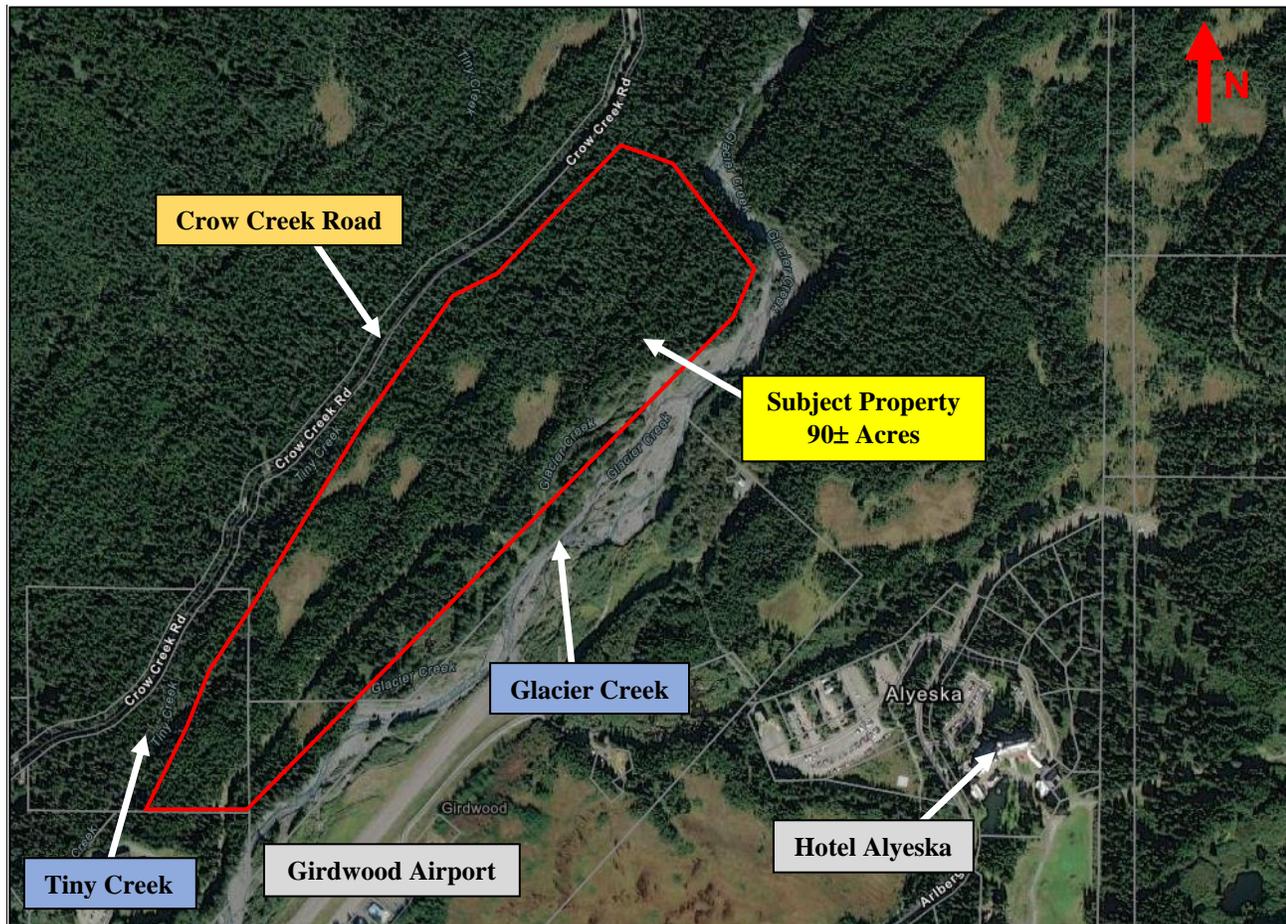


MACSWAIN ASSOCIATES LLC

4401 Business Park Boulevard, Suite 22, Anchorage, Alaska 99503

RESTRICTED APPRAISAL REPORT

Market Value Estimate - 90± Acres of Land in Holtan Hills, Girdwood, AK
Portions of Tract I, Plat 87-131, Tract B, Plat 85-38, & Tract 9A, Plat 73-220



Date of Value: December 18, 2021

File No. 21-3636

Submitted To:

Shelley Rowton, HLB Land Management Officer
Municipality of Anchorage
4700 Elmore Road
Anchorage, AK 99507

MacSwain Associates LLC

4401 Business Park Blvd., Suite 22
Anchorage, Alaska 99503
Phone: 907-561-1965
Fax: 907-561-1955
s.macswain@macswain.com

January 7, 2022

Shelley Rowton, HLB Land Management Officer
Municipality of Anchorage
4700 Elmore Road
Anchorage, AK 99507

Re: 90± Acres of Land in Holtan Hills
Portions of Tract I, Plat 87-131, Tract B, Plat 85-38, & Tract 9A, Plat 73-220
Girdwood, AK

Dear Ms. Rowton:

We have prepared a *Restricted Appraisal Report* of the above-referenced property located in Girdwood, Alaska. The appraised property contains approximately 90± acres residential-zoned land, owned by the Municipality of Anchorage / Heritage Land Bank (MOA/HLB). Located between Crow Creek Road and Glacier Creek, the appraised 90± acre property is not a legally-separated tract; thus, we invoke a **hypothetical condition** that the appraised property is legally separated and developable according to its highest and best use. We appraise the market value of the *fee simple estate*. This report is prepared in accordance with the *Uniform Standards of Professional Appraisal Practice* (USPAP).

Based on the result of our investigation and analysis, the market value of the appraised property, as of December 18, 2021, is estimated as follows.

Market Value of Subject Property	\$2,100,000
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Your attention is directed to the Assumptions and Limiting Conditions of this report. We also direct your attention to the **hypothetical condition** of the appraisal. Finally, we direct your attention to the Statement regarding COVID-19, which succeeds the Assumptions and Limiting conditions in the addendum. If you have any questions, please contact our office.

Sincerely,



Steve MacSwain, MAI
State of Alaska Certificate No. 42



Alex Kleinke
State of Alaska Certificate No. 148873

Appraiser Certification

The undersigned certifies that to the best of their knowledge and belief:

- ➔ The statements of fact contained in this report are true and correct.
- ➔ The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- ➔ We have no present or prospective interest in the property that is the subject of this report, and no personal interest with respect to the parties involved.
- ➔ We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- ➔ We have not performed any services as an appraiser or in any other capacity, regarding the property that is the subject of this report, within the three-year period immediately preceding acceptance of this assignment.
- ➔ Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- ➔ Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- ➔ The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
- ➔ The reported analyses, opinion, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.
- ➔ The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- ➔ Alex Kleinke of MacSwain Associates, LLC inspected the subject property on December 18, 2021. Steve MacSwain, MAI is familiar with the property from other appraisal assignments in Girdwood.
- ➔ No one provided significant real property appraisal assistance or analytical support to the persons signing this certification.
- ➔ As of the date of this report, Alex Kleinke and Steve MacSwain, MAI are certified General Real Estate Appraisers in the State of Alaska and have completed the education requirements through June 2023.
- ➔ As of the date of this report, Steve MacSwain, MAI has completed the Standards and Ethics Education Requirements for Designated Members of the Appraisal Institute.

MacSwain Associates LLC

- ➔ As of the date of this report, Alex Kleinke has completed the Standards and Ethics Education Requirements for Practicing Affiliates of the Appraisal Institute.
- ➔ As of the date of this report, Steve MacSwain, MAI has completed the continuing education program for Designated Members of the Appraisal Institute.
- ➔ As of the date of this report, Alex Kleinke has completed the continuing education program for Practicing Affiliates of the Appraisal Institute.



Steve MacSwain, MAI
State of Alaska Certificate No. 42



Alex Kleinke
State of Alaska Certificate No. 148873

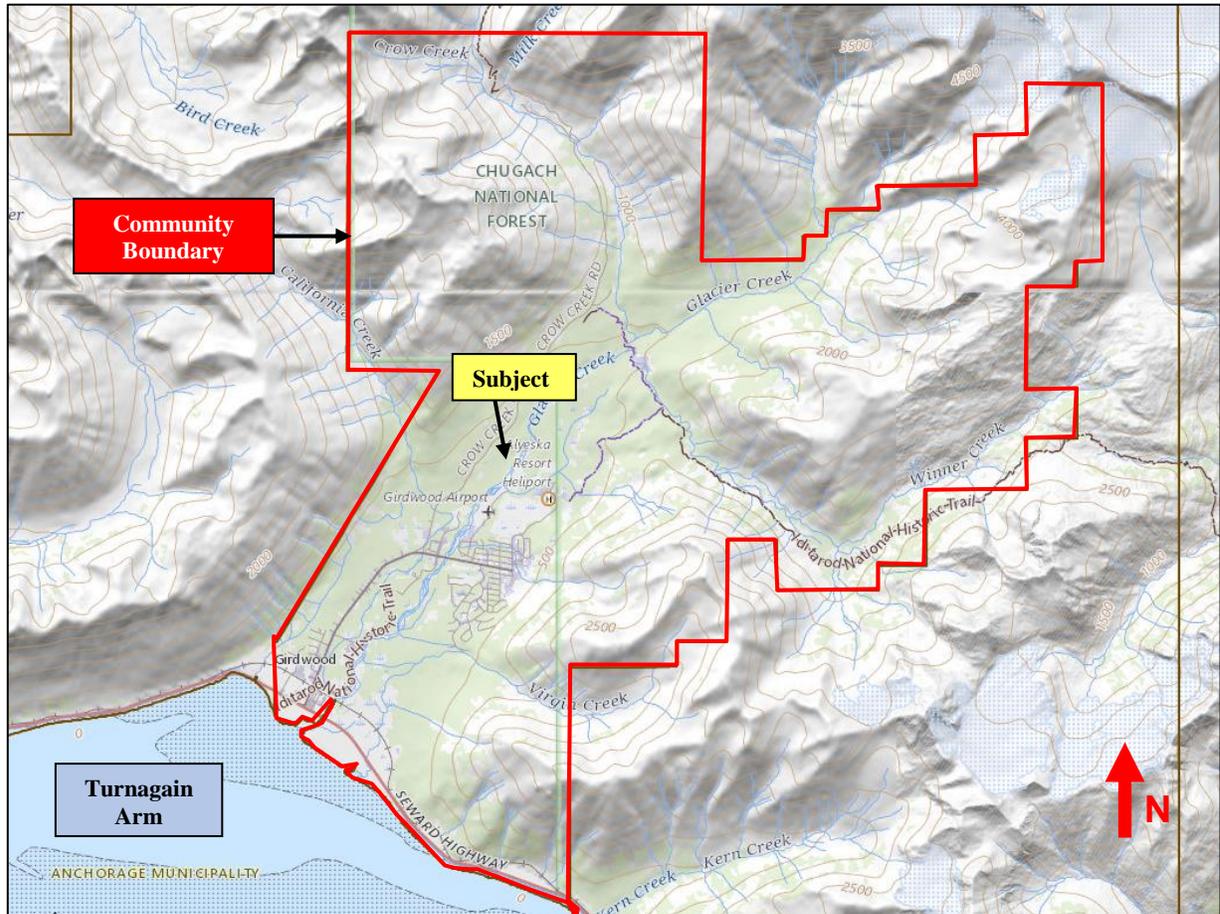
1/7/22

Date

Appraisal Overview

This is a *Restricted Appraisal Report* prepared to comply with USPAP. The data, reasoning, and analyses that are used to develop an opinion of value are retained on file. The information contained in this report addresses the specific needs of the client and the appraisers are not responsible for the unauthorized use of this report.

Girdwood Community Council Map



Client: MOA/HLB

Appraisers: Steve MacSwain, MAI (State of Alaska Certificate No. 42) and Alex Kleinke (State of Alaska Certificate No. 148873)

Intended Use: Assist with potential property development or disposition

Intended User: Client

Value Type: The type of value estimated is *market value*. Market value is defined as follows.

The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- a. *buyer and seller are typically motivated;*
- b. *both parties are well informed or well advised, and acting in what they consider their own best interests;*
- c. *a reasonable time is allowed for exposure in the open market;*
- d. *payment is made in terms of cash in US dollars or in terms of financial arrangements comparable thereto; and*
- e. *the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.*¹

Property Inspection Date: December 18, 2021

Effective Appraisal Date: December 18, 2021

Report Date: January 7, 2022

Property Type/Current Use: Vacant land used for recreation

Property Rights Appraised: Fee simple estate

Legal Description: Portions of Tract I, Alyeska Subdivision Prince Addition, Plat 87-131; Tract B, Girdwood Elementary School Subdivision, Plat 85-38; and Tract 9A, Section 9, T10N, R2E, Plat 73-330.

Ownership: Municipality of Anchorage / Heritage Land Bank (MOA/HLB)

Three-Year Sale History: No sales in past three years

Appraisal Methodology: We utilize the sales comparison approach to estimate the market value of the appraised land. We also performed abbreviated DCF analyses as a test of reasonableness, which we retain on file. The cost approach does not reflect market behavior for similar land. Our comparative market analysis uses qualitative techniques to measure differences between the comparable sales and the subject. Known as a relative comparison

¹ *Appraisal of Real Estate*, Fifteenth Edition (2020), by the Appraisal Institute, p. 49.

analysis, we rate various features of the comparable sales that affect market behavior. This report is a brief recapitulation of the appraisers' data, analyses, and conclusions with supporting documentation retained on file.

Appraisal Scope: The scope of the appraisal is summarized as follows.

- Inspected the appraised property on December 18, 2021;
- Discussed the property with Shelley Rowton, HLB Land Management Officer with the Municipality of Anchorage;
- Reviewed mapping provided by Municipality of Anchorage outlining appraised premises;
- Reviewed Plat Maps 87-131, 85-38, and 73-220;
- Reviewed MOA zoning map;
- Reviewed Crow Creek Neighborhood Land Use Plan prepared for Heritage Land Bank by Agnew::Beck Consulting, LLC dated April 2006;
- Reviewed Crow Creek Neighborhood Phase 1: Lower Matrix Feasibility Study Final Report, prepared for Heritage Land Bank by The Boutet Company, LLC dated March 2007;
- Reviewed Land Use Planning Title 21, Chapter 21.09 regarding land use in Girdwood;
- Observed neighborhood land use patterns;
- Gathered data from the Municipality of Anchorage Assessing Department and State of Alaska Recorder's office regarding ownership, assessments, and general property information;
- Interviewed local and Anchorage-wide market participants regarding current market conditions, trends, and expectations;
- Performed a land use analysis that concludes with an opinion of highest and best use;
- Collected and analyzed land sales;
- Developed the sales comparison approach to arrive at market value indications;
- Developed abbreviated subdivision lot sell-out analyses based on available information, performed as a test of reasonableness and retained on file; and
- Reconciled the value indications into a final estimate of market value.

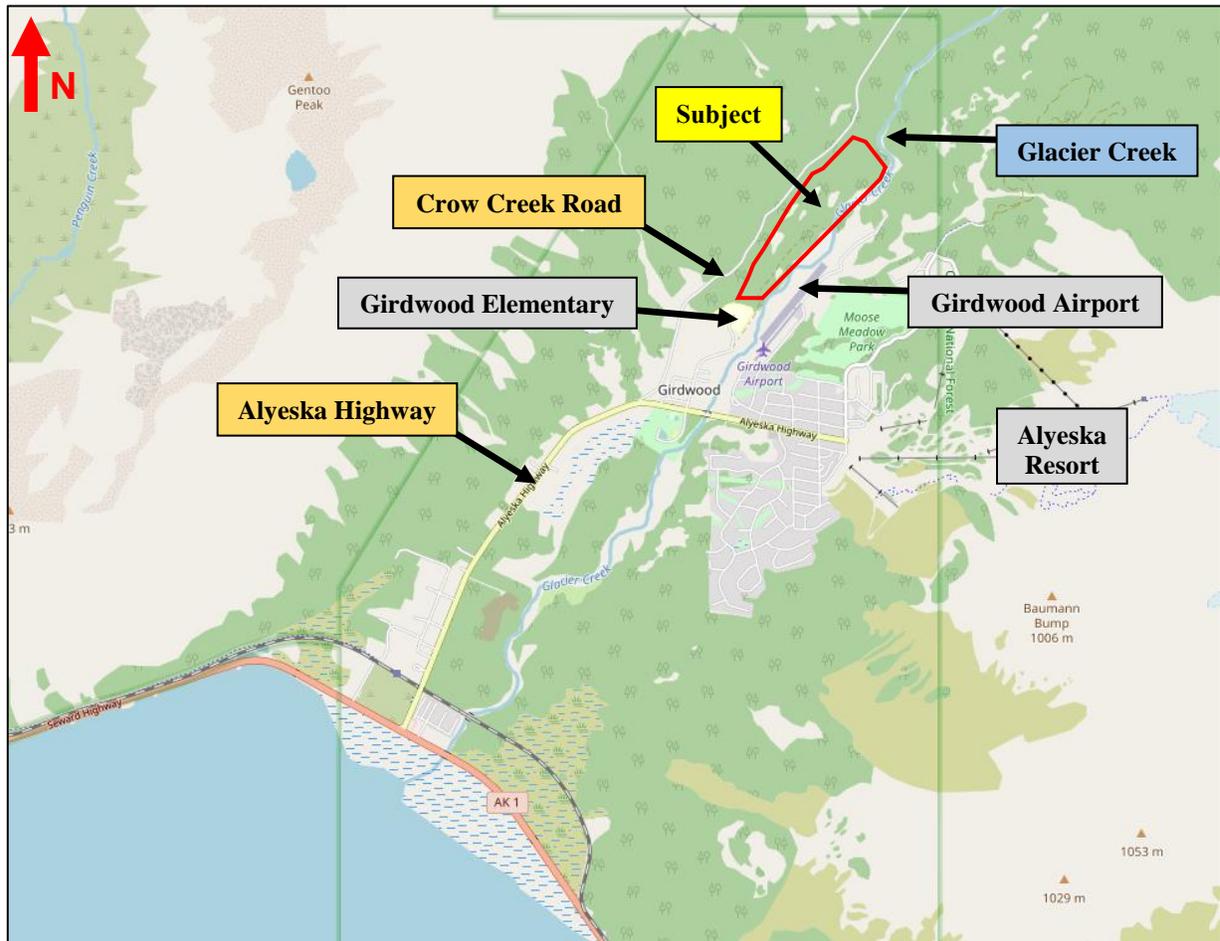
Exposure Time: A period of 12 months prior to our effective date of value is a reasonable exposure time.

Property Description

Neighborhood Description: The appraised property is located on southeast side of Crow Creek Road, west of the Girdwood Airport and Glacier Creek. The south end of the property is 0.8± road miles north of Alyeska Highway. The subject land extends an additional 0.8± mile in a northeast direction along Crow Creek Road. Zoning districts consist of both GR-3, Single-

Family/Two-Family Residential and GR-5, Multiple-Family Residential designations, as well as Girdwood Open Space District zoning interspersed where land has less development potential. Neighborhood development includes Girdwood Elementary, sparse residential development, and Girdwood Airport. Lands in the neighborhood are primarily undeveloped. Glacier Creek constricts the neighborhood's developable area, but provides appeal as it enhances the character of the neighborhood. Access is provided by Crow Creek Road, which deteriorates into a gravel road south of the subject. The historic Crow Creek Mine is located north of the subject. Established in 1896, this gold mine continues to operate, and is now open to the public for tourism activities and wedding venue. The neighborhood benefits from both recreational and residential potential due to physical character and zoning. We consider the neighborhood's outlook to be positive with long-term residential viability.

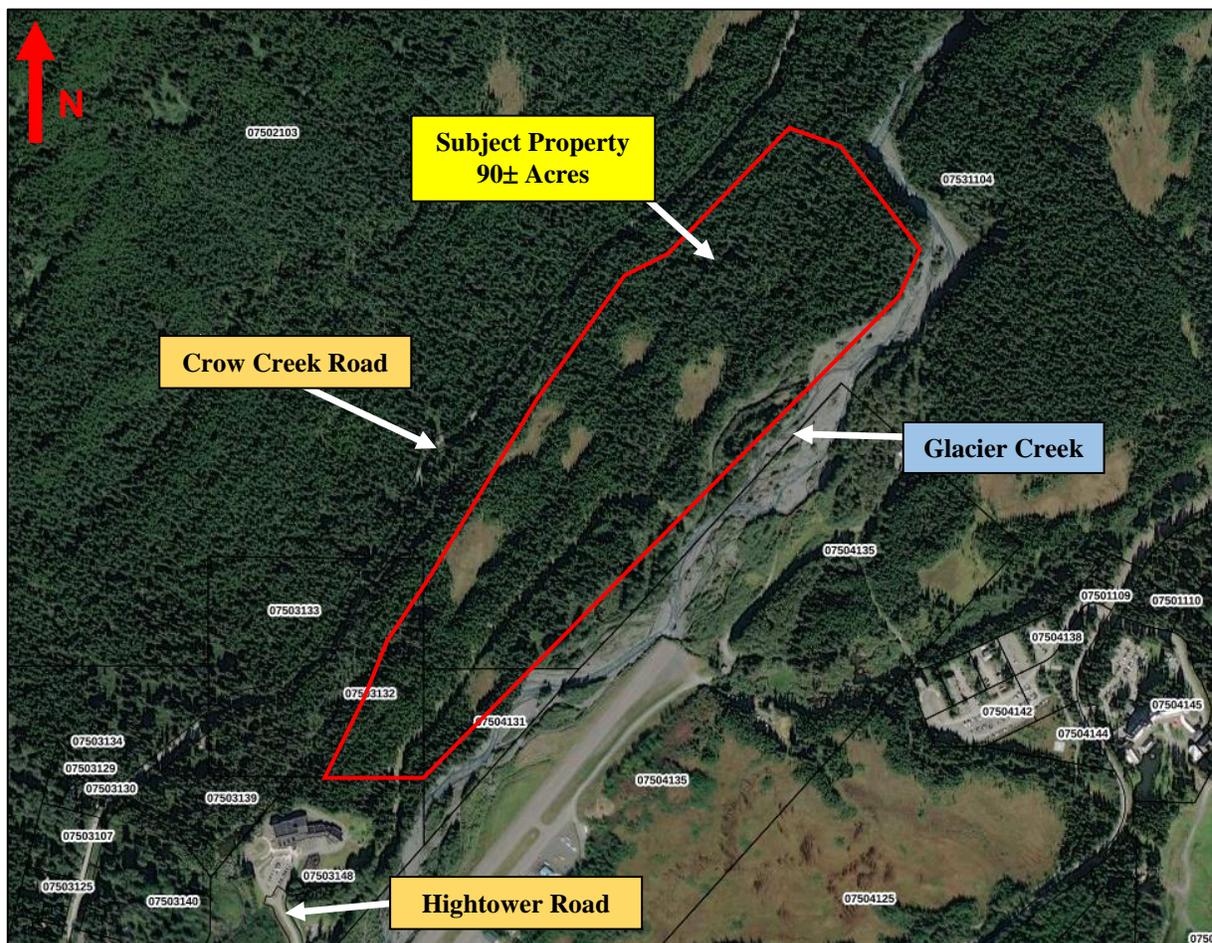
Neighborhood Aerial Map



Parcel Description: This parcel description is based on the December 18, 2021 property inspection, publicly available mapping and published land use plans, and information provided by the client. The appraised parcel contains 90± acres, based on documentation provided by the client. It is not a legally-separated property. The hypothetical subject parcel presently overlaps over three parcels. These are identified by the MOA as Parcels 6-011, 6-016, and 6-071. When combined, these properties create an irregular-shaped 90-acre parcel sandwiched between Crow Creek Road and Glacier Creek. The subject contains several level benches with gravel-based

soils, which appear suitable for development. These buildable areas are bounded by pockets of marshy wetlands and lands with steep topographical profiles. Overall, the appraised 90± acres is suitable for a planned unit development that takes advantage of the buildable areas and utilizes the non-buildable areas for privacy buffers and recreational amenities. The split-zoning allows for a variety of densities. The majority of the buildable area is zoned gR-3, Single-Family/Two-Family Residential, while the balance is zoned gR-5, Multiple-Family Residential. The non-buildable areas are zoned GOS, Girdwood Open Space. An approved Master Plan with zoning designations that maximize yield will enhance financial feasibility for subdivision. Conditional use permits will require Municipal approval. Public water, electricity, and telephone are available to the property. Public sewer terminates at Girdwood Elementary. Subdivision development would require sewer and natural gas infrastructure, and further extension of water, electricity, and telephone. Road infrastructure is limited to a narrow road to the south boundary off Hightower Road; which, based on information obtained from the client, will permit access to the appraised land. There does not appear to be constructed access from Crow Creek Road, and the steep slope between the road and subject land will increase development costs. We assume the property is environmentally clean, as a search of the State of Alaska Contaminated Sites Database yielded no results. Moreover, a soils survey was not provided, and snow cover precluded observation as to the extent of overburden. However, our observations indicated the land is heavily treed with coniferous trees.

State of Alaska GIS Aerial Map



Parcel Description (continued): Vegetation and wetland maps obtained from the Crow Creek Neighborhood Land Use Plan identify land cover as primarily open needleleaf forest with pockets of wet graminoid-forb meadows and emergent wetlands. Despite the proximity of Glacier Creek and Tiny Creek, FEMA mapping does not indicate significant flood plain inundation. Overall, the subject parcel has residential appeal due to its location and physical character; however, development challenges are present that increase costs and project risk.

Site Improvements: Limited to recreational trails and utility infrastructure

Highest and Best Use: Residential subdivision

Property Photographs

Date: December 18, 2021

Taken By: Alex Kleinke



Northeast view of parcel taken near south boundary



West view of utility infrastructure near southwest corner

Property Photographs

Date: December 18, 2021

Taken By: Alex Kleinke



East view of meadow on southeast portion of property



Northeast view of property taken near center of parcel

Property Photographs

Date: December 18, 2021

Taken By: Alex Kleinke



Southwest view of property taken from south half of property



Northeast view of Crow Creek Road, just south of subject's south boundary

Property Valuation – 90± Acres**Sales Comparison Approach**

Overview: The sales comparison approach is a systematic procedure of estimating the subject's market value by comparing it directly to property sales afforded similar physical and economic character. The approach is founded on the principle of substitution, theorizing value is a function of a knowledgeable investor's (buyer) intent to pay no more for a specific property than the cost of acquiring an alternative property offering similar utility (economic satisfaction). The sales comparison approach is the best approach for valuing commercial land.

Comparable Land Sales: A summary of property sales used in comparative analysis follows. These sales include four properties in South Anchorage and one property in Northeast Anchorage. The transactions are analyzed on a price per acre basis. Additional details of these transactions are retained on file.

Comparable Land Transactions

No.	Location	Zoning	Sale Date	Sale Price	Size (Acres)	\$/Acre
1	West terminus of Snow Flake Drive, just south of Rabbit Creek Road, South Anchorage	R-6 / R-9	5/20	\$350,000	20.00	\$17,500
2	East and west sides of Kings Way Drive, just south of Paine Road, South Anchorage	R-10	5/20	\$575,000	89.34	\$6,430
3	South side of E. 172 nd Avenue, west side of Goldenview Drive, South Anchorage	PLI	3/20	\$1,800,000	104.76	\$17,821
4	East and west sides of Cobblestone Hill Road, east of Prominence Pointe Drive terminus, South Anchorage	R-7	12/16	\$900,000	99.70	\$9,027
5	Southeast corner of Boundary Avenue and Newell Street at the current terminus of Whisperwood Park Drive, Northeast Anchorage	R-3 / R-4	6/13	\$1,834,650	16.20	\$113,250
	Between Crow Creek Road and Glacier Creek, north of Alyeska Highway, Girdwood (Subject)	gR-3 / gR-5 / gOS	-- --	-- --	90.00	-- --

Comparable Sales Analysis: These comparables indicate a wide range of value from \$6,430 to \$113,250 per acre. Adjustments were considered for location, access, frontage, size differential, and development costs. Factors affecting development costs include location and access as well as the extent of utility extension required, and topography, which influences the degree of site work required. The appraised parcel requires utility extension, road infrastructure, and extensive site work. Moreover, financially feasible subdivision will require an approved master plan and depend on successfully obtaining conditional use permits to enhance yield. Despite these risk

MacSwain Associates LLC

factors, the subject's appeal is enhanced due to increased residential demand in Girdwood caused by a housing shortage. After adjustments, the sales indicate a wide unit value, greater than \$9,027 per acre, but less than \$113,250 per acre. After carefully considering the subject's positive and negative characteristics, we correlate with a value ranging from \$20,000 to \$25,000 per acre, which is developed below.

90 Acres × \$20,000/ Acre=	\$1,800,000
90 Acres × \$25,000/ Acre=	\$2,250,000

This value range reflects the subject 90± acres in its current state, and not premised on a specific development plan. At this stage, Holtan Hills' plan has not been finalized. Relying on a DCF subdivision analysis without a final subdivision plan for the subject 90 acres could be misleading. Therefore, we consider the sales comparison approach to be the most credible method of estimating market value. As a test of reasonableness, we prepared abbreviated subdivision analyses utilizing a variety of projections, which we retain on file. Based on the preceding analysis, the market value of the appraised property, as of December 18, 2021, is reconciled as follows.

Market Value of Subject Property	\$2,100,000
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Assumptions and Limiting Conditions

This appraisal is subject to the following general assumptions and limiting conditions.

- ➔ No responsibility is assumed for the legal description provided or for matters pertaining to legal or title considerations. Title to the property is assumed marketable unless otherwise stated.
- ➔ The property is appraised free and clear of all liens or encumbrances unless otherwise stated.
- ➔ The information furnished by others is believed to be reliable, but we do not guarantee its accuracy.
- ➔ All maps, land use plans, and other illustrative material are believed to be accurate, but are included only to help the reader visualize the property.
- ➔ It is assumed there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions or for obtaining the engineering studies that may be required to discover them.
- ➔ It is assumed the appraised property is in full compliance with all applicable federal, state, and local environmental regulations and laws unless the lack of compliance is stated, described, and considered in the appraisal report.
- ➔ It is assumed the appraised property conforms to all applicable zoning, land use regulations, and platting restrictions unless the nonconformity is identified, described, and considered in the appraisal report.
- ➔ It is assumed that the use of the land and improvements is within the property boundaries and that there is no encroachment or trespass unless noted in the report.
- ➔ The appraisers are not required to give consultation, testimony, or to attend court proceeding pertaining to the appraised property without prior arrangements.
- ➔ Neither all nor any part of the contents of this report shall be disseminated to the public through advertising, public relations, news, sales, or other media without the prior written consent and approval of the appraisers.
- ➔ The appraisers are not aware of any hazardous materials or other type of environmental contamination on the appraised property. Furthermore, we do not have any knowledge that such substances exist. However, the presence of these substances may affect the property value. Therefore, we urge the client to retain an environmental report for discovery and risk assessment.

Hypothetical Condition

- ➔ The property contains 90± acres per mapping and documents provided by the client. It is currently not a legally-separated parcel. We invoke a *hypothetical condition* that the appraised 90± acres is legally separated and developable to its highest and best use.

Statement on COVID-19

- ➔ This appraisal was performed following public awareness that COVID-19 was affecting residents in the United States. At the time of the appraisal, COVID-19 was having widespread health and economic impacts. The effects of COVID-19 on the real estate market in the subject neighborhood were not yet measurable based on reliable data. The analyses and value opinion in this appraisal are based on the data available to the appraiser at the time of the assignment and apply only as of the effective date indicated. No analysis or opinions contained in this appraisal should be construed as predictions of future market conditions or value.

MacSwain Associates LLC

4401 Business Park Boulevard, Suite 22, Anchorage, Alaska 99503

Appraiser: Alex Kleinke
State of Alaska, Certified General Real Estate Appraiser – License #148873

Education: Bachelor of Business Administration, Finance, University of Alaska Anchorage (2009)
Master of Business Administration (MBA), University of Alaska Anchorage (2012)

Professional Experience: 2009 to Present – MacSwain Associates LLC

Real estate appraiser of all property types throughout Alaska including commercial, industrial, land, rights-of-way, and special-purpose properties. Appraisals performed for financing, right-of-way acquisitions, conservation easements, leasing, insurance, taxation, estate planning, investment analysis, and buy-sell decisions.

Appraisal Education: The following is a list of recently completed appraisal courses and seminars.

2021 – *Cool Tools: New Technology for Real Estate Appraisers* by the Appraisal Institute, Online

2021 – *Analyzing Operating Expenses* by the Appraisal Institute, Online

2021 – *Business Practices and Ethics* by the Appraisal Institute, Online

2020 – *7-Hour National USPAP 2020-2021 Update Course* by the Appraisal Institute, Anchorage, AK

2017 – *Business Practices and Ethics* by the Appraisal Institute, Online

2017 – *7-Hour Equivalent USPAP Update Course* by the Appraisal Institute, Online

2016 – *Advanced Market Analysis and Highest and Best Use* by the Appraisal Institute, Chicago, IL

2016 – *General Sales Comparison Approach* by the Appraisal Institute, Chicago, IL

2015 – *Real Estate Finance, Statistics, and Valuation Modeling* by the Appraisal Institute, San Diego, CA

2015 – *General Report Writing and Case Studies* by the Appraisal Institute, Las Vegas, NV

2015 – *General Income Approach Parts I and II* by the Appraisal Institute, San Diego, CA

2013 – *The Discounted Cash Flow Model: Concepts, Issues, and Apps.* by the Appraisal Institute, San Diego, CA

2013 – *General Appraiser Site Valuation and Cost Approach* by the Appraisal Institute, Fort Lauderdale, FL

2012 – *General Market Analysis and Highest and Best Use* by the Appraisal Institute, San Diego, CA

2011 – *15-Hour National USPAP Course* by the Appraisal Institute, Anchorage, AK

2010 – *Basic Appraisal Procedures* by the Appraisal Institute, Anchorage, AK

2010 – *Basic Appraisal Principles* by the Appraisal Institute, Anchorage, AK

Sample of Significant and Project Assignments:

2020-21 – Eight right-of-way appraisals for Knik-Goose Bay Road Reconstruction Project

2020 – 43 City of Seward Lease Parcels including commercial, industrial, and marine-type properties

2020 – 41 City of Kenai Lease Parcels including aviation, commercial, industrial, and marine-type properties

2019 – City of Kodiak Lease Parcels including aviation and communication sites, seaplane base, and shipyard

2018 – Fractional interest of land and sandwich leases for Anchorage hotel and fuel station properties

2017 – Pacific Spaceport Complex, market rent of launch complex facilities within PSCA on Kodiak Island

2016-2017 – Provided insurable value project appraisals for properties in Utqiagvik, Dillingham, Iliamna, Kotzebue, Nome, Cordova, Naknek, Angoon, Haines, Hoonah, Juneau, Kake, Anchorage, Bethel, and Yakutat

2015 – 40 City of Seward Lease Parcels including commercial, industrial, and marine-type properties

2015 – 97 City of Kenai Lease Parcels including aviation, commercial, industrial, and marine-type properties

2015 – Assisted with cost estimate to acquire lands to develop proposed AKLNG from Pt. Thomson to Nikiski

2014-2020 – 50+ Right-of-way appraisals for Parks Highway MP 48.8 to 52.3 Reconstruction Project

2014 – Assisted with project management and appraisals of Nikiski properties for Alaska LNG acquisitions

2012 – Assisted in the income analysis portion of the Trans Alaska Pipeline System (TAPS)

2010-2022 – Alaska Railroad Corporation (ARRC) land lease appraisals in Anchorage, Seward, and Whittier

Professional Affiliation: Practicing Affiliate – Appraisal Institute

License #: 148873
Effective: 5/23/2021
Expires: 06/30/2023

State of Alaska
Department of Commerce, Community, and Economic Development
Division of Corporations, Business, and Professional Licensing

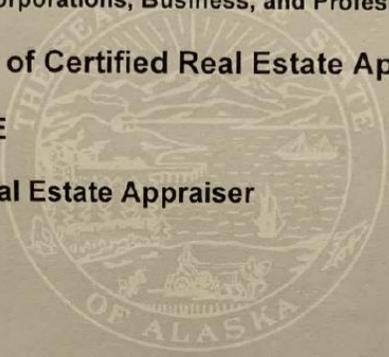
Board of Certified Real Estate Appraisers

Licensee: **ALEXANDER H KLEINKE**

License Type: **Certified General Real Estate Appraiser**

Status: **Active**

Commissioner: Julie Anderson

The seal of the State of Alaska is visible in the background of the license information. It features a central figure holding a bow and arrow, surrounded by the words "THE GREAT SEAL OF THE STATE OF ALASKA".

MacSwain Associates LLC

4401 Business Park Boulevard, Suite 22, Anchorage, Alaska 99503

Appraiser: Steve MacSwain, MAI

Member of Appraisal Institute - No. 5700

State of Alaska, Certified General Real Estate Appraiser - No. 42

Professional Experience: 1986 to Present - MacSwain Associates LLC

1976 to 1986 - Appraisal Company of Alaska - President

1970 to 1975 - Real Estate Services Corporation – Appraiser

1969 to 1970 - State of Alaska Department of Highways - Right of Way Agent

Real estate appraiser and consultant of all property types throughout Alaska including commercial, industrial, subdivisions and special-purpose properties. Appraisals have been performed for financing, leasing, insurance, condemnation, taxation, property damages, investment analysis, and buy-sell decisions. Appraisals include valuation of both real property and business enterprises. Professional experience totals 49 years. Life-long Alaskan resident of Alaskan Native descent.

Education: Bachelor of Business Administration, Finance (1969), University of Alaska Fairbanks

Appraisal Education: The following is a list of completed appraisal courses and seminars.

2021 – *Cool Tools: New Technology for Real Estate Appraisers* by the Appraisal Institute

2021 – *Desktop Appraisals (Bifurcated, Hybrid) and Evaluations* by the Appraisal Institute

2021 – *Hot Topics & Myths in Appraiser Liability* by LIA Administrators & Insurance Services

2020 – *Uniform Standards of Professional Appraisal Practice – Update* by the Appraisal Institute

2019 – *How Tenants Create or Destroy Value: Leasehold Valuation and its Impact on Value* –by the Appraisal Institute

2017 – *Appraising Environmentally Contaminated Properties* by the Appraisal Institute

2017 – *Residential & Commercial Valuation of Solar* by the Appraisal Institute

2017 – *Right of Way Acquisition for Pipeline Projects* by the International Right of Way Association

2015 – *Litigation Appraising: Specialized Topics and Applications* by the Appraisal Institute

2015 – *Business Practices and Ethics* by the Appraisal Institute

2013 – *Complex Litigation Appraisal Case Studies* by the Appraisal Institute

2013 – *Uniform Appraisal Standards for Federal Land Acquisitions (Yellow Book)* by the Appraisal Institute

2012 – *Appraisal Curriculum Overview* by the Appraisal Institute

2010 – *Reviewing Appraisals in Eminent Domain* by the International Right of Way Association

2010 – *Commercial Appraisal Engagement and Review Seminar for Bankers and Appraisers* by the Appraisal Institute

2009 – *The Appraiser as an Expert Witness: Preparation and Testimony* by the Appraisal Institute

2009 – *Attacking and Defending an Appraisal in Litigation* by Whitmer Education

2008 – *Uniform Standards of Professional Appraisal Practice* by the Appraisal Institute

2007 – *Business Practices and Ethics* by the Appraisal Institute

2007 – *Eminent Domain Law for Right of Way Professionals* by the International Right of Way Association

2007 – *Appraisal Review for Federal Aid Programs* by the International Right of Way Association

2007 – *Analyzing Operating Expenses* by the Appraisal Institute

1969-2006: Numerous appraisal classes pertaining to principles, income capitalization, cost analysis, sale comparison approach, and highest and best use analysis by the Appraisal Institute, Society of Real Estate Appraisers, International Right-of-Way Association, International Association of Assessing Officers, and Marshall Valuation Service