

## METHOD OF SURVEY PROCEDURE

This survey shall be executed by a licensed land surveyor registered to practice in the State of Alaska.

The survey and plat of ASLS 2004-6 shall substantially conform to the Final Finding and Decision and the enclosed Plan of Survey.

The Basis of Bearing shall be between two USC&GS tri-stations, eg: 'Knife' and 'Sponge'. Any improvements or encroachments onto ASLS 2004-6 shall be asbuilt and shown on the plat.

Prior to final approval, the surveyor shall obtain DOT/PF concurrence for the R/W boundary established herein.

The portion of ASLS 200r-6, bound by Richardson Highway ROW, shall be established in such a manner that the full width and alignment are preserved. At the time of the preparation of these instructions, it is unknown whether centerline monuments exists for portions of the Richardson highway ROW affecting this survey. Where no centerline monumentation exists, the centerline of the Sterling Highway shall control the location of ROW boundaries. The highway shall be as-built by splitting the pavement. If the project area falls within a curve, a minimum of three points along the curve shall be tied. The ROW mapping consulted appears to use grid bearings but this has not been verified.

ASLS 2004-6 shall consist of two tracts as identified on the plan of survey. All parcels are to be monumented with primary monuments. Additional parcels may be created at the borough's option. All parcels are to be monumented with primary monuments.

The parcels selected by the City of Valdez to be included within this survey are described within the Preliminary Finding and Decision as follows:

- Sec 16: S1/2SW1/4, SW1/4SE1/4, EXCLUDING ROBE LAKE.
- Sec 17 S1/2 EXCLUDING ROBE LAKE AND UNNAMED ISLAND.
- Sec 18 S1/2 EAST OF RICHARDSON HIGHWAY EXCLUDING ROBE LAKE AND UNNAMED ISLAND.
- Sec 19: THAT PORTION NORTH OF RICHARDSON HIGHWAY EXCLUDING USS 3323.
- Sec 20: THAT PORTION NORTH OF RIGHARDSON HIGHWAY EXCLUDING USS 3323.
- Sec 21: THAT PORTION NORTH OF RICHARDSON HIGHWAY EXCLUDING USS 5505, USS 5670 AND ROBE LAKE.
- Sec 23: ASLS 87-18, S1/2S1/2NE1/4, S1/2N1/2S1/2NE1/4, S1/2 NORTH OF RICHARDSON HIGHWAY EXCLUDING ASLS79-146.

Sec 24: S1/2S1/2NW1/4, S1/2N1/2S1/2NW1/4, SW1/4 NORTH OF RICHARDSON  
HIGHWAY EXCLUDING ASLS 87-362.

CONTAINING 1,075 ACRES, MORE OR LESS.

Tract A-1 is subject to:

- A right-of-way 100 feet in width for Robe Lake Branch Road, FAS 8153.
- A 200 – foot wide buffer upland from the ordinary high water mark of Robe Lake.
- A right-of-way 50 feet in width, easement deed from the U.S. to AT&T Alascom, AA 6190.
- Section line easements per AS 19.10.010.

Tract A-2 is subject to:

- A 200 – foot wide buffer upland from the ordinary high water mark of anadromous stream No. 3011 (AK. Dept. Of Fish & Game designation) and referred to as 'Hermit Creek' on the plat of ASLS 87-362.
- A right-of-way 50 feet in width, easement deed from the U.S. to AT&T Alascom, AA 6190.
- Section line easements per AS 19.10.010.
- A portion of the Old Richardson Highway may bisect Tract A-2. The road is shown on both the U.S. Rectangular Survey and the U.S.G.S. Quad map. The Preliminary and Final Finding and Decision do not address this ROW existence, however the decision does state the conveyance is will be subject to, "Valid existing trails, roads, easements and reservations." The road in question appears to begin within the bounds of ASLS 87-362 but is not shown on this plat. A portion described on the rectangular survey plat is acknowledged within ASLS 79-146. The surveyor is directed to locate the road in question and consult with the DOT/PF in Valdez, specifically George LeVasseur, to determine if this is a valid ROW and if so, show upon the plat of this survey as such with the alignment and appropriate width.

If GPS technology is used, it shall conform to the "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES", Version 5.0, May 11, 1988, reprinted with corrections, August 1, 1989, by the Federal Geodetic Committee, National Geodetic Survey, NOAA. Copies are available at the following website: [http://www.ngs.noaa.gov/FGCS/tech\\_pub/GeomGeod](http://www.ngs.noaa.gov/FGCS/tech_pub/GeomGeod).

Geographic Coordinates (NAD 27) will not be required to be shown for corner No.1 of both tracts of this survey.

ASLS 79-146, ASLS 87-362, ASLS 87-18, USS 5670, USS 5505 and USS 3323 shall be sufficiently retraced to ensure adequate closure. It will not be required to retrace record survey lines if boundary closure of 1:5000 can be achieved using record dimensions without adjustment.

The surveyor shall research the public record sufficiently to show on the plat the current legal identifiers of contiguous upland parcels.

Show all monuments of record on the boundary of ASLS 2004-6.

The northerly boundary of the south half of section 18 within Tract A-1 shall be established along the line of latitude  $61^{\circ}05'18.540''$  N, NAD27, as determined by ties to geodetic control monuments.

The northerly boundary of Tract A-2 shall be established by recovering monuments controlling the easterly boundary of ASLS 79-146 and setting the 1/256 corner by single proportion between recovered monuments. Thence the boundary shall proceed East, 2640.00' to corner No. 2; thence East, 2640.00' to corner No. 3; thence, South to the intercept with the Richardson Highway ROW.

No marking of any kind shall be added to the recovered monuments.

Eighteen primary are required to be set this survey as identified on the plan of survey.

### **TECHNICAL SURVEY REQUIREMENTS**

All lines surveyed and retraced by this survey shall be surveyed with a minimum accuracy of 1:5000. The surveyor must employ closed traverse or other field survey procedures which self-check the survey and justify the claim of achieving the required degree of accuracy, with the actual field closure reflected in the field notes. Legible, annotated copies of all field notes and computations, a sketch showing traverse point relationships, as well as good photographs or legible rubbings of monuments recovered or established, must accompany the first plat submittal.

Previously existing monuments and accessories found in a disturbed condition must be returned to the original position and condition as nearly as possible or replaced so as to perpetuate the position. All angle points on the exterior boundary must be monumented with a primary monument. A primary monument must consist of a minimum two-inch diameter metal pipe, as least 30 inches long, with a minimum four-inch flange at the bottom. A minimum two-and-one-half-inch diameter metal cap must be permanently attached at the top. If both the cap and the pipe are of non-ferrous metal, then additives with magnetic qualities must be permanently attached at both the top and bottom of the monument. Every primary monument cap must be permanently stamped with the survey designation across the top, the corner identification in the center and the surveyor's registration number and the year set on the bottom. This data must be oriented so that it may be read when the reader is facing north.

If the point for a primary monument is in a place that would be impractical to monument because of natural obstacles such as waterbodies, a witness corner must be set. The witness distances must be shown on the plat of survey, from the true corner position to the monument as set. Witness corners must always be set on a survey property line and at a distance considered reasonable and practical from the true corner point. Witness corners must comply with the standards for primary monuments.

All primary monuments must be referenced to three bearing trees or objects and survey tied to 1:2000 accuracy, if available.

- (1) If bearing trees or objects are used, they must be located as nearly as possible at equal angles, and may not be farther away than 100 feet from the monument. The distance to trees or objects must be measured at waist height, and in the case of trees, measured to the center of the tree, with distances reduced to horizontal equivalent. The surveyor shall have the option of marking the bearing trees with non-ferrous metal tags of at least nine square inches in size, facing the monument and clearly and permanently marked with the corner nomenclature and distance, or of scribing the trees as per Articles 4-85, 4-87 and 4-88 of the BLM Manual of Surveying Instructions, 1973. Reference monuments must be set if no trees or other suitable objects exist within 100 feet.
- (2) If reference monuments are necessary, two monuments meeting the requirements for secondary monuments, must be used. These monuments must be placed on a property line or at right angles to the monument, within the property being surveyed, and may not be further than 100 feet from the monument being referenced. In addition they must be marked with the nomenclature and distance to the monument being referenced.

If the nature of the area to be monumented does not support the standard two inch diameter, thirty inch long monuments, they may be substituted for, by using a two and one half inch aluminum cap, set flush with the surface and either grouted or epoxied into a bored hole in the rock. Please refer to 11 AAC 53.190. Monuments.

Secondary monuments must consist of at least a five-eighth-inch metal rod, three feet long, with a one-and-one-half-inch cap attached at the top.

In addition to the accessories required above, witness posts, a minimum size of a nominal two-by-four, or fiberglass reinforced carsonite witness post six feet long, with four feet protruding above ground, are required for all primary monuments. They must be set at right angles to the line and no farther than one foot from the monument.

All property corners must be numbered on the monuments and designated on the plat, in a consecutive, preferably clockwise, direction.

All significant improvements within the survey must also be field tied and shown on the plat.

Any additional survey or monumentation requirements of the City of Valdez platting authority must be conformed to.

## **PLAT REQUIREMENTS**

The plats shall be constructed by the surveyor in accordance with the following:

- (1) The base sheets must be of good quality mylar at least three mils thick, and be one of three standard sizes: 18" x 24", 24" x 36" or 31½" x 34". There are no exceptions to the standard size requirement.
- (2) The sheets must have the official division title block, border configuration and standard legend.
- (3) All line work on the plat must be in the appropriate black drafting ink.
- (4) All lettering on the plat must be in the appropriate black drafting ink and be accomplished with mechanical lettering equipment.
- (5) All line work and lettering must be of professional quality and all line widths and lettering sizes must be of such size that all information can be clearly shown without overlap or confusion. In order for all plats to microfilm properly, all lettering must be minimum size 80 Leroy ®, or equivalent, with No. 100 recommended.
- (6) When more than one sheet is required, an index sheet must be added showing the entire parcel, with the sheets in numerical order, and each sheet showing the sheet number and total number. When more than one sheet is submitted, only the last need have the approval certificates, but all sheets must be the same size.
- (7) The plat must be in an appropriate engineering-type scale of one inch representing a multiple of 100 feet.
- (8) Details, as necessary, must be shown at an appropriate indicated scale.
- (9) The plat must have a vicinity map of at least four inches on each side with a scale of one inch representing one mile in the upper right hand corner, showing sections, townships and ranges, boundaries such as national forest or municipal boundaries, and other prominent physical or natural features such as roads, lakes, or rivers. The source of the base map must also be indicated.
- (10) Nomenclature of the survey need appear in the title block only, unless the division specifically states otherwise.
- (11) The basis of bearings must be indicated. Bearings shown must be true bearings as orientated to the basis of bearing, and distances must be in the foot unit reduced to the true horizontal equivalent.

- (12) Bearings and distances must be shown within the accuracy commensurate with the class of survey being represented, boundary line distances must be shown from monument to monument.
- (13) In compliance with P.L. 94-168, entitled "Metric Conversion Act 1975," a metric bar scale must be shown on the plat, positioned directly above the title block.
- a. The foot scale must be identical to that used in the survey portion of the plat, with the metric scale adjusted accordingly. Two equations must also be shown: 1 meter = 3.280833 U.S. survey feet and 1 U.S. acre = 0.4047 hectare.
- (14) The date of plat preparation and standard north arrow must be shown on the plat. A recent magnetic declination is to be shown below the north arrow with the date and source. Declination may be computed utilizing N.O.A.A.'s 'National Geophysical Data Center' website, found at the following address on the internet: "<http://www.ngdc.noaa.gov/cgi-bin/seg/gmag/fldsnt1.pl>".
- (15) Certificates must be shown substantially as follows, with the headings capitalized and underlined:

#### **CERTIFICATE OF OWNERSHIP AND DEDICATION**

I, the undersigned, hereby certify that I am the Director, Division of Mining, Land and Water, and that the State of Alaska is the owner of Tracts A-1 and A-2 of ASLS 2004-6 as shown hereon. I hereby approve this survey and plat for the State of Alaska, and dedicate for public or private use as noted, all easements, public utility areas, and rights-of-way as shown and described hereon.

Dated \_\_\_\_\_ (Signature in black ink)  
Director, Division of Mining, Land and Water

#### **NOTARY'S ACKNOWLEDGEMENT**

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_\_.

By (Applicant's name to be handwritten in by Notary)

\_\_\_\_\_  
Notary Public for Alaska  
My Commission Expires \_\_\_\_\_

### APPLICANT CERTIFICATE

(I) We, the undersigned, hereby certify that (I am) we are the applicant as shown hereon. (I) We hereby approve this survey and plat. \*(Use the singular or plural as applicable)

ADL No. 225451

(Signature in black ink)  
Applicant's Name or Date  
Authorized Official and Title

### NOTARY'S ACKNOWLEDGEMENT

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_\_.

By (Applicant's name to be handwritten in by Notary)

\_\_\_\_\_  
Notary Public for Alaska  
My Commission Expires \_\_\_\_\_

### SURVEYOR'S CERTIFICATE

I hereby certify that I am properly registered and licensed to practice land surveying in the State of Alaska, that this plat represents a survey made by me or under my direct supervision, that the monuments shown hereon actually exist as described, and that all dimensions and other details are correct.

Date (date) Registration Number (number)

(Surveyor's Seal) (Signature in black ink)  
Registered Land Surveyor

(16) The following notes will be required on the plat:

- a. This survey was accomplished in accordance with AS 29.65 and MSI 2004-6.
- b. All bearings shown are true bearings as oriented to the basis of bearing and distances shown are reduced to horizontal field distances.
- c. The accuracy of this survey is greater than 1:5000.

- d. Basis of Bearing (for plats based on GPS)
- i. The Basis Of Bearing on this plat was determined by a high precision GPS survey using (brand and model) receivers differentially corrected and processed using (software name and version) software.
- e. There is hereby reserved a buffer 200 feet wide, upland from the ordinary high water mark of anadromous waters within this survey as determined by the state and shown on this plat for the purpose of preserving and protecting public access and recreational opportunities and protecting riparian fish and wildlife habitat.
- f. ASLS 2004-6 is subject to a 50' Public Access Easement upland of the current ordinary high water line of Robe Lake and Hermit Creek in accordance with AS 38.05.127.
- (17) Both record and found bearings and distances will be shown on the plat. In the event there are two sets of record data; that of the latest plat of record will be shown with the plat nomenclature indicated.
- (18) The exact marks on all monuments recovered and set must be shown on the plat with data pertaining to bearing trees and/or monument accessories established. If record lines are not retraced or resurveyed but are used to compute closure, record monuments along these lines must be indicated.
- (19) All easements and rights-of-way shall be shown graphically on the plat in lieu of a "note" whenever possible to do so. This requirement applies to all easements and rights-of-way including those to and along public waterbodies and shorelands.
- (20) The plat shall show the legal parcel identifiers for all lands surrounding this survey.
- (21) A public access easement shall be provided along the bed and 50 feet upland of the ordinary high water mark of all public or navigable water, except as noted in the Finding.
- (22) The current **DIVISION OF MINING, LAND AND WATER "TITLE BLOCK"** shall be placed in the lower right-hand corner of each sheet of the plat. It shall be labeled:

**ALASKA STATE LAND SURVEY NO. 2004-6  
WITHIN PROTRACTED SECTIONS 16, 17, 18, 19, 20, 21, 23 & 24,  
TRACT A T. 9 S., R. 5 W.,  
C.R.M., ALASKA  
Valdez Recording District**

- (23) Label the File No. box within the Title Block as follows: **ASLS 20040006.**



- (24) Any approval or any other certificates or notes that may be required by the City of Valdez Planning Commission must be drafted on the plat.
- (25) Upon completion of the field survey, two paper copies of the plat, along with applicable fees, shall be submitted to DML&W for review prior to submittal to the borough. A copy of the final platting board approval, or meeting minutes, shall be required with your submittal of the final plat to DML&W along with the filing fee.

### **PLAT REVIEW PROCESS**

Upon completion of the field survey, two paper copies of the plat, along with applicable fees, shall be submitted to DML&W for review prior to submittal to the borough. A copy of the final platting board approval, or meeting minutes, shall be required with your submittal of the final plat to DML&W along with the filing fee.

Legible, annotated copies of all field notes and computations, a sketch showing traverse point relationships, as well as good photographs or legible rubbings of monuments recovered or established, must accompany the first plat submittal.

Plat review fees are \$200.00 for the first parcel or tract and \$50.00 for each additional parcel or tract in accordance with 11 AAC 05.010(a)(13). Please remit a check or money order made payable to the Department of Revenue along with the first plat submittal.

### **FINAL MYLAR PLAT SUBMITTAL**

It is required that along with the final plat mylar, a 3 1/2" disk (dos format) be submitted with the drawing in \*.dxf (drawing exchange format) or AutoCAD \*.dwg format. In lieu of the 3 1/2" disk, the surveyor may make the drawing available at a FTP site on the internet.

The only drawing requirement is that it has a special layer named "DNR". These specs only apply to the "DNR" layer, other layers that which you ordinarily use need not be changed. The DNR layer should show only the boundary of the parcel surveyed, the tie to the basis of bearing and tie to the basis of coordinates. The drawing must have true geographic coordinates (text values and datum) shown, for corner #1 or the witness corner to C1, in order to place the survey in the correct location in the database. Polygons must close and have no undershoots or overshoots with the parcel boundary having clean snapped intersections. On the DNR layer, only the survey boundary and ties to control are to be shown. No text, area, title block, annotation, symbols, bearings or distances, leaders, details, and etc. are to be given.

## MODIFICATION OF INSTRUCTIONS

Should conditions arise appearing to demand additional instructions, require interpretation of these instructions, or which make these instructions inoperable, a report will be submitted promptly to the Statewide Platting Supervisor, describing the situation with recommendations to resolve such problems.


In the event that the survey is not completed, these instructions will become void at 5:00 p.m., A.S.T., two years from date of approval. Survey Instructions may only be extended once after their original issuance. A written request for an extension with justification and applicable fees is required.

Prepared by:

*for* 

Christopher Frost  
Land Surveyor Assistant II

Approved by:

  
Gerald Jennings  
Statewide Platting Supervisor

Date:

*July 29, 2004*

GDJ: CJF: cjf

Enclosures:      Municipal Survey Instructions  
                         Plan of Survey

cc:      Mike Mitchell, ML&W, RADS  
         Survey Tracking & Monitoring, Case Type: 311 Sub Type: 0017  
         Applicant: City of Valdez.      ADL No. 225451      Project: "Robe Lake South"