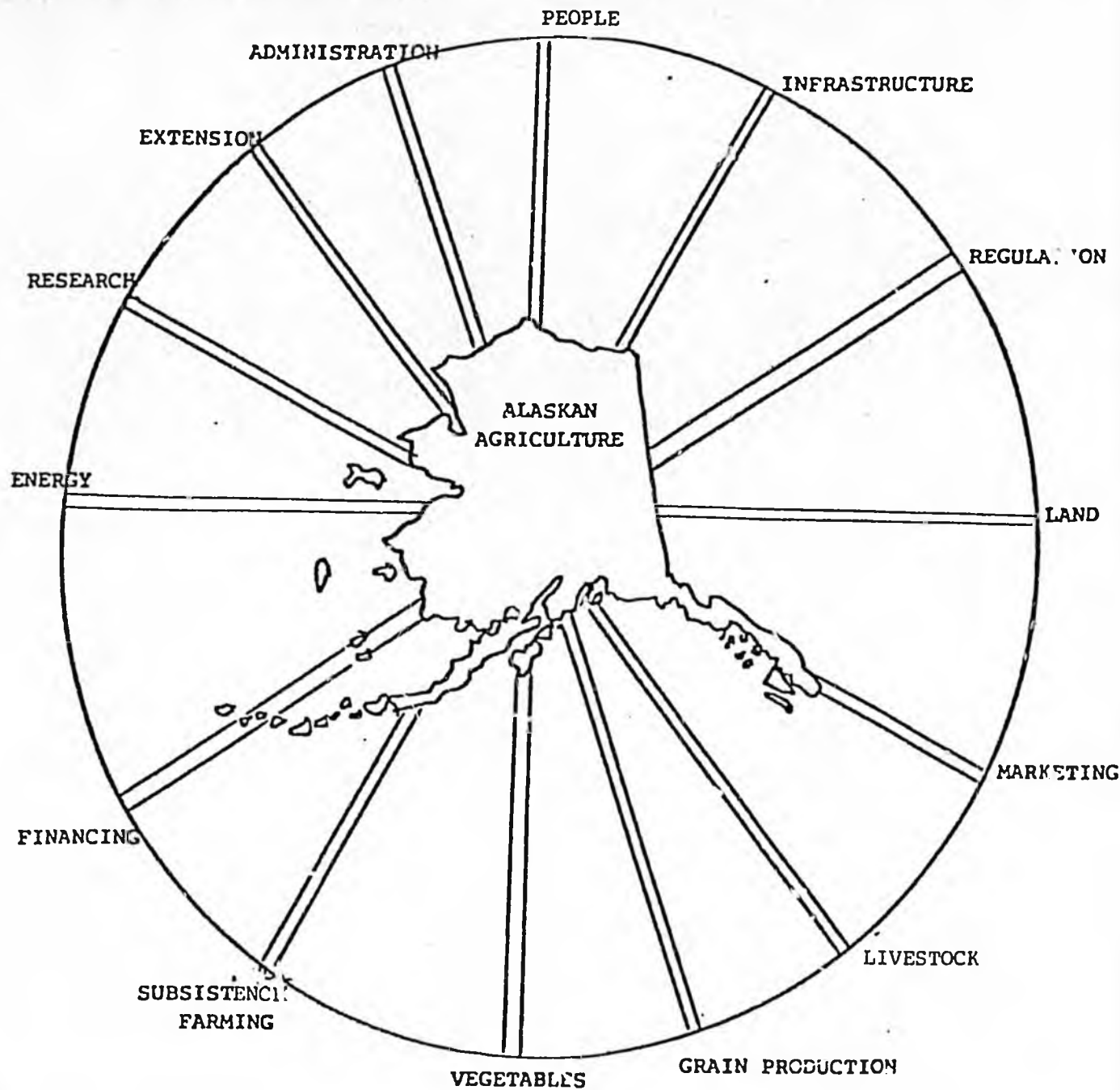
IN TERMS OF LAND: Right now, there are about 34,000 acres of land in agricultural production in Alaska compared to only 7,000 acres in 1978. By contrast, the State of Rhode Island has 23,000 acres. The Delta Project will put 50,000 acres of new land into production by 1983. By 1990, the timetable calls for at least 500,000 acres to be in cultivation. And for long term thinkers -- out of Alaska's 378,165,760 acres, 20 million acres have been identified as being potential.

IN TERMS OF JOBS: Agriculture doesn't have the glamour of gold or oil. But neither does it have the boom and bust cycle we've experienced in both. It offers steady, long term jobs for Alaskans, not only in direct agricultural employment, but in the support businesses as well that will grow up around agriculture on a local level; direct jobs such as farmers and farm hands, mechanics and elevator operators, and secondary support jobs such as grocery stores, hardware stores, and barber shops.

IN TERMS OF SELF-SUFFICIENCY: Right now, we import about 95 percent of all our food. It's high priced and oftentimes less than Grade "A" quality. A basic competitive feed grain industry will encourage a competitive livestock industry within the State. Once the basic support systems are set up, other forms of agriculture will be competitive such as vegetables, potatoes, and milk. Locally produced agricultural commodities will dampen the upward spiral of prices, and will insure fresher meat and produce. Currently, it is estimated that Alaska has a four-day supply of food. Can Alaska afford to be so dependent on such a fragile supply system?

IN TERMS OF PEOPLE: Alaska has been buffeted by a boom and bust economy since the gold rush. Agriculture, properly organized on a competitive scale, can do a great deal to smooth out that chaotic cycle by introducing long term stable economic benefits in jobs, increased self-sufficiency, and in stabilized prices.

It's not going to be done by magic. It will be people who will build the new homes and till the soil. It will be people who will plan and organize the complex management and logistics system that modern agriculture requires. It will be people who will work the support jobs in Alaskan communities. It's people, with a lot of dreams, doing a whole lot of hard work, that will make expanded agriculture a positive force in Alaska's economy -- How big a deal is that? We think it's a pretty big deal. We believe agriculture will become the dominant industry in interior Alaska.



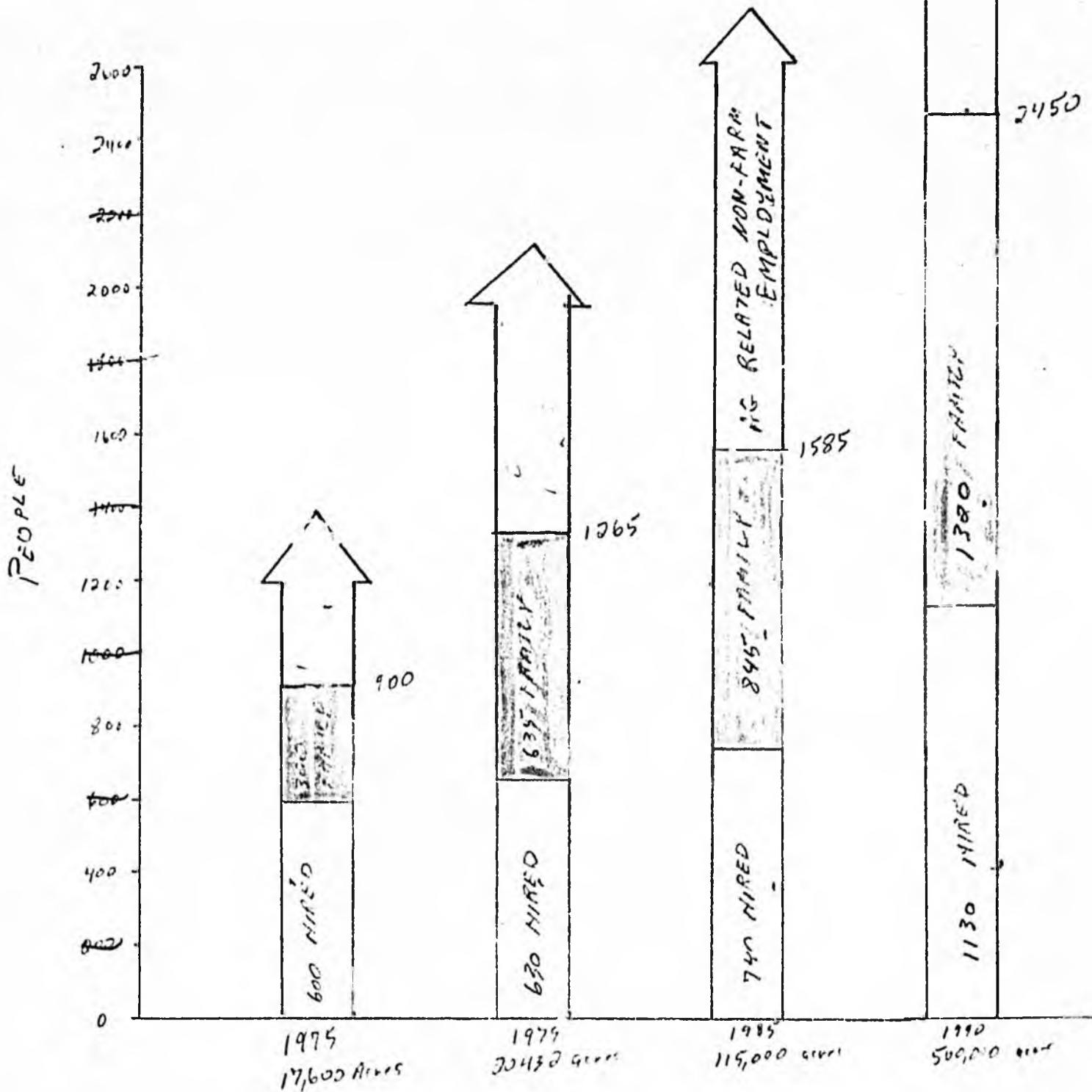
THE BEGINNINGS OF A STABLE

ECONOMIC BASE PROVIDING JOBS

AND FOOD FOR ALASKANS

BY ALASKANS

ACTUAL AND PROJECTED JOBS
DIRECTLY RESULTING FROM
AGRICULTURAL DEVELOPMENT IN ALASKA



Employment figures for 1975 and 1979 obtained from USDA Statistical Reporting Service

DELTA AGRICULTURAL PROJECT

In August, 1978, a lottery was held to distribute nearly 60,000 acres of land for agricultural production near Delta Junction.

The land was platted in 22 parcels averaging 2,850 acres each. Studies conducted by the University of Alaska determined that these sizes were necessary to provide the economies of scale necessary for small grain production in a semi-arid climate such as found in the interior region of Alaska.

Clearing of the land began during the first winter following the lottery.

The progress made during the two years succeeding the lottery has been phenomenal. The actual work that has been accomplished totals nearly 60 percent of completion. Vegetation on approximately 55,000 acres has been knocked down and has been piled into berm rows on 35,000 of these acres. Crops were planted in 1980 on about 7,600 project acres and 3,000 acres on other lands. It is expected that 1981 will show a significant increase.

Coop.

In 1979, 1.3 million dollars were loaned to the Alaska Farmers Cooperative, Inc., for the purchase and construction of a grain elevator. During 1980, an additional \$300,000 was used to expand their grain storage and handling capabilities. They now have secure storage for over 12,000 tons of grain.

It has become apparent, however, that an additional facility must be added in the very near future. This elevator likely will be in a location separate from the existing facilities and will receive grain from the eastern portion of the Delta Agricultural Project (Delta I), and also production from the newly planned Delta Expansion Project, (Delta II). It is expected that construction will be started in 1981.

Grain harvested in 1980 totaled approximately 7,800 tons from the Delta Area. Due to severe weather conditions and predator (buffalo) damage, however, field losses ranged as high as 50 percent. Despite these problems and the fact that late seeding resulted in some acreage being abandoned, the total acreage planted averaged over 30 bushels per acre. Several operators, on the other hand, averaged greater than 75 bushels per acre.

Since 1980 was the first year of any significantly large acreage planted, it served as an educational period. Much was learned from this season and this knowledge will be incorporated into farming plans for succeeding years. We have the technology to overcome the problems encountered in this year's harvest.



With the opening of new agricultural lands in Delta Junction, the private business sector has stepped in to supply farmers with needed equipment, parts, and service. There are now three equipment dealers operating in the area. They represent the three major manufacturers of agricultural equipment in the U.S. The financial commitments of the dealers are indicative of the faith they have in the potential for agricultural development in interior Alaska.

DELTA EXPANSION PROJECT (DELTA II)

A land sale by lottery is prepared for the expansion September 1, 1981. Survey work is now underway to establish exact acreages, tract sizes, and layouts. The individual tract size will be 1,800 to 2,700 acres.

The project will encompass some 55,000 acres. Approximately 45,000 acres are located on the north and east boundaries of the existing Delta I project (Delta East). An additional 10,000 acres are west of Delta Junction and located on the west bank of the Delta River (Delta West).

In order to promote usage of existing resources, all potentially commercial timber stands will be sold with the farms to be managed privately. Proven timber stands will be assessed at a reasonable market value and that value added to the price of the tract. Farm development plans will allow adequate time for alternative uses of the timber resource.

A road transportation network to service all the tracts is being designed. It will be in place when the land clearing process begins.

To provide a broader base of climatological data for the area, the Alaska Agricultural Action Council has undertaken the task of having weather recording stations installed in both Delta East and West areas. These stations will provide information that will be invaluable to the farm owners when they begin to lay out their cropping plans.

The prospective applicant, for this and other projects, will be required to submit a complete prequalification package to determine his or her eligibility for the lottery. The information to be included in this package will be proof of actual farming experience or a contract for farm management services, sufficient capital to insure adequate financing for a farm project of this scope, Alaskan residency, and a farm plan. This plan must contain a general schedule of clearing and production intentions as well as a five-year cash flow projection. This will insure that the prospective farmer knows the financial commitments required on a large scale farming operations.

To preserve natural wildlife habitats, several areas in the Delta Expansion Project have been reserved. In Delta West, a greenbelt along the river has been set aside to insure that the salmon spawning grounds will not be affected by siltation or human encroachment.

On Delta East, the head waters of the Clearwater Creek have been protected in the same manner. Also on Delta East, an historic Peregrine nesting grounds plus all lands within a one mile radius have been reserved.

NENANA AGRICULTURAL PROJECT

Stalled in past years due to uncertainties regarding land ownership by State and Federal governments and Native Corporations, the planning process has gained significant momentum towards a major agricultural development near Nenana. The first phase of the Totchaket Project, as it is called is located in two townships directly west of the City of Nenana, 60 miles south of Fairbanks.

Long considered one of the State's prime agricultural areas, this project is located adjacent to the Alaska Railroad, connecting between Fairbanks and the State's tidewater ports. In addition to the positive aspects of this transportation link, the area has the capability of expanding agriculture into the river valleys to the west.

The 1980 Legislature initiated the planning process with an appropriation to determine transportation access, feasibility of livestock and vegetable production, and analyze other developmental stages. Presently, the U.S.D.A. Soil Conservation Service has identified 175,000 acres of soils determined to have excellent potential. It is anticipated, due to access problems and the need to finalize other segments of the industry, and the actual disposal will not take place until 1982 or 1983.

POINT MACKENZIE PROJECT

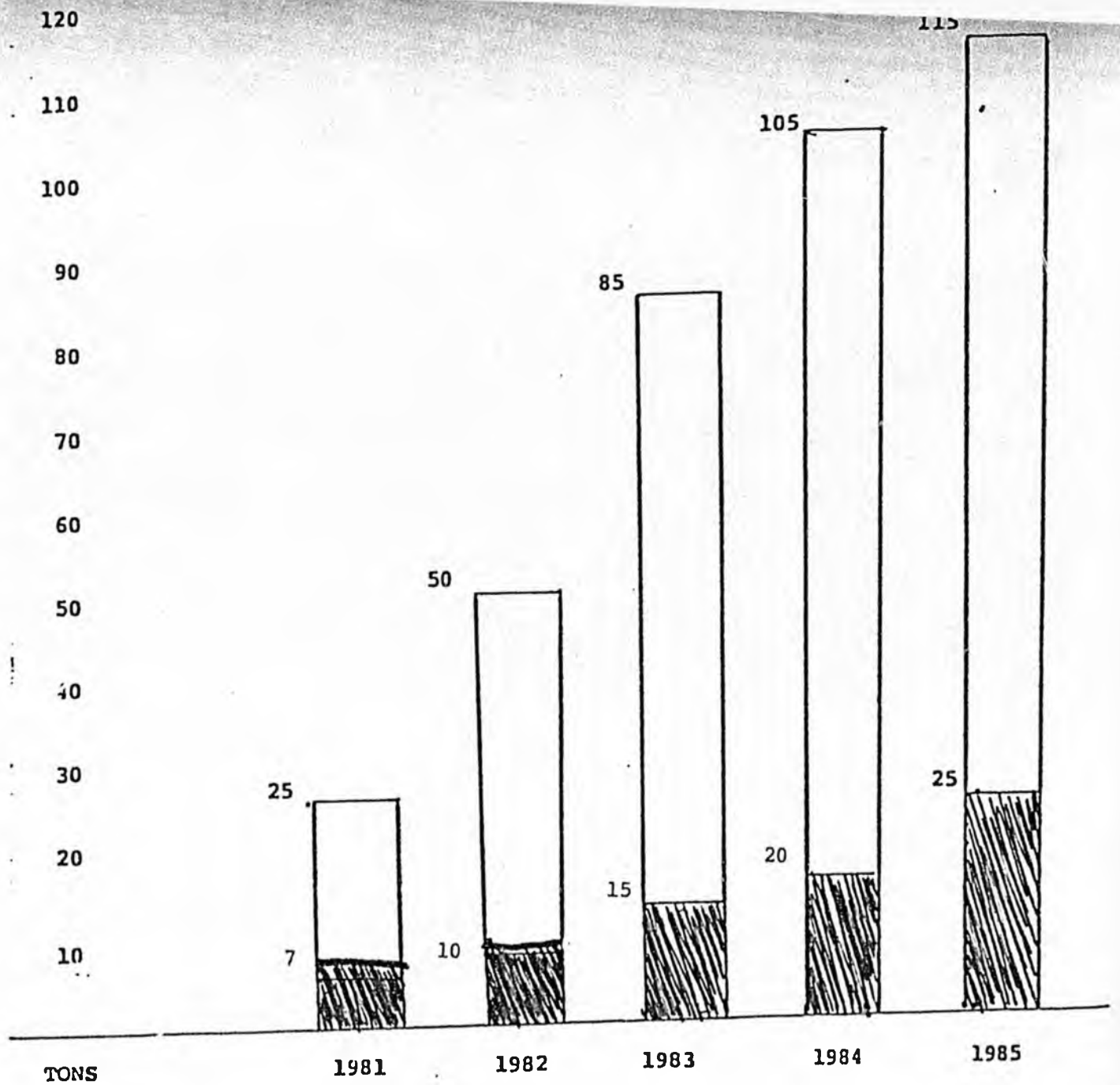
In 1980, the Alaska State Legislature appropriated funding to implement a 15,000 acre project designed mainly to revitalize the State's existing dairy industry. 30 tracts have been surveyed, roads have been built, and applications by prospective farmers have been analyzed prior to a lottery on March 6, 1981.

Prior to the initial funding, the University of Alaska Cooperative Extension Service and the Agricultural Experiment Station studied the local dairy industry. They concluded that the major reason the industry was declining was due to a lack of critical volume to support modern and efficient processing and distribution facilities in addition to many other infrastructure components. A minimum of 19 dairies, within the Point MacKenzie Project are expected to begin milk production during the next three years, and some actual production may come from the project in even the first year.



In addition to dairies, several of the new tracts are expected to concentrate on general farming and vegetable production. This industry has long been the mainstay of the Matanuska Valley, but has also suffered from scarcity of land and production to expand to more efficient marketing and processing facilities.

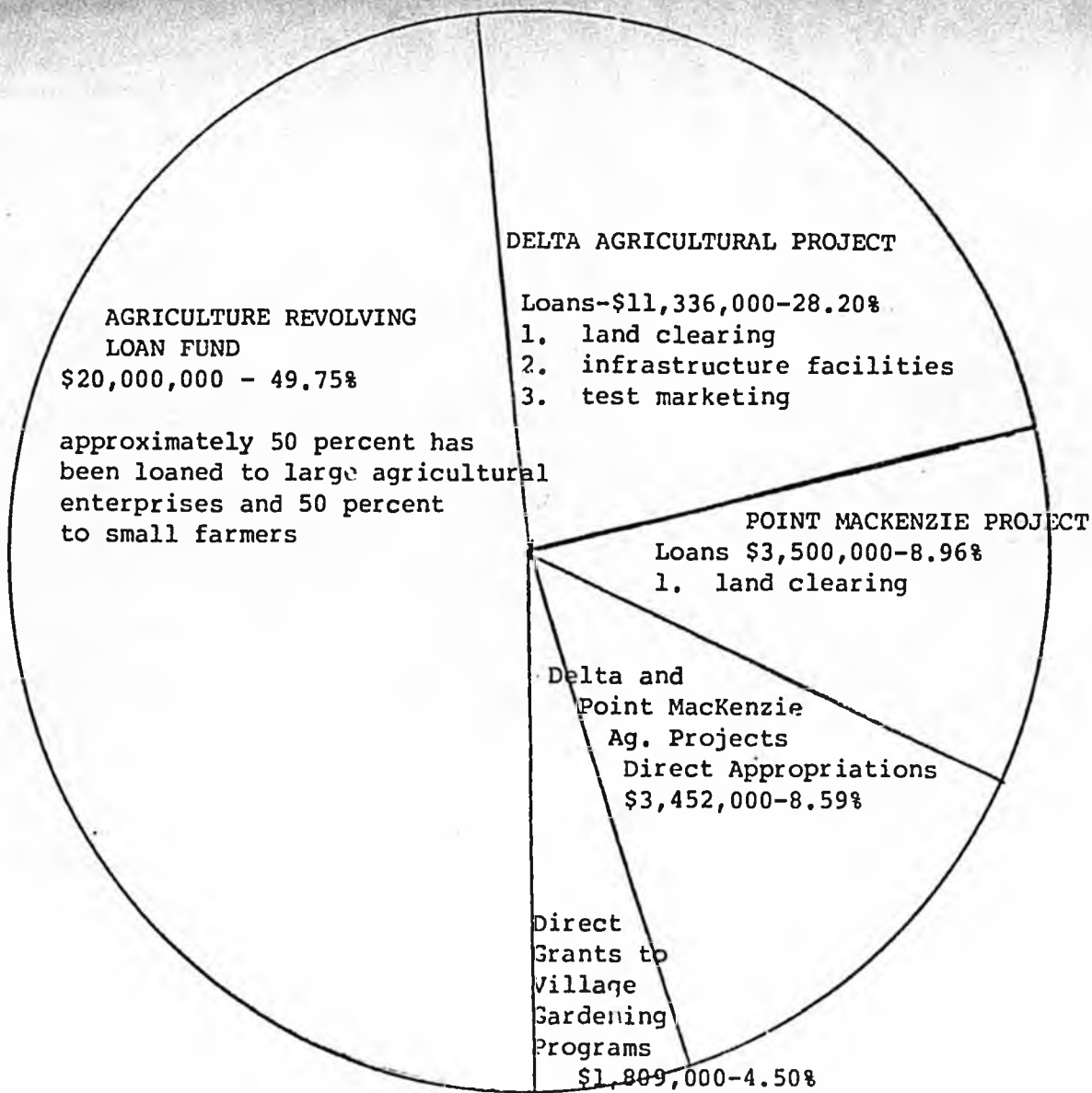
Milk and vegetables aren't the only products coming from Point MacKenzie. Dairy-beef animals will be produced to help support the very critical segment of the State's livestock industry -- a modern and efficient slaughter and processing facility.

Additional areas with agricultural potential for subsequent expansion have also been identified near the Point MacKenzie Project and will be discussed in the next report.



Production and Usage of Grain from
Delta, Delta Expansion, and Nenana Projects

 IN STATE GRAIN USAGE
 SURPLUS



Greater than 86% of agricultural appropriations, other than those grants to the village gardening program, have been in the form of loans for renewable resource development. All loans are adequately collateralized and will be repaid with interest to the state.

FINANCIAL SECTION

The primary source of development credit for Alaska's farmers continues to be the Agricultural Revolving Loan Fund (ARLF) administered by the Division of Agriculture. The fund ceiling and capitalization was increased from 7.8 million to 20 million in the last initial phase of the Delta Project, as well as for production enterprises in other new farm areas of the State. Authorization limits for processing facility was increased in 1980, allowing processing loans up to a \$2.5 million limit. Unfortunately, the increase in 1980, allowing processing loan funds available did not provide adequate monies for an expansion of the processing facilities in the state.

1980 also saw the new state-supported Commercial Fishing and Ag Bank become operational. However, given the restrictions under which commercial banks must operate and the lack of track records of the new farmers, this source has yet to make a significant contribution toward satisfying the total financing need.

If the Legislative and Administrative policy of expansion of the state's agricultural industry is to be successfully instituted the state must continue to play the lead and major role of the industry. Alternative financing sources exist, but commercial sources of credit find it difficult or impossible to offer credit to enterprises in new areas of the State, to enterprises which are programmed to be in the development phase for up to three years, or to young farmers without an Alaskan track record.

In addition to the obvious need for additional loan funds, both the Council and the State Division of Agriculture are devoting considerable effort to look at the total spectrum of agricultural financing. This vital segment of the development effort merits a most thorough examination and analysis, and will require the full cooperation of all financial institutions. As the farmers become more financially stable, they will be turning to more commercial type sources of funding such as the Commercial Fishing and Agriculture Bank and the private financial sector.

MARKETING

One of the key components of any industry is marketing. The Alaska Agricultural Action Council together with other agencies has been very involved in not only identifying potential markets but actually providing marketing for the past three years. Three specific grain markets have been identified. They are:

A. Instate Livestock Industry - This primary objective of our agricultural development is expanding faster than most people expected. Various livestock specialists and the University of Alaska have been outlining the tremendous potential for this domestic industry for many years. In summary their conclusion is that beef, and especially swine operations, are very viable but dependent on these conditions:

- Bold → {
- a. Livestock producers have a dependable supply of feed (Sufficient land in grain production)
 - a. Livestock producers can buy feed at prices competitive with feed prices in the "lower 48" states. (Feed prices in general are a function of world export prices.)
 - a. Livestock producers have access to modern and efficient slaughter, processing, and marketing facilities.

B. Export Markets - Several foreign countries have indicated an immediate desire to purchase Alaskan grain. This is a larger volume market that could potentially consume any conceivable amount of grain assuming the following conditions:

- Bold. {
1. Products are price competitive
 2. Products are quality competitive
 3. Transportation facilities (tidewater ports) are modern and efficient.

C. In-state Alcohol Industry - Based on several studies sponsored by the Division of Energy and the Alaska Agricultural Action Council, the production of ethanol and subsequent gasohol appears feasible in the future. Presently, these studies are being expanded with hopes of a pilot project within the next several years. In addition to utilizing low quality grain to produce alcohol for energy, one by product will be a high protein mash that can be used as a protein supplement in a ration for livestock.

TRANSPORTATION

Transportation is a vital part of the agricultural industry in all parts of the world; so much so that the kinds of agricultural commodities produced and where they are produced tend to be influenced by transportation costs. These costs include movement of goods into as well as out of production areas.

Closely related to transportation of agricultural goods is the availability of facilities to transfer products from one form of carrier to another. In many cases, particularly in Alaska, an area is served by only one mode of transportation. It is therefore necessary to provide an efficient means to transfer goods between carriers.

Alaska is beginning to develop the production segment of its agricultural industry. It has begun by making land available largely for the production of small grains. In the early years, a major portion of the grain produced must be exported. However, as this grain base expands, it is reasonable to assume that the livestock and poultry industry will expand as well allowing more of the grain to be used in-state. It is also possible that in the future more

vegetables will be produced in the state, at least for the fresh, in-state market. Action must be taken now concerning the manner in which these agricultural products will be moved throughout the state as well as to tidewater ports for export.

Today the transportation system in Alaska is not designed to haul and handle agricultural products. Railroads and roads, two of the principal means to transport bulk goods, service only a very small portion of the state. Yet, much of the land with agricultural potential does not lie near one or the other of these services.

Rural communities are serviced only by air or infrequent barge traffic. In many cases, this makes the cost prohibitive to transport fresh products as well as transport bulk commodities needed for production. Further, the regulatory policy of the state has not favored movement of these goods, or the upgrading and extending its present agricultural transportation system.

This latter consideration should include provisions for better links between rail, road, and waterways. Further it will be necessary to develop regional transportation system in areas remote from major agricultural production areas. In this manner, these regions will be able to rely on a supply of food products produced in Alaska. If Alaskans wish to consider expansion of the State's agricultural industry, its transportation system for agricultural production requirements and commodities must be improved.

GRAIN HANDLING

During the 1979 Legislative session, \$1,300,000 was appropriated to be used as a loan to the Alaska Farmers Cooperative, Inc. The purpose of this loan was to purchase and construct a country grain elevator to handle the feed grains produced in Delta. These monies provided drying, handling, and storage for approximately 300,000 bushels of grain. In 1980 an additional \$300,000 was used to expand the storage capacity to 500,000 bushels and add a second drying unit to this system to facilitate receiving and processing grain in a more timely manner.

This is only the first phase of a system for handling Alaskan grain. Production in 1982 from the Delta Agricultural Project alone will require three times the capacity that it now has available. In addition to storage, our export capabilities must be refined to provide the most economical method of moving grain to tide water. The two primary segments of this system will be a transfer facility to take grain trucked into Fairbanks from Delta and put it on rail for shipment to a port, and a dockside terminal to provide storage and loadout capabilities onto ocean going vessels.

This export elevator will also be a key link in Alaska's future agricultural projects also. When the Nenana project comes into production, the volume of grain that will be available for export will be substantial.

Although the export terminal is a necessity at this stage of development, the added volume of through-put resulting from Nenana production should enable the terminal facility to generate sufficient revenue to defray its operating and debt service.

FERTILIZER

In 1980, two new fertilizer blending plants were added to Alaska's agricultural infrastructure.

Alaska Mill and Feed in Anchorage constructed a blending plant to service the South-Central region. This facility has 700 tons storage capacity with an 8 hour through-put capacity of 90 tons bulk and 30 tons bagged.

In Delta Junction, the Alaska Farmers Cooperative, Inc. has built a 6,000 ton plant to serve the needs of interior Alaskan farmers. This plant has an 8 hour capacity of 400 ton bulk and 80 tons bagged.

The final necessary link in the fertilizer supply line is a bulk materials handling and transfer facility to transfer incoming products from rail to truck for distribution to the final destinations.

ALASKA SLAUGHTER FACILITIES PRESENT AND FUTURE NEEDS

In order to fill the needs of an expanding livestock industry and take advantage of economies of scale, a modern slaughter facility capable of processing 100 head of cattle and 400 head of hogs per day is necessary. Construction of this facility would provide three major benefits:

1. Provide the marketing outlet for the present and future needs of the industry.
2. Provide long range stability necessary to encourage large scale feeder operations utilizing state agriculture and fisheries feed products
3. Provide the Alaskan consumer with a quality product, delivered fresh at a competitive price.

Bold

Perhaps the most significant benefit is that the facility would provide the catalyst needed to complete the feed grain-livestock cycle. Given the reality of a strong facility, the livestock producers can make the commitment to growth confident of the future.

It should be understood, the proposed new facility would augment the existing in-state facilities, not replace them.

AGRICULTURAL RESEARCH AND EXTENSION

The Alaska Agricultural Experiment Station and the Cooperative Extension Service, University of Alaska, are important components of Alaska's agricultural system. The Experiment Station carries out research to increase the production of food and wood products in Alaska; the Extension service transfers technology resulting from this research to farmers, ranchers and land managers.

Alaska, however, has a smaller research and extension program in agriculture than any other state. The success of current agricultural projects and the development of 500,000 acres of new land for crop production by 1990 will depend on how well agricultural research and extension in Alaska can be expanded to equal the effectiveness of these programs in other states.

In the absence of effective and continuing research, Alaska's agriculture cannot compete with the production of commodities in other states where strong programs in agricultural research are provided through the public sector. Specific gaps in Alaska's facilities and staff for research at the Experiment Station include plant breeding and genetics for interior Alaska, agricultural entomology applied soil physics, plant physiology and biochemistry, soil classification and genesis, veterinary science, animal production on native rangeland, meat science, reindeer management, soil microbiology, forest management and human nutrition. Even in fully developed state Experiment Stations, agricultural scientists remain only about 8 to 10 years ahead of significant problems in plant and animal production; disease, insect and weed control; soil and water management; and changing economic and social conditions.

Much of the agricultural research and extension in Alaska will need to be done in the public sector. Researchers in the private sector rely on the Experiment Station to provide primary information for Alaskan agriculture. Investment through the public sector for agricultural research and extension will pay off in the formation of a successful and competitive agricultural industry for Alaska. Nationally, the annual rate of return on agricultural research expenditure in the public sector is on the order of 50 percent.

The following segments are recognized as vital components of the entire Alaskan agricultural development program. While it is necessary to consider these areas, it must be pointed out that they do not come under the legislative mandate of the Agricultural Action Council. We are therefore including these subjects for informational purposes

NON PROJECT FARMLANDS

During the past three years, sales of agricultural land by the State not included in major project-type disposals has occurred at a fairly rapid pace.

Since the fall of 1978, there have been 265 parcels offered for sale, totaling approximately 46,000 acres. These units range in size from 20 acres to 1,120 acres with the majority of the units within the 160-640 acre size range. Sale areas included Delta Junction, Fairbanks, Talkeetna, Copper Center, Homer, and Gustavus. Approximately 14,000 acres of these disposals in the Potlatch Ponds area near Fairbanks continue to be held from final conveyance to lottery winners by court action against the State.

The majority of the units have been disposed of via the lottery process and applicant interest has been high. The fall 1979 sales at Talkeetna and Delta Junction averaged 50 applications per parcel offered. Disposals at auction which included Tanana Loop, Four-Mile Hill and the Two Rivers sale showed considerable bidder interest and most parcels sold over minimum bid. The auction type sale is popular in areas where farming is currently going on since preference rights are allowed to local farmers to expand their present units.

The majority of the parcels are sold with some type of development schedule required. These vary in years and percent cleared from one area to the next. Development schedules are considered by local area farmers as a necessary requirement on all future sales. A number of the parcels do not have current access such as the Talkeetna and Potlatch Ponds sales. In all cases where access is not currently available, the development schedule does not begin until access occurs.

While many of the smaller size tracts are not considered economic units from a commercial agriculture standpoint, they are popular land disposal units. The small tracts allow the subsistency type resident and the part time farmer to try their efforts at agriculture in Alaska without large capital outlays. The major problem with small tracts without commercial potential and sufficient cash flow is the inability to acquire financing for farm development activities. These farmers must rely on non-farm income to pay for the farm development costs.

The estimated 25 percent of these units that are in the 200 acres size or larger may become viable farms as the marketing infrastructure is established for livestock-type activities in Alaska. The second major requirement will be the availability of farm financing, particularly for land clearing on the units with development schedules.

SUBSISTENCE

As stated, there are many people who are farming small acreages in Alaska. They are farming for various reasons; subsistence family income or just for pleasure. Whatever the reason, all contribute to the food supply for Alaskans. Yet, the State has no coherent policy which supports their efforts.

This lack of policy is particularly evident in the native communities. In the past several years, several millions of dollars have been spent in grant money to assist these communities in producing some of their own food products. This alone is not enough.

What is needed is assistance in producing the food products, assistance in using the products, and as efforts progress, assistance in marketing the products to those who are not involved in agricultural production but appreciate a fresh product. Evidence is very high that these services are desired.

Food production efforts have begun in the Galena, Kobuk and lower Yukon area with village gardens, on the Seward peninsula with reindeer, and in the Kuskokwim River valley where a small commercial truck farm is operating. A coherent planning effort including loan programs, applied research and education with almost immediate application of the plan must be begun now to aid regional food producers.

REINDEER INDUSTRY

Reindeer herding is a major segment of Alaska's livestock industry. For 1980 it is estimated that 25,000 reindeer in 18 herds are roaming grazing lands in Alaska. The majority of herds are on the Seward and Baldwin Peninsulas. Additional herds are located on Nunivak, St. Lawrence, and Hagemester Islands. A final herd, jointly owned by the St. George Tanaq Corporation and Tanadqusix Corporation of St. Paul Island, alone, approximately 14.5 million acres are under permit for reindeer grazing.

Through most of the history of reindeer in Alaska, herding has been largely a part of the subsistence economy. In the past few years, however, the industry has started to move into the modern business world. Increases in prices for reindeer products such as meat and velvet antler have given the industry renewed potential. Current reindeer herd owners are attempting to expand their herds while interest is being expressed by other Natives in starting new herds. At the very least, it is currently estimated that the Seward Peninsula could support 45,000 reindeer. This number is sure to be increased as the results of the current SCS range survey of the Seward Peninsula are translated into range management plans. It

has been estimated that Alaska has 100,000,000 acres of rangelands that are currently, or have in the past, supported domestic reindeer grazing. These lands have been estimated as capable of supporting 400,000 reindeer.

It is probably unrealistic to believe that the Alaska reindeer industry has real potential to expand to the above numbers. Even in the absence of economic consideration, land use conflicts or other difficulties would prevent this from occurring. However, it is not unrealistic to believe that the industry has the potential to expand significantly in areas where it now exists, as well as in specific areas where it formerly existed, the lower Koskokwim area is an example.

What would it take for the reindeer industry to expand? As with all livestock agriculture, it will take, above all, herd owners and herders versed in modern animal husbandry and business management. A start is being made through research and educational programs of the University of Alaska's Agricultural Experiment Station, Institute of Arctic Biology, and Cooperative Extension Service. Adequate financing will be required as herd owners attempt to expand the improved facilities. Finally, reindeer herding faces the same problem as the rest of Alaska's agriculture when it tries to expand. The lack of adequate marketing infrastructure will make it difficult to market large quantities of reindeer products. As the reindeer industry expands, additional infrastructures will be required if the industry is to reach its full potential.

STATUS OF ALASKA'S RANGELANDS IN 1980

Efficient use of Alaska's rangelands is the key factor to the developments of a successful Alaskan livestock industry. Without this low cost feed base the Alaskan livestock industry would have not been in existence today.

It is apparent that to further develop the livestock industry additional grazing lands must be identified and made available, and existing grazing lands must be utilized. However, the ability to identify and utilize grazing lands has been restricted by numerous factors. Additional grazing lands to a variety of landlords thereby making land acquisition complicated. Utilization of existing grazing lands are plagued by lack of market structure and facilities poor accessibility and the cost of winter feed.

Solutions to these factors limiting growth of the livestock industry must be identified and prioritized. It is obvious however, that a successful livestock industry is dependent on additional grazing lands. A concerted effort to collect range resource data and research the effect of livestock production in other resource values must occur. Once it is proven that grazing is an efficient use of Alaska's resources instead of an environmentally damaging land use activity additional grazing lands will most likely become available.



City of Nenana

State of Alaska

January 2, 1981

Dear Sir or Madam:

Thank you for your interest in the City's proposed clearing and wood fiber harvest program in the Nenana-Totchaket Agricultural Development project.

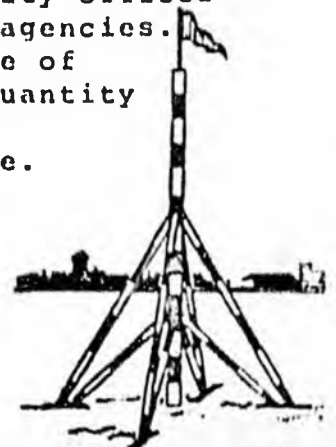
As you may know, concern has been expressed around Alaska about the clearing methods which have been used to develop agricultural lands in the State. Our program, which has been developed after extensive discussions with representatives of industry and government and review of methods used elsewhere will, we believe, correct some of the major clearing problems such as fire and resource waste.

More importantly, by encouraging private initiative and private profit in the program from the beginning we hope to foster the development of a new industrial base for the Interior in wood fiber harvest and processing as a spin off to our primary interest in agriculture.

The materials in the package were assembled in order to provide current background information which you will need in order to decide whether or not to prepare a statement of interest. The materials include:

1. A copy of our legal ad.
2. An area map.
3. A draft REQUEST FOR PROPOSALS.
4. A paper prepared by Mead Treadwell for the Alaska State Senate titled, "Use of Trees to be Cleared From Alaska Agricultural Lands to Develop a New Wood Fiber Industry: A Proposal for State Policy."

Additional information is also available in the City offices and in the offices of participating State and Federal agencies. Official estimates are also being compiled by the State of Alaska Department of Natural Resources on the actual quantity of wood fiber within the two townships and you will be receiving these estimates as soon as they are available.

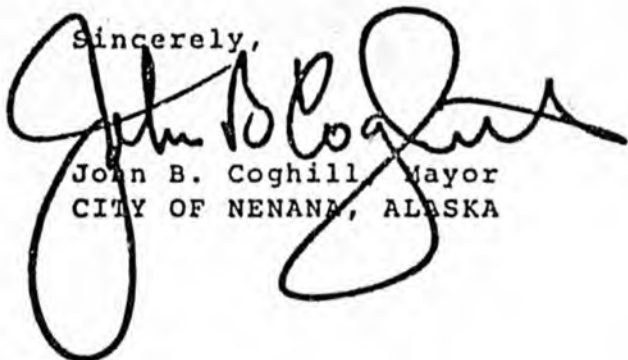


We would appreciate it if you would carefully review the DRAFT REQUEST FOR PROPOSALS. The Draft Request represents proposed performance standards which the City believes are necessary to achieve the program goals and objectives. When it is in final form the Request for Proposals will be the basis for formal bidding and final negotiations with the company or companies which respond to the request.

For further information please call either myself or Steve Bainbridge at (907) 832-5441 in Nenana or Jerry Smetzer, Development Representative for the City of Nenana, at (907) 452-6500 in Fairbanks.

Thank you again. I look forward to hearing from you.

Sincerely,

A large, stylized handwritten signature in black ink, appearing to read "John B. Coghill". The signature is written over the typed name and title.

John B. Coghill, Mayor
CITY OF NENANA, ALASKA

LEGAL AD

NOTICE OF REQUEST FOR STATEMENTS OF INTEREST IN A TIMBER HARVEST AND CLEARING PROJECT WEST OF NENANA, ALASKA.

The City of Nenana, Alaska, in cooperation with the State of Alaska, department of Natural Resources is seeking statements of interest from private companies involved with harvesting, processing and marketing wood fiber resources to conduct a 1 year program of clearing, processing grading, and marketing woodfiber resources on two townships comprising 46,080 acres west of Nenana, Alaska. The two townships--described as Township 4South, Rances 10 and 11 West, Fairbanks, Meridian--have been identified by the City of Nenana for Phase I of a long range agricultural development program in a region more commonly known as Totchaket. The region generally contains Class II and Class III agricultural soils under extensive forest cover, and the company selected to conduct the program will be required to leave the cleared areas in a condition suitable for cultivation and planting during 1982.

This is a notice only. Firms planning to respond to this request for statements will need to request a package of materials which contains background information and more fully describe the project goals, objectives, and proposed performance requirements.

Additional materials may be requested either by telephone or by writing to the following people:

1. Mayor John B. Coghill or
Steven Bainbridge--City Engineer
City of Nenana
Box 00070
Nenana, Alaska 99760 Phone: (902) 832-5441

2. Jerry Smetzer,
Development Representative
Northern Development Associates
SR 20779
Fairbanks, Alaska 99701 Phone: (907) 542-6500
(24 hr message Phone)

Deadline for receipt of statements is 2:00P.M. Monday, February 2, 1981 Interested firms are encourage to request project materials as soon as possible.

THE CITY OF NENANA IS AN EQUAL OPPORTUNITY EMPLOYER,

T2S3

TO PHASE III





T3S

BLACK
GEAR LAKE

T4S



KEY

-  PHASE I
-  PHASE II
-  PHASE I ROADS
-  PHASE II ROADS

CLASS 2 SOIL

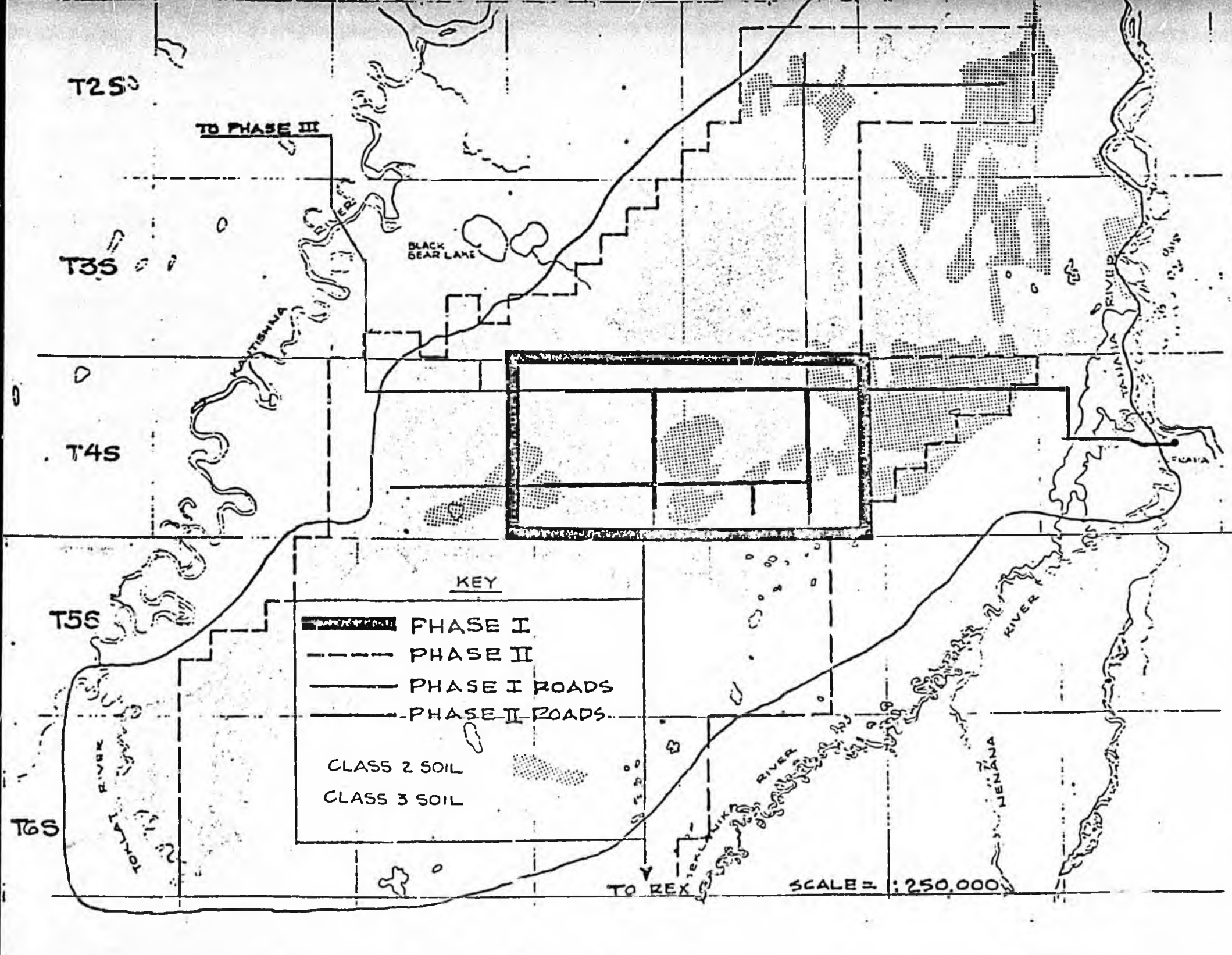
CLASS 3 SOIL

T5S

T6S

TO REX

SCALE = 1:250,000



DRAFT REQUEST FOR PROPOSALS

ISSUED BY THE CITY OF NENANA, ALASKA
January 2, 1981

The City of Nenana, Alaska in cooperation with the State of Alaska, Department of Natural Resources is seeking proposals from private companies involved with clearing, harvesting, processing, and marketing wood fiber resources to conduct a one year program designed to accomplish the program goal described below.

The City of Nenana and the Agricultural Action Council of the State of Alaska have determined that this goal is essential to the completion of Phase I of a 20 year program of Agricultural development in an undeveloped region west of Nenana, Alaska. The region comprises a gross area in excess of 350,000 acres under extensive forest cover of which 175,000 acres have been classified as Class II and Class III agricultural soils by the Soil Conservation Service. This region is more commonly known as Totchaket.

The City is the prime sponsor of the Totchaket Agricultural Project and will be, with the Fairbanks office of the Department of Natural Resources, the primary point of contact for all companies submitting proposals.

PROGRAM GOAL

To clear, harvest, and market wood fiber resources from 46,080 acres of forested land west of Nenana, Alaska; and to prepare the cleared lands for planting and cultivation during 1982.

PROGRAM OBJECTIVES

1. Through the use of clear cutting, shear cutting, de-stumping, root plowing and other appropriate methods the harvest of all wood fiber resources within two contiguous townships comprising 46,080 acres described legally as follows: Township 4 South; Ranges 10 and 11 West, Fairbanks Meridian;
2. The Processing, grading, marketing, and sale of wood fiber resources such as wood chips and other products for which a market exists;
3. The stockpiling and/or windrowing, as appropriate to minimize fire risks, of all remaining wood fiber resources for future use as hog fuel, energy and/or power production, or other recommended applications toward the eventual use of the cleared area for agricultural production;

DRAFT REQUEST FOR PROPOSALS

Page 2

PROGRAM OBJECTIVES (Cont.)

4. The general contouring and preparation of the cleared land for plowing and further preparation for planting scheduled to begin during spring of 1982, according to clearing standards established by the State of Alaska.

PROPOSAL REQUIREMENTS

Companies responding to this request for proposals will need to demonstrate their familiarity with and ability to use appropriate technology, and standard practices within the industry and within applicable regulatory procedures to accomplish the following tasks in advance of the clearing activity:

1. Development, if necessary, of overland access along a route designated by the City of Nenana to the two townships, and within the two townships to proposed clearing areas;
2. Based on micro-meteorological data for the designated townships, design, survey and delineation of clearing areas, and proposed clearing schedules by area, subject to approval by the City and the Department of Natural Resources;
3. Survey, appraisal and preparation of preliminary estimates by grade and quantity of the market value of all wood fiber resources based on field surveys of wood quantity conducted by the City, the Department of Natural Resources or their representatives;
4. A proposed method of transporting marketable resources to market;
5. The development of a method by which the City of Nenana and other interested parties will be able to monitor program progress; to assess its cost effectiveness for clearing beyond the original two townships; and to evaluate its value in stimulating the long term economic development of interior Alaska;
6. The method required under 5. above shall include either a test site selected within the two townships, or a demonstration of the program methodology under field conditions prior to April 1, 1981.

All proposals shall include a design for the general contouring, stockpiling, and/or windrowing of non-marketable resources in a manner which, after thorough analysis and evaluation of the constraints imposed by the macro and micro environment affecting Totchaket will yield the greatest agricultural productivity over the long term in the cleared areas.

DRAFT REQUEST FOR PROPOSALS

Page 3

PROGRAM FINANCING

The City of Nenana expects to finance the cost of this program through the sale or utilization of marketable wood fiber resources. Firms responding to this request for proposals who believe themselves to be willing and able to meet the performance requirements within the time constraints imposed by the Program Goal should include an outline of contract consideration for review by the City and the Department of Natural Resources which are essential to a cost and time effective program.

The City with the Department of Natural Resources are reviewing current Statutes and regulatory procedures bearing on the disposal of the State of Alaska's timber and wood fiber resources and the clearing and development of land for agricultural purposes in order to assure that a proper negotiated contract can be drawn with that qualified firm which submits a proposal which, in competition with other firms, is most responsive to the Program Goals and Objectives, and which provides the most assurance of program completion within the time available.

PROPOSAL DEADLINES AND EVALUATION PROCEDURES

Procedures for soliciting formal proposals from firms interested in conducting the wood fiber harvest and clearing program; procedures for evaluating and selecting top ranked bidders for field evaluation; and procedures for final selection and contract negotiation are being developed by the City of Nenana in consultation with the Department of Natural Resources.

Names, addresses, and telephone numbers of principal officers of firms responding to the Request for Statements of Interest will be kept on a permanent mailing list by the City of Nenana and the Fairbanks Office of the Department of Natural Resources. Firms on the permanent mailing list will be invited by letter to review and provide comment on the procedures when they are in draft form.

The City of Nenana believes that in order to substantially complete the program by May 1, 1982 a final selection of a firm to conduct the wood fiber harvest and clearing program must occur shortly after the field test of the program methodology prior to April 1, 1981, with final contract negotiations to be completed prior to April 30, 1981.

ADDITIONAL INFORMATION

The City of Nenana, The Agricultural Action Council, The Department of Natural Resources, and several other agencies of the State and Federal Government are conducting and have completed several studies of the Totchaket Region. The City has established a library and data resource and access system for the purpose of assuring that existing information is readily available to interested parties. A bibliography of current reports, studies in progress and participating state and federal officials will be provided to firms whose names appear on the permanent filing list.

DRAFT REQUEST FOR PROPOSALS

Page 4

Persons seeking more information about the program should contact one of the following people:

1. John B. Coghill, Mayor or
Steve Bainbridge, Engineering Consultant
City of Nenana
Box 177
Nenana, Alaska 99760
Phone: (907) 832-5441

2. Jerry Smetzer, Development Representative
SR Box 20779
Fairbanks, Alaska 99701
24 hour message phone: (907) 452-6500

THE CITY OF NENANA IS AN EQUAL OPPORTUNITY EMPLOYER

Use of trees to be cleared from Alaska
agricultural lands to develop a new wood-
fiber industry: a proposal for state
policy.

Mead Treadwell
Comex Alaska
December 20, 1980

1131 West Fifth Avenue
Anchorage, AK 99501
907/276-7763
617/498-5317

Presented to the Alaska
State Senate under work
conducted in conjunction
with Sen. Mike Colletta,
Majority Leader

Abstract:

Alaska, which plans to dedicate up to two million acres to agriculture during the rest of this century, should not continue to allow cleared trees to rot as waste. This paper proposes whole-tree, in-the-field chipping as an alternative system of land clearing for future agricultural projects. Wood chips can help cover the cost of clearing when sold to supplement coal in utility boilers. New systems have been developed by the U.S. Forest Service to segregate bark from clean chips. Segregating the chips before burning them as fuel creates higher profits since the clean chips can be sold for pulp on the world market. Finally, given the quantity of chips available with Interior Alaska's agriculture potential, there is little more government's agricultural planners may need to do to create an interior Alaska structural particleboard industry than to simply guarantee a long-term supply of the timber resource. A land clearing process which now costs the state and its farmers more than \$200 an acre could be not only self-liquidating, it could also provide new permanent jobs and lower construction costs.

I. The present clearing process.

Land at Delta Junction, the state's most recent agricultural project, has been cleared with primary regard to quickly allowing grain planting on large parcels of land. For any project like Delta, virtually simultaneous clearing throughout the area is required. To get started, only immediate large-scale production can economically support the roads, equipment sales outlets, grain processing and marketing facilities modern agriculture needs.

A good team of two bulldozers can clear two acres an hour. They start by dragging a heavy chain between them, both ways through a stand of trees. The uprooted stumps, as well as trunks, roots, soil and moss are then pushed into berm rows at an edge of the field.

To cover costs of clearing Delta, the state has loaned farmers \$165 per acre for 50,000 acres leveled in the past two years.

Haste, however, has made waste. Salvage, left to the individual farmer, is haphazard: some of the bigger trees are cut down ahead of the bulldozers and used in portable sawmills. A small portion of the berm piles are sources for hand-cut firewood. But huge amounts of biomass remain, posing a fire hazard.

Seven uncontrolled forest fires within the project have cost the state more than \$5 million to fight during the past two years. It is not known to what extent these fires could have been limited had the berm rows been removed.

A \$35,000 study conducted in 1979 by Battelle Laboratories for the State Division of Energy concluded that as a first option, the remaining Delta biomass could economically be chipped and used as a supplement to coal in existing electrical boilers in the Fairbanks area. Other options requiring greater capital investment included using the wood for small-scale power generation or for methanol or ammonia production. No action has been taken as a result of this study, which received but limited circulation.

The Battelle Study also recommended that an \$800,000 Mobile Harvester and Chip Forwarder be considered for future clearing. Built by Nicholson Manufacturing, the machines can cut and chip standing timber at one acre per hour. The system is expected to provide chips at \$4 to \$12 a ton from standing timber, reducing the clearing cost by about \$100 an acre. Stump removal costs are excluded from these savings. The state Agricultural Action Council is considering asking the legislature to purchase the machine for the Pt. MacKenzie Project, since conventional clearing costs there have risen to an estimated \$185-200 an acre. Farmers will be loaned \$200-240 per acre for land preparation.

before or after chipping, depending on the end use of the product. Capital cost of this system, which includes a feller-buncher, two grapple-skidders, a delimeter/debarker, a front end loader and two chipvans is estimated at \$850,000.

III. Economic constraints of a change.

Better use of agricultural land timber will require tremendous investment and a certain risk on the part of private industry. New harvesting equipment to clear land without destroying the value of the trees will cost approximately \$1 million for development with the projected size of Tokchaket. A 20 ton-per-hour Lark segregator system is estimated to cost \$200,000 with operating costs of less than one dollar per input ton. Going the full step, with construction of a structural particleboard plant, is estimated to cost between \$12 and \$20 million.

Payback, on the other hand, remains an open question. Markets, small now, can be expected to grow for instate fiberboard. Construction at Susitna, for instance, will have a significant impact on the demand for plywood or a substitute. Demand already exists for wood-chips as fuel and pulp.

At present, the largest constraint on the development of a wood fiber industry is not money, it is supply. Government, as a prudent landowner, must recognize that if it wants to see development of a new industry concurrent with agriculture it must make a commitment large enough to ensure financing of plant and equipment. Such a guarantee is no different from the sales made to stimulate instate processing of petroleum resources. As well, a commitment now would help ensure the continued expansion of agriculture in years to come.

As a next step for government, it is important to balance the high costs to the state of clearing and firefighting attributable in part to the current technique of felling trees with whatever aid might be considered for a new harvest and processing method. Industrial development using a new process entails certain risks; government may decide to share in those risks for the greater good.

Industry's role must be to seek out the opportunities for wood product development with agricultural clearing. There will come a time when huge parcels of timber will only be available with large regeneration costs; the presence of agriculture is in effect a subsidy for this new industry.

IV. Conclusion

The references cited at the end of this paper are meant to be consulted. Compiled predominantly at a cost to the taxpayers, they contain the economic facts which back up the ideas contained here. Hardly another study is needed. We already know the value to utilities of burning

II. The Tokchaket Proposal.

The land at Tokchaket, the state's third major agricultural project, will be cleared near Nenana, beginning late in 1981. The project planners intend to make land clearing costs as self-liquidating as possible. Furthermore, the City of Nenana is seeking the development of a diversified wood products industry to use the wood cleared from the Tokchaket lands.

Depending upon the amount of capital invested, three graduated steps are possible to add value to a supply of wood which would otherwise be wasted:

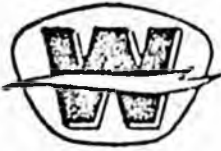
1. Wood chips for fuel in electric boilers. Municipal and military boilers in both the Fairbanks and Anchorage areas have the ability to supplement their use of coal with wood chips with only minor additions to their loading capacity.

2. Pulp chips for export from the State. Currently, pulp chips exported from Alaska are produced after debarking larger logs brought to a stationary mill. Newly developed processes for removing bark from the clean whole-tree chips have been projected to pay for themselves in fuel sales alone. Thus a chip fuel operation which adds a "sifter" can obtain clean, marketable pulp grade chips.

3. Use of clean wood fiber for particleboard manufacture. A world-scale structural particleboard plant requires an approximate annual green wood supply of 100,000 tons. Using a conservative estimate of ten tons per cleared acre, only 10,000 acres per year of trees would be needed to support a particleboard plant. Out-of-state markets, given that Alaska's current use of structural boards and plywood is much less than the output of an optimally sized plant, are yet undetermined.

The planners of the Tokchaket agricultural project will seek proposals from companies interested in clearing and making use of the timber on two contiguous townships comprising 46,080 acres. These two townships are the first stage of an agricultural development which will eventually cover 175,000 acres or more.

A first step toward saving the trees from waste is a decision on the harvesting method. Besides the two machine systems mentioned above, a more traditional means of whole-tree chipping is to fell trees with a feller-buncher and "skid" them to a stationary chipper. Debarking can occur



WASHINGTON IRON WORKS

DIVISION of FORMAC INTERNATIONAL, INC.

1500 Sixth Ave. South • Seattle, Wa. 98134 • Phone (206) 623-1292 • Cable Address "FRINK"

August 22, 1980

Mr. Mead Treadwell
1131 West 5th Avenue
Anchorage, Alaska 99501

Dear Mr. Treadwell:

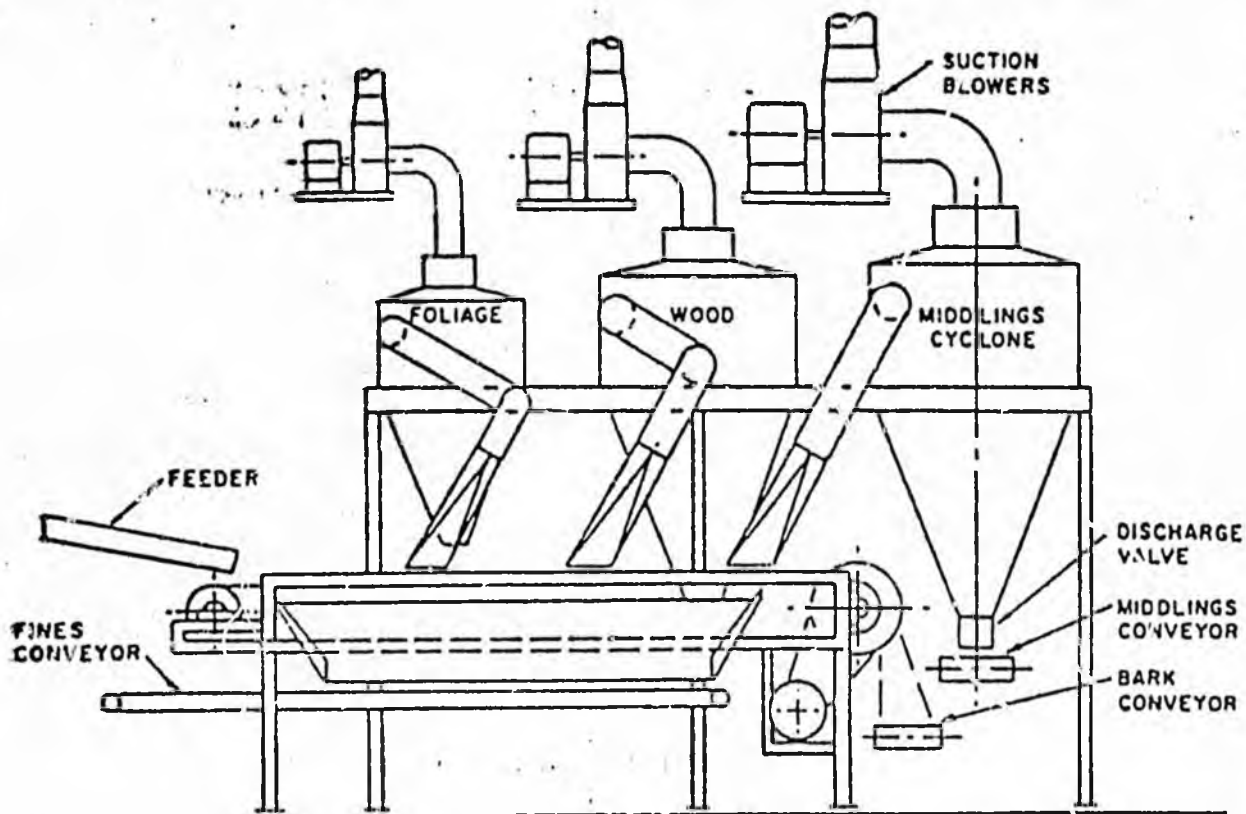
I enjoyed our conversation concerning ways to make use of the wood resource becoming available as a result of Alaska's agricultural expansion program. To slash and burn two million acres of spruce, aspen and birch would certainly be a terrible waste. The manufacture of one or more of the reconstituted wood panel products is one of the more promising approaches for making use of this valuable resource.

Waferboard or Oriented Strand Boards (OSB) would make excellent use of the aspen and birch and could use some of the spruce. These boards could replace some of the 30 million square feet of plywood now imported into Alaska.

There should also be a market for these boards along the west coast of the United States and, perhaps, elsewhere around the Pacific Rim. I'm a bit skeptical of the ability of Alaskan produced board to compete in these markets because of the high labor and material costs in Alaska. You may have a special situation, however, where normal market economics do not apply.

Fiberboard is another reconstituted wood panel product that could be produced. This category of products includes the hardboards ("Masonite"), hardboard exterior siding, and medium density fiberboard (MDF). Some of your production of these boards could probably be used locally, but most of it would have to be exported from Alaska. There is a growing market for these boards all around the Pacific Rim. The Alaskan product in these categories would also suffer from high costs just as would the structural boards

The optimum plant size for Alaska is still open to a lot of questions. We spoke of small plants, but I wonder if a large plant, centrally located at a water, rail and road junction would not turn out to be the most efficient approach. This plant would operate year round, would be large enough to efficiently use the latest technology and would benefit from the usual economies of size, i.e., efficient use of manpower, energy and capital. The biggest unanswered question is one of raw material availability and cost delivered at the plant site. Can you assure an



Multiple-stage vacuum airlift segregator. Developed by U.S. Forest Service. (Sturos-1)

wood chips. We already know that a system to segregate bark from whole-tree chips is feasible technically and profitable economically. We already know the costs of building a particleboard plant in Anchorage or Fairbanks and the potential markets to take up our capacity. The questions to ask now center on commitment and specifics: how many trees do we have, how do we want to harvest them, who do we want to be involved, how are we going to pay for it? Time, as well as wood, is a wastin'.

August 22, 1980

annual supply of say 100,000 tons of green wood (150 TPD plant) at a reasonable cost, for a reasonably long plant lifespan (say 10 years)?

I spoke of a 75 TPD plant size as about the smallest we would get involved with. This is true when we are dealing in remote, foreign corners of the world, but Alaska doesn't fall in this category. Your plant site is not really that remote from Seattle, your people and customs are ours, and our commercial practices are identical. I would not want to shut off our involvement just because the optimum plant size turns out to be less than 75 TPD. (I don't think it will).

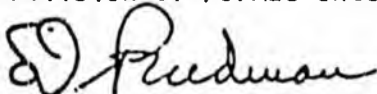
Without giving any serious thought to plant costs, I can tell you that the capital equipment and process engineering for a 75 TPD MDF plant will cost about \$6,500,000.00. That for a 150 TPD plant will run about \$11,000,000.00. The complete, installed cost of these plants normally would be about twice the cost of the equipment and engineering. I suspect building, utility, installation and erection costs will be higher than "normal" in Alaska, so this 2x multiplier is probably on the low side. For ballpark estimating, you can use the same approximate costs for structural board plants.

I've enclosed our normal selection of sales literature, reprints, etc., which will give you a good picture of Washington Iron Works and what we do. We also work closely with Columbia Engineering International, Ltd., in Vancouver, B.C., who are one of the foremost engineering firms in the reconstituted wood panel field. With them, we offer the full range of services in this field, from early engineering and feasibility studies, through plant and process design to and including the direct manufacture and supply of the major process equipment. Our forte is in fiberboard but we have supplied a number of waferboard plants and are well-qualified in this field also.

Mead, you are involved on a very fascinating program that has elements reaching to all levels of community and industrial planning, involving a wide range of interests and skills. I hope we can be a party in this. Please let me know if we can help in any way.

Sincerely yours,

WASHINGTON IRON WORKS
Division of Formac International, Inc.



David Rudman
General Manager
Miller Hoffft Division

Enclosures
cc: J. Chryst
DR/jvn

REFERENCES

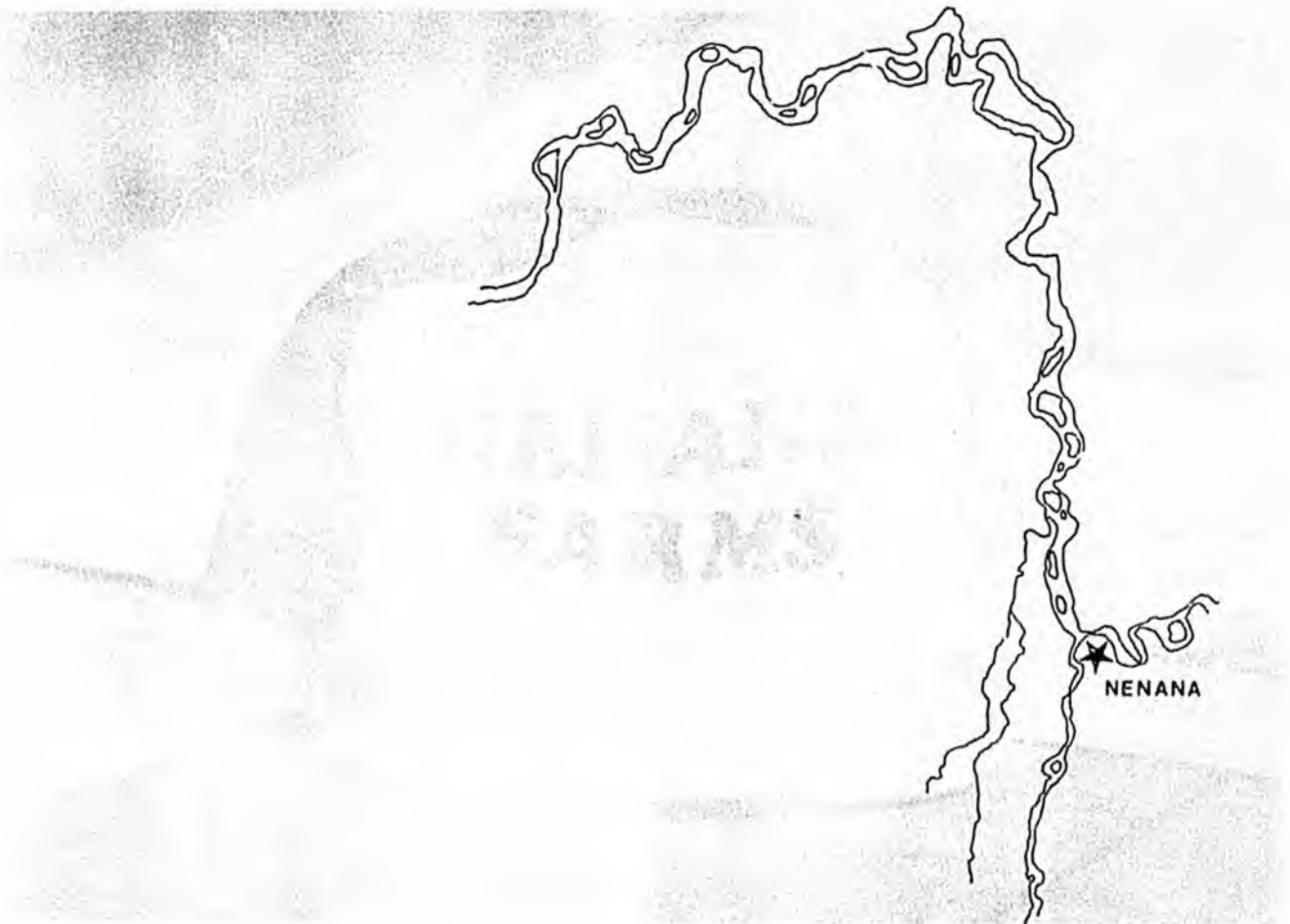
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NOTE REGARDING THE FOLLOWING FRAME ON MICROFILM:

COMPLETE DOCUMENT IS AVAILABLE IN ORIGINAL FILES
IN ALASKA STATE ARCHIVES. TITLE PAGE ONLY HAS
BEEN FILMED.

NENANA — TOTCHAKET

UNLOCKING THE AGRICULTURAL POTENTIAL
OF WESTERN ALASKA



A Report on A Seminar and Workshop on
Agricultural Development.

Sponsored by THE CITY OF NENANA

December 20, 1980

JANUARY, 1981

PRELIMINARY REPORT

OF

WORK IN PROGRESS

CITY OF NENANA PROJECT No. AG-103

RESEARCH, SURVEY AND RECOMMEND
A COURSE OF ACTION TO ESTABLISH
AN ECONOMICALLY VIABLE VEGETABLE
INDUSTRY PROJECT

SUBMITTED BY

LITTLE GOLDSTREAM ASSOCIATES
3031 RIVERWOOD DRIVE
JUNEAU, ALASKA 99801

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INTRODUCTION

This is a summary of work in progress. All computations are based on figures from prior reports. None of the numbers herein are to be considered final. Market volumes and acreage estimates should be considered only as establishing a magnitude of consideration. Any conclusions jumped to are those of the leaper and not of the author. New data is being developed that will undoubtedly change these numbers, although probably not by much. If any of the contemplated processing systems proves non-viable, the numbers could change considerably.

CONSUMPTION DATA

Dr. Wayne Burton is presently preparing a new market analysis. The only previous consumption figures are in his work Alaska's Agriculture, 1971, published by the Institute of Social, Economic and Government Research, and A. Dale Saunders' report "A Vegetable Freezing Industry for Alaska" also done in 1971. Dr. Burton's work was based on national average statistics for fresh and frozen vegetables using population trends to provide projections to 1980. His update in progress at this time will include canned vegetables as well as fresh and frozen. This work will provide an interesting comparison to his previous projections.

Dale Saunders and Charles Marsh did a fairly thorough market survey of the railbelt and concluded that Alaskan's consume considerably more frozen vegetables than their counterparts in the other 49 states. Depending on the specific vegetable, up to three times more frozen vegetables are purchased by the Alaskan consumer. The overall average frozen vegetable consumption in Alaska was 45 percent higher than the national average.

At the present time no data is available on canned vegetable consumption. Nationwide, the average citizen consumes approximately four times as many canned vegetables as frozen vegetables. Whether this holds true in Alaska remains to be seen. In later calculations in

this report, the canned vegetable consumption will be considered equal to the frozen vegetable consumption.

TABLE I

RAILBELT VEGETABLE CONSUMPTION
1980 Projections from Surveys Done in 1971
1,000 lbs.

<u>Frozen Vegetables</u>	<u>Burton</u>	<u>Saunders & Marsh</u>
Potatoes	12,938	8,600
Peas	814	578
Broccoli	341	618
Carrots	438	196
Cauliflower	114	366
Brussels Sprouts	69	262
Peas & Carrots	--	70
 <u>Fresh Vegetables</u>		
Potatoes	27,186	
Broccoli	117	
Carrots	2,318	
Cauliflower	235	
Brussels Sprouts	31	
Cabbage	2,646	
Lettuce	8,366	
Radishes & Parsnips	69	
Rutabagas & Turnips	69	
Zucchini	34	
Cucumbers	1,094	
Tomatoes	4,126	

FROZEN VEGETABLE MARKET

Saunders and Marsh divided the frozen vegetable market into two segments, institutional and retail. The institutional market consumed 76 percent of the frozen potato products, 71 percent of the frozen carrots, 62 percent of the frozen peas and carrots, 53 percent of the frozen peas, and 38 percent of the frozen broccoli. Cauliflower and brussels sprouts were split nearly equally between the retail and

institutional segment. From these figures they suggested as a reasonable goal a local processing plant could capture one-half of the retail market and two-thirds of the institutional trade. In 1970 this amounted to 3.6 million pounds of frozen potato products, 328,000 pounds of peas and 582,000 pounds of other vegetables. Using population trends and allowing for changing consumption patterns, they predicted the 1980 market. In Table II, Saunder's figures for estimated market are compared with Burton's. Dr. Burton's consumption figures were categorized into institutional and retail markets using Saunder's percentage figures for each vegetable, then computed using the same market share of two-thirds of the institutional and one-half of the retail trade.

TABLE II

FROZEN VEGETABLE MARKET SHARE
Based on Two-Thirds Institutional Market
and One-Half Retail Market
1,000 lbs.

	<u>Burton</u>	<u>Saunders & Marsén</u>
Potatoes	8,043	5,400
Peas	476	700
Broccoli	191	316
Carrots	269	120
Cauliflower	66	213
Brussels Sprouts	40	152
Peas & Carrots	—	42

FRESH VEGETABLE MARKET

The seasonal nature of farming in Alaska must be considered when evaluating the possible market share available for fresh vegetables.

The percentage of the annual consumption that can be served by local farms depends on the storage qualities of the vegetables. In Table III the annual consumption is reduced by the fraction of the year that the specific vegetable can be supplied either from the field or from storage. Some vegetables may be stored longer than indicated with controlled atmosphere storage facilities, or by using vacuum coolers. At the present state of development in Alaska, however, this is a realistic assessment. The seasonal market is then reduced by one-third to give an expected market share of two-thirds the seasonal consumption. From this expected market share is subtracted what is presently grown locally to give the available market share.

TABLE III

FRESH VEGETABLE MARKET

Vegetable	Consumption 1000s lbs from Table I	Fraction of annual market based on season factors	Seasonal market 1000s lbs	Market Share based on 2/3 seasonal mkt.	Local Sold 1979 1000s lbs	Available market 1000s lbs
Potatoes	27,186	1.0	27,186	18,133	6,400 (1978)	11,733
Broccoli	117	1/6	19.5	13	*	13
Carrots	2,318	1/3	773	516	240	276
Cauliflower	235	1/6	39	26	*	26
Brussels Sprouts	31	1/6	5	3.4	*	3.4
Cabbage	2,646	1/3	882	588	400	188
Lettuce	8,366	1/4	2,092	1,395	1,360	35
Radishes & Parsnips	69	1/6	11.5	7.7	*	7.7
Rutabagas & Turnips	69	1/3	23	15	*	15
Zucchini	34	1/6	5.7	3.8	*	3.8
Cucumbers	1,094	1/4	274	183	*	183
Tomatoes	4,126	1/4	1,031	588	*	688

* undetermined

RAW PRODUCT AND ACREAGE REQUIREMENTS

As can be seen from Table II there is quite a difference of opinion as to what the vegetable market may be. However, the Table provides a magnitude to work with until the market study is completed. The new figures probably will not be higher than the highest of these two estimates. Preliminary sizing of processing lines and acreage estimates can be done with this information. Table III gives the acreage needed to supply the quantity of frozen vegetables listed in Table II. For each vegetable, the largest of the two estimates in Table II has been used as a base figure to calculate the amount of raw product needed. For potatoes the finished product was multiplied by 2.4. The adjustment factor for the other vegetables is 1.25. This allows for losses in quality grading, peeling, trimming, etc.

Yields on most crops are statistically lower in Alaska than in the United States as a whole. The Tanana Valley averages reported by the Alaska Crop and Livestock Reporting Service are considerably lower than the Matanuska Valley. This is probably due to a lack of irrigation in the interior. The U.S. average yield for each crop has been used in computing acreage. Authorities on vegetable growing in Alaska feel that the U.S. average yields are easily obtainable with proper cultural practices.

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TABLE IV

RAW PRODUCT AND ACREAGE NEEDED TO SUPPLY
FROZEN VEGETABLE MARKET SHARE 1980

<u>Vegetable</u>	Raw Product 1000s lbs		<u>U.S. Ave. Yield lbs/acre</u>	<u>Acreage Needed</u>
	Consumption x 1.25	Potatoes x 2.4		
Potatoes	19,303		22,800	847
Peas ¹	901		2,380	379
Broccoli	432		6,300	69
Carrots ¹	362		26,000	14
Cauliflower	266		8,700	30
Brussels Sprouts	190		5,900	31
			TOTAL	1,370 Acres

¹ "peas and carrots" added in

TABLE V

ACREAGE NEEDED TO SUPPLY AVAILABLE
FRESH MARKET

<u>Vegetable</u>	<u>Available Market: 1000s lbs</u>	<u>U.S. Ave. Yield lbs/acre</u>	<u>Acreage Needed</u>
Potatoes	11,733	22,800	515
Broccoli	13	6,300	2
Carrots	276	26,000	11
Cauliflower	26	8,700	3
Brussels Sprouts	3.4	5,900	1
Cabbage	188	21,800	9
Lettuce	35	22,700	2
Radishes & Parsnips	7.7	20,000	1
Rutabagas & Turnips	15	20,000	1
Zucchini	3.8	20,000	1
Cucumbers	183*		
Tomatoes	688*		
		TOTAL	546 Acres

* greenhouse crop

Cultivated acreage required for the listed frozen and fresh vegetables is 1914 acres. If a process equivalent to canning, such as the highly touted "retort pouch" method is proven economical, this will add acreage at least equal to that needed to supply the frozen vegetable market. Also, there are marginal and specialty crops such as snap beans and sweet corn that will require acreage. This brings the actual acres in production to 3384. For this amount of land to be in cultivation requires approximately half again as much to be in fallow for a one-third rotation. Total cropland, then, becomes 5076 acres.

Additional land should be made available for future expansion and for other uses, i.e. farmstead buildings, roads, powerlines, etc. Also, a certain percentage of any tract will be unusable due to natural factors of slope and drainage. No less than twice the actual cultivated acreage should be considered, with provisions for releasing more in the future. Total acres to implement vegetable industry, providing the processing proves economical, is 10,152 acres.

PROCESSING

For this preliminary report, no economic analysis is attempted. Sizing parameters are given based on the expected market. Key Electronics of Milton-Freewater, Oregon is developing itemized machinery specifications for a vegetable freezing line, a potato processing line, and a "retort pouch" line. Water, power and labor requirements are also

dependent on their results. Controlled atmosphere storage of potatoes for processing, as well as other vegetables for an extended fresh market is a major investment. Freezer storage of the seasonal frozen pack is another factor. Disposal of large volumes of organic waste is a significant cost. Capitalization and operating costs are all being developed at this time.

FREEZING

The main advantage to the freezing method of preservation is the high quality of the packaged product. Nationally, frozen vegetables as a percentage of total food consumption has been steadily increasing since the fifties. The major disadvantage, of course, is the necessity of refrigeration. If the Alaskan market is to be serviced year-round, then frozen storage is needed to provide a steady supply to retailers and institutional users. Some reduction in storage capacity could be effected by promoting the large wintertime frozen food sales. By inducing quantity sales, consumers would provide their own storage by "stocking up". A maximum amount of storage still would be needed for the interval between the end of the growing season and cold (0°F) winter temperatures.

Since the harvest season is usually six weeks or less, most of the vegetables must be processed during a short period of time. In sizing the capacity of the plant, the crops can be grouped into those that can wait and those that cannot. Potatoes can be stored before processing, as can carrots to a lesser degree. Peas, broccoli, cauliflower and

brussels sprouts must be processed immediately usually within six hours of harvest to maintain highest quality. In addition to these "primary" vegetables, one can think of others—spinach, turnips in stew packs, etc. These vegetables are a small percentage of the pack and individual market figures are not available to this time. When calculating line flow, enough extra capacity is included to allow for these products. To handle the vegetables that must be processed quickly, it is assumed that the plant will be operated six days a week, eight hours a day, for six weeks. In some large agricultural regions similar plants are operated 24 hours a day in the harvest season. However, since this project is operating at a fairly low level of production, it is thought that a larger capacity plant run fewer hours would be more economical. This also allows for growth capacity by increasing the hours/day of operation. This schedule is also more flexible, allowing for long (24 hour) runs on a particular vegetable depending on the vagaries of the harvest.

The sum of the anticipated market share for frozen peas, broccoli, cauliflower and brussels sprouts is 716 tons. Divided by the number of hours in 36 eight-hour days (288), we have a line capacity of 2.5 tons/hour. (Finished product). At this rate of production, the carrots can be processed in an additional seven working days.

POTATO PROCESSING

Except for the freezer unit, nearly all the equipment used in potato processing is different from that used in the vegetable line.

Potatoes must be peeled, sliced, chopped, fried, degreased and pre-cooled before freezing.

The frozen potato product line will consist of french fries and hash browns, as this comprises 98 percent of the frozen potato market. The line capacity for potatoes depends on the period of operation. The two options appear to be:

1. Fairly high production for three months following cessation of other vegetable processing, closing the plant for the winter just before Christmas.

2. Maintaining a lower level of output through the winter for approximately eight months.

The trade-offs are capitalization costs versus operating costs, and controlled environment storage of the raw product versus frozen storage of the finished product. At this point, the shorter term, larger capacity plant would seem most economical. Dividing the market share (4022 tons) by operating hours (504) in the first option gives a line capacity of eight tons/hour. (Finished product). Line capacity for the smaller system would be 3 1/2 tons/hour.

RETORT POUCH

The retort pouch is a plastic aluminum foil laminate package that

replaces the tin-plate can. The method of food preservation is essentially the same as the "tin can"—thermal destruction of harmful micro organisms and prevention of re-infection. The advantages are quicker heat transfer to the interior of the container, thus maintaining better texture, flavor and nutritional quality of the enclosed food, and energy savings in sterilization. It must be pointed out that retort pouches are competitors of canned food and not of frozen food. Frozen vegetables still maintain their quality edge. The retort pouch process is still in the developmental stage in the United States although it is used elsewhere in the world. At this time, the Food and Drug Administration has not yet given full approval for commercial production. Fortunately, Key Electrosonics has participated in the development and is supplying information on this technology.

HARVESTING

The steady supply of fresh, mature, well-handled produce to the dock of a processing plant is a complex undertaking that is planned as much as a year in advance. It is customary for the packing plant to contract with individual farmers for specific quantities on specific dates. These contracts may be detailed to variety, planting date, amount of fertilizer, and amount and timing of irrigation. The processor also might own the harvesting equipment if it is a large or specialized piece of machinery such as a pea combine. A trained crew will operate the combine in close communication with the plant manager to avoid bottlenecks. The high degree of coordination required in assuring the most efficient utilization of the harvest is not to be underestimated.

TABLE VI

RECOMMENDED TEMPERATURE, RELATIVE HUMIDITY AND APPROXIMATE STORAGE LIFE OF VARIOUS VEGETABLES

Crop	Temp. °F.	Relative Humidity %	Storage ¹ Life
Beans, snap	38-42	95+	10 days
Beets, bunched	32	95+	10-14 days
topped, processing	32	98-100	8 months
Broccoli	32	95+	10-14 days
Brussels sprouts	32	95+	3-5 weeks
Cabbage, early	32	98	3-6 weeks
late	31-32	98	4-6 months
Carrots, immature, bunched	32	95+	3 weeks
immature, topped	32	98-100	1 month
mature, topped	32	98-100	6-9 months
Cauliflower	32	95+	1 month
Celery	32	95+	2-4 weeks
Collards	32	95+	10-14 days
Cucumber	50-55	95	10-14 days
Greens, various leafy	32	95+	10-14 days
Onions, dry	31-32	65-70	—
green	32	95+	1 week
Parsley	32	95+	1-2 months
Peas, garden	32	95+	7-10 days
edible podded	32	95+	3-5 days
Pepper, green	45-50	95	2 weeks
Potatoes, early	50	90	2-3 months
late	32-40	90	8 months
Railish, spring, topped	32	95+	3-4 weeks
winter	32	95	6 months
Rhubarb	32	98	2-3 weeks
Spinach	32	95+	10-14 days
Sweet corn	32	95+	4-6 days
Tomatoes, ripe	35-45	90	3-5 days

Source: Ryall and Lipton (1972).

¹Storage Life given refers to quality rating of "good". This table is intended as a quick guide only; for details, consult Ryall and Lipton (1972).

PRODUCTION

PHYSICAL DATA

Yields and production costs are probably the most variable factors in this study. Soils data is just now being compiled by the Soil Conservation Service. The soil survey should be available in early December. Rainfall, temperature, wind and occurrence of frost data is nonexistent at this time for the precise location. In the following tables, weather data from Nenana, approximately 41 miles from the project site, is compared with Fairbanks. Years of research at the University of Alaska Agricultural Experiment at College provides a basis for predicting crop growth.

The average temperature and average rainfall for the months April through September are very similar in Fairbanks and Nenana. (Table VII and Figure I). The extremes are greater in Nenana. Figure II shows frequency of occurrence of frost. Fairbanks has a slight statistical edge at both ends of the season, but total frost-free days are essentially the same. Nenana has 1875 growing degree days and Fairbanks has 1890.

TABLE VII

AVERAGE AND EXTREME TEMPERATURES
FOR FAIRBANKS AND NENANA*
°F.

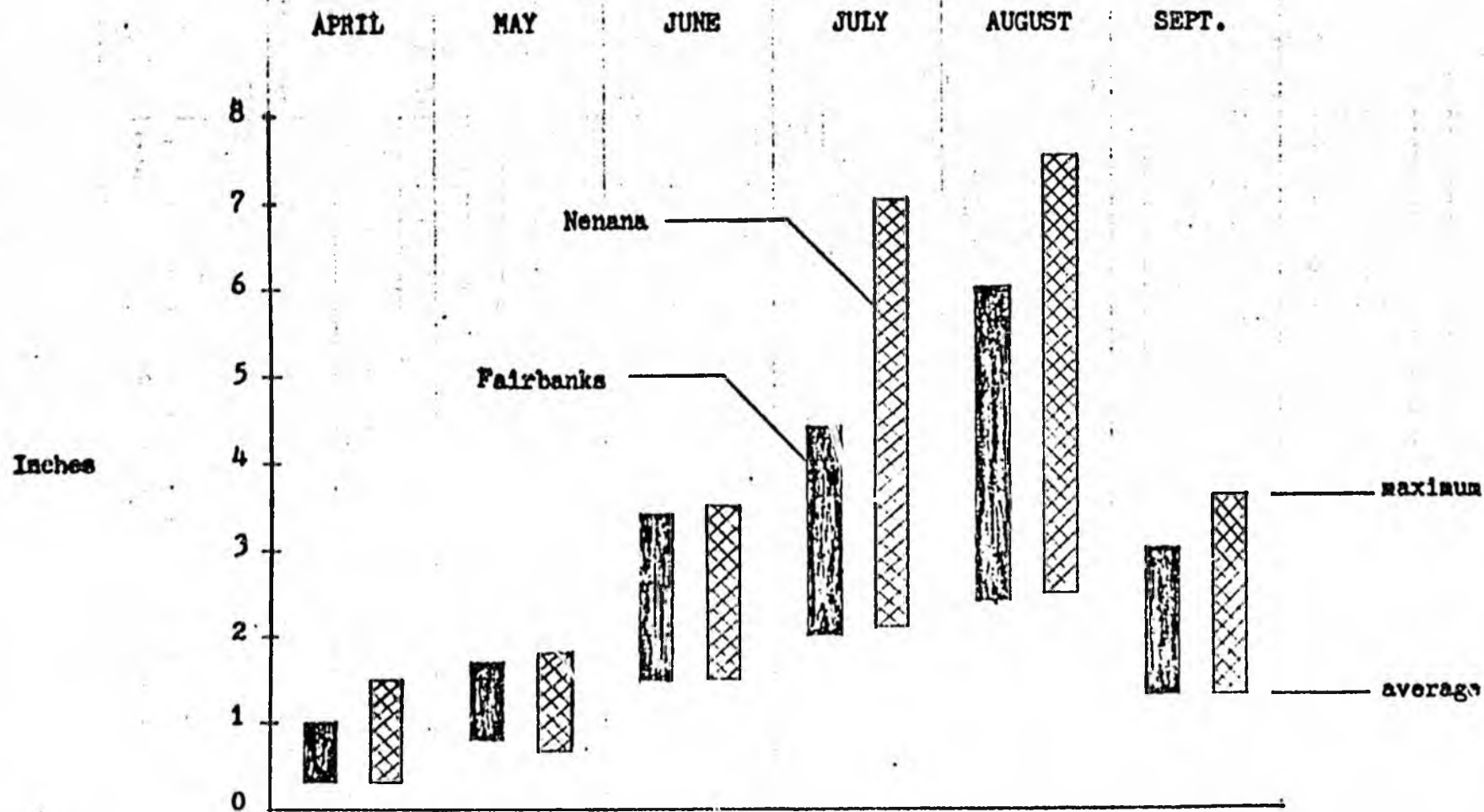
	April		May		June		July		Aug.		Sept.	
Nenana/Fbks.												
Highest	71	65	87	83	97	96	95	88	89	86	79	80
Ave. Max.	39	40	58	59	70	71	73	73	67	67	54	55
Ave. Min.	16	18	35	36	45	47	48	49	44	45	32	33
Lowest	-33	-22	-2	-1	27	30	29	35	23	30	4	12

* from Alaska Regional Profiles-Yukon Region Arctic Environmental Information and Data Center

TABLE VIII

MEAN MONTHLY WIND SPEED AND
PREVAILING DIRECTION-SPEED IN KNOTS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
NENANA	ENE 5.3	E 4.7	ENE 9.2	NW 5.8	NW 5.8	SW 9.1	SW 4.6	SW 4.4	ENE 9.0	ENE 5.2	ENE 4.8	ENE 4.3	ENE 5.0
Fbks	N 2.4	N 3.2	N 4.1	N 5.3	N 6.2	SW 5.8	SW 5.3	SW 4.9	N 4.9	N 4.4	N 3.2	N 2.5	N 4.3



GROWING SEASON PRECIPITATION in FAIRBANKS and NENANA

FIGURE 1

FREQUENCY of OCCURANCE of FROST

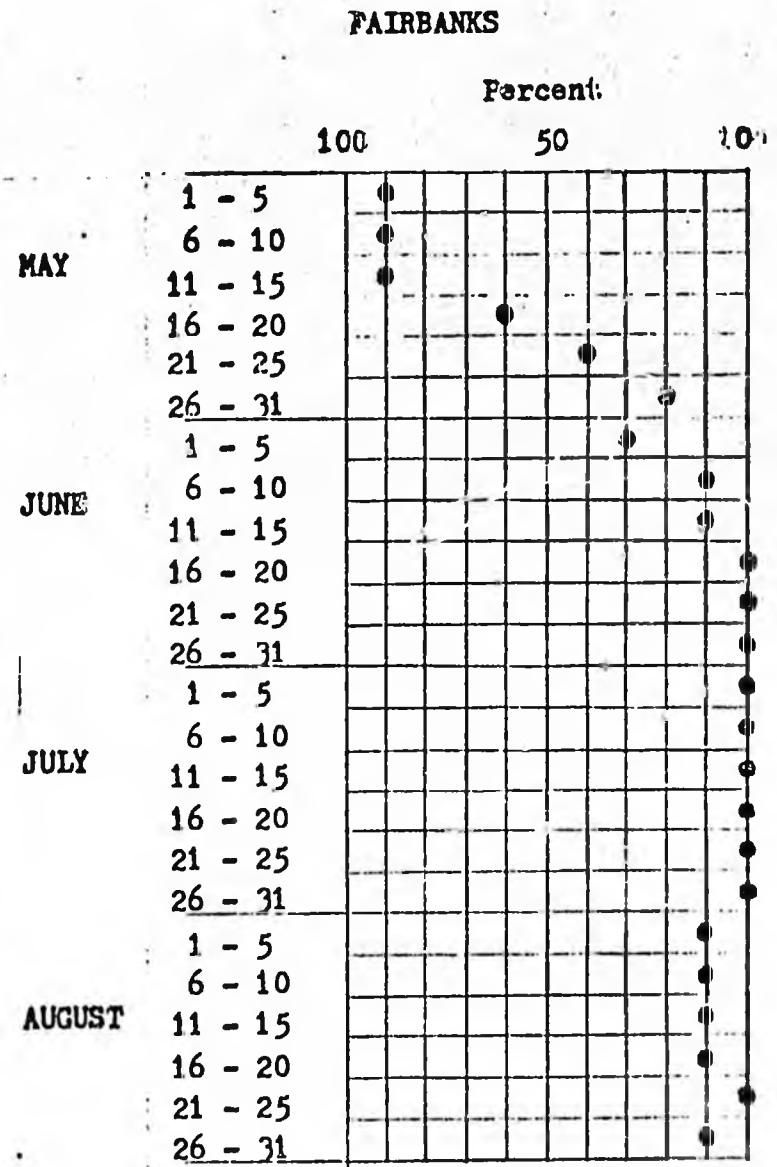
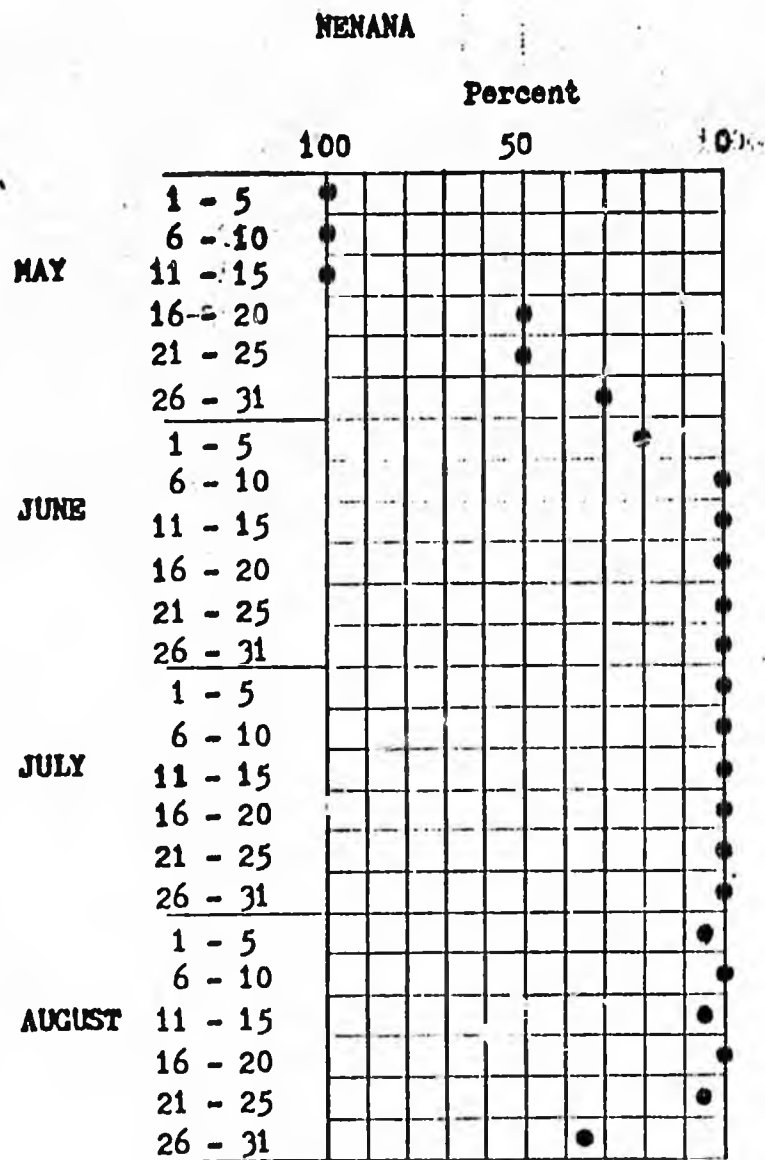


FIGURE 2

Average length of growing season in Fairbanks is 92 days, in Nenana 90 days. The wind is stronger in Nenana on the average but only in June and September during the growing season is the wind significantly stronger, 63 percent and 54 percent respectively. (Table VIII).

It should be noted that localized differences in climate are very pronounced and can be significant to the success of any agricultural project. Slight hollows may be frost pockets, slight rises with southern exposures increase the incident radiant energy absorbed, hills rising on the north side of a field provide reflection and re-radiation of long-wave energy. These microclimates can vary within one mile, and even within several hundred yards. The plots chosen for vegetable farms should be selected with this localized climate effect firmly in mind. Indeed, the difference between a successful farm and a marginal one could be totally dependent upon the original site considerations.

CROPS AND YIELDS

Vegetables to consider as market crops are listed below according to the degree of certainty of successful production. Variety selections for these vegetables will be in the final report. National average yields have been given as a basis for preliminary computations in the market and processing section. Final estimated yields should not vary too far from those figures.

Climatically well adapted

- broccoli
- brussels sprouts
- cabbage
- carrots
- cauliflower
- lettuce
- peas
- potatoes
- radishes
- rutabagas
- spinach
- turnips

Climatically adaptable if unusually good site

- snap beans
- summer squash

Marginal—require various aides—plastic, soil heat, etc.

- sweet corn
- melons
- winter squash

Greenhouse crops

- cucumbers
- tomatoes

FARM SIZING

Here must be recognized the different cultural practices of the various crops. Some are high value, very intensively cultivated. Others, such as potatoes, are high volume, low value. The fact is, vegetable farms can be just about any size, from one-half acre part time, up to extremely large (1,000 acre) potato farms. The efficiencies of production depend on the particular situation, i.e. crops grown, investment capital available, labor availability, and philosophy.

There seems to be a tendency in Alaska to underrate the labor intensity of vegetable production. In 1975 it took an average of 29 man-hours to grow potatoes on one acre. For a 1,000 acre farm and a 100 day season, this meant 24 people working 12 hours a day on a relatively non-labor intensive crop. In a survey in New Jersey of diversified medium sized vegetables farms, the average farm had 39 cropland acres and had a labor force of seven men all season with nine at the peak. This included the owner's family as two man-units. This is simply to illustrate a point--there is at present no source of farm labor in Alaska to work on large farms. To develop a work force from the existing labor pool, or even from the ranks of the unemployed will be expensive. In the past, agricultural studies have priced the labor far below market value. In 1980, CETA workers were receiving over \$6.00/hour in Nenana. An employer will have to at least equal welfare.

With these thoughts in mind, farm sizing will be left for the final report.

CROP BUDGETS

Cost of production analysis requires consideration of many factors. Crop calendars of the cultivation practices for each vegetable are needed to establish crop budgets. Efficiency factors for equipment times acreage covered in each cultivation practice give fuel, oil, maintenance and labor costs. Fertilizer, seed, insecticide, machinery

and labor expenses establish variable costs. Crop budgets are being prepared at this time. Dr. Donald Dinkel is formulating project specific inputs for the cultural requirements.

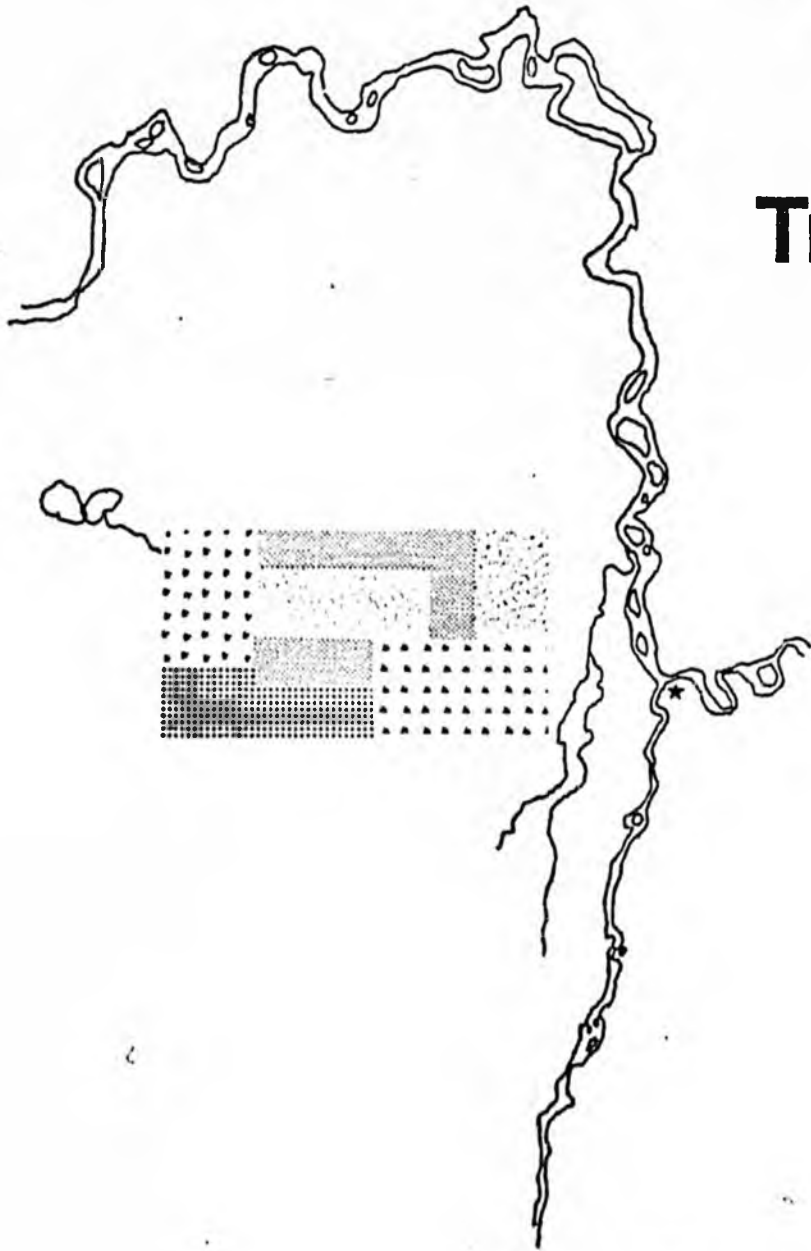
DRAFT

NENANA

Agricultural Transportation Systems

Project No. AG101

November, 1980



**HDR
ATC**

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Sheet	3	Section Drawing Typical Roadways	Envelope*
Drawing	1	Nenana River Bridge	Envelope*
Drawing	2	Nenana River Bridge	Envelope*
Drawing	3	West Middle River Bridge and East Middle River Bridge	Envelope*

*In the original draft the six drawings were enclosed in an envelope. To save cost on the additional 50 copies, the six drawings have been included at the end of the text and before the appendix.

CHAPTER I
INTRODUCTION

Transportation is an important aspect in rural development. To quote current research:

"If rural development is to proceed in an orderly and efficient manner, adequate performance of the transportation infrastructure and regulatory structure is mandatory. Highway, water rail, and air transportation investments should be closely coordinated with those state and federal agencies directing the various rural development programs."¹

Efficient and competitive routing of goods to and from a rural center is the key in providing social and economic benefits to that area. A well designed and constructed farm to market road network is essential in any agricultural development as it will be servicing the aggregation of grain transport; machinery movement; and fertilizer, feed, seed and chemical hauling.

This draft report provides a proposed roadway network in the Nenana agricultural area starting with an initial phase of two townships expanding to several townships in future phases. Commodity routing systems in the Nenana area are examined to maintain a flexible, multi-modal system in the area. Alternative processing site locations are compared in relation to the City of Nenana, the initial phase of the project, and existing commodity routing systems.

Roadway development and construction includes an examination of soils, land ownership, parcelization and climatic conditions. Alternative roadway sections are designed based upon the location of gravel, and wet or permafrost areas. A roadway layout is proposed that takes advantage of section line easements and allows for flexibility in final parcelization. Estimated costs for construction and maintenance of this layout are also presented.

It is our understanding that the project development schedule is for land disposal in late 1981 or 1982 at the latest. In order for the transportation

¹ Richard K. Hart, Transportation and Rural Development: Some Policy Considerations.

System to be in place, construction must occur in the 1981 construction season. For this to happen, the project planning and design must be fast tracked. Because of this, the consultant team has initiated permit procedure for field work this winter and early spring. This includes bridge-borings, site surveys, centerline surveys and borings, plus material site investigations.

CHAPTER II

OVERVIEW OF COMMODITY ROUTING SYSTEMS

There are three potential commodities being considered for the Nenana Agricultural Area. Studies to determine the viability of livestock raising and vegetable production are presently being undertaken. However, with the imminent success of the Delta Barley Project in mind, grain production must be given the major consideration. Thus, of the three (3) alternatives, grain production will be considered in this report as the primary user of any routing system established. This is due in part to the information available concerning grain production in Alaska (Delta Junction); the predominance of Class III soils in the project area, which are well suited to grain production; and the present lack of information regarding vegetable and livestock production.

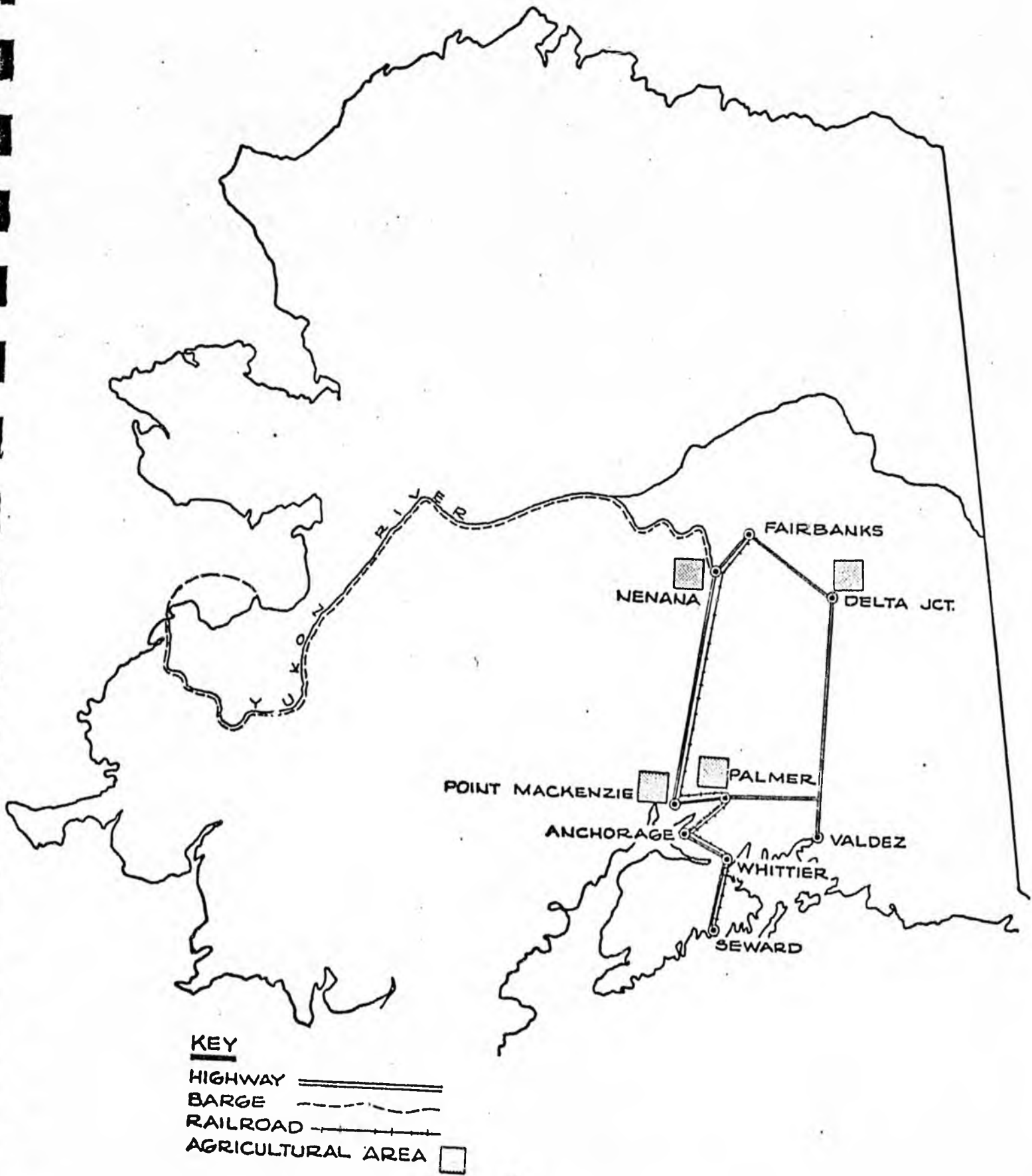
This section will provide an overview of the routing systems that exist in the Nenana area. To remain within the scope of the overall report, no analysis of routing economics will be undertaken here. Rather, the focus will be on how the roadway network and processing area within the project might impact the various routing systems. It should be noted however, that the agricultural industry relies on economically competitive transportation modes. Thus, every effort should be made to maintain maximum flexibility of the routing systems available to various agricultural areas in Alaska. Figure I illustrates the commodity routing systems available to various agricultural areas in Alaska. Nenana has a distinct advantage in being on all four modes of routing. This, coupled with its central location within the state, makes it a focal point for the distribution of agricultural goods both within the state and for export.

Though there are four systems available for use (air, truck, rail, and barge), raw agricultural goods generally move using the bulk facilities, low operating costs, and proximity to markets available on truck and rail modes.

1. Truck Routing

Routing agricultural commodities by truck is most efficient over short hauls and when backhaul possibilities are definite. Thus, truck routing would most likely be used in local/intra-state distribution of vegetables grown in Nenana and livestock processed there, having Fairbanks and Anchorage as the two major points of transfer. The hauling of grain by truck, while

FIGURE I
COMMODITY ROUTING SYSTEMS



possible, is not likely due to the large amount of trucks needed to haul the grain and the more economical use of rail in hauling such bulk quantities.

Starter herds for livestock would be most effectively transported by truck up the Alaskan highway. Red meat for export would be transported by truck to Fairbanks International Airport and most likely be flown to the Far East.

2. Rail Routing

Routing of agricultural commodities by rail is most efficient in bulk handling and long hauls due to its low operating costs and established routes. Currently, problems exist in the availability of equipment to handle grain. As agriculture continues to develop in Alaska basic routing necessities such as these will become economically viable and therefore these are seen as only initial or short term problems.

If fertilizer is to be brought to Nenana from plants on the Kenai the use of truck routing is most efficient. There are only two transfers required in this mode while there would be five in the rail mode. Rail would be most effective in bringing fertilizer produced in the Lower 48 to Nenana as there is a direct rail link between most ports and Nenana.

Due to high construction costs involved in establishing new rail lines (\$1.4 million/mile) no additional routes are seen in the immediate future and short spurs into the agricultural area seems unlikely at this time.

3. Barge Routing

Though barge routing has low operating costs and relatively large bulk handling capacities, certain restrictions make the use of this mode unlikely in the routing of grain for export. There is potential local routing of fresh and processed vegetables, processed red meat, and some grain.

Three restrictions to barge routing of export grain are the short season available to barge operation and agriculture, the more feasible routing of grain by rail, and the difficulty in establishing a scheduled shipping route into the St. Michaels area.

4. Local Air Routing

At the present time Nenana Air Service, Inc., is the only scheduled air service based in Nenana. They fly supplies to Tanana, and offer charter services to other communities in the bush. Alaska Central Airways, Inc., uses Nenana as a flag stop on flights to Galena and Tanana. It is possible that air service could provide various bush communities with agricultural commodities grown and processed in the Nenana area (primarily vegetable and red meat).

5. Port Facilities

Currently, the Alaska Agricultural Action Council has Requestes for Proposal out to various ports in Alaska with the intention of establishing a permanent facility for the exportation of Alaskan produced grains. Appendix 1 is a copy of the RFP sent to Anchorage, Palmer, Seward, Valdez, and Whittier. Seward was to be utilized for the 1980 barley crop from Delta Junction, though due to a shortened harvest season, no grain was exported this year.

CHAPTER III
PROCESSING AREA LOCATION

Any impacts on the routing systems center on the location of a processing area as this is where the major unloading, loading and any processing and packing would take place. To maintain the flexibility desired, this processing area should be located where all routing systems are readily available, or to somehow allow for efficient routing of commodities. To that end three locational concepts were developed for the processing area and presented below. Advantages and disadvantages for each concept are identified and impacts on existing routing systems discussed. These should be addressed in making a decision on the location of the area.

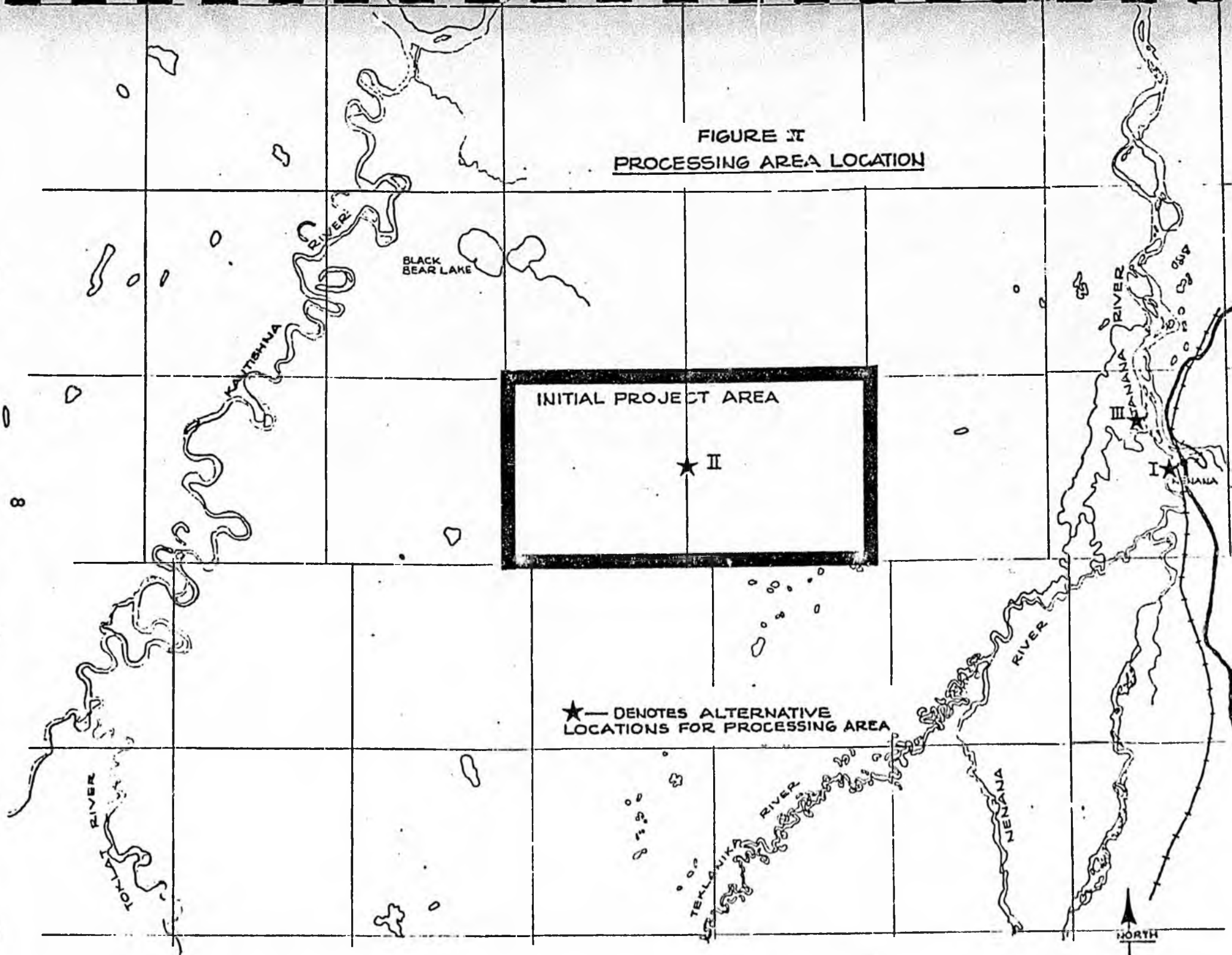
1. Concept I - Processing Area in City

Figure II illustrates a possible processing area in/or adjacent to Nenana. This location is ideal from a transportation standpoint as all modes of routing are available within a corridor, meaning virtually no capital improvements to reach the area, the area is close to the residences of people who would be working in the processing area; and a source of water is close at hand for processing purposes. Impact from possible noise, smell, and air output could pollute the surrounding area and cause ice fog problems for the airport, though wind data indicates that the direction of prevailing winds might mitigate any air pollution problems within the community boundaries, a potential flood hazard exists due to the areas proximity to the rivers; and soils maps indicate heavy permafrost in some areas.

2. Concept II - Processing Area Centered in Project Area

In this concept the processing area would be located along a rail spur in the center of the project (Figure II). This would cut down the distance between the field and the processing area; reduce the area's impact on the community of Nenana; and, if the spur were to connect Nenana and Tanana, it would create another access to the Tanana area and reduce travel time for commodities traveling by barge. However, this concept would entail considerable capital expense in terms of a transportation corridor linking the

FIGURE II
PROCESSING AREA LOCATION



processing area with the existing modes; water would not be as readily available for industrial use; commodities, if shipped by barge to the final destination, would have to be handled twice (load rail/load barge); and locating the area in the center of the project would take up a considerable amount of valuable agricultural land. Workers driving to the area pose potential traffic congestion problems on the bridge and main roads and the commuting cost is the largest as this location is the furthest from Nenana.

3. Concept III - Processing Area Downstream from Nenana (Figure II)

In this concept the processing area would be located approximately a mile down the Tanana River from Nenana. Being a distance from the community would alleviate possible incompatibility and pollution problems associated with being near other activities. Locating the area here would allow for only a moderate capital investment in terms of a transportation corridor. All modes of routing could still be available; though, as the major expense in linking the areas with the main rail system would be a railroad across the Tanana River, an expenditure of this magnitude is unwarranted unless the line continued on to the community of Tanana.

CHAPTER IV
PRELIMINARY ROADWAY NETWORK

Before establishing a roadway network for the project area, several factors were reviewed which affect its layout. Soil in the area was reviewed for its agricultural capability and the location of permafrost and bogs. Land ownership was reviewed to determine location of state-patent lands and boundaries of other ownership which might affect roadway layout, (easements and rights-of-way are discussed in Chapter VII). A parcelization scheme was put together based on agricultural capability of the soil and present land ownership.

Various phases of road development are proposed linking the project area with Nenana and the Parks Highway at Rex. The initial phase would provide access from the project area to a central processing point and loading point in Nenana (as discussed in Chapter III). Other phases would continue expansion into areas adjacent to Phase One and would include the development of a road to Rex. Layout, design and estimated costs of this development are discussed in this section.

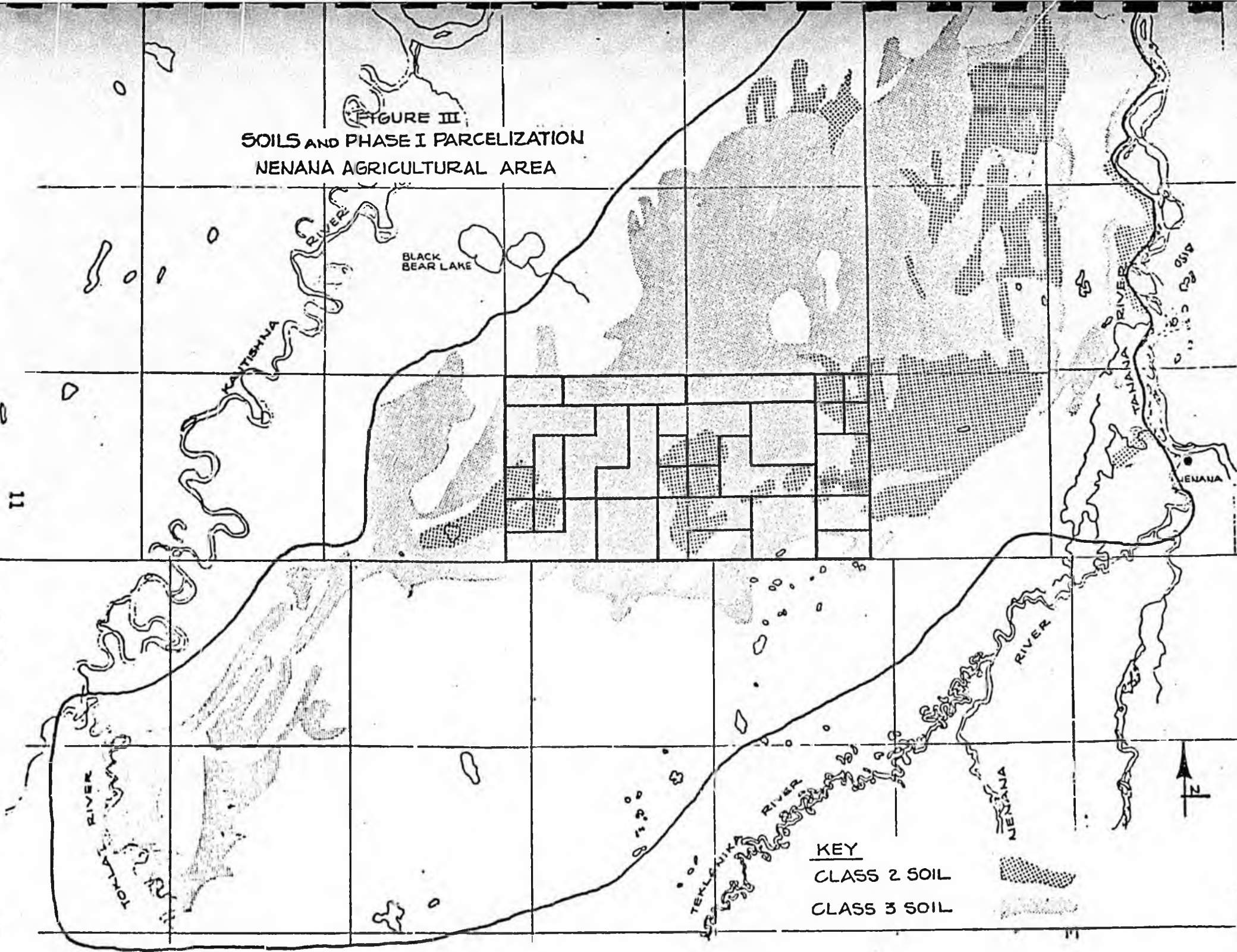
1. Soils and Parcelization

Figure III indicates the soil characteristics in the project area. Class II and III soils are highlighted and are the only soils considered adequate for agricultural production. Class IV and below are being considered for grazing purposes. Areas of permafrost and bog are also identified, as these areas must be avoided both in agricultural activities and roadway construction.

It has been recommended that Class II soils be put into parcels of 640 acres and under for purposes of vegetable production and Class III soils into parcels of 2,560 acres and over for purposes of grain production.¹ It was also assumed that several small lots (5-10 acres) would be made available to increase the population base and reduce utility costs. Figure III illustrates a possible parcelization of the initial project area based on the above information.

¹ Interview with Bob Pollock, Agricultural Action Council, October 8, 1980.

FIGURE III
SOILS AND PHASE I PARCELIZATION
NENANA AGRICULTURAL AREA



KEY
CLASS 2 SOIL
CLASS 3 SOIL

2. Layout

Sheets 1 and 2 illustrate the proposed roadway network providing access to the initial phase of the project. This network attempted to follow section lines for two reasons: First, to take advantage of section line easements; and second, parcelization will most likely be in aliquot parts. This roadway layout is flexible in that it can be modified fairly easily once the final parcelization is made. This network also lends itself to future branching out from the initial phase in a wheel and spoke manner. Collector and feeder roads were laid out to provide access to parcels and where traffic was estimated to be primarily local.

3. Roadway Design and Estimated Costs

Preliminary soils studies indicate a more economical alternative than the standard pit borrow method of building roads may be utilized for the Nenana Agricultural Project. The combination of minimal overburden with suitable structural material directly beneath lends itself to the roadside borrow concept of construction. This method utilizes the structural material from within the right-of-way to build the road, eliminating the more expensive remote borrow-haul method. The organic overburden is stripped and stockpiled at the edge of the right-of-way for use as backfill to bring the sideslopes and ditches to grade. This method of construction will require right's-of-way in excess of the 100 foot section line easements that may be available. In areas where adequate right-of-way is not available or where pockets of unsuitable structural material exist, the pit borrow method will have to be utilized as an alternate construction method. Tables I and II show estimated 1981 cost comparisons indicating that approximately \$35,000.00 per mile may be saved by utilizing the roadside borrow method of construction. Sheet 3 illustrates typical roadway sections for all types of roads in the project using both alternatives.

The proposed gravel road system within the Nenana Agricultural Project will be quite similar to the existing gravel roads that service the Delta Barley Project with respect to usage and climatic influences. State Department of Transportation figures indicate that the Fiscal Years 1979-1980 average maintenance cost per mile per year for 41.36 miles of gravel road near Delta

was \$2,490.00. Assuming a 25% inflation factor from 1980 to 1982. Surface maintenance and snow removal costs for gravel roads in the Nenana Agricultural Project should average approximately \$3,115.00 per mile for the Fiscal Year of 1982.

TYPICAL CROSS SECTION QUANTITIES - PIT BORROW

		UNIT PRICE	COST/MILE
Cleared Grub	100 LF	\$2,000/acre	\$ 24,242.42
Unclassified Exc.	41.5 sq.ft.	\$2.50/yd.	\$ 20,288.89
Borrow	104.1 sq.ft.	\$3.75/yd.	\$ 76,340.00
Subbase "C"	10.83 sq.ft.	\$19.75/yd.	\$ 1,827.27
Side slopes	35.28 sq.ft.	\$2.50/yd.	\$ 17,248.00
Seeding	68 LF	\$11.75/1,000 sq.ft.	\$ 4,218.72
18" Culverts (82 LF)	1 pr. 2500 ft.	\$35.00/LF	\$ 6,061.44
Culvert markers	2 pr. 2500 ft.	\$50.00/EA	\$ 211.20
Monument cases	4/miles	\$200.00/EA	\$ 800.00
Open borrow pits	1 pr. 2 miles	\$64.60/EA	\$ 3,230.00
Road Signs	10 sq.ft/mile	\$40.00/sq.ft.	\$ 400.00
		<u>Subtotal</u>	\$ 194,868.55
Dust control		\$7.50/1,000 gal.	\$ 550.00
Equal Employment Opportunity		N/A	\$ 100.00
		<u>Subtotal</u>	\$ 194,868.55
Contractor Engineering (5%)			\$ 9,775.93
Contractor Costs		<u>Total</u>	\$ 205,294.48
Consultant Engineering (20%)			\$ 41,058.90
		<u>Total</u>	\$ 246,353.38
Assume 25% inflation 1979-1981			\$ 307,941.72
		<u>Use</u>	\$ 310,000.00

* rounded numbers

TYPICAL CROSS SECTION QUANTITIES - ROADSIDE BORROW

		UNIT PRICE	COST/MILE
Cleared grub	200 LF	\$2,000/acre	\$ 48,484.85
Unclassified exc.	132 sq.ft.	\$2.50/cu.yd.	\$ 64,533.33
Subbase "C"	10.83 sq.ft.	\$19.75/cu.yd.	\$ 41,827.27
Seeding	168 LF	\$11.75/1,000 sq. ft.	\$ 10,422.72
18" Culvert (92 LF)	1 pr. 2500 ft.	\$35.00/LF	\$ 6,800.64
Culvert markers	2 pr. 2500 ft.	\$50.00/EA	\$ 211.20
Monument cases	4/miles	\$200.00/EA	\$ 800.00
Road signs	10 sq.ft./mile	\$40.00/sq. ft.	\$ 400.00
		<u>Subtotal</u>	\$ 173,480.01
Dust control		\$7.50/1,000 gal.	\$ 550.00
Equal Employment Opportunity (EEO)		N/A	\$ 100.00
		<u>Subtotal</u>	\$ 174,130.01
Contractor Engineering (5%)			\$ 8,706.50
Contractor Costs		<u>Total</u>	\$ 182,836.51
Consultant Engineering (20%)			\$ 36,567.30
		<u>Total</u>	\$ 219,403.81
Assume 25% inflation 1979-1981			\$ 274,254.76
		<u>Use</u>	\$ 275,000.00*

* rounded numbers

CHAPTER V
STREAM CROSSINGS

The roadway network which will serve the agricultural development in the Tanana Valley will originate in Nenana. Nenana has rail, highway, and river transportation facilities, and is the logical focal point for this transportation link.

Direct access to Nenana does require a major river crossing structure over the Nenana River, as well as several other smaller structures for the West Middle and East Middle Rivers and for the Little Nenana River. Since Nenana will be the origin and destination for much of the traffic generated in this valley, the optimum cost benefit ratio for users would dictate that the river crossing be placed in close proximity to Nenana.

A reconnaissance of the Nenana River Valley upstream from its junction with the Tanana River was made by air. The general mapping of the region was reviewed and using the air reconnaissance and the mapping, it is possible to determine the general characteristics of the river in this area. For an extended distance upstream from the river junction, the Nenana River flows through a broad, flat flood plain. Generally, the stream is highly braided, with evidence of a shifting stream occurring through the years. There is evidence that the erodable nature of the river valley, coupled with periods of high stream flow, due to the source of the stream in mountainous terrain, which results in frequent shifts in the river course and in general instability of the river channel.

Although it is not clear cut, there appears to be some higher degree of stability of the river in the vicinity of its junction with the Tanana River. Because of the general development in this region, some minor bank control has been done in the past. Future development of this area would warrant additional stabilization measures in the vicinity of Nenana, and these measures would not only benefit the community, but could also serve to protect the roadway link to the Tanana Valley.

Limited geological information is available for the area. It is assumed that the river is of sufficient size for a thaw bulb to exist in the general vicinity

of the river. Generally, it is understood that unconsolidated gravels and sands which are an outwash from the mountains prevail through the area. Since these underlying materials are unconsolidated, it is anticipated that piles will be required for the foundation support. In accord with local practice and also as a general appropriate application, it is anticipated that steel H piles will be used for all foundations. Soil borings will be required at the location of the substructure units along with a geotechnical report to more accurately identify actual insitu conditions.

At the West Middle and East Middle River and at the Little Nenana River, it appears that the stream flow is minimal. Thus, there is a possibility that permafrost does exist in these locations. The presence of permafrost would be determined by future soil borings.

There is not a gaging station in the vicinity of Nenana on the Nenana River and as a result, there is limited hydrological information available. Generally, the approximate ground elevation of Nenana is 351.0 feet. A high water elevation on the Tanana River at the railroad bridge is 358 feet for a 50 year flood. The proximity of the bridge crossing to the railroad bridge justifies the use of this elevation for the high water elevation in the development of the bridge concept plan.

A tentative location for the river crossing has been set at a location approximately 3,000 feet upstream from the Tanana River. This location will permit the roadway to connect with Tenth Street, which has been extended by the City across the railroad. At this location, the river channel is relatively well defined and a crossing can be made without skewing the structure, which will optimize the structural length and result in cost savings.

The proposed structure is a three span structure with a length of 560 feet having spans of 172'-6", 215'-0", 172'-6". The superstructure consists of four steel girders using composite action with a concrete deck. The concrete deck has a clear roadway width of 34'-0" with concrete barrier curbs.

Using a high water elevation of 358 feet, a minimum clearance of 6'-0" is indicated above high water to low steel, in conformance with the suggested clearance by AASHTO Bridge Specifications. The necessary clearance over high water, and the depth of the superstructure will elevate the roadway above the

approach roadways. The roadway elevation will be achieved by using a gradient on the approach roadways from each direction, and with a vertical curve on the structure with its apex near the center of the structure. The vertical curve will be designed for a speed of 60 mph.

Three span bridge will require the placement of two piers in the stream flow. The velocity of the stream, heavy water volumes, and thick ice will require large massive piers. Presently, it is contemplated that these will be single shaft concrete piers with steel ice plates. Footings will be located below the stream bed sufficiently to be below anticipated scour depths, and will be supported on steel H piles.

The abutments would be concrete stub abutments supported on steel H piles. These abutments will be located on embankment and the material for the embankment in the vicinity of these abutments should be non-frost susceptible soils to prevent frost heave.

Without specific information on water volumes, it has not been ascertained that the indicated waterway opening is sufficient to accommodate the flows. However, with low profile approach roadways, the approach roadways would be inundated during periods of flooding with flow crossing over the roadway.

With some inherent instability in the stream, some stabilization of the river banks may be required upstream from the structure. It is not expected to be a major undertaking, but it will be necessary to inspect the upstream banks in the vicinity of the proposed structure to ascertain if any revetments are required.

For purposes of development of a concept, a clear span of 100 feet was assumed for the West Middle and East Middle River. These structures would consist of concrete bulb T superstructures, supported on concrete stub abutments with steel H piles. For the Little Nenana River Bridge, it was assumed that a large culvert could be used to contain the flow in this stream.

No site specific information was available in the form of surveys, geological information, or hydrological data, and these concepts for the structures were developed using aerial photographs and other undocumented data. As more specific knowledge is gained, the proposed structures may change in concept and size.

Other minor structures will be required to provide flow for drainage areas lying in the path of the proposed roadway. Presently, it is contemplated that round culverts will be adequate for this purpose.

The following is a list of total costs, including soil exploration, engineering, construction inspection, and construction cost for each of the bridges over Nenana River and its tributaries. Costs related to various items such as right-of-way, utilities, bridge embankments and inflation factors are not included in the estimate. Costs presented are to be reasonable order-of-magnitude costs for work as of Spring 1981.

<u>NAME</u>	<u>TOTAL COST</u>
A. Nenana River Bridge	\$4,040,400
B. Little Nenana River Bridge	\$ 97,500
C. East Middle River Bridge	\$ 608,400
D. West Middle River Bridge	<u>\$ 608,400</u>
TOTAL	\$5,354,700

CHAPTER VI

PERMITS

Permits are required from both state and federal agencies. Use of land and environmental concerns will involve the state in all stages of the project; construction stages will also require federal permits. The application process has been divided into four (4) stages, based on anticipated work progress. A separate application for state permits will be made for each of the four (4) stages, which are:

1. Survey and Boring-Bridges
2. Survey and Boring-Road (Phase I)
3. Bridge Construction
4. Road Construction.

For state permits, Master Applications will be used (as detailed below); and, the staged application procedure will more effectively identify required state permits. Federal agencies are easier to identify, as fewer are involved; however, processing time is six (6) months or longer. Applications for federal permits should be sent by January 1, 1981.

State Permits

A Master Application has been made to the Alaska Permit Information Center in Fairbanks. The Master Application serves as a notice of intent to the state of a proposed project. The Center notifies state agencies (about 200), and they have fifteen (15) days to respond. All responses, including necessary individual department permit applications are returned to the center. The process is outlined in the attached Master Application Information Sheet, (See Appendix 2). The applicant is responsible for completion of all applications and payment of fees.

Key state departments are Fish & Game, and the Department of Environmental Conservation (DEC). State Division of Lands will be concerned about right-of-way. Fish and Game is primarily concerned with stream crossing and will issue a Title 16 Permit; first state boring work will be subject to Fish and Game requirements. DEC requires Water Quality Certification under Section 401 of Public Law 92500. The Master Application process will

identify all state agencies requiring permits for the individual stages. Agencies not responding to the Master Application within fifteen (15) days, may not later require a permit.¹

With the state agencies, as with federal departments, preliminary review of the application prior to submission will expedite approval.

Federal Permits

Application to the Corps of Engineers is the principle step in the federal process. The Corps assures public notice of a proposed project; other agencies then respond to the Corps. Statutes that apply are:

1. "River and Harbor Act of 1899", Section 10.
2. "Clean Water Act", Section 404, covers use of fill material.
3. Permits required for use of areas defined as Wetlands.

A key agency that should review applications prior to filing is the Department of Fish and Wildlife. The Fairbanks office will work closely with applicant; recommendations will be made so that proposed project will be within Fish and Wildlife guidelines. An important part of the review will be definition of Wetlands, if any, in the project area. Time frame for the review will be 3-4 weeks and is now in progress.

The Environmental Protection Agency (EPA) and National Marine Fisheries Service will be concerned,; but, individual contact at present does not appear to be needed prior to Corps application. Their reaction and progress concerning the Corps application, should be monitored however.

The Coast Guard grants permits to cross navigable rivers under Section 9 of the "River and Harbor Act of 1899".² The Nenana River is classified in the Advanced Approval Category and requires no permit. However, the East and West Middle Rivers are not on this list; and, data to determine navigability is being compiled, (Appendix 4).

¹ Section 46.35.030, Water, Etc, Conservation (See Appendix 3).

² Interview with Mark Millea, Aids to Navigation Section, U.S. Coast Guard, Juneau, Alaska.

No federal permits are required for preliminary survey and geotechnical work along the proposed roadway routing.

Additionally, a permit is needed to cross Alaska Railroad Terminal Reserve on the east bank of the Nenana River. The process to obtain this permit has been initiated though final results are still pending.

CHAPTER VII
LAND ACQUISITION FOR RIGHTS-OF-WAY

There are various methods available to acquire land for the roadway and utility rights-of-way in this project. The most straightforward of these methods is the use of section line easements granted through both state and federal statutes.¹ For the most part, the proposed roadway network follows section lines to take advantage of this easement. Other methods of acquiring land are included in the power of eminent domain. The uses of eminent domain and section line easements, project rights-of-way requirements, and recommendations pursuant to the acquisition of those rights-of-way are detailed below.

1. Eminent Domain

According to Title 9, Article 4, Section 9.55.240, the power of eminent domain is available for use in acquiring land for the building of the roads, telephone lines, and power lines in this project. Proceedings instituted under the power of eminent domain are accompanied by a declaration of taking. This declaration must contain items describing the authority under which the property is taken, the public use for which it is taken, a description of the property, an estimate of just compensation, etc.² It has been stressed that the most important item to be contained in the declaration of taking is "a statement that the property is taken by necessity for a project located in a manner which is most compatible with the greatest public good and the least private injury."³

The power of eminent domain could be utilized where section line easements are not already established and in the acquisition of land required beyond that granted in section line easements. This power is granted to both the state and first class cities such as Nenana.⁴

¹ Basis for section line easements: Act of July 26, 1866, (RS 2477), (43 CFR 2822, 43 USC 932); Chapter 19 SLA, April 6, 1923; Chapter 123 SLA, March 26, 1951; Chapter 35 SLA, March 21, 1953; Taken from workbook on Section Line Easements put together by Bill Newman, Fairbanks North Star Borough, Planning Department, 1978.

² A.S. 09.55.430.

³ Ibid; Interview with Bill Satterberg, Department of Law, Highways Section, October 28, 1980.

⁴ A.S. 09.55.420 (a).

2. Section Line Easements

As detailed in Chapter IV, the roadway network has been laid out to take full advantage of section line easements. Following is a brief outline of the federal and state laws concerning section line easements and a method for determining which laws might apply to a certain piece of property.

(A) History¹

The Mining Law of 1866 made an offer of free rights-of-way over unreserved public land for highway purposes. This offer became effective on April 6, 1923, when the territorial legislature passed Chapter 19. Any lands in Alaska appropriated and patented after April 6, 1923 were subject to an easement along all sections, 4 rods (66 feet) wide.

The section line easement law remained in effect until January 18, 1949. On this date the legislature accepted the compilation of Alaska law which also repealed all laws not included. The section line easement law was repealed.

On March 26, 1951, the legislature passed an easement law which dedicated a section line easement 100 feet wide along all section lines on land owned by or acquired from the territory. This was modified on March 21, 1953, to include an easement 4 rods wide along all other section lines in the territory.

To have an easement on a section line means that the section line must be surveyed under the normal rectangular system. On large areas such as State or Native selections, only the exterior boundaries are surveyed, hence there are no section line easements in these areas (until further subdivisional surveys are carried out).

Since all federal land is reserved in Alaska at this time and since the section line easement attaches only unreserved public land (at the time of survey or at the same time after survey), it is unlikely that the section line easement will have any applicability on any finalized D-2 land since the land will be reserved at the time of any survey.

¹ Taken from Workbook on Section Line Easements put together by Bill Newman, 1978.

Land surveyed by special survey or mineral survey are not affected by section line easements since such surveys are not a part of the rectangular net.

Section line easements relate solely to highway or road use by the public. They cannot be used for powerlines or restricted private access. The date of survey and appropriation of the land must be considered in determining the presence of a section line easement.

(B) Methodology¹

Using the date of entry and the date of survey plat approval, an analysis of section line easements would proceed as follows:

- A. If date of entry predated survey plat approval there is no easement.
- B. If entry predated April 6, 1923 (date of enabling legislation for section line easements) there is no section line easement.
- C. If survey plat approval predated April 6, 1923, but date of entry is after April 6, 1923, but before January 18, 1949, there is a section line easement.
- D. If survey plat approval is during the period of January 18, 1949 and March 21, 1953, and date of entry falls within this period, there is no section line easement.
- E. If survey plat approval is during the period of January 18, 1949 and March 21, 1953 and date of entry falls after March 21, 1953, there is a section line easement.
- F. If the land is in state ownership, there is a section line easement.
- G. If the land was disposed of by the state or territory during the period of January 18, 1949 and March 26, 1951, there is no section line easement.
- H. United States Surveys (U.S.S. and Number) and Mineral Surveys (M.S. and Number) are not a part of the rectangular net of survey. If the rectangular net is later extended, it is established around these surveys. There are no section lines through a U.S.S. or M.S., therefore, no section line easements can exist on such areas.

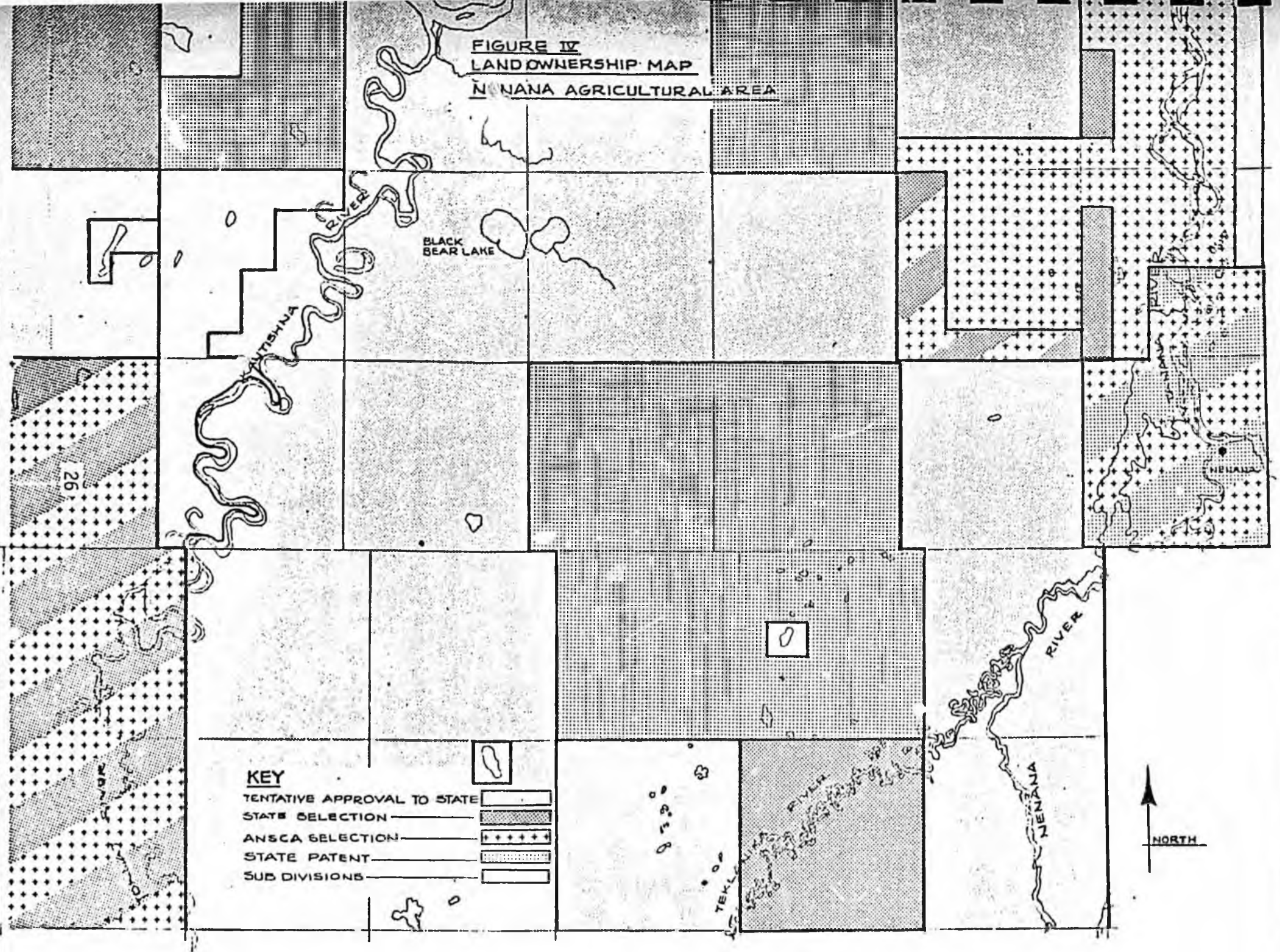
There may be many other situations which would require evaluation and decision on a case by case basis.

3. Project Right-of-Way Requirements

Figure IV presents existing land ownership in the project area. Land in the initial phase of the project was chosen because it is state patented. The

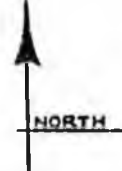
¹ Taken from "Section Line Easement Research Technique" put together by the Fairbanks North Star Borough, Planning Department, 1979.

FIGURE IV
LAND OWNERSHIP MAP
NENANA AGRICULTURAL AREA



KEY

TENTATIVE APPROVAL TO STATE	
STATE SELECTION	
ANSCA SELECTION	
STATE PATENT	
SUB DIVISIONS	



proposed roadway traverses a township which has been tentatively approved for state patent and a township including both state patent land and private property. The bridge crossing the Nenana River crosses private land along the river's west bank. Property along the east bank is currently classified as railroad terminal reserve. The entire township in which Nenana lies is being claimed for private use under the Alaska Native Claims Act. Thus, rights-of-way will have to be acquired from state, federal, and private ownership.

As discussed in Chapter IV, a right-of-way 200 feet wide is required for the main and collector roads in addition to a 30 foot utility easement on either side of the roadway easement. Within the roadway easement are 32' and 28' of traffic lanes for the main and collector roads respectively; 52-54 feet of ditch on either side of the traffic lanes; and 30-34 feet of space for storage of organics to be used in the building of slopes. Feeder roads require 150 feet of roadway easement with a 30 foot utility easement on either side. (See Sheet 4).

4. Conclusions and Recommendations

Acquiring rights-of-way can become a complex issue with the potential to slow-up or even stop a project. In the foregoing sections it was found that the proposed roadway would traverse state, federal and private property. It was also found that required rights-of-way were greater than easements available along section lines. It has been recommended that use of "blanket condemnation" for necessary right-of-way might be a way of avoiding many problems.¹ Though this is an area which definitely requires legal expertise, current Judicial practice is that an Engineers' expertise will not be substituted for Judiciary opinion if it is clear that the Engineer has exercised his or her judgement in roadway layout.² This expertise and many other resources could be made available should the road be built under the umbrella of the Local Service Roads and Trails Act (LSR&T).

Development and construction of the roadway network under LSR&T appears to

¹ Interview with Bill Satterberg, Department of Law, Highways Section, October 28, 1980.

² IBID.

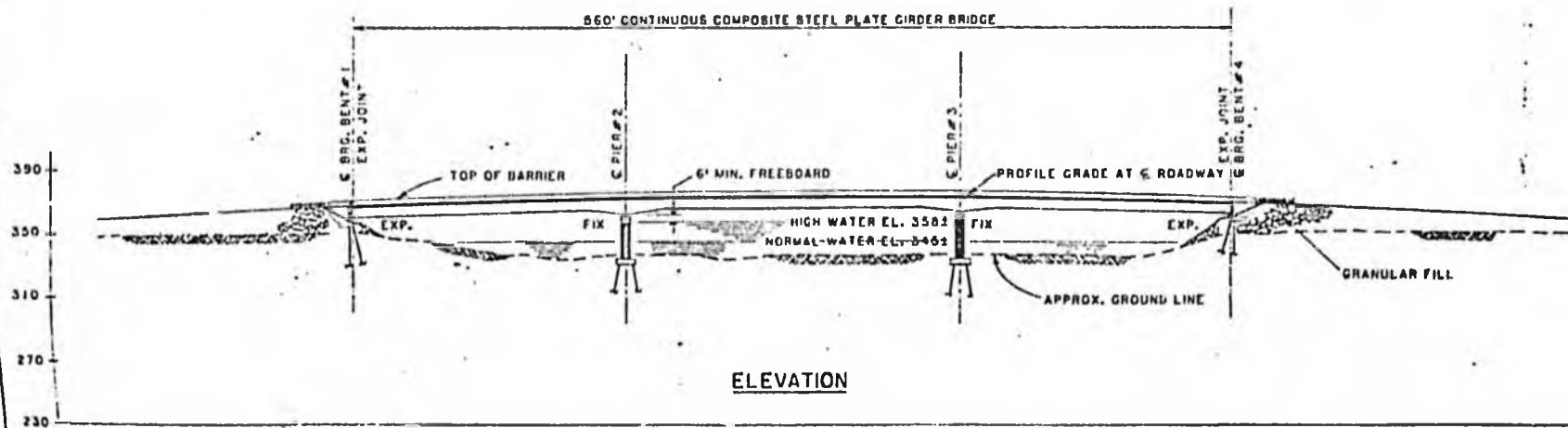
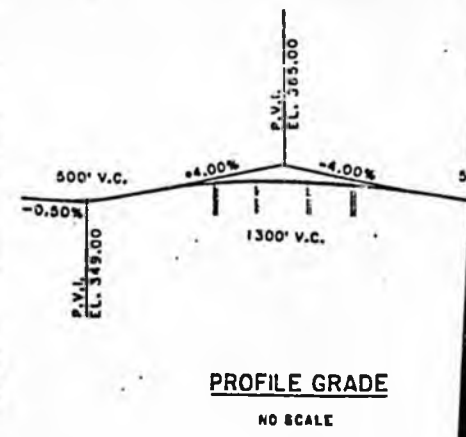
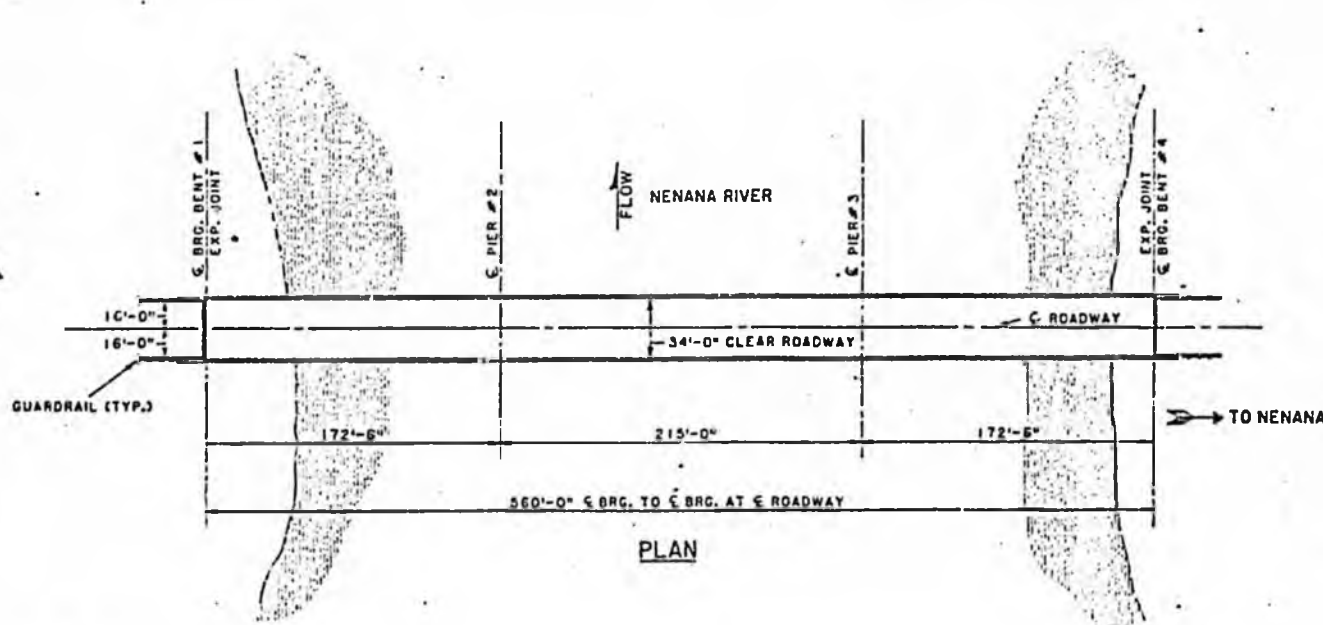
be the most expedient approach to the acquisition of rights-of-way and many other developmental requirements discussed in this section. Under LSR&T the state can use its mechanisms and powers to acquire necessary right-of-way in accordance with AS 19.05.080-19.05.120.¹ The current revision of the act would provide funds for purchase of rights-of-way and gravel. However, this revision is yet unsigned by the governor and there remains some controversy in the legislature regarding the specific provisions for the purchase of right-of-way.² Until the issue is resolved however, funding for the purchase of right-of-way will have to come through some other legislative vehicle.

Construction of the roads under LSR&T would also guarantee maintenance either through the Department of Transportation and Public Facilities or local government by way of revenue sharing.³

¹ AS 19.30.171.

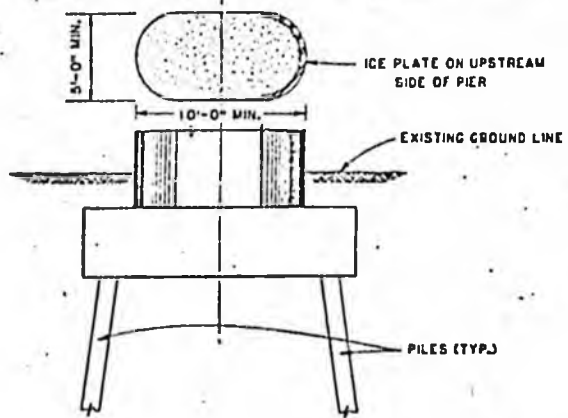
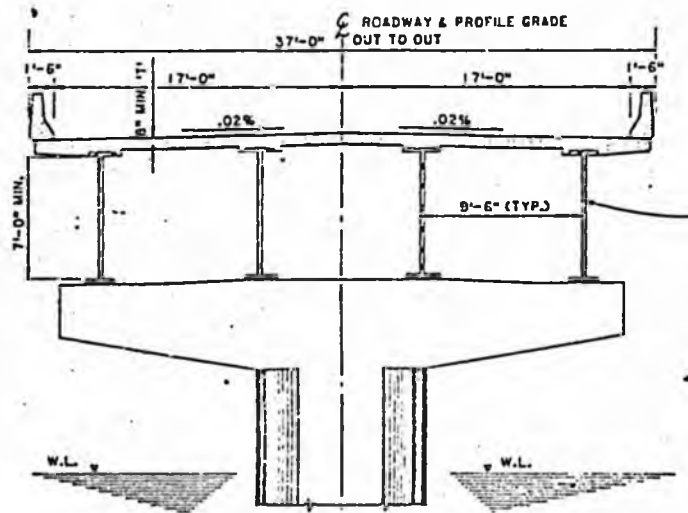
² Interview with Donovan Rinkin, LSR&T Engineer, Department of Transportation and Public Facilities, November 13, 1980.

³ AS 19.30.211.



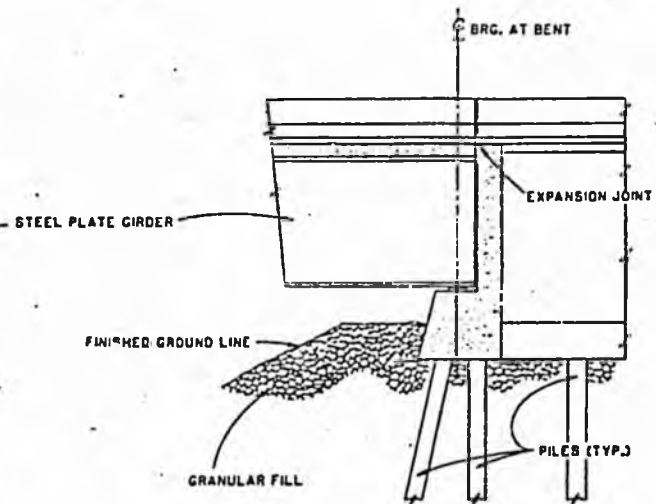
NOTES:
 LIVE LOADS: HS20-44
 DESIGN SPEED: 60 MPH
 STREAM DATA: ASSUMED

PRELIMINARY: NOV 1980
NENANA RIVER
 DRAWN: T. L. B. (11/80) APPROVED BY: [Signature]
 DATE: 11/12/80
 HDR
 ALASKA TRANSPORTATION DEPARTMENT



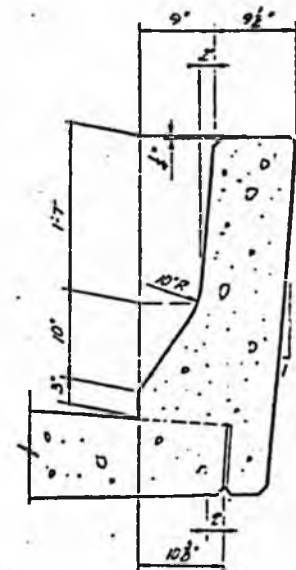
TYPICAL PIER ELEVATION

SCALE: 1/4"=1'-0"



TYPICAL BENT SECTION

SCALE: 1/4"=1'-0"



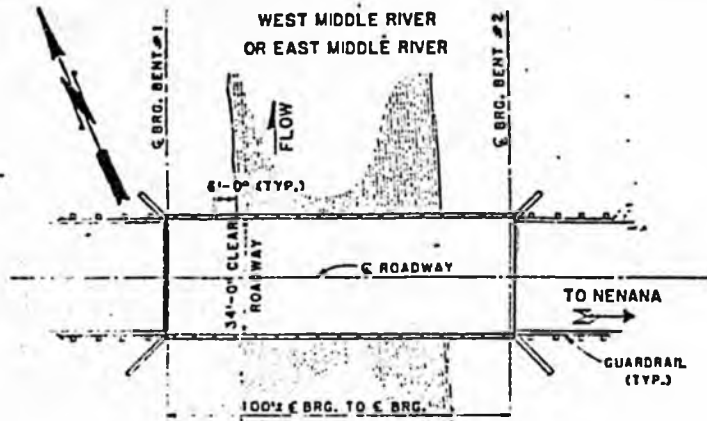
BARRIER DETAIL

SCALE: 1/2"=1'-0"

PRELIMINARY

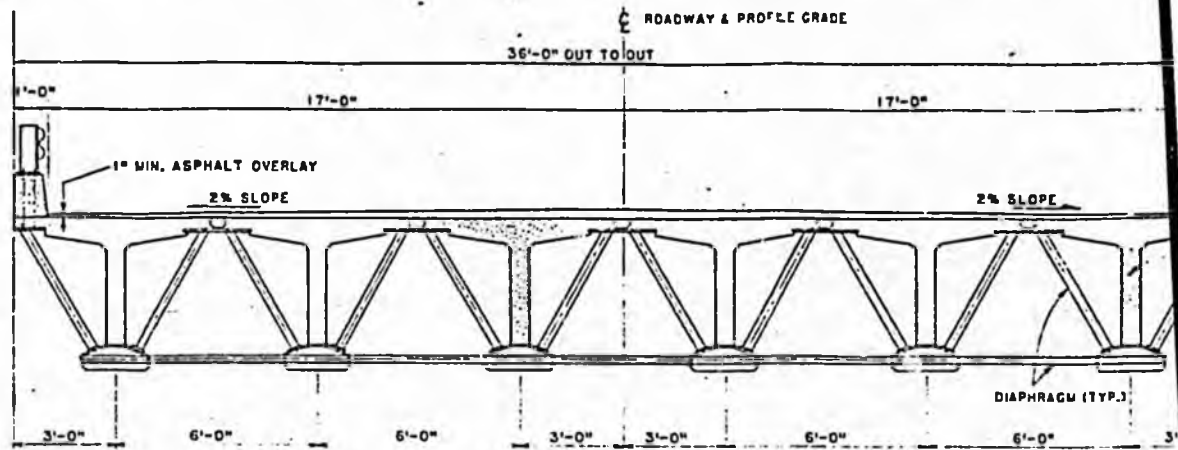
NENANA F

DATE AS SHOWN	
DATE 11/17/80	
HDR	
ALASKA TRANS	



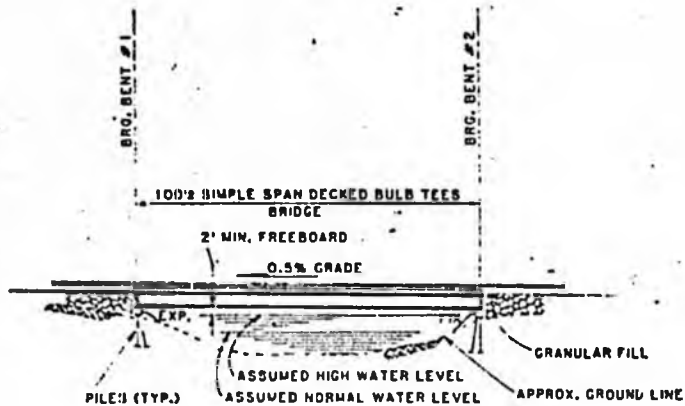
PLAN

SCALE: 1"=20'-0"



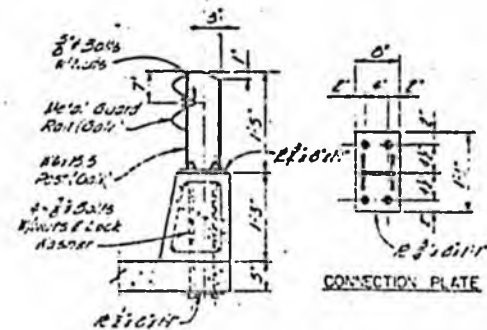
SECTION

SCALE: 1/2"=1'-0"



ELEVATION

SCALE: 1"=20'-0"



GUARD RAIL POST CONNECTION DETAIL

SCALE: 1"=1'-0"

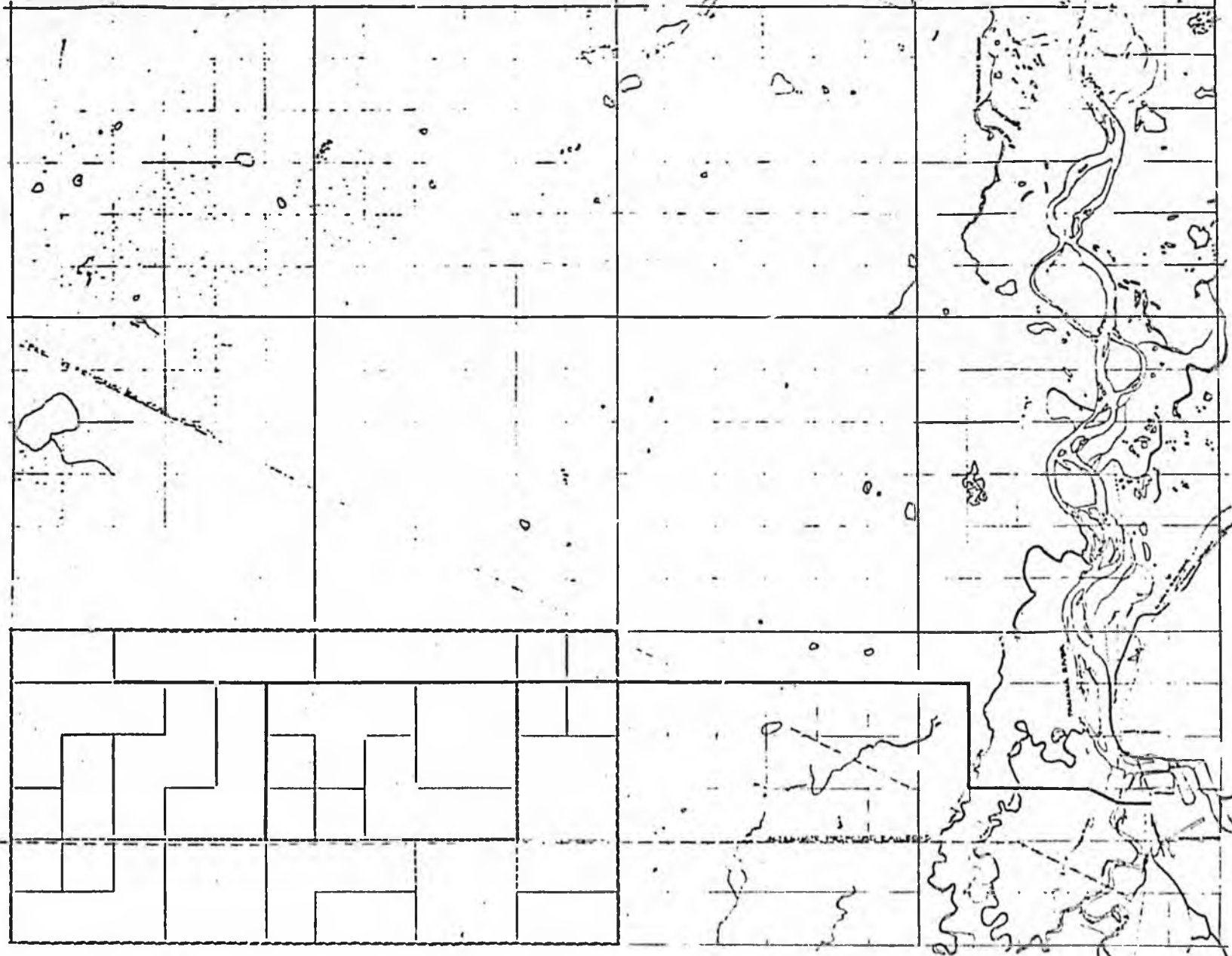
NOTES:

LIVE LOADS: HS20-44
DESIGN SPEED: 60 MPH
STREAM DATA: ASSUMED

PRELIMINARY; NOVEMBER

WEST MIDDLE RIVER
EAST MIDDLE RIVER

DATE AS SHOWN
DATE 11/12/80
HDR
ALASKA TRANSPORTATION



LEGEND
 ——— ROAD
 - - - - PROPERTY LINE
 ······ EXISTING ROAD

PRELIMINARY LAYOUT DRAWING
 INITIAL PHASE ROADWAY
 LAYOUT
 Alaska Transportation Consultants

APPENDIX I
REQUEST FOR PROPOSAL SENT TO VARIOUS ALASKAN PORTS

REQUEST FOR PROPOSAL
FOR
GRAIN EXPORT TERMINAL

The State of Alaska, Special Projects Office, is submitting this request for proposal. Our intention is to construct a permanent facility for the exportation of Alaskan produced grains.

The following information will be required in the proposal for our analysis:

1. Financial committment possibilities
 - a. development incentive on real estate taxes
 - b. direct complete or partial financing of the facility
 - c. . Bond issuing authority for construction costs
 - d. moratorium on interest and other payments until facility becomes economically viable
2. Location
 - a. acreage of proposed site
 - b. availability
 - c. site development cost
 - d. expansion area
 - e. site accessability
 - f. proximity to available dock space
3. Water depth
 - a. at dock
 - b. in approach channel.
4. Wharfage charges

5. Labor-longshoreman and facility personnel
 - a. availability
 - b. charges
6. When construction could be initiated
7. Competing dock users
8. Utilities
 - a. sufficient electrical power available
 - b. other energy forms available
9. Is port served by
 - a. rail
 - b. truck
 - c. air
10. Any potential use of existing equipment and/or facilities
11. Distances from present and future agricultural production areas.
 - a. Delta Junction
 - b. Nenana
 - c. Point MacKenzie
12. Public opinion of facility
13. Safeguard from earthquake damage
14. Possibilities of using flat house facility for importing and exporting other products

See attachments for preliminary plans of this \$4.2 million
facility. Please return your proposal no later than ¹²⁻³¹⁻⁸⁰~~11-28-80~~ to:

Alaska Agricultural Action Council
1514 South Cushman Room 210
Fairbanks, Alaska 99701

APPENDIX II
MASTER APPLICATION-ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
MASTER APPLICATION - INFORMATION SHEET
Environmental Procedures Act, AS 46.35

GENERAL INFORMATION

The master application serves as a notice of intent to the State of a proposed project by an applicant. This form was designed to include a broad range of State and local government interests, therefore, many of the questions may not apply to your proposed project. Please read this application before completing it. Answer all questions pertaining to your proposed project. Any missing or misleading answers may delay the processing of your application. Complete a site diagram of the project and submit it with your signed application to one of the Permit Information Centers listed below.

Alaska Permit Information Center
Department of Environmental Conservation
437 "E" Street, Second Floor
Anchorage, Alaska 99501
Telephone: (907) 279-0254

Alaska Permit Information Center
Department of Environmental Conservation
675 7th Avenue, P.O. Box 1601
Fairbanks, Alaska 99707
Telephone: (907) 452-2340

Alaska Permit Information Center
Department of Environmental Conservation
Pouch O, 3220 Hospital Drive
Juneau, Alaska 99811
Telephone: (907) 465-2615

GENERAL PROCEDURES FOR PROCESSING APPLICATIONS UNDER AS 46.35

Upon receipt of the master application in a permit center, the following steps are taken:

Master Application

Copies of the master application and the site diagram are sent for review to all State departments and any municipality where the project is located. A statement is requested regarding agency jurisdiction and any permits that may be required for the proposed project.

These agencies must respond to the permit center within 15 days. If the agencies have any jurisdiction over the project and require a permit, they will submit their individual applications to the permit center with a statement of whether a hearing is required.

Individual State & Local Permit Applications

The permit center will send the individual applications to the applicant for completion. Completed applications and required fees should be returned to the permit center.

The returned applications and fees will be sent to the proper agencies. The permit center will make the arrangements for a public hearing on the project, if a hearing is required. Within 30 days receipt of the last applications, the permit center will have a notice published once a week for three consecutive weeks. The applicant will be required to pay for the publication of these notices.

The public hearing will be held in or near the municipality where the major part of the proposed project is located. This hearing will be held within 20 to 30 days of the last publication of the notice. Members of the public and the applicant may be present. Any State agency that requires a permit for the project shall be represented at the hearing.

At the close of the hearing, the chairman will establish a date (within 90 days from the hearing date) for the final decisions on all applications on the project. The final decisions will be submitted to the Department of Environmental Conservation. They will be incorporated into one document and submitted to the applicant personally or by certified mail.

INTERIM MASTER APPLICATION

Permit Information Center
Alaska Department of Environmental Conservation

MASTER APPLICATION

NO. _____

CERTIFICATION

(to be completed by local government)

I hereby certify the project described herein is in compliance with all zoning ordinances and associated comprehensive plans administered by

CITY OF NENANA, ALASKA

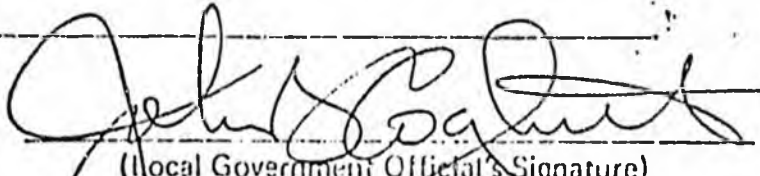
(Local Government Official's Signature)

Mayor, City of Nenana

(Title)

(Date)

I hereby certify the property described in Section II is not under the jurisdiction of any zoning ordinance or associated comprehensive plan administered by


(Local Government Official's Signature)

Mayor
(Title)

11-13-80
(Date)

I. Applicant Information

A. Name of Applicant: CITY OF NENANA, ALASKA

Address: _____
(Street Number or R.F.D.) (City) (State) (Zip Code)

Phone Number: 832-5441

B. Consultant or Contact Person: ALASKA TRANSPORTATION CONSULTANTS, INC.

Address: 212 C Wedgewood Drive, Fairbanks, Alaska 99701
(Street Number or R.F.D.) (City) (State) (Zip Code)

Phone Number: 456-1967

II. Activity Location

A. Location of Work (smallest legal subdivision): West of the City of Nenana at the Nenana River, East Middle River, and West Middle River bridge sites

Within Section 15-23, Township 4 S, Range 3 W

B. Distance and direction from nearest incorporated town or city:
Four and one-half (4½) W. of City of Nenana
Right-of-way, 200 feet wide to the West Middle River bridge site per project diagram.

III. General Activity Description

A. Beginning Construction Date: January 1, 1981 Completion Date: February 15, 1981

B. Description of Project (describe the project objectives, purpose and need):
Determine alignment of bridges across the three (3) above rivers; also alignment of road between bridge sites.

C. Description of Work (describe the project construction and operation):
Drilling test holes 10-20 feet deep, each one-fourth (¼) mile, along road alignment. Drilling test holes at bridge piling sites, one of which will be at least one hundred (100) feet deep. Survey alignment of road with bridge.

IV. SPECIFIC ACTIVITY DESCRIPTION

A. The construction or operation of this project involves: (check all appropriate boxes).

- Commercial development
- Industrial development
- Institution
- Residential development

Above checked development includes:

- Electrical
- Plumbing
- Elevator
- Mechanical equipment in structures
- Boiler
- Pressure vessels
- Pressure piping
- Prefabricated structures

Sewage disposal:

- Septic tank and drainfield installation or alternative disposal system
- Connection to municipal sewer system
- Develop or connection to nonmunicipal sewer system
- Connection to municipal water system
- Develop or connection to nonmunicipal water system
- School water supply
- Surface mining (including rock, quarry, material borrow site, sand and gravel, etc.)
- Underground mining
- Dredging
- Oil and gas drilling and exploration
- Geothermal drilling and exploration
- Well injection
- Well construction
- Fireworks
- Marine facility (access, dock, float, etc.)
- Explosives
- Disposal of surplus mineral resources

Food service facilities:

- Restaurant
- Temporary
- Limited service restaurant
- Commissary
- Food vending machine
- Vending machine
- Mobile unit(s)
- Shellfish distributors
- Shucker packers
- Harvesters

- Swimming pool
- Health facility (hospital, inpatient care, nursing home, etc.)
- Home for aged
- Group quarters
- Child care agency
- Day care facility
- Post secondary education facility at a new location
- Junkyard
- Alcohol or alcoholic beverages (industrial, manufacture, wholesale, retail)
- Hydraulic structure
- Irrigation, drainage
- Hydroelectric facilities
- Mobile home park
- Airfield construction or modification
- Advertising signs
- Cultural site development
- Pneumatic conveyance facilities
- Liquid petroleum gas
- Flammable and/or combustible liquids
- Shore-based handling devices
- Excavation
- Land leveling
- Stream bed alteration, movement of material within banks
- Flood control project (stream channelization)
- Aquaculture
- Agriculture
- Bulkhead
- Burning
- Dam construction
- Forest management
- Tree cutting
- Right of way clearing
- Gravel operation
- Road construction
- Solid waste disposal
- Utilities
- Port Development
- Propagation of fish or wildlife
- Landfill
- Tourist facilities (hotel, motel, recreational park, organization camp, picnic park, mass gathering)

Other Preliminary geotechnical and survey.

Yes No

B. All or a portion of the activity will be located within 200 feet of the ordinary high water mark or within the floodplain of _____, XXXXXXXXX
(name of stream or body of water)

NENANA RIVER, EAST MIDDLE RIVER, WEST MIDDLE RIVER _____; a tributary(s)
(name of stream or body of water)
of the Tanana River.

C. Work will be conducted (include anticipated dates work will take place)

Over Water JANUARY 1, 1981 --- FEBRUARY 15, 1981
(dates)

In or under water JANUARY 1, 1981 --- FEBRUARY 15, 1981
(dates)

D. The proposed work will be vented or will release materials into the air. (explain)

E. Will the construction or use of the final facility result in the discharge of a pollutant? Into:

- Ground water
- Surface water
- Sewer system

Explain (pollutant): _____

F. Will your proposal include facilities for the disposal of sewage?

- Septic Tank and Drainfield Installation
- Connection to Municipal sewer system
- Develop a Nonmunicipal (individual) treatment facility

G. Will construction or operations of the final facility involve the use of ground or surface water?

- | | |
|--|--|
| SOURCE | USE |
| <input type="checkbox"/> Ground water | <input type="checkbox"/> Domestic Use |
| <input type="checkbox"/> Surface water | <input type="checkbox"/> Commercial/Industrial Use |
| | <input type="checkbox"/> Other _____ |

Quantity of water use: _____ cfs, or _____ gpm.

If surface water, name of source: _____
(stream or body of water)

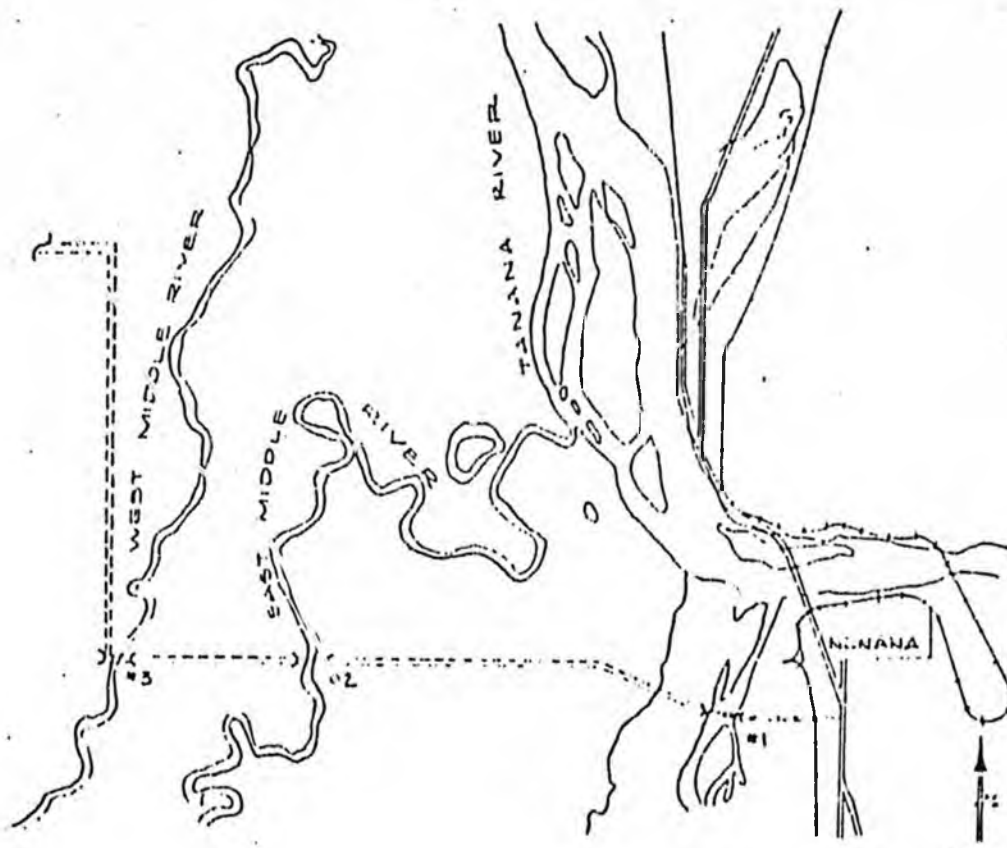
a tributary of _____
(name of stream or body of water)

Yes No

- II. Will your proposal include facilities for public water supply?
 Connection to Municipal supply system
 Develop a Non-municipal (individual) supply system
- I. Will your proposal require the construction or modification of a dam for the storage of water?
Height of dam: _____ feet.
Quantity of water to be stored: _____ acre feet.
- J. Do you plan to dispose of material by burning?
 Natural material (organic)
 Man-made material (processed)
- K. Do you plan to dump any mill waste or forest debris?
- L. Do you plan to conduct a commercial operation with power driven machinery in dead or down timber?
- M. Do you propose to remove more than 10,000 tons or disturb more than two acres of land in order to remove gravel, clay, coal, stone, sand, metallic ore, or any other similar solid material or substance to be excavated from natural deposits on or in the earth for commercial, industrial, or construction uses?
- N. Do you plan to conduct any activity on or directly pertaining to forest land and related to growing, harvesting or processing timber including: road and travel construction; timber harvest; precommercial thinning; reforestation; fertilization; prevention and suppression of diseases and insects; salvage of trees; right-of-way clearing; or brush control?
- O. Do you plan to recover stray logs, other than logs owned by you, from waters of the State?
- P. Does your proposal involve work within, adjacent to, or near a state park?
- Q. Do you have control of the land on which the project is located? Who does?
 I own/control the land.
 I control the land through a license from a private individual/company.
 The State owns the land.
 Federal land.
 Locally owned land.

V. PROJECT DIAGRAM

Show the general area involved by the project. Include the proposed project improvements, existing topography, streams or bodies of water, landmarks, property lines, north arrow, scale, etc. (include additional pages if necessary)

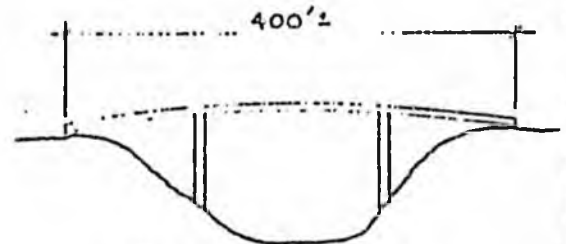


LOCATION MAP

SCALE: 1" = 1 MILE



TYPICAL BRIDGE 2 & 3
N.T.S.



TYPICAL BRIDGE 1
N.T.S.

VI. ENVIRONMENTAL IMPACT

Yes No

- A. Have you been asked to complete an "Assessment of Environmental Impact"? (If completed, please attach a copy.)
- B. Has an "Environmental Impact Statement" been requested before you begin your project? (If completed, please attach a copy.)

C. Comments: _____

The information given on this application is complete and accurate to the best of my knowledge and belief.



(Applicant's Signature)

11-15-80

(date)

APPENDIX III
SECTION 46.35.030-46.35.210 ALASKA STATUTES

Sec. 46.35.030. Master application. (a) A person proposing a project which requires the issuance of one or more permits may submit a master application to the department requesting the issuance of all permits and documents necessary before the construction and operation of the project in the state. The master application shall be on a form established by the department and shall contain sufficient information as to the location and the nature of the project, including discharge of wastes and use of or interference with natural resources of the state.

(b) Upon receipt of a properly completed master application, the department shall immediately forward a copy of the application to all heads of executive departments of the state and the chief elected official of all municipalities in which a portion of the project is proposed to be constructed, together with the date by which the agency shall respond to the master application.

(c) Each agency notified shall respond in writing to the department by the specified date, not exceeding 15 days from receipt, as determined by the department, advising

(1) whether the agency has an interest in the master application;

(2) if the response to (1) of this subsection is affirmative, the permit program under the agency's jurisdiction to which the project described in the master application is pertinent; and

(3) whether, in relation to the master application, a public hearing as provided in §§ 50 and 60 of this chapter would be in the public interest.

(d) Each notified agency which (1) responds within the specified date that it does not have an interest in the master application; or (2) does not respond as required within the specified date, may not subsequently require a permit of the applicant for the project described in the master application unless the master application contained false, misleading, or deceptive information, or other information or lack of information which would reasonably lead an agency to misjudge its interest in the master application.

(e) The department shall submit application forms relating to permit programs identified in affirmative responses under (c) of this section to the applicant with a direction to complete and return them to the department within a reasonable time as specified by the department.

(f) When the applications, properly completed, have been returned to the department, each of the applications shall be transmitted to the appropriate state agency for the performance of its responsibilities of decision making in accordance with the procedures of this chapter. (§ 1 ch 60 S.L.A. 1977)

Sec. 46.35.040. Withholding final permit. When it appears that the applicant does not own or control the land or water necessary for the siting of the project in the master application, the department shall continue the proceedings under this chapter but may withhold the final permit until the applicant has obtained ownership or control of the land or water necessary for the site of the project. If the applicant has applied

for land or water necessary for the siting of the project from the state or a municipality of the state, the state agency or municipality shall promptly adjudicate the application for the land or water filed by applicant. (§ 1 ch 60 SLA 1977)

Sec. 46.35.050. Notice of proposed project. (a) The department, within 30 days after transmittal under § 30(f) of this chapter, shall cause a notice to be published at the applicant's expense once each week for three consecutive weeks in a newspaper of general circulation within each municipality in which the project is proposed to be constructed or operated. The notice shall describe the nature of the master application, including, with reasonable specificity, the project proposed, its location, the various permits or documents applied for, and the state agency having jurisdiction over each permit or document. Except as provided in (c) of this section, the notice shall also state the time and place of the public hearing which shall be scheduled not less than 20 or more than 30 days after the date of last publication of the notice. It shall further state that a copy of the master application and a copy of all applications for the project are available for public inspection in the regional office of the department nearest to where the project is proposed to be constructed or operated, as well as at the department office in the capital and any other locations the department may designate in the notice.

(b) If no part of the project is to be constructed or operated in a municipality, or if there is no regularly published newspaper of frequency at least weekly, the public notice shall be published in a newspaper in the judicial district in which the project is proposed.

(c) If the responses received by the department from state agencies under § 30(f) of this chapter unanimously state the position that a public hearing concerning a master application is not necessary in the public interest, and the department, after a careful evaluation, taking into consideration all interests involved, including the opportunity for members of the public to present views, agrees, the provisions of (a) of this section pertaining to the time and place of a public hearing shall not be included in the notice. In that case the notice shall state that members of the public may present their views and supporting materials in writing to the department regarding any of the permits applied for within 30 days after the last date of publication of the notice in a newspaper. (§ 1 ch 60 SLA 1977)

Revisor's note (1977). — AS 46.35.050(a), as it appeared in § 1, ch. 60, SLA 1977 (HCS CSSB 227), contained reference to "(b) of this section." This citation originally appeared in SB 227; however, the

subsection (b) referred to in that version became (c) of the final version of the bill as enacted. Consequently, the reference in (a) has been corrected to read "(c) of this section."

Sec. 46.35.060. Public hearing. (a) Except as provided in § 50(c) of this chapter, before a final decision is made on a permit application relating to a project subject to the procedures of this chapter, a public

hearing shall be held in or near the municipality in which all or a major part of the proposed project is to be constructed or operated, or, if the project is not to be constructed or operated in a municipality, the hearing shall be held at a location reasonably convenient to the site of the proposed project. The hearing shall be held in accordance with the notice given under § 50(a) of this chapter. At the hearing the applicant may submit any relevant information and material in support of his applications, and members of the public may present relevant views and supporting materials relating to any or all of the applications being considered.

(b) Each state agency having an application for a permit before it under § 50(a) of this chapter shall be represented at the public hearing by its commissioner or his designee. The commissioner of the department, his designee, or a hearing officer appointed by the governor, shall chair the hearing; however, the representative of any state agency other than the department within whose jurisdiction a specific application lies shall conduct the portion of the hearing pertaining to submission of information, views, and supporting materials which concern that application. The chairman may continue a hearing from time to time and place to place.

(c) No provisions of AS 44.52 apply to the hearing conducted under this section, and the hearing shall be conducted for the purpose of obtaining information for the assistance of state agencies and not as a trial or adversary proceeding.

(d) Federal and local government agencies may be represented at the hearings, at their option, by their chief executive officer or his designee.

(e) The hearing shall be electronically recorded, and copies of the recording shall be made available to state, federal and local agencies upon request. (§ 1 ch 60 SLA 1977)

Cross reference. — See revisor's note to AS 46.35.050.

Sec. 46.35.070. Final decision. (a) Upon completion of the public hearing the chairman, after consultation with the state agency representatives, shall establish the date by which all state agencies shall forward their final decisions on applications before them to the department. The date established shall be within the following 90-day period after the public hearing.

(b) In a situation where a notice is provided under § 50(c) of this chapter, the department shall, 30 days after the last notice publication in the newspaper, submit a copy of all views and supporting material received by it to each agency as described in the notice as having an application before it. At the same time, the department shall notify each state agency, in writing, of the date by which final decisions on applications shall be forwarded to the department. That date shall be

no later than 90 days after the date of last publication of the notice, but may be extended by the department for reasonable cause.

(c) Each final decision shall state the basis for the conclusion together with a final order denying the application for a permit or granting it, subject to a condition of approval as the deciding agency may have the power to impose. An agency which denies an application shall, with its final decision denying the application, provide a written summary suggesting alternate means of completing the project, or, if no alternative is feasible, the agency shall provide a written summary of its reasons for that conclusion.

(d) As soon as all final decisions are received by the department under (b) and (c) of this section, the department shall incorporate them, without modification, into one document and transmit it to the applicant either personally or by registered mail.

(e) Each state agency having jurisdiction to approve or deny an application for a permit shall have the power vested in it before October 1, 1977 to make such determinations. Nothing in §§ 30 — 70 of this chapter lessens or reduces these powers, and §§ 30 — 70 of this chapter modify only the procedures to be followed in the carrying out of the powers.

(f) A state agency, in the performance of its responsibilities of decision making under this chapter, may request or receive additional information from an applicant and others before or after the public hearing. (§ 1 ch 60 SLA 1977)

Cross reference. — See revisor's note to AS 46.35.050.

Sec. 46.35.080. Withdrawal of agency from participation. (a) A state agency responding affirmatively under § 30(b) of this chapter may withdraw from participation in the processing provided in §§ 30 — 70 of this chapter at any time, by written notification to the department, if it subsequently appears to the state agency that it has no permit programs under its jurisdiction applicable to the project.

(b) A decision by a state agency to withdraw from the proceeding is irreversible, and the state agency may not subsequently require a permit of the applicant for the project described in the master application unless the master application contained false, misleading, or deceptive information, or other information or lack of information which would reasonably lead an agency to misjudge its interest in the master application. (§ 1 ch 60 SLA 1977)

Sec. 46.35.090. Administrative and judicial review. (a) A person aggrieved by a final decision issued under § 70(d) of this chapter may file a notice of appeal with the commissioner requesting an adjudicatory hearing within 30 days of transmittal of the final decision to the person. A failure to file a timely notice of appeal constitutes a waiver of the

person's right to review the final decision, unless the failure was due to circumstances beyond the applicant's control.

(b) The commissioner shall grant a request for an adjudicatory hearing within 20 days of filing of the notice of appeal if he determines that the notice raises a reasonable issue of fact or law material to the final decision.

(c) A hearing officer appointed under AS 44.62.350 shall preside at hearings under this section, rule on the admission and exclusion of evidence, advise the deciding officers on matters of law, and participate in posthearing deliberations.

(d) Appeals shall be heard jointly by the commissioner, or his designee, of each agency which rendered a final decision under § 70 of this chapter for which the person requesting the hearing is aggrieved. The commissioner, or his designee, of each agency shall decide only that portion of the appeal which involves his agency.

(e) The commissioner, after consultation with other state agencies and local governments, shall adopt regulations governing the conduct of adjudicatory hearings under this section. The commissioner may enter into cooperative agreements with local governments and federal agencies for the joint holding of adjudicatory hearings. To the extent feasible, regulations adopted under this section shall conform to adjudicatory hearing procedures for the review of permit decisions under AS 30.25 and AS 46.03. Notwithstanding AS 44.62.330(a)(4), adjudicatory hearing procedures to review permit decisions under this chapter, or under AS 30.25 or AS 46.03, need not conform to the Administrative Procedure Act (AS 44.62.330 et seq).

(f) A person aggrieved by a final decision of the commissioner under this section may appeal the decision to the superior court in the manner provided by AS 44.62.560 — 44.62.570. (§ 1 ch 60 SLA 1977)

Sec. 46.35.100. Time. It is the sense of the legislature that time is of the essence in the processing of applications under this chapter. Whenever a section in this chapter states a time within which an act or a review is to be completed, the legislature has determined that the time allotted is adequate for a responsive state agency or municipality to complete the act or review. If unusual conditions prevent this from happening, it is the sense of the legislature that minimum extensions of the period established in this chapter may be granted upon a determination that the delay occurred beyond the control of the reviewing agency or municipality. (§ 1 ch 60 SLA 1977)

Sec. 46.35.110. Application. Notwithstanding any other provisions of regulation or statute relating to the processing of application for permits, the procedures set out in this chapter are exclusive for applications filed under § 30 of this chapter. The procedures of this chapter are in lieu of any procedures otherwise provided by law or

regulations, and are to be followed by a state agency in ruling upon those applications. (§ 1 ch 60 SLA 1977)

Sec. 46.35.120. Fee schedules. Fee schedules previously established or authorized by law for an application for a permit continue to apply. The department shall collect the fees and forward them to the appropriate state agency. (§ 1 ch 60 SLA 1977)

Sec. 46.35.130. Compliance with local zoning ordinances and plans. (a) No permit for a project filed under § 30 of this chapter may be issued unless the application has provided a certification from the appropriate local government that the project is in compliance with the zoning ordinances and associated comprehensive plans administered by the local government regarding the project. If the local government has no such ordinances or plans, the local government shall certify that fact. A local government may accept applications for certification under this section and shall rule upon them within 30 days. A local government may impose stipulations of performance in its approval, but, upon certification, the local government may not change the zoning ordinances as to the proposed project until the procedures of this chapter, including an appeal, are completed.

(b) Approval of an application for certification as provided in this section shall not eliminate any requirements of ordinances administered by a local government. A ruling by local government denying an application for certification is not appealable under this chapter, except that the denial of an application for certification under (a) of this section does not preclude the applicant from filing an application under a different statute or procedure. (§ 1 ch 60 SLA 1977)

Sec. 46.35.140. Applicability of other laws. Nothing in this chapter modifies in any manner the applicability of a land use law or regulation or local zoning ordinances to land of a state agency. (§ 1 ch 60 SLA 1977)

Sec. 46.35.150. Regulations and authorities. The department may adopt regulations to implement the provisions of this chapter. (§ 1 ch 60 SLA 1977)

Sec. 46.35.160. Permit requirement information centers. (a) The department shall establish permit requirement information centers at the commissioner's office and in all of its regional offices and may enter into an agreement with the governing body of any municipality having a population of more than 1,000 to establish and maintain local information centers to provide information to the public, in readily understandable form, regarding requirements of federal, state, and local governments for permits that must be acquired before initiating projects in this state and to provide assistance in the completion of permit applications.

(b) Each regional office of the department and other offices as the department may establish shall provide a master application to any

person requesting it. The department shall provide information, forms, instructions, and assistance in the completion of a master application under this chapter to a person requesting assistance. (§ 1 ch 60 SLA 1977)

Sec. 46.35.170. Conflicts and compliance with federal requirements. (a) If any part of this chapter is found in conflict with federal requirements regarding the allocation of federal funds to the state, that part of this chapter is inoperative to the extent of the conflict regarding the agencies affected, and the determination shall not affect the operation of the remainder of this chapter.

(b) The department, to the extent necessary to comply with procedural requirements of federal law relating to permit systems operated by the state, may modify the notice, timing, hearing and related procedural matters provided in this chapter. (§ 1 ch 60 SLA 1977)

Sec. 46.35.200. Definitions. In this chapter

(1) "commissioner" means the commissioner of environmental conservation;

(2) "department" means the Department of Environmental Conservation;

(3) "local government" means a city or borough including a municipality unified under AS 29.68.240 -- 29.68.440;

(4) "permit" means each of the following licenses, permits or authorizations required to be obtained from a state agency before constructing or operating a project in the state, or any other license, permit or authorization which may be designated by the commissioner:

- (A) waste water disposal permit -- AS 46.03.100, 18 AAC 72;
- (B) solid waste disposal permit -- AS 46.03.100, 18 AAC 60;
- (C) air emissions permit -- AS 46.03.150, 18 AAC 50.120;
- (D) pesticides permit -- AS 46.03.320, 18 AAC 90;
- (E) surface oiling permit -- AS 46.03.740, 18 AAC 75;
- (F) open burning permit -- AS 46.03.020, 18 AAC 50.120;
- (G) anadromous fish protection permit -- AS 16.05.870, 5 AAC 95.100;
- (H) critical habitat area permit -- AS 16.20.250 -- 16.20.260;
- (I) state game refuge land permit -- AS 16.20.050 -- 16.20.060;
- (J) encroachment permit -- AS 19.25.200;
- (K) utility permit -- AS 19.25.010;
- (L) driveway permit -- AS 19.05.020, 17 AAC 10.020;
- (M) state park incompatible use permit -- AS 41.20.020, 11 AAC 18.010;
- (N) access roads permit -- AS 41.20.020, 11 AAC 18.020;
- (O) water well permit -- AS 31.05.030, 11 AAC 22.140;
- (P) brine or other salt water waste disposal permit -- AS 31.05.070 [AS 31.05.030], 11 AAC 22.250;
- (Q) coal development permit -- AS 27.20.010, 11 AAC 46.010;

- (R) right-of-way and easement permits -- AS 38.05.330, 11 AAC 58.200;
- (S) special land use permit -- AS 38.05.035, 11 AAC 58.210;
- (T) tidelands permit -- AS 38.05.320, 11 AAC 62.710;
- (U) tidelands right-of-way or easement permit -- AS 38.05.320, 11 AAC 62.810;
- (V) limited personal use permit -- AS 38.05.320, 11 AAC 62.820;
- (W) permit to appropriate water -- AS 46.15.040, 11 AAC 72.050;
- (X) dam construction permit -- AS 46.15.040, 11 AAC 72.060;
- (Y) preferred use permit -- AS 46.15.040, 11 AAC 72.160;
- (Z) permit for use of timber or materials -- AS 38.05.110, 11 AAC 76.185;
- (AA) authorization for tidelands transportation -- AS 38.05.110, 11 AAC 76.205;
- (BB) special material use permit -- AS 38.05.115, 11 AAC 75.510;
- (CC) mineral and geothermal prospecting permits -- AS 38.05.145;
- (DD) tide and submerged lands prospecting permit -- AS 38.05.250;
- (EE) surface use permit -- AS 38.05.255, 11 AAC 86.500;
- (FF) burning permit during fire season -- AS 41.15.070, 11 AAC 92.010;
- (GG) miscellaneous state land use permit -- AS 38.05.035, 11 AAC 96.010;
- (HH) right-of-way permit -- AS 38.05.330;
- (5) "person" means an individual, municipal, public, or private corporation, or other entity, and includes a state agency and a local government;
- (6) "processing" and "processing of applications" means the entire process followed in relation to the making of decisions on an application for a permit and review of it as provided in §§ 30 -- 80 of this chapter;
- (7) "project" means any new activity or expansion of or addition to an existing activity, fixed in location, for which permits are required before construction or operation;
- (8) "state agency" means a state department, commission, board or other agency of the state; for the purposes of this chapter "state agency" also means a local or regional air pollution control authority established under AS 46.03.210. (§ 1 ch 60 SLA 1977)

Sec. 46.35.210. Short title. This Act may be cited as the Environmental Procedures Coordination Act. (§ 1 ch 60 SLA 1977)

Chapter 40. The Alaska Coastal Management Program.

Article

1. Development of Alaska Coastal Management Program (§§ 46.40.010 -- 46.40.100)
2. Coastal Management Programs in the Unorganized Borough (§§ 46.40.110 -- 46.40.180)
3. General Provisions (§§ 46.40.190 -- 46.40.210)

APPENDIX IV
DATA REQUIRED TO DETERMINE NAVIGABILITY OF A WATERWAY

DATA REQUIRED TO DETERMINE NAVIGABILITY OF A WATERWAY

1. Name
2. Tributary to
3. Physical characteristics
 - (a) Type of waterway (river, bay, slough, estuary)
 - (b) Length
 - (c) Width
 - (d) Depth at Mean High Water
 - (e) Drainage area
 - (f) Discharge volumes (maximum, minimum, mean)
 - (g) Cross-section or profile at proposed crossing.
 - (h) Fall per mile
 - (i) Velocity of flow (maximum, minimum)
 - (j) Elevation of water surface at:
 - Design High Water (~~25~~¹⁰⁰ year flood)
 - Mean High Water (mean annual flood)
 - Mean Low Water (average low observed during navigation season)
 - (k) Extent of tidal influence
4. Past or present use of the waterway by boats, vessels, barges, rafts, canoes, etc.
5. Past or present use of the waterway for interstate commerce
 - (a) General types, extent and period of time
 - (b) Documentation, if necessary
6. Nature and location of significant obstruction to navigation
7. Length of time the waterway is open for navigation:
 - (a) Time of spring break-up
 - (b) Time of fall freeze-up
8. Description of any known proposed or completed projects to improve the condition of the waterway for navigation.
9. Pictures of the waterway in the vicinity of the proposed crossing at periods of high and low flow.
10. Pictures of any obstructions to navigation.