NOTES

- 1. The information provided is based on a field survey performed by R&M Consultants, Inc. during October 24, 2003 through November 8, 2003 and supplemented with data gathered during a field survey performed by R&M Consultants, Inc. during October 31, 2002 through November 10, 2002. The primary horizontal control was established by R&M Consultants, Inc. using Static GPS techniques with three Trimble dual frequency receivers and was adjusted by simultaneous least squares methods. The primary vertical control was established by R&M Consultants, Inc. by differential levels run between the primary control points. The planimetric and topographic features were collected from the project control using both RTK GPS and conventional radial surveying techniques.
- 2. Project bearings are local grid bearings oriented to the NAD83 (CORS) geodetic mean bearing between CP 8 and CP 11 as determined by static GPS observations. Distances are ground distances reduced to horizontal in U.S. Survey Feet.
- 3. The NAD83 (CORS) geographic position for CP 8 is Lat 60°04'29.52857" N, Long 147°59'48.50256" W and for CP 11 is Lat 60°04'58.67235" N, Long 147°59'37.60211" W. The geographic positions were derived using the NGS OPUS solution from static observations of 20 hours in duration. The NGS OPUS solution used common data from the following CORS stations: KENAI 1 CORS

Antenna ARP, Epoch: 2002, Lat 60°40'30.284" N, Long 151°21'00.570" W POTATO POINT 3 CORS

Antenna ARP, Epoch: 2002, Lat 61°03'22.533" N, Long 146°41'48.518" W HINCHINBROOK 3 CORS

Antenna ARP, Epoch: 2002, Lat 60°14'15.040" N, Long 146°38'47.552" W

- 4. The Project coordinates are referenced to a local horizontal datum based on an assumed coordinate value (N 500,000.00, E 500,000.00) at CP 11. A combined project scale factor of 0.99995327 was applied to the Alaska Coordinate System of 1983 (ACS83), Zone 4 coordinate values to obtain local ground distances in U.S. Survey Feet. The ACS83, Zone 4 value for CP 11 is N 2,227,773.766, £ 2,006,702.458. To convert the local coordinates to ACS 1983, Zone 4, U.S. Survey Feet coordinates, translate using +1727669.662 N, +1506608.685 E; then scale coordinates by 1.00004673; apply a rotation of -01°44'16".
- 5. The vertical datum is a local orthometric datum determined by an NGS OPUS solution as outlined in note 3. The project elevations were derived by applying NGS GEOID99 geoid undulations to the NAD83 (CORS) ellipsoid heights at CP8 resulting in a value of 66.588 feet. This datum approximates NAVD88, but does not account for the GEOID99 to NAVD88 bias.
- 6. Plat dimensions shown are record dimensions rotated to the basis of bearing. The parcel boundaries were located using a "best fit" solution which minimizes the offsets from recovered corners to the record corner positions. The boundary lines shown may not connect to the found monument position.
- 7. Stations and offsets shown are computed from the runway centerline to the found position of the recovered monumentation.

MONUMENT LEGEND

BLM MONUMENT

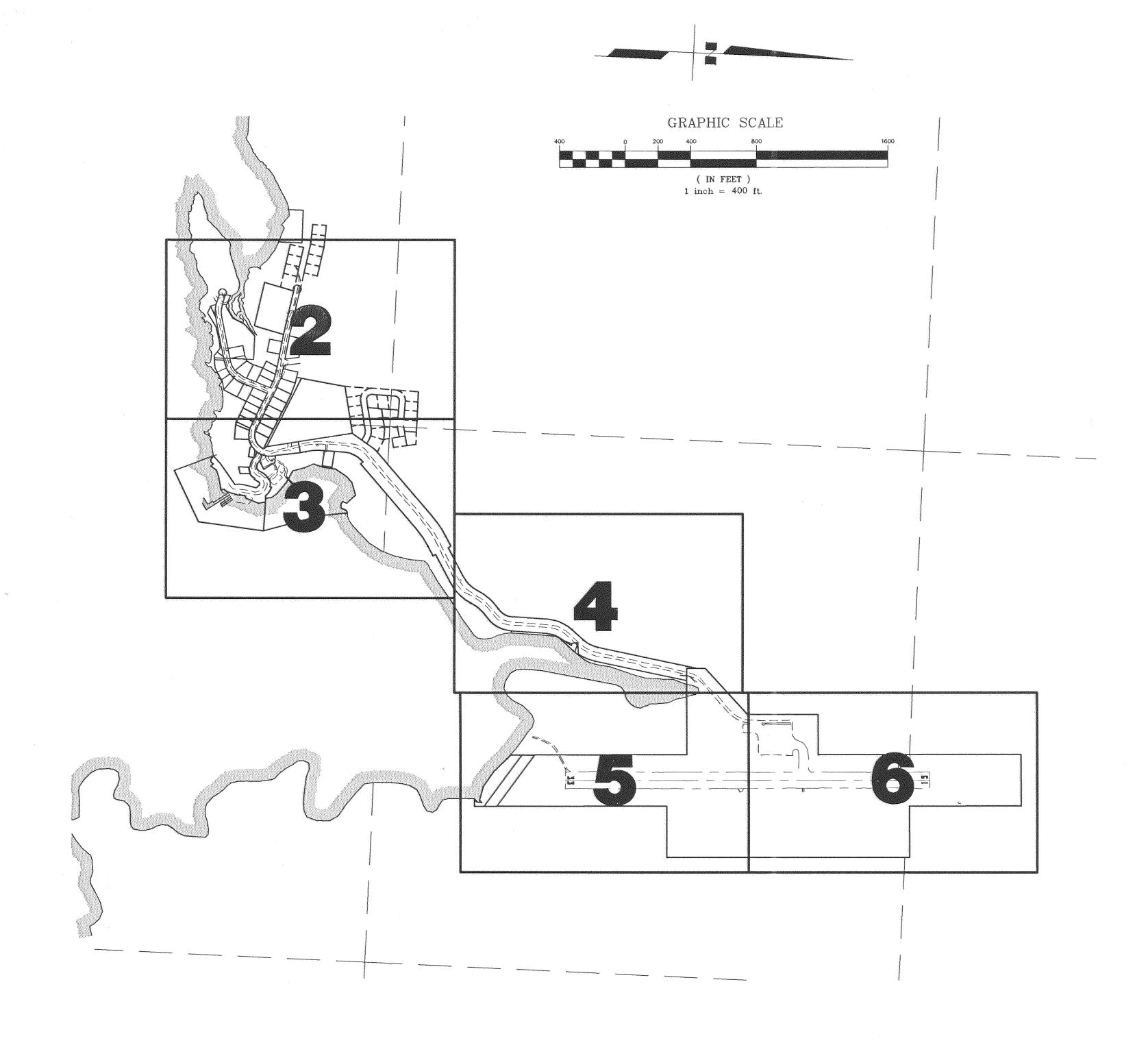
POINT NUMBER

PRIMARY MONUMENT

SECONDARY CORNER SECONDARY SURVEY CONTROL POINT

TEMPORARY BENCH MARK

- INTERVISIBLE LINE



SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA, AND THAT THIS DRAWING REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT THE MONUMENTS SHOWN HEREON ACTUALLY EXIST AS DESCRIBED, AND THAT ALL DIMENSIONS AND OTHER DETAILS ARE CORRECT TO THE EXTENT SHOWN HEREON.

DATE REVISIONS

LS 7843 1:5-04.

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION-DESIGN AND CONSTRUCTION

DESIGN SECTION CHIEF APPROVED:

DATE: 12-05-03 DRAWN: ___

CHECKED: ____

PROJECT MANAGER

CHENEGA BAY AIRPORT RESURFACING & LIGHTING AKSAS PROJECT No. 56445

> INDEX SHEET CONTROL DIAGRAM