Chefornak Airport Improvements

Environmental Assessment
and
Finding of No Significant Impact

Prepared by:
Alaska Department of Transportation & Public Facilities
Statewide Design & Engineering Services
Northern Region

for the
Federal Aviation Administration
Alaska Region

Spring 1999

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DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FINDING OF NO SIGNIFICANT IMPACT
FOR
Chefornak, Alaska Airport Improvements

PURPOSE AND NEED FOR THE PROJECT:

- The purpose of the project is to improve the aviation facilities at Chefornak, Alaska to provide safe and reliable air transportation.

PROPOSED FEDERAL ACTIONS:

- Federal funding for the proposed project through the Airport Improvement Program
- ALP approval

DESCRIPTION OF THE PROJECT:

- Acquire land,
- Construct a new gravel surfaced runway (75 by 3117-feet) approximately 2-miles from the community of Chefornak,
- install medium intensity airport lighting,
- construct a gravel surfaced taxiway,
- construct an apron, aviation support area adjacent to the apron,
- construct an access road from the community,
- construct gravel pads and install visual navigation facilities (PAPI, REIL's),
- construct a gravel pad and install a weather reporting facility (AWOS),
- close the old airport when the new airport is open and available for use.

Long term development of the Chefornak Airport includes:

- Construct a gravel surfaced crosswind runway and safety area,
- Install medium intensity runway lights for the crosswind runway.

MITIGATION MEASURES:

Conditions of approval associated with this project are detailed in the Environmental Assessment (EA) and project permits, and will be included in the construction specifications. The project has been coordinated with the appropriate agencies and includes measures to minimize impacts.

Prior to the commencement of any groundwork, ADOT shall conduct a teleconference or person-to-person meeting with the ADOT contractor and the Corps of Engineers, Regulatory Branch. The purpose of this condition is to review the permit and conditions to make sure all parties are familiar with the permit requirements and limitations.

Water Quality

- Culverts will be sized to allow for unimpeded flow.
- The unnamed stream channel that the access road crosses incorporates stipulations from the Alaska Department of Fish & Game to protect the resident blackfish population as follows:
- The culvert shall be located in the thalweg of the stream and installed so that the invert is buried at

least 965 mm (38"), at both the inlet and outlet of the culvert, below the streambed elevation.

- The effective slope of the culvert at any point along its length must not exceed 0.5 percent.
- The culvert shall be designed, installed, and maintained so that water velocity, flow, and any resulting drops in the water surface profile at any point within the culvert influence shall not impede the efficient passage of the slowest swimming fish group that occurs a the location of the proposed culvert installation. In order to meet this velocity requirement, the culvert shall be designed, installed, and maintained in such a manner that mean barrel velocity does not exceed 0.56 meters (1.8 feet) per second, and the average inlet and outlet velocities do not exceed 1 meter (3.6') per second during a mean annual flood design discharge with a two day duration.
- The culvert shall be installed on a firm substrate. Clean sand and gravel fill shall be used as foundation and backfill.
- Bank cuts, slopes, fill and exposed earthwork attributable to culvert installation and road building activities must be stabilized to prevent erosion both during and after construction.
- Prior to any fill placement, a silt fence shall be installed on a line parallel to and within 1.5 meters (5') of the proposed toe of slope within all wetland areas that contain standing water that is connected to any natural body of water or where the toe of slope is within 7.6 meters (25') of said water body.
- The DOT&PF will design the project to minimize sedimentation migration and include an erosion control plan in the construction plans and specifications. A Storm Water Pollution Prevention Plan will be developed and implemented by the construction contractor.

Archaeological and Historical Resources

- If cultural remains are encountered during construction, work must cease in the immediate area and Federal regulations pertaining to emergency discovery situations must be followed. The Advisory Council on Historical Preservation will be contacted in accordance the 36 CFR Part 800. The FAA Airports Division and the State Historic Preservation Officer will be notified.
- The construction contract will contain the provision: "Should cultural or paleontological resources be discovered as a result of this activity, all work that would impact these resources will halt and the State Historic Preservation Officer will be notified immediately, phone 907/269-8715."

Biotic Communities

- The existing runway will be utilized as a portion of the access road.

Endangered and Threatened Species

- The Department and the United States Fish & Wildlife Service will jointly conduct a reconnaissance survey for spectacled eider nesting activities immediately prior to start of construction activities.
- If a nesting site is discovered during construction, DOT/PF shall stop construction and follow USF&WS guidelines for activities near this species nesting site.
- Adherence to all USF&WS Special Use Permit stipulations will be followed.

Wetlands

- The contractor shall be responsible for permitting any contractor-supplied material source *not noted* in the EA. This includes such things (though not limited) as barge landing ramps, stockpile areas, bulkheads and ice bridges, and staging areas.
- The Alaska Department of Transportation (ADOT) shall notify the Corps of Engineers, Regulatory Branch, of the surface coarse gravel source, prior to obtaining the surface material. The purpose of this condition is to identify and obtain any associated permit authorizations that may be necessary.
- Refueling operations will be staged to protect surrounding wetlands.
- ADOT shall work with the Corps of Engineers, Regulatory Branch, and the Alaska Department of Natural Resources Plant Materials Center to develop and implement a reclamation plan for the

existing runway embankment area. This plan shall be in place not later than one year prior to the completion and operation of the new runway.

- Drainage structures of adequate size and number shall be installed and maintained along the access road embankment, where necessary, to assure that natural drainage patterns are maintained.

Construction Impacts

- Upon completion of the constructed airport, the contract will ensure that the site will be cleaned up and all trash collected and disposed of properly.
- Drip pans shall be used during servicing of equipment to prevent oil and hazardous materials from leaking.
- Use of fill materials containing hazardous substances, including petroleum fuels shall be prohibited.
- The contractor shall not stockpile, nor dispose of any material at any site suspected of containing hazardous substances or petroleum fuels.

REQUIRED PERMITS:

- U.S. Army Corps of Engineers Section 404 permit for placement of fill in wetlands and for dredging wetlands to obtain the required fill. Permit number 4-970493 is signed and dated June 16, 1999.
- Department of Fish and Game Fish Habitat Permit. Permit was issued April 30, 1999.
- Department of Environmental Conservation (DEC) Certificate of Reasonable Assurance was signed on April 30, 1999.
- Coastal Zone Consistency Determination. Proposed finding of project consistency was issued April 23, 1999.

FEDERAL FINDING AND APPROVAL

After careful and thorough consideration of the facts contained herein, the undersigned finds that the proposed Federal Actions are consistent with the existing national environmental policies and objectives as set forth in section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and that it will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to section 102(2)(c) of NEPA. Compliance with the requirements of all applicable environmental laws, Executive Orders and other related requirements has been met.

APPROVED: _____ DATE: 9/27/99

Approving FAA Official

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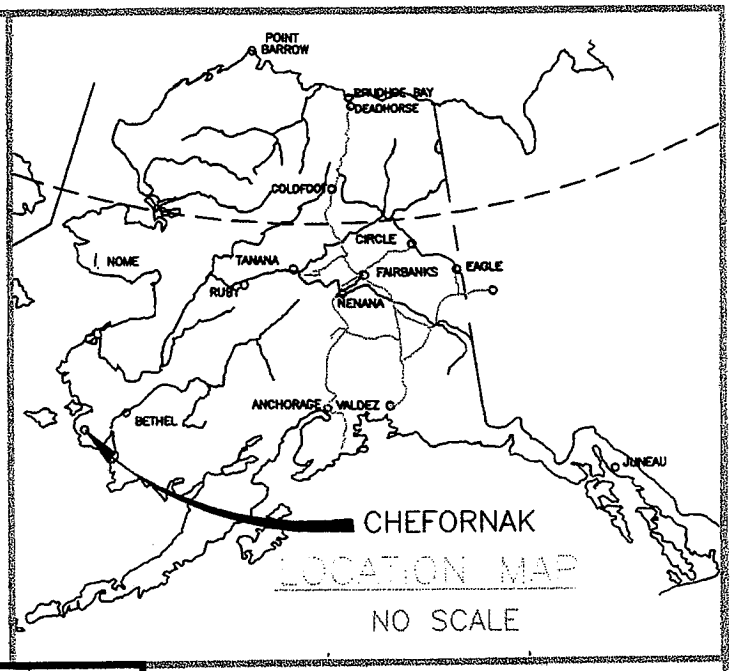
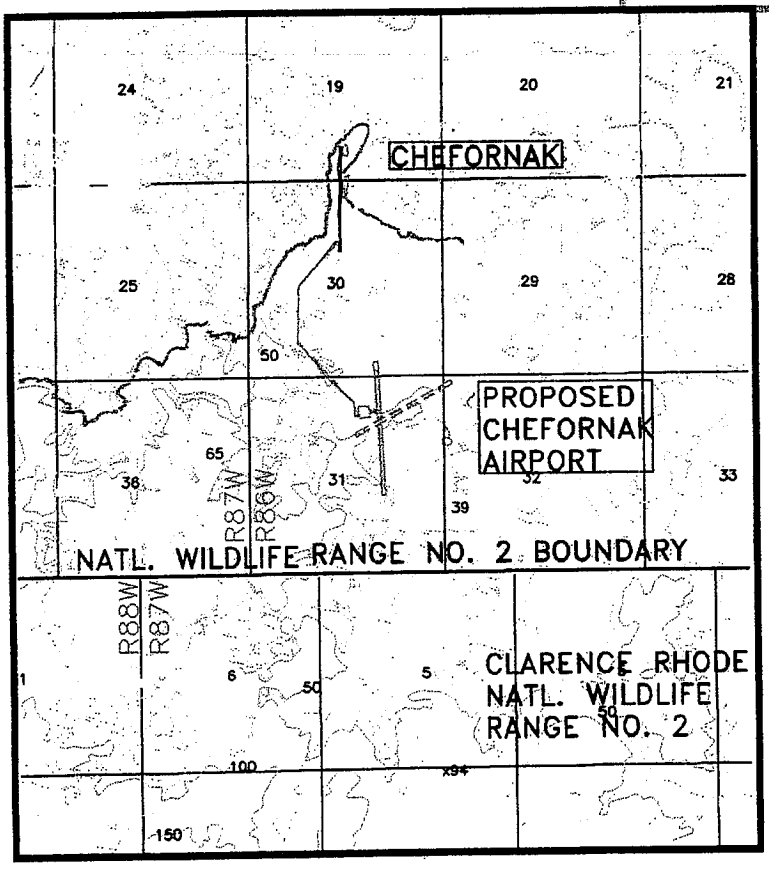


LOCATION MAP

NO SCALE



VICINITY MAP

Kilometers

1.5 1 .5 0 1 2 3

1 1/2 0 1 2

Miles

SEC 21, T1N, R86W, SM
SEWARD MERIDIAN
USGS BAIRD INLET (A-6 & A-7)

x:\air\51826\CORPS97

CHEFORNAK AIRPORT RELOCATION

LOCATION & VICINITY MAPS

APPLICATION BY DOT/PF, ALASKA

SHEET 1 OF

DATE: 10/16/98

FIGURE 1

ABSTRACT

The Alaska Department of Transportation and Public Facilities (ADOT&PF) in cooperation with the Federal Aviation Administration (FAA) is proposing improvements to the Chefornak Airport in Chefornak, Alaska. The airport is currently substandard. The single 12.2 m (40') wide runway provides only 78.8% wind coverage, far less than the FAA recommended 95%. Poor foundation and surfacing material results in frequent airport closures during wet weather and spring break up. Short runway length (792.5 m or 2,600') limits aircraft serving the airport to small single engine aircraft, which under Federal Aviation Regulations, Part 135 are not legally capable of operating during low visibility conditions. The airport provides the sole means of year round transport into and out of this community of 400 plus residents. It is also the only means of medical evacuation.

Various alternatives were studied for their ability to satisfy the purpose and need of the project with the least impact to the environment. The Department and the FAA met with the community and relevant public agencies to discuss and evaluate the pros and cons of each alternative. This environmental assessment contains the results of the studies and coordination. Relocating the airport south of the existing facility and providing two runways, a main and crosswind, is the preferred alternative (see Figure 3d on Page 4d). This new airport will be built over a 20 year timeframe. The first stage of development in the 0-10 year timeframe would consist of two projects. One would place local silt embankments for the main runway, taxiway, apron, access road, and miscellaneous pads. A second project would gravel surface the embankments, light the airport and construct the snow removal equipment storage building. Mitigation measures will be incorporated into the design to ensure protection of the environment. The final stage would construct the crosswind runway. This is planned for the 10-20 year timeframe. No significant impacts that would negatively affect the environment are anticipated with the planned development.

PURPOSE AND NEED

The Alaska Department of Transportation and Public Facilities (ADOT&PF) in cooperation with the Federal Aviation Administration (FAA) is proposing to upgrade the aviation facilities at Chefornak, Alaska to provide safe and reliable air transportation. Located in southwestern Alaska, Chefornak lies approximately 158 kilometers [98 miles] southwest of Bethel. It is located on the south bank of the Kinia River near its junction with the Keguk River within the Yukon-Kuskokwim Delta area of southwest Alaska.

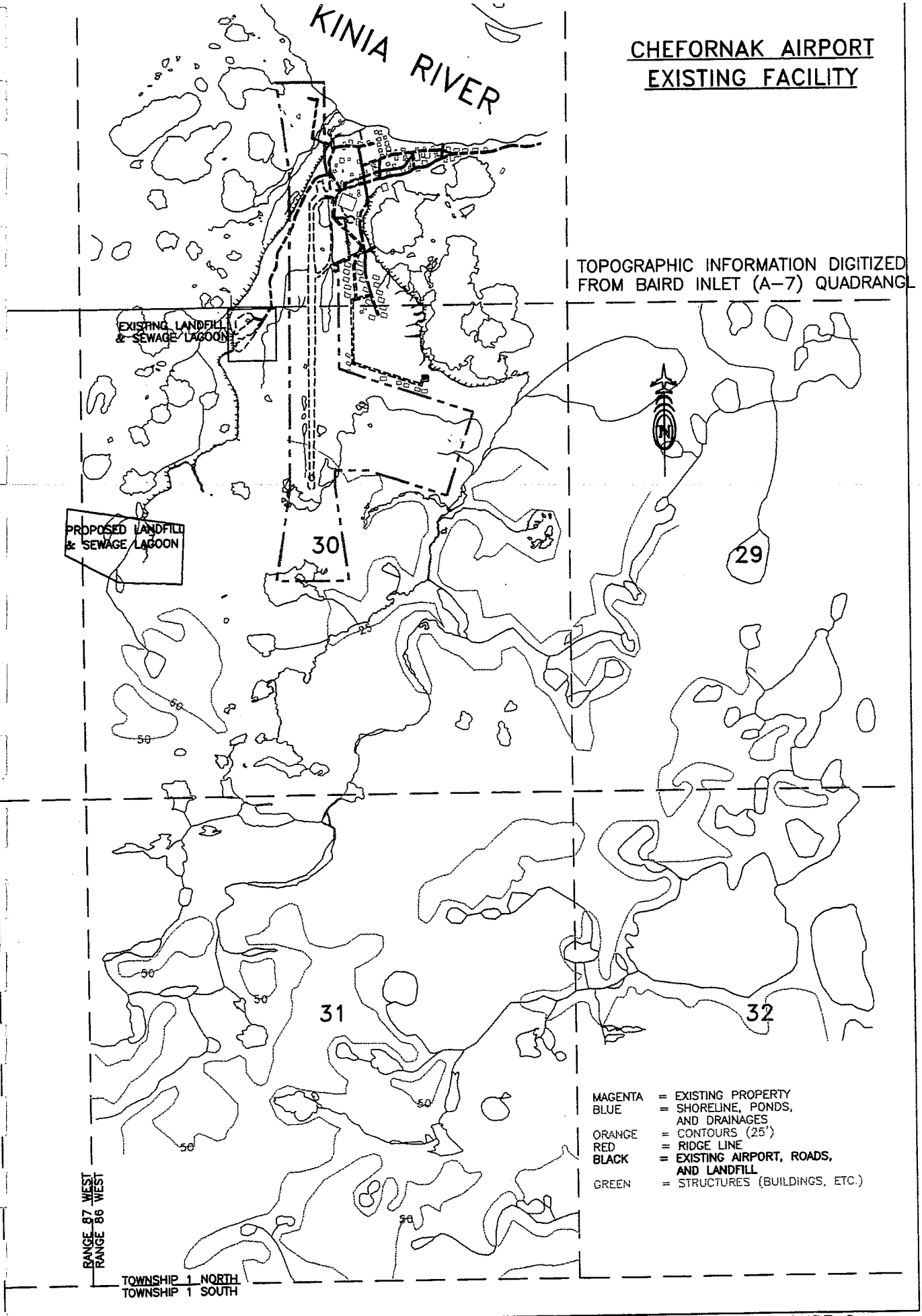
The local population as of 1997 is 405 according to Department of Labor's Alaska Population Overview. Subsistence use of the land's resources is supplemented by modern day amenities. Because no roads link Chefornak with other areas of the state or supply centers, the community relies almost exclusively on air transportation. Barge service from Seattle and Bethel deliver bulk items to Chefornak; all other supplies are delivered via air. Air service is the primary means for residents to travel between other communities and larger cities that offer services not available at home.

Without this vital link between Chefornak and the 'outside' world, community residents would largely be without. And, as the community continues to grow in population, the need for air service will increase, both for passenger and mail service, and delivery of goods and supplies.

Unfortunately, Chefornak's airport is quite substandard. The existing airport consists of a lighted 792.5 m [2,600'] by 12.2m [40'] gravel runway with a small 1394 m^2 (15,000 $ft.^2$) gravel apron connected to the runway by a short, steeply sloped taxiway. The airport does not meet current FAA standards developed to ensure that the national system of airports are safe, delay-free, and cost effective. Specific deficiencies are as follows:

- The runway length and width do not meet FAA design standards to accommodate the current twin engine aircraft fleet,
- The apron area is too small to accommodate the current mix of cargo and passenger operations and it lies within the Runway Protection Zone of the runway,
- The runway's foundation and surface materials are inadequate, often becoming too soft to land a plane on,
- The taxiway and apron grade are too steep to meet FAA design standards, especially when it is icy,
- Severe cross winds present problems for operation; the wind coverage is 78.8% based on the 10.5 knot crosswind component and FAA recommends a minimum of 95%,
- The runway and apron area are too close to the school and residences,
- The runway is often used by playing children and dogs,
- Fuel tanks are located in the approach to Runway 16 which is discouraged by current FAA design standards,
- Runway lighting needs improvement,
- Lack of a heated snow removal equipment storage building reduces snow and ice removal efficiency and,

Last Item on pg 2


KINIA RIVER
CHEFORNAK AIRPORT
EXISTING FACILITY
TOPOGRAPHIC INFORMATION DIGITIZED
FROM BAIRD INLET (A-7) QUADRANGL
EXISTING LANDFILL
& SEWAGE LAGOON
PROPOSED LANDFILL
& SEWAGE LAGOON
30
29
31
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50
MAGENTA = EXISTING PROPERTY
BLUE = SHORELINE, PONDS, AND DRAINAGES
ORANGE = CONTOURS (25')
RED = RIDGE LINE
BLACK = EXISTING AIRPORT, ROADS, AND LANDFILL
GREEN = STRUCTURES (BUILDINGS, ETC.)
RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH

FIGURE 2

✈ Drainage around the airport needs improvement.

Airport Use & Forecasts A user survey was conducted in 1996 to obtain annual operations. Local air taxi operators serving Chefornak were surveyed to obtain this information. The data obtained indicates annual operations slightly exceed 3,300. Enplanement data (defined as passengers on scheduled flights) between 1990 and 1996 (most current data available) indicates that passenger traffic increased 46% during the last six years (from 1,816 to 3,379). This data is obtained from the FAA ACAIS Database. During this same period population increased from 320 to 387, or approximately 17%, according to the Department of Labor, Alaska Population Overview publication.

Predicting future airport operations for smaller communities in Alaska has proved difficult at best. This is because accurate records of past activities are lacking, and future traffic operations are in part dependent upon changes to the airport and potential changes in FAA regulations regarding instrument flight rules. However, because there is no other year round means of access for this community, it is reasonable to assume that aircraft operations will continue to increase concurrently with the population.

ALTERNATIVES When the Department began to assess the airport facility at Chefornak, numerous items were identified which needed improvement. Various ideas were explored, suitable locations identified, and technical studies undertaken to identify alternatives for consideration. The study team originally developed six build alternatives and continued to study the feasibility of the no-action or no-build alternative. The scoping letter in Appendix A, pages A4 through A13, describes the alternatives and potential borrow sources. All of the alternatives had both positive and negative aspects to consider; each of these aspects was weighed against costs, technical advantages, environmental facets, and the people the airport is intended to serve. These alternatives were identified prior to gathering wind and topography data. Once this data was collected, the relocation alternatives, Alternatives 3, 4 and 6, were further refined to best meet the FAA wind coverage requirement and minimize earthwork. This resulted in a new alternative, Alternative 8, which is shown on Figure 3d. It is in the same general location as Alternatives 3, 4 and 6. This is the Preferred Alternative. It is a scaled back version to compete for limited construction funding.

All of the build alternatives would improve air transportation safety to some degree. The primary differences are the degree of improvement, costs of construction, amount of land acquisition, compatibility with adjacent land uses, and the schedule of completion. All alternatives would have gravel surfacing, an equipment building, and be lighted. The following is a brief outline of each alternative, also see Figures 3a through 3d for a visual representation of each location. Tables 1 and 2 distinguish between the alternatives.

✈ **Alternative 1** would shift the runway to the south and west to avoid the school and fuel tanks. The runway would be 23 meters by 914 meters [75.5 feet x 2,999 feet]. The safety area

would be 45 meters by 1094 meters [147.6 x 3,589 feet]. The apron area would be shifted to higher ground farther from the school and residential area and a new access road connection would be built to access it. It would allow lightly loaded twin engine aircraft operations. This alternative does not have a crosswind runway. Land acquisition would be required. Although better than existing (because the widened runway provides a margin of safety in crosswind conditions), wind coverage would be 78.8% which would not meet the 95% recommended by FAA. A drainage swale that feeds into a stream used for subsistence fishing would be crossed by the runway expansion to the south. The swale would be crossed with culverts. The possibility of runway incursions by children and pets remains high because the airport would still be adjacent to the community. Locally available construction materials with which to construct the embankments are of poor quality and may require a few years to thaw, settle and cure before they can be finished to support aircraft use. During this time the new embankments will not be available for use. Estimated construction cost is roughly $7,000,000. In order for the airport to be usable right away, higher quality materials must be imported. This results in an estimated cost of approximately $20,000,000.

✈ **Alternative 2** is similar to Alternative 1. It would be shifted south completely off the end of the old embankment. The main difference is that it is designed to accommodate larger aircraft. The runway would be 23m by 1219m [75.5' x 3,999'] with a safety area of 45m by 1399m [147.6' x 4,590']. Some of the air taxi operators indicated that their fleet was changing to larger aircraft. Also larger cargo haulers could use the airport occasionally. The advantages of this alternative are the same as for Alternative 1 with the addition that a more diverse fleet of aircraft and operating conditions could be accommodated. Wind coverage is 87.7% which is still not up to the required minimum of 95%. The runway and access road to this alternative's apron would both cross the stream used for subsistence fishing requiring culverts. Estimated cost is roughly $9,000,000 using locally available embankment material. The embankments will need to cure for a few years as in Alternative 1, so the airport would not be usable immediately. Estimated cost for a readily usable embankment using imported material is $26,000,000.

✈ **Alternatives 3, 4 & 6** would relocate the airport, realigning the main runway and providing a crosswind runway. These alternative alignments and locations were selected using USGS Quadrangle maps and very limited wind data early in the study. They are shown in Appendix A on pages A9, A10 and A12. **Relocation alternatives 3, 4 and 6 are dropped from further consideration since they do not optimize wind coverage or offer other advantages.**

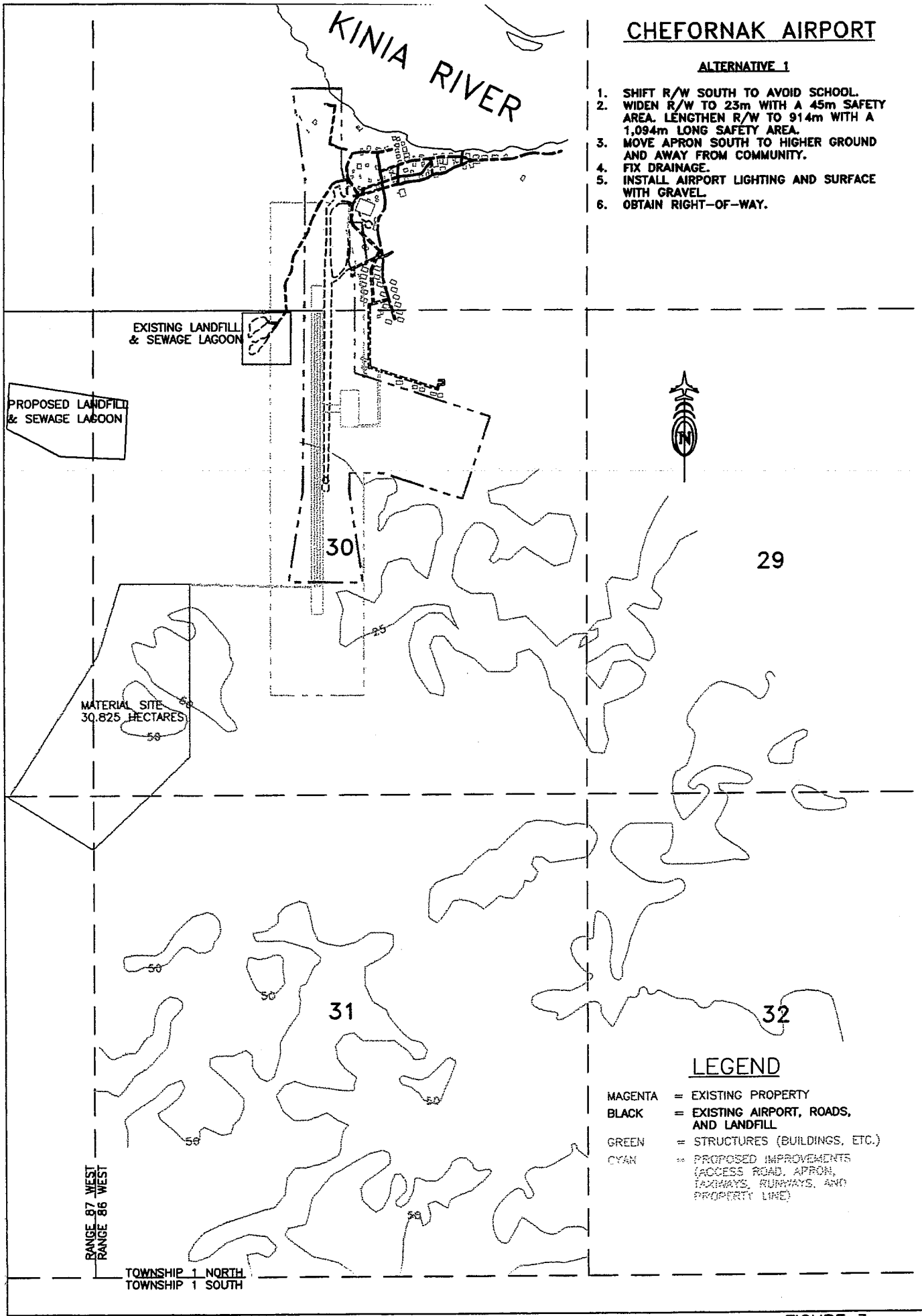
✈ **Alternative 5** proposes to widen the existing runway and safety area to meet minimum FAA design standards, relocate the apron area out of the north approach area, construct a new connecting taxiway and new access road. This alternative would only slightly improve wind coverage, from less than 78.8% to 78.8% because the surface would be wider, but would do nothing to alleviate the possibility of runway incursions. The only real improvements with this alternative are that the surfaces would be evened out and hardened, and there would be a better margin of operational safety due to the widened safety area and runway and relocation of the parking apron from the north runway protection zone. Estimated cost is $6,500,000.

✈ **Alternative 7** is the no-action alternative. This alternative would leave the existing airstrip in its existing condition, with routine maintenance the only activity. The limitations discussed earlier would remain, and the airport's safety would not be improved. No construction or land acquisition costs are associated with the No-action Alternative. Wetland involvement would not be an issue.

✈ **Alternative 8 is the preferred alternative. It was selected after field surveys and wind data collection and analysis. It is a refinement of the relocation alternatives which provides the 96.1% wind coverage which exceeds the FAA minimum recommended wind coverage while taking advantage of the best terrain features. It will provide a 5,551 m^2(59,730 ft^2) apron which is adequate for cargo and passenger operations. The approaches are all clear of incompatible land use and obstructions. It is also a scaled back version to compete for limited construction funding with the following dimensions:**

Main runway	**23m x 950m**	**[75.5' x 3117']**
Safety area	**36m x 1094m**	**[118' x 3589']**
Crosswind runway	**23m x 760m**	**[75.5' x 2493']**
Safety area	**36m x 904m**	**[118' x 2966']**

It is a compromise in that it will serve the current fleet under most operating conditions, but may need to be enlarged in the future to accommodate fleet changes and cargo operations. Estimated cost using local embankment materials is $17,000,000. It would be built in increments with the main runway, taxiway, apron and access road being constructed in two projects (one to place the local silt and one to top the embankments with gravel) in the 0-10 year time frame followed by crosswind construction in the 10–20 year time frame.


KINIA RIVER
CHEFORNAK AIRPORT
ALTERNATIVE 1
1. SHIFT R/W SOUTH TO AVOID SCHOOL.
2. WIDEN R/W TO 23m WITH A 45m SAFETY AREA. LENGTHEN R/W TO 914m WITH A 1,094m LONG SAFETY AREA.
3. MOVE APRON SOUTH TO HIGHER GROUND AND AWAY FROM COMMUNITY.
4. FIX DRAINAGE.
5. INSTALL AIRPORT LIGHTING AND SURFACE WITH GRAVEL.
6. OBTAIN RIGHT-OF-WAY.
EXISTING LANDFILL & SEWAGE LAGOON
PROPOSED LANDFILL & SEWAGE LAGOON
N
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31
32
MATERIAL SITE 30.825 HECTARES
50
25
LEGEND
MAGENTA = EXISTING PROPERTY
BLACK = EXISTING AIRPORT, ROADS, AND LANDFILL
GREEN = STRUCTURES (BUILDINGS, ETC.)
CYAN = PROPOSED IMPROVEMENTS (ACCESS ROAD, APRON, TAXIWAYS, RUNWAYS, AND PROPERTY LINE)
RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH

FIGURE 3a

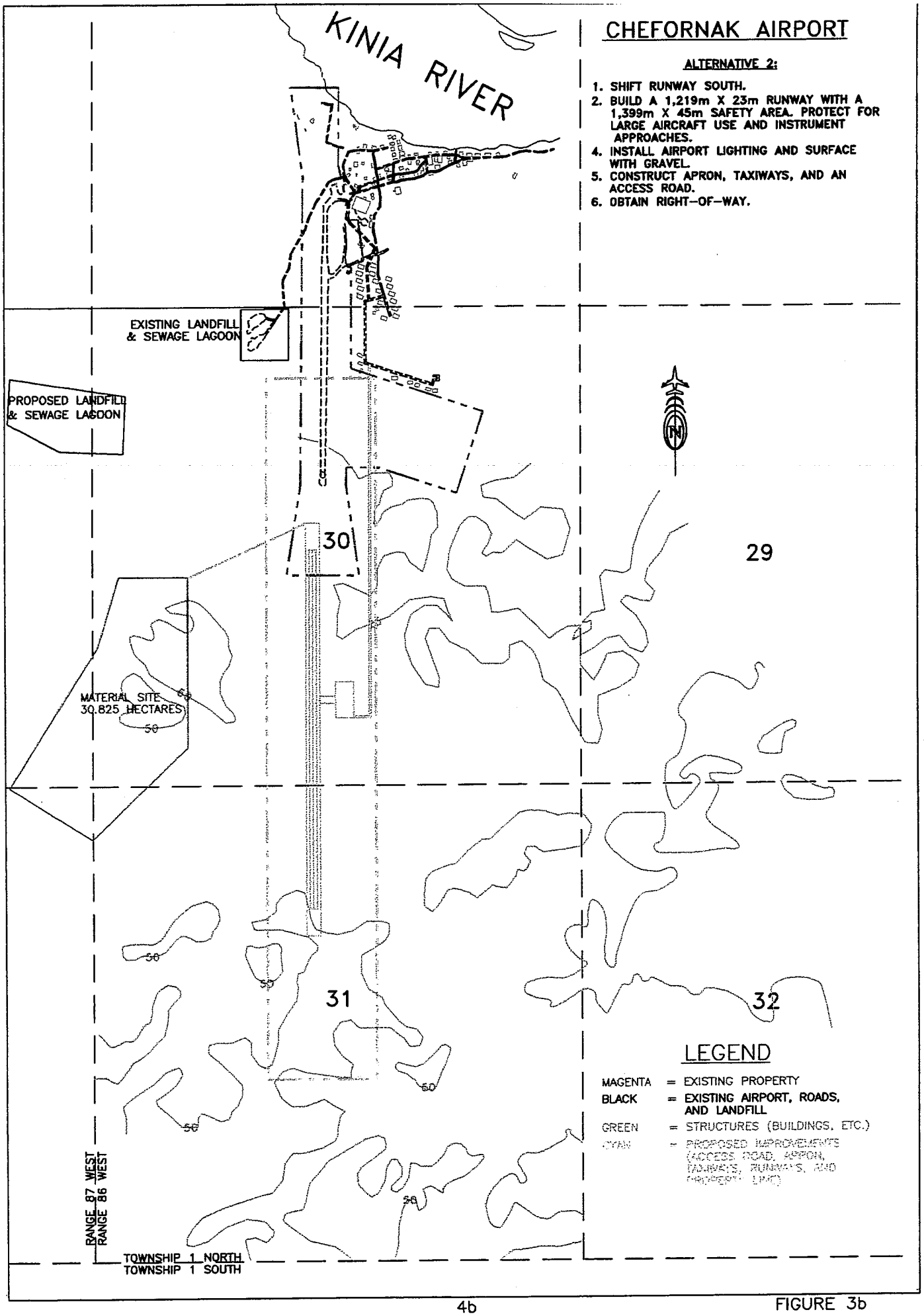
KINIA RIVER
CHEFORNAK AIRPORT
ALTERNATIVE 2:
1. SHIFT RUNWAY SOUTH.
2. BUILD A 1,219m X 23m RUNWAY WITH A 1,399m X 45m SAFETY AREA. PROTECT FOR LARGE AIRCRAFT USE AND INSTRUMENT APPROACHES.
4. INSTALL AIRPORT LIGHTING AND SURFACE WITH GRAVEL.
5. CONSTRUCT APRON, TAXIWAYS, AND AN ACCESS ROAD.
6. OBTAIN RIGHT-OF-WAY.
EXISTING LANDFILL & SEWAGE LAGOON
PROPOSED LANDFILL & SEWAGE LAGOON
N
30
29
31
32
MATERIAL SITE 30.825 HECTARES
50
RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH
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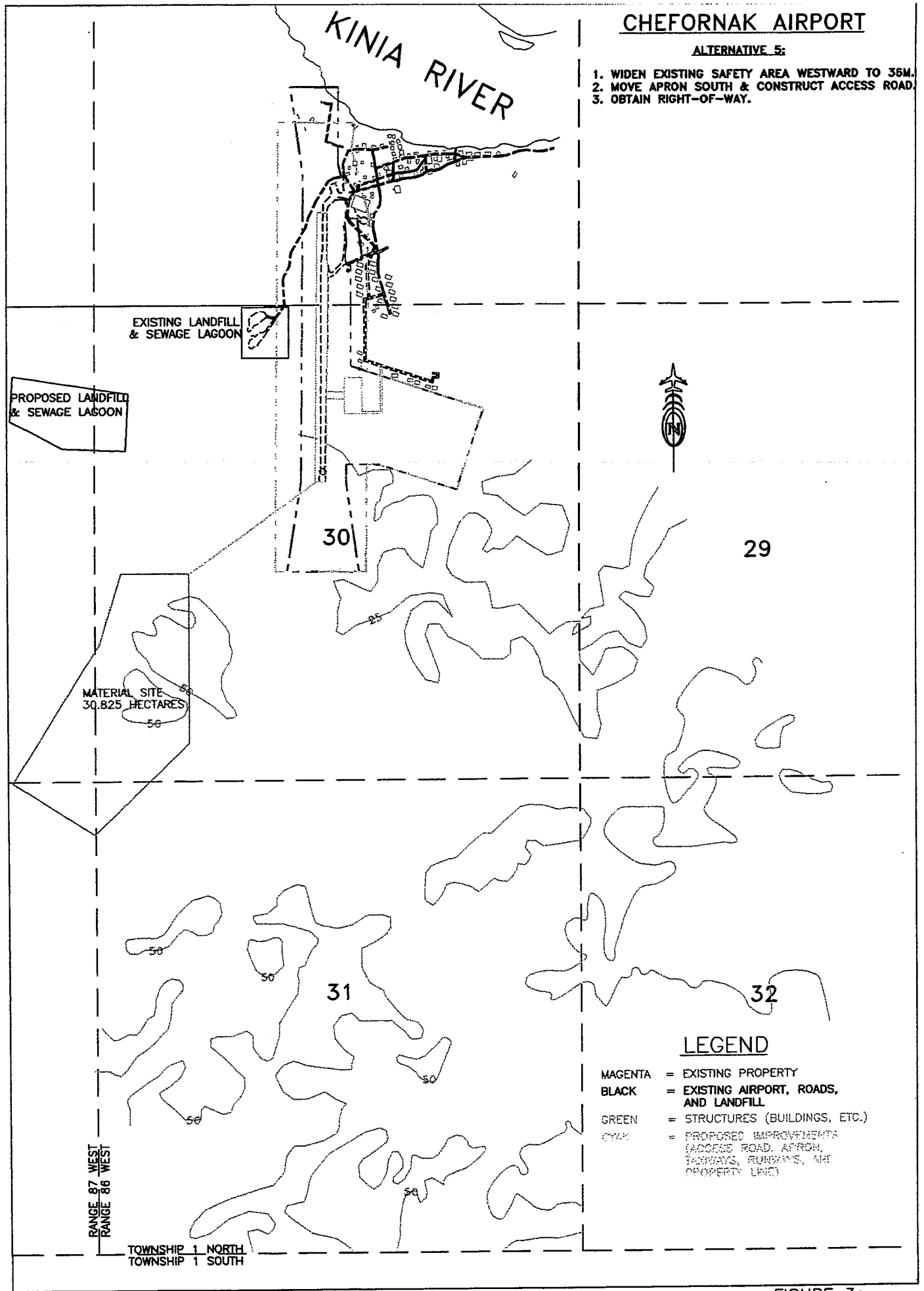
FIGURE 3b


CHEFORNAK AIRPORT
ALTERNATIVE 5:
1. WIDEN EXISTING SAFETY AREA WESTWARD TO 36M.
2. MOVE APRON SOUTH & CONSTRUCT ACCESS ROAD.
3. OBTAIN RIGHT-OF-WAY.
KINIA RIVER
EXISTING LANDFILL & SEWAGE LAGOON
PROPOSED LANDFILL & SEWAGE LAGOON
MATERIAL SITE 30.825 HECTARES
30
29
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N
LEGEND
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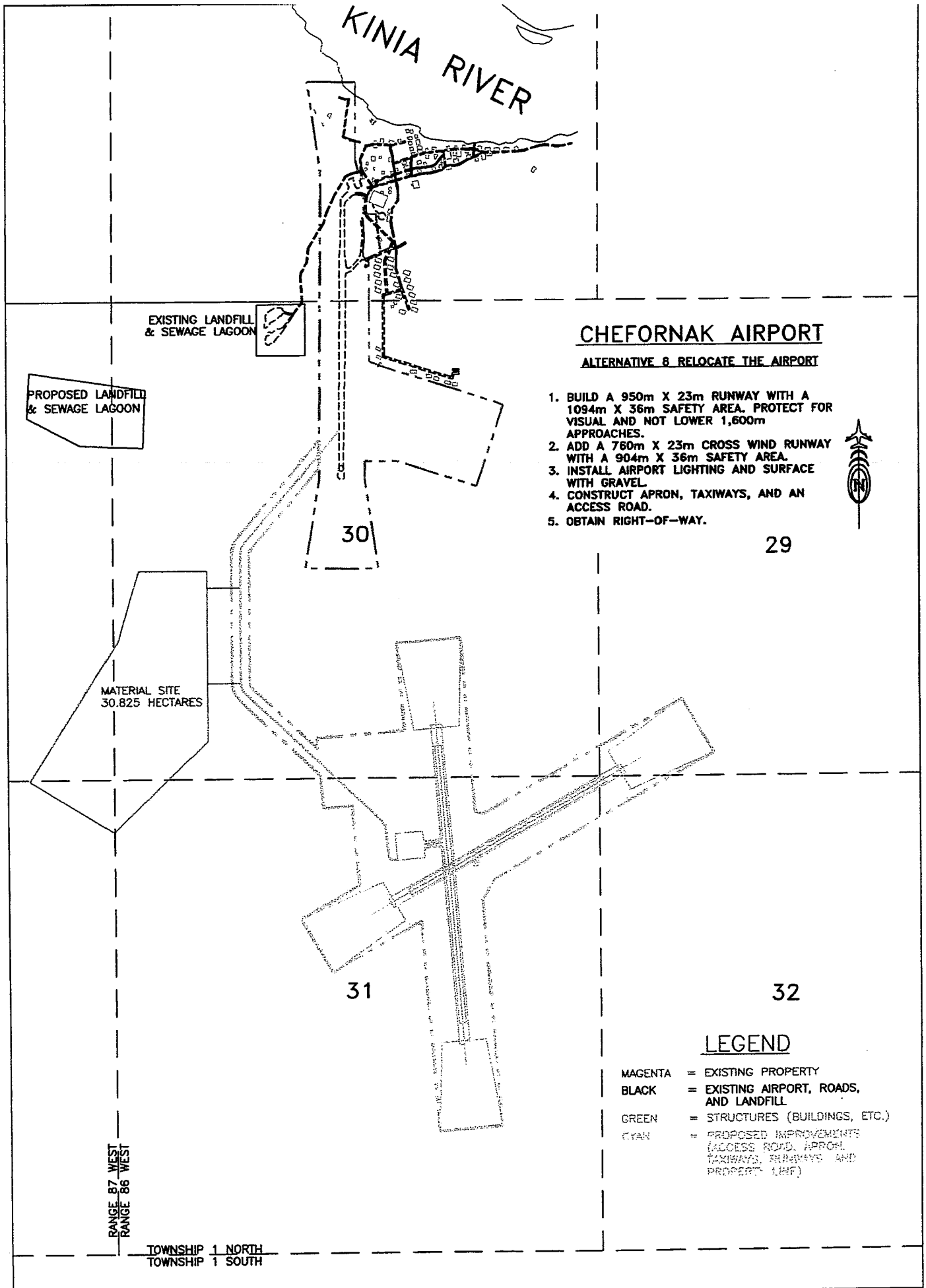
RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH

FIGURE 3c


KINIA RIVER
EXISTING LANDFILL & SEWAGE LAGOON
PROPOSED LANDFILL & SEWAGE LAGOON
CHEFORNAK AIRPORT
ALTERNATIVE 8 RELOCATE THE AIRPORT
1. BUILD A 950m X 23m RUNWAY WITH A 1094m X 36m SAFETY AREA. PROTECT FOR VISUAL AND NOT LOWER 1,600m APPROACHES.
2. ADD A 760m X 23m CROSS WIND RUNWAY WITH A 904m X 36m SAFETY AREA.
3. INSTALL AIRPORT LIGHTING AND SURFACE WITH GRAVEL.
4. CONSTRUCT APRON, TAXIWAYS, AND AN ACCESS ROAD.
5. OBTAIN RIGHT-OF-WAY.
N
30
29
MATERIAL SITE 30.825 HECTARES
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RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH

FIGURE 3d

TABLE 1
ALTERNATIVE COMPARISONS OF ENGINEERING CRITERIA

	R/W	C/W	FAA std's	Approach area clear	Land reqd.	Future expansion	Const. years	Cost
ALT 1	23m x 914m [75.5'x 2,999']	no	no	yes	26.3 ha [65 ac]	yes	2-4	$7,000,000
ALT 2	23m x 1219m [75.5'x 4,590']	no	no	yes	72.8 ha [180 ac]	yes	2-4	$9,000,000
ALT 5	12.2m x 792.5m [40' x 2,600']	no	no	no	18.0 ha [44.6 ac]	yes	One season	$6,500,000
ALT 7	No-action	no	no	no	0	yes	0	0
ALT 8	23m x 950m [75.5' x 3,117']	23m x 760m [75.5' x 2,493']	yes	yes	86.5 ha [213.74 ac]	yes	20	$17,000,000

Explanation of categories

R/W	Runway-main runway's dimensions	C/W	Crosswind runway dimensions
FAA std's	Meets FAA recommended standards for crosswind operations	Cost	Estimated costs for construction
Approach Area Clear	Approach area clear of obstructions & incompatible uses	Land reqd.	Land acquisition needs
Future	Potential for growth expansion and/or instrument landing	Const. yrs.	Estimated time for construction activities

TABLE 2
ALTERNATIVE COMPARISONS OF ENVIRONMENTAL CRITERIA

	Wetland Fill*	Archaeological Potential	Section 4(f)	T & E Species	Compatible Land Use
ALT 1	7.5 ha [18.4 ac]	low	no	med+	no
ALT 2	12.5 ha [31 ac]	low	no	med+	no
ALT 5	4.2 ha [10.3 ac]	low	no	med	no
ALT 7	0	low	no	low	no
ALT 8	26.7 ha [66 ac]	low	no	med	yes

Explanation of categories

*	Wetland dredging – 30.8 hectares [76.2 acres]
Wetland Fill	Amount of wetlands that would be filled including the ultimate crosswind runway
Archaeological	Relative potential for discovering cultural/archaeological resources
T & E Species	Threatened and Endangered Species - Spectacled Eiders
Compatible Land Use	Allows for future community and land use planning, and community growth; no land uses in the approaches are incompatible, i.e., fuel tanks in the approach is not a compatible use.

Preferred Alternative Following public and agency review the department is recommending Alternative 8. This alternative best serves the community of Chefornak, the airport users and operators. Both the State of Alaska's mandate for transportation and the Federal Aviation Administration's guidelines and standards for providing safe, cost effective air transportation for the State's people are met by Alternative 8.

All of the alternatives were examined for their ability to meet future aviation needs. This would require a 1219 m [4000'] main runway and ultimately, a 975m [3200'] crosswind runway. This alternative was scaled back in runway length to make the best use of limited construction dollars at this time. However it can be expanded to accommodate future needs.

The safety issues identified in the Purpose and Need would be alleviated with Alternative 8, as revised; cross winds would no longer severely hamper flight operations into and out of the Chefornak area. Relocating the airport to this location and at this distance would reduce the possibility of runway incursions, provide an unobstructed approach area, minimize dust nuisance, and allow for future instrument approaches. Additionally, community expansion would not be restricted by the airport. Thus, future population growth can be accommodated. The possibility of the community developing an economic resource base, if desired, would also be feasible from the standpoint of shipment of goods to market. Conversely, shipping supplies and goods into Chefornak would become more reliable.

Following public meetings in Chefornak explaining the range of alternatives along with the advantages and disadvantages, the relocation alternative was the community's recommended alternative. A resolution signed by the City of Chefornak was passed supporting Alternative 8.

Development Schedule Development of the Chefornak Airport will be accomplished in phases; near term (0-10 years) and long term (10 to 20 years). The objective of the improvements is to improve safety and reliability of the airport as economically as possible. This includes use of lower quality materials found on-site (rather than importing material) for as much of the embankment as possible. This will minimize the amount of material that must be barged to the community. It is understood that near term and the longer term phases of development are dependent on available funding. The following shows the proposed activities in each phase.

Phase I: Near Term Development 0-10 years

- ✈ Construct a new gravel surface runway and safety area,
- ✈ Construct a gravel surfaced taxiway,
- ✈ Construct an apron, aviation support area contiguous to the apron,
- ✈ Construct an access road from the community, and
- ✈ Install medium intensity airport lighting.

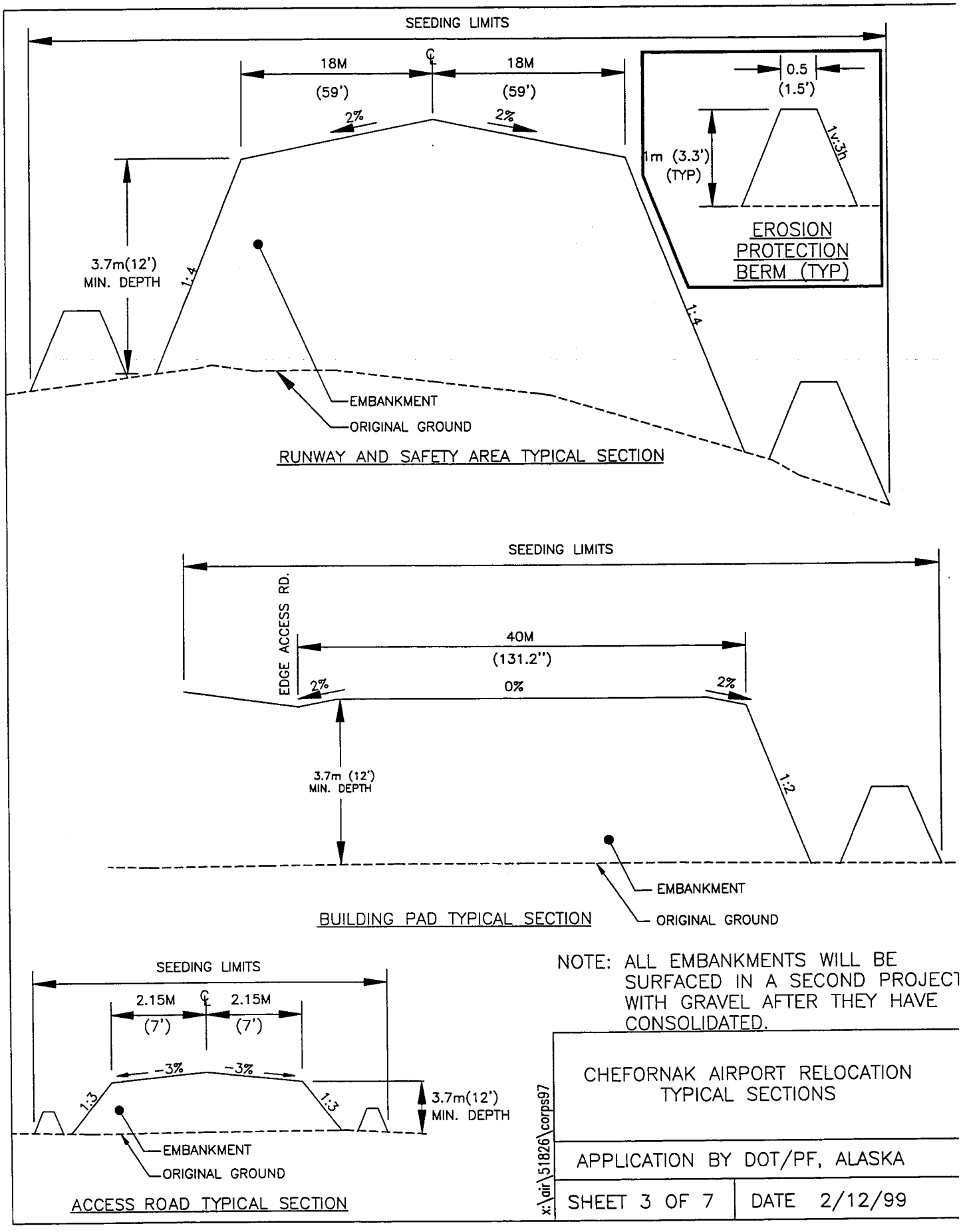
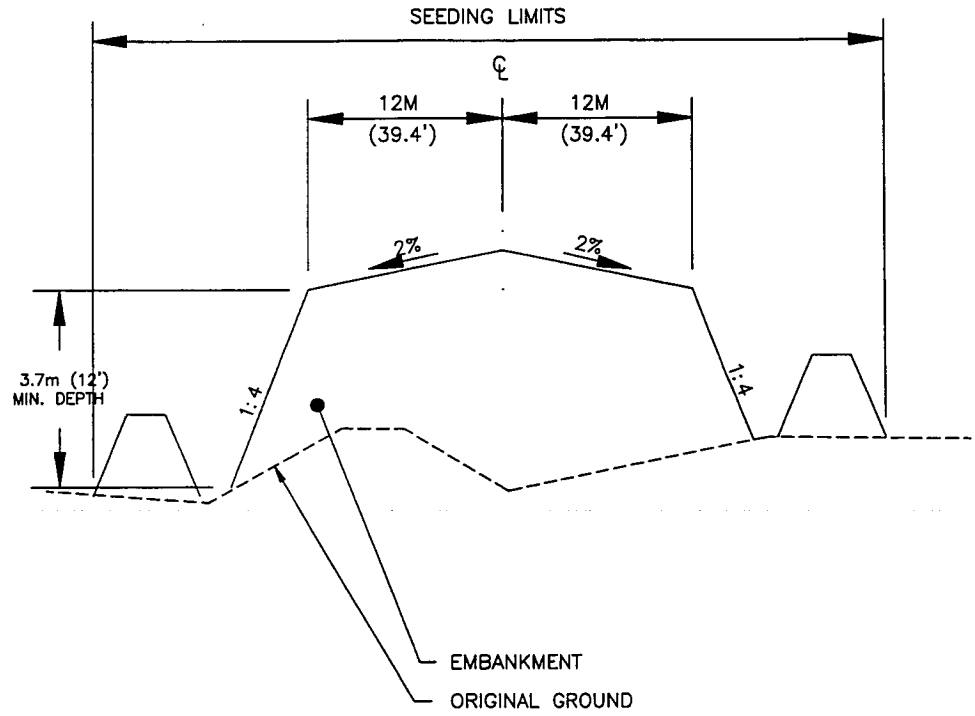
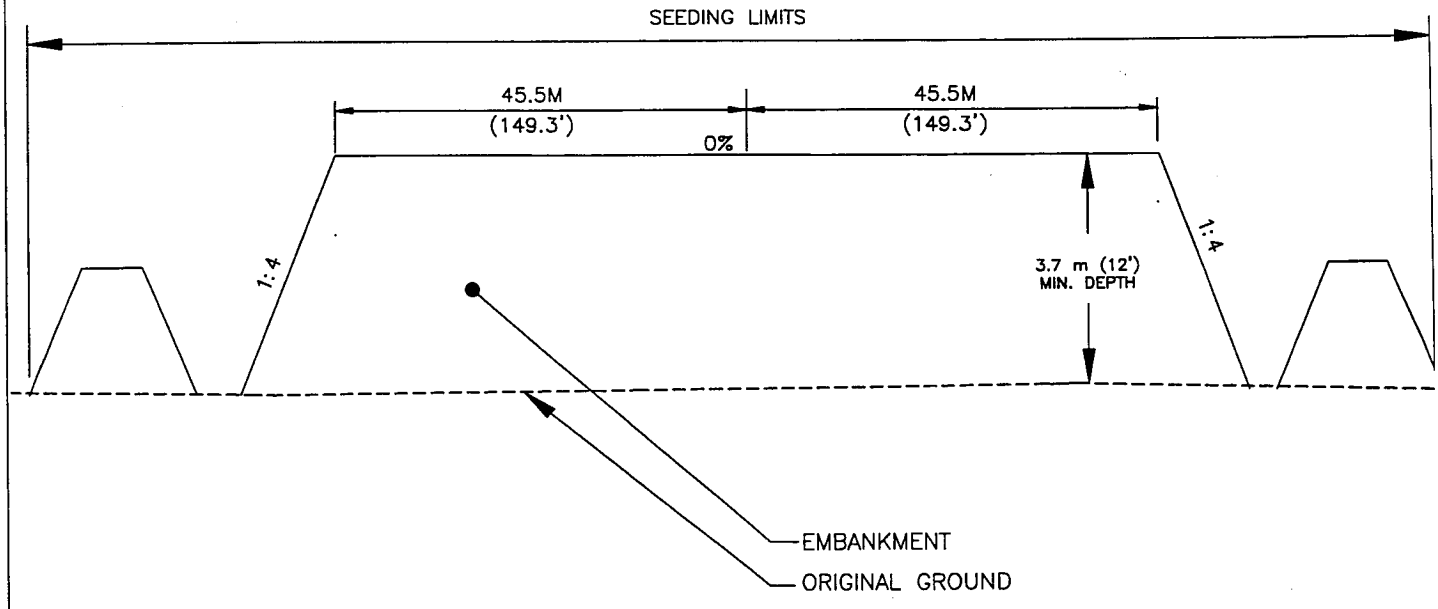

SEEDING LIMITS
18M
(59')
18M
(59')
2%
2%
0.5
(1.5')
1m (3.3')
(TYP)
1v:3h
EROSION
PROTECTION
BERM (TYP)
3.7m(12')
MIN. DEPTH
1:4
1:4
EMBANKMENT
ORIGINAL GROUND
RUNWAY AND SAFETY AREA TYPICAL SECTION
SEEDING LIMITS
EDGE ACCESS RD.
40M
(131.2")
2%
0%
2%
3.7m (12')
MIN. DEPTH
1:2
EMBANKMENT
ORIGINAL GROUND
BUILDING PAD TYPICAL SECTION
SEEDING LIMITS
2.15M
(7')
2.15M
(7')
-3%
-3%
1:3
1:3
3.7m(12')
MIN. DEPTH
EMBANKMENT
ORIGINAL GROUND
ACCESS ROAD TYPICAL SECTION
NOTE: ALL EMBANKMENTS WILL BE SURFACED IN A SECOND PROJECT WITH GRAVEL AFTER THEY HAVE CONSOLIDATED.
CHEFORNAK AIRPORT RELOCATION
TYPICAL SECTIONS
APPLICATION BY DOT/PF, ALASKA
SHEET 3 OF 7
DATE 2/12/99
x:\air\51826\corps97

Figure 4a



TAXIWAY AND SAFETY AREA TYPICAL SECTION



APRON TYPICAL SECTION

NOTE: ALL EMBANKMENTS WILL BE SURFACED IN A SECOND PROJECT WITH GRAVEL AFTER THEY HAVE CONSOLIDATED.

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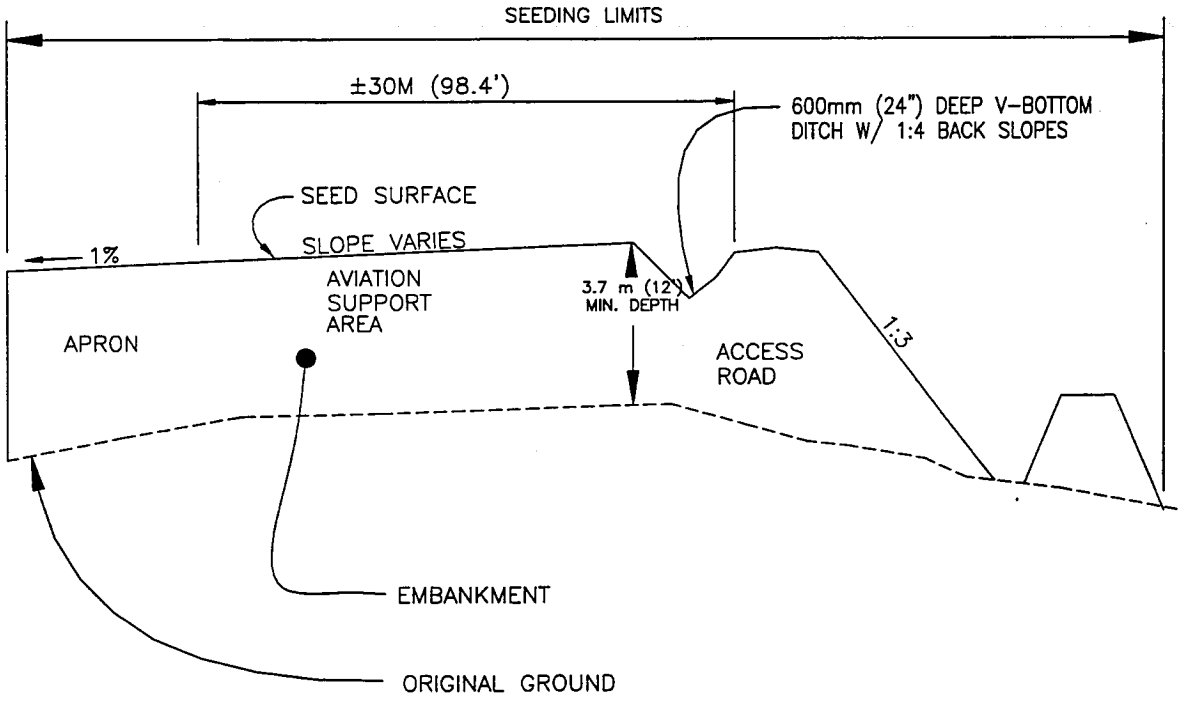
CHEFORNAK AIRPORT RELOCATION
TYPICAL SECTIONS

APPLICATION BY DOT/PF, ALASKA

SHEET 4 OF 7 | DATE 2/12/99

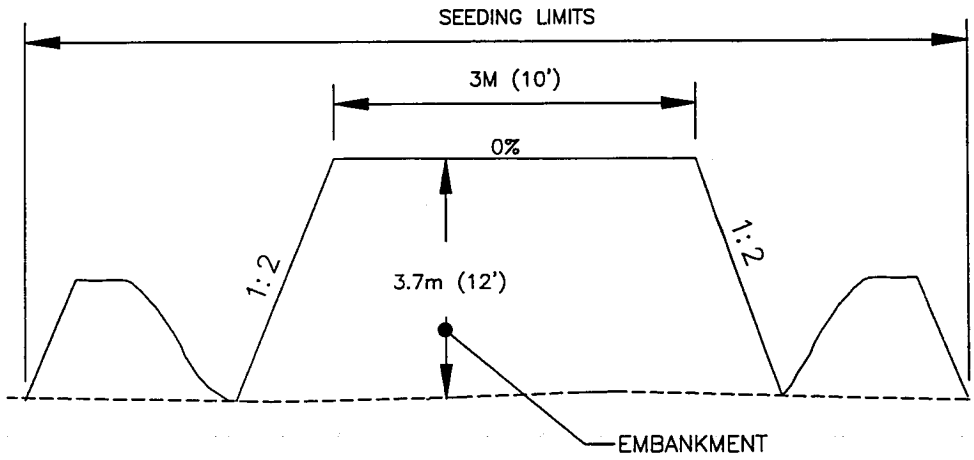
Figure 4b



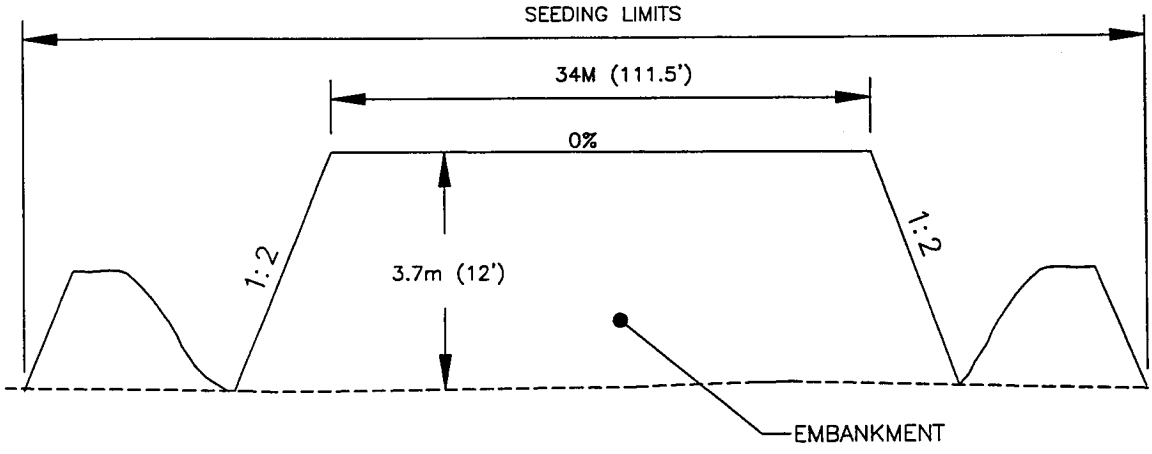
AVIATION SUPPORT AREA TYPICAL SECTION

x:\air\51826\corps97	CHEFORNAK AIRPORT RELOCATION AVIATION SUPPORT AREA TYPICAL SECTION	
	APPLICATION BY DOT/PF, ALASKA	
	SHEET 5 OF 7	DATE 2/12/99

Figure 4c



WIND CONE PAD TYPICAL SECTION
STA. 1+900



WIND CONE PAD TYPICAL SECTION
STA. 1+023 TO 1+057

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	APPLICATION BY DOT/PF, ALASKA
	SHEET 7 OF 7 | DATE 2/12/99

Figure 4d

Phase II: Long Term Development 10-20 years

- ✈ Construct a gravel surfaced crosswind runway and safety area,
- ✈ Install medium intensity lighting on the crosswind runway,
- ✈ Periodically re-grade and re-surface the embankments, and
- ✈ Re-evaluate runways and safety areas for size.

There are anticipated to be 2 projects per Phase, one to construct embankments out of local silt and one to finish the embankments with gravel imported from contractor furnished sources once the silt stabilizes.

AFFECTED ENVIRONMENT [1]

Chefornak Alaska is located within the Yukon-Kuskokwim Delta area in southwestern Alaska. It is located on the south bank of the Kinia River at its junction with the Keguk River within the Yukon Delta National Wildlife Refuge of southwest Alaska. It is fairly young, having been populated after 1950. Chefornak is a 2nd class city incorporated under Alaska Statutes and is in an unorganized borough.

Chefornak began as a community on a slough, several miles north of its present site. This site was abandoned. Eskimos have inhabited the region for thousands of years. Population of the village is currently 405 persons; 97.5% of the population is Native Alaskan. A traditional Native Village entity is located in the community: Chefornak Native Village Council. Additionally, a village corporation formed under ANCSA exists: Chefarnrmute Incorporated. The village corporation is a member of the Calista Regional Corporation.

Chefornak Alaska has a maritime climate, and as such it's weather is greatly influenced by the seas. High winds, heavy rainfall along with high humidity and fog are characteristic weather features of this area of Alaska. Temperatures range from a low of -14°C [6°F] to a high of 14°C [57° F]. Snowfall averages 1.1 meters [43"] per year, and mean annual precipitation is 0.56 meters [22"].

The area of the Yukon-Kuskokwim Delta is a region encompassing 6,734,208 hectares [16,640,000 acres] of wetland habitat. The rivers meander throughout the area creating numerous lakes, sloughs and channels. Generally underlain by permafrost the vegetation is limited to plant species capable of growing under these conditions. The biotic community found around Chefornak consists of 'wet tundra' interspersed with 'moist tundra.' Tundra vegetation is characterized by a variety of low growing shrubs, herbs, grasses and sedges rooted in a mat of mosses and lichens. Common species include: dwarf willow, cotton grass, Labrador tea, Lapland rose, wild berries (blueberries and lingonberry) and numerous tundra flowers. Slight differences in elevation, drainage, exposure or disturbances result in changes in the micro-environment.

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[1] The following information is directly attributed to the Department of Community Affairs, Community Information Summaries.

The Yukon and Kuskokwim rivers and their associated channels, are important fisheries streams. Both rivers contain salmon, in addition to sheefish, arctic char, burbot and arctic grayling. The associated wetlands are important summer habitat for a variety of migratory waterfowl and other avian species. The importance of the area to wildlife has been recognized by Congress when they incorporated the total system into the "Yukon Delta National Wildlife Reguge."

Nearer to Chefornak, the Kinia River supports fish species including Arctic Cisco, northern pike and whitefish. The Kinia River also supports a subsistence herring fishery. The numerous unnamed drainages and stream channels throughout the area have resident blackfish.

Commercial fishing and subsistence activities are an important part of the local culture. And for many it is the primary means of both survival and economics. The 1992 "Community Development Quota" program hopes to help Chefornak develop commercial fishing opportunities by increasing the pollack ground fish quota. Currently there are 22 residents with commercial fishing permits. Subsistence use of the fisheries resources is a primary source of protein for the peoples here, and is relied upon more heavily than hunting.

The economy of Chefornak is largely based on government, both local and state, for employment and cash economy. Ninety-three persons are employed in the government sector, while 56 persons are employed by the private sector. There is a 6.2% unemployment rate in Chefornak, though this amount lessens when construction activities occur. Sixty seven percent of the adults are not considered in the labor force. Most of the cash economy in Chefornak occurs during the short summer. Some residents also work outside of the community, most notably in fire fighting efforts.

Public facilities and services in Chefornak include the school (grades K-12), church, post office, health clinic, youth center, boardwalks, and a new water well system. Developing a new honey bucket lagoon and relocating the landfill are projects currently under design. Fuel and electrical power and telephone service are available in the community.

Transportation for Chefornak visitors and residents is obtained via aircraft. The airstrip is owned, managed and operated by the State of Alaska. Inclement weather often precludes air service to Chefornak. Within the community, transportation is limited to off-road vehicles. Snow machines are used during the winter months to access neighboring communities as no road connections exist. During summer four-wheelers and a few of the older three-wheelers are used locally. Boats are also an important means of transportation; they are used not only for fishing activities but also for visiting other communities. Barge service throughout rural Alaska is an important supply mechanism, especially for large bulky items.

ENVIRONMENTAL CONSEQUENCES

Noise Noise generated from airport operations will not be a problem because of the limited number of flights into and out of Chefornak and the type of aircraft that the airport is being designed for (Design Group B-1). Less than 90,000 adjusted annual propeller operations are anticipated during the planning period. The recommended alternative is located sufficiently distant from the community that any potential aircraft noise will be reduced. Therefore, a noise analysis is not necessary.

Compatible Land Use Under Alaska Statutes, land use, planning and zoning are functions of incorporated cities. Chefornak is a 2nd Class City and could assume these responsibilities, though at the present there has not been a stated need for formal planning. Discussions with the community leaders have indicated that future residential growth would be directed such that the two land uses, airport/community, would not infringe upon one another.

The existing landfill and sewage lagoon are located adjacent to the existing airport property as shown on the Figures 2 through 3d. Plans are to relocate the landfill and lagoon in the future. The landfill currently meets the 1,524 m (5,000') minimum separation distance recommended by FAA from the proposed runways of the preferred alternative. There is reportedly no bird hazard at the present site nor is there an expected hazard at the relocated site.

Social Impacts The proposed relocation of the Chefornak Airport does not require relocating any residential or business property.

Induced Socioeconomic Impacts The proposed project will not induce adverse social impacts within the community. The proposed project would have positive economic benefits for residents of the City of Chefornak. Larger aircraft have a larger payload. Thus, there is the potential that supplies coming into Chefornak could be shipped at lesser fees. Larger twin engine aircraft allow commercial operators to fly under instrument flight rules during low visibility weather conditions making air travel more reliable. Furthermore, the larger apron space for use by commercial air taxi and air cargo operators could influence new commercial operators to service Chefornak. These advantages could also prove to be an invaluable asset to commercial fishing businesses helping to increase the economic potential.

The immediate though short lived effect of the proposed project would be the construction activity itself. There is of course, the potential construction job opportunities for local qualified residents. Also construction activities in the community would have a multiplier effect as supplies, goods,

equipment, and construction workers come to live and work in Chefornak. Living expenses for imported construction help would temporarily boost income for individuals who choose to rent living quarters. Everyday supplies and food stores would be purchased in the community's stores. The opportunity also exists for rental and employment of local equipment and operators. Additionally, the quality of craft work in Chefornak is extraordinary; a new market, though relatively small would develop.

Air Quality

Chefornak's air quality has never been monitored by either the Alaska Department of Environmental Conservation or the Environmental Protection Agency. However, air quality throughout rural Alaska communities is generally from excellent to very good. Because of the relatively small populations with no roads or automobiles, there are very few air pollutant generators. The high winds in the local area also assure rapid dispersion of any pollutants.

Current and forecasted operations at Chefornak Airport would not exceed the thresholds that could create air quality problems. The proposed Chefornak airport would be designed to Design Group B-I. Therefore the criteria that requires completion of an air quality analysis is not met and the analysis is not required.

Water Quality

The recommended alternative is located about 1 mile from the community and the Kinia River. Located on slightly higher lands the proposed site would not have an adverse impact to the area's water quality. The community's potable water source will not be affected by the location of the preferred alternative. The new location also avoids the many small lakes and sloughs found throughout the area. Drainage for both the airport and associated lands, and the proposed access road will be channeled through strategically placed culverts. Culverts will be sized to allow for unimpeded flow.

The proposed access road crosses one fish-bearing stream. Alaska Department of Fish and Game representative Wayne Dolzal conducted a site visit in October 1998. Sampling of the stream indicates that resident black fish are present. The proposed culvert crossing of this stream is identified in the Alaska Department of Fish and Game General Waterway/Waterbody Application in Appendix C. The design was coordinated with Mr. Dolzal to allow for fish passage.

De-icers and other chemical compounds are not used at Chefornak airport. Nor is it expected that the level of service at Chefornak will demand this in the future. Re-fueling operations also do not occur here. It is not inconceivable that Chefornak might, in the future, have some type of fuel service. The eventual snow storage equipment building and related equipment will require fuel, though. The fuel tank for the snow removal equipment and building would likely be 3,000 gallon capacity.

Required permits for this proposal include 1)a US Army Corps of Engineers Individual permit for filling and dredging in wetlands, 2) a National Pollutants Discharge Elimination Systems (NPDES) permit which will be obtained by the Contractor prior to construction, 3) a Coastal Zone Consistency

Review, and 4) a Department of Fish and Game General Waterway/Waterbody permit. Copies of the permit applications submitted by the department to date are located in Appendix C, Permits. See also individual sections for discussions.

Section 4(f) / Section 6(f)

There is no park or recreation land which would be directly or indirectly affected by any of the alternatives nor any properties acquired or improved with funds from the 'Land and Water Conservation Act.' None of the alternatives require acquisition of any park or recreation areas, nor would they be impacted by noise. Neither Section 4(f) nor Section 6(f) statements are required since the areas under concern would not be affected by any alternative.

It should be noted though that lands surrounding the City of Chefornak are a part of the Clarence Rhode National Wildlife Refuge, now incorporated into the 'Yukon Delta National Wildlife Refuge.' The refuge excludes all community lands found within the general boundaries. The land for the recommended alternative is owned by the Village Corporation and thus does not qualify for refuge status.

Coordination with government agencies and organizations, including the U.S. Fish and Wildlife Service, specifically addressed the refuge. To date, comments regarding concerns with the refuge are related to the development of the embankment material source and haul routes outside of corporation property. Our subsurface information gathered thus far indicates there are no economically viable material sources on the refuge lands. The material site shown on the sketches herein and for which we are getting permits is within the lands selected by the Village Corporation and hence as private lands does not qualify for Section 4(f) protection.

Historic, Architectural, Archaeological, and Cultural Resources

The Alaska State Historic Preservation Office (SHPO) was contacted for information regarding the cultural resources for all alternative locations. They felt the area we propose to develop has low potential for cultural resources. Also, because the village is relatively new, it is unlikely that any Chefornak related resources would be discovered that qualify for protection under federal laws. According to the SHPO, there are "no sites listed on the Alaska Heritage Resources Survey." Therefore, the SHPO has determined that an archaeological survey is not recommended for the preferred alternative and associated material site (Appendix A, documents A33, A34 and A35). The following statement will be included in the construction contract:

> If cultural remains are encountered during construction, work must cease in the immediate area and Federal regulations pertaining to emergency discovery situations must be followed. Work can continue in the project area where no cultural materials are present. The Advisory Council on Historic Preservation should be contacted in accordance with 36 CFR Part 800. The FAA, Airports Division and the State Historic Preservation Officer (SHPO) must be notified for evaluation of the situation

by a qualified professional.

Biotic Communities The location of the preferred alternative is on slightly higher land and away from the community and river. Adjacent lands to the preferred alternative location are classified as either wet or moist tundra vegetation communities. The Yukon-Kuskokwim area is noted for its habitat for migratory waterfowl. The numerous ponds, drainage channels and standing water in depressions ensure nesting and rearing habitats for the many species of birds visiting the area. While the total delta area is important for habitat, the specific area is not any more important than other areas throughout the delta region. Our evaluation through literature review, site specific reconnaissance and discussions with community residents, indicates that no known species of concern utilize habitat in this specific location.

U.S. Fish and Wildlife Service concerns for the loss of new, "undisturbed" habitat is mitigated by minimizing the area needed for the new airport and access road. The proposed action, though disturbing undeveloped lands, would not significantly impact the total biotic communities or the relationship between the biota and wildlife. Only the minimum area necessary to construct the proposed project would be used therefore ensuring that the least amount of disturbance would occur for building the airport and associated facilities, i.e. access road.

The existing airport, taxiway and apron will become access road to the new facility. This reduces the amount of habitat disturbance necessary to build the new airport. All areas disturbed during construction will be restored by selective grading of disturbed lands and seeding with species of vegetation suitable for this area. Sedimentation during construction activities will be controlled by use of 'Best Management Practices.'

Endangered and Threatened Species Spectacled eiders are known to have historically used the delta wetlands. The USF&WS has a program throughout the delta area requesting residents to report all confirmed viewing of this species. The residents interviewed by project staff indicated that no nesting activities of spectacled eiders has occurred in recent history.

Consultation with the USF&WS (personal communication) has determined that this species of eider could nest anywhere within the Chefornak area, though they prefer low-lying areas, adjacent to open water. The preferred alternative is located on slightly higher land and would have a lesser potential for nesting activities. However, because spectacled eider numbers are so low, the department and the USF&WS have agreed upon a reconnaissance survey for nesting activities prior to construction activities. Construction would be scheduled so as not to affect the nesting birds should the survey find these birds.

Wetlands The entire area surrounding Chefornak is classified as wetlands; most notably moist or wet tundra. Discussed above, these wetlands are common throughout the delta

area. The importance of the delta wetlands is in providing habitat for migratory waterfowl which nest and rear their young during the short summer season.

There is no practicable alternative to avoiding wetlands. And, as discussed earlier in the Purpose and Need and Alternatives chapters, the no-action alternative is not considered a prudent alternative from the perspective of aircraft safety, transportation needs, or for the people of Chefornak. The preferred alternative was selected for a multitude of reasons; not solely on one factor. The preferred alternative is at a slightly higher elevation which has a lesser habitat value than low lying areas.

Phase I and II development entails filling 26.7 hectares [66 acres] of wetlands, and dredging up to 30.8 hectares [76.2 acres] of wetlands. Fill material required for Phase I is estimated to be 400,000 cubic meters [523,200 cubic yards]. The preferred alternative minimizes wetland involvement by being located on slightly higher ground, which is of lower value for nesting waterfowl. Strategically located culverts will be placed in the access road to maintain the natural, contiguous water drainage to the surrounding wetlands. Only clean fill material will be used to form stream culvert crossings.

The respective projects required to build the new facility will require Army Corps of Engineers permits under Section 404 for filling wetlands and a Section 401 permit for dredging wetlands (for local embankment) of the Clean Water Act. As part of the permit process, the Corps coordinates wetland mitigation between the Department and relevant federal and state resource agencies. The wetland mitigation plan will cover all project elements which would involve wetlands and be incorporated into the final plans.

Wetlands Mitigation Plan

The department has coordinated with appropriate resource agencies to minimize disruption to wetlands and protect wetland values. The following is incorporated into the proposed project at the request of the relevant agencies.

- All culverts will be sized to ensure and maintain natural drainage patterns.
- The proposed road crossing over the unnamed stream channel will be designed to ensure adequate flow and protect the fisheries resource. Only clean fill material will be used to form stream culvert crossings.
- The proposed material source will receive prior approval from the Corps of Engineers.
- Any Contractor material source, other than the local sand/silt embankment source already noted (see permit, App. C) must be permitted prior to use. This includes such things as material removal, barge landing ramps, bulkheads and ice bridges, staging areas and stockpiles outside of existing or permitted embankments.
- Use of material containing hazardous substances or petroleum fuels shall be prohibited.
- The Contractor shall not stockpile, nor dispose of any material at any site suspected of containing hazardous substances or petroleum fuels.
- All disturbed areas will be re-seeded as soon as practical following disturbance. Only species of grasses and flora conducive to local growing conditions will be used.
- An Erosion Control Plan is included in the design plans (App C) to aid the Contractor in

complying with sediment and erosion control during construction activities.

- ✈ The Contractor will prepare a Storm Water Pollution Prevention Plan specific to the proposed project and local conditions.
- ✈ Refueling operations will be staged to protect surrounding wetlands. Drip pans shall be used under leaking vehicles and equipment during servicing to prevent oil and hazardous substances from leaking onto the ground.

Floodplain

The village is located approximately 1 meter (3' to 4') above flood stage. Due to lake regulation the maximum flood level should not vary from the past. Flood frequency and hazard are low according to the U.S. Army Corps of Engineers, Alaska District publication Alaska Communities Flood Hazard Data. The new airport is on slightly higher ground than the village so it is out of the floodplain. The new airport location avoids lakes and ponds and will not impact flood levels in the community.

Coastal Zone Management Program Chefornak is within the coastal zone, located approximately 18 miles southeast of Nelson Island. The recommended alternative's location being on higher lands would not have any affect upon the coastal zone. As part of the permitting process, a Coastal Zone Project Questionnaire is submitted for review and comments. It is included in Appendix C, Permits.

Coastal Barriers Not applicable, for the proposed action; therefore there would be no impacts.

Wild and Scenic Rivers No rivers listed as either wild or scenic would be affected by the proposed action.

Farmlands The area does not support farming activities, therefore no impacts would occur.

Energy Supply and Natural Resources No measurable effects to the nation's fuel supplies would be precipitated by the proposed action. The only natural resources required for the proposed action is aggregate or gravel. Chefornak does not have a good source for the requirements of surfacing a runway, therefore this material will need to be imported from another area. As mentioned earlier, the subbase material will be lower quality silt which is locally available. The material site shown on Figures 3a-3d and 4d will be selectively mined to obtain the driest, least organic silt to use as embankment foundation. An estimated 400,000 cubic meters of this material is required to construct the Phase I embankments. An additional approximately 153,000 cubic meters would be needed for the Phase II (crosswind runway) embankment.

Light Emissions

Airport operations in Chefornak are such that runway lighting will be used only when aircraft are landing or taking off. Aircraft using Chefornak Airport are not that large that their lights would be an annoyance to anyone.

Solid Waste

Construction activities and subsequent airport operations are not forecasted to be significant generators of solid waste that would require special facilities. The City of Chefornak will dispose of any solid waste in their landfill. Coordination is between the City and the Alaska Department of Environmental Conservation for adherence to all regulatory requirements for their landfill.

Construction Impacts

Construction impacts are by their very nature relatively short-term. Some construction impacts will be mitigated by the relative distance from the community itself. The greatest nuisance impact from construction activities is generally the noise of heavy equipment operating throughout the day. For the residents of Chefornak, this will not be a significant impact because of the distance and topography. Air quality from operation of construction equipment will also not be a significant problem; first, the project is not that large requiring the relatively large numbers of equipment that would be needed to generate atmospheric pollutants exceeding regulations; and second, the weather patterns around Chefornak are such that the high winds would rapidly disperse particulate.

To protect the area's water quality a plan will be developed to contain potential erosion and sediment from escaping the site. An "Erosion Control Plan" has been developed for the proposed project and is included in the Permit Appendix. This plan is a guide that the contractor will use to comply with the National Pollution Discharge Elimination System (NPDES). The plan incorporates 'Best Management Practices' (BMP) adhering to the department's construction specifications and NPDES guidelines and regulations. Most construction related impacts would be controlled and minimized in accordance with BMP's using standard procedures for erosion and siltation control, and grading, fertilizing and seeding of temporally disturbed areas. For example, any construction that could increase erosion or sedimentation potential would be mitigated through use of geo-textile fabrics, soil stabilization structures, revegetation, settling ponds, or other appropriate means. The Erosion Control Plan is a part of the contract specifications.

Hazardous materials required for operating equipment will be contained on-site, per state and federal regulations, including materials needed for accidental spillage. A project specific plan for hazardous material handling will be prepared in conjunction with the NPDES permit and incorporated into the construction specifications.

Prior to the contractor leaving the site following completion of the construction project all trash will be collected and provisions made for disposal.

Beneficial impacts for the community of Chefornak could be realized by residents from the influx of construction contractor and workers. Additionally, the possibility exists that locally qualified residents would also obtain construction employment.

PUBLIC INVOLVEMENT Project staff have involved community residents since inception of the proposed project. Over that time, meetings have been held in the community of Chefornak to present the proposed project, it's purpose and need, the deficiencies to be corrected, and the range of alternatives. At each major step of the project we have endeavored to inform Chefornak residents before we progressed to the next step. In that way, not only were residents informed of our progress, but they had the ability and option of influencing the location and design, and ultimate development of the airport facility for their community. Public information was solicited throughout the project planning and development to design the best possible facility for the City of Chefornak. With the inherent knowledge of area residents the proposed airport should support the community for years to come and protect the environment. Documents supporting the proposed project and the recommended alternative as presented herein, are included in Appendix A while Appendix B contains community meeting notes and summaries.

Agencies were notified of the intent to develop the proposed project at the Chefornak Airport, and the resulting environmental studies. See Appendix A. All issues or comments have been addressed within the text of this environmental document or within the permit applications in Appendix C.

Following publication of this Environmental Assessment, project staff will meet again in the community to ensure that all issues and concerns have been understood and addressed by all parties.

List of Preparers The following ADOT&PF staff assisted in the development and preparation of this document.

AVIATION DESIGN

- Patty Miller, P.E. — Aviation Design Project Manager
- Cindie Little, P.E. — Design Engineer
- Per Sather, R.L.S. — Designer

ENGINEERING SERVICES

- Dave Bloom, P.E. — Environmental / Geotechnical Engineering Manager
- Eric Gerke — Environmental Analyst
- Tom Ottley — Engineering Geologist

APPENDIX A

PUBLIC INVOLVMENT DOCUMENTATION

Summary of Agency Coordination.....A1

Mailing List.....A2-A3

Coordination Letter.....A4-A13

FAA, Richard Girard.....A14

Department of the Army, C.O.E.....A15-A16

Department of Environmental Conservation.....A17-A20

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SUMMARY OF AGENCY CORDINATION

A formal letter requesting comments from local, state, and federal agencies was sent on June 2, 1997. Listed below are the agencies which received letters and their responses.

Agency	Response
FAA, Airway Facilities	Design for Category B, large type aircraft.
Department of Army, C.O.E.	Work described requires wetlands permit.
Department of Environmental Conservation	Work described requires Storm Water Pollution Prevention Plan.
Department of Interior, Fish & Wildlife Service	Discussion of habitat value of each alternative. Identifies possible threatened species (Spectacled Eider) presence. Further follow up resulted in agreement to survey area in June 1998 and plan the project construction according to study results. Letter also raises concern over use of Refuge lands for material source. Field work in February 1998 resulted in selection of a material source off Refuge lands.
Department of Natural Resources, Office of History And Archeology	Identified need for archeological survey of possible material sites along coast and ridgelines. Follow up discussions in person after the material site was chosen resulted in a determination of no need for archeology survey work.

A letter and copy of the Draft Environmental Assessment was sent to the following agencies on November 13, 1998. Their comments are as noted.

Department of Fish & Game	Correction of the Wildlife Refuge name which borders Chefornak from Clarence Rhode to Yukon Delta, other minor corrections and a copy of the Fish Sampling Report from the trip to Chefornak on Oct. 6, 1998.
National Marine Fisheries	Requested culverts be placed in the access road to maintain natural drainage patterns.

CHEFORNAK AIRPORT
PROJECT NO. 51826
MAILING LIST

Ms. Catharine Benediktsson
Manager, Hazardous Materials Waste/Safety
Federal Aviation Administration
Airway Facilities Division, AAL-460H
222 West 7th Avenue, Box #14
Anchorage, AK 99513-7587

Mr. Ronald J. Morris
Western Alaska Office Supervisor
Protective Resources Management Division
National Marine Fisheries Service
222 West Seventh Avenue, Room 517
Anchorage, AK 99513-7577

Director
Community Planning & Development Division
U.S. Dept. of Housing & Urban Development
Anchorage Office, Region X
949 East 36th Avenue
Anchorage, AK 99508

Ms. Ann Rappaport
U.S. Fish and Wildlife Service
Ecological Services
605 West 4th Avenue, Room 62
Anchorage, AK 99501-2231

Mr. Robert Oja, Chief
Regulatory Functions Branch
U.S. Army Corps of Engineers
Alaska District
P. O. Box 898
Anchorage, AK 99506-0898

State Director
Bureau of Land Management
Alaska State Office
222 W. 7th Avenue, #13
Anchorage, AK 99513-7599

Bureau of Indian Affairs
Realty Department
1675 "C" Street
Anchorage, AK 99501-5198

Mr. C.D. Robison, Jr., P.E.
U.S. Environmental Protection Agency
Alaska Operations Office
Water Quality Section
222 West 7th Avenue, #19
Anchorage, AK 99513-7588

Regional Administrator
State of Alaska
Department of Environmental Conservation
Southcentral Regional Office
555 Cordova Street
Anchorage, AK 99501

Ms. Judith Bittner
State Historic Preservation Officer
Department of Natural Resources
Division of Parks and Outdoor Recreation
Office of History and Archaeology
3601 C Street, Suite 1278
Anchorage, AK 99503-5921

Ms. Margaret Auble
Lifeguard
Providence Hospital
P. O. Box 196604
Anchorage, AK 99519-6000

Mr. Wallace A. Reid
Manager, Environmental Affairs
Alaska Airlines
P. O. Box 68900-SEAZA
Seattle, WA 98168-0900

Ms. Maureen McCrea
State of Alaska
Office of Management & Budget
Division of Governmental Coordination
3601 C Street, Suite 370
Anchorage, AK 99503

Mr. Rick Thompson
Southcentral Regional Manager
State of Alaska
Department of Natural Resources
Division of Land
3601 C Street, Suite 1080
Anchorage, Alaska 99503-5937

Mr. Lance Trasky
Southcentral Regional Supervisor
State of Alaska
Department of Fish and Game
333 Raspberry Road
Anchorage, Alaska 99518-1599

The Honorable Peter Matthew, Sr.
Mayor - City of Chefornak
P. O. Box 29
Chefornak, Alaska 99561

President
Calista Corporation
601 West 5th Avenue, Suite 200
Anchorage, Alaska 99501-2225

Chairperson
Chefarnrmute, Inc.
P. O. Box 70
Chefornak, AK 99561

Michael Rearden
Refuge Manager
Yukon-Delta National Wildlife Refuge
P. O. Box 346
Bethel, AK 99559

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NORTHERN REGION, DESIGN AND CONSTRUCTION

2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5399
PHONE: (907) 451-2238
FAX: (907) 451-5103
Environmental Section

June 2, 1997

Re: Chefornak Airport
Project No. 51826
Letter of Intent

Ms. Judith Bittner
State Historic Preservation Officer
Department of Natural Resources
Division of Parks and Outdoor Recreation
Office of History and Archaeology
3601 C Street, Suite 1278
Anchorage, AK 99503-5921

Dear Ms. Bittner:

The Alaska Department of Transportation and Public Facilities (DOT&PF) is considering six preliminary alternatives to improve air transportation safety in the community of Chefornak. The existing airport facility is shown on the attached Figure 1. This project is still in preliminary design and the earliest construction activities could potentially begin is the summer of 1999.

Based on aerial photographs, the enclosed preliminary alternatives are being looked at as potential options for the airport. DOT&PF is in the process of collecting data, such as wind, soil, survey, etc. and community and user comments to aid in the design process. Alternatives 1 and 2 propose enlarging the existing runway and shifting the runway south at its current orientation. Alternatives 3, 4, and 6 present various configurations, including a cross wind runway, for relocating the airport south of the village. Alternative 5 offers improvements to the current airport. Figures 2 through 7 illustrate the six alternatives.

Material sources are also being considered by DOT&PF. Possible locations include the Tern Mountain area approximately 5 miles south of Chefornak or a beach source approximately 7 miles south of the village. Figure 8 shows the potential areas under consideration.

Please review the preliminary alternatives and potential material source locations and provide clearance, if appropriate. If cultural resources sites are known or suspected in the vicinity of any of the locations, please provide specific recommendations needed for clearance.

Please provide comments by June 30, 1997. If you would like additional information, please call Eric Gerke, Environmental Analyst at 451-5289 (or e-mail: eric_gerke@dot.state.ak.us) or Patricia Miller, P.E., Engineering Manager at 451-2284 (or e-mail: patty_miller@dot.state.ak.us).

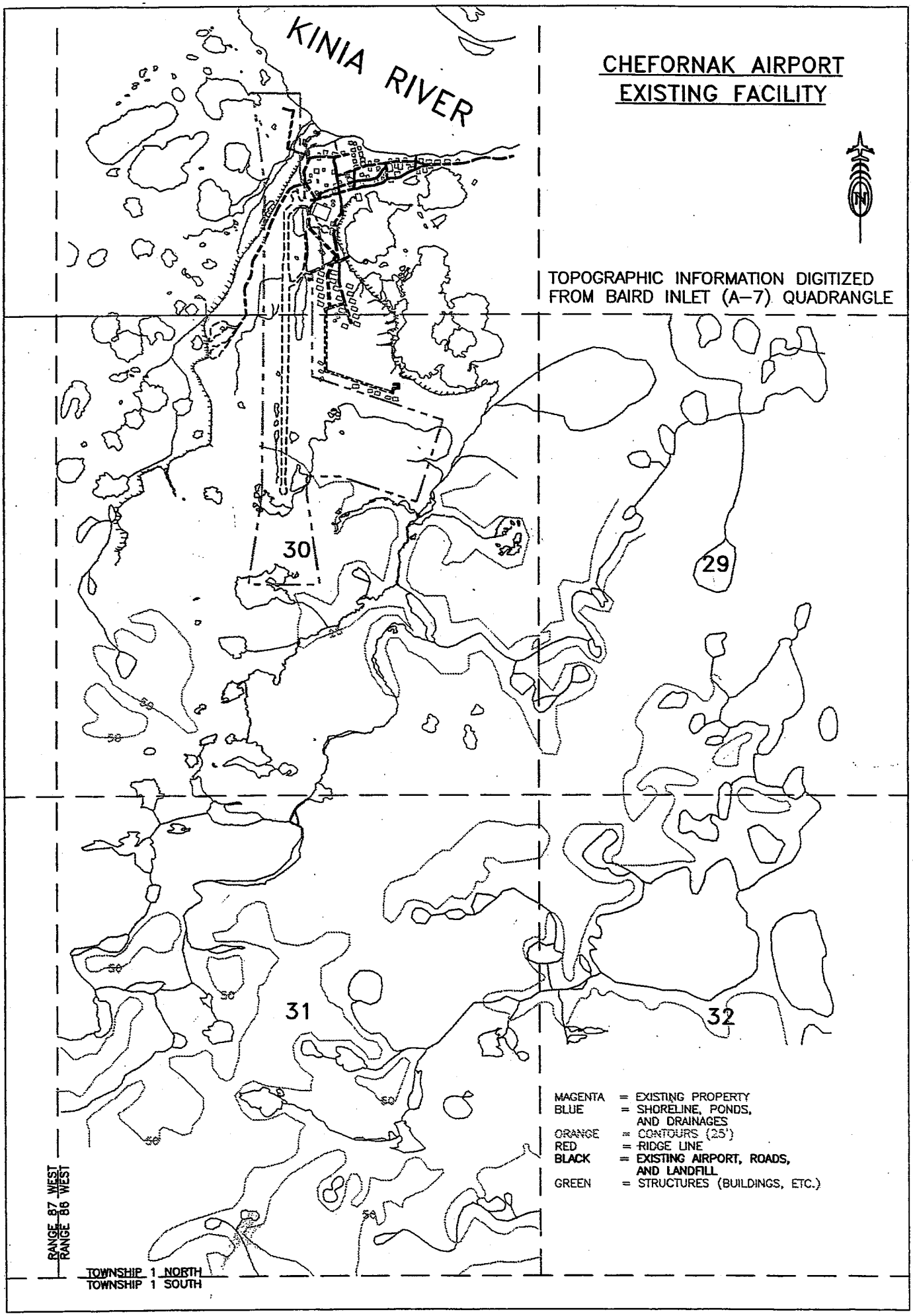
Sincerely,

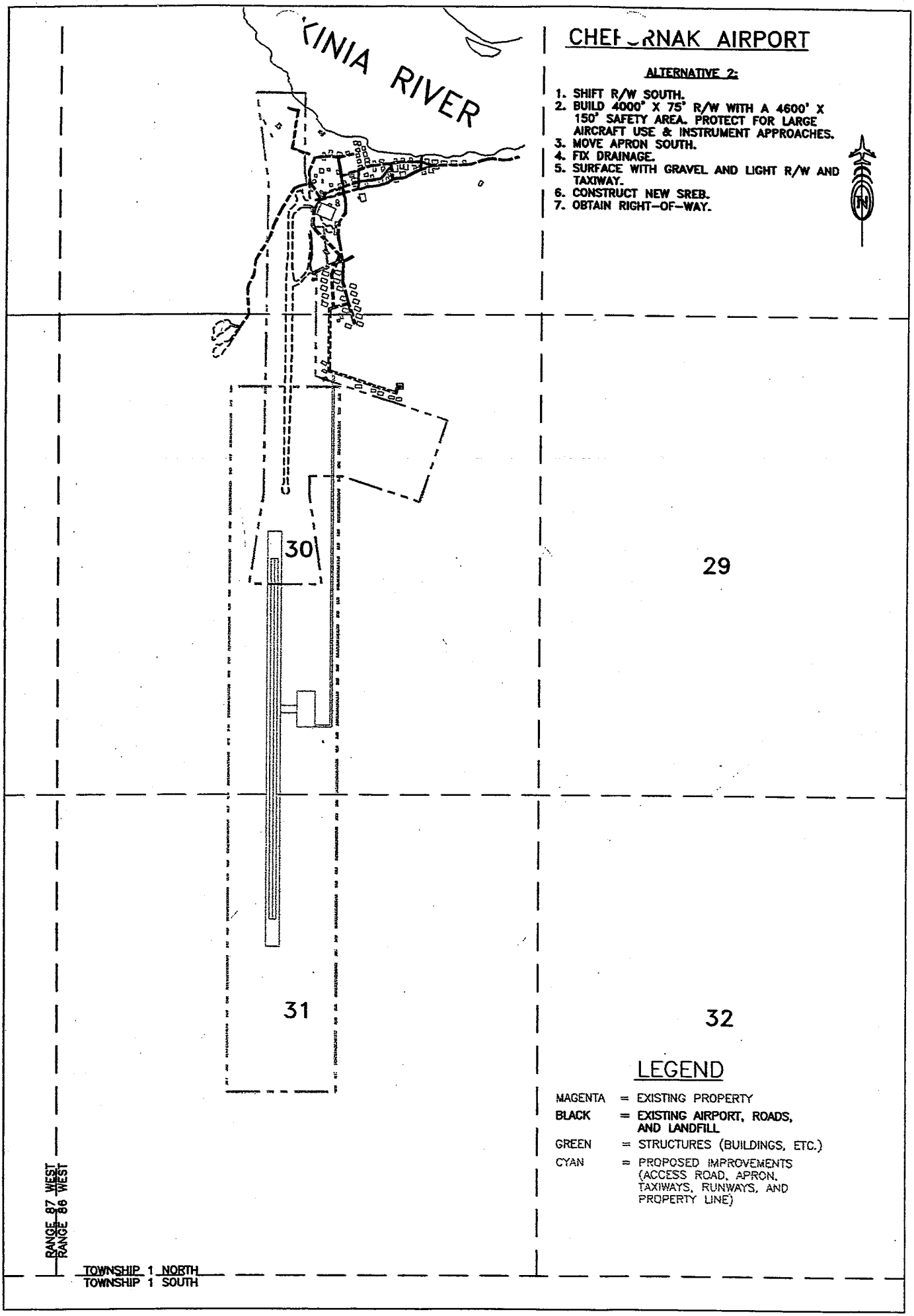
David T. Bloom, P. E.
Environmental/Geotech Engineering Manager

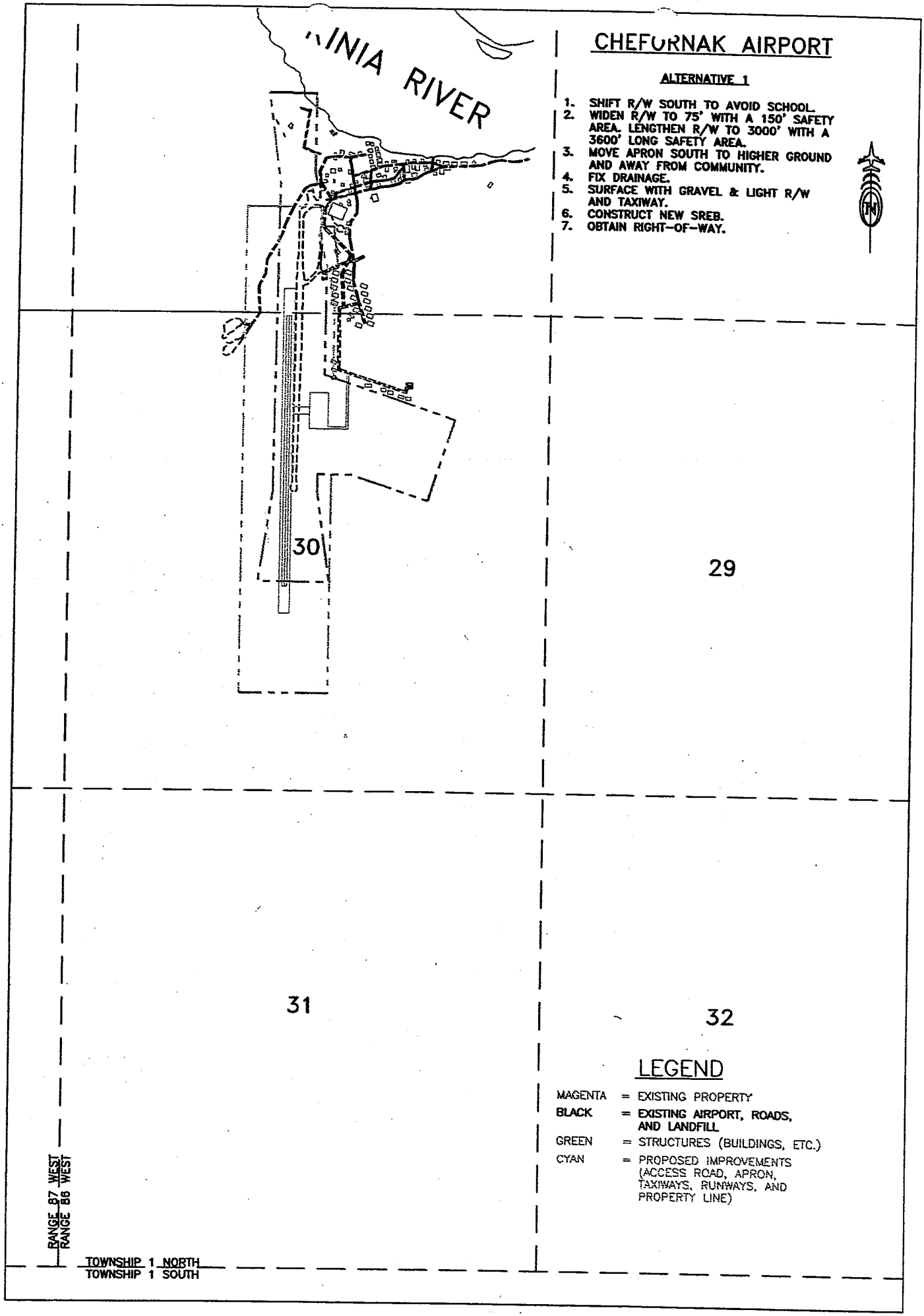
Attachments

AMC/dlw

cc: John A. Miller, P.E., Right of Way Chief, DOT&PF, Northern Region
Patricia Miller, P E., Engineering Manager, Design, Northern Region


KINIA RIVER
CHEFORNAK AIRPORT
EXISTING FACILITY
TOPOGRAPHIC INFORMATION DIGITIZED
FROM BAIRD INLET (A-7) QUADRANGLE
30
29
31
32
MAGENTA = EXISTING PROPERTY
BLUE = SHORELINE, PONDS, AND DRAINAGES
ORANGE = CONTOURS (25')
RED = RIDGE LINE
BLACK = EXISTING AIRPORT, ROADS, AND LANDFILL
GREEN = STRUCTURES (BUILDINGS, ETC.)
RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH


KINIA RIVER
CHEFORNAK AIRPORT
ALTERNATIVE 2:
1. SHIFT R/W SOUTH.
2. BUILD 4000' X 75' R/W WITH A 4600' X 150' SAFETY AREA. PROTECT FOR LARGE AIRCRAFT USE & INSTRUMENT APPROACHES.
3. MOVE APRON SOUTH.
4. FIX DRAINAGE.
5. SURFACE WITH GRAVEL AND LIGHT R/W AND TAXIWAY.
6. CONSTRUCT NEW SREB.
7. OBTAIN RIGHT-OF-WAY.
N
30
29
31
32
LEGEND
MAGENTA = EXISTING PROPERTY
BLACK = EXISTING AIRPORT, ROADS, AND LANDFILL
GREEN = STRUCTURES (BUILDINGS, ETC.)
CYAN = PROPOSED IMPROVEMENTS (ACCESS ROAD, APRON, TAXIWAYS, RUNWAYS, AND PROPERTY LINE)
RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH


INIA RIVER
CHEFORNAK AIRPORT
ALTERNATIVE 1
1. SHIFT R/W SOUTH TO AVOID SCHOOL.
2. WIDEN R/W TO 75' WITH A 150' SAFETY AREA. LENGTHEN R/W TO 3000' WITH A 3600' LONG SAFETY AREA.
3. MOVE APRON SOUTH TO HIGHER GROUND AND AWAY FROM COMMUNITY.
4. FIX DRAINAGE.
5. SURFACE WITH GRAVEL & LIGHT R/W AND TAXIWAY.
6. CONSTRUCT NEW SREB.
7. OBTAIN RIGHT-OF-WAY.
N
30
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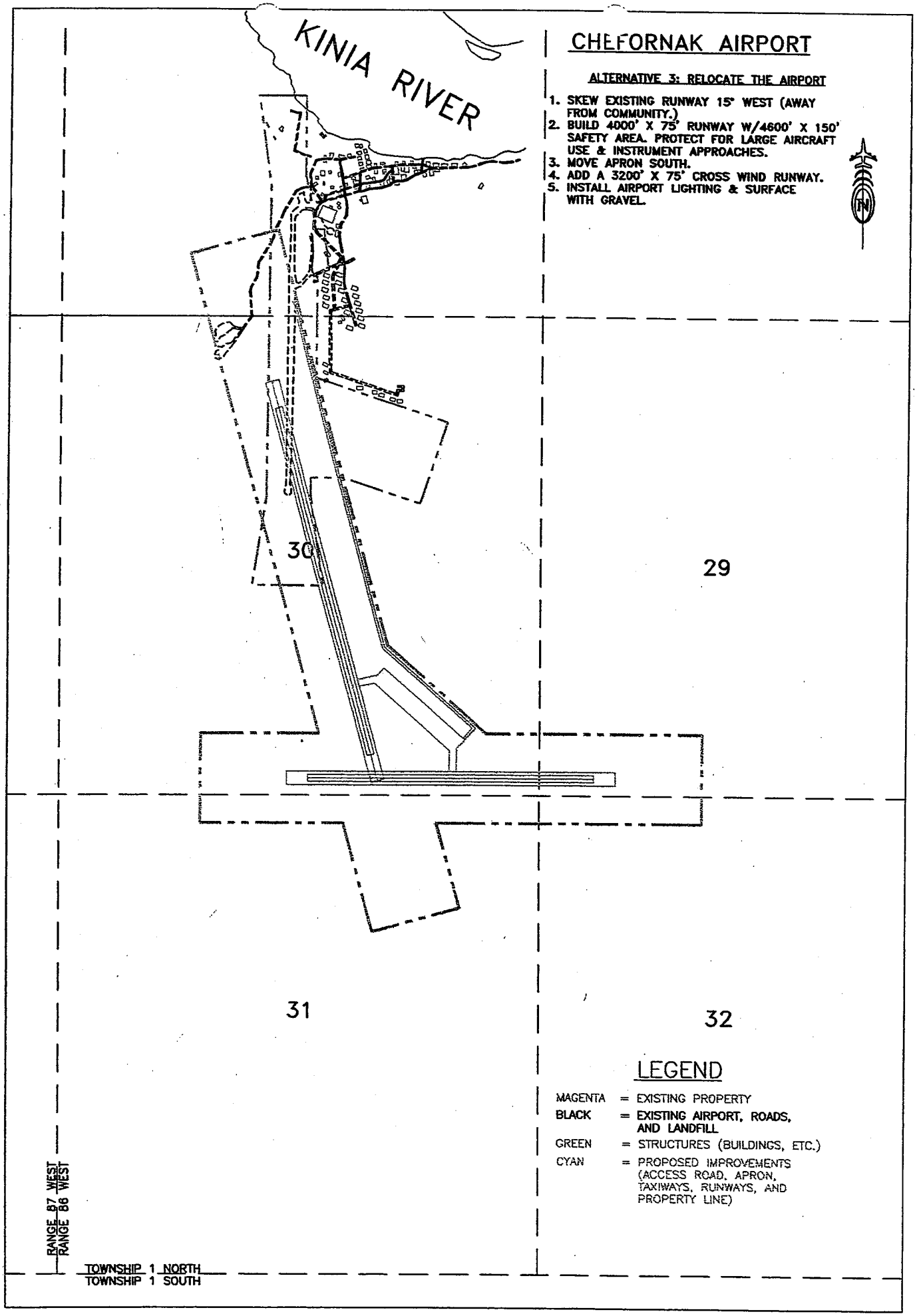
32
LEGEND
MAGENTA = EXISTING PROPERTY
BLACK = EXISTING AIRPORT, ROADS, AND LANDFILL
GREEN = STRUCTURES (BUILDINGS, ETC.)
CYAN = PROPOSED IMPROVEMENTS (ACCESS ROAD, APRON, TAXIWAYS, RUNWAYS, AND PROPERTY LINE)
RANGE 87 WEST
RANGE 88 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH


KINIA RIVER
CHEFORNAK AIRPORT
ALTERNATIVE 3: RELOCATE THE AIRPORT
1. SKEW EXISTING RUNWAY 15° WEST (AWAY FROM COMMUNITY.)
2. BUILD 4000' X 75' RUNWAY W/4600' X 150' SAFETY AREA. PROTECT FOR LARGE AIRCRAFT USE & INSTRUMENT APPROACHES.
3. MOVE APRON SOUTH.
4. ADD A 3200' X 75' CROSS WIND RUNWAY.
5. INSTALL AIRPORT LIGHTING & SURFACE WITH GRAVEL.
N
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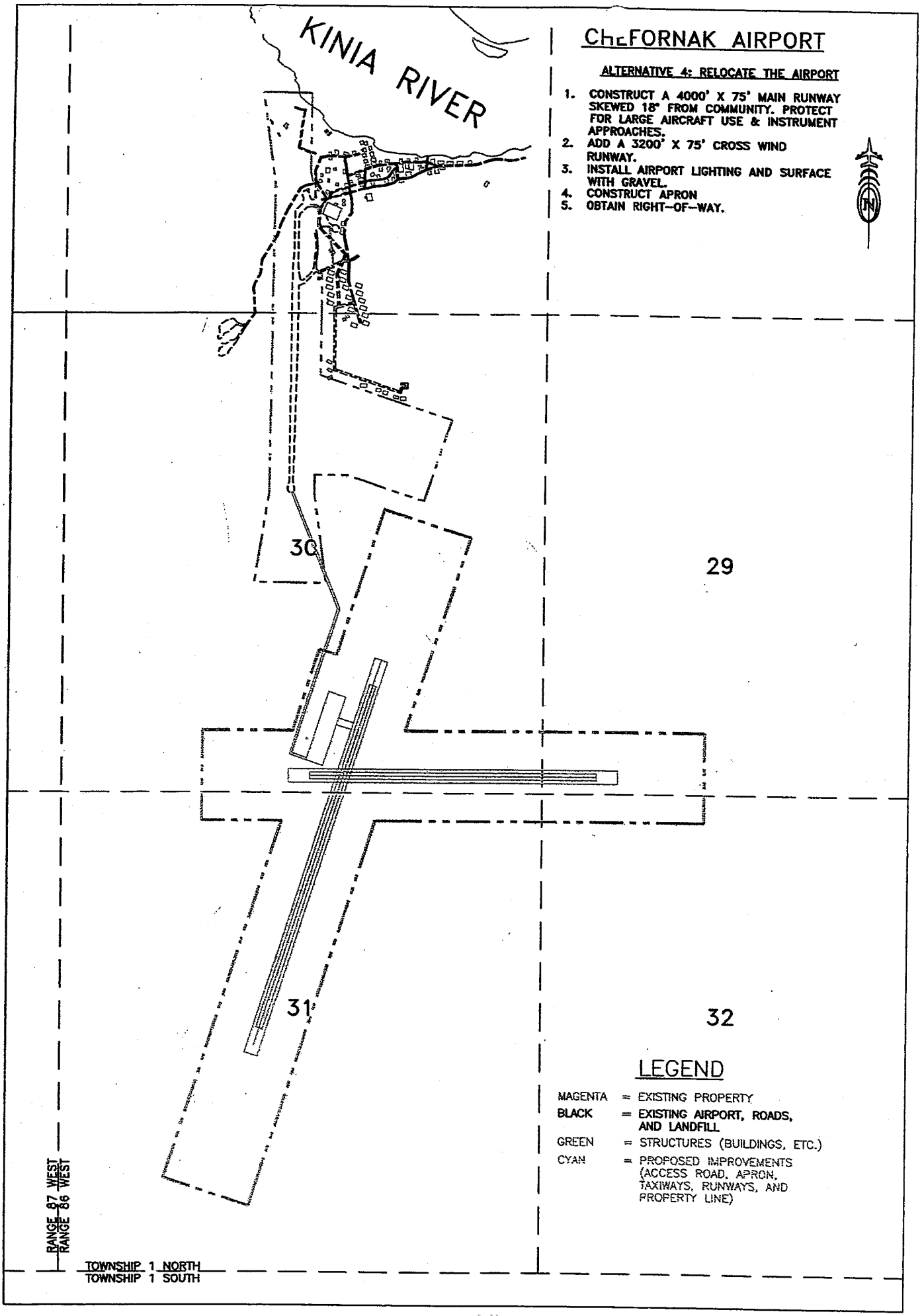
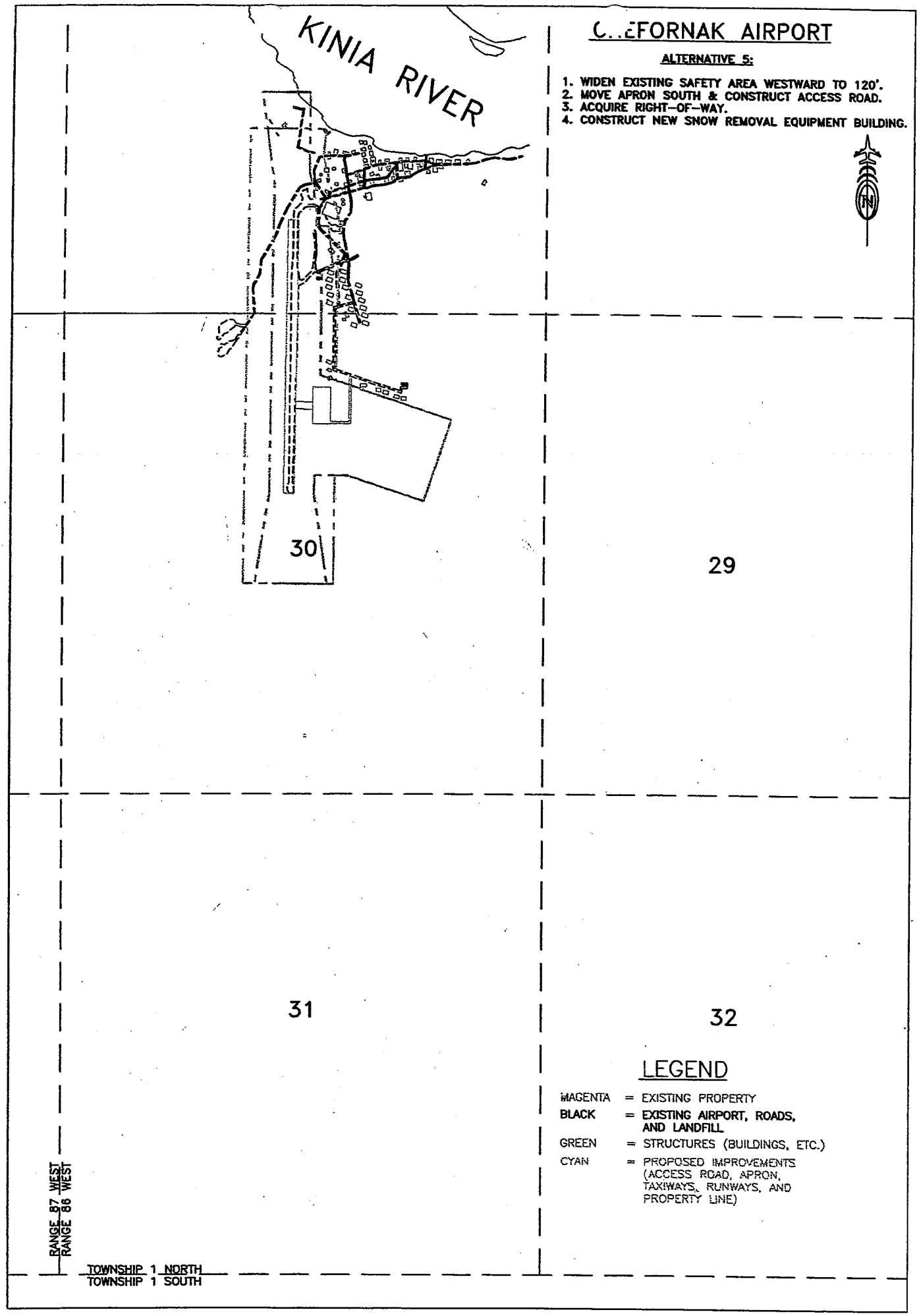
32
LEGEND
MAGENTA = EXISTING PROPERTY
BLACK = EXISTING AIRPORT, ROADS, AND LANDFILL
GREEN = STRUCTURES (BUILDINGS, ETC.)
CYAN = PROPOSED IMPROVEMENTS (ACCESS ROAD, APRON, TAXIWAYS, RUNWAYS, AND PROPERTY LINE)
RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH


KINIA RIVER
ChcFORNAK AIRPORT
ALTERNATIVE 4: RELOCATE THE AIRPORT
1. CONSTRUCT A 4000' X 75' MAIN RUNWAY SKEWED 18° FROM COMMUNITY. PROTECT FOR LARGE AIRCRAFT USE & INSTRUMENT APPROACHES.
2. ADD A 3200' X 75' CROSS WIND RUNWAY.
3. INSTALL AIRPORT LIGHTING AND SURFACE WITH GRAVEL.
4. CONSTRUCT APRON
5. OBTAIN RIGHT-OF-WAY.
N
30
29
31
32
LEGEND
MAGENTA = EXISTING PROPERTY
BLACK = EXISTING AIRPORT, ROADS, AND LANDFILL
GREEN = STRUCTURES (BUILDINGS, ETC.)
CYAN = PROPOSED IMPROVEMENTS (ACCESS ROAD, APRON, TAXIWAYS, RUNWAYS, AND PROPERTY LINE)
RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH


KINIA RIVER
C..EFORNAK AIRPORT
ALTERNATIVE 5:
1. WIDEN EXISTING SAFETY AREA WESTWARD TO 120'.
2. MOVE APRON SOUTH & CONSTRUCT ACCESS ROAD.
3. ACQUIRE RIGHT-OF-WAY.
4. CONSTRUCT NEW SNOW REMOVAL EQUIPMENT BUILDING.
N
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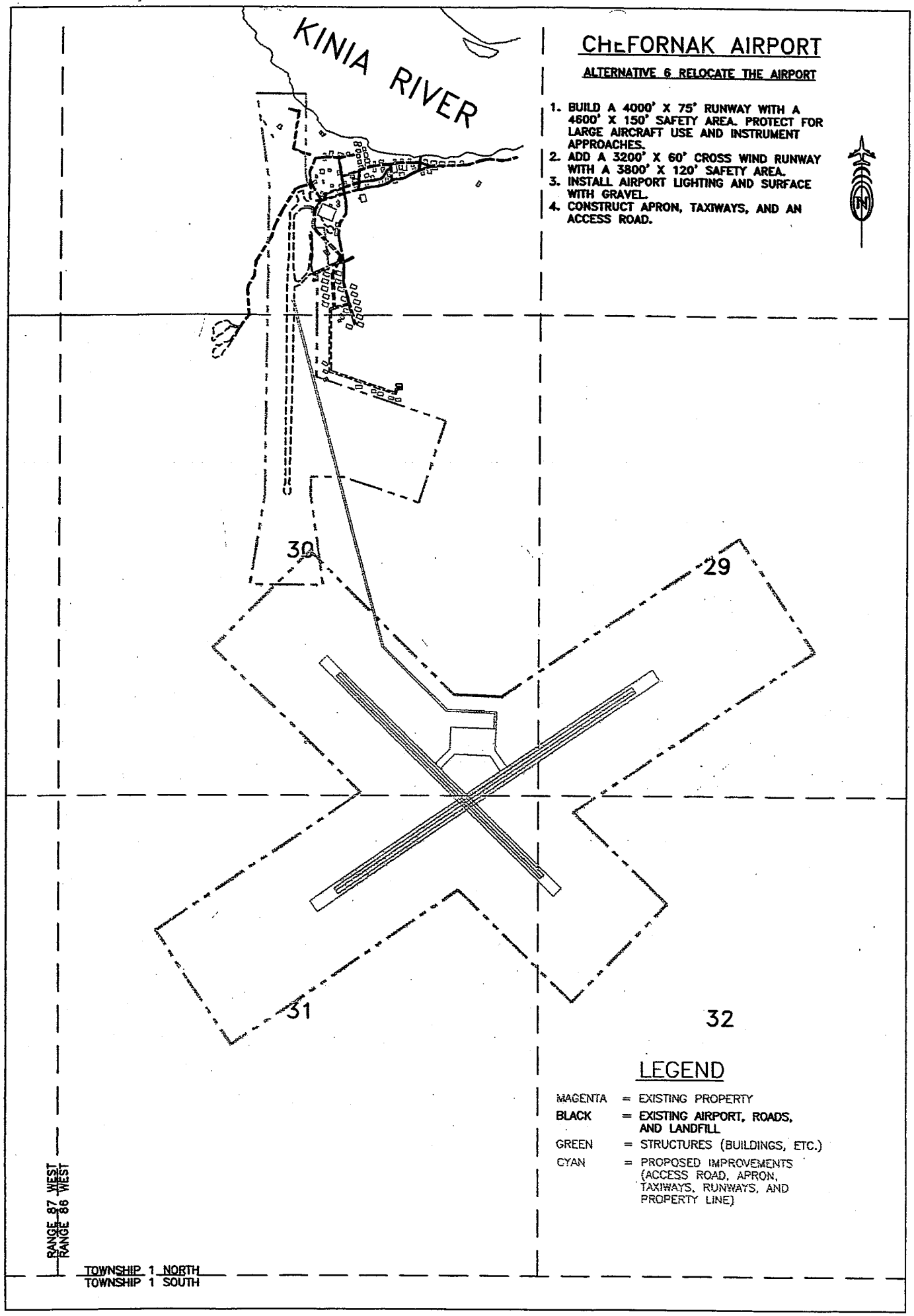
32
LEGEND
MAGENTA = EXISTING PROPERTY
BLACK = EXISTING AIRPORT, ROADS, AND LANDFILL
GREEN = STRUCTURES (BUILDINGS, ETC.)
CYAN = PROPOSED IMPROVEMENTS (ACCESS ROAD, APRON, TAXIWAYS, RUNWAYS, AND PROPERTY LINE)
RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH


KINIA RIVER
CHEFORNAK AIRPORT
ALTERNATIVE 6 RELOCATE THE AIRPORT
1. BUILD A 4000' X 75' RUNWAY WITH A 4600' X 150' SAFETY AREA. PROTECT FOR LARGE AIRCRAFT USE AND INSTRUMENT APPROACHES.
2. ADD A 3200' X 60' CROSS WIND RUNWAY WITH A 3800' X 120' SAFETY AREA.
3. INSTALL AIRPORT LIGHTING AND SURFACE WITH GRAVEL.
4. CONSTRUCT APRON, TAXIWAYS, AND AN ACCESS ROAD.
30
29
31
32
LEGEND
MAGENTA = EXISTING PROPERTY
BLACK = EXISTING AIRPORT, ROADS, AND LANDFILL
GREEN = STRUCTURES (BUILDINGS, ETC.)
CYAN = PROPOSED IMPROVEMENTS (ACCESS ROAD, APRON, TAXIWAYS, RUNWAYS, AND PROPERTY LINE)
RANGE 87 WEST
RANGE 86 WEST
TOWNSHIP 1 NORTH
TOWNSHIP 1 SOUTH

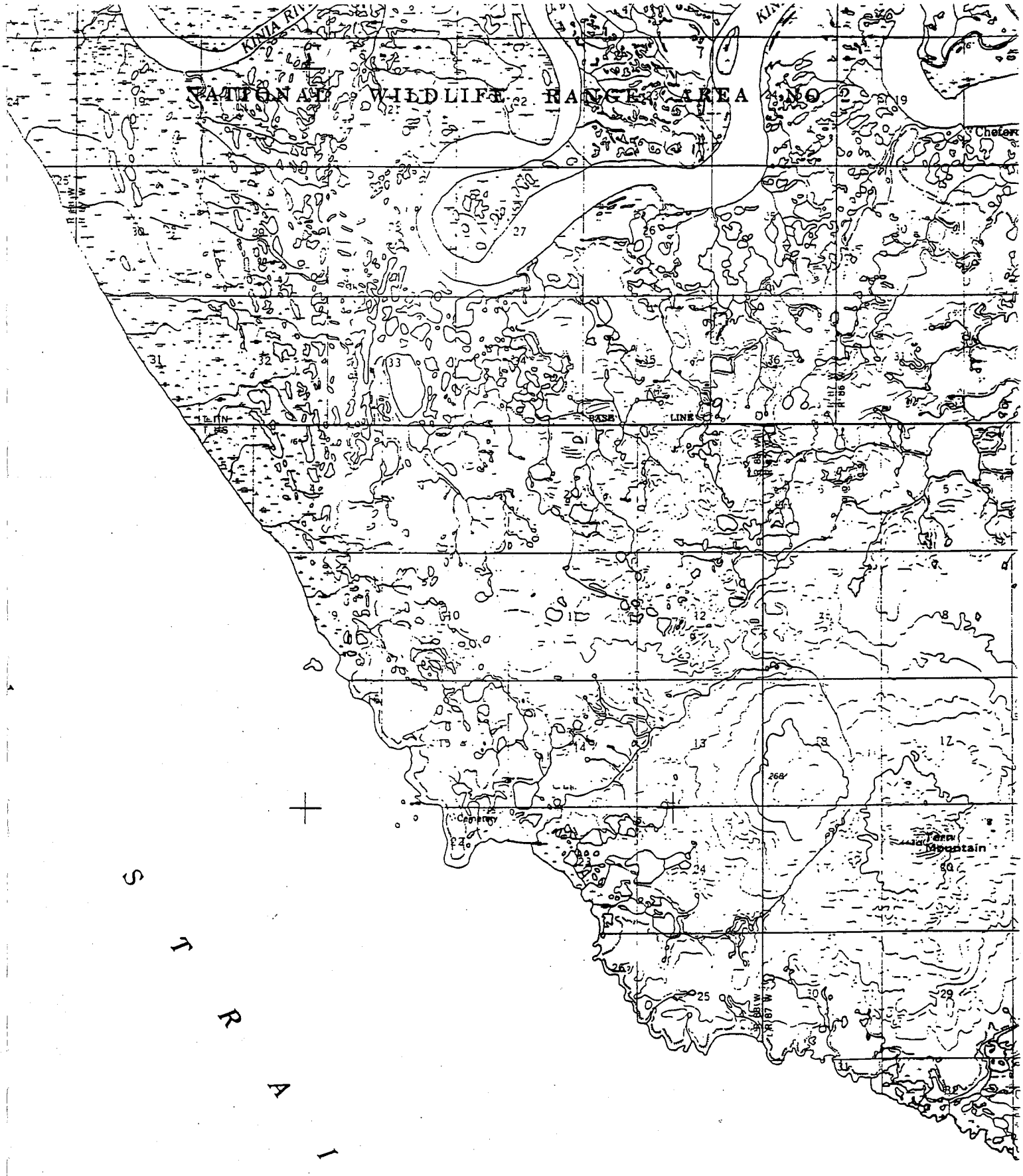

NATIONAL WILDLIFE RANGE AREA NO. 2
KINIA RIV
BASE LINE
Cemetery
Mountain
STRAIT

FIGURE 8

Author: Richard Girard <Richard.Girard@faa.dot.gov> at DOTPFWAN
Date: 6/26/97 7:16 PM
Priority: Normal
TO: Eric Gerke at FAIPM1
Subject: Chefornak

Eric

My only comment on Chefornak airport project is to make it an instrument runway for at least Cat B large, type aircraft. This would include all design standards to support this. It appears that you are planning this allready. The FAA would like very much to put in weather reporting equipment and a comunications facility, along with a GPS approach. We think the minimum width should be 100 ft not 75. C-130 and DC-6 aircraft regularly go into remote villages like Chefornak, when runway length and width allows. 75 ft wide runways allow no margin for error or mechanical failure on the runway.

Rick Girard
FAA AAL-203
richard.girard@faa.dot.gov

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, ALASKA
P.O. BOX 898
ANCHORAGE, ALASKA 99506-0898

REPLY TO
ATTENTION OF:

JULY 08 1997

Regulatory Branch
North Section
9-970493

Mr. Eric Gerke
Alaska Department of Transportation
and Public Facilities
2301 Peger Road
Fairbanks, Alaska 99709-5399

Dear Mr. Gerke:

We have received your letter of June 11, 1997, requesting information and/or comments in regards to the proposed Chefornak Airport upgrade or relocation project. You have identified six alternatives for the proposed airport work at Chefornak, Alaska, within sections 19, 29, 30-32, T. 1 N, R. 86 W., Seward Meridian. Your project has been assigned number 9-970493, Kinia River. Please include this number with your future correspondence.

Your proposed project was reviewed pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors act of 1899. Section 404 of the Clean Water Act requires that a Department of the Army (DA) permit be obtained for the placement or discharge of dredged and/or fill material into waters of the United States (U.S.), including wetlands, prior to conducting the work (33 U.S.C. 1344). Section 10 of the Rivers and Harbors Act of 1899 requires that a DA permit be obtained for certain structures or work in or affecting navigable waters of the U.S. prior to conducting the work (33 U.S.C. 403).

For regulatory purposes, the Corps of Engineers defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Navigable waters of the U.S. are those waters subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or other waters identified as navigable by the Alaska District. Your potential beach material borrow source may be a navigable water of the U.S., depending upon its location.

Based on our review of the information you furnished and those available to us, we have determined that all six of the proposed project alternatives would involve the placement of fill material into waters of the U.S., under the Corps regulatory jurisdiction. Therefore, issuance of an individual Department of the Army permit would be required prior to conducting the proposed work.

Based solely upon the preliminary information you have provided us with, it appears as though alternative number five would be the least environmentally damaging practicable alternative, aside from the no action alternative.

Enclosed is a DA permit application packet. Upon submittal of your application, please include the following information:

a. A vicinity map of Chefornak.

b. A cross-sectional view of the proposed runway and access route, including width and depth dimensions as well as side slopes.

c. The location of the proposed material site, method of removal and transport, and the quantities required.

d. If there will be any excess waste material (ex: vegetation or overburden), where will this material be disposed.

e. Specifics on the purpose and need for each of the proposed alternatives.

In an effort to determine the level of customer satisfaction with the services provided to you, the Regulatory Branch asks that you take a few moments to provide us with any constructive comments you feel are appropriate by filling out the enclosed questionnaire. Our interest is to see how we can continue to improve our service to you, our customer, and how best to achieve these improvements. Additional comments may be provided through the use of an oral exit interview, which is available to you upon request. Your efforts and interest in evaluating the regulatory program are much appreciated.

Your early planning coordination efforts are appreciated. Should you have further questions or comments, I can be contacted at the letterhead address, by FAX at (907) 753-5567, by telephone at (907) 753-2716, or toll free from within Alaska at (907) 478-2712.

Sincerely,

Shannon Hansen

Shannon Hansen
Regulatory Specialist

Enclosures

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION

ANCHORAGE/WESTERN PUBLIC SERVICE OFFICE
555 Cordova Street
Anchorage, Alaska 99501

Phone: (907) 269-7519
Fax: (907) 269-7506

July 10, 1997

Mr. David T. Bloom
DOT/PF
Environmental Section
2301 Peger Road
Fairbanks, Alaska 99709-5399

Re: Chefornak Airport; ADEC # 9725-WW-163-353

Dear Mr. Bloom:

I received a letter from you concerned with numerous sites for relocating your airfield at Chefornak. This project will need to consider the Storm Water Pollution Prevention and Plan Review Checklist when you have decided on which location the airfield will be built.

Attached, you will find a copy of the Storm Water Pollution Prevention and Plan Review Checklist and the billing for review of this plan is also attached.

Please fill out the form and include the payment for the billing when you have determined the scope of your project. If you have any questions call me and we will discuss the matter.

Respectfully,

William R. Rieth

William R. Rieth, P.E.
Environmental Engineer

WRR/cf

ROUTING / INSTRUCTIONS
B. Gannon ____ K. Maitlen ____
E. Gerke ____X____ C. Storey ____
R. Horner ____ P. Wightman ____
T.R. Horner ____ G. Zimmerman ____
Initial and ____ File: ____
cc: ____
Return to: ____

ADEC
STORM WATER POLLUTION PREVENTION AND PLAN REVIEW CHECKLIST
18 AAC 72.600

Project Name: _____

Project Size (acres): _____ Project Type: _____

Location (Legal description): _____

Street Address: _____

Receiving Water Body/Watershed: _____

Has an EPA General Construction Storm Water Pollution Prevention Plan been completed? (Required if 5 acres or greater.) YES_____ NO_____ If yes, please attach a copy of the Notice of Intent to Discharge (NOI).

Best Management Practices (BMPs) are physical, structural, and management measures implemented to prevent or reduce storm water pollution. ADEC encourages use of BMPs for construction projects and for site maintenance after construction in order to reduce the potential for site runoff to cause violations of State of Alaska Water Quality Standards. For each pollutant identified below, engineering plans submitted for the project should demonstrate application of two or more of the BMPs shown on the attached list.

I. CONSTRUCTION PHASE **	APPLICABLE BMPS
Sediment Control	_____
Oil/Petroleum Products	_____
Vegetation Maintenance	_____
Snow Removal/Storage	_____
Litter/Debris	_____
Other Pollutants Generated by Project	_____

II. POST CONSTRUCTION/MAINTENANCE **	APPLICABLE BMPS
Sediment Control	_____
Oil/Petroleum Products	_____
Vegetation Maintenance	_____
Snow Removal/Storage	_____
Litter/Debris	_____
Other Pollutants Generated by Site Activity	_____

* Identify BMPs by number next to each appropriate category (see attached list).

PREDICTED FLOW AND RUNOFF CALCULATIONS SHOULD BE SUBMITTED IN PLAN REVIEW.

BEST MANAGEMENT PRACTICES:

Construction Techniques

1. Grade stabilization structure
2. Lot benching, gradient trenches
3. Right-of-way diversions
4. Riprap
5. Stabilized construction entrance
6. Surface roughening/tracking

Detention/Retention

7. Filter strips
   - A. vegetated
   - B. rock-lined
8. Ponds
   - A. single
   - B. multiple
   - C. extended
9. Roadside storage basins
10. Wetpond
11. Wetlands
    - A. constructed
    - B. natural/existing

Diversion

12. Berms and dikes
13. Check dams
14. Flumes
15. Interceptor dikes and swales
16. Slope drains
17. Storm water conveyance channel
18. Subsurface drains

Drainage System Design

19. Catch basin
20. Degritter
21. High flow bypass structures
22. Inlet protection
23. Oil stop valve
24. Outlet protection
25. Sediment traps
    - A. single
    - B. multiple
26. Weirs
    - A. proportional
    - B. side

Infiltration

27. Basins
28. Drainfields
29. Porous Pavement
30. Swales
31. Trenches

Maintenance Practices

32. Covering
33. Disposal of collected sediments, grease, oil, etc.
34. Dust control
35. Litter control
36. Ice control
    - A. chemical deicing agents
    - B. road sand specifications
37. Street maintenance
    - A. cleaning
    - B. sweeping
38. Structural control maintenance
    - A. preventative
    - B. routine

Operating Practices

39. Construction site control
40. Cost effectiveness analysis
41. Employee training
42. Internal reporting
43. Materials inventory and management
44. Non-storm-water discharge identification
45. Recordkeeping
46. Risk identification and assessment
47. Visual inspections

STATE OF ALASKA
INVOICE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
FEES FOR NONDOMESTIC WASTEWATER
GENERAL PERMITS AND INSPECTIONS

INVOICE # ~~410242~~

Send payment to:
DEPT OF ENVIRONMENTAL CONSERVATION
FISCAL/REVENUE
410 WILLOUGHBY AVE, #105
JUNEAU, AK 99801-1795

MAKE CHECK PAYABLE TO: STATE OF ALASKA

BILLING NUMBER: 3/13/96
YEAR PROG. REG DIST SUB CAT.
9-7-3-6-0-2-0-5-*N-H*-163-353

Permit no. (Optional):

DEC CONTACT (TYPED OR PRINTED): WILLIAM R. RIETH
PHONE: 269-7519

Applicant name, address and phone number:
State of Alaska / DOT-PF
2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5399
ATTEN: DAVID T. BLOOM

IMPORTANT
1. Please reference invoice number on your check.
2. Submit top (white) copy of this form with your payment.

Facility / Project name: CHEFORNAK AIRPORT

FEE REGS. REFERENCE	SUB-CATEG.	DESCRIPTION	FEE AMOUNT	ITEMIZED FEE DUE
72.610		**NONDOMESTIC WASTEWATER PERMITS, PLAN REVIEW, EA, EIS**		
(a)(1)	NA	Environmental Assessment	$500	
(a)(2)	NB	Environmental Impact Statement	$10,000	
(a)(3)	NC	Initial State Permit	$200	
(a)(4)	ND	State Permit Renewal or modifications	$100	
(a)(5)	NE	Initial NPDES Permit	$1,500	
(a)(6)	NF	NPDES Permit Renewal	$750	
(a)(7)	NG	Single review of a group of NPDES permits	$100	
(a)(8)	NH	Plan Review	$400	$400.00
(a)(9)	NI	Multiple activities at different locations at varying times, initial permit	$1,500	
(a)(9)	NJ	Multiple activities at different locations at varying times, each activity	$200	
72.910.		**GENERAL PERMITS**		
(a)(1)	GA	Domestic wastewater	$100	
(a)(2)	GB	Non-Domestic Waste Water	$200	
72,945		**INSPECTIONS - Domestic & nondomestic**		
(b)	IA	Inspections - hourly rate	$65/hr.	

PAID: — CASH or — CHECK # _____ Note: Payment due upon receipt of invoice.

Total fee due $ 400.00

To legally dispose of liquid wastes to land or waters of the state of Alaska, owners/operators are required to pay a permit fee pursuant to AS 44.46.025. Please check the information on this form for accuracy and remit the correct permit fee to the address above, with a copy of this form.

Signature of DEC contact: William R. Rieth
Title: Environmental Engineer
Date: 8 July 1997

WHITE - REMITTANCE COPY, YELLOW - APPLICANT, PINK - FISCAL, GOLD - FILE COPY

18-0411 (Rev 3/96)

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NORTHERN REGION, DESIGN AND CONSTRUCTION

2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5399
PHONE: (907) 451-2228
TDD: (907) 451-2363

Date: July 17, 1997

Mr. William R. Rieth, P.E.
Department of Environmental Conservation
Anchorage/Western Public Service Office
555 Cordova Street
Anchorage, Alaska 99501

Re: Chefornak Airport
ADEC#9725-WW-163-353

Dear Mr. Rieth:

Per your recent conversation with Nate Johnson, ADOT Statewide Environmental Coordinator, regarding the Storm Water Pollution Prevention and Plan Review Checklist, once we have determined a preferred alternative and developed a more detailed design we will submit an application for a CORP 404 permit and the ensuing 401 water quality certification. At that time appropriate mitigation and BMP's will be considered and incorporated into the plans and specifications and the 401 certification fee paid.

During final design the Department prepares an Erosion and Sediment Control Plan (ESCP) that is incorporated or referenced in the plans. Once the project is advertised and awarded the Contractor prepares a Storm Water Pollution Prevention Plan based on the ESCP and his own proposed method of operation.

If you have any questions please contact Nate Johnson (465-6954) or myself at 451-2228.

Sincerely,

David T. Bloom, P.E.
Env/Geotech Engineering Manager

DTB:mjb

cc: Patty Miller, Engineering Manager, Northern Region
Nate Johnson, Statewide Environmental Coordinator, Headquarters

Paul
CALL CM
File #01

United States Department of the Interior

IN REPLY REFER TO:

FISH AND WILDLIFE SERVICE
YUKON DELTA NATIONAL WILDLIFE REFUGE
P.O. BOX 346
BETHEL, ALASKA 99559

21 July 1997

Eric Gerke, Environmental Analyst
Alaska Dept. Of Transportation and Public Facilities
2301 Peger Road
Fairbanks, Alaska 99709-5399

Dear Mr. Gerke:

As requested in Mr. Bloom's letter of intent, dated 11 June 1997, the following are our preliminary comments regarding the proposed Chefornak Airport project (No. 51826):

1) The wetlands around Chefornak are biologically very rich and provide excellent breeding and nesting habitat for numerous waterfowl and shorebird species as well as other bird life. The various alternatives would have varying levels of impacts on habitat and wildlife in the area.

2) Alternatives 1 or 5 would require the least new construction, the least loss of new, "undisturbed" habitat, and would be least damaging to the environment. From the refuge's perspective, either 1 or 5 would be the preferred alternative.

3) Alternative 2 would cause the direct loss of some new, "undisturbed" habitat and would require filling in a number of wetlands and/or diverting or bridging several drainages. Unless extreme care is taken, the downstream flow of water could be impeded with negative consequences for associated waterbodies.

4) Alternatives 3, 4, and 6 (in increasing order of habitat damage) are the least biologically desireable options. All 3 alternatives would cause significant, direct loss of new, "undisturbed" habitat and would require a substantial amount of filling, diverting, and/or bridging. Impedance and/or constriction of water flow and environmental consequences to downstream waterbodies are similar to #3, only on a larger scale.

5) The area around Chefornak is in the potential nesting range of the Yukon-Kuskokwim Delta population of spectacled eiders. Although I suspect there are few, if any, spectacled eiders nesting in the immediate vicinity of the village, suitable habitat further from the village may well be occupied. Potential impacts

to this threatened species from each alternative would have to be addressed in any environmental documentation.

5) Of greatest immediate concern to the refuge at this juncture are the areas you have identified as potential material sources. Both areas are on refuge lands and accessing either site could cause substantial environmental damage. Use of sites on refuge lands will require a Special Use Permit and there is generally an associated charge per cubic yard of material. This process would be simplified if fill could be gotten from Corporation lands. I believe this area of the delta is mostly volcanic in origin. As I recall, there are large boulders sticking out of the tundra for some distance south of the village. Furthermore, I doubt there is much topsoil in the area. If this is indeed the case, a simple rock crusher set up on Corporation lands should be able to produce all the fill needed for the project, while minimizing construction, haul distances, and environmental damage.

6) If it is determined that the only logical place to get the necessary fill is from the beach or Tern Mountain, ADOT should evaluate the use of a barge to haul materials to the runway construction site versus construction of new roads from the village to the material sites.

Thank you for the opportunity to comment on this letter of intent. I look forward to reviewing future documents as they are prepared. If you have any questions regarding these comments, please don't hesitate to contact me at (907) 543-3151.

Michael Rearden
Refuge Manager

cc: Gary Wheeler

CML CML
File #01

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF PARKS AND OUTDOOR RECREATION
OFFICE OF HISTORY AND ARCHAEOLOGY

3601 C STREET, SUITE 1278
ANCHORAGE, ALASKA 99503-5921
PHONE: (907)269-8721
FAX: (907)269-8908

July 23, 1997

ROUTING / INSTRUCTIONS
B
E
F
T
Initial
cc:
Return to:

File No.: 3130-2R DOT/PF

Subject: Project No. 51826 Chefornak Airport

David T. Bloom, Environmental Engineering Manager
Northern Region, Design and Construction
Department of Transportation and Public Facilities
2301 Peger Road
Fairbanks, AK 99709-5399

Dear Mr. Bloom;

We have reviewed your letter on the referenced project asking us to evaluate archaeological survey needs. Almost no archaeological survey has been done in the general area, so obviously no sites are listed on the Alaska Heritage Resources Survey.

John Cook, currently with BLM in Fairbanks, briefly surveyed the location of the proposed school in 1979. The school land did not contain any sites but he did make the following observation: "About 200' west of the school tract, there are several house pits." I believe that the large building in green on the maps you provided is the school. If so, the house pits may be on or near the airport property (if they still exist).

It appears that the "ridge line" in red on your map would be a relatively attractive place for prehistoric occupation. Therefore, we recommend an archaeological reconnaissance survey for any of the alternatives that would impact the ridge line area. This includes at lease Alternatives 1 and 5, and may include Alternative 3 if ground disturbance is proposed for the northern clear zone.

Several ANCSA 14(h)(1) sites are known along the coast in the area of the proposed material sources. They are in Sections 25 and 26 within the area outlined in yellow on your map. Others may be present as well. Additional archaeological survey will probably be needed when potential material source locations are narrowed down from the 11 square miles now proposed.

Please contact Tim Smith at 269-8722 if there are any questions or

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if we can be of further assistance.

Sincerely,

Judith E. Bittner
State Historic Preservation Officer

JEB:tas

file Chefornak-c

CHEFORNAK CITY COUNCIL
RESOLUTION 97-09

A RESOLUTION IN SUPPORT OF THE RELOCATION OF THE CHEFORNAK AIRPORT.

WHEREAS, the existing runway does not meet the needs of the community of Chefornak, and is too short to allow reliable access by twin engine aircraft, and;

WHEREAS, Chefornak has severe wind conditions and we need a cross wind runway to insure a safe airport, and;

WHEREAS, there is no room at the existing airport for construction of a cross wind runway, and;

WHEREAS, the existing airport parking apron abuts private property which results in a very unsafe mixing of aircraft and children, and;

WHEREAS, it is very important to our community that the airport be relocated to a site that is farther away from the community and that the potential for a crosswind runway and runway lengths that will accommodate twin engine aircraft.

NOW THEREFORE BE IT RESOLVED THAT the Chefornak City Council is in favor of the relocation of the airport to a site South of the City of Chefornak.

PASSED AND APPROVED by a duly constituted quorum of the Chefornak City Council this 11 day of December, 1997.

Hubert Tunuchak
Mayor, City of Chefornak

Isadora Nilanak
Attest: City Clerk

MEETING AGENDA

Department of Transportation & Public Facilities
2301 Peger Road
Fairbanks, Alaska 99709

Meeting Description Airports & Resource Agencies

Results Desired Project coordination and permit preapplication

Date February 6, 1998 **Time** 9:00 am **Location** Federal Bldg., Airports Conf. Rm.

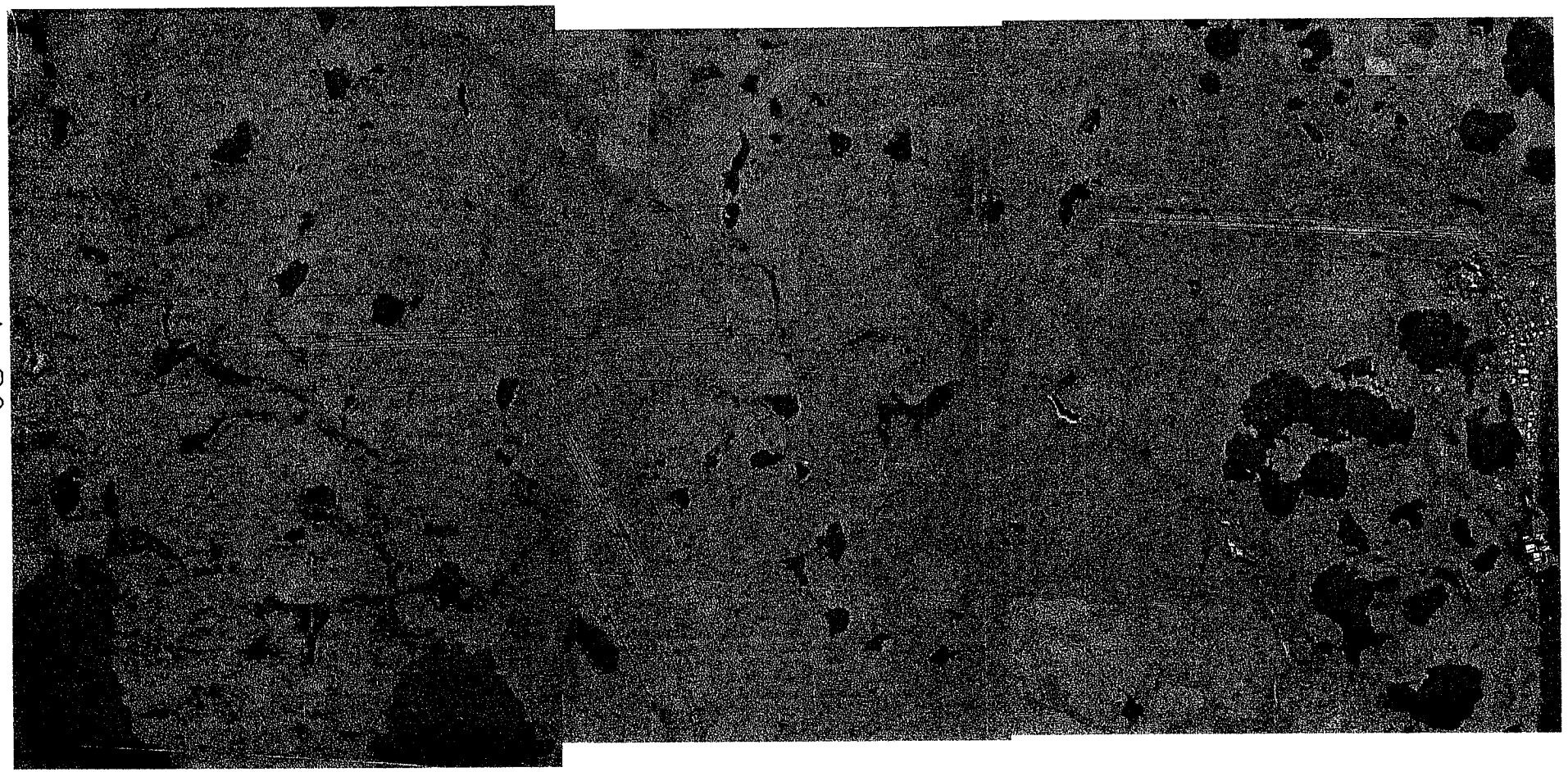
Scheduled Time			Actual Time		
Start	Stop	Total Hours	Start	Stop	Total Hours
9:00 am	noon		9:00	noon	3 hrs

Agencies Attending		
1	COE	Regulatory
2	NMFS	Didn't attend
3	ADF&G	Habitat
4	DGC	CZM
5	USF&WS	Ecological Services
6		Habitat Conservation
7		Refuge
8		Reality
9	DEC	Water Quality
10	FAA & ADOT/PF	Design - Environmental - Right-of-way - Central Region Personnel (same sections)

Projects To Be Discussed		✓
1	Chevak Airport Improvements	
2	Chefornak Airport	
3	Other upcoming airport projects located in western Alaska	
3a	Marshall	
3b	Alukanuk	
3c	Shageluk	
4	St. Michael & Stebbins Sanitation Roads (if time allows)	

Displays & materials available for review		
✈	Chevak: photos & community profile	
	Project drawings	
	Draft COE permit	
	Draft EA	
✈	Chefornak: photos & community profile	
	Preliminary drawings/location	
✈	Shageluk: photos & community profile	
	Preliminary drawings	
✈	Marshall	
✈	Alukanuk	
✎	Various pertinent regulations	

CHEFORNAK AIRPORT RELOCATION



A 3n

FAX

Date 9/15/98

Number of pages including cover sheet

TO: Tim Smith
Dept. of Natural Resources, Parks and Recreation, Office of History and Archeology

Phone 269-8722
Fax Phone 269-8908

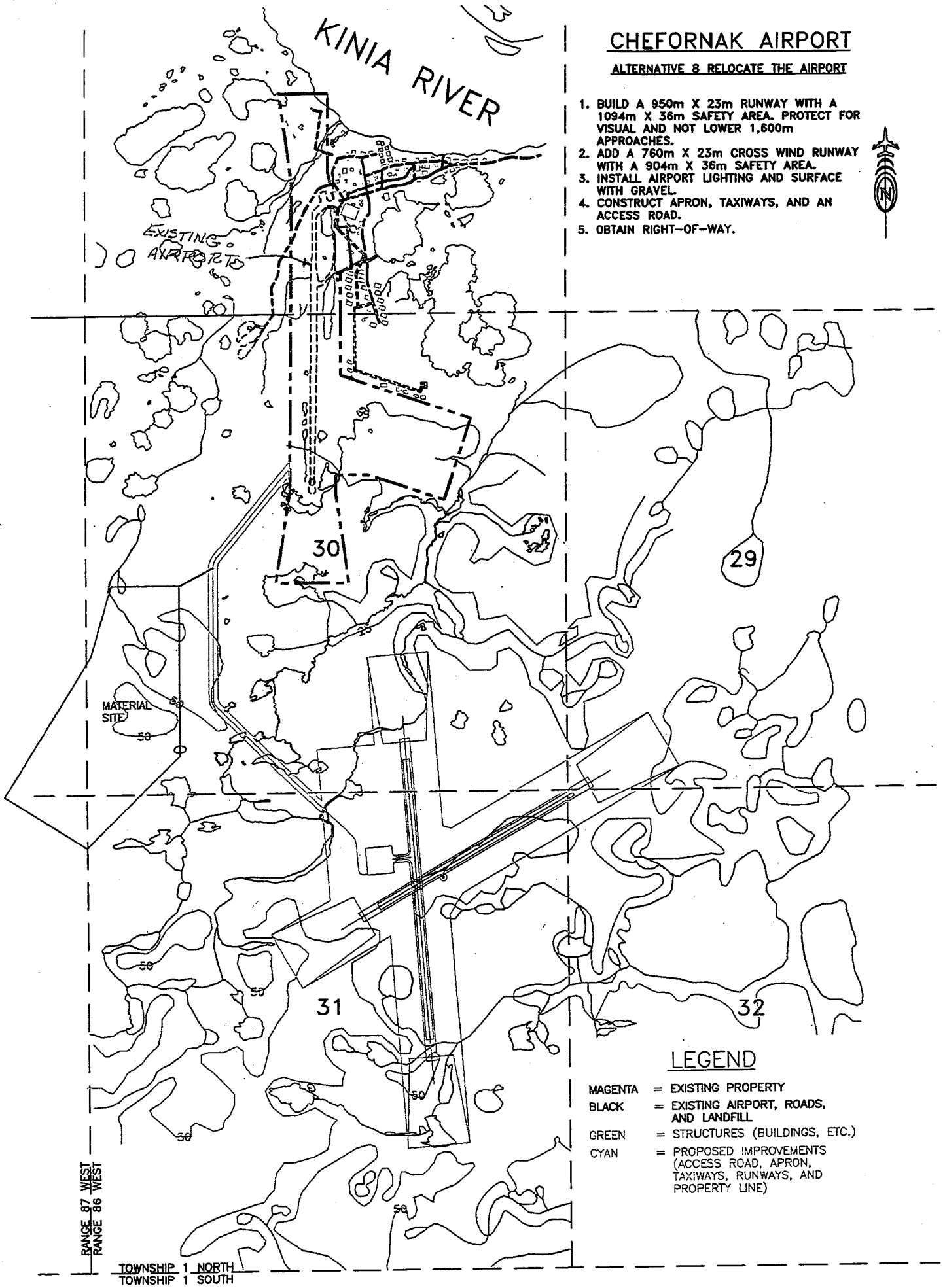
FROM: Cindie Little
DOT&PF
2301 Peger Rd.
Fairbanks, AK 99709

Phone 907 - 451- 2279
Fax Phone 907 - 451 - 5126

CC:

REMARKS: ☐ Urgent ☒ For your review ☒ Reply ASAP ☐ Please Comment

At you request we are faxing an excerpt from the USGS Quadrangle Map entitled Baird Inlet A-7 which shows the areas we requested archeological clearance on earlier this summer. We had a large scale photograph of the area which covered our proposed project site and material site when we met with you. A written reply is required now in order to put together our environmental assessment. Thank you for your input.



CHEFORNAK AIRPORT

ALTERNATIVE 8 RELOCATE THE AIRPORT

1. BUILD A 950m X 23m RUNWAY WITH A 1094m X 36m SAFETY AREA. PROTECT FOR VISUAL AND NOT LOWER 1,600m APPROACHES.
2. ADD A 760m X 23m CROSS WIND RUNWAY WITH A 904m X 36m SAFETY AREA.
3. INSTALL AIRPORT LIGHTING AND SURFACE WITH GRAVEL.
4. CONSTRUCT APRON, TAXIWAYS, AND AN ACCESS ROAD.
5. OBTAIN RIGHT-OF-WAY.

LEGEND

MAGENTA = EXISTING PROPERTY
BLACK = EXISTING AIRPORT, ROADS, AND LANDFILL
GREEN = STRUCTURES (BUILDINGS, ETC.)
CYAN = PROPOSED IMPROVEMENTS (ACCESS ROAD, APRON, TAXIWAYS, RUNWAYS, AND PROPERTY LINE)

pour GERKE
CML

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF PARKS AND OUTDOOR RECREATION
OFFICE OF HISTORY AND ARCHAEOLOGY

9601 C STREET, SUITE 1278
ANCHORAGE, ALASKA 99503-5921
PHONE: (907)269-8721
FAX: (907)269-8908

September 16, 1998

File No.: 3130-2R DOT/PF

Subject: Project No. 51826 Chefornak Airport

David T. Bloom, Environmental Engineering Manager
Northern Region, Design and Construction
Department of Transportation and Public Facilities
2301 Peger Road
Fairbanks, AK 99709-5399

Dear Mr. Bloom;

We have reviewed your recent fax on the referenced project asking us to evaluate archaeological survey needs for an alternative which would relocate the airport approximately one mile south of the present facility.

No sites are listed on the Alaska Heritage Resources Survey.

Judging from aerial photos, the area of potential effect including the access road and the material site appears to have low potential to contain historic or archaeological sites. An archaeological reconnaissance survey is not recommended for this alternative.

Please contact Tim Smith at 269-8722 if there are any questions or if we can be of further assistance.

Sincerely,

Judith E. Bittner
State Historic Preservation Officer

JEB:tas

printed on recycled paper

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NORTHERN REGION, DESIGN AND ENGINEERING SERVICES DIVISION

TONY KNOWLES, GOVERNOR

2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5399
TELEPHONE: (907) 451-2279
TDD: (907) 451-2363
FAX: (907) 451-5103

November 13, 1998

Re: Chefornak Airport Environmental Assessment – Project No. 51826

Mr. Lance Trasky
Southcentral Regional Supervisor
Department of Fish and Game
Habitat and Restoration Division
333 Raspberry Road
Anchorage, Alaska 99518-1599

Dear Mr. Trasky:

Enclosed is a draft Environmental Assessment for proposed improvements to the Chefornak Airport. If you have any comments or questions concerning its content or recommendation, please contact us at:

State of Alaska
Department of Transportation
And Public Facilities
2301 Peger Road
Fairbanks, Alaska 99709-5399
Attn: Ms. Cindie M. Little, P.E.
Aviation Design Section
Telephone: (907) 451-2279

Comments on this document will be accepted until December 10, 1998. The Federal Aviation Administration requests an acknowledgement that you were afforded an opportunity to review the document. A response form and postage paid envelope are enclosed for your convenience.

Sincerely,

for David T. Bloom, P.E.
Preliminary Engineering Chief

EMG/dlw
Enclosures: as stated
cc: Eric M. Gerke, Environmental Analyst, DOT&PF, Fairbanks
Cindie Little, P.E., Aviation Design Engineering Manager, DOT&PF, Fairbanks

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Distrubution of Draft Environmental Assessment

State of Alaska, Department of Fish & Game
State of Alaska, Department of Environmental Conservation
U.S. Fish & Wildlife Service, Yukon Delta National Wildlife Refuge
U.S. Fish & Wildlife Service, Ecological Services Division
State Historic Preservation Officer
U.S. Army Corps of Engineers
National Marine Fisheries Service

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
222 W. 7th Avenue, #43
Anchorage, Alaska 99513-7577

December 10, 1998

David T. Bloom
Preliminary Engineering Chief
State of Alaska
Department of Transportation and Public Facilities
2301 Peger Road
Fairbanks, Alaska 99709-5399

Re: Chefornak Airport
Project No. 51826

Attn: Cindie M. Little, P.E.

Dear Mr. Bloom:

Thank you for contacting the National Marine Fisheries Service (NMFS) with your Draft Environmental Assessment for the Chefornak Airport Project. The NMFS has reviewed the above document and believes the described construction activities could have an adverse impact on the fishery resources. However, these resources can be adequately protected provided the Preferred Alternative address the following:

- bridge or culvert placement in the access road allow adequate flow for fish.
- culverts be placed in the access road to maintain the natural, contiguous water drainage in the surrounding wetlands.

We are willing to assist you with those living marine resource issues identified above. Thank you for the opportunity to provide comment.

Sincerely,

Jeanne L. Hanson
Field Office Supervisor for
Habitat Conservation Division

NMFS Contact Person: Matthew P. Eagleton

cc: EPA, ADGC - Anchorage
ADEC, ADFG, USFWS - Fairbanks

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

Habitat and Restoration Division

TONY KNOWLES, GOVERNOR

333 Raspberry Road
Anchorage, AK 99518-1599
PHONE: (907) 267-2285
FAX: (907) 267-2464

MEMORANDUM

TO: Files

FROM: C. Wayne Dolezal
Habitat Biologist
Region II

DATE: November 20, 1998

SUBJECT: Fish Sampling at Chefornak, Alaska

On October 6, 1998, I accompanied Per Sather and Chris Storey (ADOT&PF Airport Design, and Environmental Sections, respectively) to Cherfornak, Alaska to inspect the access road alignment to a proposed new airport complex located about 1.5 miles south of the village. The road will cross two drainages.

At a distance of approximately 0.8 miles south of the existing runway, the new access road crosses a swale between two isolated tundra ponds. Although water may connect the ponds after spring breakup or a heavy rainfall, an active stream channel does not exist. Judging from the vegetation, the swale appears to be dry most of the year. See attached photos 1 and 2. A culvert is planned for installation at this site.

At approximately 1.0 mile south of the existing runway (project station 20+350), located within the SW¼, SE¼ Section 30, T. 1 N., R. 86 W., Seward Meridian, the access road crosses an active stream channel. The stream at this site varies in width from 25 to 16 feet. It is 3 to 4 feet deep and flows at less than 1 foot-per-second. The water is clear but stained a dark tan color. The streambanks are undercut and the edges are composed of a dense mat of floating, herbaceous vegetation. A large culvert or culverts will be required for this stream crossing (see photo 3).

A 50-foot long reach of stream was sampled using an18 foot-long, ¼ inch mesh seine. The floating vegetation along the streambank made pulling the seine in the stream channel impractical. The seine was deployed as a throw net, then retrieved. In three samples, two Alaska blackfish (i.e., *Dallia pectoralis*) were captured. The fish were 152 and 35 millimeters long (as

measured tip of snout to tip of tail). Photo 4 shows the smaller fish. The fish were returned alive to the stream.

Attachments - Photographs

Cc: P. Sather, ADOT&PF
C. Storey, ADOT&PF
C. Burkey, ADF&G/CF
R. Seavoy, ADF&G/WC
G. Wheeler, USFWS/WAES
J. Hanson, NMFS

Photo 1

View looking southeast.

Photo 2

Closeup view of swale shown in photo 1.

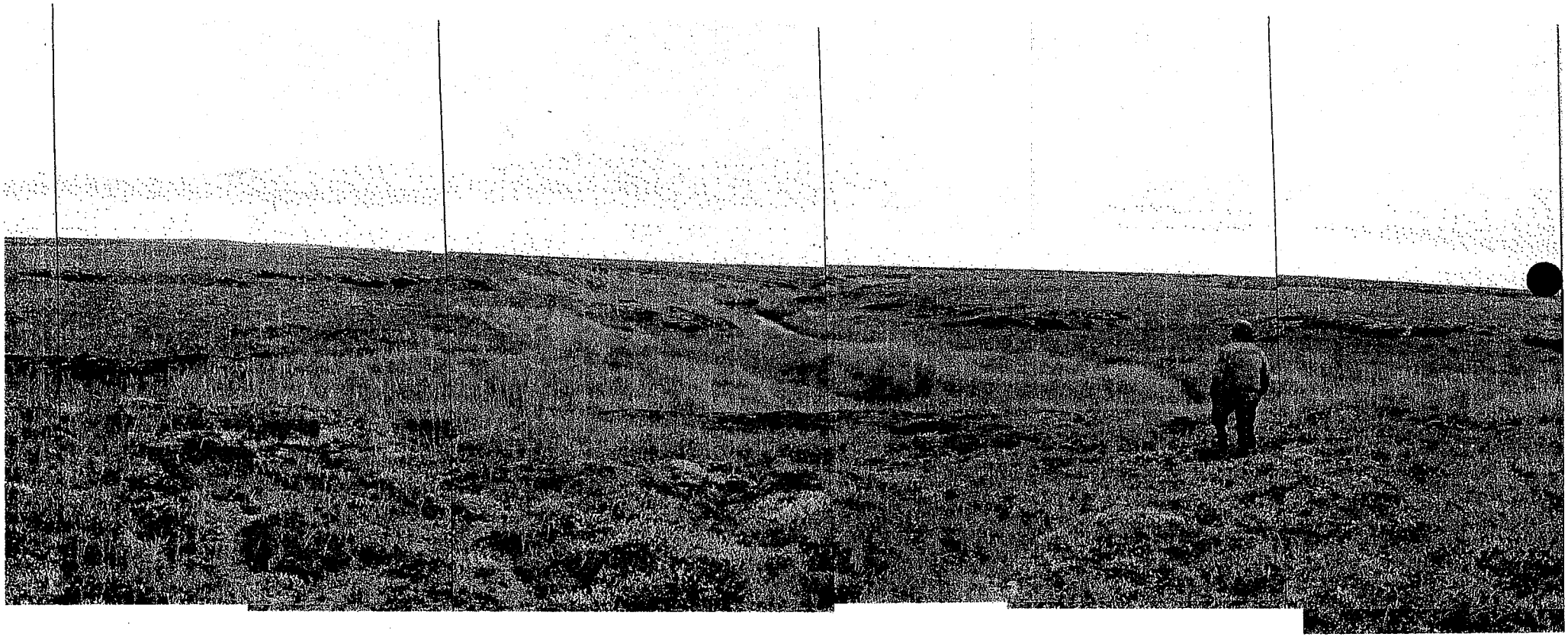

Photo 3

Stream in which Alaska blackfish were captured. Access road will cross this stream at the site showing water in this photo.

A43

photo 4

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

Habitat and Restoration Division

TONY KNOWLES, GOVERNOR

333 Raspberry Road
Anchorage, AK 99518-1599
PHONE: (907) 267-2285
FAX: (907) 267-2464

MEMORANDUM

TO: Eric Gerke, Preliminary Engineering Chief
Northern Region, Design and Engineering Services Division
Department of Transportation and Public Services

FROM: C. Wayne Dolezal
Habitat Biologist
Region II

DATE: November 24, 1998

SUBJECT: Chefornak Airport, ADOT&PF Project Nº 51826
Draft Environmental Assessment

The Alaska Department of Fish and Game (ADF&G) has briefly reviewed draft environmental assessment relating to the proposed new construction of the airstrip at Chefornak, Alaska. From the information provided we understand that in addition to the no-build option, seven additional runway alignments or upgrades were evaluated. The preferred alternative (i.e., alternative 8) calls for construction of a new airport complex at a site about 1.5 mile south of the village. The airport will be built in 2 phases with the main north-south runway being constructed first and the crosswind runway second sometime in the future. The main runway will be 3,117 feet long by 75.5 feet wide with a 3,589 feet long by 118 feet wide safety area. A 59,730 square foot apron would be installed on the west side of the runway and an access road to the village will be built.

The project area includes portions of Sections 29, 30, 31, and 32, T. 1 N., R. 86 W., S.M. Under any of the proposed scenarios, wetlands will be impacted. Materials for the road and runway embankments will come from a local source located about 0.5 miles northwest of the new airport. Placement of the materials would occur during the winter when the tundra, lakes and stream are frozen. Surface course gravel will be imported from as yet unidentified locations.

The environmental assessment (EA) addresses the general construction related concerns associated with the project. We offer the following comments for inclusion in the document.

1. On pages 8 and 12 the EA states that Chefornak is located in the Clarence Rhodes National Wildlife Refuge. The first paragraph on page 9 also references the creation of several wildlife refuges in the area. In 1980, Congress combined the Clarence Rhodes, Hazen Bay, and Nunivak National Wildlife Refuges with other retained federal lands on the Yukon/Kuskokwim delta to create the Yukon Delta National Wildlife Refuge. Therefore, the current name for the federal conservation system management unit for the area is the Yukon Delta National Wildlife Refuge; and, there is only one refuge in the area.

2. On pages 8 and 9 the affected environment is discussed. However, no mention is made of the fish found in the unnamed freshwater stream that will be crossed by the new access road (at project station 20+350-360). Alaska blackfish were found in this stream during an October 1998 stream survey (see attached sampling report). In addition, the Kinia River, located north of the various runway proposals, supports resident fish species including Arctic Cisco, northern pike, and whitefish. The river also supports a subsistence herring fishery.

3. On page 14 under the heading of Coastal Zone Management, the EA states that Chefornak lies 17 mile east of Hooper Bay. Chevak, not Chefornak, is found at that location. Perhaps the document could describe the Chefornak's location either as being about 16 river-miles upstream of the mouth of the Kinia River or as being about 18 miles southeast of Nelson Island.

As advisory information, there are no state legislatively designated special areas (i.e., State Game Refuges, Sanctuaries, or Critical Habitat Areas) near the project site over which ADF&G exerts Title 16 special areas permitting authority. A Fish Habitat Permit issued by the ADF&G, Habitat and Restoration Division, would be required if any project related activities (e.g., either placement of fill or removal of material, equipment operation, fording, barge off-loading ramps or bulkheads, bank stabilization, ice bridges or winter stream crossings, etc.) were to be conducted below the ordinary high water level of specified anadromous fish water bodies. A Fish Habitat Permit will be required for the road crossing of the stream located at Project station 20+350-360.

We appreciate the opportunity to comment. Should you have any questions please do not hesitate to contact me at 267-2333.

Attachment

cc: C. Burkey, ADF&G
M. Coffing, ADF&G
R. Seavoy, ADF&G
G. Wheeler, USFWS
J. Hanson, NMFS
P. Sather, ADOT&PF

NOTICE OF OPPORTUNITY FOR PUBLIC HEARING

CHEFORNAK AIRPORT IMPROVEMENTS
DRAFT ENVIRONMENTAL ASSESSMENT
PROJECT NO. 51826

The Alaska Department of Transportation and Public Facilities, in cooperation with the Federal Aviation Administration, announces the public availability of a Draft Environmental Assessment for the community airport in Chefornak, Alaska. A copy of the Environmental Assessment is available upon request. The document recommends siting the airport approximately 1,000 feet south of the existing airport location. The ultimate design would consist of a 1,000-foot long runway and associated taxiway, apron, snow removal equipment building, and access road.

An opportunity for a public hearing is being offered at this time. The purpose of the opportunity for a public hearing is to consider the economic, social, and environmental effects of the airport location and its consistency with the goals and objectives of such local planning as has been carried out by the community.

Individuals who wish to obtain information about this project or have specific questions can contact Cindie Little, P.E., Engineering Manager, at (907) 451-2279, before filing a written request for a public hearing. Any person requesting a public hearing should contact the Department, in writing, by December 10, 1998. To correspond by text telephone (TDD), call (907) 451-2363. Written comments or questions should be addressed as follows:

State of Alaska
Department of Transportation and Public Facilities
Fairbanks, Alaska 99709-5399
Aviation Design Section
Attn: Cindie M. Little, P.E.
Telephone: (907) 451-2279
TDD: (907) 451-2363
FAX: (907) 451-5103

APPENDIX B

MEETING NOTES AND SUMMARIES

Chefornak Airport Meeting Notice, Agenda and Summary.....B1-B12

Chefornak Trip Report.....B13

Chefornak Airport Meeting Agenda

- Introduction
- Airport planing and design process
- Airport alternatives
- Airport property requirements
- Funding and programming
- Open discussion
- Wrap - up

Introduction

Thank you for taking the time to come and talk to us about your airport. We are from the State Department of Transportation in Fairbanks. I am Patty Miller the project manager for your project. There will be a team of people working on your project they are:

Cindie Little - Lead Airport Design Engineer
Per Sather - Airport Designer
Steve VanHorn - Aviation Design Section Chief
Leslie Mitchell - Planning and Programming
Rose Martell-Greenbatt - Right of Way Agent
Gary Volkman - Maintenance and Operations
Sharon Daboin - FAA, Airports
Jim Lomen - FAA, Airports Planning
Ken Jacobs - FAA, Washington D.C.

Our phone numbers and addresses are listed at the end of this section. Also attached to the back of this package is a postage paid comment sheet you can fill in and send to us. Please call or write anytime.

In order to save project money we have scheduled a meeting at Chevak tonight so we can split the airfare between the two projects. But that means we unfortunately have a limited amount of time we can meet with you. We have to leave by 5:30. If we can't get to everything today we will be back. We encourage you to write to us or call us.

The purpose of this meeting is to get input from the community on what problems you have with your airport and what you would like your airport to look like in the future. At this meeting we will explain what we see as possible alternatives and ways to improve your airport. We want to hear your opinions about these options.

Last month we were able to meet with your mayor Mr. Peter Mathews and a number of other people informally when we stopped by to look at your airport. We also have talked to a number of the pilots and air services that fly into Chefornak. There were a number of needs identified in the list below:

Runway

- Cross-winds are often very bad. A cross wind runway is needed.
- Runway is too narrow
- Runway is too short
- Houses and fuel tanks are too close to airport and cause problems in low visibility

Aircraft Parking Apron

- Too small
- Too close to school

Drainage

- Drainage around airport seems to be a problem

Runway lighting needs to be improved.

Boardwalk to apron needs to be extended

Please let us know if you have any additional items we need to address with this project.

Planning and Design Process

Your airport has a lot of needs that are very difficult and expensive to solve. Since it is so expensive to do any construction work on your airport we really want to do the right thing so we don't waste money. The problem is figuring out what the right thing to do is, it takes a lot of time and you have problems with the existing airport that need to be taken care of now. The State and FAA have discussed your airport and think that the following plan might work for your airport:

Phase 1 - Planning- An Airport Layout Plan and an Environmental Document will be developed. An Airport Layout Plan is a long term plan for the airport. The

plan is developed to meet the needs of the community and the airport users and is environmentally sound and technically feasible. The community and the airport users work with the State and the FAA to develop the plan. The more input we have from the community and the users, the better the plan will fit your needs. The plan outlines the development of the airport that would best meet the needs of your community for the next 20 years or more.

The process takes between 2 and 4 years to complete. Normally two years of wind data collection is required to start the process (unless wind data is available, none has been located for Chefornak yet). The wind data is required so we know what direction would be best for the runway. The analysis of alternatives can take two years. While this is a long process it does thoroughly consider what needs to be done at your airport and results in a sound long term plan.

Phase 2 - At the same time that the master plan is being done, we are looking into the possibility of doing a construction project to bring gravel to the existing airport. We would put fabric down and place good gravel on the runway and apron. Depending on how much money is available for this project the runway will be widened and the apron will be expanded some. This project should be done in the next few years and will improve the safety of the existing airport.

Phase 3 - After the planning is complete, the design of the airport project will be completed and the land for this airport would be acquired. The length of time it takes to acquire the land can vary from a few months to a number of years depending on the circumstances. Once the land is acquired and funding is programmed the airport improvement project can be bid and a construction contract awarded to construct a silt embankment.

Phase 4 - The silt embankment will be left to thaw and settle. Once it has settled the gravel on the existing runway will be hauled over to the new runway. Due to the type of construction material available (ice rich silt) construction will take from 2 to 5 years.

The construction of the ultimate airport may will be very expensive. There may be a number of projects done before all the parts of the airport are constructed. For example maybe we only have $4 million dollars for the first project. We may only be able to build a portion of the silt runway and apron. Then the next project would put gravel on the silt and maybe build more silt embankment that would be left to settle and wait for funding to become available for gravel. This could go on

for a long time until the full runway and apron are constructed.

The exact amount of time that it would take before you had a new operational airport is unknown. The funding has to come from the legislature and from FAA. Your airport project will be competing against a lot of other airport projects. There is a limited amount of funding. But the sooner we get a plan together and get the design done and the land acquired, the sooner you will be able to start competing for the funding.

FAA and the State would like your opinion of this proposal. We are still considering the options and will not be able to make a decision on this today but we are optimistic that this approach will work and is probably the best option for your community.

Airport Alternatives

Cindie Little will explain the various alternatives that have been identified by the Mayor and others in the village as well as alternatives we have identified.

All of the alternatives improve air transportation safety to some degree. They all address the issues that have been identified. The primary differences between them are degree of safety improvement, schedule of completion, cost of construction and land requirements. All of the alternatives will be surfaced with gravel and lighted. Since we do not have wind data for Chefornak we will need to collect wind data for at least one year before we can determine the best alignment and coverage for it. The alignment shown for the cross wind runway fits the terrain and does seem to fit the wind data we have.

Alternative 1:

A. Shift the runway to the south on the existing alignment to avoid the school and close houses.
B. Extend and widen the runway to 3000' by 75' with a 150' by 3600' safety area and protect visual approaches.
C. Relocate the apron away from community.
D. Improve drainage
E. Construct a new snow removal equipment building
F. Obtain ROW

Advantages:

Avoids the school on final approach.
Provides slightly better wind coverage.
Moves the apron to higher ground.
Allows lightly loaded twin engine aircraft operations.

Disadvantages:

Still close to the houses and community.
Land requirements include developed housing areas.
Does not allow for changing aircraft fleet of larger aircraft.
Will take 2 to 4 years for the silt embankment to cure before the gravel surface can be finished and lighting installed.
Construction cost is roughly $7,000,000.

Alternative 2:

This is similar to Alternative 1. The big difference is that the runway is designed to accommodate larger aircraft. Some of the air taxi operators indicated that their fleet was changing to larger aircraft. Also larger cargo haulers could use the airport occasionally.

Advantages:

The same as Alternative 1 with the addition that a more diverse fleet of aircraft and operating conditions could be accommodated. Land requirements do not include developed areas of the community.

Disadvantages:

The time frame for getting the airport operational would be between 2 to 4 years after the silt was placed. Also the cost of this project would be high. It is roughly estimated to cost $9,000,000.

Alternatives 3 & 4:

A. Relocate the airport.
B. Construct a 75' by 4000' main runway.
C. Construct a 75' by 3200' crosswind runway.
D. Relocate the apron to the south and construct access to it.

Advantages:

The main advantage over the first two alternatives is that wind coverage would be greatly improved and meet current FAA standards. It also would move the airport farther from the community and not require acquisition of developed areas.

Disadvantages:

It would take from 2 to 4 years after the silt is placed to be fully operational. The estimated cost is $13,000,000.

Alternative 5:

A. Using gravel, widen the existing runway safety area to the west from approximately between 65' and 90' up to 120' and resurface the runway.
B. Move the apron to the south, expand and construct access to it. This could be a combination of silt and gravel construction.
C. Acquire land.
D. Construct a Snow removal equipment storage building.

Advantages:

This is the least costly of the alternatives with an estimated cost of between $5,300,000 and $7,600,000 depending on how wide and long the safety is and whether the apron and taxiway are completed. The runway would be operational as soon as the gravel was placed.

Disadvantages:

The problems associated with the close proximity to the community are not solved. The wind coverage would only be slightly improved. Land requirements must be met in order for the project to be funded. This means the clouded title to the existing property would have to be cleared up.

None of the above alternatives alone solve all the safety problems in a short time frame as well as provide a sound long term solution to transportation problems for your community. We believe that the best solution may be to combine Alternative 5 with one of the Relocation Alternatives which provides a cross wind runway and main runway farther from the community. This way the immediate safety issues would be addressed while we look at sound long term plans in an Airport Layout Plan process for an airport that will serve you well for at least the next twenty years. This plan would require spending several million dollars on an interim solution. It is something that has not been done before. FAA and DOT&PF would have to reach an agreement to fund such a project. We would construct the gravel embankments and surfaces such that the gravel could be reused on the permanent airport.

The decision to select one of these alternatives will be made based on the data we collect, such as wind direction and speed, soils, topography, hydrology, and environmental information. Community plans for expansion and land use will also play a major role in alternative refinement.

Airport Property Requirements

The options presented to you and those yet to be determined, will require varying amount of land. DOT&PF must have enough control over the land to assure there will be no incompatible development adjacent the new or existing airports.

When the decisions have been made and community approval given as to the new location, the DOT&PF will begin a process to acquire the lands needed for the airport. That process can take some time to accomplish depending on who owns the land and the circumstances involved.

DOT&PF has a section of people in the Right of Way Office who handle all the land acquisitions. They will be in contact with you after decisions have been made about the airport.

Funding and Programming

Leslie will describe the State funding and programming process.

Chefornak Airport is one of the many airports in the Yukon Kuskokwim delta area that does not meet current FAA standards. The department faces a difficult task in ranking all of the high priority aviation projects throughout the state. Our hope is to improve conditions at all of our rural airports as soon as possible.

The overwhelming majority of funds for aviation improvements in Alaska come from the federal government through the Federal Aviation Administration. FAA funding over the last few years has averaged 50 million dollars a year for Alaska. This money is for the entire state of Alaska. We also receive discretionary funds from the FAA that varies from year to year. Alaska received $20 million in discretionary funding in FY'94 and $25 million in FY'95.

Your airport will compete against other small airports in Alaska, such as Toksook Bay, Tununak, Nightmute and Kwethluk for funding. It is premature to discuss the exact timing of the project, however, we intend to work to schedule as many

improvements in the Yukon Kuskokwim Delta region as our limited budget will fund.

It is important that the department and your community work together to develop an airport plan. The sooner we get a plan, complete a design and acquire the property the sooner the project can compete for funding.

Sharon Daboin, Jim Loman and Ken Jacobs are here from the FAA and they might have a few words to say about FAA funding.

Open Discussion

Does anyone have any comments?

(Open discussion)

Wrap- Up

Whatever we do for your airport wind data is a key element. We will continue to collect input from pilots and the community and try to find some wind data. If we can't find any soon, we will put an instrument out to start collecting data. We will need someone in the community to be the caretaker for the anemometer. If the anemometer is damaged and cannot collect wind for a period of time that can delay a project further. If you are interested, please let me know. FAA normally requires a minimum of one year of wind data for an airport.

Thank you for taking your time to meet with us. We would like to hear from you at any time and will be out to talk to you throughout this project. Please send us your comments on the postage paid flyers in the back of this package.

Airport Design Team

Patty Miller
Project Manager
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Fax 907 - 451-5126
2301 Peger Road
Fairbanks, AK 99709

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Aviation Design Section Chief
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Cindie Little
Lead Designer
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Per Sather
Designer
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Fairbanks, AK 99709

Gary Volkman
Maintenance and Operations
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Bethel, AK 99559

Sharon Daboin
Manager, Planning & Programming Branch
Federal Aviation Administration
and
Jim Lomen
Airport Planner
Federal Aviation Admin.
Attention: AAL-610
222 W. 7th Ave., Box 14
Anchorage, AK 99513
907 - 271-5816
Fax 907 - 271-5459

Ken Jacobs
Programming Branch
Federal Aviation Administration
Attention: AAL-610
222 W. 7th Ave., Box 14
Anchorage, AK 99513
907 - 271-5440
Fax 907 - 271-5459

CHEFORNAK AIRPORT COMMENT SHEET

Name:_____

Address:_____

Phone Number:_____

Comments: _____

_____

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_____

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_____

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_____

_____

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Return to : Patty Miller , State of Alaska DOT&PF, 2301 Peger Road, Fairbanks, Ak 99709

Post-it™ brand fax transmittal memo 7671	# of pages ▸ 5
To Patti Miller	From Leslie Mitchell
Co. ADOT&PF (Northern)	Co. ADOT&PF (Central)
Dept. Aviation Design	Phone # 266-1451
Fax #	Fax # 243-2774

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

WILL HOLD AN

OPEN HOUSE

TO DISCUSS THE CHEFORNAK AIRPORT IMPROVEMENT PROJECT ON

JUNE 1, 1995

AT 4:00 P.M. IN THE COMMUNITY CENTER

Individuals with disabilities who need special accommodations to participate may access DOT&PF's TDD number at 1-907-266-1442. If any other accommodations are needed please contact Leslie Mitchell at 1-907-266-1451.

B12

CHEFORNAK TRIP REPORT

Travel dates: Monday June 16 through Wednesday June 18, 1997

Personnel Involved: Patty Miller, Cindie Little, Mike Grahek, and Per Sather

There were three reasons for the trip. 1. Hold an open house meeting for the people of Chefornak. 2. Walk the ground at possible Airport relocation sites. 3. Look for a possible material site near Tern mountain (approximately 10 kilometers South Southwest of Chefornak).

Monday June 16: We arrived in Chefornak at approximately 4:30 p.m. and set up a time (7 p.m.) for the open house meeting. Prior to the meeting we met with Stan Nevak (the property manager for the corporation, Chefornamute Inc.).He talked about trading some or all of the existing Airport property for corporation land at a new site or added to the South end of the existing airport property. He was very confident that land acquisition wouldn't be a problem. During the open house we went over the various proposals for Airport reconstruction and relocation and solicited comments from the people attending. The most commonly voiced concern was safety, the existing runway is too close to the village (the school is only 300' from the centerline) and because the runway is so close to the village and school, children play on the runway, apron, and taxiway. Another comment from the mayor was that the higher ground in the area of the existing runway (presently State owned) is a logical area for future expansion. All of the people at the meeting were in favor of moving the runway away from the village and several pointed out an area of higher ground approximately ¾ of a mile Southeast of the existing runway. The meeting went quite well and the public response was very encouraging. The meeting ended at around 8:30 p.m..

Tuesday June 17: The four of us and Stan Nevak walked the higher ground Southeast of the existing Airport (as suggested) and located an area where a main and crosswind runway could be constructed. This area will be surveyed and mapped later this summer. The area directly South of the existing runway will be included in the mapping in case shifting the runway South proves to be the best option. During the walk I took several GPS readings (with a Garmin 45 handheld GPS) to get an idea of the bearings and distances walked. The points (waypoints) recorded have been input into the Chefornak drawing.

Wednesday June 18: We hired one of the local fishermen to take us down the coast to the beach at the base of Tern Mountain. The original plan was to hike to the top of the mountain and collect a sample of that material as well as collect samples on the beach, but due to time constraints (we had to catch the high tide to get back to Chefornak or wait until the next one 12 to 14 hours later) we only managed to collect the beach samples. These samples will be tested for suitability for embankment and or surfacing material.

Per Sather

APPENDIX C PERMITS

Erosion and Sedimentation Control Plan

Informal Correspondence Between the ADOTPF and the COE

Amended COE Permit Drawings

COE Permit and Application

Coastal Zone Permit Application and Consistency Determination

Department of Fish and Game Permit Application and Permit

ADEC Certificate of Reasonable Assurance

Shannon: 1/28/99

Its been awhile, but I have the revised info on Chefornak. The wetland fill area will increase to 50 acres. This increase is due to addition of an erosion protection berm around the entire footprint of all embankments plus a grade raise to account for expected settlement and consolidation of the silt embankments. The sketches are attached to show these changes. The borrow pit back slopes have also been changed to 1 vertical : 4 horizontal. This was done because of concern for unstable conditions with the originally planned 1 vertical : 1.5 horizontal slope. (For future reference, when depth of cut is 6' or less, a 1:1.5 back slope is a good idea in frozen soils because the organic mat will slough down over the cut slope and refreeze to stabilize it. Cut depth here is expected to exceed 6' so it wouldn't work).

The Erosion & Sedimentation Control Plan is attached. It addresses your question on sequencing. Let me know if you need anything else. Our plan is to advertise this project for bids in May of this year and construction could begin this year. Let me know if you see a problem with issuing the permit by May.

I have asked the community and our ROW staff to get back to me on the approval for reclaiming the area outside the access road on the existing airport. I don't expect any problems but will let you know if this changes. A sketch showing the area is attached.

Cindie Little

P.S. 2/9/99

I checked the quantities and they should be 400,000 cubic meters (523,200 cubic yards) of material from the borrow site for embankment formation. I think cubic meters got confused with cubic yards.

Shannon: 1/28/99

Its been awhile, but I have the revised info on Chefornak. The wetland fill area will increase to 50 acres. This increase is due to addition of an erosion protection berm around the entire footprint of all embankments plus a grade raise to account for expected settlement and consolidation of the silt embankments. The sketches are attached to show these changes. The borrow pit back slopes have also been changed to 1 vertical : 4 horizontal. This was done because of concern for unstable conditions with the originally planned 1 vertical : 1.5 horizontal slope. (For future reference, when depth of cut is 6' or less, a 1:1.5 back slope is a good idea in frozen soils because the organic mat will slough down over the cut slope and refreeze to stabilize it. Cut depth here is expected to exceed 6' so it wouldn't work).

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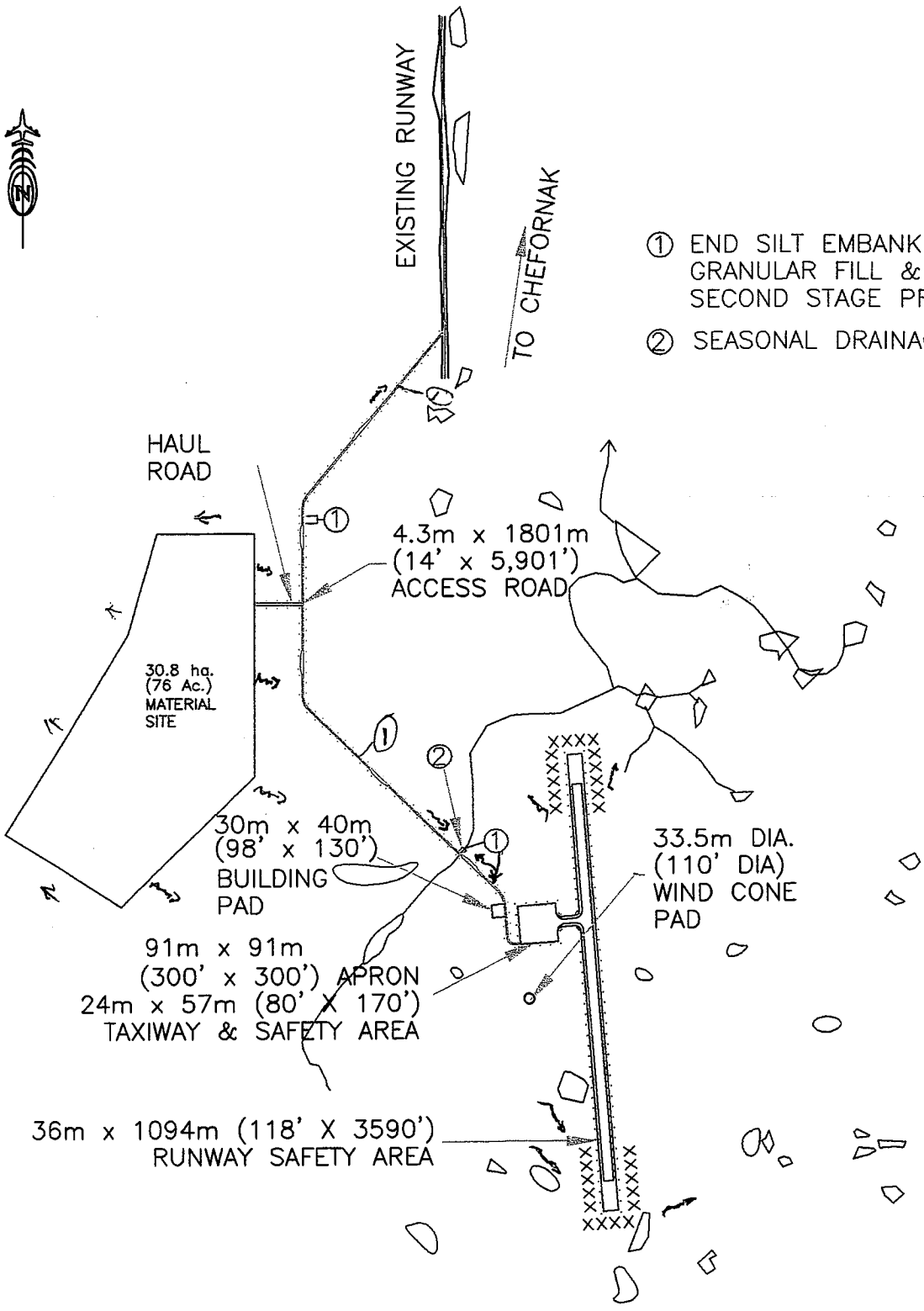
I have asked the community and our ROW staff to get back to me on the approval for reclaiming the area outside the access road on the existing airport. I don't expect any problems but will let you know if this changes. A sketch showing the area is attached.

Cindie Little



FILL LIMITS

NO SCALE

LEGEND

. . . . . = FILL LIMITS

xxxxxxx = SILT FENCE

→ = FLOW DIRECTION

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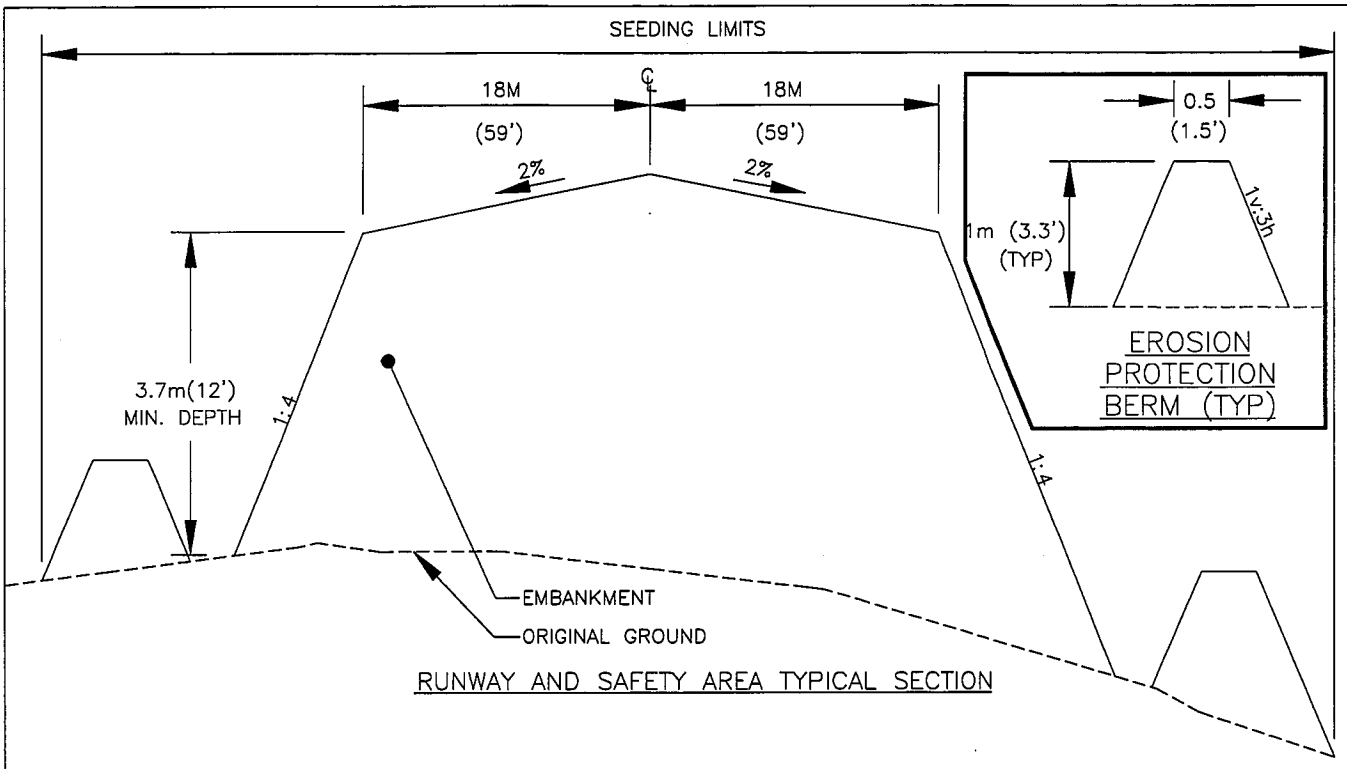
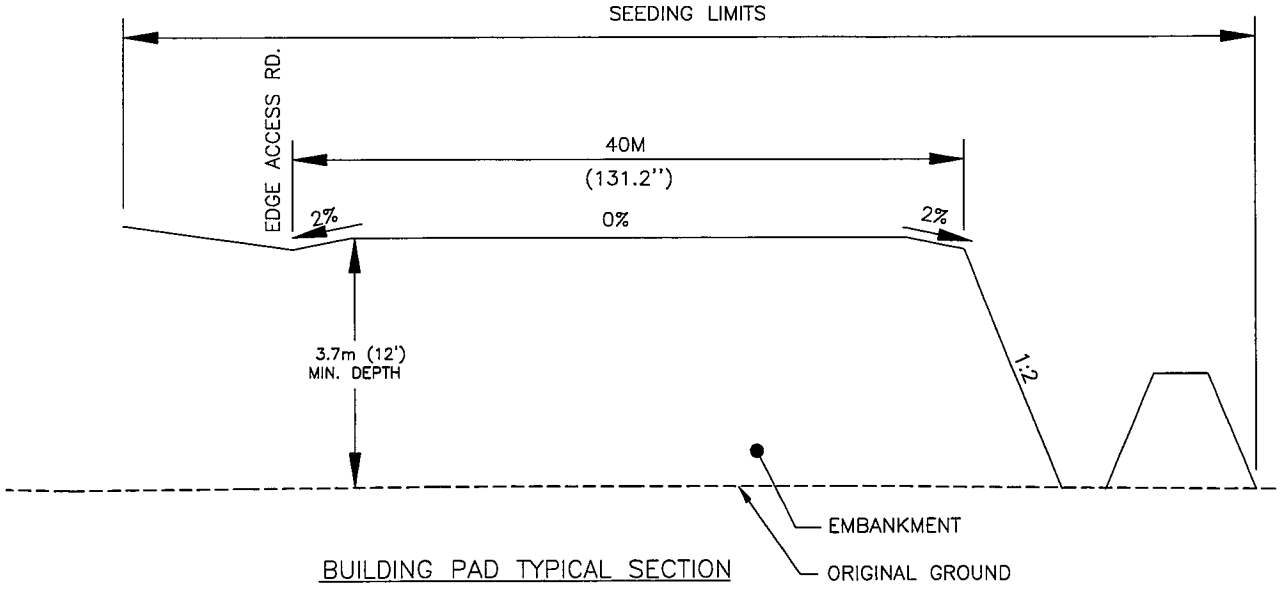
CHEFORNAK AIRPORT RELOCATION
FILL LIMITS & MATERIAL SITE

APPLICATION BY DOT/PF, ALASKA

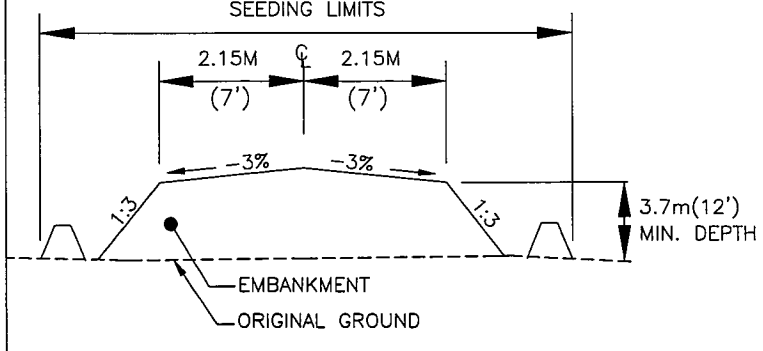
SHEET 2 OF 6 | DATE 6/16/98



RUNWAY AND SAFETY AREA TYPICAL SECTION



BUILDING PAD TYPICAL SECTION



ACCESS ROAD TYPICAL SECTION

NOTE: ALL EMBANKMENTS WILL BE SURFACED IN A SECOND PROJECT WITH GRAVEL AFTER THEY HAVE CONSOLIDATED.

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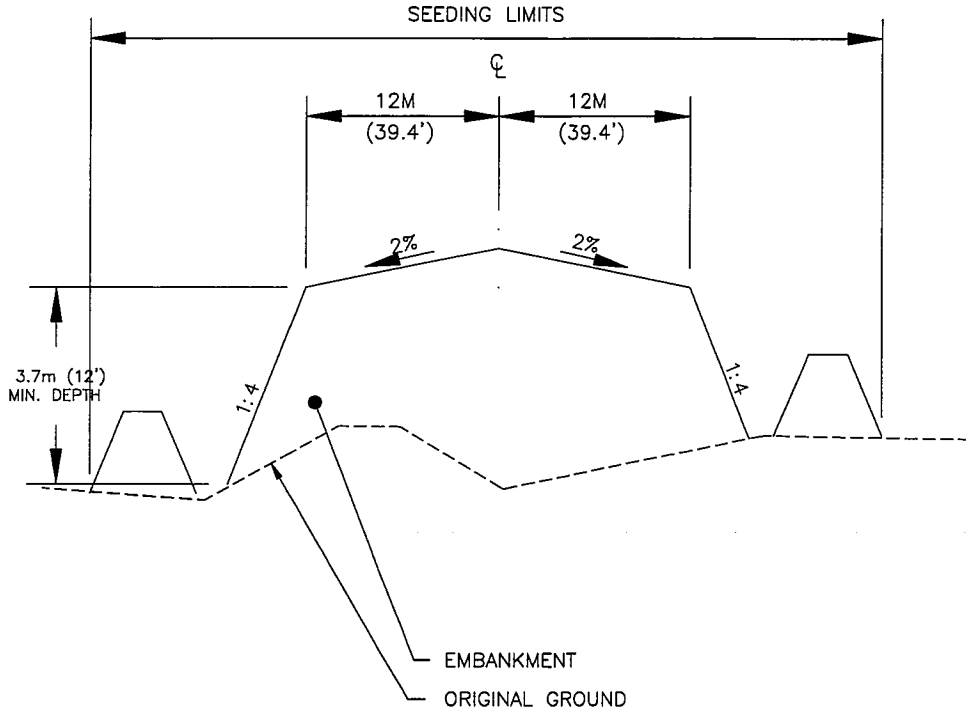
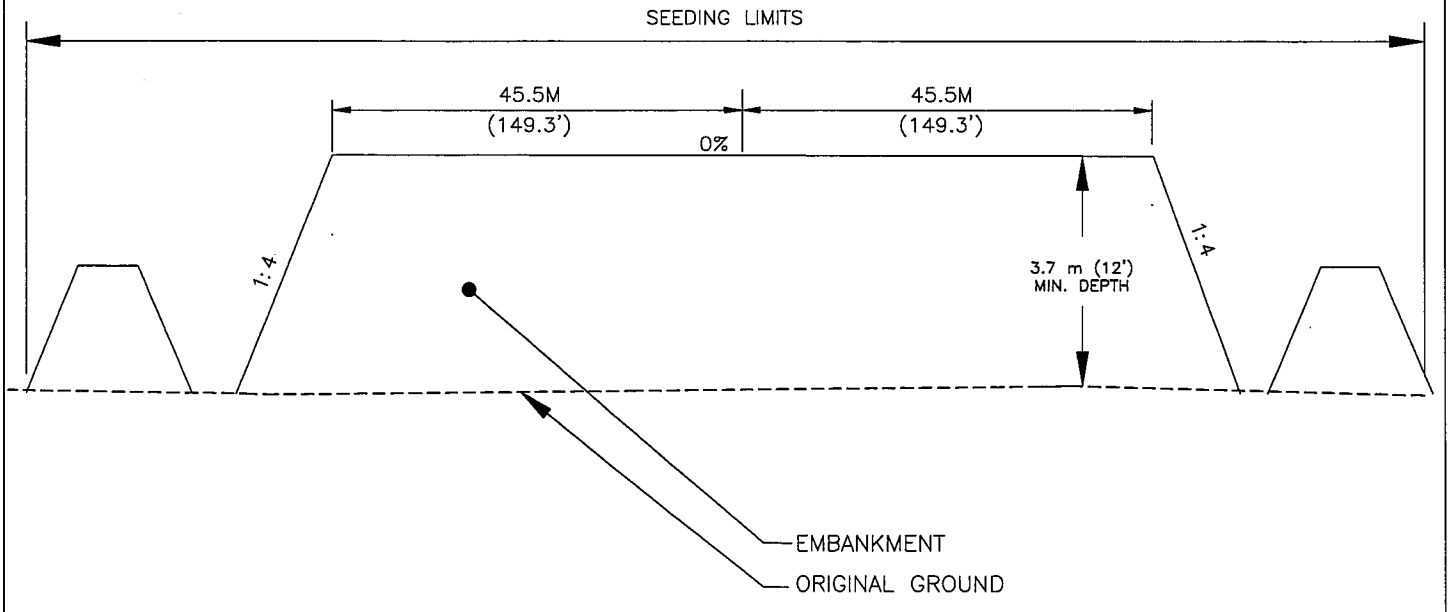
CHEFORNAK AIRPORT RELOCATION
TYPICAL SECTIONS
REVISED

APPLICATION BY DOT/PF, ALASKA

SHEET 3 OF 7 | DATE 2/12/99



TAXIWAY AND SAFETY AREA TYPICAL SECTION



APRON TYPICAL SECTION

NOTE: ALL EMBANKMENTS WILL BE SURFACED IN A SECOND PROJECT WITH GRAVEL AFTER THEY HAVE CONSOLIDATED.

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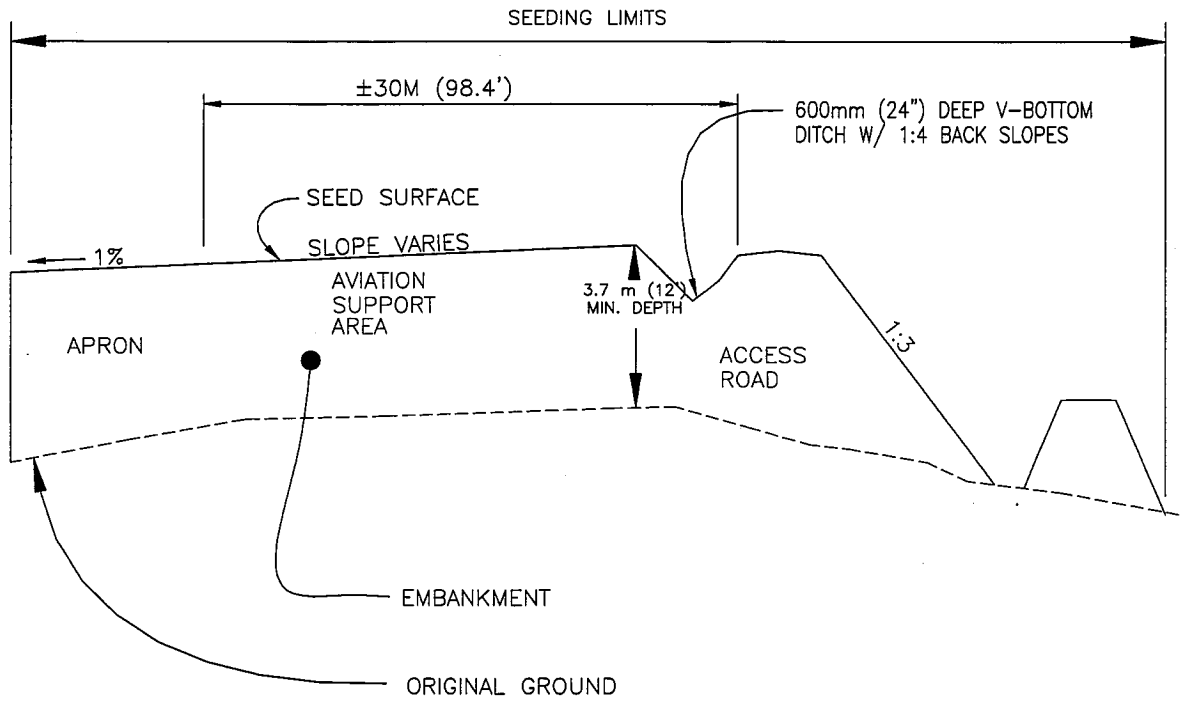
CHEFORNAK AIRPORT RELOCATION
TYPICAL SECTIONS
REVISED

APPLICATION BY DOT/PF, ALASKA

SHEET 4 OF 7 | DATE 2/12/99



AVIATION SUPPORT AREA TYPICAL SECTION

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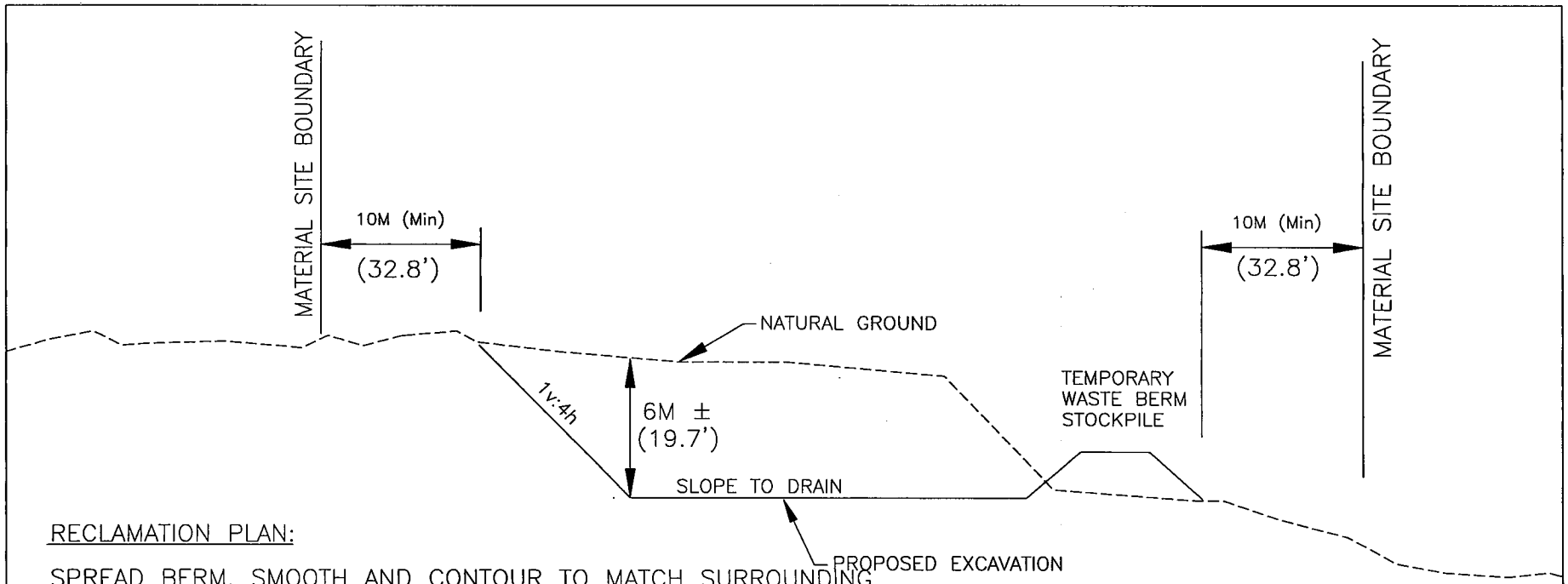
CHEFORNAK AIRPORT RELOCATION
AVIATION SUPPORT AREA TYPICAL SECTION
REVISED

APPLICATION BY DOT/PF, ALASKA

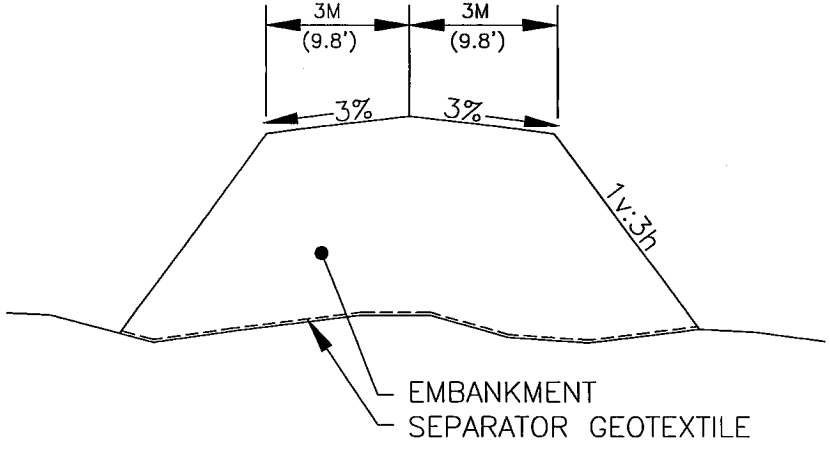
SHEET 5 OF 7 | DATE 2/12/99



RECLAMATION PLAN:

SPREAD BERM, SMOOTH AND CONTOUR TO MATCH SURROUNDING TERRAIN. SLOPE TO PREVENT PONDING. SEED TO PROMOTE VEGETATION.

TYPICAL CROSS SECTION OF MATERIAL SITE EXCAVATION



HAUL ROAD TYPICAL SECTION

Material Site Mining and Reclamation Plan:

Mine the site within the general lines and grades shown. Allow for positive drainage from the mined area using natural drainage patterns. Install and maintain silt fencing along the tundra outside the pit boundaries as needed. Overburden shall be spread within the spent portions of the site. All slopes shall be seeded upon completion of mining.

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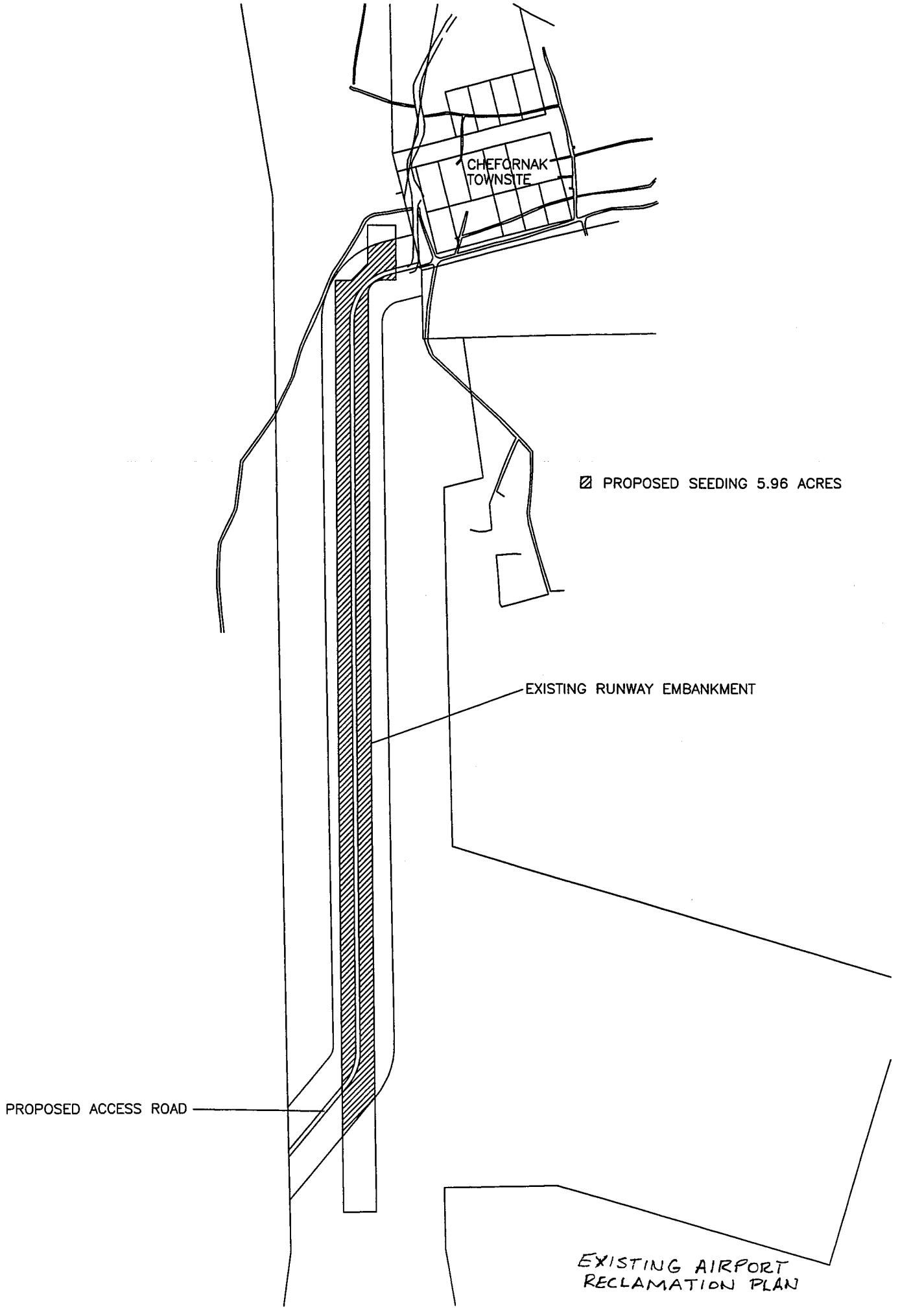
CHEFORNAK AIRPORT RELOCATION
MINING PLAN
REVISED

APPLICATION BY DOT/PF, ALASKA

SHEET 6 OF 7 | DATE 1/28/99


CHEFORNAK
TOWNSITE
PROPOSED SEEDING 5.96 ACRES
EXISTING RUNWAY EMBANKMENT
PROPOSED ACCESS ROAD
EXISTING AIRPORT
RECLAMATION PLAN

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NORTHERN REGION, DESIGN AND ENGINEERING SERVICES DIVISION

2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5399
TELEPHONE: (907) 451-5289
TDD: (907) 451-2363
FAX: (907) 451-5103

October 22, 1998

Re: Chefornak Airport Improvements
Project No. 51826

Mr. Don Kohler
Chief, Regulatory Branch-North Section
U.S. Army Corps of Engineers
P. O. Box 898
Anchorage, Alaska 99506-0898

Dear Mr. Kohler:

Enclosed is a Corps of Engineers Individual permit application and copies of the Department of Fish and Game Waterway/Waterbody permit application, and the Division of Governmental Coordination Coastal Zone Questionnaire. This project will require a full coastal zone review.

If you have any further questions, please telephone Eric Gerke, Environmental Analyst, at (907) 451-5289. Thank you.

Sincerely,

David T. Bloom, P.E.
Preliminary Engineering Chief

Jim Wolfe
Special Assistant to the Commissioner
for Environmental & Regulatory Policy

EMG/dlw

Enclosures: as stated

cc: Patricia Miller, P.E., Aviation Design Group Chief, DOT&PF, Northern Region

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT
(33 CFR 325)

OMB APPROVAL NO. 0710-003
Expires October 1996

Public reporting burden for this collection of information is estimated to average 5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

PRIVACY ACT STATEMENT

Authority: 33 USC 401, Section 10: 1413, Section 404. Principal Purpose: These laws require authorizing activities in, or affecting, navigable waters of the United States, the discharge or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Routine Uses: Information provided on this form will be used in evaluating the application for a permit. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETED

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME
State of Alaska
Department of Transportation and Public Facilities
Design and Engineering Services Division

8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required)
David T. Bloom, P.E.
Preliminary Engineering Chief

6. APPLICANT'S ADDRESS
2301 Peger Road
Fairbanks, Alaska 99709-5399

9. AGENT'S ADDRESS
2301 Peger Road
Fairbanks, Alaska 99709-5399

7. APPLICANT'S PHONE NOs. W/AREA CODE
a. Residence (907) not applicable
b. Business (907) 451-5289

10. AGENT'S PHONE NOs. W/AREA CODE
a. Residence (907) n/a
b. Business (907) 451-2228

11. **STATEMENT OF AUTHORIZATION**

I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____ APPLICANT'S SIGNATURE

_____ DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)
Chefornak Airport Relocation - State Project No. 51826

13. NAME OF WATERBODY, IF KNOWN (if applicable)
The Kinia River is the nearest waterbody and the proposed activity is approximately 0.6 hectares (1.5 miles) south of the river.

14. PROJECT STREET ADDRESS (if applicable)

15. LOCATION OF PROJECT
Chefornak (COUNTY) Alaska (STATE)

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) Section, Township, Range, Lat/Lon, and/or Accessors's Parcel Number, for example.
Protracted Sections 30 and 31; Township 1 North, Range 86 West, Seward Meridian, U.S.G.S Baird Inlet A-6 and A-7

17. DIRECTIONS TO THE SITE See Section 16 above.

18. Nature of Activity (Description of project, include all features)

This project will relocate the airport at Chefornak to a new site approximately 300m (1,000') south of the existing airport. The existing apron, taxiway, and runway will serve as part of the access road to the new airport. The proposed project will construct a single 36m (118') by 1,094m (3,589') runway safety area 24 m (79') by 57 m (187') taxiway safety area, 91 m (299') by 91 m (299') apron, 30 m (100') by 91 m (299') aviation support area, 4.3 m (14 ') by 1,801 m (5,909') access road with turnouts, 40 m (131') by 30 m (100') building pad, and 33.5 m (110') diameter windcone pad. All of these dimensions refer to the full depth embankments and all will be gravel surfaced. Airport lighting will be installed. This will be a two phase project constructed within a four to six year period. First phase will entail construction of the embankment of the access road and airport because of poor quality, frozen material which has to thaw. Second phase will consist of construction of the surface course material and associated facilities.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

The existing airport at Chefornak is substandard. It is too close to the school and community. The runway is short, narrow, and does not provide the minimum recommended wind coverage. The apron is small and the connecting taxiway grade is too steep. There are fuel storage tanks in the Runway Protection Zone. The airport serves as the sole year-round transportation link for this community. All medical evacuations are performed by fixed wing aircraft. During spring breakup and fall rains, the runway surface is too soft to permit safe operations, which results in airport closures.

This project will separate the airport from the concentrated residential area and school. The airspace will be unobstructed. It will provide a modern airport designed to current safety standards and surfaced with a durable, reliable, all weather gravel surface course.

USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

Construction of a new airport facility to current design standards.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

Approximately 30.8 hectares (76.2 acres) would be dredged to provide approximately 300,000 cubic meters (400,000 cubic yards) of embankment material. Approximately 19.2 hectares (47.4 acres) of wetlands would be filled. Another approximately 33,000 cubic meters (44,000 cubic yards) of gravel would be used to surface the embankments. This material would be imported from Contractor-furnished sources

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

40 hectares (99 acres)

23. Is Any Portion of the Work Already Complete? Yes __ No X IF YES, DESCRIBE THE COMPLETED WORK

Not applicable

24. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

Surface Estate: Chefarnrmute, Inc. P. O. Box 70, Chefornak, Alaska 99561

Subsurface Estate: U.S. Fish and Wildlife Service, Yukon Delta Wildlife Refuge, P. O. Box 346, Bethel, Alaska 99559

25. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
ADEC	401 Water Quality Certification			Concurrent with DOA permit	
ADF&G	Title 16			Concurrent with DOA permit	
CZM	Coastal Zone Consistency Determination			Concurrent with DOA permit	
EPA	NPDES			Contractor to furnish prior to construction	

* Would include but is not restricted to zoning, building, and flood plain permits

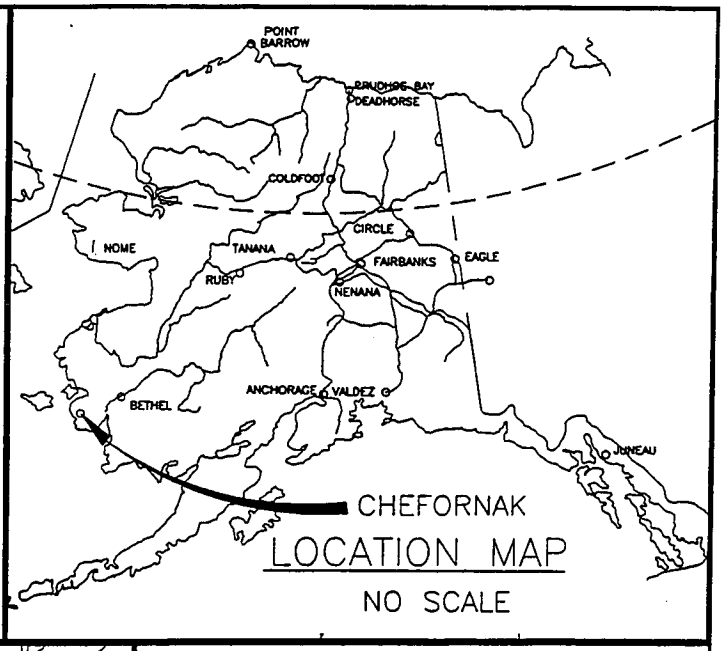
26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

[signature] 10/22/98

SIGNATURE OF APPLICANT DATE SIGNATURE OF AGENT DATE

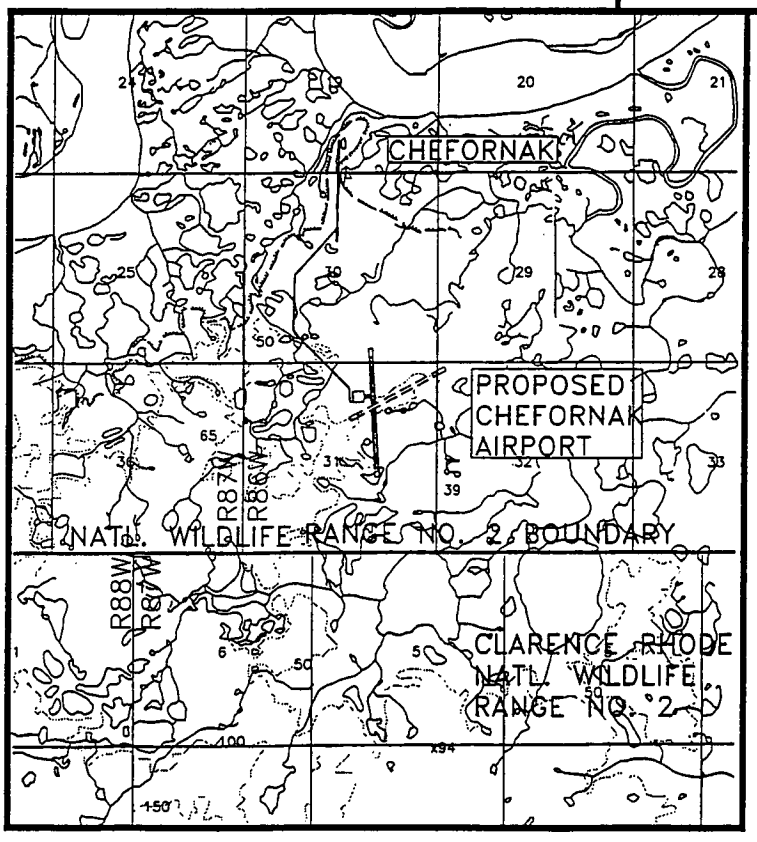
The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.



LOCATION MAP

NO SCALE



VICINITY MAP

Kilometers

1.5 1 .5 0 1 2 3

1 1/2 0 1 2

Miles

SEC 21, T1N, R86W, SM
SEWARD MERIDIAN
USGS BAIRD INLET (A-6 & A-7)

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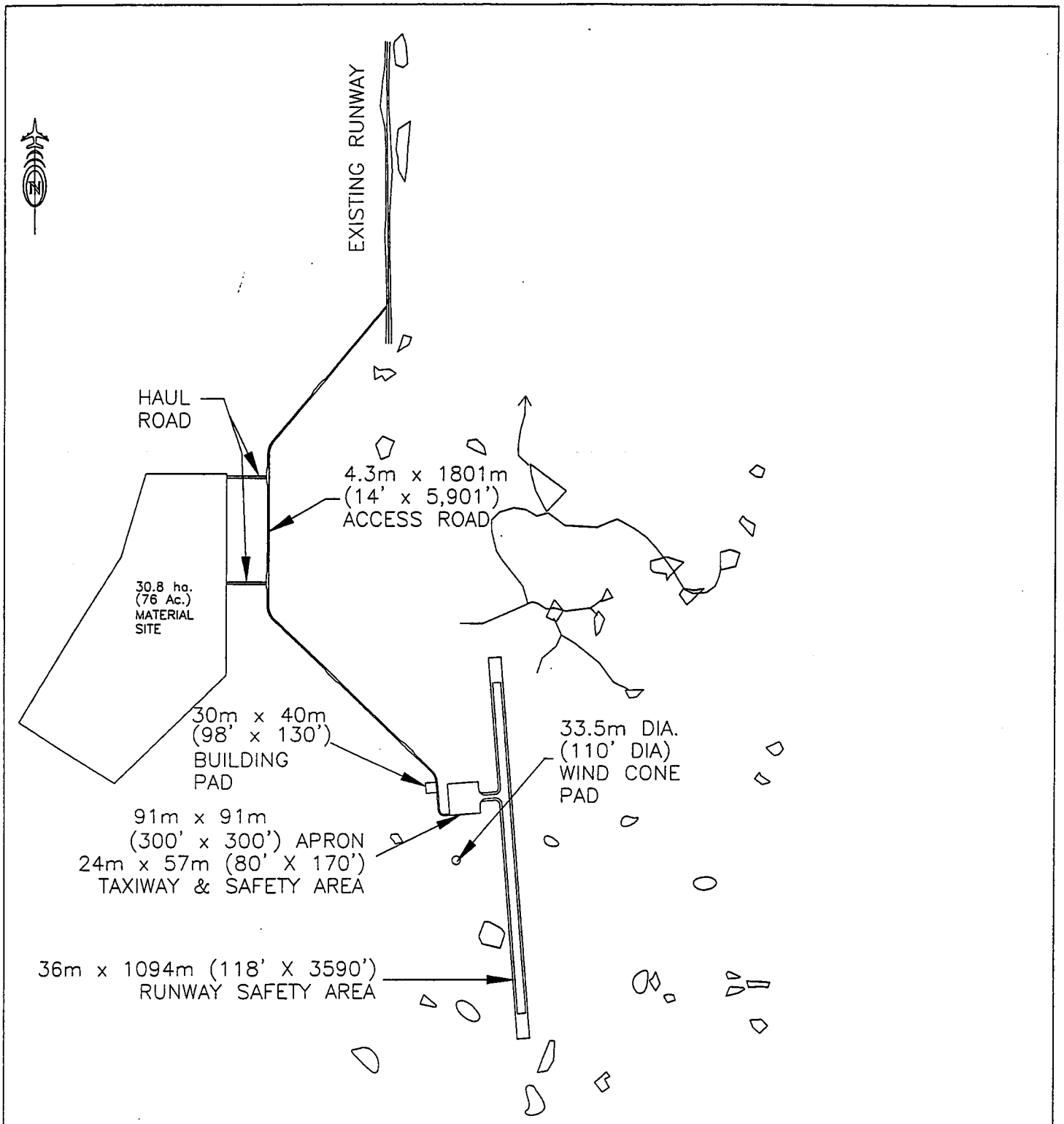
CHEFORNAK AIRPORT RELOCATION

LOCATION & VICINITY MAPS

APPLICATION BY DOT/PF, ALASKA

SHEET 1 OF 6 | DATE: 6/16/98



FILL LIMITS

NO SCALE

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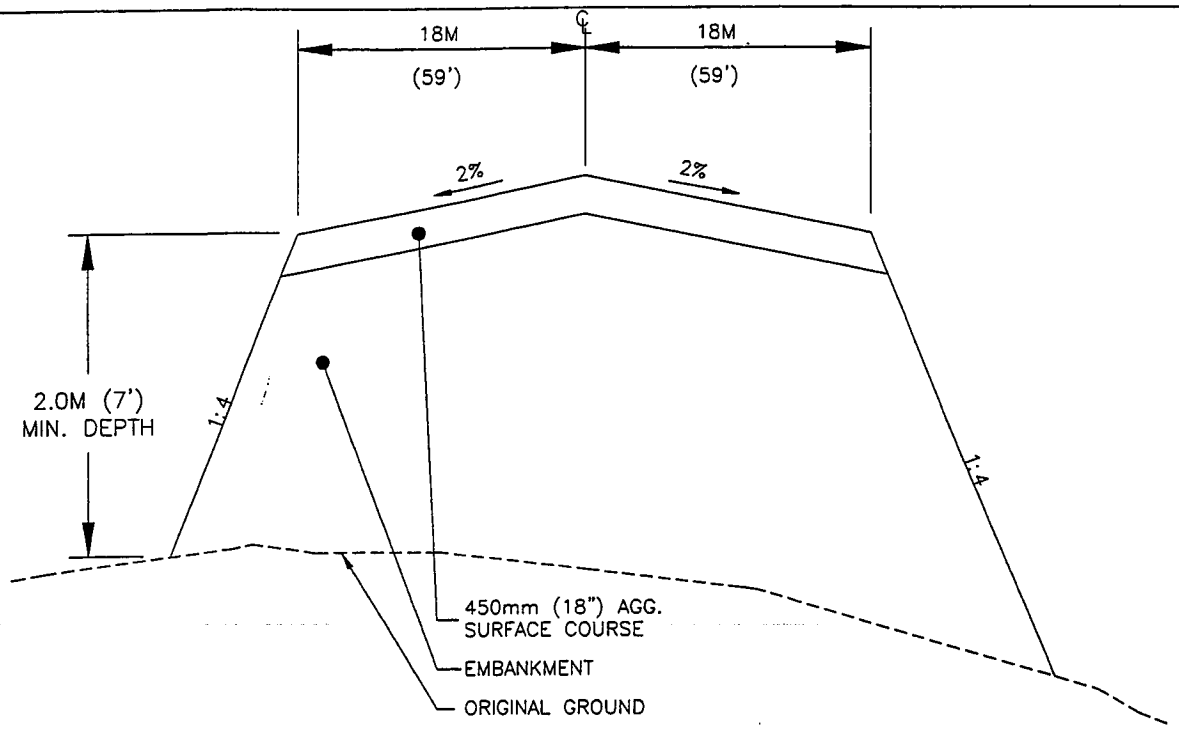
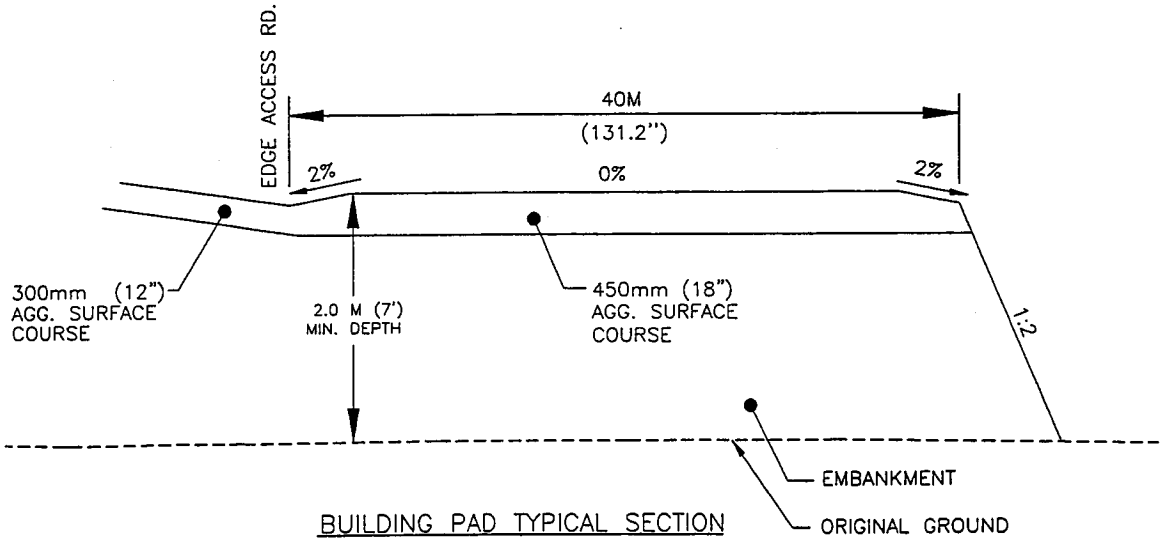
CHEFORNAK AIRPORT RELOCATION
FILL LIMITS & MATERIAL SITE

APPLICATION BY DOT/PF, ALASKA

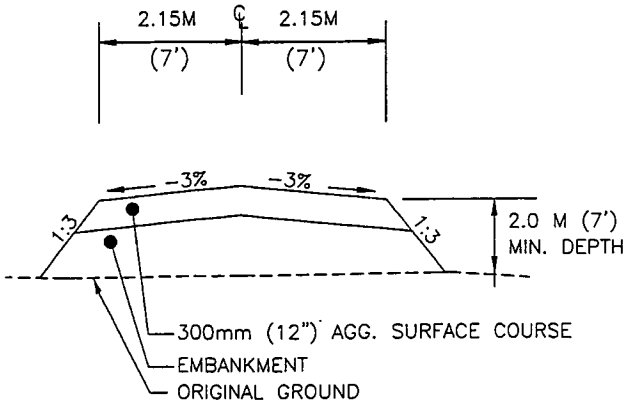
SHEET 2 OF 6 | DATE 6/16/98



RUNWAY AND SAFETY AREA TYPICAL SECTION



BUILDING PAD TYPICAL SECTION



ACCESS ROAD TYPICAL SECTION

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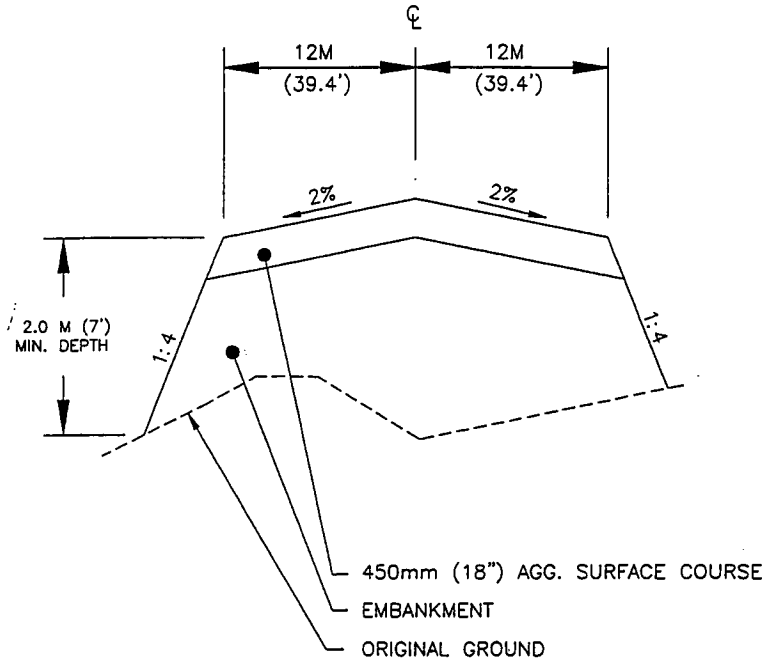
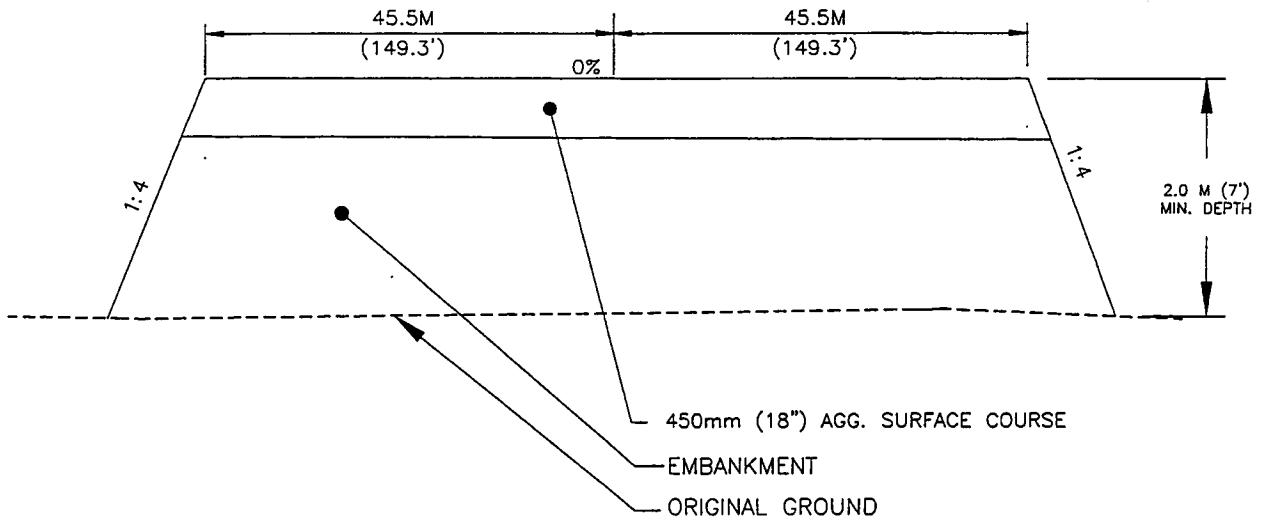
CHEFORNAK AIRPORT RELOCATION
TYPICAL SECTIONS

APPLICATION BY DOT/PF, ALASKA

SHEET 3 OF 6 | DATE 6/16/98



TAXIWAY AND SAFETY AREA TYPICAL SECTION



APRON TYPICAL SECTION

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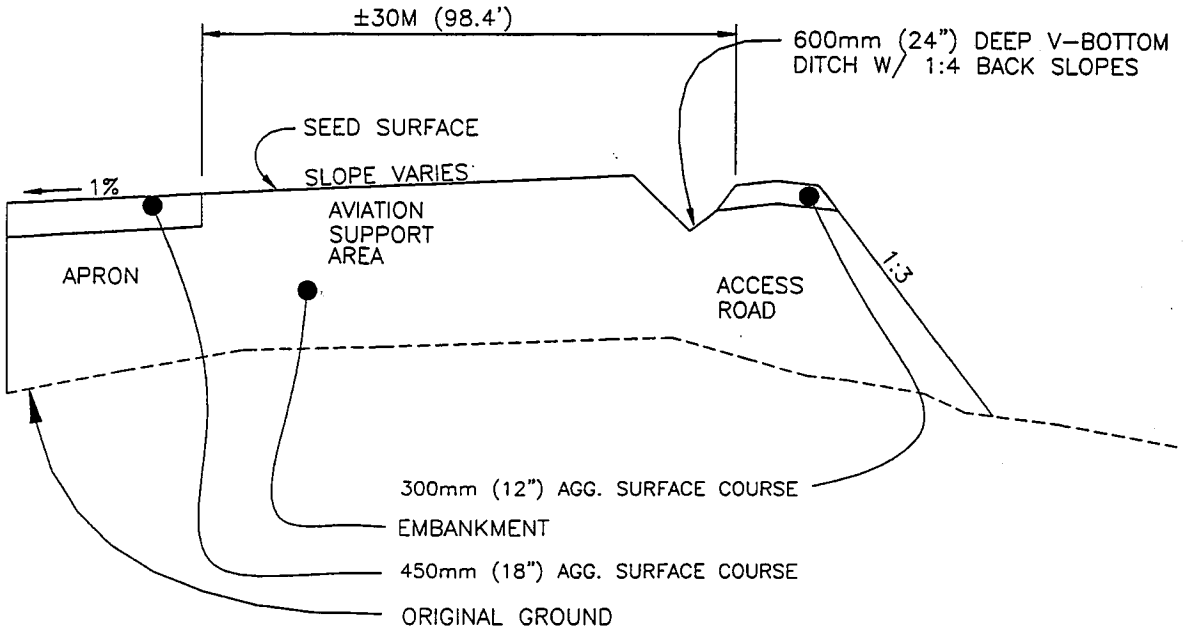
CHEFORNAK AIRPORT RELOCATION
TYPICAL SECTIONS

APPLICATION BY DOT/PF, ALASKA

SHEET 4 OF 6 | DATE 6/16/98



AVIATION SUPPORT AREA TYPICAL SECTION

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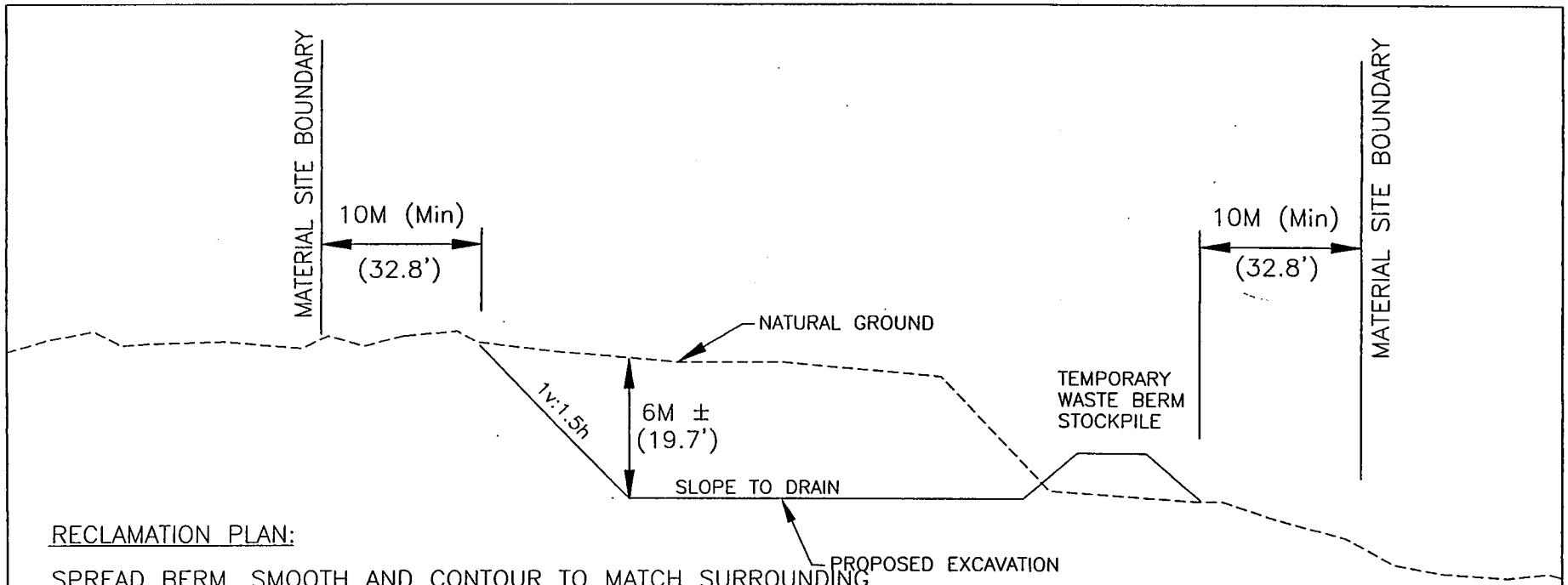
CHEFORNAK AIRPORT RELOCATION
AVIATION SUPPORT AREA TYPICAL SECTION

APPLICATION BY DOT/PF, ALASKA

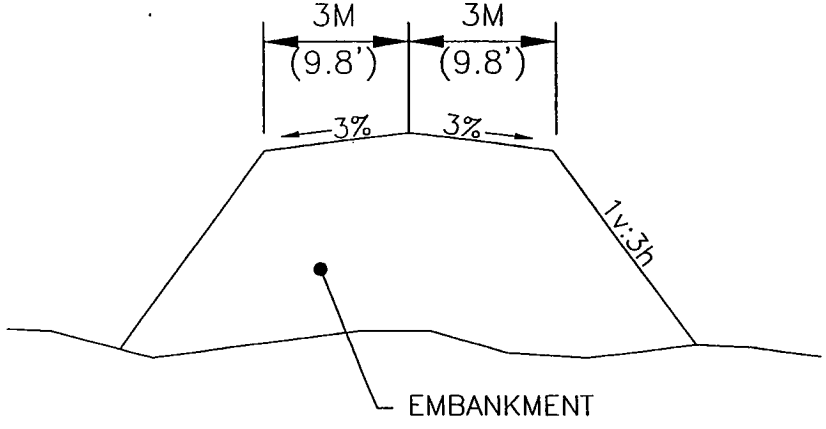
SHEET 5 OF 6 | DATE 6/16/98



RECLAMATION PLAN:

SPREAD BERM, SMOOTH AND CONTOUR TO MATCH SURROUNDING TERRAIN. SLOPE TO PREVENT PONDING. SEED TO PROMOTE VEGETATION.

TYPICAL CROSS SECTION OF MATERIAL SITE EXCAVATION



HAUL ROAD TYPICAL SECTION

Material Site Mining and Reclamation Plan:

Mine the site within the general lines and grades shown. Allow for positive drainage from the mined area using natural drainage patterns. Install and maintain silt fencing along the tundra outside the pit boundaries as needed. Overburden shall be spread within the spent portions of the site. All slopes shall be seeded upon completion of mining.

x:\air\51826\corps97

CHEFORNAK AIRPORT RELOCATION
MINING PLAN

APPLICATION BY DOT/PF, ALASKA

SHEET 6 OF 6 | DATE 6/3/98

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NORTHERN REGION, DESIGN AND ENGINEERING SERVICES DIVISION

TONY KNOWLES, GOVERNOR

2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5399
TELEPHONE: (907) 451-5289
TDD: (907) 451-2363
FAX: (907) 451-5103

October 22, 1998

Re: Chefornak Airport Improvements
Project No. 51826

Ms. Diane Sheridan
Project Review Assistant
Division of Governmental Coordination
3601 C Street, Suite 370
Anchorage, Alaska 99503

Dear Ms. Sheridan:

Enclosed is a Coastal Zone Questionnaire and copies of the Corps of Engineers Individual and the Alaska Department of Fish and Game Waterway/Waterbody permit applications. The project will require a fifty day (50) review.

If you have any further questions, please telephone Eric Gerke, Environmental Analyst, at (907) 451-5289. Thank you.

Sincerely,

David T. Bloom, P.E.
Preliminary Engineering Chief

EMG/dlw

Enclosures: as stated

cc: Patricia Miller, P.E., Aviation Design Group Chief, DOT&PF, Northern Region

Coastal Project Questionnaire and Certification Statement

Please answer all questions. To avoid a delay in processing, please call the department if you answer "yes" to any of the questions related to that department. Maps and plan drawings must be included with your packet.

An incomplete packet will be returned.

■ APPLICANT INFORMATION

1. State of Alaska
Department of Transportation and Public Facilities
Name of Applicant
2301 Peger Road
Address
Fairbanks, Alaska 99709-5399
City State Zip Code
(907) 451-5289
Daytime Phone
(907) 451-5103
Fax Number
Attn: David T. Bloom, P.E.

2. _____
Agent (or responsible party if other than applicant)
_____
Address
_____
City State Zip Code
_____
Daytime Phone
_____
Fax Number

■ PROJECT INFORMATION

		Yes	No
1.	This activity is a: ☒ new project ☐ modification or addition to an existing project If a modification do you currently have any State, federal or local approvals related to this activity?	☐	☐

Note: Approval means any form of authorization. If "yes," please list below:

Approval Type	Approval #	Issuance Date	Expiration Date

2.	Has this project ever been reviewed by the State of Alaska per the ACMP?	☐	☒

Previous State I.D. Number: AK_____ Previous Project Name:_____

■ PROJECT DESCRIPTION

1. Attach the following: • a detailed description of the project and all associated facilities; • a project timeline for completion of all major activities in the proposal; • a site plan depicting all proposed actions; • other supporting documentation that would facilitate review of the project. Note: If the project is a modification, identify existing facilites as well as proposed activities on the site plan.
Proposed starting date for project: 1999 Proposed ending date for project: 2004

2. Provide a brief description of your entire project and ALL associated facilities (access roads, caretaker facilities, waste disposal sites, etc.).
This project will relocate the airport at Chefornak to a new site approximately 300 m (1,000') south of the existing airport. The existing apron, taxiway, and runway will serve as part of the access road to the new airport. The proposed project will construct a single 36 m by 1,094 m runway safety area, 24 m by 57 m taxiway safety area, 91 m (299') by 91 m (299') apron, 30 m (100') by 91 m (299') aviation support area, 4.3 m (12') by 1,801 m (5,909') access road with turnouts, 40 m (131') by 30 m (100') building pad, and 33.5 m diameter windcone pad. All o these dimensions refer to the full depth embankments and all will be gravel surfaced. Airport lighting will be installed.

		Yes	No
5.	Have you applied for a U.S. Environmental Protection Agency National Pollution Discharge Elimination System (NPDES) permit? Contractor to furnish prior to construction. Date of submittal: _____ *(Note: For information regarding the need for an NPDES permit, contact EPA at (907) 271-5083.)*	☐	☒
6.	Will you have a putrescible waste discharge within 5 miles of any public airport? If yes, please contact the Airports Division of the **Federal Aviation Administration** at (907) 271-5440.	☐	☒
7.	Does the project include a nonfederal power project affecting any navigable body of water or located on federal land? Or, is utilization of surplus water from any federal government dam proposed? (Power projects consist of dams, water conduits, reservoirs, powerhouses, and transmission lines.)	☐	☒
	If yes, have you applied for a permit from the **Federal Energy Regulatory Commision (FERC)**? Date of submittal: _____ *(Note: For information, contact FERC, Office of Hydropower Licensing, at (202) 208-0200.)*	☐	☒
7.	Have you applied for permits from any other federal agency?	☐	☒

AGENCY	APPROVAL TYPE	DATE SUBMITTED

■ DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) APPROVALS

		Yes	No
1.	Will a discharge of wastewater from industrial or commercial operations occur?	☐	☒
	Will the discharge be connected to an already approved sewer system?	☐	☒
	Will the project include a stormwater collection/discharge system?	☐	☒
2.	Do you intend to construct, install, modify, or use any part of a wastewater (sewage or greywater) disposal system?	☐	☒
	a) If so, will the discharge be 500 gpd or greater?	☐	☒
	b) If constructing a domestic wastewater treatment or disposal system, will the system be located within fill material requiring a COE permit?	☐	☒
	If you answered yes to a or b, answer the following:		
	1) How deep is the bottom of the system to the top of the subsurface water table? _____		
	2) How far is any part of the wastewater disposal system from the nearest surface water? _____		
	3) ..... Is the surrounding area inundated with water at any time of the year?	☐	☒
	4) ..... How big is the fill area to be used for the absorption system? _____		
	(Questions 1 & 2 will be used by DEC to determine whether separation distances are being met; Questions 3 & 4 relate to the required size of the fill if wetlands are involved.)		
3.	Do you expect to request a mixing zone for your proposed project? *(If your wastewater discharge will exceed Alaska water quality standards, you may apply for a mixing zone. If so, please contact DEC to discuss information required under 18 AAC 70.032.)*	☐	☒

c. Will you be operating facilities on the land or water for the exploration or production of hydrocarbons? ..... Yes ☐ No ☒

If you answered NO to ALL questions in this section, continue to next section.

If you answered YES to ANY of these questions, contact the DEC Regional office for information and application forms. Please be advised that all new DEC permits and approvals require a 30-day public notice period.

Based on your discussion with DEC, please complete the following:
Approval Type: 401 Water Quality Certification Date Submitted: _____

9. Does your project qualify for a general permit for wastewater or solid waste? ..... ☐ ☐

10. If you answered yes to any questions and are not applying for DEC permits, indicate reason below:
☐ _____ (DEC contact) told me on _____ that no DEC approvals are required on this project. Reason: _____
☐ Other: _____

■ DEPARTMENT OF FISH & GAME (DFG) APPROVALS

1. Will you be working in, or placing anything in, a stream, river or lake? (This includes work in running water or on ice, within the active flood plain, on islands, the face of the banks or the tidelands down to mean low tide.)*(Note: If the proposed project is located within a Federal Emergency Management Agency Zone, a Floodplain Development Permit may be required. Contact the local municipal government for additional information and a floodplain determination.)* ..... Yes ☒ No ☐
Name of ☐ stream, ☐ river, or ☐ lake: _____

2. Will you do any of the following? ..... ☒ ☐

Please indicate below:

- ☐ Build a dam, river training structure or instream impoundment?
- ☐ Use the water?
- ☐ Pump water out of the stream or lake?
- ☐ Divert or alter the natural stream channel?
- ☐ Block or dam the stream (temporarily or permanently)?
- ☐ Change the water flow or the water channel?
- ☐ Introduce silt, gravel, rock, petroleum products, debris, chemicals, or other organic/inorganic waste of any type into the water?
- ☐ Alter or stabilize the banks?
- ☐ Mine or dig in the beds or banks?
- ☐ Use explosives?
- ☐ Build a bridge (including an ice bridge)?
- ☐ Use the stream as a road (even when frozen), or crossing the stream with tracked or wheeled vehicles, log-dragging or excavation equipment (back-hoes, bulldozers, etc.)?
- ☒ Install a culvert or other drainage structure?
- ☐ Construct a weir?
- ☐ Use an in-stream structure not mentioned here?

3. Is your project located in a designated State Game Refuge, Critical Habitat Area or State Sanctuary? ..... ☐ ☒

		Yes	No
6.	Will you be building or altering a dam?	☐	☒
7.	Do you plan to drill a geothermal well?	☐	☒
8.	At any one site (regardless of land ownership), do you plan to do any of the following?	☒	☐
	☐ Mine five or more acres over a year's time?		
	☐ Mine 50,000 cubic yards or more of materials (rock, sand or gravel, soil, peat, overburden, etc.) over a year's time?		
	☐ Have a cumulative unreclaimed mined area of five or more acres?		
	If you plan to mine less than the acreage/amount stated above and have a cumulative unreclaimed mined area of less than five acres, do you intend to file a voluntary reclamation plan for approval?	☐	☐
9.	Will you be exploring for or extracting coal?	☐	☒
10.	Will you be drilling for oil/gas?	☐	☒
11.	Will you be investigating or removing historical or archaeological resources on State-owned land?	☐	☒
12.	Is the proposed project located within a known geophysical hazard area?	☐	☒
13.	Is the proposed project located in a unit of the Alaska State Park System?	☐	☒

If you answered "No" to ALL questions in this section, continue to certification statement.

If you answered "Yes" to ANY questions in this section, contact DNR for information.

Based on your discussion with DNR, please complete the following:

Approval Type: _____ Date Submitted: _____

_____ _____

14. If you answered yes to any questions and are not applying for DNR permits, indicate reason below:

☐ _____ (DNR contact) told me on _____ that no DNR approvals are required.

Reason: _____

☒ Other: State of Alaska will acquire right-of-way from Cheformmute, Inc

Please be advised that the CPQ identifies permits subject to a consistency review. You may need additional permits from other agencies or local governments to proceed with your activity.

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

OFFICE OF THE GOVERNOR

OFFICE OF MANAGEMENT AND BUDGET
DIVISION OF GOVERNMENTAL COORDINATION

☑ *SOUTHCENTRAL REGIONAL OFFICE*
3601 "C" STREET, SUITE 370
ANCHORAGE, ALASKA 99503-5930
PH: (907) 269-7470/FAX: (907) 561-6134

☐ *CENTRAL OFFICE*
P.O. BOX 110030
JUNEAU, ALASKA 99811-0030
PH: (907) 465-3562/FAX: (907) 465-3075

☐ *PIPELINE COORDINATOR'S OFFICE*
411 WEST 4TH AVENUE, SUITE 2C
ANCHORAGE, ALASKA 99501-2343
PH: (907) 271-4317/FAX: (907) 272-0690

April 29, 1999

David Bloom
Dept. of Transportation & Public Facilities
2301 Peger Road
Fairbanks, Alaska 99709-5399

Dear Mr. Bloom:

SUBJECT: FINAL CONSISTENCY DETERMINATION
Kinia River 2
STATE I.D. NUMBER AK 9902-12AA

The Division of Governmental Coordination (DGC) has completed coordinating the State's review of your project for consistency with the Alaska Coastal Management Program (ACMP). On April 23, 1999, you were issued a proposed consistency finding for your project.

The project subject to this consistency review is construction of an airport in Chefornak at a new location that is approximately 1.25 miles south of the existing airport. The existing apron, taxiway, and runway would serve as part of the access road to the new airport. The access road would connect the new runway apron to the south end of the existing runway. Activity involved in the construction of the new airport and accompanying facilities would include:

1. Excavate up to 523,200 cubic yards (CY) of silt borrow material from 76.2 acres of tundra wetlands identified in the COE/ACMP Public Notice;
2. Place the silt borrow material plus 44,000 CY of surface coarse gravel obtained from an approved gravel source, and 44,000 CY of overburden berm material in 50.0 acres of tundra wetlands.
3. Construct a runway and safety area, 80' X 170' taxiway, 300' X 300' long apron and aviation support area, access road with turnouts, building pad, windcone pad, material site, temporary haul road, and erosion protection berm; and, install lighting.

The borrow-material excavation and embankment construction work would be completed during the winter while the ground is frozen. Because of the time needed to thaw the frozen material, construction likely would take more than three years. The existing airport embankments, beyond what is needed for access to the new airport, would be reclaimed.

This final consistency determination, developed under 6 AAC 50, applies to the following State and federal authorizations:

Department of Fish and Game (DFG)
Fish Habitat Permit

Department of Environmental Conservation (DEC)
Certificate of Reasonable Assurance

U.S. Army Corp of Engineers (COE)
Section 404, Permit No. 4-970493

Based on the review of your project by the Alaska Departments of Environmental Conservation, and Fish and Game, Natural Resources, and the Ceñaliulriit Coastal District, the State concurs with your certification that the project is consistent with the ACMP with the following modifications that will appear as stipulations on the State permit noted:

To be consistent with the ACMP statewide standard for Air, Land, and Water Quality (6 AAC 80.140) and the Ceñaliulriit Coastal Management Program Enforceable policy 8.5, Fish and Wildlife Habitats, the DEC Certificate of Reasonable Assurance will carry the following stipulation:

1. Prior to any fill placement, a silt fence shall be installed on a line parallel to and within 5' of the proposed fill toe of slope within all wetland areas that contain standing water that is connected to any natural body of water or where the toe of slope is within 25' of said waterbody.

To be consistent with the ACMP statewide standard for Habitats (6 AAC 80.130) and the Ceñaliulriit Coastal Management Program Enforceable policies 8.5, Fish and Wildlife Habitats and 14.4, Flooding and Surface Water Drainage and DFG statutes at 16.05.084, the Fish Habitat Permit will carry the following stipulations:

2. The culvert shall be located in the thalweg of the stream and installed so that the invert is buried at least 38 inches, at both the inlet and outlet of the culvert, below the streambed elevation at the site.

3. The effective slope of the culvert at any point along its length must not exceed 0.5 percent

4. The culvert shall be designed, installed, and maintained so that water velocity, flow, and any resulting drops in the water surface profile at any point within the culvert influence shall not impede the efficient passage of the slowest swimming fish group that occurs at the location of the proposed culvert installation. In order to meet this

velocity requirement, the culvert shall be designed, installed, and maintained in such a manner that the mean barrel velocity does not exceed 1.8 feet per second, and the average inlet and outlet velocities do not exceed 3.6 feet per second during a mean annual flood design discharge with a two day duration.

5. The culvert shall be installed on a firm substrate. If necessary to obtain a solid foundation, peat or other unsuitable material shall be excavated to a solid substrate and the area backfilled with clean gravel prior to placement of the culverts.

6. Each bank cut, slope, fill, and exposed earth work attributable to culvert installation and road building activities must be stabilized to prevent erosion both during and after project construction.

Copies of the relevant ACMP statewide standards and district policies were previously provided.

This final consistency determination represents a consensus reached between you as the project applicant and the reviewing agencies listed above, as provided under 6 AAC 50.70(k), regarding the conditions necessary to ensure the proposed project is consistent with the ACMP. As also provided under 15 CFR 930.64(c), federal authorization of your project will be made with the full understanding that your original project proposal has been modified subject to the conditions described above.

Other Concerns/Advisories

Please be advised that although the State has found the project consistent with the ACMP, based on your project description and any modifications that appear as stipulations contained herein, you still are required to meet all applicable State and federal laws and regulations. Your consistency determination may include reference to specific laws and regulations, but this in no way precludes your responsibility to comply with other applicable laws and regulations.

Please be advised that a Fish Habitat Permit issued by DFG, Habitat and Restoration Division, also will be required if any project related activities are conducted below the ordinary high water level of specified anadromous fish waterbodies. Such activities include, but are not limited to, placement of fill or removal of material, equipment operation, fording, barge loading/off-loading ramps or bulkheads, bank stabilization, ice bridges or winter stream crossings.

Please be advised that DNR, Division of Land (DOL) records do not show an authorized barge-landing site in the location indicated. DNR/DOL recommends that an application for authorization for a barge landing at this site be submitted to DNR/DOL.

If changes to the approved project are proposed prior to or during its siting, construction, or operation, you are required to contact this office immediately to determine if further review and approval of the revised project is necessary. If the actual use differs from the approved use

contained in the project description, the State may amend the State approvals listed in this consistency determination.

Should cultural or paleontological resources be discovered as a result of this activity, we request that work which would disturb such resources be stopped, and that the State Historic Preservation Office (269-8720) and the U.S. Army Corps of Engineers (COE) (753-2712) be contacted immediately so that consultation per section 106 of the National Historic Preservation Act may proceed.

This consistency determination does not obligate DNR to issue authorization under AS 38.05, nor does it supersede the statutory obligations thereunder. You may not proceed with any specific land use activity on the subject State lands until authorized by DNR/Division of Land. Authorities outside the ACMP may result in additional permit/lease conditions not contained in the consistency decision.

This final consistency determination is a final administrative decision for purposes of Alaska Appellate Rules 601-612. Any appeal from this decision to the superior court must be made within 30 days of the date of this determination.

By copy of this letter we are informing the COE of our proposed determination.

Please contact me at 269-7473, or email (maureen_mccrea@gov.state.ak.us) if you have any questions.

Sincerely,

Maureen McCrea
Senior Project Review Coordinator

cc: Shannon Hansen, COE Regulatory, Anchorage
Tim Smith, DNR/SHPO, Anchorage
Linda Medeiros, ACMP Liaison, DNR/DOL, Anchorage
Don McKay, DFG, Anchorage
Tim Rumfelt, DEC, Anchorage
Gail Alstrom, Coastal Management Coordinator, Cenaliulriit CRSA, St. Mary's

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NORTHERN REGION, DESIGN AND ENGINEERING SERVICES DIVISION

TONY KNOWLES, GOVERNOR

2301 PEGER ROAD
FAIRBANKS, ALASKA 99709-5399
TELEPHONE: (907) 451-5289
TDD: (907) 451-2363
FAX: (907) 451-5103

October 22, 1998

Re: Chefornak Airport Improvements
Project No. 51826

Lance Trasky
Southcentral Regional Supervisor
Department of Fish and Game
Habitat and Restoration Division
333 Raspberry Road
Anchorage, Alaska 99518-1599

Dear Mr. Trasky:

Enclosed is a General Waterway/Waterbody permit application, a copy of the Corps of Engineers Individual permit application, and the Division of Governmental Coordination Coastal Zone Questionnaire. This project will require a full coastal zone review.

If you have any further questions, please telephone Eric Gerke, Environmental Analyst, at (907) 451-5289. Thank you.

Sincerely,

David T. Bloom

David T. Bloom, P.E.
Preliminary Engineering Chief

EMG/dlw

Enclosures: as stated

cc: Patricia Miller, P.E., Aviation Design Group Chief, DOT&PF, Northern Region

ALASKA DEPARTMENT OF FISH AND GAME

Office Use Only
FG #_____

GENERAL WATERWAY/WATERBODY APPLICATION
ALASKA DEPARTMENT OF FISH AND GAME

A. APPLICANT

1. Name: State of Alaska Department of Transportation and Public Facilities
2. Address: 2301 Peger Road
   Fairbanks, Alaska 99709-5399 Telephone: (907)451-5289
3. Project Contractor: Name: Project not yet advertised.
   Address: _____
   _____ Telephone: ( ) _____

B. TYPE AND PURPOSE OF PROJECT:

This project will relocate the airport at Chefornak to a new site approximately 300 m (1,000') south of the existing airport. The existing apron, taxiway, and runway will serve as part of the access road to the new airport. The proposed project will construct a single 36 m (118') by 1,094 m (3,589') runway safety area, 24 m (79') by 57 m (187') taxiway safety area, 91 m (299') by 91 m (299') apron, 30 m (100') by 91 m (299') aviation support area, 4.3 m (14') by 1,801 m (5,909') access road with turnouts, 40 m (131') by 30 m (100') building pad, and 33.5 m (110') diameter windcone pad. All of these dimensions refer to the full depth embankments and all will be gravel surfaced. Airport lighting will be installed. This will be a two phase project constructed within a four to six year period. First phase will entail construction of the embankment of the access road and airport because of poor quality, frozen material which has to thaw. The second phase will consist of construction of the surface course material and associated facilities.

The existing airport at Chefornak is substandard. It is too close to the school and community. The runway is short, narrow, and does not provide the minimum recommended wind coverage. The apron is small and the connecting taxiway grade is too steep. There are fuel storage tanks in the Runway Protection Zone. The airport serves as the sole year-round transportation link for this community. All medical evacuations are performed by fixed wing aircraft. During spring breakup and fall rains, the runway surface is too soft to permit safe operations, which results in airport closures.

This project will separate the airport from the concentrated residential area and school. The airspace will be unobstructed. It will provide a modern airport designed to current safety standards and surfaced with a durable, reliable, all weather gravel surface course.

C. LOCATION OF PROJECT SITE:

1. Name of River, Stream, or Lake: No Name (Seasonal Spring) or Anadromous Stream #_____
2. Legal Description: Township 1 North Range 86 West Meridian Seward Section 30 USGS Quad Map Baird Inlet A-7
3. Plans, Specifications, and Aerial Photographs (see specific instructions)

D. TIME FRAME FOR PROJECT: January 1, 1999 to December 2004 (dates)

E. CONSTRUCTION METHODS:

	Yes	No
1. Will the stream be diverted?	___	X
How will the stream be diverted? not applicable		
How long? not applicable		
2. Will stream channelization occur?	___	X
3. Will the banks of the stream be altered or modified?	___	X
Describe: not applicable		

4. List all tracked or wheeled equipment (type and size) that will be used in the stream (in the water, on ice, or in the floodplain)
Project not yet advertised.
How long will equipment be in the stream? not applicable

	Yes	No
5. a. Will material be removed from the floodplain or bed of the stream or lake?	___	X
Type not applicable		
Amount not applicable		
b. Will material be removed from below the water table?	___	X
If so, to what depth? not applicable		
Is a pumping operation planned?	___	X
6. Will material (including spoils, debris, or overburden) be deposited in the floodplain or in the stream or lake?	X	___
If so, type Gravel		
Amount 1,500 cubic yards		
Disposal Site Location(s) Access road Station 20+360 (metric)		
7. Will blasting be performed?	___	X
Weight of charges not applicable		
Type of substrate not applicable		
8. Will temporary fills in the stream or lake be required during construction (e.g. for construction traffic around construction site)?	___	X
9. Will ice bridges be required?	___	X

F. SITE REHABILITATION/RESTORATION PLAN: On a separate sheet, present a site rehabilitation/restoration plan (see specific instructions).

G. WATERBODY CHARACTERISTICS:

Width of Stream approximately 30 feet

Depth of Stream or Lake: varies with the season

Type of Stream or Lake Bottom: mud
(e.g., sand, gravel, mud)

Stream Gradient: 5 percent

H. HYDRAULIC EVALUATION:

	YES	NO
1. Will a structure (e.g., culvert, bridge support, dike) be placed below ordinary high water of the stream?	X	

If yes, attach engineering drawings or a field sketch, as described in Step B. For culverts, attach stream discharge data for a mean annual flood (Q = 2.3), if available. Not applicable

Describe potential for channel changes or increased bank erosion, if applicable. None. This stream has seasonal flow only.

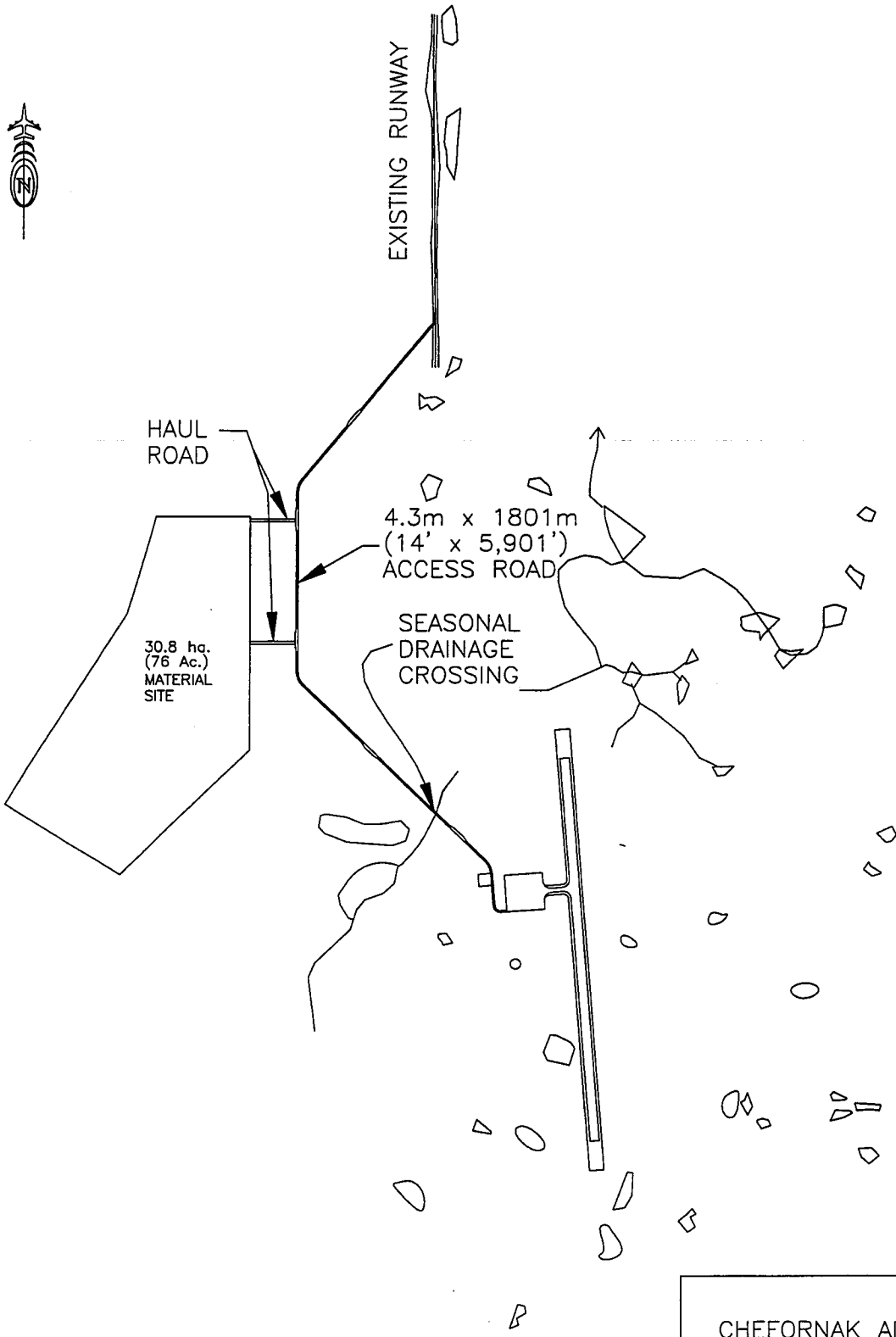
2. Will more than 25,000 cubic yards of material be removed?		X

If yes, attach a written hydraulic evaluation including, at a minimum, the following: potential for channel changes; assessment of increased aufeis (glaciering) potential: assessment of potential for increased bank erosion.

I HEREBY CERTIFY THAT ALL INFORMATION MADE ON OR IN CONNECTION WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Howard T. Bloom 10/22/89

SIGNATURE OF APPLICANT **DATE**

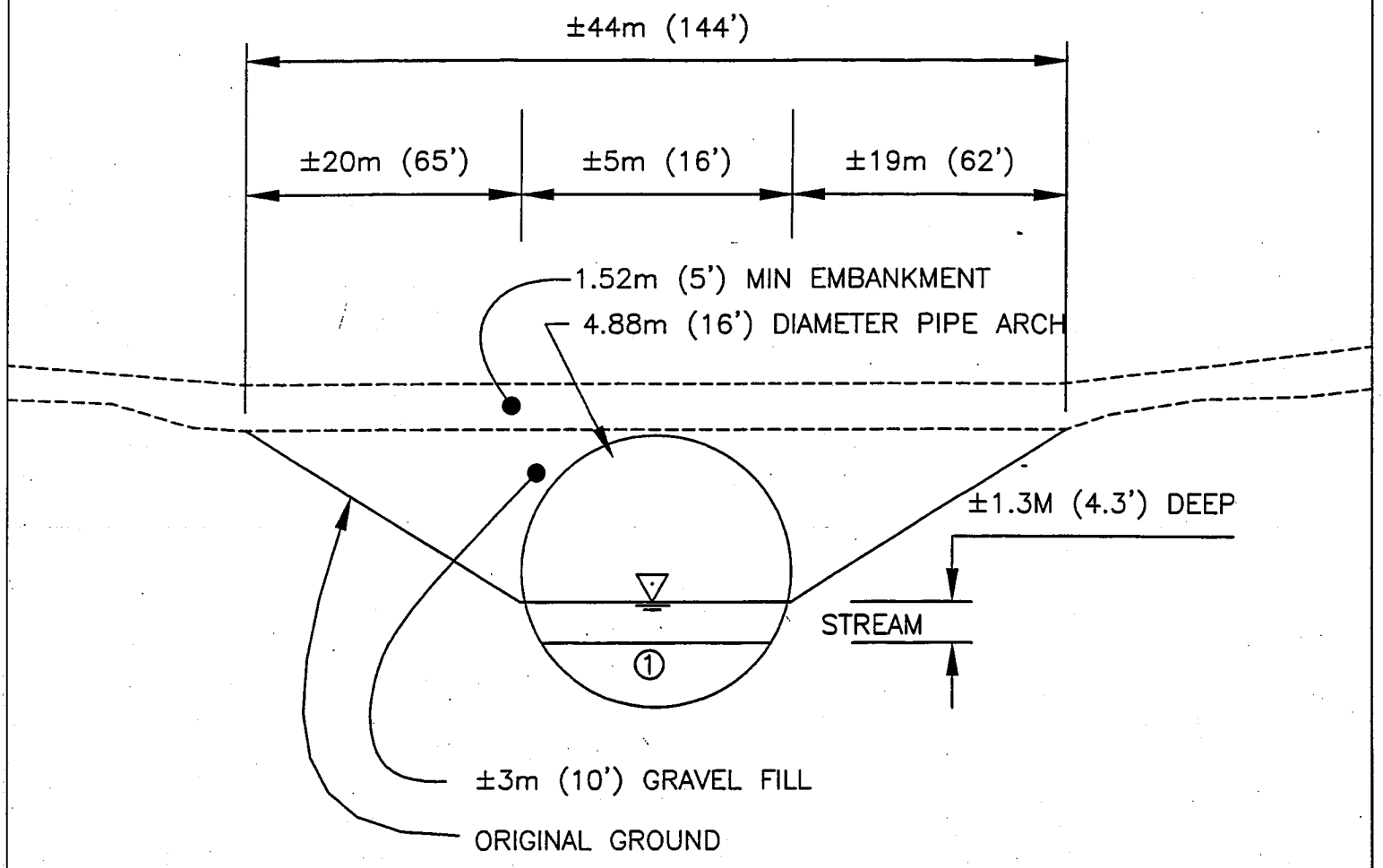


CHEFORNAK AIRPORT RELOCATION
PLAN VIEW
TITLE 16

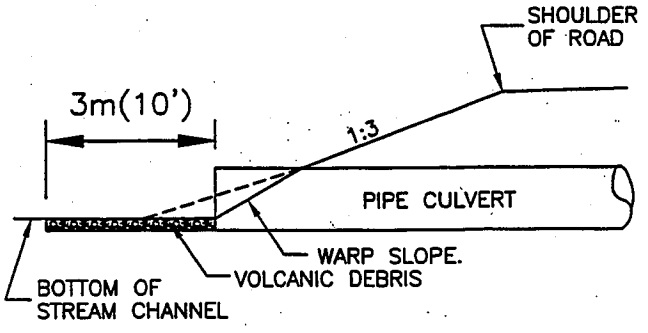
APPLICATION BY DOT/PF, ALASKA

SHEET 1 OF 2 | DATE 9/25/98

x:\air\51826\dnrtl16



① THE BOTTOM OF THE PIPE ARCH WILL BE 1m (3.3') BELOW THE STREAM BOTTOM.



TYPICAL CULVERT SECTION

x:\air\51826\dnrtl16

CHEFORNAK AIRPORT RELOCATION
TYPICAL SECTIONS
TITLE 16

APPLICATION BY DOT/PF, ALASKA

SHEET 2 OF 2 | DATE 10/22/98

STATE OF ALASKA

TONY KNOWLES, GOVERNOR

DEPARTMENT OF FISH AND GAME

HABITAT AND RESTORATION DIVISION

333 RASPBERRY ROAD
ANCHORAGE, ALASKA 99518-1599
PHONE: (907) 344-0541

FISH HABITAT PERMIT FG 99-II-0102

ISSUED: April 30, 1999
EXPIRES: December 31, 2004

Mr. David T. Bloom, P.E., Preliminary Engineering Chief
Northern Region, Design & Engineering Services Division
Department of Transportation and Public Facilities
2301 Peger Road
Fairbanks, AK 99709-5399

ROUTING INSTRUCTIONS

B. Gannon		K. Maitlen	
E. Gerke	X	C. Storey	
R. Horner		P. Wightman	
T. Richards		G. Zimmerman	
D. Wicken			

DO THE FOLLOWING: cc Cindie Lithe

Dear Mr. Bloom:

Re: Airport Construction and Unnamed Stream Crossing–Chefornak
NE¼ NW¼ Section 31, T. 1 N., R. 86 W., S.M.
SID AK9902-12AA; COE Nº 4-970493; Kinia River 2

Pursuant to AS 16.05.840, the Alaska Department of Fish and Game (ADF&G) has reviewed your proposal to construction of a new airport and access road at Chefornak, Alaska. The new runway will be located about 1.25 miles south of the village and the access road will connect the new runway apron to the south end of the existing runway. Project features at the new airport include a 118-foot wide by 3,590-foot long north-south runway and safety area. An 80-foot wide, 170-foot long taxiway on the west side of the runway would connect to a 300-foot wide by 300-foot long aircraft parking apron and aviation support area. A new 5,901-foot long, 14-foot wide access road will connect the apron to the local road system. A segmented circle with wind cone and airport lighting will be installed. Up to 523,200 cubic yards (cy) of silt borrow material will be mined from a 76-acre tundra wetland site located on the west side of the new access road about midway between the village and the new airport. Construction during the winter months is planned.

In total, about 50 acres of tundra wetlands will be filled with 523,200 cy of silt fill material plus 44,000 cy of surface coarse gravel on of the runway, taxiway, apron, and access road. In addition, about 42,000 cy of overburden will be placed along side the runway for erosion protection. A source for the surface coarse material has not yet been identified. Plans also call for installation of a 16-foot diameter by 144-foot long arch pipe at project station 20+350-360. This project was reviewed for consistency with the standards of the Alaska Coastal Management Program (ACMP) and a final consistency determination was received from the Office of Management and Budget, Division of Governmental Coordination, on April 30, 1999.

Alaska blackfish were found in the stream located at project station 20+350-360 during an October 1998 stream survey. Based on our review of your plans, your proposed project may obstruct the efficient passage and movement of fish.

printed on recycled paper by C.D.

In accordance with AS 16.05.840, project approval is hereby given subject to the following stipulation(s):

1. The culvert shall be located in the thalweg of the stream and installed so that the invert is buried at least 38 inches, at both the inlet and outlet of the culvert, below the streambed elevation at the site.

2. The effective slope of the culvert at any point along its length must not exceed 0.5 percent.

3. The culvert shall be designed, installed, and maintained so that water velocity, flow, and any resulting drops in the water surface profile at any point within the culvert influence shall not impede the efficient passage of the slowest swimming fish group that occurs at the location of the proposed culvert installation. In order to meet this velocity requirement, the culvert shall be designed, installed, and maintained in such a manner that the mean barrel velocity does not exceed 1.8 feet per second, and the average inlet and outlet velocities do not exceed 3.6 feet per second during a mean annual flood design discharge with a two day duration.

4. The culvert shall be installed on a firm substrate. If necessary to obtain a solid foundation, peat or other unsuitable material shall be excavated to a solid substrate and the area backfilled with clean gravel prior to placement of the culverts.

5. Each bank cut, slope, fill, and exposed earth work attributable to culvert installation and road building activities must be stabilized to prevent erosion both during and after project construction.

The permittee is responsible for the actions of contractors, agents, or other persons who perform work to accomplish the approved plan. For any activity that significantly deviates from the approved plan, the permittee shall notify the ADF&G, Habitat and Restoration Division, and obtain written approval in the form of a permit amendment before beginning the activity. Any action taken by the permittee or an agent of the permittee that increases the project's overall scope or that negates, alters, or minimizes the intent or effectiveness of any stipulation contained in this permit will be deemed a significant deviation from the approved plan. The final determination as to the significance of any deviation and the need for a permit amendment is the responsibility of the ADF&G, Habitat and Restoration Division. Therefore, it is recommended that ADF&G, Habitat and Restoration Division, be consulted immediately when a deviation from the approved plan is being considered.

This letter constitutes a permit issued under the authority of AS 16.05.840. This permit must be retained on site during culvert installation operations. Please be advised that this approval does not relieve you of the responsibility for securing other permits: state, federal, or local.

This permit provides reasonable notice from the commissioner that failure to meet its terms and conditions constitutes violation of AS 16.05.860; no separate notice under AS 16.05.860 is required before citation for violation of AS 16.05.840 can occur.

Pursuant to 6 AAC 80.010 (b), the conditions of this permit are consistent with the Standards of the ACMP and the Ceñaliulriit CRSA Coastal Management Program.

In addition to the penalties provided by law, this permit may be terminated or revoked for failure to comply with its provisions or failure to comply with applicable statutes and regulations. The department reserves the right to require mitigation measures to correct disruption to fish and game created by the project and which were a direct result of the failure to comply with this permit or any applicable law.

The recipient of this permit (the permittee) shall indemnify, save harmless, and defend the department, its agents, and its employees from any and all claims, actions or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from permitted activities or the permittee's performance under this permit. However, this provision has no effect if, and only if, the sole proximate cause of the injury is the department's negligence.

Sincerely,

Robert G. Bosworth, Deputy Commissioner

C. Wayne Dolezal

By: C. Wayne Dolezal
Habitat Biologist
Region II
(907) 267-2333

cc: S. Hansen, COE
C. Burkey, ADF&G
M. Coffing, ADF&G
D. Vos, NMFS
G. Wheeler, USFWS
E. Gerke, ADOT&PF
M. McCrea, OMB/DGC
G. Alstrom, Ceñaliulriit CRSA

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF AIR AND WATER QUALITY
WATERSHED MANAGEMENT

TONY KNOWLES, GOVERNOR
555 Cordova Street
Anchorage, AK 99501-2617
Phone: (907) 269-7564
Fax: (907) 269-7508
TTY: (907) 269-7511
http://www.state.ak.us/dec/

April 30, 1999

ADOT/PF
David Bloom
2301 Peger Road
Fairbanks, AK 99709

Certified Mail
Return Receipt Requested
Z 526 022 591

SUBJECT: Kinia River 2, NPACO No. 4-970493, State I.D. No. AK 9902-12AA

Dear Mr. Bloom:

In accordance with Section 401 of the federal Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation is issuing the enclosed Certificate of Reasonable Assurance for the proposed construction of a new airport at Chefornak, Alaska.

This certification is one of the approvals required as part of a coastal management consistency determination issued by the Division of Governmental Coordination under 6 AAC 50.070.

Department of Environmental Conservation regulations provide that any person who disagrees with any portion of this action may request an adjudicatory hearing in accordance with 18 AAC 15.200-920. The request should be mailed to the Commissioner of the Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 105, Juneau, AK 99801-1795. Please also send a copy of the request for hearing to the undersigned. Failure to submit a hearing request within thirty days of receipt of this letter constitutes a waiver of that person's right to judicial review of this action.

By copy of this letter we are advising the Corps of Engineers and the Division of Governmental Coordination of our actions and enclosing a copy of the certification for their use.

Sincerely,

Tim Rumfelt
Environmental Specialist

Enclosure: As stated
cc: (with encl)
Corps of Engineers
F&WS
DGC, Anchorage
Dave Sturdevant, ADEC/Juneau

EPA, AK Operations
ACMP, DNR\DOL
ADF&G, Anchorage

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATE OF REASONABLE ASSURANCE

A Certificate of Reasonable Assurance, in accordance with Section 401 of the federal Clean Water Act and the Alaska Water Quality Standards, is issued to the Alaska Department of Transportation & Public Facilities, 2301 Peger Road, Fairbanks, Alaska 99709, for the proposed construction of a new airport and access road within wetlands.

The proposed activity is located within sections 30 and 31, T1N, R86W, Seward Meridian, Chefornak, Alaska.

Public notice of the application for this certification was given as required by 18 AAC 15.180.

Water Quality Certification is required under Section 401 because the proposed activity will be authorized by a Corps of Engineers permit identified as Kinia River 2, NPACO No. 4-970493 and a discharge may result from the proposed activity.

Having reviewed the application and comments received in response to the public notice, the Alaska Department of Environmental Conservation certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, will comply with applicable provisions of Section 401 of the Clean Water Act, the Alaska Water Quality Standards, 18 AAC 70, and the Standards of the Alaska Coastal Management Program, 6 AAC 80, provided that the following stipulation is adhered to. This stipulation was adopted pursuant to 6 AAC 50 (Project Consistency with the Alaska Coastal Management Program) and is necessary to ensure that your project is consistent with the ACMP:

1. Prior to any fill placement, a silt fence shall be installed on a line parallel to and within 5' of the proposed fill toe of slope within all wetland areas that contain standing water that is connected to any natural body of water or where the toe of slope is within 25' of said waterbody.

4/30/99
Date

Tim Rumfelt
Environmental Specialist