


Memorandum

To: AnnMarie Lane, Planning Director, City of Valdez, AK
From: Vernon L. Roelfs, PE, Valdez Engineering Inc. (VEI) 
Date: November 27, 2017
Re: Preliminary Plat Application Review for Blue Spruce Subdivision, Septic Information

As requested, the following are our recommendations from our review of the preliminary plat application for the proposed Blue Spruce Subdivision. The proposed subdivision consists of twenty 0.29 acre lots, plus a 1.04 acre snow lot. The proposed subdivision is adjacent to the Robe River Subdivision, consisting of 194 lots generally ranging from 0.3 to 0.5 acres, and the Northern Lights Subdivision, consisting of 12 lots ranging from 0.4 to 1.1 acres. Both the existing Robe River and Northern Light subdivisions, and the proposed Blue Spruce Subdivision, will be served by City water and onsite sewer systems.

Recommendations pertaining to the Developer:

1. According to Valdez Municipal Code, VMC 16.16.010, proposed subdivision designs shall comply to the following standards. "D. The regulations of the State Department of Environmental Conservation relating to lot size and lot elevation if the subdivision is not served by a public sewer and provision for such service has not been made;" To comply with this code, the Developer should adhere to the standards and procedures set forth in the ADEC document titled; "Subdivision Plan Review , Guidelines and Procedures", dated June 1, 1990. Copy Attached.
2. In addition to the submittal requirements listed in Valdez Municipal Code, VMC 13.12.090, also submit information and documents listed in the ADEC document listed above. Reference Submittal Requirements on page 46 of the ADEC document. Exclude the following:
 - a. Coastal Project Questionnaire—No longer in use
 - b. Pollution Abatement Report, Nitrate modeling—See "Recommendations pertaining to the City" below.

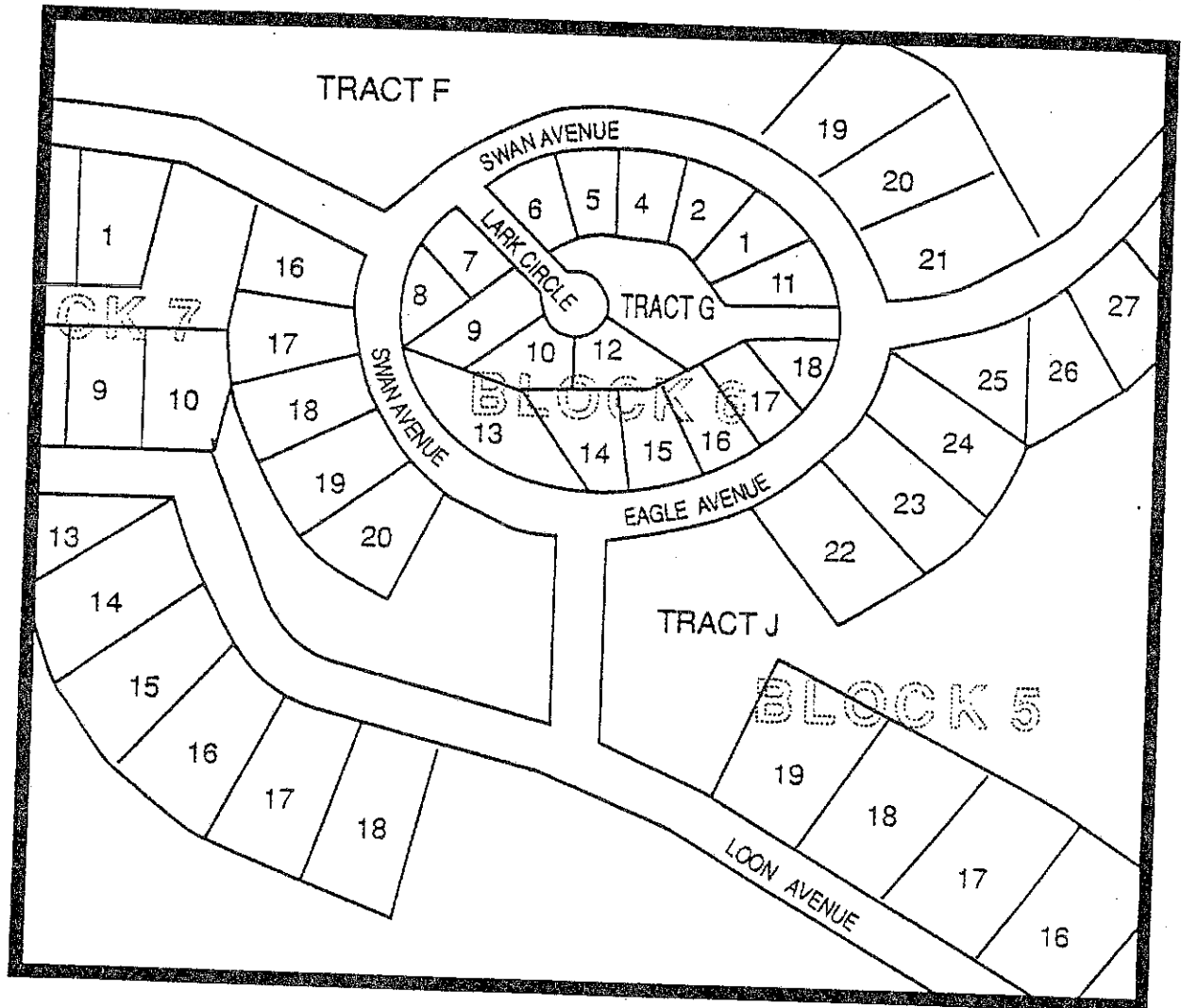
3. The geotechnical investigation test hole plan submitted last month by Wrangell Mountain Technical Services, (see attached) is approved. Additional test holes should be added if unexpected conditions are encountered that would affect the septic system designs.
4. On a preliminary plat map with topo and contour information, show locations on each lot for primary absorption field and one replacement field.
5. We understand that several of the lots will be developed with zero lot line duplexes straddling two lots. Show a typical two lot layout with the duplex structure and the two primary septic systems and the two replacement areas. This design would be applicable for the shallowest groundwater areas encountered. This design would be stamped by an engineer registered in the State of Alaska.

The proposed land development would add to an area that has been mostly developed using lot sizes less than 0.5 acre with onsite sewer and City water. This density of onsite sewers has been problematic in many areas both here in Alaska and in the lower 48.

Recommendations pertaining to the City:

1. Conduct Nitrate modeling as listed in 18 AAC 72.260, Paragraph (5). The modeling would be completed for just the existing Robe River and Northern Lights Subdivisions and then the Robe River and Northern Lights Subdivisions with the Proposed Blue Spruce Subdivisions added in.
2. Conduct a monitoring program with quarterly water samples gathered from surrounding wells and nearby surface water lakes and streams. Analyses would include: Nitrate-N, Fecal coliform and total coliform, and chloride. Sampling would be quarterly for the first year and annually thereafter for an indefinite period.

Alaska Department of Environmental Conservation



SUBDIVISION PLAN REVIEW

GUIDELINES AND PROCEDURES

DOMESTIC WASTEWATER PROGRAM

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ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**SUBDIVISION PLAN REVIEW
GUIDELINES AND PROCEDURES**

June 1, 1990

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DOMESTIC WASTEWATER PROGRAM**

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I. GENERAL PROCEDURES

A. PURPOSE

The purpose of the subdivision plan review process is to require as a condition of subdividing that there are, or will be provided, adequate means of disposing of domestic wastewaters that are, or will be, generated on each lot. In this context, adequate disposal means that domestic wastewater can be disposed of without threatening public health, without violating standards of quality for surface waters or groundwaters, and without threatening potable water sources or systems.

The five general categories of domestic wastewater disposal from a subdivision are:

1. Conventional Soil absorption systems [On-lot]
2. Alternate on-lot disposal systems [On-lot]
3. Construction of a collector sewer or a collector sewer and treatment system
4. Connection to an existing wastewater disposal system
5. Treatment systems with individual marine outfalls

As defined in the wastewater regulations, the terms **subdivision**, **subdivide**, and **subdividing**, mean to divide land or combine lots or parcels by recording, sale, contract, lease, or any other means into two or more lots, sites, or other division for the purpose, whether immediate or future, of conveyance or development, including mobile home parks; the terms include resubdivision and, when appropriate to the context, the process of subdividing or the areas subdivided; the date of a subdivision is the date five days after the submission of a proposed subdivision plat to a platting authority or, where no plat is filed, the date 60 days before a subdivision parcel is offered for sale or conveyance.

Except as provided in section R., p.11, of these guidelines, no person may subdivide, transfer, sell, contract to sell, lease, or otherwise convey an interest in a lot within a subdivision unless plans for that subdivision have been approved by the Alaska Department of Environmental Conservation (DEC).

B. AUTHORITY

Authority for requiring that plans for proposed subdivisions be reviewed and approved by DEC is contained in Alaska Statute section 46.03.090, "Plans for pollution disposal", which reads:

The Department [DEC] may require the submission of plans for sewage and industrial waste disposal or treatment or both for a publicly or privately owned or operated industrial establishment, community, public or private property subdivision or development.

C. LIMITATIONS

For the purposes of its review, DEC assumes that, at a minimum, domestic wastewater on subdivision lots reviewed under these guidelines will be generated at flows typical of single-family residential development. Where zoning or development patterns indicate development other than single-family residential housing, DEC may modify the requirements contained in this document to reflect the expected wastewater flows and characteristics. Criteria contained in references in DEC's Wastewater Disposal Regulations (18 AAC 72) and its Domestic Wastewater System Plan Review Guidelines and Procedures may be used to project wastewater flows and characteristics for subdivisions other than single-family residential housing.

DEC approval of a proposed subdivision only attests to compliance with the applicable approval criteria included in the wastewater disposal regulations (18 AAC 72). Also, approval of plans for a proposed subdivision does not necessarily mean that it is possible to develop each lot within the subdivision for the specified purpose.

It is DEC's policy to periodically compare these guidelines and associated regulations with advances in the field of wastewater disposal technology and their application in Alaska, to incorporate appropriate changes in policy, and to otherwise improve the documents.

D. STANDARD REVIEW AND APPROVAL PROCEDURES

As part of the subdivision plan review process, the subdivider must specify the proposed means of wastewater disposal, and provide information demonstrating its applicability as part of the plan review application. The standard and abbreviated subdivision plan review process consists of the following steps:

1. The subdivider obtains a subdivision plan review application packet from the DEC district office;
2. The subdivider determines whether the subdivision lies within a coastal zone, and if so submits a coastal project questionnaire as part of the submittal packet to the local DEC office. Further information regarding projects in coastal zone areas is found in Section I, p.6;
3. The subdivider and DEC review staff may hold a preapplication conference. The conferences are held at the request of the subdivider;
4. The subdivider submits the required information as described in the submittal requirements of the appropriate section of these guidelines. Use of checklists provided in Appendix C may help the subdivider determine all required information;

5. Within five working days, the district DEC office screens the contents of the packet for completeness, and notifies the subdivider of any missing information required by the checklist in Appendix C;
6. Usually within 15 calendar days, but not more than 30 calendar days of receipt of a complete application, DEC issues an approval or denial letter. Denials include a rationale. Approval may be conditional (see section K, p.7). The scope of DEC's review will be limited to the items in the submittal requirements and approval criteria in the appropriate section of these guidelines;
7. If plan approval is denied, the subdivider may submit the application upon modification, or appeal the decision (see section M., p.8);
8. Upon receipt of an approval letter, the subdivider submits a copy of the approval letter, the final plat (with required plat notes), and a blue-line copy of the final plat to the DEC district office. If the subdivision qualifies under the provisions of AS 29.40.090(b), or is a subdivision that is otherwise exempt from platting requirements, DEC approval will consist of an approval letter to the subdivider, since a plat would not be required;
9. The district office reviews the final plat to insure that it is consistent with the approved preliminary plat submitted to DEC and contains all required notes, then affixes DEC's approval to both the final plat and the DEC blue-line copy. This review can usually be accomplished at the time of submittal of the final plat, but will not exceed 5 calendar days from the time of submittal;
10. It is the responsibility of the subdivider to ensure that a copy of the final recorded plat as recorded by the recording agency is provided to the local DEC office within ten working days of recording.

E. THE PREAPPLICATION CONFERENCE

A subdivider may request a preapplication conference to discuss and resolve issues prior to plan submittal. DEC holds the conference within 15 calendar days from the time of the request. The conferences are usually no more than one hour in duration. The applicant presents at least a working map and conceptual plot plan. The conferences are attended by district office staff that actually perform subdivision reviews. DEC notifies the appropriate platting authority of the time and location of the conference, should the platting authority desire to attend. Results and agreements of the conference are recorded in writing and distributed to the participants within five calendar days of the conclusion of the conference.

F. THE TWO-STEP REVIEW

Each review consists of two steps: The first step comprises an initial

screening, using the checklist of submittal requirements in Appendix C to determine whether the basic components of the submittal requirements are included. The DEC district offices perform this initial screening within the first five working days after receiving an application. The owner of the proposed project is notified of any missing information in writing, or by phone (with written confirmation back-up). The applicant may want to use the checklists provided in Appendix C to prevent omission of required items.

The second step comprises the actual technical review. In some cases the technical review reveals the need for additional technical information, the absence of which could not be detected at the time of the initial screening. In those cases it may be necessary to request additional information.

G. REVIEW PRIORITIES

Subdivision plans, including resubmittals, are reviewed on a first-in-first-out basis. However, at the request of a subdivider and at the discretion of the district DEC office, a resubmittal involving only minor changes or additions may be given a higher priority than initial submittals.

H. RESPONSE TIME

By regulation, DEC has 30 calendar days to issue a decision on a complete subdivision plan review application. However, it is the Department's goal to issue the majority of such decisions within 15 calendar days of receipt of a complete application. Each DEC district office maintains a record of the turnaround time for subdivision plans.

I. SUBDIVISIONS IN THE COASTAL ZONE

The Alaska Coastal Management Act, AS 46.40, requires that all projects proposed for areas lying within or affecting the "coastal zone" must be determined to be consistent with state and local coastal management plans.

Consistency review procedures are outlined in 6 AAC 50, and are performed by state and federal resource agencies [the Alaska Dept. of Fish & Game (ADF&G), Alaska Dept. of Natural Resources (DNR), Alaska Dept. of Environmental Conservation (DEC), U.S. Army Corps of Engineers], as well as local coastal districts which participate in the consistency review process. These reviews are coordinated by the state Office of Management & Budget, Division of Governmental Coordination (DGC), if permits or authorizations from more than one agency are required. If only one state permit is required, the resource agency responsible for that permit coordinates the review.

To determine what review is required, the subdivider must:

1. Determine if the project is in or may affect the coastal zone. Information on coastal zone boundaries and assistance in making the

determination can be obtained from the local DEC or DGC offices (see address list at the end of Appendix E);

2. If the project lies within or may affect the coastal zone, the subdivider completes a Coastal Project Questionnaire (Appendix E), and returns it to the local DEC office. Answers provided by the applicant on the questionnaire indicate whether review or permits by state or federal agencies will be required. If the questionnaire indicates that review or permits by an agency other than DEC will be required, the questionnaire will be forwarded by DEC to the appropriate regional DGC office, who will coordinate the consistency review. To speed the review and permit process, the applicant is encouraged to seek assistance from the resource agencies (ADF&G, DNR, DEC, Corps of Engineers) to determine whether permits from these agencies will be required. Incorrect or incomplete answers on the questionnaire could cause a delay in the review of the project;
3. If the project is not within, or will not affect a coastal zone, completion of the Coastal Project Questionnaire is not required.

J. OTHER AUTHORIZATIONS

DEC's approval of subdivision plans only attests to compliance with the appropriate approval criteria as set out in chapters II-IX of this guidance. Depending on the type and extent of the subdivision, other authorizations or permits may be required. The Coastal Project Questionnaire in Appendix E is designed to help the subdivider determine if other approvals are needed from the Alaska Departments of Fish and Game, Natural Resources, or Environmental Conservation, or the U.S. Army Corps of Engineers.

K. CONDITIONAL APPROVALS

Approval letters issued to the subdivider prior to affixing DEC approval on the final plat and blue-line copy may include certain terms and conditions. For example, when the subdivider proposes construction of a collector sewer or a collector sewer and treatment system, final approval may be made contingent upon DEC approval of the plans for the collector/treatment system, and receipt of satisfactory evidence of construction assurance.

L. WAIVERS

When DEC finds that a provision of the guidelines relating to separation distances, holding tanks, septic tanks and soil absorption systems, or discharge to sewers, is not needed to protect public health or the environment, it will waive or modify that provision as warranted. DEC's decision to waive or modify a provision will be based upon a review of effluent quality and quantity, soil and groundwater conditions, surface waters and topography, geology, water and land uses, construction methods and materials, and any other environmental factor which is important in the evaluation. DEC may,

in its discretion, require that items submitted in support of a waiver request be sealed by a registered engineer.

DEC recommends that any request for waiver be discussed with the review staff either informally or at a preapplication conference prior to preparation of the subdivision plan review application packet.

M. APPEALS

Within 10 calendar days after receiving the DEC's decision concerning plans submitted for approval under this chapter, the applicant or other person adversely affected by the decision may request a review of the decision by the DEC regional supervisor. The request must be made in writing to the regional supervisor, and must include

1. the name, mailing address, and telephone number of the requestor; and
2. a description of the proposed project, including the name and legal description of the subdivision when applicable; and
3. a clear and concise statement of the basis for the request, including
 - (A) a statement of the nature and scope of the requestor's interests, and an explanation of how and to what extent those interests would be directly and adversely affected by the decision; and
 - (B) the contested terms or conditions, and proposed alternatives.

Upon receipt of a request for review, the regional supervisor, or a designee (other than the person who issued the contested decision), will decide if the request has merit, or if the original decision is satisfactory. If the regional supervisor or designee decides that the request does not merit review, he or she will inform the requestor in writing of this decision within 10 working days after receipt of the request, and of the reasons for the decision. The denial will include the statement that the requestor may appeal the denial to the DEC Central Office, Wastewater & Water Treatment section chief, or may seek an adjudicatory hearing under 18 AAC 15.200.

If review is granted, the regional supervisor or designee will, in his or her discretion, request additional information of the applicant or other requestor. The regional supervisor, or the designee, will issue a final decision within 30 calendar days after receipt of the request for review or receipt of additional information requested, whichever is later.

The requestor will be advised of the right to appeal the regional supervisor's

final decision to DEC's Central Office, Wastewater and Water Treatment section chief within 10 days of the decision. The department will also advise the applicant of the right to instead seek an adjudicatory hearing under 18 AAC 15.200.

When the Wastewater & Water Treatment section chief receives an appeal from the regional supervisor's decision on review, he or she will appoint a three-member panel of technically qualified persons from within the department who were not previously involved in the original plan review decision to review all aspects of the matter and to provide a recommendation within 30 days after receiving the appeal. The section chief will issue a final decision immediately after receiving the panel's recommendations, and will inform the applicant or other requestor of the right to seek an adjudicatory hearing under 18 AAC 15.200.

The 30-day time limit for seeking an adjudicatory hearing on a decision for which review is requested begins when a decision is made at any of the review stages discussed above, to allow the applicant or other interested party the ability to seek an adjudicatory hearing after any stage in the appeal process.

N. POLLUTION ABATEMENT

A major concern in many areas throughout the United States and Alaska is that subdivisions will result in a density of on-lot treatment and disposal systems greater than the natural ability of the soils and receiving environment to assimilate system effluents. Elevated concentrations of nitrates, fecal coliform bacteria and other pollutants have been documented in numerous instances as a result of residential development following subdivision.

In addition to the potential for polluting groundwaters, on-lot disposal of wastewater in areas with a shallow soil mantle can contaminate shallow subsurface or surface waters. Where these waters collect in roadside ditches, or otherwise come to the surface, they present a serious health threat. There are documented cases in areas of Alaska where on-lot wastewater disposal system failure in conjunction with high system densities (e.g., one per 15,000 to 20,000 square feet) have caused significant contamination of shallow subsurface or surface waters.

The quality of surface and groundwaters must be maintained within safe limits. Consequently, a subdivision must be planned so as not to contribute to nitrate concentrations, fecal coliform counts, or other pollutants to increase the cumulative concentrations beyond acceptable limits.

When subdivisions propose on-lot disposal of wastewater for single-family residential development with lots less than 40,000 square feet of area, the subdivider must demonstrate through the use of mathematical calculations that the nitrogen concentration in the groundwater aquifer most likely to be affected by the proposed disposal systems will not exceed 5 mg/l (as nitroge-

n) at the property line of each lot below this size. Samples of mathematical models providing these calculations are presented in references 1-3 listed in Appendix F. There are many other groundwater modeling references to choose from as well. This requirement does not apply to subdivisions which have, or will have, a public water system capable of delivering water to each lot.

For subdivisions with a minimum lot size of 40,000 square feet or greater, groundwater pollutant calculations are not required. In most cases, the one system per 40,000 square-foot density should be sufficient to mitigate the effect of pollutants that are not ordinarily removed in the soils. It should also mitigate the effect of failing on-lot systems.

In all cases of proposed wastewater disposal, whether on-lot (conventional or alternate system) or off-lot disposal is proposed, proper separation distances between wastewater system components and surface waters and drinking water sources, as provided in 18 AAC 72.015, must be met.

O. SUBDIVISIONS SUBJECT TO DEC REGULATIONS THAT DO NOT REQUIRE A REVIEW

For subdivisions meeting either of the three criteria listed below, DEC will require only that the subdivider submit a completed Subdivision Plan Review Data Sheet (Appendix A), a completed Subdivision Plan Review Owner's Statement (Appendix B), and the final subdivision plat:

1. Subdivisions with a minimum lot size of 400,000 square feet; or
2. Existing subdivisions, which have previously been approved by DEC, where the only proposed action is to: vacate lot lines to create a fewer number of lots; move one or more lot lines a distance of 10 feet or less without increasing the number of developable lots; or moving one or more lot lines without increasing the number of developable lots, while maintaining a minimum of 20,000 square feet of contiguous usable wastewater disposal area, as described in Section IV.B., for each lot affected by the proposed lot line movements.

In completing the Data Sheet, the subdivider signifies in section 7 of the Data Sheet that the subdivision meets one of the above categories. Completion of section 8 of the Data Sheet is not required for subdivisions that do not require a review.

P. ABBREVIATED REVIEWS

Subdivisions with a minimum lot size of 200,000 square feet (excluding dedicated road rights-of-way) qualify for an abbreviated review. In an abbreviated review, DEC waives some of the requirements normally associated with subdivision plan review. For example, investigations to determine if conditions are suitable for on-lot wastewater disposal may be

limited to general descriptions of soils and topography. The actual submittal and approval requirements for abbreviated reviews are shown in chapter III of this document.

Subdividers anticipating an abbreviated review are encouraged to arrange a preapplication conference to discuss particular submittal and approval requirements for the subdivision.

Q. SUBDIVISIONS PROPOSING NO WASTEWATER DISPOSAL

There may be instances when subdividing land is not for the purpose of, and is not followed by, residential or other types of development that will result in the need to dispose of wastewater. Examples of such subdivisions include cemeteries, subdivisions on which repeater stations are to be erected, promotional subdivisions (i.e., "Own a square-foot of Alaska"!), cases where the subdivided plots are uninhabitable and will remain so, etc. Subdivisions involving road or utility rights-of-way are, at DEC's discretion, also reviewed under this section.

DEC approves subdivisions in this category when:

1. the area is zoned for purposes other than residential, industrial, or other development that will generate wastewater; or
2. a subdivision is being proposed for the purpose of creating or changing a road or utility right-of-way; or
3. in areas where there is no zoning authority, the subdivider demonstrates to DEC's satisfaction that wastewater will not be generated from the immediate or future development of the property. In making such determinations, DEC considers development patterns in surrounding and similar areas, any restrictions to the development of water supplies, as well as other pertinent considerations.

In approving subdivisions for road or utility rights-of-way, the department will apply applicable review and approval criteria from other subdivision categories to the remaining portions of parcels affected by the right-of-way. When subdivisions are proposed for a specific use (i.e., cemeteries, etc.) then the specific use for the subdivision is included on the final plat as a plat note.

R. EXEMPT SUBDIVISIONS - ANCSA 14(c) CONVEYANCES

Section 14(c) of the Alaska Native Claims Settlement Act (ANCSA) provides for conveyance of lands to certain individuals, municipal corporations, or state or federal governments by village corporations. As conveyance of these lands is mandated by federal law, the Alaska Attorney General's Office has determined that DEC subdivision regulations do not apply to such conveyances. Therefore, subdivisions proposed by village corporations under the provisions of ANCSA Section 14(c) are exempt from any DEC

regulations pertaining to the initial act of subdividing, platting, or disposition.

However, any subdividing of these lands subsequent to the ANCSA 14(c) transfer is subject to DEC's review under the appropriate section of these guidelines. In addition, any wastewater disposal on such lands is subject to the appropriate provisions of DEC's wastewater disposal regulations at any time, regardless of the method or institutions involved in subdividing.

II. SUBDIVISIONS SUBJECT TO DEC REGULATIONS THAT DO NOT REQUIRE A REVIEW

For subdivisions meeting any of the criteria listed below, DEC will require only that the subdivider submit a completed Subdivision Plan Review Data Sheet (Appendix A), a completed Subdivision Plan Review Owner's Statement (Appendix B), and a final subdivision plat:

- . minimum lot size is 400,000 square feet or greater; or
- . the existing subdivision was approved by DEC, and the proposed subdividing action is limited to:
 - . vacating lot lines to create fewer lots, and/or
 - . moving one or more lot lines a distance of 10 feet or less without increasing the number of developable lots, and/or
 - . moving one or more lot lines without increasing the number of developable lots, while maintaining a minimum of 20,000 square feet of contiguous usable wastewater disposal area, as described in Section IV.B., for each lot affected by the proposed lot line movements.

A. Submittal Requirements

The submittal packet to DEC should contain the following:

1. A completed Subdivision Data Sheet (see Appendix A), or similar format containing the information requested (section 8 need not be completed);
2. A completed Owner's Statement (see Appendix B), or similar format containing the information requested by the Statement;
3. For subdivisions within or affecting the coastal zone, a completed Coastal Project Questionnaire (Appendix E)
4. The final subdivision plat, and a blue-line copy of the final subdivision plat, containing all notes requested by DEC, including the standard plat note No. I, Appendix D. A person proposing a subdivision subject to AS 29.40.090(b), or a subdivision that is otherwise exempt from platting requirements, may submit a working map, as described in Section III.A.5., in place of the final subdivision plat.

B. Approval Criteria

1. The subdivision meets one or more of the following categories:
 - a. The subdivision minimum lot size is 400,000 square feet or

greater; or

- b. The existing subdivision was approved by DEC, and the proposed subdividing action is limited to:

- . vacating lot lines to create fewer lots; and/or
- . moving one or more lot lines a distance of 10 feet or less without increasing the number of developable lots; and/or
- . moving one or more lot lines without increasing the number of developable lots, while maintaining a minimum of 20,000 square feet of contiguous usable wastewater disposal area, as described in Section IV.B., for each lot affected by the proposed lot line movements.

2. For subdivisions not requiring plan review, the final plat must contain plat notes discussed in paragraph 4. of the submittal requirements. This requirement does not apply to subdivisions subject to AS 29.40.090(b) or to those otherwise exempt from platting requirements.

III. ABBREVIATED REVIEWS

Abbreviated reviews are performed for subdivisions with minimum lot sizes between 200,000 and 400,000 square feet, exclusive of road rights-of-way (see section P., p.10 for description of subdivisions qualifying for abbreviated reviews).

A. SUBMITTAL REQUIREMENTS

The submittal packet to DEC should contain the following:

1. A completed Subdivision Data Sheet (see Appendix A), or similar format containing the information requested by the Data Sheet;
2. A completed Owner's Statement (see Appendix B), or similar format containing the information requested by the Statement;
3. For subdivisions within or affecting the coastal zone, a completed Coastal Project Questionnaire (see Appendix E);
4. A preliminary subdivision plat; this requirement does not apply to a subdivision subject to AS 29.40.090(b), or a subdivision that is otherwise exempt from platting requirements.
5. A working map of the proposed subdivision, sealed by a registered engineer or by a registered land surveyor, at a scale between 50 and 400 feet per inch; if the scale value is greater than 100 feet per inch, it must be in multiples of 100 feet; the map must clearly depict

- (A) parcel plots and sizes; and
 - (B) water bodies and their high water marks for all surface waters, including oceans, streams, rivers, springs, swamps, bogs, lakes, ponds, creeks, reservoirs, and other perennial surface waters, natural or man-made, within the subdivision and within 200 feet of the subdivision boundary;
- 6. A general description of a proposed practical and safe method of disposing of wastewater applicable to each lot, or to each group of lots for which the proposed method of wastewater disposal is similar;
 - 7. A general topographic description, sealed by a registered engineer or by a registered land surveyor, in sufficient detail to support the applicability of the proposed means of wastewater disposal described in paragraph 6. above; and
 - 8. A general soils and water table description in sufficient detail to support the applicability of the proposed means of wastewater disposal; the description must be based on
 - (A) existing information; or
 - (B) visual analysis by, or local knowledge of a registered engineer or a registered land surveyor.

B. APPROVAL CRITERIA

The subdivider must demonstrate that the minimum lot size is 200,000 square feet and that practical and safe methods of on-lot wastewater disposal can be constructed by the eventual landowners. As a matter of course, for subdivisions required to prepare plats, DEC requires a standard plat note explaining that conventional soil absorption systems may not be appropriate (see Appendix D, plat note number II.).

IV. CONVENTIONAL ON-LOT SOIL ABSORPTION SYSTEMS

Conventional soil absorption systems are wastewater treatment and disposal systems of typical trench, bed, or seepage pit design, using natural soils for the treatment media. Fill above grade or insulation may be used to prevent frost penetration. All conventional on-lot soil absorption systems utilize a septic tank for primary treatment prior to wastewater entry into the absorption system.

Due to the potential for groundwater pollution from too high a density of on-lot disposal systems, subdivisions should have a minimum lot size of 40,000 square feet. For subdivisions with lot sizes less than 40,000 square feet, the subdivider must demonstrate through the use of mathematical calculations (see section N., p.9) that nitrate nitrogen concentrations in groundwater at the property line of each lot less

than this size will not exceed 5 mg/l.

A. SUBMITTAL REQUIREMENTS

The submittal packet to DEC should contain the following:

1. A completed Subdivision Data Sheet (see Appendix A), or similar format containing the information requested by the data sheet;
2. A completed Owner's Statement (see Appendix B), or similar format containing the information requested by the statement;
3. For subdivisions within or affecting the coastal zone, a completed Coastal Project Questionnaire (see Appendix E);
4. A preliminary subdivision plat; this requirement does not apply to a subdivision subject to AS 29.40.090(b), or a subdivision that is otherwise exempt from platting requirements.
5. A Soils Report bearing the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska. The Soils Report must contain sufficient information to evaluate the items listed in Section B.2. of this chapter;
6. A Pollution Potential Report bearing the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska (when required under section B.3. of this chapter);
7. A Working Map at a scale between 50 and 400 feet per inch, provided that if the scale value is greater than 100 feet per inch, the scale must be in multiples of 100 feet, i.e. 100 feet per inch, or 200 feet per inch, or 300 feet per inch, etc. The working map bears the seal and signature, or signature and registration number, of a professional engineer or land surveyor registered to practice in Alaska. The working map clearly depicts:
 - (A) parcel plots and sizes;
 - (B) topography with five-foot, or less, contour intervals in areas with ground surface slopes less than 15%; and ten-foot, or less, contour intervals in areas with ground surface slopes of 15% or greater (other contour intervals or topographic descriptions may be approved by the district DEC offices for particular situations);
 - (C) the location of all soils field work, including location of borings, test holes, etc;

- (D) waterbodies and their high water marks for all surface waters, including oceans, streams, rivers, springs, swamps, bogs, lakes, ponds, creeks, reservoirs, and other perennial surface waters, natural or man-made, within the subdivision and within 200 feet of the subdivision boundaries;
- (E) muskegs, as well as intermittent drainages that are designed, or can be expected, to convey rainfall or snowmelt flows for a continuous period of more than one week per year;
- (F) existing sources of water for public drinking water systems within the subdivision and within 200 feet of the subdivision boundaries, and sources of water for private drinking water systems within the subdivision and within 100 feet of the subdivision boundaries. This information can be obtained from i) physical inspection of the adjacent property, or ii) where access to adjacent property is denied, a review of existing records (DEC, Alaska Dept. of Natural Resources, local governments, etc.) which would be expected to delineate drinking water system sources and their locations; and
- (G) an approximate delineation of the apparent usable wastewater disposal area on each lot (as defined in B.1 of this section).

B. APPROVAL CRITERIA

In general, approval of subdivision plans which propose wastewater disposal via conventional on-lot soil absorption systems requires that a) there is sufficient area on each lot that is usable for a soil absorption system, and b) that the lot density in the subdivision is low enough to prevent accumulation of wastewater system pollutants in the groundwater affected by the subdivision. DEC considers 40,000 square feet to be the minimum acceptable lot size, below which the subdivider must demonstrate with mathematical calculations which show that the nitrate nitrogen concentrations in groundwater will not exceed 5 mg/l beyond the property boundary of each lot less than this size.

The specific approval requirements are:

1. Usable Wastewater Disposal Area

The subdivider must demonstrate for each lot that there is at least 20,000 square feet of contiguous area suitable for use for an initial and replacement wastewater disposal system, sidewalks, driveways, and an average single-family residence with associated appurtenances, but excluding dedicated road rights-of-way and utility easements if the utility could interfere with a soil absorption system; to be considered usable wastewater disposal area

- (A) the soil types, moisture content (in areas of known or suspected permafrost), soil slopes, distances to downhill breaks in the terrain, and depths to seasonal high water table and impermeable strata must
 - (1) meet the requirements of the soils and analysis report described in Section B.2 below; and
 - (2) be suitable for use in a soil absorption system, as shown by the soils analysis and report; and
- (B) separation distances in or from any part of the usable wastewater disposal area must be maintained as required by 18 AAC 72.015; if an area outside the subdivision boundary cannot be visually inspected to determine existence and position of water system sources, the applicant may use existing records as the basis for this information, subject to confirmation by the department. DEC may request submission of a statement, signed by the subdivider or his/her designee, indicating that such research was conducted, the outcome of the research, and the documents or files researched.

2. Soils Testing and Report

The soils analysis and report required must demonstrate that subsurface conditions and soils are suitable for designation as a usable wastewater disposal area. Soils testing, test results, and the soils report must meet the following criteria:

- (A) Soils analysis
 - (1) the soils analysis and report must bear the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska;
 - (2) test holes and borings must be located to yield representative data for, and to provide coverage of, the entire subdivision;
 - (3) borings and test holes must have the following minimum depths below the ground surface:
 - (a) in areas known or suspected to contain permafrost, the lesser of
 - (i) 20 feet deep; or
 - (ii) a depth at which permafrost or an impermeable layer is encountered; and

- (b) the least depth associated with the following conditions, where they apply:
 - (i) two feet below the depth where the water table is encountered; or
 - (ii) 10 feet deep for shallow trench or bed systems; or
 - (iii) 12 feet deep for areas where deep trench or seepage pits will likely be used; or
 - (iv) the depth to bedrock, clay or other impermeable strata with an expected percolation rate slower than 120 minutes per inch;
- (4) soils in a usable wastewater disposal area must be
 - (a) clearly shown to be visually classified as GW, GP, SW, or SP, under the Unified Soils Classification System, and expected to have a percolation rate of between one and 60 minutes per inch;
 - (b) clearly shown to be GM or SM under the Unified Soils Classification System by a sieve analysis; or
 - (c) shown by a percolation test conducted in accordance with the procedure described in reference 4, Appendix F, to have a percolation rate between
 - (i) one and 30 minutes per inch for seepage pits, and
 - (ii) one and 60 minutes per inch for trenches or beds

[Note: Soils with percolation rates outside of these values must be approved by DEC on a case-by-case basis; please refer to Appendix G]

The accuracy of the percolation test must be confirmed by a correlation of the observed soil texture in the test hole with the range of soil texture types associated with the observed

percolation rate found in Appendix G. The percolation test must be performed by a professional engineer registered to practice in Alaska (or a person under their direct supervision), and the results must bear the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska;

(d) Subject to waiver by DEC

- (i) the ground surface slope must be less than 25 percent for trenches, and less than five percent for beds; and
- (ii) the distance from any part of a soil absorption system to downhill man-made or natural breaks in the slope of the terrain where the slope becomes greater than 25 percent must be at least 50 feet.

The department will, in its discretion, grant a waiver from the requirements of this paragraph for conventional soil absorption systems if existing soil types, vegetation, geologic factors, hydrologic factors, or other pertinent factors show that there is reasonable assurance that wastewater will not surface downslope, and that an unstable slope condition will not be created;

- (B) Use of soils with percolation rates other than those set out in paragraph B.2.(A)(4)(c) of this section must be approved by the department on a case-by-case basis, as described in Appendix F.
- (C) In areas known or suspected to contain permafrost, a soil moisture content profile analysis derived from laboratory testing methods, and taken from each test hole used for soils testing in the subdivision, must show that the soils throughout the subdivision are adequately drained.

- (D) Subject to paragraphs B.2.(E) & (F) of this section, the minimum number of test holes and soil analyses required under this section must be at least one per two acres of subdivision, with at least one test hole and one soil analysis for a subdivision of two acres or less. When required by the department, the applicant shall supplement the results of the soil analyses with information from visual inspections of the area or with existing soils information to demonstrate that the test results can be expected to represent conditions throughout the subdivision.
- (E) The department will, in its discretion, allow less than the minimum number of test holes and soil analyses required by paragraph B.2.(D) of this section if sufficient existing soils data indicate general consistency throughout all or a portion of the subdivision. This allowance will be made only during the preapplication conference described in Section I.E., and will be subject to confirmation during the soils investigation on the subdivision property.
- (F) The department will, in its discretion, modify the soil testing requirements of paragraph B.2.(D) of this section for subdivision lots equal to or greater than 200,000 square feet in size as follows:
- (1) for lots equal to or greater than 200,000 square feet, but less than 400,000 square feet in size, the information required by paragraphs III.A.5 - 8. may be submitted in place of the soil analyses and test holes required by this section; and
 - (2) for lots equal to or greater than 400,000 square feet in size, the department will, in its discretion, waive the requirements of this section.
- (G) Except as provided in paragraph B.2.(H) of this section, the minimum depth from the ground surface to the seasonal high water table and impermeable strata must conform to the values listed in the accompanying table below. The listed depth must provide at least
- (1) two, three, or four feet of earth cover as insulation, depending on geographical location;
 - (2) one foot for the distribution pipe, gravel, and barrier material; and
 - (3) four feet of separation from the bottom of the system to the seasonal high water table.

Minimum Depths From The Ground Surface

<u>Geographical Location</u>	<u>Minimum Depth of Ground Cover in feet</u>	<u>Minimum Depth to Seasonal High Water Table in feet</u>	<u>Minimum Depth to Impermeable Strata in feet</u>
Southeast Alaska [east of 141° W. Longitude]	3	8	10
Southwest Alaska [Kodiak Island Borough and all areas southwest of Chignik (incl. Chignik)]	2	7	9
Valdez, and the area enclosed by the Valdez Basin	3	8	10
All remaining areas of the state	4	9	11

- (H) The minimum depths from the ground surface to the seasonal high water table set out in paragraph B.2.(G) of this section may, at the applicant's request, and in the department's discretion, be reduced by up to two feet by insulating with non-water absorbing insulation or by mounding above grade to provide protection from frost penetration. Insulation material may be substituted for up to two feet of earth cover if the department approves material type and thickness, except that at least two feet of earth cover must be maintained. To have this lesser vertical separation distance approved, the applicant must request a waiver from the requirements of paragraph B.2.(G) of this section and must submit, in addition to the other applicable requirements of this chapter, a typical system design sealed by a registered engineer.
- (I) When the water table is encountered in the test holes, the depth to the seasonal high water table must be determined by
 - (1) monitoring test holes or soil borings at times between May and October (inclusive); or
 - (2) soil mottling analyses; or
 - (3) interpretation of levels of standing open water; or
 - (4) local knowledge and experience, if approved by the department; or
 - (5) a combination of these methods.
- (J) The depth to any seeps must be noted, and will, in the department's discretion, require subsequent monitoring.

3. Pollution Potential Report

For subdivisions with a minimum lot size less than 40,000 square feet and which will not be supplied with a public water system, the subdivider must demonstrate through the use of calculations which show that nitrate concentrations in the groundwater aquifer most likely to be affected by the proposed disposal systems will not exceed 5 mg/l (as nitrogen) at the property boundary of each lot below this size (see section N., p.9). The calculations must bear the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska. This requirement does not apply to subdivisions which have or will have a public water system capable of delivering water to each lot. If a public water system is proposed, but not already in existence, construction assurance of the system, using the criteria outlined section VII.B.3., will be required prior to approval of the subdivision by DEC.

4. Plat Notes

For subdivisions required to prepare plats, standard plat notes are shown on the final plat, (see Appendix D) as well as other plat notes required to ensure proper notification of any restrictions to wastewater treatment and disposal.

V. ALTERNATE ON-LOT WASTEWATER DISPOSAL

Alternate means of on-lot wastewater disposal comprise those methods of on-lot disposal other than conventional soil absorption systems (as defined in chapter IV), but do not include non-water carried disposal methods (composting, incineration, etc.), or holding tanks. The Department considers subdivisions proposing alternate means of wastewater disposal when the subdivider demonstrates that conventional soil absorption systems, a collector sewer or collector system, a collector sewer or system and treatment system, or connection to an existing system (as defined in chapters IV, VII, and VIII) are not practicable due either to lack of suitable soils or economic considerations.

As with conventional on-lot soil absorption systems (chapter IV), the size of lots utilizing alternate on-lot soil absorption systems is of concern due to the potential for failed systems or groundwater pollution resulting from too high a density of wastewater disposal systems. For subdivisions with lot sizes less than 40,000 square feet, and which propose disposal of wastewater to on-lot soils, the subdivider must demonstrate through calculations (see section N., p.9) that nitrate nitrogen concentrations in groundwater at the property line of each lot below this size will not exceed 5 mg/l.

The subdivider is encouraged to arrange for a preapplication conference to confirm submittal requirements and approval criteria for the property in question.

A. SUBMITTAL REQUIREMENTS

The submittal packet to DEC should contain the following:

1. A completed Subdivision Data Sheet (see Appendix A), or similar format containing the information requested by the Data Sheet;
2. A completed Owner's Statement (see Appendix B), or similar format containing the information requested by the Statement;
3. For subdivisions within or affecting the coastal zone, a completed Coastal Project Questionnaire (see Appendix E);
4. A preliminary subdivision plat; this requirement does not apply to a subdivision subject to AS 29.40.090(b), or a subdivision that is otherwise exempt from platting requirements.

5. A Soils Report bearing the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska. There must be sufficient soils data presented to demonstrate that conventional on-lot soil absorption systems are not practicable, as well as supporting the use of the system proposed. The type and quantity of soils data required will vary depending on the type of system proposed, and must be sufficient to allow an evaluation of the ability of the proposed system to function properly;
6. If disposal of wastewater to on-lot soils is proposed, a Pollution Potential Report bearing the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska (when required under section B.4. of this chapter);
7. A Working Map at a scale between 50 and 400 feet per inch, provided that if the scale value is greater than 100 feet per inch, the scale must be in multiples of 100 feet, i.e. 100 feet per inch, or 200 feet per inch, or 300 feet per inch, etc. The working map bears the seal and signature, or signature and registration number, of a professional engineer or land surveyor registered to practice in Alaska. The working map clearly depicts:
 - a. parcel plots and sizes;
 - b. topography with five-foot, or less, contour intervals in areas with ground surface slopes less than 15%; and ten-foot, or less, contour intervals in areas with ground surface slopes of 15% or greater (other contour intervals or topographic descriptions may be approved by the district DEC offices for particular situations);
 - c. the location of all soils field work, including locations of borings, test holes, etc.;
 - d. water bodies and their high water marks for all surface waters, including oceans, streams, rivers, springs, swamps, bogs, lakes, ponds, creeks, reservoirs, and other perennial surface waters, natural or man-made, within the subdivision and within 200 feet of the subdivision boundaries;
 - e. muskegs, as well as intermittent drainages that are designed, or can be expected, to convey rainfall or snowmelt flows at any time for a duration of more than one week per year;
 - f. existing sources of water for public drinking water systems within the subdivision and within 200 feet of the subdivision boundaries, and sources of water for private drinking water systems within the subdivision and within 100 feet of the subdivision boundaries. This information can be obtained from

- i) physical inspection of the adjacent property, or ii) where access to adjacent property is denied, a review of existing records (DEC, Alaska Dept. of Natural Resources, local governments, etc.) which would be expected to delineate drinking water system sources and their locations; and
 - g. an approximate delineation of the apparent usable wastewater disposal area (as defined in section IV.B.1.);
- 8. Plans for treatment and disposal systems for each lot (or a single typical design for each group of systems which are identical), bearing the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska. These plans are required under the provisions of 18 AAC 72.210;
- 9. An adequate demonstration that a conventional onsite soil absorption system, collector sewer or collector system, collector sewer or collector system and treatment/disposal system, individual lot treatment system, or connection to an existing system are not practicable due either to lack of suitable soils or economic considerations.

B. APPROVAL CRITERIA

1. General

The subdivider must demonstrate that a conventional soil absorption system, collector sewer or collector system, collector sewer or collector system and treatment/disposal system, individual lot treatment system, or connection to an existing system are not practicable due either to lack of suitable soils or economic considerations.

2. Approved System Plans

Plans for treatment and disposal systems for each lot are approved by DEC under the system plan review procedures (18 AAC 72.210). DEC will accept a single typical system design for each group of systems which are identical;

3. Soils

There is sufficient soils data presented to demonstrate that conventional on-lot soil absorption systems are not practicable, and to support the use and proper functioning of the proposed system. The recommendations in reference 4, Appendix F for minimum soil and geologic conditions will be used when evaluating plans for on-lot mound types of treatment and disposal systems;

4. **Pollution Potential**

For subdivisions with a minimum lot size less than 40,000 square feet and which will not be supplied with a public water system, the subdivider must demonstrate through the use of mathematical calculations that nitrate nitrogen concentrations in the groundwater aquifer most likely to be affected by the proposed systems will not exceed 5 mg/l at the property boundary of each lot below this size (see section I.N.). The mathematical calculations must bear the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska. This requirement does not apply to subdivisions which have or will have a public water system capable of delivering water to each lot. If a public water system is proposed, but not already in existence, construction assurance of the system, using the criteria outlined section VII.B.3., will be required prior to approval of the subdivision by DEC.

5. **Separation Distances**

Separation distances in or from any part of the usable wastewater disposal area must be maintained as required by 18 AAC 72.015; if an area outside the subdivision boundary cannot be visually inspected to determine existence and position of water system sources, the applicant may use existing records as the basis for this information, subject to confirmation by the department. DEC may request submission of a statement, signed by the subdivider or his/her designee, indicating that such research was conducted, the outcome of the research, and the documents or files researched.

6. **Plat Notes**

For subdivisions required to prepare plats, standard plat notes are shown on the final plat, (see Appendix D) as well as other plat notes required to ensure proper notification of any restrictions to wastewater treatment and disposal.

VI. ON-LOT TREATMENT SYSTEMS WITH INDIVIDUAL MARINE OUTFALLS.

On-lot treatment systems with individual marine outfalls consist of a treatment system located on each lot from which effluent is discharged through a single outfall extending to marine waters.

A. SUBMITTAL REQUIREMENTS

The submittal packet to DEC should contain the following:

1. A completed Subdivision Data Sheet (see Appendix A), or similar format containing the information requested by the Data Sheet;

2. A completed Owner's Statement (see Appendix B), or similar format containing the information requested by the Statement;
3. A completed Coastal Project Questionnaire (see Appendix E);
4. A preliminary subdivision plat. The plat must show how each lot proposing marine outfalls will have access to marine waters, or must include easements or other vehicles which will allow access by such lots to marine waters for wastewater disposal; this requirement does not apply to a subdivision subject to AS 29.40.090(b), or a subdivision that is otherwise exempt from platting requirements. If a plat is not required, the subdivider should submit documentation which shows that each lot will have necessary access to marine waters for disposal;
5. Engineering plans for treatment and disposal systems for each lot, bearing the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska. DEC will accept a single typical design for each group of identical systems;
6. A soils analysis and report, sealed by a registered engineer, with sufficient soils data to demonstrate that neither a conventional nor an alternate onsite soil absorption system is practicable for the lot in question.

B. APPROVAL CRITERIA

1. General

Approval of plans for subdivisions proposing on-lot treatment systems with individual marine outfalls depends primarily on DEC approval of plans for each treatment and disposal system under the system plan review procedures.

For each lot proposing to dispose of wastewater via marine outfall, the subdivider must demonstrate that all such lots will have necessary access to marine waters for disposal. Proof of access would include, but not be limited to, spatial areas on the plat which provide marine water access from each lot, or easements or other authorizations provided to each lot that will allow marine water access for wastewater disposal.

The minimum lot size for subdivisions proposing on-lot treatment systems with individual marine outfalls is that area necessary to maintain separation distances listed in 18 AAC 72.015 between any part of the wastewater systems, and surface waters and drinking water supply sources;

2. **Approved System Plans**

Plans for treatment and disposal systems for each lot are approved by DEC under the domestic wastewater system plan review procedures (18 AAC 72.060), and dispersion and mixing calculations show that each outfall and the cumulative impact from all of the outfalls comply with this chapter and with 18 AAC 70, or otherwise comply with permit conditions;

3. **Construction and Operation of System**

Construction and proper operation of the treatment systems is feasible by the eventual lot owners;

4. **Disposal to Onsite Soils Not Feasible**

The soils analysis and report show that neither conventional nor alternate onsite soil absorption systems are a practicable wastewater treatment and disposal method for the lots in question;

5. **Plat Notes**

For subdivisions required to prepare plats, standard plat notes are shown on the final plat, (see Appendix D) as well as other plat notes required to ensure proper notification of any restrictions to wastewater treatment and disposal.

VII. CONSTRUCTION OF A COLLECTOR SEWER OR A COLLECTOR SEWER AND TREATMENT SYSTEM

This general category of providing sewer services refers to those subdivisions for which there is to be constructed: a collector sewer system or collector system that ties into an existing collector sewer, collector system, or treatment system; those that propose to construct a collector sewer or collector system and treatment system; and those that propose to construct a collector sewer system to which individual treatment systems are to connect (such as STEP systems - Septic Tank Effluent Pumping, etc.).

A. SUBMITTAL REQUIREMENTS

The submittal packet to DEC should contain the following:

1. A completed Subdivision Data Sheet (see Appendix A), or similar format containing the information requested by the Data Sheet;
2. A completed Owner's Statement (see Appendix B), or similar format containing the information requested by the Statement;
3. For subdivisions within or affecting the coastal zone, a completed

Coastal Project Questionnaire (see Appendix E);

4. A preliminary subdivision plat; this requirement does not apply to a subdivision subject to AS 29.40.090(b), or a subdivision that is otherwise exempt from platting requirements.
5. Documentation of construction assurance (see section B.3. of this chapter);
6. For systems proposing a collector sewer to tie in to an existing collector sewer or treatment system, connection assurance will be required as described in section B.4. of this chapter;
7. Engineering plans for the collector sewer, or collector sewer and treatment system, bearing the seal and signature, or signature and registration number, of a professional engineer registered to practice in Alaska. These plans are required under 18 AAC 72.060, system plan review.

B. APPROVAL CRITERIA

1. General

Approval of plans for subdivisions proposing construction of a collector sewer, or a collector sewer and treatment system, depends primarily on DEC approval of the plans for the system under the system plan review procedures, and providing assurance that the system will be constructed. The minimum lot size for subdivisions proposing construction of a collector sewer, or collector sewer and treatment system, is that area necessary to maintain separation distances listed in 18 AAC 72.015 between any part of the wastewater systems and surface waters and drinking water supply sources;

2. Approved System Plans

The department has approved plans for the proposed system under 18 AAC 72.210 -- 18 AAC 72.285; in lieu of plans for the system, the department will, in its discretion, accept a feasibility study for a wastewater collection, treatment, or disposal system or systems to serve a subdivision proposed by a federal, state, or local government entity, if the study shows that a proposed collection, treatment, or disposal system or systems is feasible;

3. Construction Assurance

Assurance is provided which demonstrates that the type of system upon which subdivision plan approval is to be granted will actually be constructed. Acceptable types of construction assurance include:

- a. Actually constructing the system; or
 - b. The existence of local government permitting systems whereby granting of building or zoning permits is made contingent upon DEC approval; or
 - c. A written agreement between the applicant and the local government which may include a provision for performance bonding or other security for constructing the system, and which includes conditions acceptable to the department for release of securities; or
 - d. Placing money in an escrow account of an amount sufficient to construct the proposed system with provisions acceptable to DEC for release of the money by the escrow agent upon construction of the system in a manner satisfactory to DEC; or
 - e. For federal, state, or local government entities proposing a subdivision under this section, a letter of assurance of funding availability for the system; or
 - f. Other arrangements that would assure construction of the system, which are approved by DEC on a case-by-case basis;
4. Connection Assurance (for systems proposing a collector sewer to tie into an existing collector sewer or treatment system)

The owner of the existing system attests in writing that the connections will be permitted. When the receiving wastewater system is approaching its capacity, DEC may also require a determination that the system is capable of accepting the additional hydraulic and organic loading;

5. Plat Notes

For subdivisions required to prepare plats standard plat notes are shown on the final plat, (see Appendix D) as well as other plat notes required to ensure proper notification of any restrictions to wastewater treatment and disposal.

VIII. CONNECTION TO AN EXISTING SYSTEM

This general category of providing sewer services refers to those situations when there is an existing collector sewer and treatment system, and all that is required are single service connections from individual lots (i.e., no laterals, mains, interceptors, collectors or treatment facilities are to be constructed).

A. SUBMITTAL REQUIREMENTS

The submittal packet to DEC should contain the following:

1. A completed Subdivision Data Sheet (see Appendix A), or similar format containing the information requested by the Data Sheet;
2. A completed Owner's Statement (see Appendix B), or similar format containing the information requested by the Statement;
3. For subdivisions within or affecting the coastal zone, a completed Coastal Project Questionnaire (see Appendix E);
4. A preliminary subdivision plat; this requirement does not apply to a subdivision subject to AS 29.40.090(b), or a subdivision that is otherwise exempt from platting requirements.
5. Documentation of connection assurance (see section B.2. of this chapter).

B. APPROVAL CRITERIA

1. General

Approval of plans for subdivisions proposing to connect each lot to an existing collector sewer and treatment system depends primarily on a commitment from the owner of the collection and treatment system that the lots will be allowed to connect. This may include a determination that the system is adequate to accept the additional hydraulic and organic loading. The minimum lot size for subdivisions proposing connection to an existing system is that area necessary to maintain separation distances listed in 18 AAC 72.015 between any part of the wastewater systems, and surface waters and drinking water supply sources;

2. Connection Assurance

The owner of the existing collector sewer and treatment system attests in writing that the connections will be permitted. When the receiving wastewater system is approaching its capacity, DEC may also require a determination that the system is capable of accepting the additional hydraulic and organic loadings;

3. Plat Notes

For subdivisions required to prepare plats, standard plat notes are shown on the final plat, (see Appendix D) as well as other plat notes required to ensure proper notification of any restrictions to wastewater treatment and disposal.

IX. NO WASTEWATER DISPOSAL

There may be instances when subdividing land is not for the purpose of, or followed by, residential or other types of development that will result in the need to dispose of wastewater. Examples of such subdivisions include cemeteries, subdivisions on which repeater stations are to be erected, promotional subdivisions (i.e., "Own a square-foot of Alaska"), and other cases where the subdivided plots are uninhabitable and will remain so. In these instances the subdivider may request that the subdivision be approved on the basis that there is never going to be any wastewater disposal. In addition, subdivisions proposed solely for the purpose of establishing roadways, road rights-of-way, or utility rights-of-way will, in the department's discretion, be considered under this section.

A. SUBMITTAL REQUIREMENTS

The submittal packet to DEC should contain the following:

1. A completed Subdivision Data Sheet (see Appendix A), or similar format containing the information requested by the Data Sheet;
2. A completed Owner's Statement (see Appendix B), or similar format containing the information requested by the Statement;
3. For subdivisions within or affecting the coastal zone, a completed Coastal Project Questionnaire (see Appendix E);
4. A preliminary subdivision plat; this requirement does not apply to a subdivision subject to AS 29.40.090(b), or a subdivision that is otherwise exempt from platting requirements.
5. A zoning map of the area (where available);
6. Information demonstrating that the subdivision is never going to generate wastewater.

B. APPROVAL CRITERIA

DEC only approves subdivisions under the provisions listed in this chapter when the subdivider successfully demonstrates to DEC that there will never be any wastewater generated within the subdivision, or, where road or utility rights-of-way are proposed, that the subdividing action will not affect the wastewater disposal ability of the remaining portion of the affected lots.

Approval criteria are as follows:

1. Land Use

The area must be zoned for purposes other than that which would be

expected to generate wastewater (i.e. other than residential, industrial, etc.); in areas where there is no zoning authority, the subdivider provides reasonable demonstration that wastewater will not be generated from the immediate or eventual development of the property; the subdivided plots are uninhabitable and will remain so; or the proposed subdivision of land is not for the purpose of, and will not be followed by, residential or other types of development that result in the need to dispose of wastewater.

In making such determinations, DEC considers development patterns in surrounding and similar areas, any restrictions to the development of water supplies, as well as other pertinent considerations.

Where a subdivision is proposed solely for the purpose of establishing roadways, road rights-of-way, or utility rights-of-way, the department will, in its discretion, waive one or more of the approval criteria listed above or requirement A.6. of this chapter.

2. Plat Notes

For subdivisions required to prepare plats, standard plat notes are shown on the final plat, (see Appendix D) as well as other plat notes required to ensure proper notification of any restrictions to wastewater treatment and disposal.

When subdivisions are proposed for a specific use (i.e., cemeteries, etc.) then the specific use for the subdivision is included on the final plat as a plat note.

APPENDIX A

SUBDIVISION PLAN REVIEW

DATA SHEET



State of Alaska
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
P.O. Box O, Juneau, Alaska 99811-1800



SUBDIVISION DATA SHEET

Please type or print in ink:

Subdivision Name: _____

Department Completion Only
Subdivision No. _____
Date Received: _____

1. Legal Description (Section, Township, Range, Meridian):

2. General Location (Please describe the location of the project in relation to the nearest community, physical landmarks such as bays, islands, rivers, lakes, etc., and in sufficient detail so that it could be physically located by Department personnel):

3. Owner

Name _____

Company (if applicable) _____

Street Address _____

City _____ State _____ Zip _____ Phone () _____

4. Contact Person (Please provide the name, address, and phone of the engineer or other person that the Department should contact on matters pertaining to this application if other than the owner):

Name _____

Company (if applicable) _____

Street Address _____

City _____ State _____ Zip _____ Phone () _____

5. Number of Lots: Present _____ Proposed _____ Total Acreage _____

6. Development planned for the lots in this subdivision is:

(Single-family or duplex residential, commercial, etc.)

7. Subdivisions Exempt From Subdivision Plan Review

(Check the appropriate box if the subdivision conforms to the category listed. If one or more of the exempt categories are checked, completion of Section 8 is not required.)

- ☐ A. The smallest lot in the subdivision has an area of 400,000 square feet or greater; and/or
- ☐ B. The current action is limited to vacating lot lines to create a smaller number of lots, and the subdivision has previously been approved by the Department; and/or
- ☐ C. The current action is limited to moving lot lines a distance of 10 feet or less and not increasing the number of developable lots, and the subdivision has been previously approved by the Department; and/or
- ☐ D. The subdivision has been previously approved by the Department, and the current action is limited to moving one or more lot lines which will not increase the number of developable lots and which maintain a minimum of 20,000 square feet of contiguous wastewater disposal area, as described in the Department's wastewater regulations, for each lot affected by the proposed lot line movements.

8. Method of Providing Drinking Water and Sewage Disposal

This application is based on the means of providing potable water and sewage disposal as indicated below:

A. DRINKING WATER

(Check boxes that apply)

Drinking water is to be obtained on each individual lot from:

- ☐ groundwater sources
- ☐ roof-catchment/cisterns
- ☐ surface sources
- ☐ constructing or expanding a public drinking water supply source and distribution system
- ☐ there is to be no provision for drinking water

B. SEWAGE DISPOSAL

(Check boxes that apply)

Sewage is to be disposed of on each individual lot using:

- ☐ conventional on-site soil absorption systems
- ☐ alternate on-site soil disposal systems
- ☐ individual marine outfalls
- ☐ constructing a collector sewer that ties into an existing collector sewer and treatment system
- ☐ constructing a collector sewer that has individual treatment systems (examp. STEP system)
- ☐ constructing a collector sewer with a community treatment plant
- ☐ service connections from each lot to an existing system
- ☐ other
- ☐ there is to be no provision for sewage disposal

APPENDIX B

SUBDIVISION PLAN REVIEW

OWNER'S STATEMENT



State of Alaska
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
P.O. Box O, Juneau, Alaska 99811-1800



SUBDIVISION PLAN REVIEW OWNER'S STATEMENT

*This information is required by 18 AAC 15.030.
Please type or print all non-signature items in ink:*

Subdivision Name: _____

Department Completion Only
Subdivision No. _____
Date Received: _____

I submit the enclosed items concerning the above referenced subdivision for review. By my signature I certify that the subdivision is (check one):

- ☐ privately owned and that I am the owner.
- ☐ owned by a sole proprietorship and that I am the proprietor.
- ☐ owned by a partnership of which I am a general partner.
- ☐ owned by a corporation of which I am a principal executive officer of at least the level of vice-president, or a duly authorized representative responsible for the overall management of this subdivision.
- ☐ owned by a municipal, state, federal or other public agency, of which I am a principal executive officer, ranking elected official, or other duly authorized employee.

Signature (please sign in ink) _____

Date _____

Name and Official Title _____

Company or Agency (if applicable) _____

18 AAC 15.030. SIGNING OF APPLICATIONS: All permit or approval applications must be signed as follows:

- (1) in the case of corporations, by the principal executive officer of at least the level of vice-president or his duly authorized representative, if the representative is responsible for the overall management of the project or operation;
- (2) in the case of a partnership, by a general partner;
- (3) in the case of a sole proprietorship, by the proprietor; and
- (4) in the case of municipal, state, federal or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee. (Eff. 11/25/77, Register 64)

Authority: AS 46.03.020(10), AS 46.03.090, AS 46.03.100, AS 46.03.110, AS 46.03.160, AS 46.03.330, AS 46.03.720

APPENDIX C

SUBDIVISION PLAN REVIEW CHECKLISTS

SUBDIVISION PLAN REVIEW CHECKLIST

SUBDIVISIONS EXEMPT FROM SUBDIVISION PLAN REVIEW

SUBMITTAIREQUIREMENTS:

- ☐ Subdivision Data Sheet
- ☐ Owner's Statement
- ☐ Coastal Project Questionnaire (if applicable)
- ☐ Final Subdivision Plat With Standard Plat Note

APPROVAL CRITERIA:

- ☐ Subdivision minimum lot size is 400,000 square feet or greater; OR
- ☐ Proposed action is limited to vacating lot lines to create a smaller number of lots, and the current subdivision has been previously approved by DEC; OR
- ☐ Proposed action is limited to moving lot lines a distance of 10 feet or less and not increasing the number of developable lots, and the current subdivision has been previously approved by DEC; OR
- ☐ Proposed action is limited to moving one or more lot lines which will not increase the number of developable lots and which maintain a minimum of 20,000 square feet of contiguous wastewater disposal area, as described in the Department's wastewater regulations, for each lot affected by the proposed lot line movements.
- ☐ Standard Plat Note Provided

SUBDIVISION PLAN REVIEW CHECKLIST

ABBREVIATED REVIEWS

SUBMITTAL REQUIREMENTS:

- ☐ Subdivision Data Sheet
- ☐ Owner's Statement
- ☐ Coastal Project Questionnaire (if applicable)
- ☐ Working Map Including:
 - ☐ a scale between 50 and 400 feet per inch, and in multiples of 100 feet per inch if the scale value is greater than 100 feet per inch
 - ☐ parcel plots and sizes
 - ☐ surface waters within 200 feet
- ☐ General Topography Description
- ☐ General Description of Practical Methods of Wastewater Disposal
- ☐ General Soils and Water Table Description
- ☐ Preliminary Subdivision Plat with Standard Plat Notes

APPROVAL CRITERIA:

- ☐ Surface Water Locations Provided Which Show the Proposed Wastewater Systems Can be Located A Sufficient Distance From Surface Waters
- ☐ General Topographic and Soils Descriptions Provided That Are Sufficient to Determine if Conditions Are Suitable for the System Proposed
- ☐ General Description of Practical Wastewater Disposal System Provided in Sufficient Detail to Determine the Suitability of the System to the Topography and Soils
- ☐ Minimum Lot Size of 200,000 Square Feet is Provided
- ☐ Standard Plat Notes Provided

SUBDIVISION PLAN REVIEW CHECKLIST

CONVENTIONAL ON-LOT SOIL ABSORPTION SYSTEMS

SUBMITTAL REQUIREMENTS:

- ☐ Subdivision Data Sheet
- ☐ Owner's Statement
- ☐ Coastal Project Questionnaire (if applicable)
- ☐ Soils Report, Sealed by Registered Engineer (See Chapter IV)
- ☐ Minimum Lot Size of 40,000 Square Feet, Or Pollution Abatement Report If Minimum Lot Size Is Less Than 40,000 Square Feet
- ☐ Working Map Including:
 - ☐ a scale between 50 and 400 ft per inch, and in multiples of 100 ft per inch if the scale value is greater than 100 ft per inch
 - ☐ parcel plots and sizes
 - ☐ topography with 5-ft, or less, contour intervals in areas with ground surface slopes less than 15%; and 10-ft, or less, contour intervals in areas with ground surface slopes of 15% or greater
 - ☐ the location of all soils field work
 - ☐ surface waters within 200 feet
 - ☐ muskegs and intermittent drainages
 - ☐ sources for public drinking water systems within 200 ft
 - ☐ private water sources within 100 feet
 - ☐ the usable wastewater disposal area on each lot
- ☐ Preliminary Subdivision Plat With Standard Plat Notes

APPROVAL CRITERIA:

- ☐ 40,000 Square Foot Minimum Lot Size Provided; or a Pollution Abatement Report Demonstrates That Groundwater Nitrate Will Not Exceed 5 mg/l $\text{NO}_3\text{-N}$
- ☐ 20,000 Square Feet of Contiguous Usable Wastewater Disposal Area per Lot Provided With:
 - ☐ soil types, moisture content (in areas of known or suspected permafrost), soil slopes, distances to downhill breaks in the terrain, and depths to seasonal high water table and impermeable strata meet the requirements of the soils analysis and report (See Chapter IV)
 - ☐ distance to surface water is 100 ft or more
 - ☐ distance to Class A or B public drinking water supply sources is 200 ft or more

- ☐ distance to Class C public drinking water supply sources is 150 ft or more
- ☐ distance to private drinking water supply sources is 100 ft or more
- ☐ Soils Report Is Provided That Shows:
 - ☐ test holes and borings located to yield representative data in entire subdivision
 - ☐ test hole depths are sufficient to comply with requirements of chapter IV
 - ☐ soils are classified under the criteria of chapter IV
 - ☐ sieve analyses and percolation tests, if conducted, are performed by an approved method
 - ☐ the number of test holes and soil analyses equals, at a minimum, one each per two acres of subdivision (minimum of one each per subdivision)
 - ☐ the depth to the seasonal high water table is five to eight feet or more (see chapter IV)
 - ☐ the depth to bedrock, clay or other impermeable strata is at least two feet greater than the depth to seasonal high water table
 - ☐ soils analysis and report is sealed by a registered engineer
 - ☐ for subdivisions in permafrost areas, soil moisture content profile analysis shows that soils in subdivision are adequately drained
 - ☐ depth to any seeps are noted, and monitored if required by DEC
- ☐ Typical System Design (Sealed By Registered Engineer) Is Submitted When The Standard Depths to the Seasonal High Water Table Or Impermeable Strata Are Not Met
- ☐ Standard Plat Notes Are Provided

SUBDIVISION PLAN REVIEW CHECKLIST

ALTERNATE ON-LOT WASTEWATER DISPOSAL

SUBMITTAL REQUIREMENTS:

- ☐ Subdivision Data Sheet
- ☐ Owner's Statement
- ☐ Coastal Project Questionnaire (if applicable)
- ☐ Soils Report, Sealed by A Registered Engineer (See Chapter V)
- ☐ Minimum Lot Size Is 40,000 Square Feet, Or Pollution Abatement Report if Minimum Lot Size Less Than 40,000 Square Feet
- ☐ Demonstration That Conventional On-Lot Systems, Collector Sewer & Treatment Systems, Or Connection To An Existing System, Are Not Practicable
- ☐ Working Map Including:
 - ☐ a scale between 50 and 400 ft per inch, and in multiples of 100 ft per inch if the scale value is greater than 100 ft per inch
 - ☐ parcel plots and sizes
 - ☐ topography with 5-ft, or less, contour intervals in areas with ground surface slopes less than 15%; and 10-ft, or less, contour intervals in areas with ground surface slopes of 15% or greater
 - ☐ the location of all soils field work
 - ☐ surface waters within 200 feet, and muskegs and intermittent drainages
 - ☐ sources for public drinking water systems within 200 ft., and private drinking water sources within 100 ft.
 - ☐ the usable wastewater disposal area on each lot
- ☐ Plans For A Treatment and Disposal System For Each Lot (Or Single Typical Design For Similar Systems), Sealed by A Registered Engineer
- ☐ Preliminary Subdivision Plat With Standard Plat Notes

APPROVAL CRITERIA:

- ☐ Minimum Lot Size of 40,000 Square Feet, Or Pollution Abatement Report Demonstrates That Groundwater Nitrate Will Not Exceed 5 mg/l NO₃-N
- ☐ Demonstration That Conventional Soil Absorption Systems, Collector Sewer and Treatment Systems, Or Connection To An Existing System (as defined in chapters IV, VII, and VIII) Are Not Practicable, and That Soils Will Support The Use of The Proposed Systems
- ☐ DEC Has Approved System Plans, And Separation Distances Are Met
- ☐ Standard Plat Notes Provided

SUBDIVISION PLAN REVIEW CHECKLIST

ON-LOT TREATMENT SYSTEM WITH INDIVIDUAL MARINE OUTFALL

SUBMITTAL REQUIREMENTS:

- ☐ Subdivision Data Sheet
- ☐ Owner's Statement
- ☐ Coastal Project Questionnaire
- ☐ Preliminary Subdivision Plat With Standard Plat Notes, With Sufficient Detail to Show How Each Lot For Which Marine Disposal Is Proposed Will Have Access To Marine Waters
- ☐ Soils Report With Sufficient Soils Data To Demonstrate That Disposal To On-Lot Soils is Not Practicable for The Lots For Which Marine Disposal Is Proposed
- ☐ Plans For A Treatment and Disposal System For Each Lot (Or Single Typical Design For Similar Systems), Sealed by A Registered Engineer

APPROVAL CRITERIA:

- ☐ DEC Has Approved System Plans
- ☐ Assurance That Lot Sizes Are Sufficient to Allow Compliance With Separation Distances, And That Each Lot Has Access To Marine Waters For Wastewater Disposal
- ☐ The Soils Report Shows That Disposal To On-lot Soils Is Not Practicable
- ☐ Construction And Proper Operation of The Treatment Systems By The Eventual Lot Owners Is Feasible
- ☐ Mixing Calculations Show That Each Outfall And The Cumulative Impact From All Of the Outfalls Comply With The Wastewater And Water Quality Regulations
- ☐ Standard Plat Notes Provided

SUBDIVISION PLAN REVIEW CHECKLIST
CONSTRUCTION OF A COLLECTOR SEWER
OR A COLLECTOR SEWER AND TREATMENT SYSTEM

SUBMITTAL REQUIREMENTS:

- ☐ Subdivision Data Sheet
- ☐ Owner's Statement
- ☐ Coastal Project Questionnaire (if applicable)
- ☐ Preliminary Subdivision Plat With Standard Plat Notes
- ☐ Plans For The Collector Sewer And/Or Treatment System, As Required By Wastewater Regulations
- ☐ Construction Assurance
- ☐ Connection Assurance

APPROVAL CRITERIA:

- ☐ Construction Assurance Provided
- ☐ Connection Assurance Provided, With System Adequacy Assurance If Required
- ☐ DEC Has Approved System Plans
- ☐ Assurance That Lot Sizes Are Sufficient To Allow Compliance With Separation Distances
- ☐ Standard Plat Notes Provided

SUBDIVISION PLAN REVIEW CHECKLIST
CONNECTION TO AN EXISTING SYSTEM

SUBMITTAL REQUIREMENTS:

- ☐ Subdivision Data Sheet
- ☐ Owner's Statement
- ☐ Preliminary Subdivision Plat With Standard Plat Notes
- ☐ Connection Assurance
- ☐ System Adequacy Assurance, If Required By DEC

APPROVAL CRITERIA:

- ☐ Connection Assurance Provided
- ☐ System Adequacy Assurance Provided, If Required By DEC
- ☐ Assurance That Lot Sizes Are Sufficient To Allow Compliance With Separation Distances
- ☐ Standard Plat Notes Provided

SUBDIVISION PLAN REVIEW CHECKLISTS

NO WASTEWATER DISPOSAL

SUBMITTAL REQUIREMENTS:

- ☐ Subdivision Data Sheet
- ☐ Owner's Statement
- ☐ Coastal Project Questionnaire (if applicable)
- ☐ Preliminary Subdivision Plat With Standard Plat Notes
- ☐ Zoning Map (where available)
- ☐ Information Demonstrating No Wastewater Disposal

APPROVAL CRITERIA:

- ☐ Information Demonstrates There Will Never Be Wastewater Generated In The Subdivision, OR
- ☐ Meets Criteria for Other Applicable Types of Subdivisions if Subdivision Proposed is for a Road Or Utility Right-of-Way
- ☐ Standard Plat Notes Provided

APPENDIX D

SUBDIVISION PLAN REVIEW

STANDARD PLAT NOTES

I. **STANDARD PLAT NOTES FOR SUBDIVISIONS WITH A MINIMUM LOT SIZE OF 400,000 SQUARE FEET OR GREATER**

WASTEWATER DISPOSAL: Wastewater treatment and disposal systems must meet the regulatory requirements of the Alaska Department of Environmental Conservation.

The Alaska Department of Environmental Conservation approves this subdivision for platting.

Name and Title of	Date
Alaska Department of Environmental Conservation	
Approving Official	

II. **STANDARD PLAT NOTES FOR ABBREVIATED REVIEWS**

WASTEWATER DISPOSAL: Conditions may not be suitable for onsite wastewater treatment and disposal. Any wastewater treatment or disposal system must meet the regulatory requirements of the Alaska Department of Environmental Conservation.

Subject to any noted restrictions, the Alaska Department of Environmental Conservation approves this subdivision for platting.

Name and Title of	Date
Alaska Department of Environmental Conservation	
Approving Official	

III. **STANDARD PLAT NOTES FOR SUBDIVISIONS PROPOSING CONVENTIONAL ON-LOT SOIL ABSORPTION SYSTEMS**

WASTEWATER DISPOSAL: Soil conditions, water table levels, and soil slopes in this subdivision have been found suitable for conventional onsite wastewater treatment and disposal systems serving single-family or duplex residences and meeting the regulatory requirements of the Alaska Department of Environmental Conservation. Any other type of wastewater treatment and disposal system must be approved by the Alaska Department of Environmental Conservation.

Subject to any noted restrictions, the Alaska Department of Environmental Conservation approves this subdivision for platting.

Name and Title of	Date
Alaska Department of Environmental Conservation	
Approving Official	

IV. STANDARD PLAT NOTES FOR SUBDIVISIONS PROPOSING ALTERNATE ON-LOT WASTEWATER DISPOSAL SYSTEMS

WASTEWATER DISPOSAL: Soil conditions in this subdivision have been found unsuitable for conventional onsite wastewater treatment and disposal systems. Plans for an approved alternate wastewater disposal system for use on lots in this subdivision are available from the Alaska Department of Environmental Conservation. Any other type of onsite wastewater treatment and disposal system must be designed by a professional engineer registered to practice in Alaska, and the design must be approved by the Alaska Department of Environmental Conservation.

Subject to any noted restrictions, the Alaska Department of Environmental Conservation approves this subdivision for platting.

Name and Title of Date
Alaska Department of Environmental Conservation
Approving Official

V. STANDARD PLAT NOTES FOR SUBDIVISIONS PROPOSING ON-LOT TREATMENT SYSTEMS WITH INDIVIDUAL MARINE OUTFALLS

WASTEWATER DISPOSAL: Wastewater treatment systems with individual marine outfalls serving single family or duplex residences, which meet the regulatory requirements of the Alaska Department of Environmental Conservation, have been approved for use in this subdivision. Any type of wastewater treatment and disposal system disposing of wastewater onsite must meet the regulatory requirements of the Alaska Department of Environmental Conservation.

Subject to any noted restrictions, the Alaska Department of Environmental Conservation approves this subdivision for platting.

Name and Title of Date
Alaska Department of Environmental Conservation
Approving Official

VI. STANDARD PLAT NOTES FOR SUBDIVISIONS PROPOSING CONSTRUCTION OF A COLLECTOR SEWER, OR A COLLECTOR SEWER AND TREATMENT SYSTEM

WASTEWATER DISPOSAL: The Alaska Department of Environmental Conservation has reviewed plans for this subdivision's wastewater disposal, and approves this subdivision for platting.

Name and Title of Date
Alaska Department of Environmental Conservation
Approving Official

VII. STANDARD PLAT NOTES FOR SUBDIVISIONS PROPOSING CONNECTION TO AN EXISTING SYSTEM

WASTEWATER DISPOSAL: The Alaska Department of Environmental Conservation has reviewed plans for this subdivision's wastewater disposal, and approves this subdivision for platting.

Name and Title of	Date
Alaska Department of Environmental Conservation	
Approving Official	

VIII. STANDARD PLAT NOTES FOR SUBDIVISIONS PROPOSING NO WASTEWATER DISPOSAL

WASTEWATER DISPOSAL: Approval of this subdivision is based on the representation that no wastewater will be generated or disposed of on any lot. Conditions might not be suitable for onsite wastewater treatment and disposal systems. Any onsite wastewater treatment and disposal system must meet the regulatory requirements of the Alaska Department of Environmental Conservation.

Subject to any noted restrictions, the Alaska Department of Environmental Conservation approves this subdivision for platting.

Name and Title of	Date
Alaska Department of Environmental Conservation	
Approving Official	

APPENDIX E

COASTAL PROJECT QUESTIONNAIRE

OFFICE OF THE GOVERNOR

OFFICE OF MANAGEMENT AND BUDGET
DIVISION OF GOVERNMENTAL COORDINATION

CENTRAL OFFICE

P.O. BOX AW
JUNEAU, ALASKA 99811-0165
PHONE: (907) 465-3562

SOUTHEAST REGIONAL OFFICE

431 NORTH FRANKLIN
P.O. BOX AW, SUITE 101
JUNEAU, ALASKA 99811-0165
PHONE: (907) 465-3562

SOUTHCENTRAL REGIONAL OFFICE

3601 C STREET
SUITE 370
ANCHORAGE, ALASKA 99503-5930
PHONE: (907) 561-6131

NORTHERN REGIONAL OFFICE

675 SEVENTH AVENUE
STATION H
FAIRBANKS, ALASKA 99701-4596
PHONE: (907) 451-2818

ALASKA COASTAL MANAGEMENT PROGRAM
CONSISTENCY REVIEW
COASTAL PROJECT QUESTIONNAIRE

Dear Applicant:

The State of Alaska has a system for reviewing and processing all the resource-related approvals (permits, leases and other authorizations) which are required for proposed projects in or affecting coastal areas of Alaska. This system, called project consistency review, is based on the Alaska Coastal Management Program and is designed to improve management of Alaska's coastal land and water uses. Project proposals are reviewed to:

- ° Identify permits required by the State resource agencies, which are the Alaska Departments of Environmental Conservation, Fish and Game, and Natural Resources.
- ° Determine the project's consistency with the standards of the Alaska Coastal Management Program and approved district coastal management programs.

Participants in the State's review process include:

- ° You, the applicant;
- ° State resource agencies and the Division of Governmental Coordination (DGC);
- ° The affected local coastal community; and
- ° Other interested members of the public.

Your answers to this questionnaire will determine the agency responsible for coordinating your consistency review. If permits from more than one State agency or from a federal agency are required, the consistency review is coordinated by a regional office of DGC. If permits from only one State agency are required, the State agency responsible for issuing those permits coordinates the review. Contact the nearest DGC regional office for more information.

Revised 2/90

Before you settle on your final project plans and submit your application, the State can arrange for meetings between you, State agency representatives, and coastal district representatives to review your completed coastal project questionnaire and/or draft plans. Preapplication meetings can help identify concerns and information needs, and encourage a mutual understanding of your project. To arrange for a preapplication meeting, call or write the coordinating agency contact. In lieu of a meeting, DGC can distribute materials to agencies for preliminary identification of concerns and information needs.

To begin the review process you must complete the attached coastal project questionnaire to determine which permits are needed. The consistency review begins upon receipt of your complete application packet. A complete packet includes:

- ° A signed coastal project questionnaire.
- ° Copies of any State permit applications needed for the project (originals go to the State agency issuing the permit).
- ° Copies of any federal permit applications needed for the project (originals go to the federal agency issuing the permit).
- ° Any additional pertinent information, including public notices from agencies.

YOUR PROJECT CANNOT BE REVIEWED UNTIL A COMPLETE PACKET INCLUDING ALL APPLICATIONS IS RECEIVED.

Attached is a list of regional agency contacts and a map of the coastal area with the regions delineated. You must submit the completed packet in the region where the proposed project is to occur. All packets must be submitted to DGC, with the following exceptions:

- ° If a fee is required, submit the original application, coastal project questionnaire, and fee to the State resource agency with the fee requirement (also send a copy of that permit application to DGC).
- ° If a State permit application requires confidential information, submit the entire packet to the State resource agency with that requirement.
- ° If the project is a placer mining activity, submit the Annual Placer Mining Application, instead of the questionnaire, to the Department of Natural Resources, Division of Mining.

- ° If you need permits from only one State resource agency and no federal agencies, submit the entire packet to the State resource agency requiring the permits.
- ° If you are applying to grow shellfish or aquatic plants, an Aquatic Farm Application, questionnaire, and Corps of Engineers application, and filing fee must be submitted to the Department of Natural Resources during an aquatic farm district opening held each year in Southeast and South-central Alaska.

If one or more federal permits are required, submit the original application(s) to the federal agency and send a copy of those applications to DGC along with your packet of other applications.

STEPS IN THE REVIEW PROCESS

Start-up: You will be notified when the review starts. You will receive your project's State review number, review schedule, and other information.

Information requests: Agencies may request additional information from you during the review. The coordinating agency may stop the review until that information is received.

Proposed determination: After reviewing comments on your project, the coordinating agency will develop a proposed consistency determination which will be presented to you, State resource agencies, and coastal districts.

Conclusive determination: A conclusive consistency determination will be issued upon agreement of the proposed determination by you, State resource agencies, and coastal district with an approved program.

Elevation (appeal) process: If you do not concur with the proposed determination for your project, you may request elevation (further review by division directors within the State resource agencies). The directors review the proposed determination and any additional information included in the elevation request, then issue a second proposed determination.

You may then elevate the review to the commissioners of the resource agencies if the director-level review does not satisfy your interests. This is the final step in the administrative appeal process. Each elevation review can take no longer than 15 days. State resource agencies and coastal districts with approved programs may also request elevation.

In addition to the State's elevation process, if your project requires a federal permit and you disagree with the State's final conclusive consistency determination, you may appeal to the U.S. Secretary of Commerce in Washington, D.C., as provided in 15 CFR 930.125(H).

Permits: Agencies will issue State permits covered by the conclusive consistency determination within five days after the determination is issued, unless that agency finds that additional review is necessary to fulfill other statutory requirements. For example, DNR disposals of State interest in State lands or water are not bound by this time limit.

Review Schedules

The coordinating agency must complete the review of your project within 30 or 50 days. A 30-day review schedule will be used if all associated State permits must by statute or regulation be issued in 30 days. A 50-day review schedule will be used for projects with approvals requiring a 30-day public notice. The coordinating agency may grant extensions to these schedules as provided under 6 AAC 50.110. For example, if your project is located in the unorganized borough, the comment and decision deadlines may be extended for 10 days. The deadlines may also be extended at the request of the applicant, or to receive additional information requested by a resource agency.

	<u>30-Day Review</u>	<u>50-Day Review</u>
Consistency review begins	Day 1	Day 1
Deadline for regional reviewers to request additional information	Day 15	Day 25
Public and agency reviewer comments due	Day 17	Day 34
Proposed consistency determination	Day 25	Day 44
Notification for elevation	Day 29	Day 49
Conclusive consistency determination issued (unless elevation requested)	Day 30	Day 50
If elevated, director's determination	Day 45	Day 65
If elevated again, commissioner's determination	Day 60	Day 80

Coastal Project Questionnaire and Certification Statement

Please answer all questions. Include maps or plan drawings with your packet. An incomplete questionnaire may be returned and will delay the review of your packet.

APPLICANT INFORMATION

1. Name of Applicant _____
Address _____
City _____ State _____ Zip Code _____
Daytime Phone _____

2. Contact Person _____
Address _____
City _____ State _____ Zip Code _____
Daytime Phone _____

PROJECT INFORMATION

1. Provide a brief description of your project and ALL associated facilities (caretaker facilities, etc.):

Starting Date for Project _____ Ending Date for Project _____

PROJECT LOCATION

1. Please give location of project. (Include nearest community or identifiable body of land or water.)

Township _____ Range _____ Meridian _____ Section _____ Aliquot Parts _____ USGS Map _____

2. Is the project on: (please mark with ✓)

State Land _____ Federal Land _____ Private Land _____ Municipal Land _____

3. Project is located in which region of the state (see attached map):

Northern _____ Southcentral _____ Southeast _____

CURRENT APPROVALS

1. Do you currently have any State or federal approvals for this project? If yes, please list below. Yes ☐ No ☐
(Note: approval means permit or any other form of authorization.) List state review ID#, if any.

Approval Type _____ Approval # _____ Expiration Date _____ State ID# _____

FEDERAL APPROVALS

1. Will you be placing structures or fills in any of the following: tidal waters, streams, lakes, or wetlands*? Yes ☐ No ☐

* If you are uncertain whether your proposed project area is in a wetland, contact the U.S. Corps of Engineers, Regulatory Branch at (907) 753-2720 for a wetlands determination. If you are outside the Anchorage area, call toll free 1-800-478-2712.

If yes, have you applied for or do you intend to apply for a U.S. Army Corps of Engineers (COE) permit? Please indicate at right and give date of submittal _____ Yes ☐ No ☐

2. Have you applied for or do you intend to apply for a U.S. Environmental Protection Agency National Pollution Discharge Elimination System (NPDES) permit? Please indicate at right and give date of submittal _____. (Note: For information regarding the need for a NPDES permit, contact EPA at 271-5083.) Yes ☐ No ☐

3. Have you applied for or do you intend to apply for permits from any other federal agency? If yes, please list below. Yes ☐ No ☐

<u>Agency</u>	<u>Approval Type</u>	<u>Date submitted (or intend to submit)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

DEPARTMENT OF NATURAL RESOURCES APPROVALS

1. Is the proposed project on state-owned land or will you need to cross state lands for access? Yes ☐ No ☐

Note: In addition to state owned uplands, the state has jurisdiction over most land below the ordinary high water line of streams, rivers, lakes, and mean high tide line seaward for three miles.

2. Is any portion of your project placed below the ordinary high water line of a stream, river, lake, or mean high water line of a saltwater body? ☐ ☐

3. Will you be dredging? If yes, location of dredging is: ☐ ☐

Township _____ Range _____ Meridian _____ Section _____

• Location of disposal site for dredged materials (describe): _____

Township _____ Range _____ Meridian _____ Section _____

4. Will you be filling with rock, sand or gravel? If yes, amount? _____ Yes ☐ No ☐

• Location of source: Township _____ Range _____ Meridian _____ Section _____

• Location of fill site: Township _____ Range _____ Meridian _____ Section _____

5. Do you plan to use any of the following state-owned resources?

Timber

• Will you be harvesting timber from 10 or more acres? If yes, amount? _____ Yes ☐ No ☐

• Location of source: Township _____ Range _____ Meridian _____ Section _____

Other Materials

• If yes, what material? _____
(peat, building stone, silt, overburden, etc.)

• Location of source: Township _____ Range _____ Meridian _____ Section _____

6. Are you planning to use any fresh water? ☐ ☐

• If yes, amount (gallons per day)? _____

• Source? _____

7. Will you be building or altering a dam? ☐ ☐

8. Do you plan to drill a geothermal well? ☐ ☐

9. Will you be exploring for or extracting coal? ☐ ☐

10. Will you be exploring for or extracting minerals on state-owned land? ☐ ☐

11. Will you be exploring for or extracting oil and gas on state-owned land? ☐ ☐

12. Will you be investigating or removing historical or archaeological resources on state-owned land?

Yes ☐ No ☐

13. Will the project be located in a unit of the Alaska State Park System?

☐ Yes ☐ No

If you answered NO to all questions in this section, you do not need an approval from the Alaska Department of Natural Resources (DNR). Continue to the next section.

If you answered YES to ANY questions in this section, contact DNR to identify and obtain necessary application forms.

Based on your discussion with DNR, please list (below) the approval type needed and date submitted.

Approval Type

Date Submitted (or intend to submit)

_____	_____
_____	_____
_____	_____

Have you paid the filing fees required for the DNR permits?

Yes ☐ No ☐

If you are not applying for DNR permits, indicate reason below:

_____ a. _____ (DNR contact) told me on _____ (date) that no DNR approvals or permits were required on this project.

_____ b. Other: _____

DEPARTMENT OF FISH AND GAME APPROVALS

1. Will you be working in a stream, river, or lake? (This includes work in running water or on ice, within the active floodplain, on islands, the face of the banks, or the stream tidelands down to mean low tide.)

Yes ☐ No ☐

Name of stream or river: _____ Name of lake: _____

Will you be doing any of the following:

a) Building a dam, river training structure or instream impoundment?

Yes ☐ No ☐

b) Using the water?

☐ Yes ☐ No

c) Diverting or altering the natural channel stream?

☐ Yes ☐ No

d) Blocking or damming the stream, (temporarily or permanently)?

☐ Yes ☐ No

e) Changing the water flow or the water channel?

☐ Yes ☐ No

f) Pumping water out of the stream or lake?

☐ Yes ☐ No

g) Introducing silt, gravel, rock, petroleum products, debris, chemicals or wastes of any type into the water?

☐ Yes ☐ No

h) Using the stream as a road (even when frozen), or crossing the stream with tracked or wheeled vehicles, log-dragging or excavation equipment (backhoes, bulldozers, etc.)?

☐ Yes ☐ No

i) Altering or stabilizing the banks?

☐ Yes ☐ No

j) Mining or digging in the beds or banks?

☐ Yes ☐ No

k) Using explosives?

☐ Yes ☐ No

l) Building a bridge (including an ice bridge)?

☐ Yes ☐ No

m) Installing a culvert or other drainage structure?

☐ Yes ☐ No

- n) Constructing a weir? Yes ☐ No ☐
- o) Other in-stream structure not mentioned above? Yes ☐ No ☐
2. Is your project located in a designated State Game Refuge, Critical Habitat Area, or State Game Sanctuary? Yes ☐ No ☐
3. Does your project include the construction and operation of a salmon hatchery? Yes ☐ No ☐
4. Does your project affect or is it related to a previously permitted salmon hatchery? Yes ☐ No ☐
5. Does your project include the construction of a shellfish or sea vegetable farm? Yes ☐ No ☐

If you answered NO to all questions in this section, you do not need an approval from the Alaska Department of Fish and Game (DFG). Continue to the next section.

If you answered YES to any of the questions under 1 or 2, contact the Regional DFG Habitat Division Office for information and application forms.

If you answered YES to questions 3, 4 or 5, contact the DFG Private Nonprofit Hatchery Office at the F.R.E.D. division headquarters for information and application forms.

Based on your discussion with DFG, please list (below) the approval type needed and date submitted.

Approval Type

Date Submitted (or intend to submit)

If you are not applying for permits, indicate reason below:

a. _____ (DFG contact) told me on _____ (date) that no DFG approvals or permits were required on this project.

b. Other: _____

DEPARTMENT OF ENVIRONMENTAL CONSERVATION APPROVALS

- | | | |
|---|------------------------------|-----------------------------|
| 1. Will a discharge of wastewater from industrial or commercial operations occur?
(See #2 in "Federal Approvals" section) | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 2. Do you intend to construct/install or modify any part of a wastewater (sewage or greywater) disposal system? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. If yes, will the discharge be 500 gpd or greater? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Do you expect to request a mixing zone for your proposed project?
<small>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.</small> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Will the project result in dredging or disposal of fill in wetlands or placement of a structure in waterways? (Note: your application for this activity to the Corps of Engineers will also serve as your application to DEC.) | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Will your project result in the development of a currently unpermitted facility for the disposal of domestic or industrial solid waste? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Will your project require the application of oil or pesticides to the surface of the land? | <input type="checkbox"/> | <input type="checkbox"/> |

8. Will your project generate air emissions from the following:

- a) Diesel generators totaling more than 10,000 hp?
- b) Other fossil fuel-fired electric generator, furnace, or boiler totaling greater than 10,000 hp, or 9,000 kWh, or 100,000,000 btu/hr?
- c) Asphalt plant?
- d) Incinerator burning more than 1000 lbs. per hour?
- e) Industrial process?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

9. Will you be altering a public water system?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

10. Will your project require offshore drilling or vessel transport of oil, or other petroleum products as cargo, or include onshore facilities with an effective storage capacity of greater than 10,000 barrels of such products?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

11. Will you be subdividing lands into two or more lots (parcels)?

<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------

If you answered NO to all questions in this section, you do not need a permit or approval from the Alaska Department of Environmental Conservation (DEC). Please continue to the next section.

If you answered YES to any of these questions (see #6 Note), contact the DEC Regional Office for information and application forms.

Based on your discussion with DEC, please list (below) the approval type needed and date submitted.

Approval Type

Date Submitted (or intend to submit)

_____	_____
_____	_____
_____	_____

If you are not applying for permits, indicate reason below:

- a. _____ (DEC contact) told me on _____ (date) that no DEC approvals or permits were required on this project.
- b. Other: _____

Certification Statement

The information contained herein is true and complete to the best of my knowledge. I certify that the proposed activity complies with, and will be conducted in a manner consistent with, the Alaska Coastal Management Program.

Signature of Applicant or Agent

Date

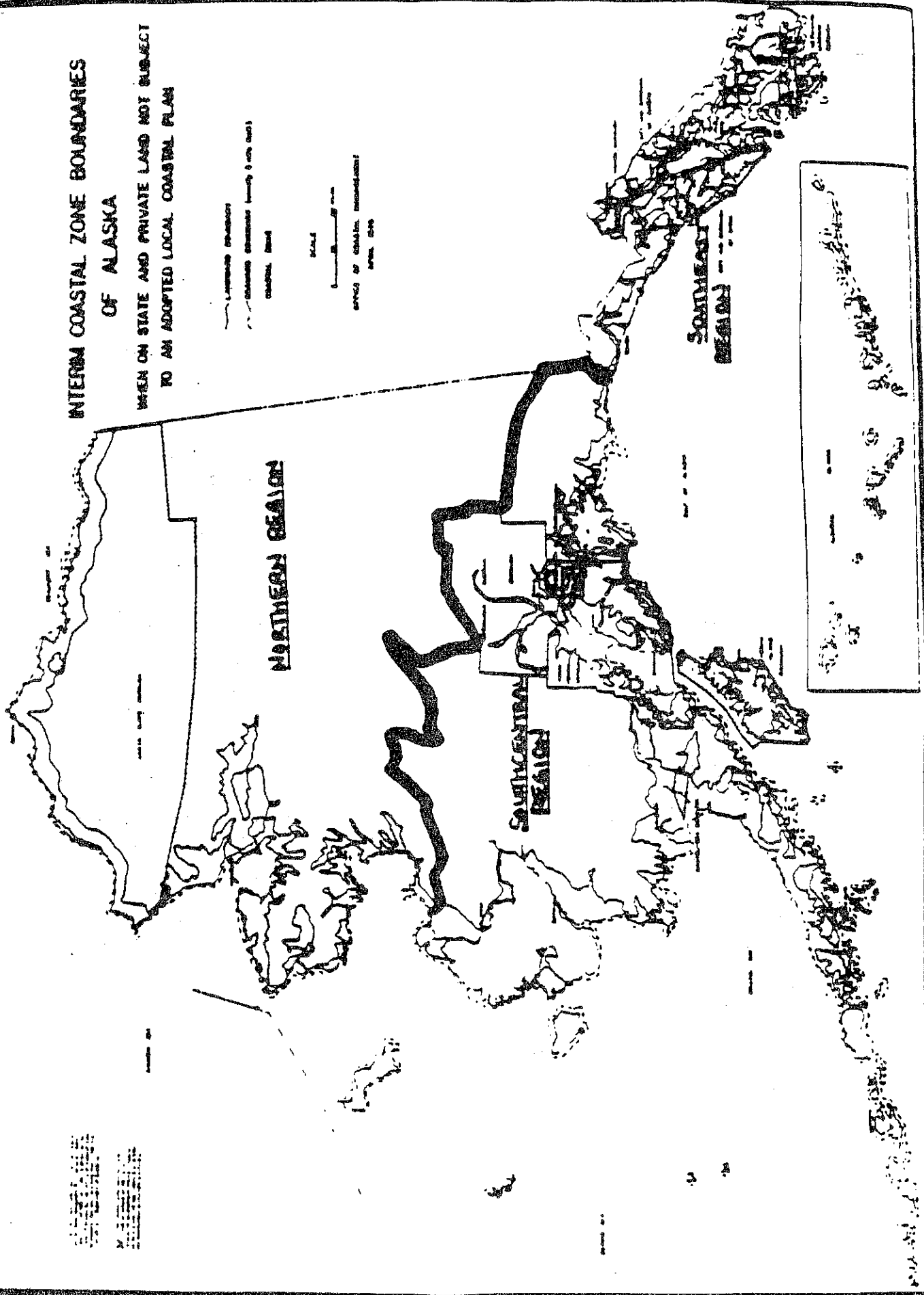
Note: This certification statement is a requirement for federal permit applicants. Federal agencies conducting an activity that will directly affect the coastal zone are required to submit a federal consistency determination per 15 CFR 930, Subpart C.

To complete your packet, please attach your state permit applications and copies of your federal permit applications to this questionnaire.

Revised 3/89

INTERM COASTAL ZONE BOUNDARIES OF ALASKA

BASED ON STATE AND PRIVATE LAND NOT SUBJECT
TO AN ADOPTED LOCAL COASTAL PLAN



SOUTHEAST REGIONAL CONTACTS

2/90

DEPARTMENT OF NATURAL RESOURCES

Oil & Gas Activities

DNR/Commissioner's Office
400 Willoughby Ave.
Juneau, AK 99801-1796
(907) 465-2400
CONTACT: Jim Powell

Mining Activities

DNR/Mining*
Box 107016
Anchorage, AK 99510-7016
(907) 762-2109
CONTACT: Mitch Henning

Forestry Activities

DNR/Forestry
400 Willoughby Avenue
Juneau, AK 99801-1796
(907) 465-2491
CONTACT: Jim McAllister

Agriculture Activities

DNR/Agriculture
915 S. Bailey
P.O. Box 949
Palmer, AK 99645-0949
(907) 745-7200
CONTACT: Frank Mielke

Activities on State Park Lands

DNR/Parks
400 Willoughby Avenue
Juneau, AK 99801-1796
(907) 465-4563
CONTACT: Bill Garry

All Other Activities

Southeast District Office
DNR/Land and Water Management
400 Willoughby Avenue
Juneau, AK 99801-1796
(907) 465-3400
CONTACT: Valerie DeLaune
Andy Pekovich

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DEC/Southeast Office
P.O. Box 32420
9000 Old Glacier Highway
Juneau, AK 99803
(907) 789-3151
CONTACT: Amy Kruse, COE/Wetlands Fill
Steve Haavig, Solid Waste Disposal Permits
Gene Rehfield, Wastewater Disposal Permits
Michelle Schumann, Oil Spill Contingency
Plans/Fueling Facilities

DEPARTMENT OF FISH AND GAME

Area Offices:

DFG/Habitat Division
P.O. Box 20
Douglas, AK 99824-0020
(907) 465-4290, 465-4291
CONTACT: Janet Schempf or
Rick Reed

DFG/Habitat Division
P.O. Box 667
Petersburg, AK 99833
(907) 772-3801
CONTACT: Don Cornelius

DFG/Habitat Division
2030 Sealevel Drive, Room 205
Ketchikan, AK 99901
(907) 225-2027
CONTACT: Jack Gustafson

DFG/Habitat Division
Room 103
304 Lake Street
Sitka, AK 99835
(907) 747-5828
CONTACT: Dave Hardy

DFG/Habitat Division
P.O. Box 101
Klawock, AK 99925
(907) 755-2331
CONTACT: Glenn Freeman

Hatchery Permits

DFG/FRED Division
1255 West Eighth Street
P.O. Box 3-2000
Juneau, AK 99802-2000
(907) 465-4160
CONTACT: Jerry Madden or
Kevin Duffy

OFFICE OF MANAGEMENT AND BUDGET

Division of Governmental Coordination
P.O. Box AW
431 N. Franklin Street, Suite 101
Juneau, AK 99811-0165
(907) 465-3562
CONTACT: Carrie Sykes
Gabrielle LaRoche
Lorraine Marshall

*Street Address:

3601 "C" Street
Frontier Building

DEPARTMENT OF NATURAL RESOURCESOil & Gas Activities

DNR/Oil and Gas*
Box 107034
Anchorage, AK 99510-7034
(907) 762-2547
CONTACT: Bill Van Dyke

Mining Activities

DNR/Mining*
Box 107016
Anchorage, AK 99510-7016
(907) 762-2109
CONTACT: Mitch Henning

Forestry Activities

DNR/Forestry*
Box 107005
Anchorage, AK 99510-7005
(907) 762-2512
CONTACT: Bill LaTocha

Agriculture Activities

DNR/Agriculture
915 S. Bailey
P.O. Box 949
Palmer, AK 99645
(907) 745-7200
CONTACT: Frank Mielke

Activities on State Park Lands

DNR/Parks*
Box 107001
Anchorage, AK 99510-7001
(907) 762-4565
CONTACT: Al Meiners

All Other Activities

Public Information*
Southcentral District Office
DNR/Land and Water Management
Box 107005
Anchorage, AK 99510-7005
(907) 762-2270
CONTACT: Janetta Pritchard

*Street Address:

3601 "C" Street
Frontier Building

DEPARTMENT OF FISH AND GAME

DFG/Habitat Division
333 Raspberry Road
Anchorage, AK 99518-1599
(Southcentral except as noted below):
CONTACT: Don McKay
(907) 267-2284

Kuskokwim (above Sleetmute) and
Yukon (above Paimiut) River
drainages:

DFG/Habitat Division
1300 College Road
Fairbanks, AK 99709
CONTACT: Al Ott
(907) 451-6192

Coastal Gulf of Alaska drainages
east of Cape Suckling:

DFG/Habitat Division
304 Lake Street, Room 103
Sitka, AK 99835-7563
(907) 747-5828
CONTACT: Dave Hardy

Hatchery Permits

DFG/FRED Division
1255 West Eighth Street
P.O. Box 3-2000
Juneau, AK 99802-2000
(907) 465-4160
CONTACT: Jerry Madden or
Kevin Duffy

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DEC/Southcentral Office
3601 C Street, Suite 1334
Anchorage, AK 99503
(907) 563-6529
CONTACT: Pat Cyr, Oil Spill Contingency
Plans/Fueling Facilities
Steve Eng, Subdivision and Septic Plans
Henry Friedman, Solid Waste Permits
Julie Howe, NPDES Permits
Tim Rumpfelt, COE Permits/Wetland Fills
Rick Sundet, Placer Mining Activities

OFFICE OF MANAGEMENT AND BUDGET

Division of Governmental Coordination
3601 C Street, Suite 370
Anchorage, AK 99503-5309
(907) 561-6131
CONTACT: Pat Miller
Alison Smith
Louisa Rand
Patty Bielawski

NORTHERN REGIONAL CONTACTS

DEPARTMENT OF NATURAL RESOURCES

Oil & Gas Activities

DNR/Oil and Gas*
Box 107034
Anchorage, AK 99510-7034
(907) 762-2547
CONTACT: John Wharam

Mining Activities

DNR/Mining
3700 Airport Way
Fairbanks, AK 99709
(907) 451-2793
CONTACT: John Wood

Forestry Activities

DNR/Forestry
3700 Airport Way
Fairbanks, AK 99709
(907) 451-2700
CONTACT: Steve Clautice

Agriculture Activities

DNR/Agriculture
915 S. Bailey
P.O. Box 949
Palmer, AK 99645
(907) 745-7200
CONTACT: Frank Mielke

Activities on State Park Lands

DNR/Parks
3700 Airport Way
Fairbanks, AK 99709
(907) 451-2700
CONTACT: Al Meiners or Dave Snarski

All Other Activities

North Central District Office
DNR/Land and Water Management
3700 Airport Way
Fairbanks, AK 99709
(907) 451-2700
CONTACT: Gayle Berger

*Street Address:

3601 "C" Street
Frontier Building

DEPARTMENT OF FISH AND GAME

DFG/Habitat Division
1300 College Road
Fairbanks, AK 99709
CONTACT: Al Ott
(907) 451-6192

Hatchery Permits

DFG/FRED Division
1255 West Eighth Street
P.O. Box 3-2000
Juneau, AK 99802-2000
(907) 465-4160
CONTACT: Jerry Madden or
Kevin Duffy

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DEC/Northern Office
1001 Noble Street, Suite 350
Fairbanks, AK 99701
(907) 452-1714
CONTACT: Joyce Beelman

OFFICE OF MANAGEMENT AND BUDGET

Division of Governmental Coordination
675 Seventh Avenue, Station H
Fairbanks, AK 99701-4596
(907) 451-2818
CONTACT: Elizabeth Benson
Patti Wightman

APPENDIX F

REFERENCES

**References for Subdivision
Plan Review Guidelines**

1. On-Site Wastewater Treatment. Proceedings of the Fourth National Symposium on Individual and Small Community Sewage Systems, 1985, American Society of Agriculture Engineers, 2950 Niles Rd., St. Joseph, MI 49085-9659.
2. Septic Tank System Effects On Ground Water Quality, 1985, Canter, Larry W., and Knox, Robert C., Lewis Publishers, Inc., 121 South Main Street, Chelsea, MI 48118.
3. High Rate Soil Absorption (HRSA) Task Force. Design Recommendations and Criteria, 1984, Minnesota Pollution Control Agency, 520 Lafayette Rd. North, St. Paul, MN 55155 (copies available from the Alaska Department of Environmental Conservation).
4. On-Site Wastewater Treatment and Disposal Systems Design Manual, EPA 625/1-80-012, 1980, U.S. Environmental Protection Agency, Office of Research and Development, Technology Transfer, Cincinnati, OH 45268 (copies available from National Small Flows Clearinghouse, West Virginia University, P.O. Box 6064, Morgantown, WV 26506-6064; 1-800-624-8301.

APPENDIX G

WASTEWATER APPLICATION RATES FROM PERCOLATION TEST RESULTS

**APPENDIX G
WASTEWATER APPLICATION RATES
FROM PERCOLATION TEST RESULTS**

Observed Percolation Rate ^a minutes/inch	Soil Texture	Application Rate in gal/day/ft ² for design flow less than or equal to 2,500 gal/day	Application Rate in gal/day/ft ² for design flow greater than 2,500 gal/day
Faster than 1	Gravel, coarse sand	Not suitable ^b	Not suitable ^b
1-5	Coarse to medium sand	1.2	0.79 - 0.98
6-15	Fine sand, loamy sand	0.8	0.61 - 0.74
16-30	Sandy loam, loam	0.6	0.52 - 0.61
31-60 ^c	Loam, porous silt loam	0.45	0.25 - 0.52
61-120 ^d	Silty clay loam, clay loam ^e	Not suitable ^d	Not suitable ^d

^a Percolation tests must be performed according to procedures described in the reference manual listed at 18 AAC 72.950(12).

^b Soils with percolation rates faster than 1 min/inch can be used providing a shallow trench or bed system is used, native soils are replaced by a two feet or greater layer of medium-graded sands as defined in Note 2 below, and application rates less than or equal to 1.2 gallons/day/ft² are used. These systems are subject to department approval on a case-by-case basis.

^c Soils with percolation rates faster than 30 min/inch are unsuitable for seepage pits.

^d Suitable for elevated mounds or conventional systems, with prior department approval.

^e Soils without expandable clays.

Notes:

1. The absorption field area for a shallow trench or bed system is the bottom area of the trench or bed. The absorption field area for a deep trench system or seepage pit is the side wall area between the bottom of the distribution pipe and the bottom of the excavation.

2. Subject to waiver by the department, sands for sand liners installed in soils with percolation rates faster than 1 min/inch must meet all of the criteria in at least one of the two following groups of minimum specifications (sieves are Standard U.S. Sieve Numbers). Group A: 85-100% passing a #10 sieve (less than 2.0 mm); 60-90% passing a #20 sieve (less than 0.850 mm); 25-50% passing a #40 sieve (less than 0.425 mm); less than or equal to 15% passing a #60 sieve (less than 0.250 mm); less than 5% passing a #200 sieve (less than 0.075 mm); and the sand shall not have more than 45% (of the total) passing any one sieve and retained on the next consecutive sieve, of those listed. Group B: The Coefficient of Uniformity (C_u) must be less than 4; the Coefficient of Curvature (C_c) must be equal to or less than 1; the amount passing the #10 Standard U.S. sieve (less than 2.0 mm) must be greater than or equal to 85% of the total; the amount passing the #200 Standard U.S. sieve (less than 0.075 mm) must be less than 5% of the total; and the sand shall not have more than 45% (of the total) passing any one sieve and retained on the next consecutive sieve, of those listed in Group A above.

15.65.101 Definitions

Subdivision – The process or result of partitioning, dividing, combining or altering of any lot, parcel or tract of land.

OKed
By Board

Part IV Subdivision Standards for Lots Served by On-Site Wastewater Disposal Systems

15.65.400 Subdivision Submittal Requirements

The subdivider shall submit plans, data, tests and engineering reports required to substantiate the capability of the proposed subdivision to adequately dispose of wastewater. Testing and deliverables required under this subsection shall be conducted and prepared under the direction of an engineer. Where individual on-site wastewater disposal is proposed, the subdivision wastewater disposal plan shall contain, but need not be limited to, the following information:

- A. Soil, percolation, and groundwater table observations and test results conducted in accordance with standards outlined in this chapter.
- B. A site plan showing:
 - 1. The location of existing private and public water systems, on-site wastewater disposal systems, replacement subsurface disposal field sites, public sewage systems and bodies of water:
 - a. in the proposed subdivision.
 - b. located outside the proposed subdivision and within 250 feet of the proposed wells and wastewater disposal system reserve areas.
 - 2. The location of a possible well and wastewater reserve area for each lot in the proposed subdivision and within 250 feet of the proposed subdivision. The plans shall show the required separation distances of each well.
 - 3. Topographic contours. Areas exceeding a 25% slope shall be delineated.
 - 4. Potable water source separation distances.

15.65.401 Subdivision Standards

All lots in a proposed subdivision served by on-site wastewater disposal systems shall conform to the following standards. *except as here. this section!*

- A. The minimum area of any lot shall be 40,000 square feet. The department may require a larger lot area where necessary to meet the requirements of this section.
- B. Each lot in a proposed subdivision shall contain minimum reserved area suitable for the original and two replacement on-site wastewater disposal systems. A holding tank shall not be considered as either the original or replacement site. Reserved areas shall be based on test holes completed

on each lot. The department may require additional tests to better assess the ability of the soils to accept wastewater. Groundwater monitoring shall be done during seasonally high months. Groundwater monitor tubes shall not be removed until construction of the on-site wastewater disposal system is complete. The minimum reserved area may be determined by either of the following two methods:


1. Total reserved area requirements may be determined from Table 7 without consideration of subsurface disposal fields or the number of bedrooms allowed on the lot. The reserve area shall meet all separation distances required in this chapter. Test holes shall be located within the designated reserved area.

TABLE 7: Reserved Area Requirements

Percolation Rate (minutes/inch)	Reserved Area (square feet)
1 - 5	10,000
6 - 12	12,000
13 - 24	14,000
25 - 60	16,000

2. The lot shall contain sufficient area to provide for structures, and a well or other water source, and sufficient area for an original on-site wastewater disposal system and two replacement subsurface disposal fields designed in accordance with this chapter. The plat shall designate the maximum number of bedrooms allowed on each lot. The area to be used for the wastewater disposal system and replacement wastewater disposal fields shall be designated on the plat for each lot as being unavailable for use for driveways, parking areas or structures.

Exception: Reserved areas are not required if the proposed lot has an existing approved on-site wastewater disposal system. Existing on-site disposal systems on proposed lots shall have been approved by the regulatory agency or shall be documented and approved in accordance with this chapter, which includes providing a replacement system design.

 ~~Exception to the 15.65.402 Subdivision Standards~~ *Exception*

Proposed subdivisions containing on-site wastewater disposal systems approved by the governing agency may be approved without conforming to this section if

the number of lots in the subdivision is not increased, and for decreased lot sizes the subdivider demonstrates: * see yellow sheet

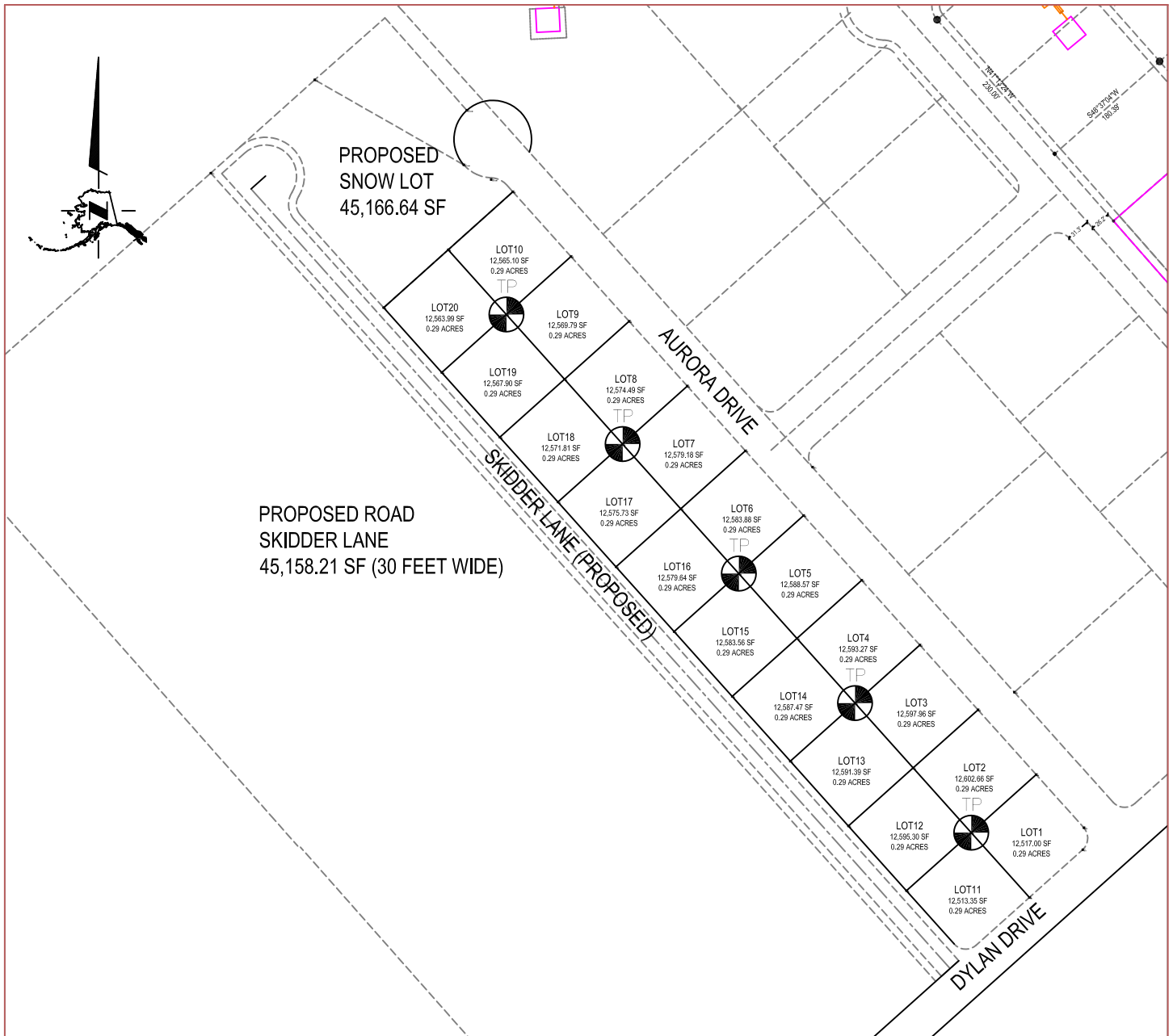
1. Lot sizes must be decreased in order to resolve a surveying error or fix violations to municipal code, provided the decrease in lot size of any one lot does not exceed 15 percent of the lot size prior to the decrease; and
2. Strict application of this section would be impractical and unreasonable or not in the best interests of the public health, safety or welfare; and
3. The proposal would not be detrimental to the public welfare or injurious to other property; and
4. The proposal will not nullify the intent and purpose of this chapter; and
5. A site for a ~~replacement~~ system is available; and
6. Undue hardship would result from strict compliance with the requirements of this section.

3 exceptions

Part 4 is stated.

15.65.101 Definitions

Subdivision – The process or result of partitioning, dividing, combining or altering of any lot, parcel or tract of land.



GEOTECHNICAL INVESTIGATION FOR SEPTIC SYSTEMS

1. EXCAVATE TEST HOLES WITHIN TEN FEET OF CENTER OF EVERY FOUR LOTS AS SHOWN ON THE DRAWING. THERE ARE LARGE TREES IN THE AREA THAT MAY PREVENT THE EXACT CENTER OF THE FOUR LOTS.
2. IF SOILS ARE INCONSISTENT BETWEEN NEIGHBORING HOLES AN ADDITIONAL HOLE OR HOLES WILL BE EXCAVATED BETWEEN THE CENTER OF EVERY FOUR LOTS.
3. IT IS ANTICIPATED THAT THE WATER TABLE WILL RISE AS THE TEST HOLES ARE EXCAVATED HEADING NORTHWESTERLY DUE TO THE STREAM JUST TO THE NORTH WEST OF THE PROPOSED SNOW LOT.
4. NOTE PREVIOUS TEST HOLE ON THE LAST LOT ON THE NORTH OF AURORA DRIVE HAD THE WATER TABLE AT ± 4 BELOW SURFACE. SOILS WERE A COURSE SAND WITH SMALL SCATTERING OF 1 TO 2 INCH MINUS GRAVEL THAT IS OVERALL RATED AS POORLY GRADED SANDS .

GEOTECHNICAL INVESTIGATION

LEGAL DESCRIPTION: BLUE SPRUCE SUBDIVISION
PROPOSED GEOTECH INVESTIGATION
VALDEZ, ALASKA

STREET ADDRESS: AURORA DRIVE AND PROPOSED SKIDDER LANE

PREPARED FOR: BART BARNETT

Wrangell Mountain Technical Services
P.O.BOX 118, CHITINA, ALASKA 99566
(907) 823-2280

DATE: 10/26/17

DRAWN: MINISH

CHECK: MINISH

SCALE: 1" = 200'

JOB#: 17045

DRAWING #: 17045 VALDEZ BLUE SPRUCE SUBD GEOT 171026

SHEET: 1 OF 1

REV#: 0