

## REGULAR MEETING AGENDA

**1. Call to Order**

**2. Approval of Agenda**

**3. Public Comment**

The public may speak to the Commission regarding matters on the agenda that are not scheduled for public hearing or plat consideration. (3 minute time limit).

**4. Reconsiderations**

**5. Adoption of Consent Agenda**

All items on the consent agenda are considered routine and non-controversial by the Planning Commission and are approved in one motion. There will be no separate discussion of these items unless requested by a Planning Commissioner or someone from the public, in which case the item will be moved to the regular agenda.

**A.** Approval of minutes of June 7, 2017 **p. 1**

**6. Presentations**

**7. Reports**

**A.** Staff Report PL 17-57, City Planner's Report **p. 9**

**8. Public Hearings**

Testimony limited to 3 minutes per speaker. The Commission conducts Public Hearings by hearing a staff report, presentation by the applicant, hearing public testimony and then acting on the Public Hearing items. The Commission may question the public. Once the public hearing is closed the Commission cannot hear additional comments on the topic. The applicant is not held to the 3 minute time limit.

**A.** Staff Report PL 17-58, CUP 17-03 for the installation of a driveway involving more than 6,000 square feet of grading within the Bridge Creek Watershed Protection District at 61447 Florence Martin Ct. **p. 11**

**9. Plat Consideration**

**10. Pending Business**

**A.** Staff Report 17-59, Comprehensive Plan Update, Chapter 4 Land Use **p. 103**

**11. New Business**

**A.** Memorandum – City of Homer 2018-2023 Capital Improvement Plan (CIP) **p. 143**

**12. Informational Materials**

**A.** City Manager's Report June 12, 2017 City Council Meeting **p. 215**

**B.** KPB Notice of Decisions:

- Eagle View Subdivision 2017 Replat Preliminary Plat **p. 217**
- Lloyd Race 2017 Revised Preliminary Plat **p. 227**
- Homer Enterprises, Inc. Subdivision Resetarits Replat Time Extension Request **p. 235**
- Barnett's South Slope Subdivision Fell Addition Preliminary Plat **p. 241**

**13. Comments of the Audience**

Members of the audience may address the Commission on any subject. (3 min limit)

**14. Comments of Staff**

**15. Comments of the Commission**

**16. Adjournment**

The next regular meeting is scheduled for July 19, 2017. Meetings will adjourn promptly at 9:30 p.m. An extension is allowed by a vote of the Commission.



Session 17-07, a Regular Meeting of the Homer Advisory Planning Commission was called to order by Chair Don Stead at 6:33 p.m. on June 7, 2017 at the City Hall Cowles Council Chambers located at 491 E. Pioneer Avenue, Homer, Alaska.

**PRESENT:** COMMISSIONERS HIGHLAND, BRADLEY, STEAD, BOS ABRAHAMSON AND VENUTI

**ABSENT:** NONE

**STAFF:** CITY PLANNER ABBOD  
PLANNING TECHNICIAN BROWN

The Advisory Planning Commission met for a worksession at 5:30 p.m. prior to the regular meeting. The update of the Comprehensive Plan Chapter 4 was on the agenda.

### **APPROVAL OF AGENDA**

Chair Stead called for a motion to approve the agenda.

ABRAHAMSON/BRADLEY - SO MOVED.

There was no discussion.

VOTE. YES. NON-OBJECTION. UNANIMOUS CONSENT

Motion carried.

### **PUBLIC COMMENT**

The public may speak to the Planning Commission regarding matters on the agenda that are not scheduled for public hearing or plat consideration. (3 minute time limit).

### **RECONSIDERATION**

#### **ADOPTION OF CONSENT AGENDA**

All items on the consent agenda are considered routine and non-controversial by the Planning Commission and are approved in one motion. There will be no separate discussion of these items unless requested by a Planning Commissioner or someone from the public, in which case the item will be moved to the regular agenda and considered in normal sequence.

A. Approval of the minutes of May 17, 2017 meeting

Chair Stead requested a motion to approve the consent agenda.

BOS/BRADLEY - SO MOVED.

There was no discussion.

VOTE. YES. NON-OBJECTION. UNANIMOUS CONSENT

Motion carried.

### **PRESENTATIONS**

#### **REPORTS**

A. Staff Report PL 17-53, City Planner's Report

City Planner Abboud provided a summary of his report. There was some discussion about Mr. Abboud's trip to New York for the American Planning Association National Conference.

Commissioner Bos agreed to attend the July 24 City Council Meeting and Commissioner Bradley agreed to attend the August 14 City Council Meeting.

## **PUBLIC HEARINGS**

### **A. Staff Report PL 17-54, Vacation of a portion of the Greatland Street Right-of-Way**

Chair Stead read the title into the record. City Planner Abboud summarized the report including the location of the preliminary plat. He explained that this vacation petition vacates additional Right-of-Way, creating frontage onto Ohlson Lane.

Chair Stead opened the public hearing.

Kenton Bloom, city resident and project surveyor, signed in and said he is available to answer questions of the commission. He explained that the reason for requesting the Right-of-Way vacation in two parts was so they could get the neighbors on board with a plan that addresses drainage.

**BOS/VENUTI - MOVED TO ADOPT STAFF REPORT PL 17-54, VACATION OF A PORTION OF THE GREATLAND STREET RIGHT OF WAY WITH STAFF RECOMMENDATION THAT THE NORTHEAST HALF OF OHSON LANE FROM CENTERLINE SHALL BE 30 FEET WIDE.**

There was no discussion.

**VOTE: NON-OBJECTION: UNANIMOUS CONSENT**

Motion carried.

### **B. Staff Report PL 17-55, Vacation of a portion of the Starboard Way Right-of-Way**

Chair Stead read the title into record. City Planner Abboud reviewed the staff report.

Chair Stead opened the public hearing. There were no comments and the public hearing was closed.

Commissioner Highland questioned whether a wetlands permit would be necessary. City Planner Abboud explained that the delineation by the Army Corps of Engineers is shown on the preliminary plat and that a permit would be necessary prior to development within the delineated area.

Commissioner Highland verbalized for the record that the commission received a letter from a neighbor who has concerns about the development of the cul-de-sac within the wetlands. Commissioner Bos commented that it may not be appropriate to bring up a letter during the public hearing. Commissioner Venuti pointed out that the letter is included in the packet and is therefore part of the permanent record. He also commented that it is good to see infill in this neighborhood. Chair Stead pointed out the possible misspelling of "Starbord Way" on the plat. Commissioner Bradley commented that the cul-de-sac presents a larger area of right-of-way dedication within the wetlands than is currently there.

**BOS/VENUTI - MOVED TO ADOPT STAFF REPORT PL 17-55, VACATION OF A PORTION OF THE STARBOARD WAY RIGHT OF WAY.**

There was no discussion.

**VOTE: NON-OBJECTION: UNANIMOUS CONSENT**

Motion carried.

## **PLAT CONSIDERATION**

A. Staff Report PL 17-56, Mariner Village Subdivision Fraley Replat Preliminary Plat

City Planner Abboud reviewed the staff report.

BOS/BRADLEY - MOVED TO ADOPT STAFF REPORT PL 17-56, MARINER VILLAGE SUBDIVISION FRALEY REPLAT PRELIMINARY PLAT.

There was no discussion.

VOTE: NON-OBJECTION: UNANIMOUS CONSENT

Motion carried.

B. Staff Report 17-57, Foothills Subdivision Sunset View Estates Addition No. 3 Preliminary Plat

City Planner Abboud reviewed the staff report. He explained that the preliminary plat includes establishing just a few lots, out of the greater area of the subdivision, and creating road corridor easements for future road connections.

Commissioner Highland asked City Planner Abboud where the access for lot A-1 is located. City Planner Abboud said the access is onto Soundview Avenue. Chair Stead asked City Planner Abboud to clarify the reason for establishing a road easement instead of dedicating Right-of-Way. City Planner Abboud explained the conflict between City and Kenai Peninsula Borough code as outlined in the "analysis" portion of the staff report.

BOS/ABRAHAMSON - MOVED TO ADOPT STAFF REPORT 17-57, FOOTHILLS SUBDIVISION SUNSET VIEW ESTATES ADDITION NO. 3 PRELIMINARY PLAT WITH STAFF RECOMMENDATIONS 1-5.

There was no discussion.

VOTE: NON-OBJECTION: UNANIMOUS CONSENT

Motion carried.

**PENDING BUSINESS**

A. Staff Report PL 17-58, Comprehensive Plan Update, Chapter 4 Land Use

Chair Stead read the title into the record and opened discussion. City Planner Abboud advised that the discussions of the work session should be summarized and that any changes to the Comprehensive Plan should be discussed for the record.

City Planner Abboud stated the Commission determined Goal 1 Objective A can be eliminated because implementation strategies 1-3 have been largely accomplished through zoning code since this plan was written and the other aspects of the objective, such as guiding growth to protect community character and the quality of the environment, are found elsewhere in the comprehensive plan.

VENUTI/BOS - MOVED TO REMOVE "OBJECTIVE A" FROM GOAL 1, CHAPTER 4 OF THE COMPREHENSIVE PLAN.

Commissioner Venuti commented that discussion of this objective was lengthy during the work session.

There was no discussion.

VOTE: NON-OBJECTION: UNANIMOUS CONSENT

Motion carried.

City Planner Abboud stated that the commission decided the Land Use Recommendations Map, found on page 4-7, should be moved to the appendix section of the plan.

City Planner Abboud stated that the commission determined Goal 1 Objective D can be eliminated because it attempts to plan for infrastructure where it is not practical and is therefore not a very useful objective. Infrastructure development should be focused on infill, responding to market demands, and guided by the Water/Sewer Master Plan, which identifies feasible areas for expansion of those systems.

HIGHLAND/BOS - MOVED TO REMOVE "OBJECTIVE D" FROM GOAL 1, CHAPTER 4 OF THE COMPREHENSIVE PLAN.

There was no discussion

VOTE: NON-OBJECTION: UNANIMOUS CONSENT

Motion carried.

City Planner Abboud stated that the commission decided Implementation Strategies 5 & 6 of Goal 1 Objective E are no longer relevant and can be eliminated.

Commissioner Highland commented that the following phrase from Goal 1 Objective A should be included at the end of the first paragraph of Goal 2: "Growth will need to be guided to meet Homer's concerns about protecting community character and the quality of the environment."

Several Commissioners and City Planner Abboud discussed the wording of the title of Goal 2 Objective B. The pros and cons of various phrases to replace the term "environmental functions" was discussed and it was decided to replace the word "Establish" with "Continue to review and refine."

Commissioner Abrahamson commented on Implementation Strategy 1 of Objective D, Goal 2. She wishes to amend it as follows: "...Build on examples set by Kachemak Heritage Land Trust, Natural Resources Conservation Service and Homer Soil and Water Conservation District."

City Planner Abboud stated the Commission had discussed eliminating Implementation Strategy 6 of Objective B, Goal 3 because it will be very difficult to carry out. Although it may benefit the City for projects outside City limits to comply with Homer's community design standards, the cost to seek compliance will be too high.

VENUTI/BOS - MOVED TO REMOVE IMPLEMENTATION STRATEGY 6 FROM OBJECTIVE B, GOAL 3, CHAPTER 4 OF THE COMPREHENSIVE PLAN.

Commissioner Abrahamson commented that DOT has recently announced a new community engagement strategy. Commissioner Bos agreed that it is a "tall order" to expect projects outside of city limits to comply with City design standards. City Planner Abboud suggested the City can continue to participate in outside-agency or regional programs such as the Scenic Byways Program.

VOTE: NON-OBJECTION: UNANIMOUS CONSENT

Motion carried.

City Planner Abboud stated that the Commission discussed eliminating "Objective C: Work with the KPB to determine the costs and benefits of shifting some or all platting authority to the City of Homer" from Goal 3, Chapter 4 of the Comprehensive Plan. The main reason for eliminating this objective is the City does not have the capacity for such a large increase in its budget.

BOS/BRADLEY - MOVED TO REMOVE "OBJECTIVE C" FROM GOAL 3, CHAPTER 4 OF THE COMPREHENSIVE PLAN.

There was no discussion.

VOTE: NON-OBJECTION: UNANIMOUS CONSENT.

Motion carried.

City Planner Abboud stated that the Commission agreed to eliminate Implementation Strategies 2 and 3 of Objective A, Goal 4 because they were accomplished with the update of the City parking code and the adoption of the Town Center Zoning District.

City Planner Abboud commented that Implementation 5 of Objective A, Goal 4 is out of date. The Commission held discussion and decided to amend it to read, "...Develop an attractive, business friendly commercial streetscape for Pioneer Avenue and ensure the Town Square/City Hall project is designed to benefit Pioneer Avenue and Old Town businesses."

City Planner Abboud stated that the Commission discussed the elimination of "Objective C: Encourage complementary commercial activity between the CBD and Homer Spit that benefits both in the appropriate locations and builds upon their geographic strengths" from Goal 4, Chapter 4 of the Comprehensive Plan. This objective is addressed by the Spit Plan. Additionally, implementation strategies 1,2 and 4 have been accomplished through the establishment of the Marine Industrial/Marine Commercial districts and the Spit Plan adoption, while implementation strategy 3 is addressed in Transportation Chapter 5.

ABRAHAMSON/HIGHLAND - MOVED TO REMOVE "OBJECTIVE C" FROM GOAL 4, CHAPTER 4 OF THE COMPREHENSIVE PLAN.

Commissioner Venuti asked the group why there isn't more paid parking on the Spit. A general conversation about parking on the spit ensued.

VOTE: NON-OBJECTION: UNANIMOUS CONSENT.

Motion carried.

City Planner Abboud stated that "Objective D: Introduce new commercial districts to better encourage and accommodate commercial land uses in appropriate locations, and allow new types of commercial activities to take place" of Goal 4 was discussed during the work session. He stated that the Commission talked about eliminating this objective because the implementation strategies are addressed in other sections of code and a neighborhood commercial district on West Hill Road was previously proposed and failed.

BOS/ABRAHAMSON - MOVED TO REMOVE "OBJECTIVE D" FROM GOAL 4, CHAPTER 4 OF THE COMPREHENSIVE PLAN.

There was no discussion

VOTE: NON-OBJECTION: UNANIMOUS CONSENT.

Motion carried.

Several of the Commissioners discussed Objective A, under Goal 5.

HIGHLAND/BOS - MOVED TO REMOVE "OBJECTIVE A" OF GOAL 5, CHAPTER 4 OF THE COMPREHENSIVE PLAN

ROLE CALL VOTE: 6 NO, 0 YES.

Motion failed.

City Planner Abboud introduced the June 7, 2017 Draft Future Land Use Map. He stated this map depicts a staff suggestion to rezone a portion of the Central Business District to General Commercial 1 in the vicinity of Lake Street and Heath Street.

Chair Stead asked City Planner Abboud if there was a big need for more commercial land. City Planner Abboud responded by saying there have been multiple inquiries for places to do outdoor sales, outdoor storage, and auto oriented activities, but the General Commercial 1 land is very limited and the lots that are available are too small.

Vice Chair Bos asked City Planner Abboud if he has spoken with any specific businesses who support the rezone. City Planner Abboud stated that he has not because it is not appropriate for him to do so without the support of the Commission. Further, he is bringing this up to the Commission now to get feedback and to find out if it is a concept that the Commission supports him in pursuing.

VENUTI/HIGHLAND - MOVED TO DIRECT THE CITY PLANNER TO INVESTIGATE REZONING A PORTION OF THE CENTRAL BUSINESS DISTRICT TO GENERAL COMMERCIAL 1 DISTRICT AS DISPLAYED IN THE JUNE 7, 2017 DRAFT FUTURE LAND USE MAP.

VOTE: NON-OBJECTION: UNANIMOUS CONSENT

Motion carried.

City Planner Abboud reviewed the implementation strategies that have been accomplished since 2010 as depicted in the amended Land Use Implementation Table (page 97 & 98 of the packet).

The Commission discussed the Green Infrastructure Map found in Appendix D, page D3. The Commission wishes to seek an updated version of this map through Homer Soil and Water Conservation District.

## **NEW BUSINESS**

### **INFORMATIONAL MATERIALS**

- A. City Manager's Report, May 30, 2017 City Council Meeting
- B. KPB Notice of decisions: Vacation of a 30 foot wide portion of Greatland Street

### **COMMENTS OF THE AUDIENCE**

### **COMMENTS OF STAFF**

City Planner Abboud and Planning Technician Brown had no comments.

### **COMMENTS OF THE COMMISSION**

Commissioner Venuti commented that it was nice to do some planning, so often the Commission is reactive.

Commissioner Bos commented that the US Coast Guard is searching for a new location for a large cutter and that this gives the Homer Port and Harbor good reason for a harbor expansion.

Commissioner Abrahamson said she recently attended a FEMA resiliency training.

**ADJOURN**

There being no further business to come before the Commission, the meeting adjourned at 9:07 p.m. The next regular meeting is scheduled for Wednesday, July 19, 2017 at 6:30 p.m. in the City Hall Cowles Council Chambers. There is a worksession at 5:30 p.m. prior to the meeting.

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Travis Brown, Planning Technician

Approved: \_\_\_\_\_





## City of Homer

[www.cityofhomer-ak.gov](http://www.cityofhomer-ak.gov)

## Planning

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(f) 907-235-3118

TO: Homer Advisory Planning Commission  
FROM: Rick Abboud, City Planner  
DATE: June 21, 2017  
SUBJECT: City Planner's Report PL 17-57

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City Council - 6.12.17 Recommended approval of vacation of Greatland Street (first request).

Introduced Ordinance 17-24, authorizing the purchase of a lot in the Bridge Creek Watershed.

Adopted Ordinance 17-21, contributing \$8000 in HART funds in addition to in-kind contributions to build the Woodard Creek Upper Trail at Karen Hornaday Park.

Adopted Resolution 17-056, policies and guidelines for Hickerson Memorial Cemetery.

Council also tasked the Parks Committee with reviewing and making recommendations on the Jack Gist Park Plan and the Main Street Sidewalk.

6.26.17 Ordinance 17-24, public hearing and second reading regarding purchase of lot in the Bridge Creek Watershed.

Ordinance 17-05(A-2), Appropriating HART funds for Greatland Street improvements.

Training: Julie attended the Community Council Field Day on June 7<sup>th</sup>. This included an excursion across the bay that included presentations on a variety of topics related to the Kachemak Bay Habitat Focus Area.

The office is keeping busy with the usual summer business including development inquiries, permitting, code enforcement, and the comprehensive plan update.

Current schedule for Commissioners to present to the council.

June 26, 2017: Roberta

July 24, 2017: Tom

August 14, 2017: Savanna

August 28, 2017





# City of Homer

[www.cityofhomer-ak.gov](http://www.cityofhomer-ak.gov)

## Planning

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### Staff Report PL 17-58

TO: Homer Advisory Planning Commission  
THROUGH: Rick Abboud, City Planner  
FROM: Julie Engebretsen, Deputy City Planner  
DATE: June 21, 2017  
SUBJECT: CUP 17-03,

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**Synopsis** The applicant, Mrs. Dolese, proposes to build a twelve-foot wide driveway approximately 2,500 feet long to provide legal, constructed access to a cabin owned by Ms. Grant. The driveway would cross property owned by both parties.

Applicants: Patricia Dolese  
PO Box 25  
Homer, AK 99603  
Seabright Survey + Design  
Kenton Bloom  
1044 East End Rd Ste A  
Homer, AK 99603  
Lynella Grant  
100 Conway St  
Greenfield, MA 01301

Location: Bridge Creek Watershed, generally northeast of Easy Street and Skyline Drive

Parcel information: 17305243 at 61447 Florence Martin Ct, 33.7 acres  
17305239 at 40871 Twitter Creek Lane, 50 acres

Zoning Designation: Bridge Creek Watershed Protection District, not within City Limits

Comprehensive Plan: Goal 2 Objective D: Provide extra protection for areas with highest environmental value or development constraints.

Existing Land Use: The western lot is mostly vacant, with yurts in the northeastern corner that support the activities at Ageya Wilderness Center. The eastern lot is mostly vacant with a small cabin.

Surrounding Land Use: North: Ageya Wilderness Center/Vacant

|        |                                     |
|--------|-------------------------------------|
| South: | Vacant                              |
| East:  | Residential/Wynn Nature Center      |
| West:  | Vacant, some sparse residential use |

|                     |                                                                                                                        |
|---------------------|------------------------------------------------------------------------------------------------------------------------|
| Wetland Status:     | The 2005 wetlands mapping shows some wetlands on these properties. It appears the driveway route avoids wetland areas. |
| Flood Plain Status: | Not in a mapped floodplain.                                                                                            |
| Utilities:          | The sites are not served by municipal water and wastewater services.                                                   |
| Public Notice:      | Notice was sent to 13 property owners of 15 parcels as shown on the KPB tax assessor rolls.                            |

**Introduction:** The purpose of this project is to build a twelve-foot wide gravel driveway from Florence Martin Court, across land owned by Mrs. Dolese, to a small cabin on the adjacent property owned by Ms. Grant. The driveway follows the route historically used to get to the cabin. The two property owners have a dispute about access, and the construction of this driveway is part of the resolution of this dispute. More information is provided in the draft settlement agreement, and the recorded easement agreement, which are attachments to this staff report. The matter before the Planning Commission is the approval of the sediment and erosion control plan as required by HCC. 21.40.080, Erosion and Sediment Control.

## Discussion

Homer City Code 21.40.080 requires a conditional use permit for work within the Bridge Creek Watershed for grading that involves 6,000 square feet of area or more. HCC 21.40.080 further stipulates that the CUP must require that the activity comply with the site specific Erosion and Sediment Control plan prepared and signed by a certified hydrologist, professional engineer or soil scientist whose qualifications to prepare such a plan are reviewed and approved by the Public Works Director.

The applicant has submitted an Erosion and Sediment Control Plan by Jared Worthington, Soil Conservationist for the Homer Field Office of the Natural Resources Conservation Services (NRCS) of the United States Department of Agriculture. Mr. Worthington's title is Soil Conservationist, and he is a certified Conservation Planner. Carey Meyer, Public Works Director, has approved his qualifications. The information provided by Mr. Worthington that the soils and slopes of the project site were evaluated. In addition to some site specific recommendations, Mr. Worthington has provided technical standard and specifications the NRCS publishes.

**PUBLIC WORKS COMMENTS:** The driveway construction will result in the concentration of sheet runoff at the two eastern culverts. If 18-inch culverts are used, PW recommends installing

outlet erosion control and energy dissipation best management practices. An alternative would be to place more 12-inch culverts. Outlet dissipation best management practices are still preferred on these smaller culverts. PW would like to see 5% cross slope, and in areas of 10% grade or greater, use water bars as recommended by Soil Conservationist Jared Worthington.

HCC: 21.40.080 Erosion and sediment control.

a. All activities within the BCWP district involving the disturbance of the existing ground cover (i.e., topsoil or vegetation or both) resulting from excavation, grading or filling or other similar activity and involving (1) any area within 500 feet of Bridge Creek Reservoir or 100 feet from any known stream or tributary or (2) an area in excess of 6,000 square feet require a conditional use permit approved by the Planning Commission. The conditional use permit must require that the activity comply with a site-specific erosion and sediment control plan prepared and signed by a certified hydrologist, professional engineer, or soil scientist whose qualifications to prepare such a plan are reviewed and approved by the Public Works Director.

b. The erosion and sediment control plan shall ensure compliance with the following requirements:

1. A drainage system shall be provided to direct all runoff from impervious coverage or the disturbed ground either into an engineered drainage system or into a natural drainage, but no runoff shall be discharged untreated directly into the Bridge Creek Reservoir, or any stream or watercourse tributary to Bridge Creek Reservoir.

2. Where open-ditch construction is used to handle drainage within the tract, a minimum of 30 feet shall be provided between any structures and the top of the bank of the defined channel of the drainage ditch.

3. When a closed system is used to handle drainage within the tract, all structures shall be a minimum of 10 feet from the closed system.

4. Natural vegetation shall remain undisturbed except as necessary to construct improvements and to eliminate hazardous conditions, in which case it must be replanted with approved materials including ground cover, shrubs and trees. Native vegetation is preferred for replanting operations, and will be used where practicable.

5. Grading must not alter the natural contours of the terrain except as necessary for building sites or to correct unsafe conditions. The locations of buildings, roads and rights-of-way must be planned to follow and conform to existing contours as nearly as possible.

6. Upon completion of earthwork, all exposed slopes and all cleared, filled, and disturbed soils shall immediately be given sufficient protection by appropriate means, such as landscaping, planting, and maintenance of vegetative cover, or temporary protective measures to prevent erosion.

7. All exposed, cleared, filled and disturbed soils shall be revegetated within the current growing season, unless required to be revegetated sooner by other provisions of this title or other law.

8. Drainage, erosion, siltation, slope failure and other adverse effects may be prevented or controlled by means other than vegetation, if approved by the Planning Commission.

9. Development activities shall not adversely impact other properties or watershed water quality by causing adverse alteration of surface water drainage, increased turbidity above natural conditions, surface water ponding, slope failure, erosion, siltation, intentional or inadvertent fill, root damage to neighboring trees, or other adverse physical impacts. The erosion and sediment control plan shall address this requirement, and the property owner and developer shall take such steps, including installation of culverts or buffers, or other methods, as necessary to comply with this requirement. [Ord. 08-29, 2008].

#### Impervious Surface Analysis

HCC 21.40.070 (a)1() limits impervious surfaces to 4.2% of the lot area.

- The driveway at twelve feet long and about 2,500 feet long will create approximately 30,000 square feet or 0.69 acres of impervious area.
- Lot 3 Ageya Homestead is 33.7 acres, which allows for 1.4 acres of impervious area. About 1,100 feet of driveway will be constructed across this lot, resulting in about 13,200 square feet, or 0.3 acres of impervious surface.
- 40871 Twitter Creek Lane has an area of 50 acres, which allows for 2.1 acres of impervious coverage. About 1,400 feet of driveway will be constructed to access the cabin, resulting in about 18,000 square feet or 0.413 acres of impervious surface.

**The criteria for granting a Conditional Use Permit is set forth in HCC 21.71.020, General conditions, and establishes the following conditions:**

a. The applicable code authorizes each proposed use and structure by conditional use permit in that zoning district;

**Finding 1:** HCC 21.40.080(2) authorizes disturbance of existing ground cover in an area in excess of 6,000 square feet as a conditional use in the Bridge Creek Watershed Protection District.

b. The proposed use(s) and structure(s) are compatible with the purpose of the zoning district in which the lot is located.

21.40.010 Purpose.

*The purpose of this chapter is to prevent the degradation of the water quality and protect the Bridge Creek Watershed to ensure its continuing suitability as a water supply source for the City's public water utility. These provisions benefit the public health, safety, and welfare of the residents of the City of Homer and other customers of the City's water system by restricting land use activities that would impair the water quality, or increase the cost for treatment.*

**Finding 2:** The use is consistent with the purpose of the zoning district as it complies with a conditionally permitted use per HCC 21.40.080)(a), disturbance of existing groundcover resulting from excavation, grading or filling of other similar activity and involving an area in excess of 6,000 square feet. The purpose of HCC 21.40 is to prevent degradation of the water quality and protect the Bridge Creek Watershed to ensure its continues suitability as a water supply source for the City's public water supply. The purpose further states the provisions benefit the public health, safety and welfare by restricting land use activities that would impair water quality, or increase the cost for treatment. The proposed project, if done in compliance with the submitted Erosion and Sediment Control Plan ,will allow for access to an existing cabin in such a way as to limit impact to the water quality of the City's public water source.

c. The value of the adjoining property will not be negatively affected greater than that anticipated from other permitted or conditionally permitted uses in this district.

**Analysis:** The Bridge Creek Watershed Protection District does not generally permit land uses that are noxious and that would negatively affect adjoining property values. Permitted and conditionally permitted uses include residential uses, parks, bed and breakfast establishments, private storage yards, schools and religious cultural and fraternal organizations, cemeteries, timber and agricultural activities are all listed in the district.

**Finding 3:** A driveway reconstructed over an old trail route is not expected to negatively impact the adjoining properties greater than other permitted or conditional uses.

d. The proposal is compatible with existing uses of surrounding land.

**Analysis:** Surrounding uses of land include low-density residences, and the Ageya Wilderness Center.

**Finding 4:** The proposed driveway is consistent with the uses of surrounding land.

e. Public services and facilities are or will be, prior to occupancy, adequate to serve the proposed use and structure.

**Finding 5:** Public services and facilities do not serve either site. The purpose of the CUP is to address the Erosion and Sediment Control Plan, not any land uses or structures.

f. Considering harmony in scale, bulk, coverage and density, generation of traffic, the nature and intensity of the proposed use, and other relevant effects, the proposal will not cause undue harmful effect upon desirable neighborhood character.

**Analysis:** The project location is outside Homer City Limits, within the Bridge Creek Watershed Protection District. The purpose of the district is silent on the desirable character of the area, seeking instead to prevent degradation of water quality and the Bridge Creek Watershed. The project will construct a private driveway to access an existing cabin. The project is in harmony with the rural, low traffic land uses in the area.

**Finding 6:** The Commission finds the proposal will not cause undue harmful effect upon desirable neighborhood character as described in the purpose statement of the district.

g. The proposal will not be unduly detrimental to the health, safety or welfare of the surrounding area or the city as a whole.

**Finding 7:** A driveway constructed in a manner that complies with the submitted sediment and erosion control plan will ensure that the project is not unduly detrimental to the surrounding area or the city as a whole.

h. The proposal does or will comply with the applicable regulations and conditions specified in this title for such use.

**Finding 8:** The proposal complies with the regulations and conditions set in HCC 21.40.

i. The proposal is not contrary to the applicable land use goals and objectives of the Comprehensive Plan.

**Analysis:** Goals of the Land Use Chapter of the Homer Comprehensive Plan include Goal 2 Objective D: Provide extra protection for areas with highest environmental value or development constraints.

**Finding 9:** The proposal is not contrary to the applicable land use goals and objects of the Comprehensive Plan. The required Erosion and Sediment Control Plan provides extra protection for development and aligns Goal 1 and Objectives A and B. No evidence has been found that the project is contrary to the applicable land use goals and objects of the Comprehensive Plan.

j. The proposal will comply with the applicable provisions of the Community Design Manual (CDM).

**Analysis:** No part of CDM applies.

**Finding 10:** The Community Design Manual does not apply to activities in the Bridge Creek Watershed Protection District.

**HCC 21.71.040(b).** b. In approving a conditional use, the Commission may impose such conditions on the use as may be deemed necessary to ensure the proposal does and will continue to satisfy the applicable review criteria. Such conditions may include, but are not limited to, one or more of the following:

- 1. Special yards and spaces:** No specific conditions deemed necessary
- 2. Fences and walls:** No specific conditions deemed necessary
- 3. Surfacing of parking areas:** No specific conditions deemed necessary.
- 4. Street and road dedications and improvements:** No specific conditions deemed necessary.
- 5. Control of points of vehicular ingress and egress:** No specific conditions deemed necessary.
- 6. Special provisions on signs:** No specific conditions deemed necessary.
- 7. Landscaping:** No specific conditions deemed necessary.
- 8. Maintenance of the grounds, building, or structures:** No specific conditions deemed necessary.
- 9. Control of noise, vibration, odors or other similar nuisances:** No specific conditions deemed necessary.
- 10. Limitation of time for certain activities:** No specific conditions deemed necessary.
- 11. A time period within which the proposed use shall be developed:** No specific conditions deemed necessary.
- 12. A limit on total duration of use:** No specific conditions deemed necessary.
- 13. More stringent dimensional requirements,** such as lot area or dimensions, setbacks, and building height limitations. Dimensional requirements may be made more lenient by conditional use permit only when such relaxation is authorized by other provisions of the zoning code. Dimensional requirements may not be altered by conditional use permit when and to the extent other provisions of the zoning code expressly prohibit such alterations by conditional use permit.
- 14. Other conditions necessary** to protect the interests of the community and surrounding area, or to protect the health, safety, or welfare of persons residing or working in the vicinity of the subject lot.

**PUBLIC COMMENTS:** None by the time this report was published.

**STAFF COMMENTS/RECOMMENDATIONS:**

Planning Commission approve CUP **Staff Report PL 17-58** with findings 1-10 and the following conditions.

**Condition 1.** Install outlet erosion control and energy dissipation best management practices.

**Condition 2.** Use water bars if road grades exceed 10 percent.

**Attachments**

Application

Public Notice

Aerial Photograph

Example of water bar

Letter and materials from Jared Worthington, Soil Conservationist, USDA-NRCS



# City of Homer

www.cityofhomer-ak.gov

## Planning

491 East Pioneer Avenue  
Homer, Alaska 99603

Planning@ci.homer.ak.us

(p) 907-235-3106

(f) 907-235-3118

### Applicant

Name: Seabright Survey + Design Telephone No.: 907-235-4247

Address: 1044 East Road Suite A Homer AK Email: seabrightz@yahoo.com

### Property Owner (if different than the applicant):

Name: Patricia Dolese Telephone No.: 907-230-1771

Address: PO BOX 25 Homer AK Email: kevin@kmdconsulting.biz

### PROPERTY INFORMATION:

Address: 61447 Florence Martin CT Lot Size: 33.7 acres KPB Tax ID # 175-052-43

Legal Description of Property: Lot 3 Ageya Homestead

For staff use:

Date: 5/31/17 Fee submittal: Amount \$300

Received by: TPB Date application accepted as complete \_\_\_\_\_

Planning Commission Public Hearing Date: June 21, 2017

### Conditional Use Permit Application Requirements:

1. A Site Plan
2. Right of Way Access Plan
3. Parking Plan
4. A map showing neighboring lots and a narrative description of the existing uses of all neighboring lots. (Planning can provide a blank map for you to fill in).
5. Completed Application Form
6. Payment of application fee (nonrefundable)
7. Any other information required by code or staff, to review your project

### Circle Your Zoning District

|                                    | RR | UR | RO | CBD | TCD | GBD | GC1 | GC2 | MC | MI | EEMU | BCWPD |
|------------------------------------|----|----|----|-----|-----|-----|-----|-----|----|----|------|-------|
| Level 1 Site Plan                  | x  | x  | x  |     |     | x   |     |     | x  |    |      | x     |
| Level 1 ROW Access Plan            | x  | x  |    |     |     |     |     |     | x  |    |      |       |
| Level 1 Site Development Standards | x  | x  |    |     |     |     |     |     |    |    |      |       |
| Level 1 Lighting                   |    |    | x  | x   | x   | x   | x   | x   | x  | x  | x    |       |
| Level 2 Site Plan                  |    |    | x  | x   | x   |     | x   | x   |    | x  | x    |       |
| Level 2 ROW Access Plan            |    |    | x  | x   | x   |     | x   | x   |    | x  | x    |       |
| Level 2 Site Development Standards |    |    | x* | x   | x   | x   | x   | x   |    |    | x    |       |
| Level 3 Site Development Standards |    |    |    |     |     |     |     |     |    |    |      |       |
| Level 3 ROW Access Plan            |    |    |    |     |     |     |     |     |    |    |      |       |
| DAP/SWP questionnaire              |    |    |    |     | x   | x   | x   | x   |    |    | x    |       |

RECEIVED

5/31/2017

CITY OF HOMER  
PLANNING/ZONING

**Circle applicable permits. Planning staff will be glad to assist with these questions.**

Y/N Are you building or remodeling a commercial structure, or multifamily building with more than 3 apartments? If yes, Fire Marshal Certification is required. Status: NO

Y/N Will your development trigger a Development Activity Plan?  
Application Status: NO

Y/N Will your development trigger a Storm water Plan?  
Application Status: NO

Y/N Does your site contain wetlands? If yes, Army Corps of Engineers Wetlands Permit is required. Application Status: NO

Y/N Is your development in a floodplain? If yes, a Flood Development Permit is required. NO

Y/N Does your project trigger a Community Design Manual review? NO  
If yes, complete the design review application form. The Community Design Manual is online at: <http://www.ci.homer.ak.us/documentsandforms>

Y/N Do you need a traffic impact analysis? NO

Y/N Are there any nonconforming uses or structures on the property? NO

Y/N Have they been formally accepted by the Homer Advisory Planning Commission?

Y/N Do you have a state or city driveway permit? Status: \_\_\_\_\_

Y/N Do you have active City water and sewer permits? Status: N/A

1. Currently, how is the property used? Are there buildings on the property? How many square feet? Uses within the building(s)? There are a few yurts on temporary foundations used for summer camps, etc.
  
2. What is the proposed use of the property? How do you intend to develop the property? (Attach additional sheet if needed. Provide as much information as possible). This CUP is strictly for the purposes of providing a 12' wide gravel access driveway to the adjacent property to the east per the attached legal agreement

- a. What code citation authorizes each proposed use and structure by conditional use permit? N/A
- b. Describe how the proposed uses(s) and structures(s) are compatible with the purpose of the zoning district. The driveway has been located along the historic access way to the neighboring property to the east. It has been inspected by the Soil Conservationist for NRCS.
- c. How will your proposed project affect adjoining property values?  
The adjacent property will have legal gravel driveway .
- d. How is your proposal compatible with existing uses of the surrounding land?  
The driveway is located in the correct location for the least impact on the land
- e. Are/will public services adequate to serve the proposed uses and structures?  
N/A
- f. How will the development affect the harmony in scale, bulk, coverage and density upon the desirable neighborhood character, and will the generation of traffic and the capacity of surrounding streets and roads be negatively affected?  
It will improve the harmony between neighbors and the scale is appropriate for a private driveway. No negative effects are expected
- g. Will your proposal be detrimental to the health, safety or welfare of the surrounding area or the city as a whole? Not at all
- h. How does your project relate to the goals of the Comprehensive Plan?  
The Comprehensive Plan are online,  
The driveway is situated in uplands well out of any wetlands
- i. The Planning Commission may require you to make some special improvements. Are you planning on doing any of the following, or do you have suggestions on special improvements you would be willing to make? (**circle each answer**)
1. Y/N Special yards and spaces.
  2. Y/N Fences, walls and screening.
  3. Y/N Surfacing of parking areas.
  4. Y/N Street and road dedications and improvements (or bonds).
  5. Y/N Control of points of vehicular ingress & egress.
  6. Y/N Special provisions on signs.
  7. Y/N Landscaping.
  8. Y/N Maintenance of the grounds, buildings, or structures.

9. Y/N Control of noise, vibration, odors, lighting, heat, glare, water and solid waste pollution, dangerous materials, material and equipment storage, or other similar nuisances.
10. Y/N Time for certain activities.
11. Y/N A time period within which the proposed use shall be developed.
12. Y/N A limit on total duration of use.
13. Y/N Special dimensional requirements such as lot area, setbacks, building height.
14. Y/N Other conditions deemed necessary to protect the interest of the community.

### **PARKING**

1. How many parking spaces are required for your development? N/A  
If more than 24 spaces are required see HCC 21.50.030(f)(1)(b). \_\_\_\_\_
2. How many spaces are shown on your parking plan? N/A
3. Are you requesting any reductions? N/A

Include a site plan, drawn to a scale of not less than 1" = 20' which shows existing and proposed structures, clearing, fill, vegetation and drainage.

I hereby certify that the above statements and other information submitted are true and accurate to the best of my knowledge, and that I, as applicant, have the following legal interest in the property:

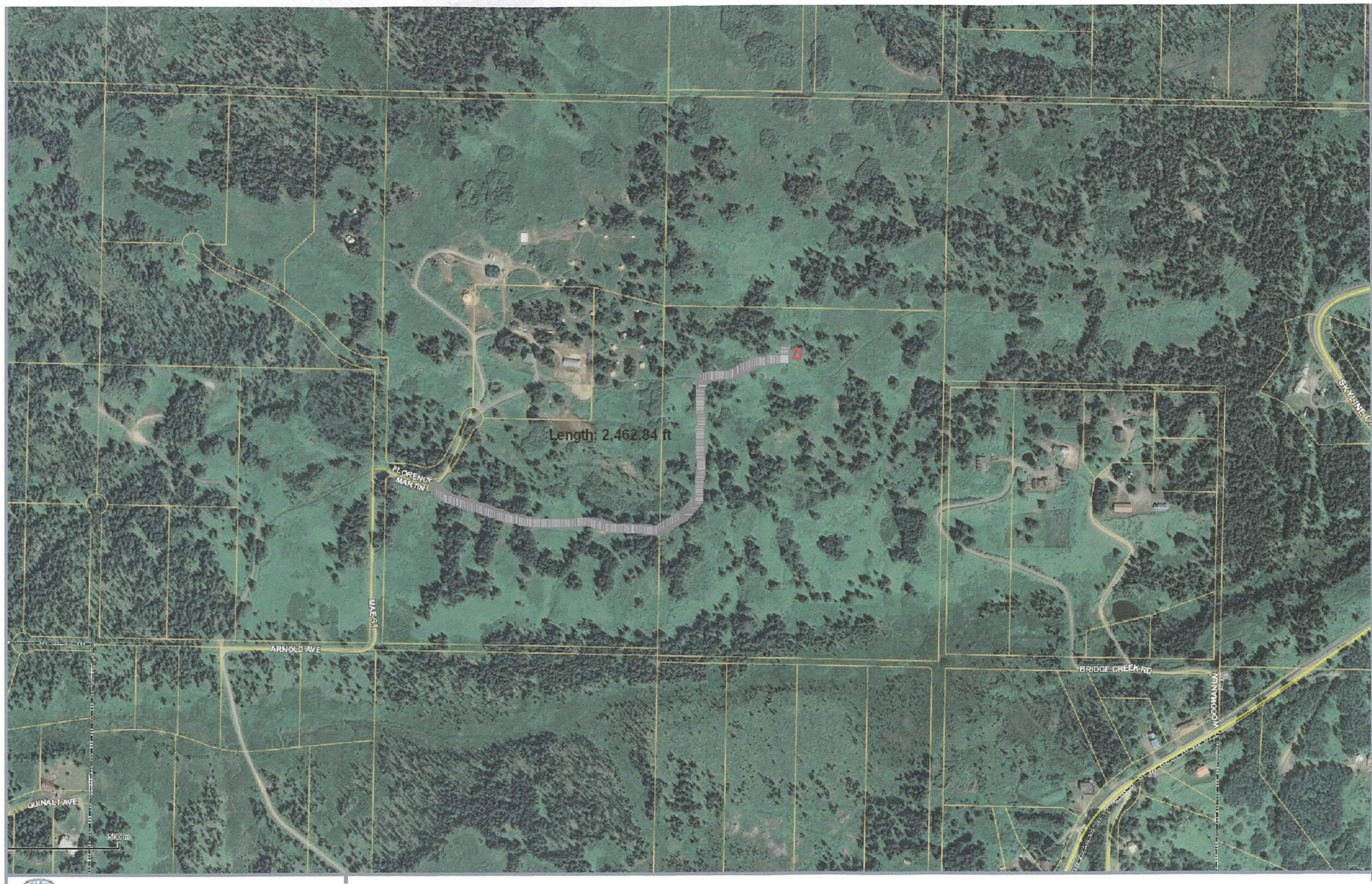
**CIRCLE ONE:**      Owner of record      Lessee      Contract purchaser

Applicant signature: Kent V. Bloom      Date: 5/30/2017

Property Owner's signature: Patricia M. D. H.      Date: 5/30/2017



1" = 200' APPROXIMATE SCALE





**EASEMENT AND AGREEMENT AFFECTING REAL PROPERTY**

COME NOW **PATRICIA M. DOLESE**, whose address is 2517 Foraker Drive, Anchorage, Alaska 99517 ("Grantor") and **LYNELLA FAITH GREEN GRANT**, whose address is 100 Conway Street, Greenfield, Massachusetts 01301-2311 ("Grantee"), and agree as follows:

WHEREAS, Grantor is the owner of the following described real property located in the Homer Recording District, Third Judicial District, State of Alaska (the Servient Estate):

Lot 3 Ageya Homestead according to Plat 96-9, Homer Recording District, Third Judicial District, State of Alaska; and

WHEREAS, Grantee is the owner of the following described real property located in the Homer Recording District, Third Judicial District, State of Alaska (the Dominant Estate):

PARCEL C: The North 990 feet of the East  $\frac{1}{2}$  SE  $\frac{1}{4}$  Section 4, Township South, Range 13 West, Seward Meridian, Alaska; consisting of 30 acres as described in Plat Waiver Resolution 94-25, recorded in Book 237, Page 254, Homer Recording District;

Parcel D: The East  $\frac{1}{2}$  SE  $\frac{1}{4}$ , Section 4, Township 6 South, Range 13 West, Seward Meridian, Alaska; excepting therefrom the North 990 feet, consisting of 50 acres as described in Plat Waiver Resolution 94-25, recorded in Book 237, Page 254, Homer Recording District, Third Judicial District, State of Alaska; and

WHEREAS, Grantee wishes to obtain a driveway easement for the Dominant Estate, and Grantor is willing to grant such easement on part of the Servient Estate on such terms and conditions as are set forth below;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereby agree as follows:

1. Grantor hereby grants and conveys unto Grantee an appurtenant driveway easement 30 feet in width, running with the Servient Estate, which easement consists of space for a driveway twelve (12) feet wide. The specific location of the easement on the Servient Estate will be surveyed and recorded upon completion of the driveway, but it is intended to generally follow the route set forth on the attached Exhibit A and identified therein as the Old Homestead Trail.

2. Included in this easement are the right and obligation of the Dominant Estate to grade, pave or otherwise maintain the driveway easement after construction.

3. This Easement and Agreement Affecting Real Property shall be effective immediately upon recordation in the books and records of the Homer Recording District, Third Judicial District, State of Alaska and shall be binding on the parties hereto, their successors and assigns.

4. Upon the recording of this Easement and Agreement Affecting Real Property, the parties hereby rescind and terminate any and all existing ingress and egress agreements that presently encumber both the Dominant and Servient parcels.

**GRANTOR:**

April 25, 2017  
Date

Patricia M. Dolese  
Patricia M. Dolese

**GRANTEE:**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Lynella Faith Green Grant



NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the parties hereby agree as follows:

1. Grantor hereby grants and conveys unto Grantee an appurtenant driveway easement 30 feet in width, running with the Servient Estate, which easement consists of space for a driveway twelve (12) feet wide. The specific location of the easement on the Servient Estate will be surveyed and recorded upon completion of the driveway, but it is intended to generally follow the route set forth on the attached Exhibit A and identified therein as the Old Homestead Trail.

2. Included in this easement are the right and obligation of the Dominant Estate to grade, pave or otherwise maintain the driveway easement after construction.

3. This Easement and Agreement Affecting Real Property shall be effective immediately upon recordation in the books and records of the Homer Recording District, Third Judicial District, State of Alaska and shall be binding on the parties hereto, their successors and assigns.

4. Upon the recording of this Easement and Agreement Affecting Real Property, the parties hereby rescind and terminate any and all existing ingress and egress agreements that presently encumber both the Dominant and Servient parcels.

**GRANTOR:**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Patricia M. Dolese

**GRANTEE:**

*April 24 2017*  
\_\_\_\_\_  
Date

*Lynella Faith Green Grant*  
\_\_\_\_\_  
Lynella Faith Green Grant



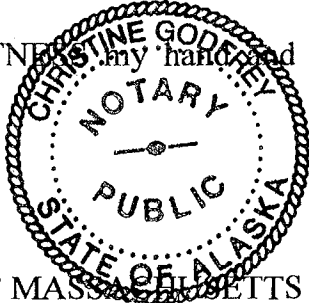
STATE OF ALASKA

THIRD JUDICIAL DISTRICT

SS.

THIS IS TO CERTIFY that on the 25 day of Apr, 2017  
before me, the undersigned, a Notary Public in and for the State of Alaska,  
personally appeared **PATRICIA DOLESE**, known to me and to me known to be  
the individual named in and who executed the foregoing document, and she  
acknowledged to me that she signed and sealed the same as her free and voluntary  
act for the uses and purposes therein stated.

WITNESS my hand and  
written.



Christine Godfrey  
NOTARY PUBLIC in and for Alaska  
My Commission Expires: 5/2/20

STATE OF MASSACHUSETTS

COUNTY OF FRANKLIN

SS.

THIS IS TO CERTIFY that on the \_\_\_\_ day of \_\_\_\_\_, 2017  
before me, the undersigned, a Notary Public in and for the State of Massachusetts,  
personally appeared **LYNELLA FAITH GREEN GRANT**, known to me and to  
me known to be the individual named in and who executed the foregoing document,  
and she acknowledged to me that she signed and sealed the same as her free and  
voluntary act for the uses and purposes therein stated.

WITNESS my hand and notarial seal the day and year first hereinabove  
written.

\_\_\_\_\_  
NOTARY PUBLIC in and for  
Massachusetts  
My Commission Expires: \_\_\_\_\_

Easement and Agreement  
Affecting Real Property

Page 3



Page 4 of 7  
2017-001437-0

STATE OF ALASKA

SS.

THIRD JUDICIAL DISTRICT

THIS IS TO CERTIFY that on the \_\_\_\_ day of \_\_\_\_\_, 2017 before me, the undersigned, a Notary Public in and for the State of Alaska, personally appeared **PATRICIA DOLESE**, known to me and to me known to be the individual named in and who executed the foregoing document, and she acknowledged to me that she signed and sealed the same as her free and voluntary act for the uses and purposes therein stated.

WITNESS my hand and notarial seal the day and year first hereinabove written.

NOTARY PUBLIC in and for Alaska  
My Commission Expires: \_\_\_\_\_

STATE OF MASSACHUSETTS

SS.

COUNTY OF FRANKLIN

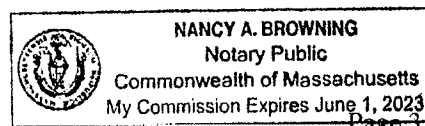
THIS IS TO CERTIFY that on the 24<sup>th</sup> day of April, 2017 before me, the undersigned, a Notary Public in and for the State of Massachusetts, personally appeared **LYNELLA FAITH GREEN GRANT**, known to me and to me known to be the individual named in and who executed the foregoing document, and she acknowledged to me that she signed and sealed the same as her free and voluntary act for the uses and purposes therein stated.

WITNESS my hand and notarial seal the day and year first hereinabove written.

Nancy A Browning  
NOTARY PUBLIC in and for  
Massachusetts

My Commission Expires: 06-01-2023

Easement and Agreement  
Affecting Real Property



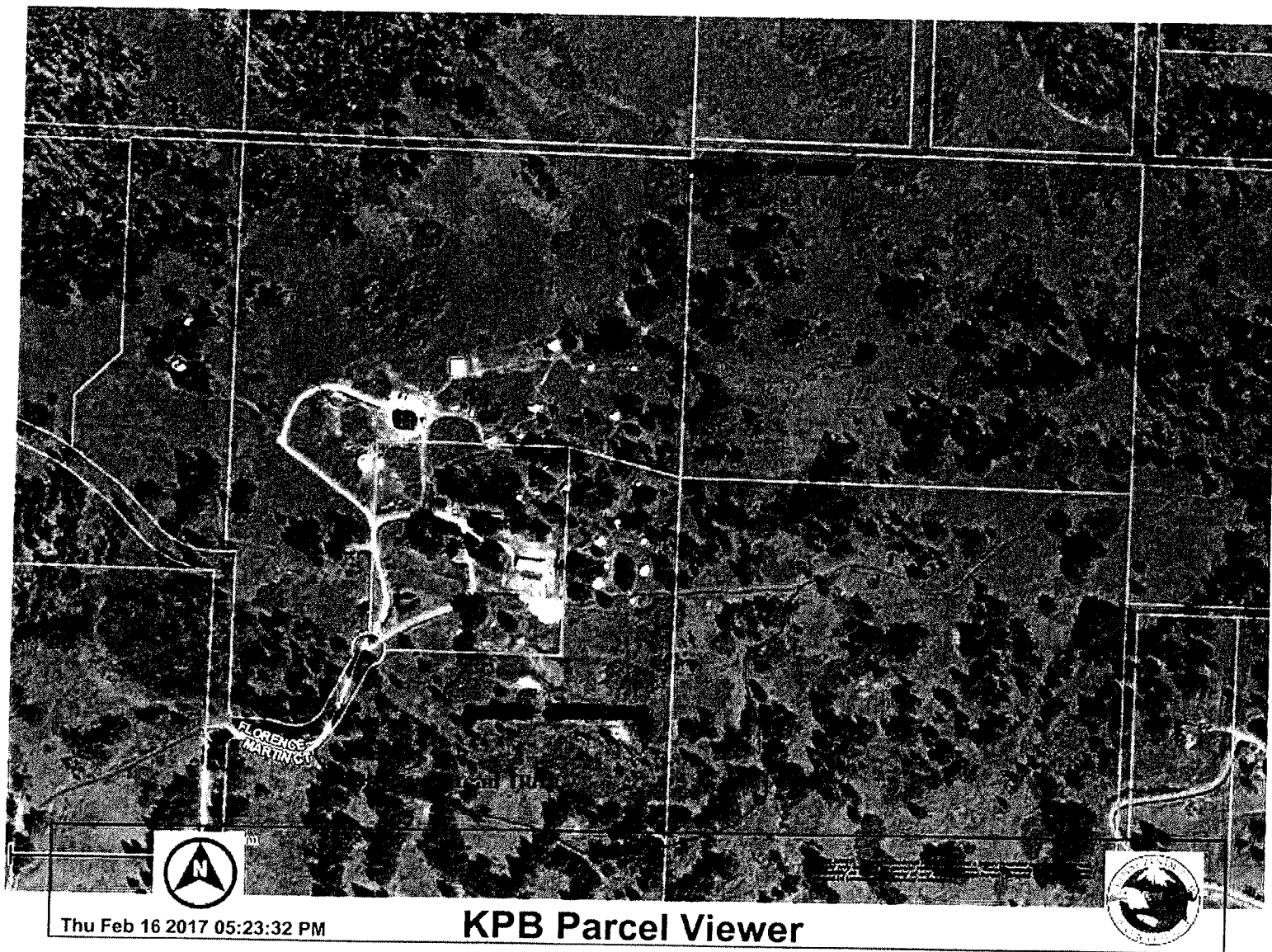
**FOR RECORDING IN THE HOMER RECORDING DISTRICT**

After recording, please return to:

LYNELLA GRANT  
100 CONWAY ST.  
GREENFIELD MA  
01301

388251





Thu Feb 16 2017 05:23:32 PM

KPB Parcel Viewer

*Exhibit A*



Page 7 of 7

2017-001437-0



## **SETTLEMENT AGREEMENT**

This Settlement Agreement is entered into by and between **PATRICIA M. DOLESE**, a married woman, **PATRICIA M. DOLESE** and **KEVIN M. DEE**, husband and wife, and **AGEYA HOMESTEAD PROPERTIES, LLC**, an Alaska limited liability company, Plaintiffs, and **LYNELLA FAITH GREEN GRANT**, Defendant;

WHEREAS Plaintiffs initiated a lawsuit against Defendant in the Superior Court for the State of Alaska, Case No. 3AN-16-04787CI wherein they sought to declaratory judgment as to Defendant's ingress and egress rights across Plaintiffs' property and for certain other damages; and

WHEREAS Defendant answered the complaint and asserted several counterclaims for relief against Plaintiffs; and

WHEREAS after the exchange of preliminary discovery, the parties commenced negotiating to determine whether the issues raised in the lawsuit could be resolved by settlement; and

WHEREAS the parties have reached an agreement which resolves all issues set forth in the complaint and counterclaims, and which provides for specific dedicated ingress and egress rights across the respective adjacent parcels of real property owned by the parties, and for a process for future maintenance of common access roads; and

WHEREAS the parties wish to memorialize their agreement as set forth herein;

NOW THEREFORE, in consideration of the foregoing, and other good and valuable consideration, the parties hereby agree as follows:

1. The parcels of land covered by this Settlement Agreement are identified as four specific parcels. Plaintiffs are the current owners of Parcels A and B, with an original legal description as follows:

Parcel A: The NW  $\frac{1}{4}$  SE  $\frac{1}{4}$ , Section 4, Township 6 South, Range 13 West, Seward Meridian, Alaska; EXCEPTING the S  $\frac{1}{2}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$  Section 4, Township 6 South, Range 13 West, Seward Meridian, Alaska, consisting of 35 acres as described in Plat Waiver

Resolution 94-25, recorded in Book 237, Page 254, Homer Recording District;

PARCEL B: The SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  and S  $\frac{1}{2}$  SE  $\frac{1}{4}$  NW  $\frac{1}{4}$  SE  $\frac{1}{4}$ , Section 4, Township 6 South, Range 13 West, Seward Meridian, Alaska; consisting of 45 acres as described in Plat Waiver Resolution 94-25, recorded in Book 237, Page 254, Homer Recording District;

Plaintiffs have subsequently replatted Parcels A and B into three lots, Lots 1, 2 and 3, Ageya Homestead, according to Plat 96-9 as filed and recorded in the Homer Recording District.

2. Defendant is the current owner of Parcels C and D which have the following legal descriptions:

PARCEL C: The North 990 feet of the East  $\frac{1}{2}$  SE  $\frac{1}{4}$  Section 4, Township South, Range 13 West, Seward Meridian, Alaska; consisting of 30 acres as described in Plat Waiver Resolution 94-25, recorded in Book 237, Page 254, Homer Recording District;

PARCEL D: The East  $\frac{1}{2}$  SE  $\frac{1}{4}$ , Section 4, Township 6 South, Range 13 West, Seward Meridian, Alaska; EXCEPTING therefrom the North 990 feet, consisting of 50 acres as described in Plat Waiver Resolution 94-25, recorded in Book 237, Page 254 Homer Recording District.

3. The parties acknowledge that all four parcels, A through D, were identified in Personal Representative's Deeds, which deeds were reeorded at Book 238, Pages 411 through 414 (Parcels A and B) and at Book 242, Pages 896 through 899 (Parcels C and D), records of the Homer Recording District, and that each deed contained the language that follows as to certain reserved ingress and egress rights:

"HEREBY granting and reserving all rights to ingress and egress over and through all parcels described in said Plat Waiver, recorded in Book 237, Page 254; . . ."

4. The parties agree to rescind the blanket reservation of mutual ingress and egress rights as set forth above. In return, they agree to provide each other with the following:

Plaintiffs will grant Defendant a recordable 30-foot-wide ingress and egress easement across Plaintiff Dolese's Lot 3, Ageya Homestead from the public Florence Martin Court to Defendant's Tract C, for the benefit of defendant's Tracts C and D. The easement document will be reviewed and approved by the parties prior to recording, and shall be recorded by Defendant. Within this easement, a vehicular driveway will be constructed, as follows:

Plaintiffs will contract with a licensed and bonded Alaska contractor to construct and complete a driveway, 12 feet wide, with a 12-inch thickness of pit run gravel, which will be placed atop a road-type fabric and compacted, which will branch off of Florence Martin Court, and will follow the "Old Homestead Trail" across what is now Plaintiff Dolese's Lot 3, Ageya Homestead, and then across defendant's Parcel D to the existing homesteader's cabin on that parcel, with a length of approximately 2000 linear feet, whose general location will be depicted as the "Old Homestead Trail" on the aerial photo to be attached as an exhibit to the easement document.

- a) This construction work will be performed and completed over the 2017 construction season;
- b) The routing of the driveway over Defendant's Parcel D will be agreed upon by Defendant, and will need Defendant to be physically present, or have a designated representative present, to agree upon the routing on Parcel D no later than fifteen (15) days after this Settlement Agreement has been executed by the parties;
- c) Defendant or her representative will have the driveway inspected within thirty (30) days after being notified of its completion, to ensure that it conforms to the specifications stated herein. If any discrepancies are found, Plaintiffs will have the contractor perform all necessary corrections.
- d) Plaintiffs will arrange to have the driveway surveyed, with Defendant paying \$1500 of the surveyor's cost.

- e) Plaintiffs will contract with a surveyor to not only survey, but to also pursue, on behalf of all the parties, any necessary Conditional Use Permits needed to permit construction of the driveway.
- f) The driveway survey will result in a surveyed and recorded driveway ingress and egress easement from Plaintiff Patricia Dolese to Defendant across Lot 3, Ageya Homestead.
- g) As between Plaintiffs and Defendant, Defendant will be solely responsible for the care and maintenance of the recorded driveway easement and the driveway after its construction; except that if Plaintiffs use the portion of the easement on Dolese's Lot 3 for their purposes, Plaintiffs' shall be responsible for a fair proportionate share of such expenses.
- h) Kenton Bloom of Seabright Survey & Design will be responsible for all surveying and permitting required by local governmental entities so that the parties can fulfill their obligations under this Settlement Agreement. Kevin Dee will be responsible for construction management and oversight to insure completion of the survey and the driveway in accordance with the specifications set forth in this Settlement Agreement.

Defendant agrees to execute a recordable six-(6) foot-wide pedestrian easement in the northwest corner of her Parcel C, granting Plaintiff Ageya a pedestrian access across Parcel C to access the Nature Center property to the north. This access easement need not be surveyed, but it is anticipated that an aerial photo, with the location of this trail depicted on the photo and identified as "foot trail," will be appended to the easement document to show the parties' agreed easement location. If at some future time Defendant performs the work to relocate this pedestrian trail to lie within the nearby existing section-line easement, the parties agree to rescind the pedestrian easement if Plaintiff Ageya is satisfied that the relocated pedestrian trail meets the same trail standards and utility as the segment it is intended to replace.

5. The parties acknowledge that access to Florence Martin Court is via two dedicated, but privately maintained, segments of road: Arnold Street and

Mae Street. To the extent maintenance and upkeep of these public road segments is necessary (e.g., ditching repairs as dictated by weather or other natural conditions) from where Borough maintenance ends on Easy Street up to the point where Defendant's driveway easement to Parcels C and D begins, Defendant agrees to share in those periodic costs, with the other users, at a rate of fifteen percent (15%) of any maintenance costs incurred. The other participants to this maintenance obligation are Plaintiffs and Joel Cooper. Jack Hughes has not been asked to contribute to any ongoing maintenance expenses as he built the road; however, any successor owner of the Hughes property will be expected to share proportionately in the costs, and proportionately and equitably reducing the other contributors' percentage of such costs. Before such proposed maintenance and repairs commence, they shall be reviewed and approved by all participants unless the circumstances of the situation require immediate action to preserve the roadways.

6. The parties agree that Defendant will not be expected to participate in or pay for a share of the snow plowing or sanding expense of the access roads, or of Florence Martin Court, unless Defendant chooses to use and/or occupy her property during the winter months.
7. The parties will agree to a dismissal with prejudice of the complaint and counterclaims, with each side bearing its own costs and attorney's fees. The form of dismissal is attached hereto as Exhibit A.
8. The parties will agree to execute a mutual release of claims asserted, or which could have been asserted. The form of mutual release is attached hereto as Exhibit B.
9. The form of the driveway easement is attached hereto as Exhibit C.
10. The form of the pedestrian easement is attached hereto as Exhibit D.
11. The terms of the existing and recorded Reciprocal Option To Purchase, recorded at Book 314, Pages 354 through 359, records of the Homer Recording District, shall remain in place, should either party choose to exercise its rights thereunder.
12. This Settlement Agreement may be executed in counterparts by the parties, with the understanding that the effective date of this Settlement Agreement

will be the latest execution date by a signatory to the Settlement Agreement.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Patricia M. Dolese

\_\_\_\_\_  
Date

\_\_\_\_\_  
Kevin M. Dee

**AGEYA HOMESTEAD PROPERTIES,  
LLC**, an Alaska limited liability company

\_\_\_\_\_  
Date

By: \_\_\_\_\_  
Its: \_\_\_\_\_

\_\_\_\_\_  
Date

\_\_\_\_\_  
Lynella Faith Green Grant

389838

## **PUBLIC HEARING NOTICE**

Public notice is hereby given that the City of Homer will hold a public hearing by the Homer Advisory Planning Commission on Wednesday, June 21, 2017 at 6:30 p.m. at Homer City Hall, 491 East Pioneer Avenue, Homer, Alaska, on the following matter:

**A Conditional Use Permit application to construct a gravel driveway approximately 2,500 feet in length across two properties located in the Bridge Creek Watershed Protection District (BCWPD) as required by Homer City 21.40.080 a. (2) for the placement of fill and grading in excess of 6,000 square feet. The two properties affected are 61447 Florence Martin Ct., Lot 3 Ageya Homestead T 6S R 13W Sec. 4 S.M, and 40871 Twitter Creek Ln., the unsubdivided E ½ SE ¼ Excl. N 990 Ft. Per PW RES 94-25 REC @ 237/254 T 6S R 13W Sec. 4 S.M.**

Anyone wishing to present testimony concerning this matter may do so at the meeting or by submitting a written statement to the Homer Advisory Planning Commission, 491 East Pioneer Avenue, Homer, Alaska 99603, by 4:00 p.m. on the day of the meeting.

The complete proposal is available for review at the City of Homer Planning and Zoning Office located at Homer City Hall. For additional information, please contact Rick Abboud at the Planning and Zoning Office, 235-3106.

**NOTICE TO BE SENT TO PROPERTY OWNERS WITHIN 300 FEET OF PROPERTY.**

.....

**VICINITY MAP ON REVERSE**

# Vicinity Map

Proposed construction of a private driveway from Florence Martin Court to adjoining property.

X

X

## Legend

-  Subject Location
-  Lots w/in 300 ft
-  City Limits



City of Homer  
Planning and Zoning Department

6/8/2017

## Request for CUP 17-03

Lots within 300 feet are marked  
and property owners notified.

0 500 1,000 Feet



*Disclaimer:*  
It is expressly understood the City of Homer, its council, board, departments, employees and agents are not responsible for any errors or omissions contained herein, or deductions, interpretations or conclusions drawn therefrom.



DISCLAIMER: The data displayed herein is neither a legally recorded map nor survey and should only be used for general reference purposes. Kenai Peninsula Borough assumes no liability as to the accuracy of any data displayed herein. Original source documents should be consulted for accuracy verification.

Printed: May 29 2017

Kenai Peninsula Borough GIS Division

Ageya driveway Map



## 22 Forest Roads

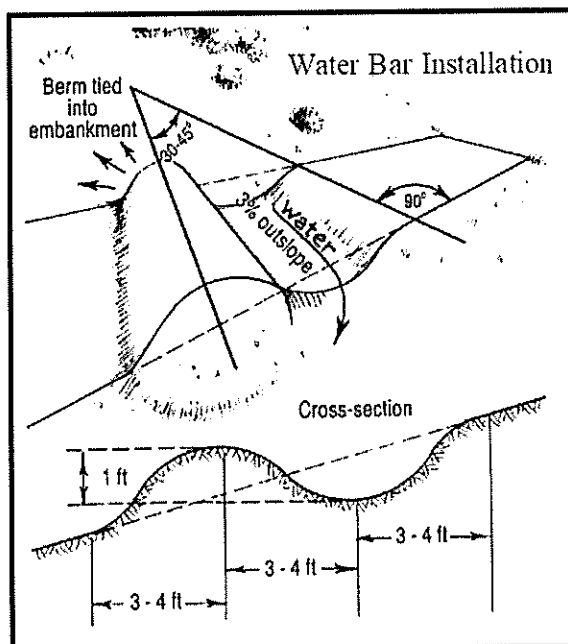


Figure ROAD-8

Table ROAD-2

| Water Bar Spacing |                                            |
|-------------------|--------------------------------------------|
| Grade             | Spacing between dips<br>or upland culverts |
| 2%                | 250 ft                                     |
| 5%                | 130 ft                                     |
| 10%               | 80 ft                                      |
| 15%               | 50 ft                                      |
| 25%+              | 40 ft                                      |



5/15/2017

Mr. Bloom,

In response to your request regarding grading and revegetation on the 2000 ft. access road you proposed on the property located off Florence Martin CT in Homer, ( T 6S R 13W SEC 4). I am attaching several Information references from our Field Office Technical Guides, as well as soil interpretations from the Western Kenai Peninsula soil survey.

According to this soil survey, the soils on your property are of the Kachemak silt loam series. Slopes in the area range from 8-15%. These soils are predominantly well drained, moderately deep and formed in volcanic ash mixed with silt blown from recently exposed glacial drift. Due to their massive structure, Kachemak soils are moderately to highly erosive when exposed and should be protected from wind and water through permanent vegetative cover to avoid potential displacement and runoff.

It is important when exposing soils or channeling drainage in the vicinity of the Bridge Creek watershed to follow best management practices that will minimize the impact of these activities to water quality. Avoiding concentrated flow by directing road related runoff so that it gradually dissipates away from established drainages is the goal. Water breaks or water bars may be used to control surface runoff on low intensity roads. On steeper grades where runoff and erosion is anticipated down the road, water bars should be considered. See the attached technical standards and specifications for Access Roads for information regarding treatment of surface runoff.

Any soil disturbance should also be treated through Critical Area Stabilization practices. I have attached the technical standard for this practices as well as specific recommendations for seed and fertilizer rates on critical areas from the Alaska Revegetation Guide. Any of the Combinations outlined in this attachment can be used to establish a vegetation mat for protection and stabilization of the affected site. I hope this information helps.

Jared Worthington

Soil Conservationist

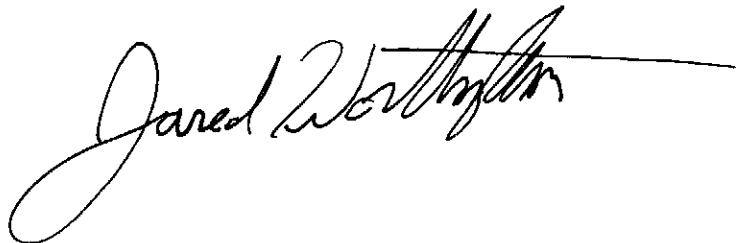
USDA-NRCS Homer Field office

4014 Lake St, Suite 201

PO Box 400

Homer, AK 99603

(907) 235-8177 ext. 107

A handwritten signature in black ink, reading "Jared Worthington". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.



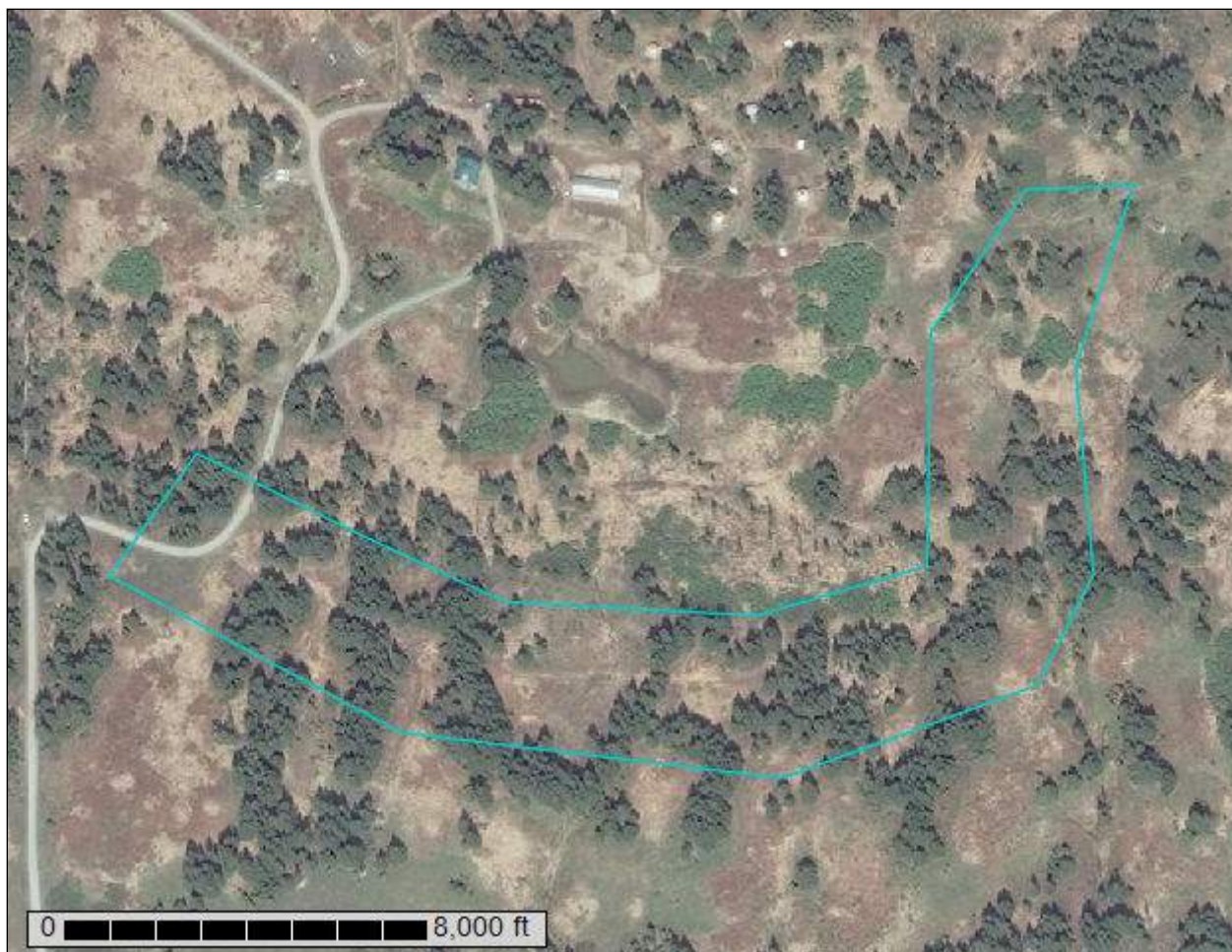
United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Western Kenai Peninsula Area, Alaska



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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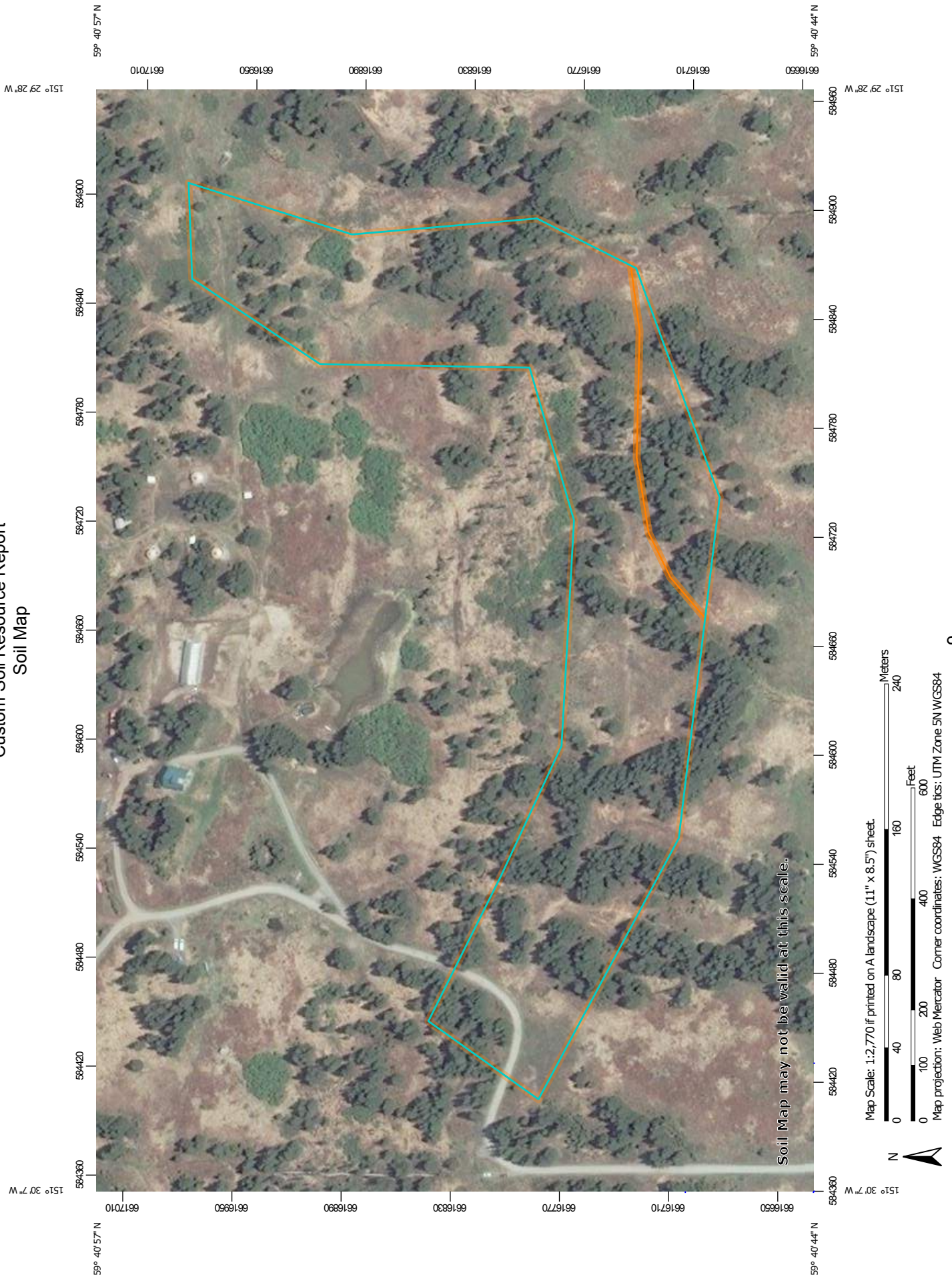
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

---

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



## Map Unit Legend

| Western Kenai Peninsula Area, Alaska (AK652) |                                             |              |                |
|----------------------------------------------|---------------------------------------------|--------------|----------------|
| Map Unit Symbol                              | Map Unit Name                               | Acres in AOI | Percent of AOI |
| 574                                          | Kachemak silt loam, 8 to 15 percent slopes  | 10.9         | 90.7%          |
| 575                                          | Kachemak silt loam, 15 to 25 percent slopes | 1.1          | 9.3%           |
| <b>Totals for Area of Interest</b>           |                                             | <b>12.0</b>  | <b>100.0%</b>  |

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the

development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.



## Western Kenai Peninsula Area, Alaska

### 574—Kachemak silt loam, 8 to 15 percent slopes

#### Map Unit Setting

*National map unit symbol:* 1lyd9  
*Elevation:* 160 to 2,000 feet  
*Mean annual precipitation:* 20 to 39 inches  
*Mean annual air temperature:* 34 to 39 degrees F  
*Frost-free period:* 85 to 130 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Kachemak and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Kachemak

##### Setting

*Landform:* Moraines on till plains  
*Landform position (two-dimensional):* Backslope, shoulder, summit  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Ash influenced loess over glacial drift

##### Typical profile

*Oi - 0 to 3 inches:* slightly decomposed plant material  
*A - 3 to 8 inches:* silt loam  
*B - 8 to 30 inches:* silt loam  
*2C - 30 to 60 inches:* silt loam

##### Properties and qualities

*Slope:* 8 to 15 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very high (about 15.4 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* *Picea xlutzii*/*Salix barclayi*-*Empetrum nigrum*/*Equisetum arvense* (F224XY429AK)  
*Hydric soil rating:* No

#### Minor Components

##### Tuxedni

*Percent of map unit:* 10 percent

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*Landform:* Till plains, hills  
*Landform position (two-dimensional):* Toeslope  
*Down-slope shape:* Concave  
*Across-slope shape:* Linear  
*Ecological site:* Rolling Uplands (R170XD427AK)  
*Hydric soil rating:* No

### **Redoubt**

*Percent of map unit:* 8 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope, shoulder  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense (F170XD443AK)  
*Hydric soil rating:* No

### **Starichkof**

*Percent of map unit:* 2 percent  
*Landform:* Fens  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* Wetland Complex (R170XY400AK)  
*Hydric soil rating:* Yes

## **575—Kachemak silt loam, 15 to 25 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* 1lydb  
*Elevation:* 200 to 2,020 feet  
*Mean annual precipitation:* 20 to 39 inches  
*Mean annual air temperature:* 34 to 39 degrees F  
*Frost-free period:* 85 to 130 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Kachemak and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Kachemak**

#### **Setting**

*Landform:* Moraines on till plains  
*Landform position (two-dimensional):* Backslope, shoulder, summit  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Ash influenced loess over glacial drift

#### **Typical profile**

*Oi - 0 to 3 inches:* slightly decomposed plant material

## Custom Soil Resource Report

*A - 3 to 8 inches:* silt loam  
*B - 8 to 30 inches:* silt loam  
*2C - 30 to 60 inches:* silt loam

### Properties and qualities

*Slope:* 15 to 25 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.20 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very high (about 15.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* B  
*Ecological site:* Picea xutzii/Salix barclayi-Empetrum nigrum/Equisetum arvense (F224XY429AK)  
*Hydric soil rating:* No

### Minor Components

#### Redoubt

*Percent of map unit:* 10 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Backslope, shoulder  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Ecological site:* Picea glauca-Betula papyrifera/Calamagrostis canadensis-Equisetum arvense (F170XD443AK)  
*Hydric soil rating:* No

#### Tuxedni

*Percent of map unit:* 10 percent  
*Landform:* Till plains  
*Ecological site:* Rolling Uplands (R170XD427AK)  
*Hydric soil rating:* No

# Soil Information for All Uses

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## Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

## Recreational Development

Recreational Development interpretations are tools designed to guide the user in identifying and evaluating the suitability of the soil for specific recreational uses. Example interpretations include camp areas, picnic areas, playgrounds, paths and trails, and off-road motorcycle trails.

## Paths and Trails

Paths and trails for hiking and horseback riding should require little or no slope modification through cutting and filling.

The ratings are based on the soil properties that affect trafficability and erodibility. These properties are stoniness, depth to a water table, ponding, flooding, slope, and texture of the surface layer.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

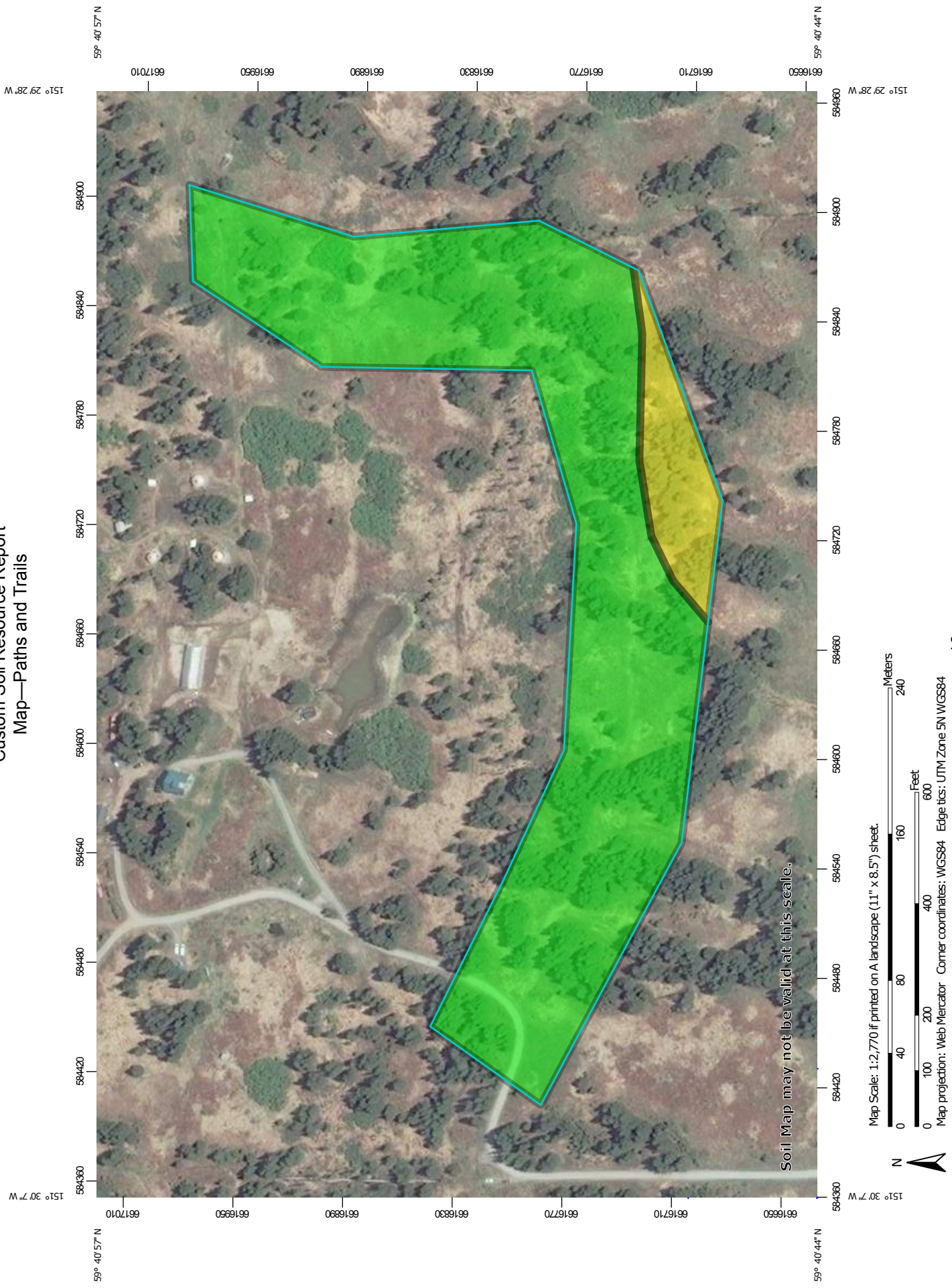
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Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Custom Soil Resource Report  
Map—Paths and Trails





## Tables—Paths and Trails

| Paths and Trails— Summary by Map Unit — Western Kenai Peninsula Area, Alaska (AK652) |                                             |                  |                          |                                 |              |                |
|--------------------------------------------------------------------------------------|---------------------------------------------|------------------|--------------------------|---------------------------------|--------------|----------------|
| Map unit symbol                                                                      | Map unit name                               | Rating           | Component name (percent) | Rating reasons (numeric values) | Acres in AOI | Percent of AOI |
| 574                                                                                  | Kachemak silt loam, 8 to 15 percent slopes  | Not limited      | Kachemak (80%)           |                                 | 10.9         | 90.7%          |
| 575                                                                                  | Kachemak silt loam, 15 to 25 percent slopes | Somewhat limited | Kachemak (80%)           | Slope (0.50)                    | 1.1          | 9.3%           |
|                                                                                      |                                             |                  | Tuxedni (10%)            | Dusty (0.36)                    |              |                |
| Totals for Area of Interest                                                          |                                             |                  |                          |                                 | 12.0         | 100.0%         |

| Paths and Trails— Summary by Rating Value |              |                |
|-------------------------------------------|--------------|----------------|
| Rating                                    | Acres in AOI | Percent of AOI |
| Not limited                               | 10.9         | 90.7%          |
| Somewhat limited                          | 1.1          | 9.3%           |
| Totals for Area of Interest               | 12.0         | 100.0%         |

### Rating Options—Paths and Trails

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

### Off-Road Motorcycle Trails

Off-road motorcycle trails are intended primarily for recreational use. They require little or no site preparation. They are not covered with surfacing material or vegetation. Considerable compaction of the soil material is likely.

The ratings are based on the soil properties that influence erodibility, trafficability, dustiness, and the ease of revegetation. These properties are stoniness, slope, depth to a water table, ponding, flooding, and texture of the surface layer.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use.

"Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected.

"Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot

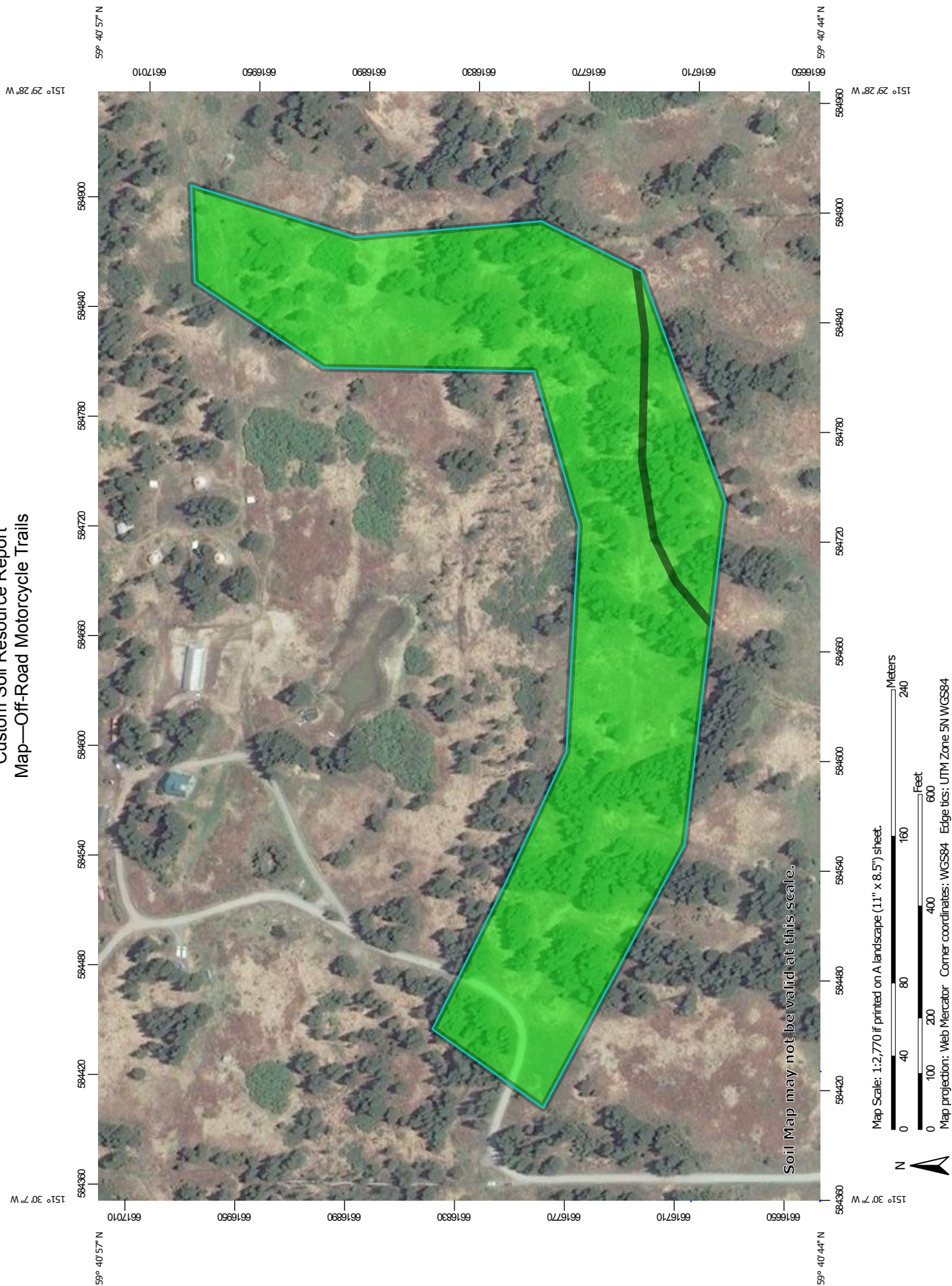
be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

# Custom Soil Resource Report Map—Off-Road Motorcycle Trails



Area of Interest (AOI)

Area of Interest (AOI)

Background

Aerial Photography

Soils

Soil Rating Polygons

Very limited

Somewhat limited

Not limited

Not rated or not available

Soil Rating Lines

Very limited

Somewhat limited

Not limited

Not rated or not available

Soil Rating Points

Very limited

Somewhat limited

Not limited

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

MAP LEGEND

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MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:25,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Kenai Peninsula Area, Alaska

Survey Area Data: Version 14, Sep 27, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

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## Tables—Off-Road Motorcycle Trails

| Off-Road Motorcycle Trails— Summary by Map Unit — Western Kenai Peninsula Area, Alaska (AK652) |                                             |             |                          |                                 |              |                |
|------------------------------------------------------------------------------------------------|---------------------------------------------|-------------|--------------------------|---------------------------------|--------------|----------------|
| Map unit symbol                                                                                | Map unit name                               | Rating      | Component name (percent) | Rating reasons (numeric values) | Acres in AOI | Percent of AOI |
| 574                                                                                            | Kachemak silt loam, 8 to 15 percent slopes  | Not limited | Kachemak (80%)           |                                 | 10.9         | 90.7%          |
| 575                                                                                            | Kachemak silt loam, 15 to 25 percent slopes | Not limited | Kachemak (80%)           |                                 | 1.1          | 9.3%           |
| <b>Totals for Area of Interest</b>                                                             |                                             |             |                          |                                 | <b>12.0</b>  | <b>100.0%</b>  |

| Off-Road Motorcycle Trails— Summary by Rating Value |              |                |
|-----------------------------------------------------|--------------|----------------|
| Rating                                              | Acres in AOI | Percent of AOI |
| Not limited                                         | 12.0         | 100.0%         |
| <b>Totals for Area of Interest</b>                  | <b>12.0</b>  | <b>100.0%</b>  |

## Rating Options—Off-Road Motorcycle Trails

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

## Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

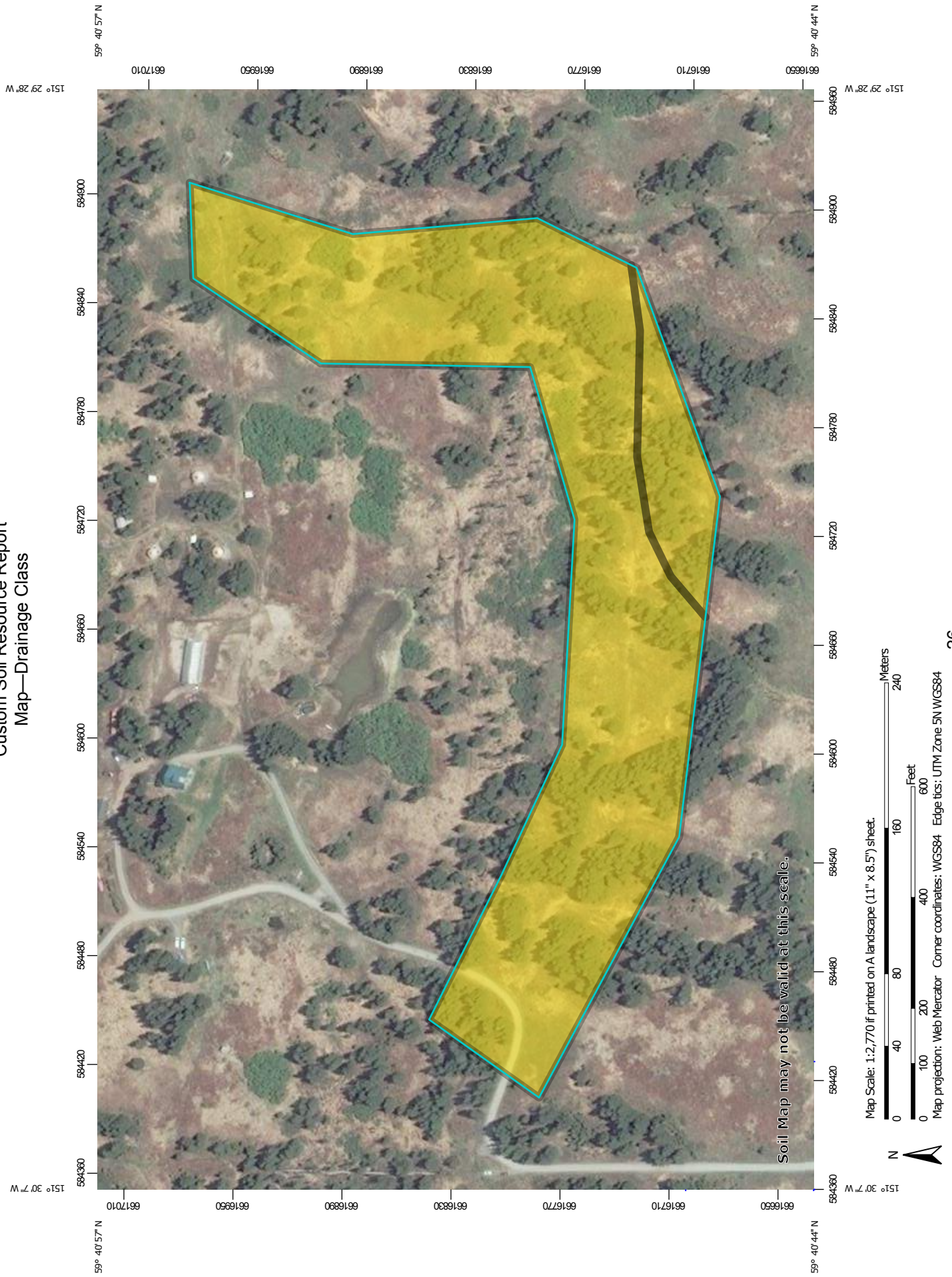
## Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

## Drainage Class

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized-excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

# Custom Soil Resource Report Map—Drainage Class





**Table—Drainage Class**

| <b>Drainage Class— Summary by Map Unit — Western Kenai Peninsula Area, Alaska (AK652)</b> |                                             |               |                     |                       |
|-------------------------------------------------------------------------------------------|---------------------------------------------|---------------|---------------------|-----------------------|
| <b>Map unit symbol</b>                                                                    | <b>Map unit name</b>                        | <b>Rating</b> | <b>Acres in AOI</b> | <b>Percent of AOI</b> |
| 574                                                                                       | Kachemak silt loam, 8 to 15 percent slopes  | Well drained  | 10.9                | 90.7%                 |
| 575                                                                                       | Kachemak silt loam, 15 to 25 percent slopes | Well drained  | 1.1                 | 9.3%                  |
| <b>Totals for Area of Interest</b>                                                        |                                             |               | <b>12.0</b>         | <b>100.0%</b>         |

**Rating Options—Drainage Class***Aggregation Method:* Dominant Condition*Component Percent Cutoff:* None Specified*Tie-break Rule:* Higher

# References

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- American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
- American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.
- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. September 18, 2002. Hydric soils of the United States.
- Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.
- National Research Council. 1995. Wetlands: Characteristics and boundaries.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_054262](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262)
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053577](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577)
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053580](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580)
- Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.
- United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.
- United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)
- United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>

## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)

## NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

### ACCESS ROAD

(Ft.)

CODE 560

#### DEFINITION

An access road is an established route for equipment and vehicles.

#### PURPOSE

An access road is used to provide a fixed route for vehicular travel for resource activities involving the management of timber, livestock, agriculture, wildlife habitat, and other conservation enterprises.

#### CONDITIONS WHERE PRACTICE APPLIES

This practice applies where access is needed from a private or public road or highway to a land use enterprise or conservation measure, or where access is needed in a planned land use area.

Access roads range from single purpose, seasonal use roads, designed for low speed and rough driving conditions, to all-purpose, all-weather roads. Single purpose roads provide access to areas such as forest fire lines, forest management activities, remote recreation areas, or for maintenance of facilities.

This practice does not apply to temporary or infrequently used trails used for logging. Use NRCS Conservation Practice Standard (CPS) *Forest Trails and Landings (Code 655)*. Trails and walkways used for animals, pedestrians, or off-road vehicles are addressed in NRCS CPS *Trails and Walkways (Code 575)*.

#### CRITERIA

Design the access road to serve the enterprise or planned use with the expected vehicular or equipment traffic. Factors in the design include the type of vehicle or equipment and the speed, loads, soils, climate, and other conditions under which vehicles and equipment are expected to operate.

**Location.** Locate the access road to serve the purpose intended, to facilitate the control and disposal of surface and subsurface water, to control or reduce erosion, and to make the best use of topographic features. Design the layout of the road to follow natural contours and slopes to minimize disturbance of drainage patterns. Locate the access road where it can be maintained and where water management problems are not created. To reduce potential pollution, position the road as far as possible from water bodies and watercourses. To the extent possible, do not impede overland flow.

**Alignment.** Adapt the gradient and horizontal alignment to the intensity of use, the mode of travel, the type of equipment and load weights, and the level of development.

Grades normally should not exceed 10 percent except for short lengths. A maximum grade of 15 percent should only be exceeded if necessary for special uses such as field access roads or fire protection roads.

**Width.** The minimum width of the roadbed for an all-purpose road is 14 feet for one-way traffic and 20 feet for two-way traffic. The roadbed width includes a tread-width of 10 feet for one-way traffic or 16 feet for two-way traffic and 2 feet of shoulder width on each side. Increase the two-way traffic width by a minimum of 4 feet for trailer traffic. Single purpose roads will have a minimum width of 10 feet with greater widths at curves and turnouts. Use vegetation or other measures to protect the shoulders from erosion.

Use turnouts on single lane roads where vehicles travel in both directions on a limited basis. Design the turnout to accommodate the anticipated vehicle use.

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January 2015

Provide a turnaround at the end of dead end roads. Size the turnaround for the anticipated vehicle type that will be using the road.

Provide parking space as needed to keep vehicles from parking on the shoulder or other undesirable locations.

**Side Slopes.** Design all cuts and fills to have stable slopes that are a minimum of 2 horizontal to 1 vertical. For short lengths, rock areas, or very steep hillsides, steeper slopes may be permitted if soil conditions warrant and special stabilization measures are installed.

Where possible, avoid areas with geological conditions and soils that are subject to slides. When the area cannot be avoided, treat the area to prevent slides.

**Drainage.** The type of drainage structures used will depend on the intended use and runoff conditions. Provide a culvert, bridge, ford, or surface cross drain for water management at every natural drainage way. The capacity and design of the drainage feature must be consistent with sound engineering principles and must be adequate for the class of vehicle, road type, land use in the watershed, and intensity of use.

When a culvert or bridge is installed in a drainage way, it must have a minimum capacity that is sufficient to convey the design storm runoff without causing erosion or road overtopping. Table 1 lists minimum design storm frequencies for various road types.

Table 1

| Road Intensity & Usage                                                   | Storm Frequency   |
|--------------------------------------------------------------------------|-------------------|
| Intermittent; single purpose or farm use                                 | 2 year - 24 Hour  |
| Frequent; farm headquarters, livestock access, isolated recreation areas | 10 year - 24 Hour |
| High intensity; residential or public access                             | 25 year - 24 Hour |

Use NRCS CPS *Stream Crossing (Code 578)* to design stream crossings.

An erosion-resistant low point or overflow area may be constructed across the access road to

supplement the culvert capacity on non-public use roads.

Surface cross drains, such as broad-based or rolling dips, may be used to control and direct water flow off the road surface on low-intensity use forest, ranch or similar roads. Protect the outlets of drainage measures to limit erosion. On steep grades where water could run down the road, use a broad-based dip or other similar feature to divert runoff. The surface cross drain must be constructed of materials that are compatible with the use and maintenance of the road surface. The discharge area for a surface cross drain must be well-vegetated or have other erosion resistant materials. See Figure 1 - Recommended Spacing of Surface Cross Drains Based on Soil Type. Reduce separation distances as needed to account for local hydrologic conditions.

Crown the road surface to direct precipitation off of the road.

Provide ditches, as needed, to move water away from the road. Maintain unobstructed flow into the ditches to prevent flows from causing roadside erosion. The capacity of a roadside ditch must be adequate to carry the drainage from the road surface. Design ditch channels to have stable grades and side slopes. Provide a stable outlet for the ditch. Protection may include riprap or other similar materials. Use NRCS CPSs such as *Structure for Water Control (Code 587)*; *Lined Waterway or Outlet (Code 468)*; or *Grade Stabilization Structure (Code 410)*, if needed.

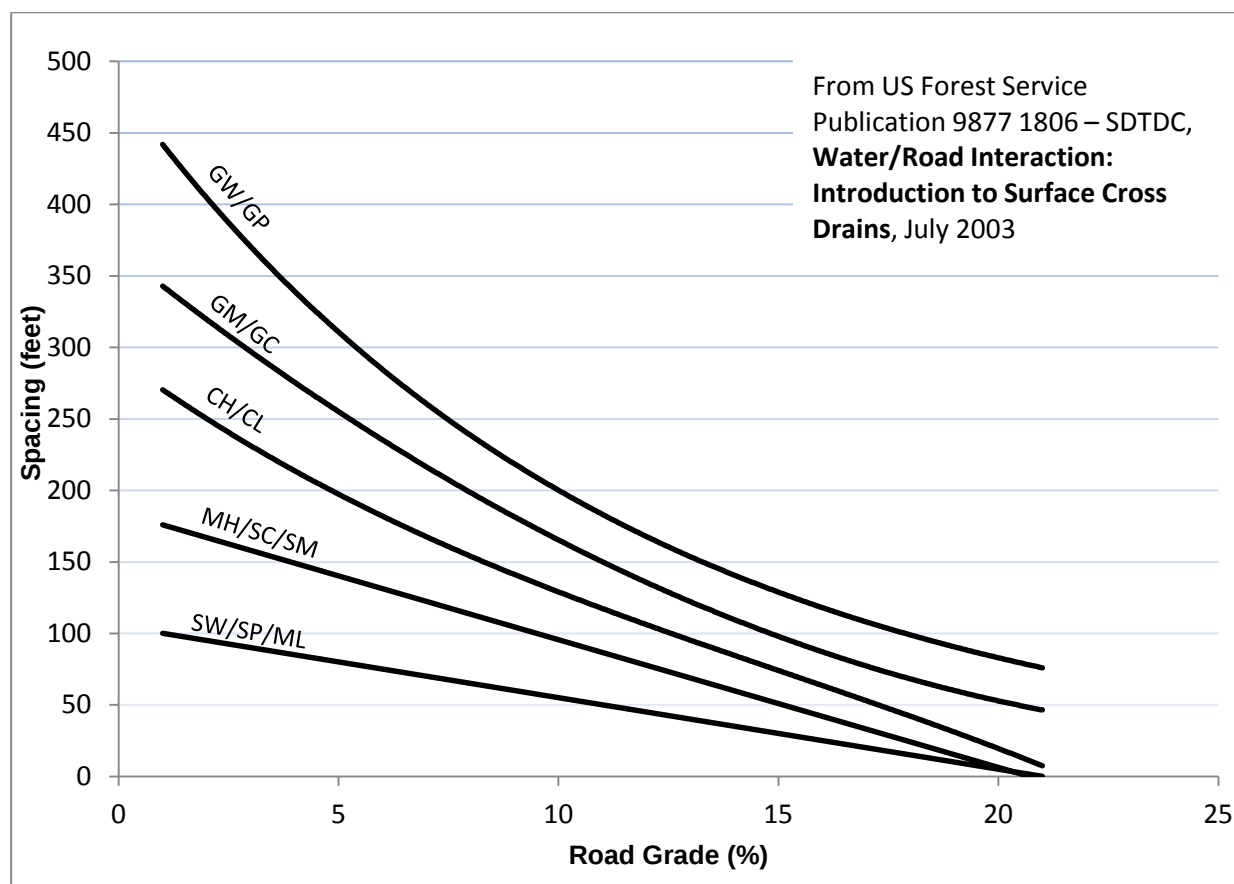
**Surfacing.** Install a wearing course or surface treatment on the access road if required by traffic needs, soil, climate, erosion control, particulate matter emission control, or other site condition. If none of these factors apply, no special treatment of the surface is required.

When a treatment is used, the type of treatment will depend on local conditions, available materials, and the existing road base. On roads made of soils with weak bearing capacity, such as silts, organics, and clays, or where it is necessary to separate the surfacing material from the foundation material, place a geotextile material specifically designed for road stabilization applications under the surface treatment. Use the criteria in NRCS CPS *Heavy Use Area Protection (Code 561)* to

design the surface treatment. Do not use toxic and acid-forming materials to build the road.

If dust control is needed, use NRCS CPS *Dust Control on Unpaved Roads and Surfaces* (Code 373).

Figure 1. Recommended Spacing of Surface Cross Drains Based on Soil Types



**Safety.** Provide passing lanes, turnouts, guardrails, signs, and other facilities as needed for safe traffic flow. Design an intersection to a public highway to meet applicable federal, state and local criteria.

**Erosion Control.** Use the criteria in NRCS CPS *Critical Area Planting* (Code 342) or the NRCS State-approved seeding specification to vegetate road banks and disturbed areas as soon soil and climatic conditions are favorable. If permanent vegetation cannot be established in a timely manner, use appropriate temporary measures to control erosion. If the use of vegetation is precluded and protection against erosion is needed,

use the criteria in NRCS CPS *Mulching* (Code 484) to provide surface protection.

During and after construction, use erosion and sediment control measures to minimize off-site damages.

#### CONSIDERATIONS

Consider visual resources and environmental values during planning and design of the road system.

Limiting the number of vehicles and vehicle speed will reduce the potential for generation of particulate matter and decrease safety and air quality concerns.

Consider using additional conservation practices to reduce the potential for generation and transport of particulate matter emissions such as NRCS CPSs *Dust Control on Unpaved Roads and Surfaces (Code 373)* or *Windbreak/Shelterbelt Establishment (Code 380)*.

During adverse weather, some roads may become unsafe or may be damaged by use. Consider restricting access to the road at that time.

Consideration should be given to the following:

- Effects on downstream flows, wetlands or aquifers that would affect other water uses or users.
- Effects on wildlife habitats that would be associated with the practice.
- Utilizing buffers where possible to protect surface water.
- Short-term and construction-related effects of this practice.

## PLANS AND SPECIFICATIONS

Provide plans and specifications that describe the requirements for applying the practice to achieve its intended purpose. As a minimum, include:

- A plan view of the proposed road that shows water features, known utilities, and other features that affect the design.
- Road width and length with profile and typical cross section(s) including turnouts, parking, and turnarounds.
- Design road grades or maximum grades when applicable.
- Soils investigation. Location of soil borings and plot of the soil/geologic boring showing the USCS, as needed
- Type and thickness of surface treatment including any subbase preparation.
- Grading plan.
- Cut and fill slopes where applicable.
- Planned drainage features.
- Location, size, type, length and invert elevations of all required water control structures.
- Vegetative requirements that include vegetation materials to be used, establishment rates, and season of planting.

- Erosion and sediment control measures, as needed.
- Safety features.
- Construction and material specifications.

## OPERATION AND MAINTENANCE

Prepare a written Operation and Maintenance Plan for the access road. As a minimum, include the following activities:

- Inspect culverts, roadside ditches, water bars and outlets after each major runoff event and restore flow capacity as needed. Ensure proper cross section is available and outlets are stable.
- Maintain vegetated areas in adequate cover to meet the intended purpose(s).
- Fill low areas in travel treads and re-grade, as needed, to maintain road cross section. Repair or replace surfacing materials as needed.
- Selection of chemical treatment(s) for surface treatment or snow/ice removal, as needed. Select the chemicals used for surface treatment or snow and ice removal to minimize adverse effects on stabilizing vegetation.
- Selection of dust control measures, as needed.

## REFERENCES

United States Forest Service. July 2003. *Water/Road Interaction: Introduction to Surface Cross Drains* (Publication 9877 1806 – SDTDC).

# NATURAL RESOURCES CONSERVATION SERVICE

## CONSERVATION PRACTICE STANDARD

### MULCHING

(Ac.)

CODE 484

#### DEFINITION

Applying plant residues or other suitable materials produced off site, to the land surface.

#### PURPOSE

- Conserve soil moisture
- Reduce energy use associated with irrigation
- Moderate soil temperature
- Provide erosion control
- Suppress weed growth
- Facilitate the establishment of vegetative cover
- Improve soil quality
- Reduce airborne particulates

#### CONDITIONS WHERE PRACTICE APPLIES

This practice applies to all lands where mulches are needed. This practice may be used alone or in combination with other practices.

#### CRITERIA

##### General Criteria Applicable to All Purposes

The selection of mulching materials will depend primarily on site conditions and the material's availability. Mulch materials shall consist of natural and/or artificial materials that are environmentally safe such as plant residue, wood bark or chips, gravel, plastic, fabric, rice hulls, or other equivalent materials of sufficient dimension (depth or thickness) and durability to achieve the intended purpose for the required time period.

Prior to mulching, the soil surface shall be prepared in order to achieve the desired purpose.

The mulch material shall be evenly applied and,

if necessary, anchored to the soil. Tackifiers, emulsions, pinning, netting, crimping or other acceptable methods of anchoring will be used if needed to hold the mulch in place for specified periods.

As a minimum, manufactured mulches shall be applied according to the manufacturer's specifications.

Mulching operations shall comply with federal, state, and/or local laws and regulations during the installation, operation, and maintenance of this practice.

Mulch material shall be relatively free of disease, pesticides, chemicals, noxious weed seeds, and other pests and pathogens.

##### Additional Criteria to Conserve Soil Moisture and/or Reduce Energy Use Associated with Irrigation

Mulch materials applied to the soil surface shall provide at least 60 percent surface cover to reduce potential evaporation.

##### Additional Criteria to Moderate Soil Temperature

Mulch materials shall be selected and applied to obtain 100 percent coverage over the area treated. The material shall be of a significant thickness to persist for the period required for the temperature modification.

##### Additional Criteria to Provide Erosion Control

When mulching with cereal grain straw or grass hay, apply at a rate to achieve a minimum 70 percent ground cover. Mulch rate shall be determined using current erosion prediction technology to reach the soil erosion objective.

When mulching with wood products such as wood chips, bark, or shavings or other wood materials, apply a minimum 2-inch thickness.

When mulching with gravel or other inorganic material apply a minimum 2 inch thickness and shall consist of pieces 0.75 to 2 inches in diameter.

#### **Additional Criteria to Suppress Weed Growth**

The thickness of mulch will be determined by the size of the plant being mulched, soil conditions, and need for weed control. Mulches shall be kept clear of the stems of plants where disease is likely to occur. Mulches applied around growing plants or prior to weed seedling development shall have 100 percent ground cover. Thickness, darkness and/or density of the mulch shall be adequate to prevent emergence of targeted weeds. Light-blocking barrier mulches may be used for weed control. Dark plastic weed barriers include extruded, woven, or spun-bonded polyethylene, polypropylene or polyester. Natural weed barriers include treated or untreated paper.

#### **Additional Criteria to Establish Vegetative Cover**

Mulch shall be applied at a rate that achieves a minimum of 70 percent ground cover to provide protection from erosion and runoff and yet allow adequate light and air penetration to the seedbed to ensure proper germination and emergence.

#### **Additional Criteria to Improve Soil Quality**

Apply mulch materials with a carbon to nitrogen ratio (C:N) less than 30 to 1 so that soil nitrogen is not immobilized by soil biota. Do not apply mulch with C:N less than 20:1 to an area of designed flow in watercourses.

Use the Soil Conditioning Index to assess soil quality impacts and to determine the type and rate of the mulching material.

#### **Additional Criteria to Reduce Airborne Particulate Matter from Wind Erosion**

Mulch rate shall be determined using current wind erosion prediction technology to reach the soil erosion (movement of particulates offsite) objective.

### **CONSIDERATIONS**

Evaluate the effects of mulching on evaporation, infiltration, and runoff. Mulch material may affect microbial activity in the soil surface, increase infiltration, and decrease runoff, erosion, and

evaporation. The temperature of the surface runoff may also be lowered.

Mulch material used to conserve soil moisture should be applied prior to moisture loss. Prior to mulching, ensure soil under shallow rooted crops is moist, as these crops require a constant supply of moisture.

Mulch materials with a high water holding capacity and/or high impermeability to water droplets may adversely affect the water needs of plants.

Fine textured mulches (e.g. rice hulls) which allow less oxygen penetration than coarser materials should be no thicker than 2 inches.

Organic materials with C:N ratios of less than 20:1 will release nitrate-nitrogen which could cause water quality impairments.

Mulching may also provide habitat for beneficial insect and provide pest suppression.

Clear and infra-red transmissible (IRT) plastics have the greatest warming potential. They are transparent to incoming radiation and trap the longer wavelengths radiating from the soil. Black mulches are limited to warming soils by conduction only and are less effective.

Clear mulches allow profuse weed growth and may negate the benefits of soil warming. Black mulches provide effective weed control. Wavelength selective (IRT) plastic provides the soil warming characteristics of clear mulch with the weed control ability of black mulch.

Low permeability mulches (e.g. plastic) may increase concentrated flow and erosion on un-mulched areas.

Consider potential toxic allelopathic effects that mulch material may have on other organisms. Animal and plant pest species may be incompatible with the site.

Consider the potential for increased pathogenic activity within the applied mulch material.

Keep mulch 3 to 6 inches away from plant stems and crowns to prevent disease and pest problems. Additional weed control may be needed around the plant base area.

Deep mulch provides nesting habitat for ground-burrowing rodents that can chew extensively on tree trunks and/or tree roots. Light mulch applied after the first cold weather may prevent rodents from nesting.

Some mulch material may adversely affect aquatic environments through changes in water chemistry or as waterborne debris. Consider placing mulch in locations that minimizes these risks.

Consider potential effects of soil physical and chemical properties. Refer to soil survey data as a preliminary planning tool for assessment of areas. Consult the Web Soil Survey at: <http://websoilsurvey.nrcs.usda.gov/app/> to obtain Soil Properties and Qualities information.

## PLANS AND SPECIFICATIONS

Specifications shall be prepared for each site and purpose and recorded using approved specification sheets, job sheets, technical notes, narrative statements in the conservation plan, or other acceptable documentation.

Documentation shall include:

- Purpose of the Mulch
- Type of mulch material(s) used
- The percent cover and/or thickness of mulch material(s)
- Timing of application
- Site preparation
- Listing of netting, tackifiers, or method of anchoring, and
- Operation and maintenance.

## OPERATION AND MAINTENANCE

Mulched areas will be periodically inspected, and mulch shall be reinstalled or repaired as needed to accomplish the intended purpose.

Evaluate the effectiveness of the mulch (application, amount of cover provided, durability, etc.) and adjust the management or

type of mulch to better meet the intended purpose(s).

Removal or incorporation of mulch materials shall be consistent with the intended purpose and site conditions.

Operation of equipment near and on the site shall not compromise the intended purpose of the mulch.

Prevent or repair any fire damage to the mulch material.

Properly collect and dispose of artificial mulch material after intended use.

Monitor and control undesirable weeds in mulched areas.

## REFERENCES

- Agriculture and Agri-Food Canada. 2000. Plastic mulches for commercial vegetable production. Canada-Saskatchewan Irrigation Diversification Centre. Outlook, Saskatchewan.
- Renard, K.G., G.R. Foster, G.A. Weesies, D.K. McCool, and D.C. Yoder, Coordinators. 1997. Predicting soil erosion by water: A guide to conservation planning with the Revised Universal Soil Loss Equation (RUSLE). U.S. Department of Agriculture, Agriculture Handbook No. 703.
- Shaffer, M.J., and W.E. Larson (ed.). 1987. NTRM, a soil-crop simulation model for nitrogen, tillage and crop residue management. USDA Conserv. Res. Rep. 34-1. USDA-ARS.
- Toy, T.J., and G.R. Foster. (Ed.) 1998. Guidelines for the use of the Revised Universal Soil Loss Equation (RUSLE) Version 1.06 on mined lands, construction sites, and reclaimed lands. USDI, OSMR.
- USDA, NRCS. 2011. National Agronomy Manual. 190-V, 4<sup>th</sup> Ed. Washington, D.C.

In revegetation situations where exotic grasses are used for temporary cover until native plants are able to reestablish, the use of fertilizers should be reduced over the second and third years until none is used the fourth year and beyond. This will allow the native species to gradually invade the exotics since the exotics require artificially high fertility to compete, whereas the native species are adapted to Alaska soil fertility levels.

## 8. Mulching

Mulching is important in establishing vegetation on steep or very gravelly sites. A mulch cover will help hold moisture, protect the soil from erosion, keep seed in place, and keep soil temperatures more constant. If traditional mulch materials are used, they should be applied uniformly by mechanical means or by hand after seeding. Common types of mulching material used in revegetation plantings are hay, small grain straw, straw-asphalt, wood fiber mulches, peat moss, gravel, and jute matting. Grass seed straw or native hay, cut when seed is about mature, could be used as a mulch. This material often contains viable seed and is excellent for mulching. Some bare soil should still be visible through a straw mulch to absorb solar heat. Mulching is expensive and often necessary only on steep and critical areas. Very early spring mulch applications may retard the rate at which the soils warm up.

Plastic emulsion materials have been used in Alaska with varying degrees of success. New types of soil treatment chemicals are placed on the market each year, and the user should contact one of the technical agencies for recommendations and on-site assistance.

## 9. Temporary Emergency Seedings

Temporary emergency seedings are those designed to produce a quick cover on soils for erosion control. Annual ryegrass and cereal grains are recommended for this purpose. Seeding rates depend on individual site conditions and range from 10 to 25 pounds of PLS per acre for annual ryegrass and 50 to 75 pounds per acre of PLS for cereals. These seedings should be completed by August 15 for best results. Adapted perennial species should be planted the following spring to provide permanent soil protection. If quick erosion control is required on a site early in the season, annual ryegrass can be seeded with the perennial plant mix up to 10% of the total seed mix.

## SECTION III

be purchased in several different formulations. For convenience, these formulations are presented below for several recommendations. Other formulations are available on special order from fertilizer dealers. Fertilizer materials should be incorporated into the soil, if possible, to reduce the loss of nitrogen through volatilization. For best results, at least one half of the nitrogen source should be in the ammonium or nitrate form as this is more readily available and less likely to vaporize than is urea nitrogen.

| Application Rate |    | Suggested Formulations and amounts per acre                                                              |
|------------------|----|----------------------------------------------------------------------------------------------------------|
| 150-60-100       | or | 300 lb of 20-20-10 + 120 lb 0-0-60 + 200 lb 45-0-0<br>300 lb of 20-20-10 + 140 lb 0-0-50 + 200 lb 45-0-0 |
| 80-150-60        |    | 500 lb of 16-30-12                                                                                       |
| 60-100-50        | or | 310 lb of 8-32-16 + 100 lb 34-0-0<br>370 lb of 16-27-13.5                                                |
| 60-60-60         | or | 300 lb of 10-20-20 + 100 lb of 34-0-0<br>300 lb of 10-20-20 + 200 lb of 15.5-0-0                         |
| 60-60-30         |    | 300 lb of 20-20-10                                                                                       |

### b. Liming

This table provides generalized lime requirements for soils of cool regions. Lime is generally only necessary where the pH is lower than 5.5. It is often less expensive to select species adapted to low pH as opposed to liming.

LIME REQUIREMENT TO INCREASE pH IN UPPER 6 INCHES OF SOIL

|                     | From pH 3.5 to 4.5<br>Tons per acre | From pH 4.5 to 5.5<br>Tons per acre | From pH 5.5 to 6.5<br>Tons per acre |
|---------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Sand and loamy sand | 0.4                                 | 0.5                                 | 0.6                                 |
| Sandy loam          | —                                   | 0.8                                 | 1.3                                 |
| Loam                | —                                   | 1.2                                 | 1.7                                 |
| Silt loam           | —                                   | 1.5                                 | 2.0                                 |
| Clay loam           | —                                   | 1.9                                 | 2.3                                 |
| Muck                | 2.9                                 | 3.8                                 | 4.3                                 |

This data should be considered only as a guide for the relative lime requirements of various soil types. Consult the local Cooperative Extension Service for specific recommendations. Accurate liming requirements based on SMP buffer pH soil tests are available through the Cooperative Extension Service.

## 7. Maintenance

Grass seedlings must be kept moist after seeding until the grass has reached a height of 1 to 2 inches. If possible, supplemental water should be supplied, especially during prolonged periods of drought while the grass is becoming established. Critical sites may need water disposal structures, some reseeding or sodding, and maintenance applications of mulch and fertilizer.

**Proportions Recommended Per Acre:**

|                                |                |
|--------------------------------|----------------|
| Fiber mulch                    | 1,000-1,200 lb |
| Seed - as specified, usually   | 10-50 lb       |
| Fertilizer - N.P.K., Inorganic | 400-600 lb     |
| 300 lb. - 10-20-20             |                |
| 100-300 lb. - 33-0-0           |                |
| Water - 3,000 gallons minimum  |                |

**Loading and Mixing—1/2 Acre Requirement**

Fill tank 1/3 full of water and start agitation system operating at partial speed. Add materials so they are uniformly blended in the following sequence.

**1,500 Gallon Tank—Water for 1/2 Acre**

1. Add three (3) 50-lb bags of fiber or similar mulch.
2. Add seed for 1/2 acre; 5-25 lb.
3. Add N.P.K. for 1/2 acre; 200-300 lb.
4. Fill tank to 1/2 capacity and agitate mixture at full speed.
5. Add seven (7) 50-lb bags of mulch and complete filling tank and mixing.  
(Figures can be adjusted for various sized tanks.)

**c. Broadcast**

If it is necessary to use the broadcast method of seeding, doubling the drill-seeding rates will be required in most cases. The best operating speed for ground broadcasting is under 2 miles per hour for maximum performance and uniformity in seed delivery. It is important to pack the soil surface firmly with a corrugated roller, packer, or spike-tooth harrow after seeding. The firmed soil around the seed is critical in keeping the seed in contact with soil and moisture to promote germination.

**d. Sprigging**

Sprigging (planting a shoot, root, or sprout of a plant) and sodding (covering with sections of sod) are special methods which are costly but often necessary for some plants. Sodding and sprigging may be preferable to seeding in critical situations. Specific instructions can be developed if this method is determined to be the best solution to a specific problem.

**6. Fertilization and Liming****a. Fertilization**

Fertilization is important to assure good growth of grasses and herbaceous plants in Alaska. It may be imperative for establishment and survival of plantings on some sites.

The major plant nutrients required are nitrogen (N), phosphorous (P<sub>2</sub>O<sub>5</sub>), and potassium (K<sub>2</sub>O). Fertilizer formulations are written in that order (N-P-K-) and are expressed as the percentage of the available nutrients. Fertilizer recommendations contained in Section V are only approximate. Soil tests should be made to determine residual nutrient concentrations. Fertilizer may

## SECTION III

Step 2 To find planting rate in lb of PLS per acre for 30-foot rows, we use the following formula:

$$\begin{aligned}\text{Planting rate lb PLS} &= \frac{\text{viable seeds/row ft} \times \text{row ft/acre}}{\text{seed units in lb of pure seed}} \\ \text{Planting rate lb PLS} &= \frac{150 (\text{from step 1}) \times 17,424^*}{2,180,000} \\ &= 1.2 \text{ lb of PLS (your planting per acre)}\end{aligned}$$

\*In 30-inch rows, there are 17,424 row-feet per acre.

Step 3 To find how much bulk seed is needed for the 10 acre area, use the same procedures as in Example 1, Steps 2 and 3:

$$\begin{aligned}10 \text{ acres} \times 1.2 \text{ lb per acre (PLS required per acre)} \times \text{conversion factor} \\ = 14.4 \text{ lb of bulk seed you need to buy.}\end{aligned}$$

Therefore the bulk seeding rate is actually 1.4 lb per acre.

### b. Hydroseed

On steep slopes where drilling is not feasible, the hydroseeder method is preferred. When applying seed, fertilizer, or mulch materials with the hydroseeder, use no more than 200 pounds of solids per 100 gallons of water. It is best to apply seed, or seed and fertilizer first, to ensure seed contact with the soil, followed by the mulch. Fertilizer can be added to the water slurry as long as the material is used within a few minutes after mixing, preferably when the soil is already moist. Seeding recommendations for revegetating areas are in terms of broadcast rates. Hydroseeding, like drill seeding, should rely on the equipment manufacturer's suggested operating procedures. The following instructions are merely general recommendations and may vary by brand of hydroseeder.

**Hydroseeder Mixing Operation** - General instructions are "not more than 200 pounds of seed or solids per 100 gallons of water." This is the upper limit and much too thick to get even distribution of the slurry; 100 to 150 pounds of solids per 100 gallons of water is much better. If the solids are all Silva fiber, Conwed, or similar mulch, only 50 to 60 pounds of material can be used per 100 gallons of water. It is better to apply the seed, or seed and fertilizer first, followed by the mulch. When all are applied together much of the seed is in with, and even on top of, the mulch material and not in contact with the soil. High seeding rates can compensate for this. You need not be concerned about the concentration of the fertilizer in the water or slurry as long as the material is applied within a few minutes after mixing. This avoids settling of the suspended fertilizer materials.

examples of setting a drill are simply suggestions. Use the manufacturer's recommendations for proper setting.

**Setting a Drill** – An accurate way to set a drill is to count the seeds delivered by each drill section. Run the drill over hard ground, concrete floor, or tarpaulin at normal travel speed, then count seeds dropped per foot of row (seeds per foot method). Adjust the drill until it is delivering the approximate number of seeds per foot according to the calculations used in Appendix C, Tables 1 and 2 which include the following information:

- (1) Appendix C, Table 1 (Drill calibration data for various row spacings by using the seeds per foot method) determines the number of seeds per linear foot of row at various row spacings for each pound of seed planted.
- (2) Appendix C, Table 2 (Conversion factors to determine pounds of bulk seed needed to obtain one pound of pure live seed) adjusts seeding rate requirements for seed purity and germination. To use Table 2, select the conversion factor for the germination and purity percentage column of your seed lot, multiplying the number of seeds per foot of row in Table 1 by this conversion factor.

By using the above tables you can select the drill calibration that will deliver the required number of seeds per foot. When mixtures are being seeded, use the percentage of each species in the mixture to calculate the number of seeds per foot of row.

**EXAMPLE 1** – Consider planting a pure stand of Nugget Kentucky Bluegrass on 2 acres of waterway with a required PLS seeding rate of 3.0 pounds per acre for the Cook Inlet/Susitna Area on Soil Groups 1 and 2. How many pounds of bulk seed are needed? What is the bulk seeding rate per acre? For drill setting, how many seeds per linear foot are shown for a drill adjustment setting on a 9-inch row spacing?

- Step 1 The Kentucky Bluegrass seed tag shows 98.94% purity and 85% germination. By going to Appendix C, Table 2, find the conversion factor of 1.2 lb bulk seed needed to obtain 1.0 pound of pure live seed. For 98.94% purity, find the nearest number on table, which is 100.
- Step 2 Knowing the bulk seed needed to obtain 1.0 pound of pure live seed enables determination of how many pounds of bulk seed are needed for the 2 acre waterway.  $2 \text{ acres} \times 3.0 \text{ lb per acre (PLS required per acre)} \times 1.2 \text{ conversion factor} = 7.2 \text{ lb of bulk seed}$ . Therefore, the bulk seeding rate is actually 3.6 lb per acre ( $7.2 \text{ lb bulk seed divided by } 2 \text{ acres field size} = 3.6 \text{ lb per acre bulk seeding}$ ).
- Step 3 37.5 seeds per linear foot are given when 1.0 pound of seed is applied in a 9-inch row spacing according to Appendix C, Table 1. Therefore, to determine the number of seeds per linear foot for this seeding make the following calculations:  $3.6 \text{ lb bulk seed needed per acre} \times 37.5 \text{ seeds per linear foot at } 1.0 \text{ lb per acre} = 135 \text{ seeds should be present per linear foot if you are applying } 3.6 \text{ lb bulk seed per acre, with a } 9\text{-inch drill row spacing}$ .

**EXAMPLE 2** – Developing a snow control planting of Kentucky Bluegrass in 30-inch rows on 10 acres (Cook Inlet/Susitna Area on Soil Groups 1 and 2) would require how many viable seeds per square foot? What is the planting rate in PLS per acre? How many pounds of bulk seed are needed?

- Step 1 Appendix C, Table 1, shows 50 viable seeds per square foot are planted at 1.0 lb PLS per acre. Therefore, with a drill seeding of 3.0 lb per acre,  $3 \times 50 = 150 \text{ viable seeds per square foot would need to be planted}$ .

## SECTION III

**EXAMPLE:** A Kentucky Bluegrass seed tag shows 98.94% pure seed and 85% germination. To determine the PLS, multiply the pure seed percentage (98.94%) by the germination percentage (85%) and divide by 100.

$$98.94 \times 85.00 / 100 = 84.10 \text{ PLS}$$

The PLS shows that 84% of the material in the bag is viable Kentucky Bluegrass seed and that 16% is inert matter and other seeds.

Average seed quality standards for most kinds of grasses and legumes for conservation seedings in Alaska are shown in Appendix C, Table 1. Some native legumes should be scarified and all legumes inoculated with the proper strain of nitrogen-fixing bacteria before seeding. Use only adapted northern varieties of grasses and legumes.

### 4. Time of Seeding

For best results, seedings should be made from May 15 to June 15. Successful seedings can be made later in the summer according to the following table:

| Land Area          | Optimum Seeding Dates <sup>1</sup> | Extended Seeding Dates <sup>2</sup> |
|--------------------|------------------------------------|-------------------------------------|
| Arctic & Alpine    | May 15 to June 15                  | July 15th                           |
| Cook Inlet/Susitna | May 15 to June 15                  | August 1st                          |
| Interior           | May 15 to June 15                  | July 20th                           |
| Southeast          | May 15 to June 15                  | August 15th                         |
| Southwest          | May 15 to June 15                  | August 1st                          |
| Western            | May 15 to June 15                  | July 1st                            |

<sup>1</sup>Optimum seeding time depends on temperature and soil moisture. In southern Alaska, successful seedings may be made at least two weeks before the indicated optimum depending on local conditions.

<sup>2</sup>Plant only to this date if soil moisture is adequate. To avoid winterkill, grasses and legumes should never be seeded later than this date.

Annual ryegrass or cereal grain can be seeded until August 15th to secure a temporary or emergency cover to reduce erosion. The area should then be seeded to a perennial grass the next spring.

### 5. Seeding Methods

#### a. Drill

A grass drill is the best machine for seeding on nearly level to sloping land. Drills designed to plant a wide range of grass and legume seeds are commercially available. They are equipped with special seed boxes, agitators, depth bands, and packer wheels to meet the following primary requirements of planting perennial grasses: (1) uniform distribution of seed at the proper rate per acre, (2) placing the seed at the proper depth, and (3) firming the soil around the seed. If the drill used has no packer wheels, a packer should be pulled behind the drill. Very small seed must be seeded no more than 1/4 to 1/2 inch deep. The term "seed drill" is applied to a variety of machines. Each type of drill requires different settings and methods of operation. The following

# GUIDELINES FOR ESTABLISHMENT AND MANAGEMENT OF GRASSES AND OTHER HERBACEOUS PLANTS

Effective and productive planting of grasses and other herbaceous plants begins with sound planning. Consideration of local climate, topography, and the following are fundamental and essential to the successful establishment and management of grasses and other herbaceous plants for conservation cover and revegetation of critical areas.

## 1. Soil

The upper 4 to 6 inches of the soil should consist of loamy material that is able to hold at least 1 inch of water. The soil must be porous enough to allow root penetration and friable enough to be tillable for good seedbed preparation.

## 2. Seedbed Preparation

Proper seedbed preparation is an important factor in establishing plants. In many areas, incorporation of dead vegetation and organic matter by intensive cultivation is necessary in order to get a satisfactory seedbed. After tilling and packing, the seedbed should be firm and moist. Less seed will be required for successful establishment when the seedbed is well prepared.

On steep sloping land where tillage implements cannot be used, the soil should remain in a rough condition. Slopes should be prepared as well as possible and roughened with construction equipment so the broadcast seed will have a chance to remain in place long enough to germinate and produce a stand.

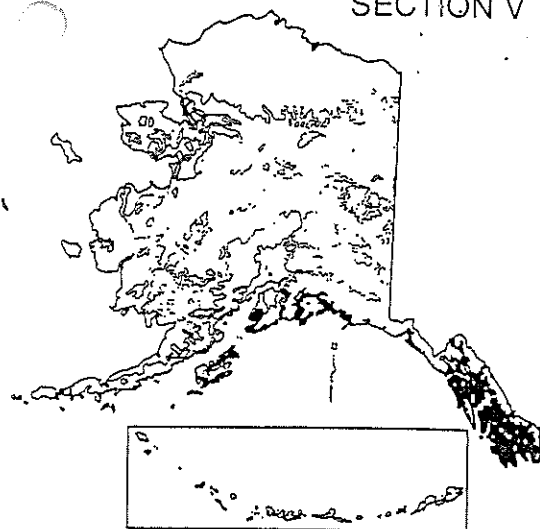
Drill seeding requires that the seedbed be firm after tilling and packing so that a shoe heel imprint will barely show after walking over the ground. If drill methods are not used, it is desirable to lightly incorporate the seed into the prepared bed. This can be accomplished with a light tine harrow or blanket harrow.

## 3. Seed Specifications

Certified seed should be used; a purity and germination tag should be attached to the seed bag. If certified seed is not available, use seed of a known variety with germination and purity equal to certified standards. The suggested method of purchase is based on Pure Live Seed (PLS). Pure Live Seed is determined by multiplying the purity times the germination. The label on each bag or lot of seed provides information about the kind and quality of the seed. (Bulk seed can be tested for purity and germination by the Alaska Seed Growers, Inc., Box 895, Palmer, Alaska, 99645-0895.)

# SOUTHEAST AREA GROUPS 1, 2, 3

Soils and sites with few or no limitations  
 Soils and sites with moderate limitations due to low  
 water holding capacity  
 Soils and sites with severe limitations due to low water  
 holding capacity



| Opt <sup>1</sup>        | Mixtures &<br>Species <sup>2</sup> | Variety<br>Name <sup>3</sup> | PURE LIVE SEED <sup>4</sup><br>Seeding Rates - Lb/Acre |           | Fertilizer Rate<br>(N-P <sub>2</sub> O <sub>5</sub> -K <sub>2</sub> O-S)<br>1st Year Lb/Acre |
|-------------------------|------------------------------------|------------------------------|--------------------------------------------------------|-----------|----------------------------------------------------------------------------------------------|
|                         |                                    |                              | Drill                                                  | Broadcast |                                                                                              |
| CRITICAL AREA PLANTINGS |                                    |                              |                                                        |           |                                                                                              |
|                         | Red Fescue                         | Arctared or                  | 6                                                      | 12        | 80-80-40-0                                                                                   |
|                         |                                    | Boreal                       | 6                                                      | 12        |                                                                                              |
| *                       | Bering Hairgrass                   | Norcoast                     | 3                                                      | 6         |                                                                                              |
| **                      | Alsike or White                    |                              | 1                                                      | 2         |                                                                                              |
| 1                       | Dutch Clover                       |                              | 1                                                      | 2         |                                                                                              |
|                         | Kentucky Bluegrass                 | Nugget,                      | 6                                                      | 12        | 80-80-40-0                                                                                   |
|                         |                                    | Merion, or Park              | 6                                                      | 12        |                                                                                              |
| **                      | Alsike or White                    | Aurora                       | 1                                                      | 2         |                                                                                              |
| 2                       | Dutch Clover                       |                              | 1                                                      | 2         |                                                                                              |
| 3                       | * Meadow Foxtail                   | common                       | 5                                                      | 10        | 80-80-40-0                                                                                   |
| 4                       | * Bering Hairgrass                 | Norcoast                     | 8                                                      | 16        | 80-80-40-0                                                                                   |
|                         | * Bluejoint Reedgrass              | Sourdough                    | 4                                                      | 8         | 80-80-40-0                                                                                   |
|                         | Alsike or White                    | Aurora                       | 1                                                      | 2         |                                                                                              |
| 5                       | Dutch Clover                       |                              | 1                                                      | 2         |                                                                                              |
| 6                       | * Polargrass                       | Kenai                        | 6                                                      | 12        | 80-80-40-0                                                                                   |
|                         | Timothy                            | Engmo, Korpa,                | 5                                                      | 10        | 80-80-40-0                                                                                   |
| 7                       |                                    | or Adda                      | 5                                                      | 10        |                                                                                              |
|                         | Hard Fescue                        | Tournament                   | 5                                                      | 10        | 80-80-40-0                                                                                   |
| 8                       |                                    | or Scaldis                   | 5                                                      | 10        |                                                                                              |
|                         | Red Fescue                         | Arctared, Boreal,            | 6                                                      | 12        | 80-80-40-0                                                                                   |
| 9                       |                                    | or Pennlawn                  | 6                                                      | 12        |                                                                                              |

Watercourses and water quality shall be protected during and after construction by erosion-control facilities and maintenance. Filter strips, water and sediment control basins, and other conservation practices shall be used and maintained as needed.

### CONSIDERATIONS

Consider visual resources and environmental values during the planning and designing of the road system.

Access roads should be located where minimal adverse impacts will affect wetlands, waterbodies and wildlife habitat. Consideration should be given to the following:

- Effects on downstream flows or aquifers that would effect other water uses or users.
- Effects on the volume and timing of downstream flow to prohibit undesirable environmental, social, or economic effects.
- Short-term and construction-related effects of this practice on the quality of on-site downstream water courses.
- Overall effects on erosion and the movement of sediment, pathogens, and soluble and sediment-attached substances that would be carried by runoff from construction activities.
- Effects on wetlands and water-related wildlife habitats that would be associated with the practice.

- Effects of permafrost.

### PLANS AND SPECIFICATIONS

Plans and specifications for constructing access roads shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose.

Refer to NRCS Alaska Construction and Material Specifications to select the appropriate specification(s) for a specific project. Applicable specifications from NRCS National Engineering Handbook, Part 642, Construction and Materials Specifications, may be used in place of, or to supplement the Alaska Specifications.

### OPERATION AND MAINTENANCE

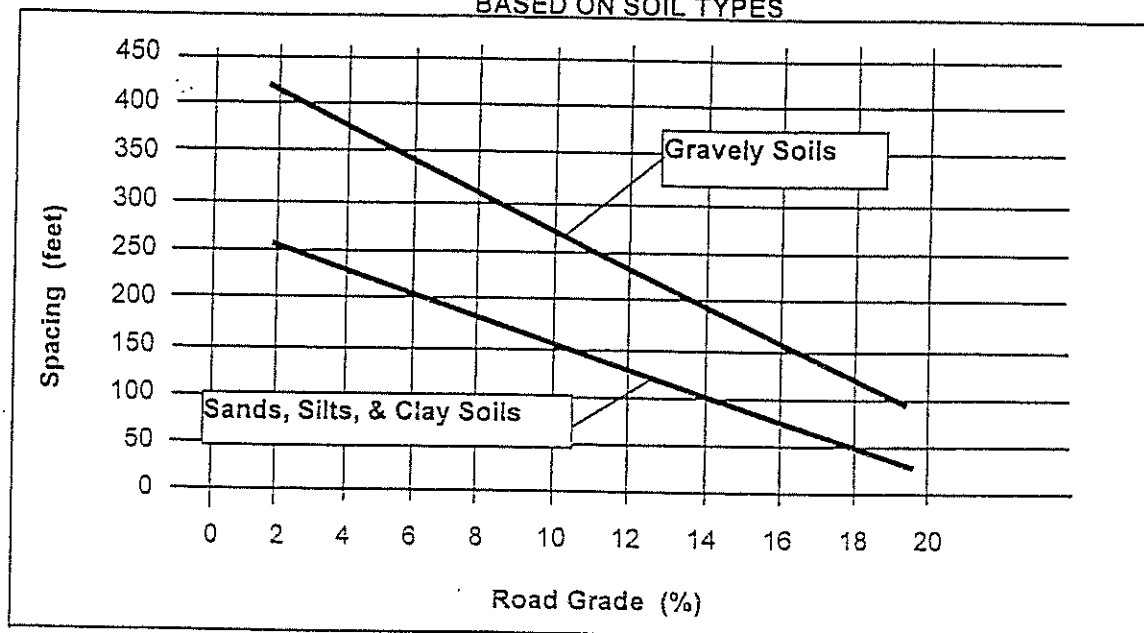
An operation and maintenance plan will be developed and carried out for the life of the practice:

1. Inspect culverts, roadside ditches, water bars, and outlets after each major runoff event and restore flow capacity as needed.
2. Maintain vegetated areas in adequate cover. Re-seed and mow as needed.
3. Fill low areas in travel treads and re-grade, as needed, to maintain road cross section.
4. Inspect roads with water-bars periodically to insure proper cross section is available and outlets are stable.

Unsurfaced roads may require controlled access to prevent damage or hazardous

conditions during adverse climatic conditions.

**RECOMMENDED SPACING FOR RELIEF CULVERTS AND WATER BARS  
BASED ON SOIL TYPES**



Toxic and acid-forming materials shall not be used on roads. This should not be construed to prohibit use of chemicals for dust control and snow and ice removal after considering potential impacts on stabilizing vegetation.

**Construction Operations.** Construction operations should be carried out in such a manner that erosion and air and water pollution are minimized and held within legal limits. Construction shall include the following requirements as necessary for the job:

1. Trees, stumps, roots, brush, weeds, and other objectionable material shall be removed from the work area.
2. Unsuitable material shall be removed from the roadbed area.
3. Grading, sub-grade preparation, and compaction shall be done as needed.
4. Surfacing shall be done as needed.

**Traffic safety.** Passing lanes, turnouts, guardrails, signs, and other facilities as needed for safe traffic flow shall be provided. Traffic safety shall be a prime factor in selecting the angle and grade of the intersection with public

highways. Preferably, the angles shall be not less than 85 degrees. The public highway shall be entered either at the top of a hill or far enough from the top or a curve to provide visibility and a safe sight distance. The clear sight distance to each side shall not be less than 300 feet or as required by local regulations.

**Erosion control.** If soil and climatic conditions are favorable, roadbanks and disturbed areas shall be vegetated as soon as possible and skid trails, landings, logging, and similar roads shall be vegetated after harvesting or seasonal use is completed (see Critical Area Planting). If the use of vegetation is precluded and protection against erosion is needed, protection shall be provided by non-vegetative materials, such as gravel or other organic or inorganic material (see Mulching), or in accordance with local regulations.

Roadside channels, cross drains, and drainage structure inlets and outlets shall be designed to be stable (see Structure for Water Control). If protection is needed, riprap or other similar materials shall be used.

can have a minimum width of 10 feet, with greater widths at curves and turnouts. The two-way traffic width shall be increased approximately 4 feet for trailer traffic. The shoulder width may be either gravel or grass.

Turnouts shall be used on single lane roads where vehicles travel in both directions on a limited basis. Where turnouts are used, road width shall be increased to a minimum of 20 feet for a distance of at least 30 feet.

**Side slopes.** All cuts and fills shall be designed to have stable slopes of a minimum of 2 horizontal to 1 vertical on heights of less than 4 feet. For short lengths, rock areas, or very steep hillsides, steeper slopes may be permitted, if soil conditions warrant and special stabilization measures are installed.

Areas with geological conditions and soils subject to slides shall be avoided or treated to prevent slides.

**Drainage.** The type of drainage structure used will depend on the intended use and runoff conditions. Culverts, bridges, fords, or grade dips for water management shall be provided at all natural drainageways. The capacity and design shall be consistent with sound engineering principles and shall be adequate for the class of vehicle, type of road, development, or use. When a culvert or bridge is installed in a drainage way, its minimum capacity shall convey the design storm runoff without causing erosion or road overtopping. Table 1 lists minimum design storm frequencies for various road types.

Table 1

| Road Type                                              | Storm Frequency   |
|--------------------------------------------------------|-------------------|
| Forest Access Roads,<br>Farm Field Access Roads        | 2 year - 24 Hour  |
| Farm Driveways,<br>Recreation Facility<br>Access Roads | 10 year - 24 Hour |
| Public Access Roads,<br>Camp grounds, Etc.             | 25 year - 24 Hour |

An erosion-resistant low point or overflow area may be constructed across the access road to supplement culvert capacity on non-public use roads. Culverts, bridges, fords and hardened

overflow areas should be installed so the road crossing does not significantly impact fish migration.

Roadside ditches shall be adequate to provide surface drainage for the roadway and deep enough, as needed to serve as outlets for subsurface drainage. At a minimum, the roadside ditch shall be 1.0 foot below the top of road surface to provide internal drainage. Ditch channels shall be designed to be on stable grades or protected with structures or linings for stability.

Water-breaks or water-bars may be used to control surface runoff on low-intensity use forest, ranch or similar roads. On steep grades where runoff and erosion is anticipated down the road, water bars should be considered. Water bars must be constructed of materials that are compatible with the use and maintenance of the road surface. Water bar discharge areas must be well vegetated or have other erosion resistant materials. See chart for Recommended Spacing of Relief Culverts and Water Bars Based on Soil Type.

Surface crowning can also help direct road runoff into the side drainage ditches. Unobstructed flow into the ditches must be maintained to prevent flows from causing roadside erosion. Provide a turnaround at the end of dead end roads. In some areas, turnarounds may also be desirable for stream, lake, recreation, or other access purposes.

Provide parking space as needed to keep vehicles off the road or from being parked in undesirable locations.

**Surfacing.** Access roads shall be given a wearing course or surface treatment if required by traffic needs, soil, climate, erosion control, or dust control. The type of treatment, if needed, depends on local conditions, available materials, and the existing road base. If these factors or the volume of traffic is not a problem, no special treatment of the surface is required. On weak bearing capacity soils such as silts, organics, and clays, the surface treatment should be underlain with a geotextile material specifically designed for road stabilization applications when the road is used on a regular basis.

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD**

**CRITICAL AREA PLANTING**

(Ac.)

**CODE 342**

**DEFINITION**

Establishing permanent vegetation on sites that have, or are expected to have, high erosion rates, and on sites that have physical, chemical or biological conditions that prevent the establishment of vegetation with normal practices.

**PURPOSE**

This practice supports one or more of the following purposes:

- Stabilize stream and channel banks, pond and other shorelines – Resource concern (SOIL EROSION– Excessive bank erosion from streams shorelines or water conveyance channels).
- Stabilize areas with existing or expected high rates of soil erosion by wind or water – Resource concern (SOIL EROSION – Concentrated flow erosion and/or SOIL EROSION - Sheet, rill, & wind erosion and/or SOIL QUALITY DEGRADATION – Concentration of salts or other chemicals).
- Stabilize areas, such as sand dunes and riparian areas – Resource concern (SOIL EROSION – Concentrated flow erosion and/or SOIL EROSION - Sheet, rill, & wind erosion).

**CONDITIONS WHERE PRACTICE APPLIES**

This practice applies to highly disturbed areas such as:

- active or abandoned mined lands;
- urban restoration sites;
- construction areas;

- conservation practice construction sites;
- areas needing stabilization before or after natural disasters such as floods, hurricanes, tornados and wildfires;
- eroded banks of natural channels, banks of newly constructed channels, and lake shorelines;
- other areas degraded by human activities or natural events.

**CRITERIA**

**General Criteria Applicable to All Purposes**

**Site Preparation.** A site investigation shall be conducted to identify any physical, chemical, or biological conditions that could affect the successful establishment of vegetation.

Areas to be planted will be cleared of unwanted materials and smoothed or shaped, if needed, to meet planting and landscaping purposes.

A suitable seedbed shall be prepared for all seeded species. Compacted layers will be ripped and the soil re-firmed prior to seedbed preparation.

As site conditions dictate, when grading slopes, stockpile topsoil to be redistributed over area to be planted

**Species Selection.** Species selected for seeding or planting shall be suited to local site conditions and intended uses, and be common to the site or location.

Selected species will have the capacity to achieve adequate density and vigor to stabilize the site within an appropriate period.

**Establishment of Vegetation.** Seeds will be planted using the method or methods best

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact your Natural Resources Conservation Service [State Office](#) or visit the [Field Office Technical Guide](#).

**NRCS, AK  
March 2014**

suited to site and soil conditions.

Sod placement shall be limited to areas that can naturally supply needed moisture or sites that can be irrigated during the establishment period.

Sod will be placed and anchored using techniques to ensure that it remains in place until established.

Species, rates of seeding or planting, minimum quality of planting stock (e.g. pure live seed (PLS) or stem caliper), method of seedbed preparation, and method of establishment shall be specified before application. Only viable, high quality seed or planting stock will be used.

Seeding or planting shall be done at a time and in a manner that best ensures establishment and growth of the selected species

Planting shall be done during approved times for the species to be used.

Apply soil amendments (e.g. lime, fertilizer, compost) according to the requirements in the Alaska Field Office Technical Guide.

Plantings shall be protected with mulch and/or weed barrier fabric as necessary to ensure establishment. Other disturbed areas shall be mulched as necessary to prevent erosion.

#### **Additional Criteria to Stabilize Stream and Channel Banks, Pond and other Shorelines**

**Bank and Channel Slopes.** Channel side slopes shall be shaped so that they are stable and allow establishment and maintenance of desired vegetation.

A combination of vegetative and structural measures may be necessary on slopes steeper than 2:1 to ensure adequate stability.

**Species Selection.** Plant material used for this purpose shall:

- be adapted to the hydrologic zone (see Fig. 1) into which they will be planted.
- be adapted and proven in the regions in which they will be used.
- be compatible with existing vegetation in the area
- protect the channel banks but not restrict channel capacity.

**Establishment of Vegetation.** The species used, planting rates, spacing, and methods and dates of planting shall be based on local planting guides or technical notes.

Identify and protect desirable existing vegetation during practice installation.

A combination of vegetative and structural practices using living and inert material shall be used when flow velocities, soils, and bank stability preclude stabilization by vegetative establishment alone.

If the existing vegetation on a site will compete with species to be established vegetatively (e.g. bare-root, containerized, ball-and-burlap, potted), it will be controlled in a manner that ensures the successful establishment of the planted species.

Streambank stabilization plantings shall be in accordance with the NRCS Engineering Field Handbook Part 650, Chapter 16 (Streambank and Shoreline Protection) and Chapter 18 (Soil Bioengineering for Upland Slope Protection & Erosion Reduction).

#### **Site Protection and Access Control.**

Restrict access to planted areas until fully established.

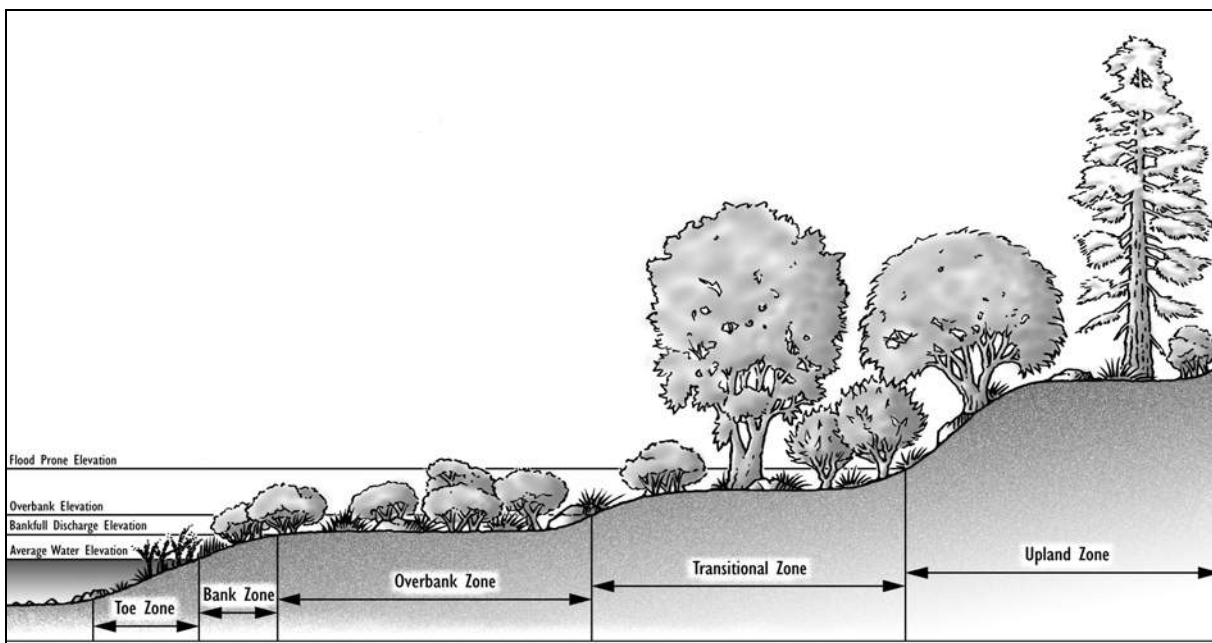


Figure 1. Location of hydrologic zones along a channel or shoreline.

#### Definitions and descriptions of hydrologic zones used for channels and shorelines:

**Bankfull Discharge Elevation** - In natural streams, it is the elevation at which water fills the channel without overflowing onto the flood plain.

**Bank Zone** - The area above the Toe Zone located between the average water level and the bankfull discharge elevation. Vegetation may be herbaceous or woody, and is characterized by flexible stems and rhizomatous root systems.

**Overbank Zone** - The area located above the bankfull discharge elevation continuing upslope to an elevation equal to two thirds of the flood prone depth. Vegetation is generally small to medium shrub species.

**Toe Zone** - The portion of the bank that is between the average water level and the bottom of the channel, at the toe of the bank. Vegetation is generally herbaceous emergent aquatic species, tolerant of long periods of inundation.

**Transitional Zone** - The area located between the overbank zone, and the flood prone width elevation. Vegetation is usually larger shrub and tree species.

**Upland Zone** - The area above the Transitional Zone; this area is seldom if ever saturated.

**Note:** some channels or shorelines have fewer than four hydrologic zones because of differences in soils, topography, entrenchment and/or moisture regime.

#### **Additional Criteria to Restore Coastal Areas, such as Sand Dunes and Riparian Areas**

Plants for sand dunes and coastal sites must be able to survive being buried by blowing sand, sand blasting, salt spray, salt water flooding, drought, heat, and low nutrient supply.

Sand trapping devices such as sand fences or brush matting shall be included in the re-vegetation/stabilization plans where applicable.

#### **CONSIDERATIONS**

Species or mixes that are adapted to the site and have multiple benefits should be considered. Native species may be used when appropriate for the site.

To benefit pollinators and other wildlife, flowering shrubs and wildflowers with resilient root systems and good soil holding capacity also should be considered for incorporation as a small percentage of a larger grass-dominated planting. Where appropriate consider a diverse mixture of forbs to support pollinator habitat.

**NRCS, AK**

**March 2014**

When mulching with gravel or other inorganic material apply a minimum 2 inch thickness and shall consist of pieces 0.75 to 2 inches in diameter.

#### **Additional Criteria to Suppress Weed Growth**

The thickness of mulch will be determined by the size of the plant being mulched, soil conditions, and need for weed control. Mulches shall be kept clear of the stems of plants where disease is likely to occur. Mulches applied around growing plants or prior to weed seedling development shall have 100 percent ground cover. Thickness, darkness and/or density of the mulch shall be adequate to prevent emergence of targeted weeds. Light-blocking barrier mulches may be used for weed control. Dark plastic weed barriers include extruded, woven, or spun-bonded polyethylene, polypropylene or polyester. Natural weed barriers include treated or untreated paper.

#### **Additional Criteria to Establish Vegetative Cover**

Mulch shall be applied at a rate that achieves a minimum of 70 percent ground cover to provide protection from erosion and runoff and yet allow adequate light and air penetration to the seedbed to ensure proper germination and emergence.

#### **Additional Criteria to Improve Soil Quality**

Apply mulch materials with a carbon to nitrogen ratio (C:N) less than 30 to 1 so that soil nitrogen is not immobilized by soil biota. Do not apply mulch with C:N less than 20:1 to an area of designed flow in watercourses.

Use the Soil Conditioning Index to assess soil quality impacts and to determine the type and rate of the mulching material.

#### **Additional Criteria to Reduce Airborne Particulate Matter from Wind Erosion**

Mulch rate shall be determined using current wind erosion prediction technology to reach the soil erosion (movement of particulates offsite) objective.

### **CONSIDERATIONS**

Evaluate the effects of mulching on evaporation, infiltration, and runoff. Mulch material may affect microbial activity in the soil surface, increase infiltration, and decrease runoff, erosion, and

evaporation. The temperature of the surface runoff may also be lowered.

Mulch material used to conserve soil moisture should be applied prior to moisture loss. Prior to mulching, ensure soil under shallow rooted crops is moist, as these crops require a constant supply of moisture.

Mulch materials with a high water holding capacity and/or high impermeability to water droplets may adversely affect the water needs of plants.

Fine textured mulches (e.g. rice hulls) which allow less oxygen penetration than coarser materials should be no thicker than 2 inches.

Organic materials with C:N ratios of less than 20:1 will release nitrate-nitrogen which could cause water quality impairments.

Mulching may also provide habitat for beneficial insect and provide pest suppression.

Clear and infra-red transmissible (IRT) plastics have the greatest warming potential. They are transparent to incoming radiation and trap the longer wavelengths radiating from the soil. Black mulches are limited to warming soils by conduction only and are less effective.

Clear mulches allow profuse weed growth and may negate the benefits of soil warming. Black mulches provide effective weed control. Wavelength selective (IRT) plastic provides the soil warming characteristics of clear mulch with the weed control ability of black mulch.

Low permeability mulches (e.g. plastic) may increase concentrated flow and erosion on un-mulched areas.

Consider potential toxic allelopathic effects that mulch material may have on other organisms. Animal and plant pest species may be incompatible with the site.

Consider the potential for increased pathogenic activity within the applied mulch material.

Keep mulch 3 to 6 inches away from plant stems and crowns to prevent disease and pest problems. Additional weed control may be needed around the plant base area.

Deep mulch provides nesting habitat for ground-burrowing rodents that can chew extensively on tree trunks and/or tree roots. Light mulch applied after the first cold weather may prevent rodents from nesting.

Some mulch material may adversely affect aquatic environments through changes in water chemistry or as waterborne debris. Consider placing mulch in locations that minimizes these risks.

Consider potential effects of soil physical and chemical properties. Refer to soil survey data as a preliminary planning tool for assessment of areas. Consult the Web Soil Survey at: <http://websoilsurvey.nrcs.usda.gov/app/> to obtain Soil Properties and Qualities information.

## PLANS AND SPECIFICATIONS

Specifications shall be prepared for each site and purpose and recorded using approved specification sheets, job sheets, technical notes, narrative statements in the conservation plan, or other acceptable documentation.

Documentation shall include:

- Purpose of the Mulch
- Type of mulch material(s) used
- The percent cover and/or thickness of mulch material(s)
- Timing of application
- Site preparation
- Listing of netting, tackifiers, or method of anchoring, and
- Operation and maintenance.

## OPERATION AND MAINTENANCE

Mulched areas will be periodically inspected, and mulch shall be reinstalled or repaired as needed to accomplish the intended purpose.

Evaluate the effectiveness of the mulch (application, amount of cover provided, durability, etc.) and adjust the management or

type of mulch to better meet the intended purpose(s).

Removal or incorporation of mulch materials shall be consistent with the intended purpose and site conditions.

Operation of equipment near and on the site shall not compromise the intended purpose of the mulch.

Prevent or repair any fire damage to the mulch material.

Properly collect and dispose of artificial mulch material after intended use.

Monitor and control undesirable weeds in mulched areas.

## REFERENCES

- Agriculture and Agri-Food Canada. 2000. Plastic mulches for commercial vegetable production. Canada-Saskatchewan Irrigation Diversification Centre. Outlook, Saskatchewan.
- Renard, K.G., G.R. Foster, G.A. Weesies, D.K. McCool, and D.C. Yoder, Coordinators. 1997. Predicting soil erosion by water: A guide to conservation planning with the Revised Universal Soil Loss Equation (RUSLE). U.S. Department of Agriculture, Agriculture Handbook No. 703.
- Shaffer, M.J., and W.E. Larson (ed.). 1987. NTRM, a soil-crop simulation model for nitrogen, tillage and crop residue management. USDA Conserv. Res. Rep. 34-1. USDA-ARS.
- Toy, T.J., and G.R. Foster. (Ed.) 1998. Guidelines for the use of the Revised Universal Soil Loss Equation (RUSLE) Version 1.06 on mined lands, construction sites, and reclaimed lands. USDI, OSMR.
- USDA, NRCS. 2011. National Agronomy Manual. 190-V, 4<sup>th</sup> Ed. Washington, D.C.

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD**

**ACCESS ROAD**

(Ft.)

**CODE 560**

**DEFINITION**

An access road is an established route for equipment and vehicles.

**PURPOSE**

An access road is used to provide a fixed route for vehicular travel for resource activities involving the management of timber, livestock, agriculture, wildlife habitat, and other conservation enterprises.

**CONDITIONS WHERE PRACTICE APPLIES**

This practice applies where access is needed from a private or public road or highway to a land use enterprise or conservation measure, or where access is needed in a planned land use area.

Access roads range from single purpose, seasonal use roads, designed for low speed and rough driving conditions, to all-purpose, all-weather roads. Single purpose roads provide access to areas such as forest fire lines, forest management activities, remote recreation areas, or for maintenance of facilities.

This practice does not apply to temporary or infrequently used trails used for logging. Use NRCS Conservation Practice Standard (CPS) *Forest Trails and Landings (Code 655)*. Trails and walkways used for animals, pedestrians, or off-road vehicles are addressed in NRCS CPS *Trails and Walkways (Code 575)*.

**CRITERIA**

Design the access road to serve the enterprise or planned use with the expected vehicular or equipment traffic. Factors in the design include the type of vehicle or equipment and the speed, loads, soils, climate, and other conditions under which vehicles and equipment are expected to operate.

**Location.** Locate the access road to serve the purpose intended, to facilitate the control and disposal of surface and subsurface water, to control or reduce erosion, and to make the best use of topographic features. Design the layout of the road to follow natural contours and slopes to minimize disturbance of drainage patterns. Locate the access road where it can be maintained and where water management problems are not created. To reduce potential pollution, position the road as far as possible from water bodies and watercourses. To the extent possible, do not impede overland flow.

**Alignment.** Adapt the gradient and horizontal alignment to the intensity of use, the mode of travel, the type of equipment and load weights, and the level of development.

Grades normally should not exceed 10 percent except for short lengths. A maximum grade of 15 percent should only be exceeded if necessary for special uses such as field access roads or fire protection roads.

**Width.** The minimum width of the roadbed for an all-purpose road is 14 feet for one-way traffic and 20 feet for two-way traffic. The roadbed width includes a tread-width of 10 feet for one-way traffic or 16 feet for two-way traffic and 2 feet of shoulder width on each side. Increase the two-way traffic width by a minimum of 4 feet for trailer traffic. Single purpose roads will have a minimum width of 10 feet with greater widths at curves and turnouts. Use vegetation or other measures to protect the shoulders from erosion.

Use turnouts on single lane roads where vehicles travel in both directions on a limited basis. Design the turnout to accommodate the anticipated vehicle use.

**NRCS, ALASKA  
January 2015**

Provide a turnaround at the end of dead end roads. Size the turnaround for the anticipated vehicle type that will be using the road.

Provide parking space as needed to keep vehicles from parking on the shoulder or other undesirable locations.

**Side Slopes.** Design all cuts and fills to have stable slopes that are a minimum of 2 horizontal to 1 vertical. For short lengths, rock areas, or very steep hillsides, steeper slopes may be permitted if soil conditions warrant and special stabilization measures are installed.

Where possible, avoid areas with geological conditions and soils that are subject to slides. When the area cannot be avoided, treat the area to prevent slides.

**Drainage.** The type of drainage structures used will depend on the intended use and runoff conditions. Provide a culvert, bridge, ford, or surface cross drain for water management at every natural drainage way. The capacity and design of the drainage feature must be consistent with sound engineering principles and must be adequate for the class of vehicle, road type, land use in the watershed, and intensity of use.

When a culvert or bridge is installed in a drainage way, it must have a minimum capacity that is sufficient to convey the design storm runoff without causing erosion or road overtopping. Table 1 lists minimum design storm frequencies for various road types.

Table 1

| Road Intensity & Usage                                                   | Storm Frequency   |
|--------------------------------------------------------------------------|-------------------|
| Intermittent; single purpose or farm use                                 | 2 year - 24 Hour  |
| Frequent; farm headquarters, livestock access, isolated recreation areas | 10 year - 24 Hour |
| High intensity; residential or public access                             | 25 year - 24 Hour |

Use NRCS CPS *Stream Crossing (Code 578)* to design stream crossings.

An erosion-resistant low point or overflow area may be constructed across the access road to

supplement the culvert capacity on non-public use roads.

Surface cross drains, such as broad-based or rolling dips, may be used to control and direct water flow off the road surface on low-intensity use forest, ranch or similar roads. Protect the outlets of drainage measures to limit erosion. On steep grades where water could run down the road, use a broad-based dip or other similar feature to divert runoff. The surface cross drain must be constructed of materials that are compatible with the use and maintenance of the road surface. The discharge area for a surface cross drain must be well-vegetated or have other erosion resistant materials. See Figure 1 - Recommended Spacing of Surface Cross Drains Based on Soil Type. Reduce separation distances as needed to account for local hydrologic conditions.

Crown the road surface to direct precipitation off of the road.

Provide ditches, as needed, to move water away from the road. Maintain unobstructed flow into the ditches to prevent flows from causing roadside erosion. The capacity of a roadside ditch must be adequate to carry the drainage from the road surface. Design ditch channels to have stable grades and side slopes. Provide a stable outlet for the ditch. Protection may include riprap or other similar materials. Use NRCS CPSs such as *Structure for Water Control (Code 587)*; *Lined Waterway or Outlet (Code 468)*; or *Grade Stabilization Structure (Code 410)*, if needed.

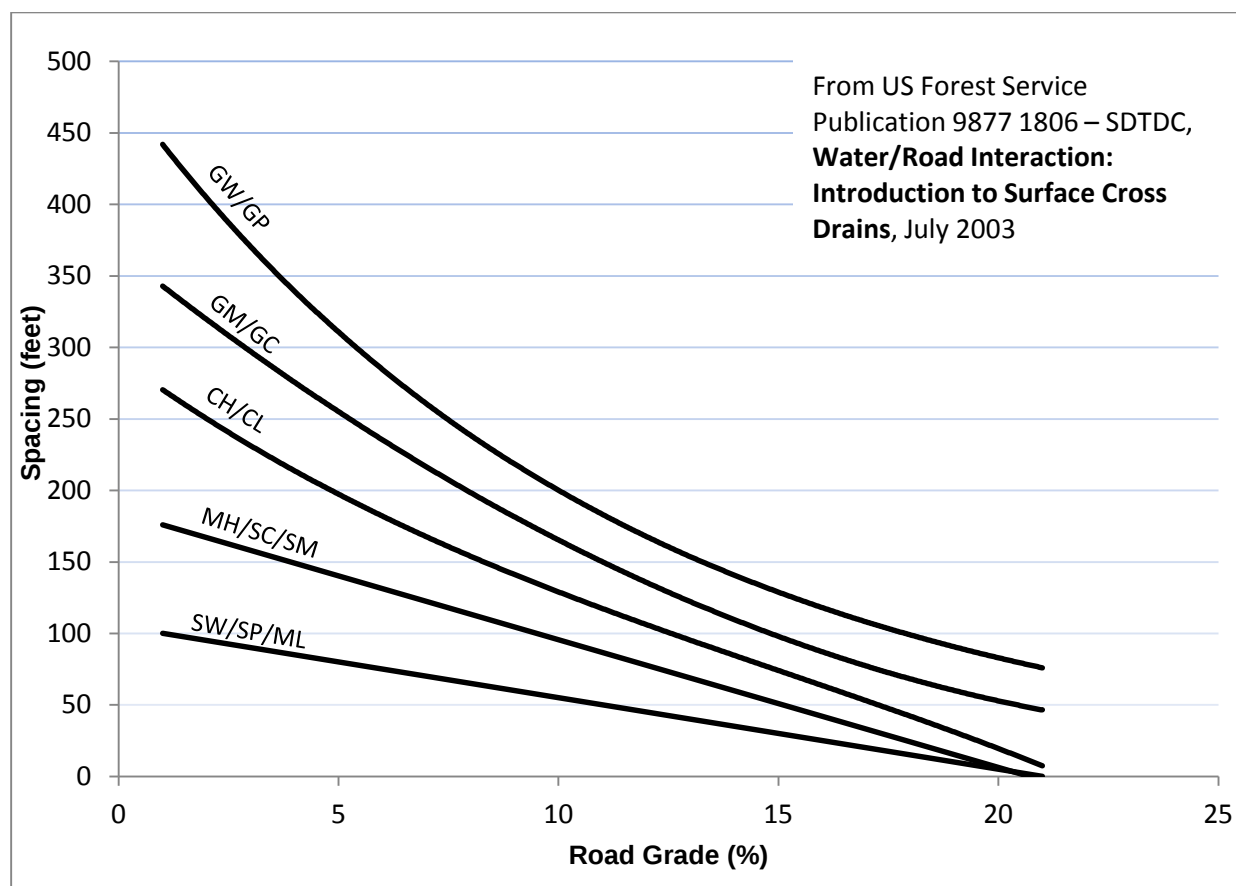
**Surfacing.** Install a wearing course or surface treatment on the access road if required by traffic needs, soil, climate, erosion control, particulate matter emission control, or other site condition. If none of these factors apply, no special treatment of the surface is required.

When a treatment is used, the type of treatment will depend on local conditions, available materials, and the existing road base. On roads made of soils with weak bearing capacity, such as silts, organics, and clays, or where it is necessary to separate the surfacing material from the foundation material, place a geotextile material specifically designed for road stabilization applications under the surface treatment. Use the criteria in NRCS CPS *Heavy Use Area Protection (Code 561)* to

design the surface treatment. Do not use toxic and acid-forming materials to build the road.

If dust control is needed, use NRCS CPS *Dust Control on Unpaved Roads and Surfaces* (Code 373).

Figure 1. Recommended Spacing of Surface Cross Drains Based on Soil Types



**Safety.** Provide passing lanes, turnouts, guardrails, signs, and other facilities as needed for safe traffic flow. Design an intersection to a public highway to meet applicable federal, state and local criteria.

**Erosion Control.** Use the criteria in NRCS CPS *Critical Area Planting* (Code 342) or the NRCS State-approved seeding specification to vegetate road banks and disturbed areas as soon soil and climatic conditions are favorable. If permanent vegetation cannot be established in a timely manner, use appropriate temporary measures to control erosion. If the use of vegetation is precluded and protection against erosion is needed,

use the criteria in NRCS CPS *Mulching* (Code 484) to provide surface protection.

During and after construction, use erosion and sediment control measures to minimize off-site damages.

#### CONSIDERATIONS

Consider visual resources and environmental values during planning and design of the road system.

Limiting the number of vehicles and vehicle speed will reduce the potential for generation of particulate matter and decrease safety and air quality concerns.

Consider using additional conservation practices to reduce the potential for generation and transport of particulate matter emissions such as NRCS CPSs *Dust Control on Unpaved Roads and Surfaces (Code 373)* or *Windbreak/Shelterbelt Establishment (Code 380)*.

During adverse weather, some roads may become unsafe or may be damaged by use. Consider restricting access to the road at that time.

Consideration should be given to the following:

- Effects on downstream flows, wetlands or aquifers that would affect other water uses or users.
- Effects on wildlife habitats that would be associated with the practice.
- Utilizing buffers where possible to protect surface water.
- Short-term and construction-related effects of this practice.

## PLANS AND SPECIFICATIONS

Provide plans and specifications that describe the requirements for applying the practice to achieve its intended purpose. As a minimum, include:

- A plan view of the proposed road that shows water features, known utilities, and other features that affect the design.
- Road width and length with profile and typical cross section(s) including turnouts, parking, and turnarounds.
- Design road grades or maximum grades when applicable.
- Soils investigation. Location of soil borings and plot of the soil/geologic boring showing the USCS, as needed
- Type and thickness of surface treatment including any subbase preparation.
- Grading plan.
- Cut and fill slopes where applicable.
- Planned drainage features.
- Location, size, type, length and invert elevations of all required water control structures.
- Vegetative requirements that include vegetation materials to be used, establishment rates, and season of planting.

- Erosion and sediment control measures, as needed.
- Safety features.
- Construction and material specifications.

## OPERATION AND MAINTENANCE

Prepare a written Operation and Maintenance Plan for the access road. As a minimum, include the following activities:

- Inspect culverts, roadside ditches, water bars and outlets after each major runoff event and restore flow capacity as needed. Ensure proper cross section is available and outlets are stable.
- Maintain vegetated areas in adequate cover to meet the intended purpose(s).
- Fill low areas in travel treads and re-grade, as needed, to maintain road cross section. Repair or replace surfacing materials as needed.
- Selection of chemical treatment(s) for surface treatment or snow/ice removal, as needed. Select the chemicals used for surface treatment or snow and ice removal to minimize adverse effects on stabilizing vegetation.
- Selection of dust control measures, as needed.

## REFERENCES

United States Forest Service. July 2003. *Water/Road Interaction: Introduction to Surface Cross Drains* (Publication 9877 1806 – SDTDC).



# City of Homer

[www.cityofhomer-ak.gov](http://www.cityofhomer-ak.gov)

## Planning

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### Staff Report PL 17-59

TO: Homer Advisory Planning Commission  
FROM: Rick Abboud, City Planner  
DATE: June 21, 2017  
SUBJECT: Comprehensive Plan Update Chapter 4 Land Use

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#### Introduction

As I was incorporating the recommendation of the Planning Commission, I found more items to address in Chapter 4. In particular, I am cleaning up the implementation strategies and implementation table. Along the way, I have made other refinements listed below.

#### Analysis

You will notice bold and underlined sentences under the implementation strategies. This is an effort to follow how chapter 8 was formatted. The goal is to provide general implementation strategies while moving the former strategies to the implementation table as they are mostly more specific. It will also provide an improved format in which to evaluate just what has and has not been accomplished.

Please review and provide any suggestions for language of suggested implementation strategies (bold and underlined) and any of the items on the implementation table (lists under the bold and underlined language). The rest is mostly cleanup, described below.

Yellow highlight is my reminder to update references to other parts of the plan as they are subject to change.

Goal 2, Objective C has been moved and incorporated into Goal 2, Objective A.

Line 151, change to consideration of form-based codes. Want to leave open other possibilities and take time to consider all the implication of form-based code.

Eliminated lines 161-162. All standards except on-site septic are addressed in Goal 2 Objective B. Added reference to septic as item 6, line 284.

Eliminated lines 188-189 for formatting purposes.

Lines 240-243 & 251-256 are the language moved from objective 3

Eliminated language, lines 243-244 for formatting purposes.

Eliminated language on lines 264-265 for formatting purposes and added language (lines 265-266) introducing the concept of revision to match implementation items.

Moved 291-305 to Objective 1. Objective C is now an implementation strategy.

Eliminated lines 305-306 because of dated example. An example is better prepared as part of a permitting material.

Lines 323-324, added reference to purchase of Bridge Creek properties.

Lines 329-330, added language to provide a better format. Consider language for possible clarification.

Lines 349-351, added reference to code enforcement.

Eliminated wording 418-419, as the discussion of BID's and TIF with EDC did not turn into recommendation.

Eliminated line 425, see discussion below – dated and simplistic material.

Added reference to improvements on Pioneer Avenue.

Eliminated wording on lines 442-443, formatting issues.

I recommend moving Goal 5 to the appendix. This is a good guide to how we might approach annexation. As annexation is not 'on-the-table' and will not be in the foreseeable future, there is no need at this time to make actionable implementation table.

## **Appendices**

### **1. Requested action: Cut Appendices A, C and E**

Appendix A – Background population projection information. Staff finds this out of date and not worth retaining. Recommend deletion from the plan.

Appendix C – Homer Spit section of the previous 1999 comprehensive plan. The City has since adopted a separate Homer Spit Comprehensive Plan. Staff Recommends deleting Appendix C from the Plan.

Appendix E Downtown Design Principles. While the information is still good, its not particular useful in the context of this document. There are numerous professional publications on these topics should we want current research on downtown design principles.

**2. Requested action: Approve the combination and editing of Appendix B and D as presented**

Staff recommends combining Appendix B and D – Land Use Designation Categories, and Background Land Use information. All the maps, and information about the maps, will be in one place. Staff has created a simple table to describe the various zoning districts.

**3. Requested action: Move Chapter 4 Goal 5 to the Appendix.**

Staff recommends moving Chapter 4 Goal 5 to the Appendix. This is the goal about how an annexation process should be handled. These are good guidelines and worthy of keeping in the plan, but the goal and implementation items are not ‘action items’ so to speak, or a near term land use priority. Place keeping them in the appendix would allow for a more concise, useful land use chapter. Should the city pursue an annexation, the guidelines would be readily accessible to decision makers and the public to follow.

**Staff Recommendation**

Please provide comments and recommendations

**Attachment**

Chapter 4 Land Use 6.13.17

Chapter 4 Implementation Table 6.13.17

Appendices



# CHAPTER 4 LAND USE

**Vision Statement:** Guide the amount and location of Homer's growth to increase the supply and diversity of housing, protect important environmental resources and community character, reduce sprawl by encouraging infill, make efficient use of infrastructure, support a healthy local economy, and help reduce global impacts including limiting greenhouse gas emissions.

## Overview

This chapter presents background information and policies to guide development in Homer. The first goal presents the overall goal of the land use policies. The other goals are more specific to various aspects of land use issues.

## Summary of Goals

**GOAL 1:** Guide Homer's growth with a focus on increasing the supply and diversity of housing, protect community character, encouraging infill, and helping minimize global impacts of public facilities including limiting greenhouse gas emissions.

**GOAL 2:** Maintain the quality of Homer's natural environment and scenic beauty.

**GOAL 3:** Encourage high-quality buildings and site development that complement Homer's beautiful natural setting.

**GOAL 4:** Support the development of a variety of well-defined commercial/business districts for a range of commercial purposes.

**GOAL 5:** Develop a clear and open public process for future changes to City of Homer boundaries. Explore a planned, phased possible expansion and initiate and establish regional planning processes with the Kenai Peninsula Borough.



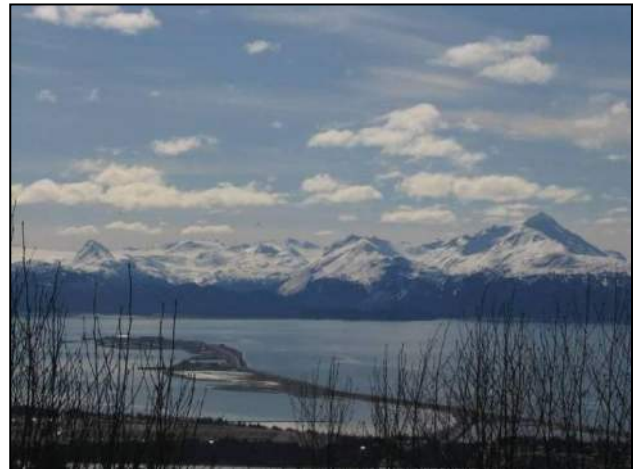
## Context: Land Use in Homer & Surrounding Areas

### Land Use in Homer

Land use in Homer today closely corresponds to the area's unique geographical features, history of homesteading, its road system, access to Kachemak Bay, and the vicinity to water. Two very distinct areas with very different land use characteristics developed in the last century, one on the mainland and the other on the Homer Spit. The portion of the City on the "mainland" has a ring-like land use pattern. It has a relatively concentrated, mixed use core or central business district. Transitional land uses surround the core consisting of institutional and public facilities, commercial uses, residential office, and denser, more urban residential. Farther from the central business district, larger lot/low density rural residential land uses prevail. Variations from this general pattern occur, for instance, along the Sterling Highway where roadside commercial activities are prevalent and in some instances compete with concentrated downtown activities. Additionally, the area surrounding the airport, southeast of downtown, holds most of the town's mixed industrial activities.

The Homer Spit contains its own assortment of industrial, commercial and recreational uses. The Spit's functions and land uses fluctuate with the season; during the summer months commercial activities increase in response to the arrival of summer visitors and tourism. Issues on the Spit are sufficiently distinct and complex as addressed separately in the Spit Comprehensive Plan.

Homer's land use pattern is generally supported by the City's current zoning designations, but an eclectic mix of land uses is still found in various zoning districts. *See the Zoning Map, Appendix D-10.* This mixing of uses is part of the unique character of Homer and not without benefits. The current land use zones largely fulfill their intended functions, but in some cases do not mesh with the realities of existing or desired future use patterns. Growth in Homer will require a new set of standards to guide the form and location of future land use and development. For instance, the land downtown and extending west along the Sterling Highway



is zoned central business district and gateway business district respectively. New policies are needed in the central business district to better allow for higher density and greater mixing of retail shopping, professional services, entertainment facilities and restaurants, and residential uses. The policies controlling development in the recently established gateway business district will likely need ongoing refinement to promote business with an emphasis on the visitor industry and at the same time ensure an attractive and notable entry point to Homer and Kachemak Bay.

Homer's public water and sewer infrastructure plays a large role in shaping land use patterns in the city. *See the Water & Sewer Map, Appendix D-11.* To make the investment in public water and sewer infrastructure efficient and fair, decisions on infrastructure need to be coordinated with land use policy. For example, there are some areas within the rural residential zoning that have gained water and sewer service, providing landowners the opportunity to subdivide their lots and develop at a higher density than the existing land use classification promotes. This situation calls for a solution and is addressed in this plan.

Homer's pattern of development is also greatly influenced by environmental constraints. Steep slopes, bluff and shoreline erosion, and wetland areas make development of many parcels costly, difficult, or even unfeasible. While such areas may be unfeasible for individual development, they can have great value for the community as a whole. Drainage ways, beach areas, or steep or erodible slopes can form an integrated open space network ("green infrastructure") which supports the areas that may be developed more intensively. Environmental constraints and opportunities have an important role in guiding the character and location of new growth.

## Land Use and Growth in Homer and the Surrounding Area

The city of Homer is growing and it is likely to continue to grow. *See Background Chapter 2.* As stated previously in this plan, future growth will be driven by factors including changes in the overall economy of Alaska, the future of the fishing industry, the pace of growth in the visitor industry and – probably the most difficult to forecast – the growth of Homer as a quality-of-life community for retirees, baby boomers and other "footloose" prospective residents. If Homer remains a "hot" desirable residential destination, then it can grow, in some ways, more or less independently of changes in the conventional economic base.



While increasing visitation has had a great impact on the economic growth of Homer, the most significant change in Homer's real estate landscape has been the recent, rapidly growing demand for middle- to high-end residential development. This has led to substantial increases in land prices and the construction of many new homes, particularly in the area just outside of the city's perimeter, extending out East End Road and on the bench above town. This growth is an important consideration in the development of Homer's Comprehensive Plan. Residents of these developments use many of the same public and commercial services as Homer residents including police, fire, water supply, shops, restaurants, visitor and medical facilities, and public institutions like the library. Planning for services requires consideration of this growing residential demand.

## Goals & Objectives for Land Use

**GOAL I:** Guide Homer's growth with a focus on increasing the supply and diversity of housing, protect community character, encouraging infill, and helping minimize global impacts including limiting greenhouse gas emissions.

**Objective A:** Promote a pattern of growth characterized by a concentrated mixed-use center, and a surrounding ring of moderate-to-high density residential and mixed-use areas with lower densities in outlying areas.

Many of the community's most important goals are tied to the amount and location of growth. These goals include encouraging affordable housing, protecting environmental quality, creating a walkable community, and efficiently providing public services and facilities. The broad strategy behind this objective is to encourage concentrated residential and business growth in the central area of the city, with densities decreasing in outlying areas. The existing pattern of development in the city and current zoning generally follow this pattern. The alternative to this pattern – to allow this same quantity of growth to spread over a much wider area – works against all these goals.

While concentrating land uses brings many benefits, residents clearly want to maintain a sense of open space and privacy that is often associated with lower density development, particularly in residential areas. As a result, this objective of concentrated growth must be accompanied by a set of standards that ensure housing and commercial areas are well designed. The remainder of this section presents more details on the location of new development; following sections address the character of new development.

The key element of this section is the generalized Land Use Recommendations Map. *See page 4-7 – Comprehensive Plan Land Use Recommendations Map.* This is not a zoning map, but a general map of proposed future land uses in Homer. Before these recommendations have the force of law, a separate, subsequent process must occur to amend the City's current zoning code.

#### Implementation Strategies

#### **Review Land Use Recommendations Map**

**Objective B:** Develop clear and well-defined land use regulations and update the zoning map in support of the desired pattern of growth.

The Comprehensive Plan Land Use Recommendations Map establishes the location and intent of proposed land use districts, but does not address the standards needed to guide development.

#### Implementation Strategies

#### **Revise zoning map**

#### **Encourage preservation of natural areas**

#### **Review density objectives**

#### **Review appropriate design standards**

Changes to existing regulations will be required to implement the goals of this chapter, listed below:

1. Revise the City's existing zoning code, to reflect the general land use designations presented in **Objective B and Appendix B.**

2. Encourage alternative methods for preserving natural areas by creating improved cluster housing/open space/Planned Unit Development zoning standards and subdivision ordinance.
3. Develop standards and policies such as buffers and transitional densities to ensure high-quality higher density residential and/or mixed use development, particularly where this adjoins existing lower density residential areas. Create regulations that promote mixed use and high quality, attractive medium- to high-density development.
4. Develop standards and policies for new mixed-use districts, including the recently established Gateway Business district. Use **Consider** “form-based” zoning strategies, encouraging a modest scale of development while allowing for a wide range of uses.
5. Tailor current residential office and central business district zoning to accommodate more mixed use, medium- to high-density housing.
6. Develop consistent design standards for new development to complement the character of the land use. Include architectural and site development standards and standards for associated infrastructure (particularly roads and trails).
7. Re-evaluate height standards in commercial and mixed use districts to determine whether buildings over three stories should be permitted. Height standards must meet fire safety and insurance standards.
- ~~8. Develop and apply in all districts new standards addressing environmental issues including management of storm water, slope standards, and on-site septic systems.~~

**Objective C:** Maintain high quality residential neighborhoods; promote housing choice by supporting a variety of dwelling options.

Diverse, high-quality residential neighborhoods are crucial to the stability and economic health of Homer. Growth puts pressure on housing prices as land prices increase. Neighborhoods established decades ago with large lots face pressure as some landowners create subdivisions with smaller lots, while others would like to preserve the established neighborhood character. Housing choice is crucial to accommodate future growth as the dominant single family large lot developments clearly won't be able to meet future demand in quantity or price.

**Implementation Strategies**

**Review code for opportunities for appropriate infill**

**Support options for affordable housing**

1. Promote infill development in all housing districts, review zoning laws in existing districts to ensure a range of residential uses, identify new residential zoning districts, and provide for appropriate supporting infrastructure.
2. Encourage inclusion of affordable housing in larger developments and affordable housing in general.
3. Maintain the availability of lands designated for rural residential use; improve the zoning code for this category to withstand pressure for platting large lots into smaller ones in that district.

**Objective D: Consider the regional and global impacts of development in Homer.**

Homer is a community that understands and appreciates its place in the context of the larger, global environment. As shown by its robust environmental nonprofit community and the work of the City's Global Warming Task Force, Homer residents look beyond their boundaries and have expressed the importance of acting locally as a way of addressing global issues.

~~Below are some general approaches to meeting the goals of reducing Homer's impact on global warming, based on work by Homer's Global Warming Task Force.~~

**Implementation Strategies**

**Review opportunities that support energy efficiency for structures**

**Consider land use policies that promote density and discourage sprawl**

1. Pursue environmentally sound development practices and measure success for every public facility project in Homer either by locally established benchmarks, LEED certification, or other contemporary concepts.
2. Encourage a concentrated development pattern to reduce the need for vehicle trips and encourage non-motorized transportation. *See more in the Transportation Section.*
3. Support planning and zoning regulations that promote land use strategies that include compact, mixed-use development, higher density development, and infill.
4. Adopt building codes and incentives to increase energy efficiency in all new residential and commercial development.

**GOAL 2: Maintain the quality of Homer's natural environment and scenic beauty.**

Homer's natural setting provides many benefits but also creates significant constraints. The characteristics of the physical setting need to be respected in guiding the location, amount, and density of development. Growth will need to be guided to meet Homer's concerns about protecting community character and the quality of the environment.

This plan takes two general approaches to guide development in relation to environmental conditions. One is to "overlay" information regarding environmental constraints and opportunities onto the Land Use Recommendations Map. This means, for example, that some portions of an area identified for development would be limited by the site-specific presence of steep slopes, wetland areas, drainage channels, etc. The second broad strategy is to recommend that appropriate standards be adopted so that where development does occur it is designed to respect environmental functions and characteristics. Examples in this category include site development polices for drainage, vegetation, and grading.

A need exists for the community to take seriously the issue of shoreline stabilization and the implications of allowing ongoing shoreline development. A process should be launched to examine the issue and put proposed solutions before the citizens.

**Objective A: Complete and maintain a detailed “green infrastructure” map for the City of Homer and environs that presents an integrated functional system of environmental features on lands in both public and private ownership and use green infrastructure concepts in the review and approval of development projects.**

Protecting the environment can be a way to achieve goals like reducing infrastructure costs and providing “environmental services” like drainage ways, parks, and trails. For example, protecting the integrity of a stream channel can help provide cost-effective drainage solutions and also provide a trail corridor. The challenge in carrying out these types of actions is that most land in Homer is already split into many individual private parcels. This objective provides the first step in solving this challenge by creating a complete base of knowledge regarding environmental features on land regardless of ownership. Specific steps to establish a system of green infrastructure can be found in **Appendix D**.

**Green Infrastructure Defined**

*Green infrastructure is defined as an interconnected network of natural areas and other open spaces that conserves natural ecosystem values and functions, sustains clean air and water, and provides a wide array of benefits to people and wildlife. In contrast to traditional approaches to open space conservation, green infrastructure is integrated with and linked to development. Green infrastructure is a way of conserving natural areas that function as city infrastructure.* Definition and other information based on Green Infrastructure: Linking Landscapes & Communities.

Mark A. Benedict, Ph.D., Edward T. McMahon, J.D.  
Island Press, 2006

*Maps of important environmental features, processes, and key open space areas are valuable to the extent this information shapes decisions about development. In particular, this information is critical to protect features that cross boundaries of multiple parcels; e.g., streams and trails. This action not only protects open space values, but increases value of open space for developers. ~~Specific policies for using this information to shape development include:~~*

**Implementation Strategies**

**Review how developments effect on- and off-site environmental functions**

**Support the preservation of green infrastructure.**

1. Consider adopting incentives to encourage use of the Green Infrastructure Map developed by the Homer Soil and Water Conservation District.
2. *Require developers to include details about environmental features and processes, along with plans for open space, when submitting subdivisions or other developments for approval.*
3. *Require developers to demonstrate how features that cross multiple parcels will be protected in individual projects. Use this process to create links between open space areas and integrate new development into the network of open space.*
4. *When a Green Infrastructure Map is adopted, use it in the review process.*

**Objective B: Continue to review and refine development standards and require development practices that protect environmental functions.**

Once a project has been identified for development, green infrastructure concepts can be used to consider what special conditions, if any, need to be incorporated into the project's layout and development. Guidelines for development such as setbacks from waterbodies or limits on development of steep slopes are covered through the City's zoning code. Homer's existing codes include many good environmental standards. ~~Some specific strategies for accomplishing this objective through the revision of City code include:~~ **Periodic review of the successes and failures of the existing standards will help identify opportunity for revisions.**

## Implementation Strategies

### **Review the lessons learned from the implementation of site development standards**

#### **Consider revision of development standards in light of new information in relation to environmental functions and best practices**

1. Continue to review and refine standards and guidelines to reduce bluff erosion and shoreline erosion, such as managing surface water runoff on coastal bluffs and implementing any other applicable best management practices.
2. Continue to review and refine standards for coastal bluff stabilization projects and building setbacks from coastal bluffs.
3. Continue to review and refine standards for setbacks on streams and wetlands.
4. Continue to review and refine standards for development on steep slopes, in wetland areas, and on other sensitive sites, including standards for grading and drainage, vegetation clearing, building setbacks, and building footprints. Include flexibility in road dimensions to avoid excessive grading.
5. Continue to review and refine review processes for hillsides and other sensitive settings (e.g., allowance for development on steeper slopes subject to submission of more extensive site analysis and engineering reports).
6. **Consider regulations of on-site septic systems.**

**Appendix D** includes examples of how decisions about site clearing, grading, and impervious surfaces can create very different types of development. Homer is encouraged to continue practices that bring about Objective B.

#### **Objective C: Use green infrastructure concepts in the review and approval of development projects.**

~~Maps of important environmental features, processes, and key open space areas are valuable to the extent this information shapes decisions about development. In particular, this information is critical to protect features that cross boundaries of multiple parcels; e.g., streams and trails. This action not only protects open space values, but increases value of open space for developers. Specific policies for using this information to shape development include:~~

## Implementation Strategies

### **Review how developments affect on- and off-site environmental functions**

- ~~1. Require developers to include details about environmental features and processes, along with plans for open space, when submitting subdivisions or other developments for approval.~~
- ~~2. Require developers to demonstrate how features that cross multiple parcels will be protected in individual projects. Use this process to create links between open space areas and integrate new development into the network of open space.~~
- ~~3. When a Green Infrastructure Map is adopted, use it in the review process.~~

~~Comparative examples of different approaches to preserving green infrastructure in land subdivision and development can be found in appendix D.~~

**Objective DC:** Provide extra protection for areas with highest environmental value or development constraints.

Ideally, adopting more effective development standards will result in the preservation and protection of lands with high environmental value. However, there may be some areas identified that cannot easily be protected through standard means and are so important they should be preserved forever. References such as wetland, steep slope, and green infrastructure maps can help identify and prioritize these lands. Organizations, such as; Homer Soil and Water Conservation District and the Natural Resources Conservation Service of Alaska may be consulted in identifying specific local strategies. Examples of environmentally important areas might include a particular beach access corridor or a particular section of a lake or stream. There are many creative means by which Homer can do this if determined necessary, ~~such as:~~

## Implementation Strategies

### **Support acquisition of environmentally sensitive land for preservation**

1. Work with land trusts and/or public agencies to acquire land for protection and recreational use. Build on example set by Kachemak Heritage Land Trust.
2. Consider land trades or variations on the transfer of development rights.
3. **Recommend that the City purchase property vital for protection of the Bridge Creek Watershed.**

**Objective ED:** Collaborate with jurisdictions outside the City of Homer, as well as state and federal agencies, to ensure that environmental quality is maintained.

Homer's environment is affected by actions outside of its borders. Wildlife corridors and drainage systems do not conform to borough and municipal boundaries. In this regard, Homer should work with surrounding jurisdictions, notably the Kenai Peninsula Borough to **promote environmentally suitable policy.**

## Implementation Strategies

### **Support practices that preserve and maintain environmental quality outside the City of Homer**

1. Identify environmentally sensitive sites and natural systems of regional importance and work towards collaborative management of these areas. Options include implementing Special Use Districts to develop and pay for needed infrastructure and addressing drainage and trail issues on a regional or watershed approach.
2. Encourage establishment of environmentally responsible development practices by the KPB on land surrounding Homer.

**GOAL 3: Encourage high quality buildings and site design that complements Homer's beautiful natural setting.**

New growth and development in Homer is inevitable. The community has made clear its intent to guide the character of the built environment so this growth improves the quality of the life. The Town Center Development Plan established standards for the development of the city core and sets a good standard for policies that can be followed to achieve higher design quality. An integrated but balanced regulatory and enforcement process is needed for the entire city, to raise the bar for future development standards. **While enhanced development standards help guide the character of the built environment, enforcement of nuisance properties and the undue collection of open air junk will compliment development standards to improve the quality of life.**

**Objective A: Create a clear, coordinated regulatory framework that guides development.**

Clear, predictable, consistent rules and regulations are key to achieving standard, quality design. These rules and regulations have to fit the context of the marketplace and be accepted by the development community. Overregulation is a disincentive, while under-regulation will achieve less than desired results. Specific policies addressing this topic include:

**Implementation Strategies**

**Review City adopted plans for consistency**

**Review rules and regulation options with consideration of operational constraints and community acceptance**

1. Synthesize existing rules and regulations for both public and private development in a comprehensive design manual. For instance, it is important that the Master Roads and Streets Plan is supplemented by the Community Design Manual, Transportation Plan, and a Streetscape Design Manual to balance functionality and aesthetics.
2. Provide a clear and predictable approval process for every development including organizing project review and permitting and providing appropriate staff review.
3. **Review code enforcement requirements and action in relation to meeting community expectations**

**Objective B: Encourage high quality site design and buildings.**

Good site design, appealing architecture, and quality construction practices contribute to the creation of high quality buildings. Attractive, well-constructed buildings are a long-term asset to the

community. Design can be thought of in two categories: form, meaning what the building looks like; and function, meaning the construction methods and layout of the building.

## Implementation Strategies

### **Consider appropriate design standards for buildings**

#### **Review site impacts of developments**

1. Adopt building codes and create an inspection program.
2. Set standards that regulate the form of development to encourage attractive, diverse housing styles. Specific design objectives are presented under Goal 5, page 4-17.
3. Develop specific policies regarding site development including standards for landscaping, grading, lighting, view protection, etc., in coordination with current national efforts that promote better site development (LEED certification standards, Sustainable Sites Initiative, Low Impact Development, etc.).
4. Ensure that all utility service to new developments shall be underground.
5. Ensure that any redevelopment which moves overhead utilities requires moving those utilities underground.

**GOAL 4:** Support development of a variety of well-defined commercial/business districts for a range of commercial purposes.

**Objective A:** Encourage a concentrated, pedestrian oriented, attractive business/commerce district in the Central Business District (CBD) following the guidelines found in the Town Center Development Plan.

Creating a vital, successful central business district – the clear commercial and civic center of Homer – won’t happen by accident. A number of strategies are required to reach this objective, as outlined below. These actions are all designed to carry forward in the spirit of the previously approved Homer Town Center Development Plan and Community Design Manual. Those documents provide additional details that need to be considered to gain a full understanding of CBD objectives.

## Implementation Strategies

### **Consider infrastructure appropriate to support and sustain investment in the Central Business District**

1. Provide incentives for private investment in the CBD. Incentives can include public investments in improved infrastructure (e.g., roads, trails, parking) and in public facilities. Particular priorities include improved public parking and construction of a new east-west road through the center of the CBD roughly parallel to the Sterling Highway and Pioneer Avenue.
2. Create an overlay zone for the “Old Town” section of the CBD, establishing general standards for building design and



construction. Aim for future buildings to continue in the style of the older buildings in the area as well as the several more recently constructed buildings that follow these traditions.

3. Use public/private partnerships, ~~Business Improvement Districts, or Tax Increment Financing~~ to improve streetscapes, including better sidewalks, landscaping, and building facades. Develop an attractive, business friendly commercial streetscape for Pioneer Old Town businesses.
4. Improve trail connections to and within the CBD. Provide a system of trails and sidewalks linking residential areas, commercial and civic uses.
5. Concentrate commercial uses in the downtown. *See following section.*
6. ~~See also Appendix E for a summary of principles for success in small downtowns.~~
7. **Support Pioneer Avenue beautification/revitalization efforts.**

## **Objective B: Discourage strip development along the Sterling Highway and major collectors/thoroughfares**

Strip development occurs along busy major roads with easy access to businesses. Strip development is an unplanned consequence of building transportation infrastructure, and it tends to include practically any land use in an eclectic – often cluttered and unsightly – array of buildings, parking lots, utilities, and support structures.



Strip development along highways introduces competition for the central business district and weakens its role. Strip development can create unattractive community entries (e.g., the Glenn Highway coming into downtown Anchorage) and unsafe edges along thoroughfares. Communities with no restraints on the location of commercial use often find their downtowns wither, as businesses shift to outlying, lower cost properties. On the other hand, communities need to allow for a measure of outlying commercial growth, to be fair to property owners, to meet the need for the types of commercial uses that don't fit well into a central commercial core, and to respond to ongoing demand for expansion of commercial activity. ~~Two primary strategies can help avoid and lessen the potential adverse impacts of unwanted strip development:~~

### **Implementation Strategies**

#### **Support infill of existing commercial districts prior to expansion of a district**

#### **Consider attractive commercial design practices**

1. Use the zoning process to guide the majority of future commercial development into the central business district. Locate development as presented on the Land Use Recommendations Map. Implementation will require an ongoing balancing act.
2. Use strategies to ensure the character of development in strip commercial development makes a positive contribution to the overall character of the community. These include: controls on the size and appearance of signs, requirements for landscaping of parking areas, and basic guidelines regarding building appearance.

**GOAL 5: Develop a clear and open public process for future changes to City of Homer boundaries. Explore a planned, phased possible expansion; and initiate and establish regional planning processes with the Kenai Peninsula Borough.**

Existing land use and future growth around the periphery of Homer has significant impacts on the quality of life, the environment, and the economy of those who live and work within city limits. As a consequence, the City needs to be open to the possibility of annexing lands beyond city boundaries. Some of the specific benefits for those in the annexed areas include:

- Access to water for domestic use
- Improved fire protection services
- Improved street maintenance and snow removal services
- Improved law enforcement services provided by the City police department (as continued growth in outlying areas requires more services than the Alaska State Troopers can provide)
- Local control over planning and zoning (when done in a manner that reflects local values, city planning and zoning authority can help avoid the intrusion of incompatible uses into neighborhoods and help maintain and increase property values)
- Right to vote for elected representatives in Homer, and serve on City Boards and Commissions (currently sales tax provides the majority of the city's revenue. People outside city boundaries pay sales tax but don't vote for the people who make the decisions about how sales tax money is spent)

**Objective A: Develop a clear and orderly process to assess the need and apply for the expansion of the boundaries of the City of Homer, which is likely to be necessary over the coming decades as surrounding areas grow and develop.**

For the long-term benefit of both the city and surrounding areas, Homer will adopt a proactive planning strategy in the greater Homer area. Overall intentions regarding possible boundary changes are outlined below:

**Implementation Strategies**

1. Regularly assess the need for phased annexations to guide growth and provide for effective delivery of municipal services which benefit landowners, residents, and businesses.
2. Identify specific criteria for prioritizing prospective annexation areas. Focus near term attention where the uses have the greatest impact on City of Homer interests, including the area of the Bridge Creek water reservoir and associated watershed, areas where City water is delivered to residents outside city limits, areas directly adjacent to Homer city boundaries, and areas where recreational and open space resources (trails, greenbelts, water and drainage ways) are already in existence or may be easily developed.
3. Establish a clear and open public process for proposing annexations, including obtaining input from interested persons regarding land use and City services.
4. Work actively with the KPB to develop shared plans for current uses and future growth in the areas outside current city boundaries; including services, land use, and development standards.
5. In addition to considering the impacts of proposed annexation on residents and land owners, evaluate the costs and benefits of specific possible annexations to the City of Homer; looking, for example, at the relative balance of expected revenues versus costs to provide needed services.

497 **Objective B: Develop a fair, planned process for involving affected members of the public when**  
 498 **considering annexation.**

499 Past annexation procedures in Homer have been painful, slow, and costly. Some of this cannot be  
 500 avoided: annexation is a complex issue and not everyone will be satisfied with the outcomes.  
 501 Nonetheless, there is room for improvement in the procedures associated with annexation. Specific  
 502 policies include:

### 503 Implementation Strategies

- 504 1. In the near term, carry out an initial “annexation issues scoping process” for areas outside  
 505 the city. Get early input from landowners, residents, and businesses in possible annexation  
 506 areas regarding annexation issues. This will help Homer in planning for future growth, and  
 507 enable landowners and businesses outside Homer to be part of the process and to  
 508 understand how annexation may affect them.
- 509 2. Prior to proceeding with any annexation petition, the City, working with the Borough, will  
 510 undertake a planning study of the specific area proposed for annexation. This will include  
 511 providing public notice and public meetings to help define recommended future land uses  
 512 and to indicate how and when municipal services (including public safety, utilities, streets  
 513 and trails) will be extended to the area, together with estimated associated costs. The  
 514 recommendations of the study will be incorporated into any annexation proposal  
 515 submitted to the Alaska Local Boundary Commission.
- 516 3. Extra effort will be made to give the public a meaningful role in the consideration of  
 517 annexation costs and benefits.
- 518 4. Explore options for different levels of services where clear distinctions can be made in the  
 519 level of service required. For example, the level of fire protection service may vary greatly  
 520 as a function of road infrastructure, vegetation, and response time. In outlying areas for  
 521 example, the focus may be prevention of loss of human life and containment versus  
 522 protection of life and property in locations closer to town.
- 523 5. It is not possible or appropriate for the City of Homer to prepare land use policy for  
 524 potential annexation areas. At the same time, the City needs to convey general intentions  
 525 for the future use of annexed lands. These intentions are established through the general  
 526 policies of this Comprehensive Plan and other policies for land inside City limits, but also  
 527 give a helpful sense of what policies might apply in future annexation areas. Examples of  
 528 general policies that apply citywide and would likely be extended to annexed areas include  
 529 creating and maintaining quality residential neighborhoods, using setbacks and buffers to  
 530 ensure compatibility between different types of uses, providing open space and trails, and  
 531 ensuring roads are built to City standards. The annexation planning studies called for  
 532 above will build from the general framework in the Comprehensive Plan and take into  
 533 account the opportunities and constraints of specific locations, as well as the perspectives  
 534 of affected property owners and residents.

535 **Objective C: Develop land use and infrastructure policies to address issues such as access and**  
 536 **water use for areas that may be annexed in the future.**

Regardless of any future annexations, which may be decades away, the City needs to address several specific land use and infrastructure issues that cross city boundaries into greater Homer. Specific issues and recommended policies are presented below:

## Implementation Strategies

1. Working through a cooperative planning process with the Borough, establish mechanisms to deal with issues outside City of Homer boundaries with greatest impact on the city. Examples include agreement to use common road standards and for cooperative work on trail and open space issues.
2. Re-examine the City's current policy for the provision of water from the public water system to users outside city limits and determine the impact of this practice. Currently approximately 40% of properties within Homer city limits do not enjoy the benefit of piped water delivery. The ability to receive water from city sources outside city boundaries has a major impact on the prospects for development in outlying areas where options for wells are limited. Water delivery in outlying areas contributes to the outward spread of residential uses, which in turn increases driving, energy use and contributes to greenhouse gas emissions. Determine if areas receiving water should be high priority areas for annexation. Investigate options for "reciprocity" by either developing plans for annexation or by establishing KPB-enforced land use practices that align with similar practices in the City of Homer. *See also Goal 1, Objective C in Chapter 6 for more on water use.*

## Land Use Implementation Table

| Project                                                                                    | Timeframe |          |             | Primary Responsibility |
|--------------------------------------------------------------------------------------------|-----------|----------|-------------|------------------------|
|                                                                                            | Near Term | Mid Term | Longer Term |                        |
| Improved Zoning                                                                            |           |          |             |                        |
| ▪ Develop new zoning code to implement new categories.                                     |           |          | x           | City                   |
| ▪ Work with the Comprehensive Plan Land Use Recommendation Map on an area by area basis to |           |          | x           | City                   |

|                                                                                                                                                                                                   |   |   |   |                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|-------------------------------------------------|
| determine the feasibility and acceptability of rezoning.                                                                                                                                          |   |   |   |                                                 |
| ▪ <del>Flesh out specific development standards and guidelines for commercial zones; create a Town Center overlay zone to better differentiate downtown, auto-oriented neighborhoods.</del>       | x |   |   | City along w/ downtown merchants and landowners |
| ▪ Define the boundaries for and then develop an overlay zone for Old Town so buildings in that portion of the district feature an “old Homer” historical character.                               | x |   |   | City along w/ Old Town merchants and residents  |
| ▪ <del>Flesh out specific development standards and guidelines for R-2 residential zone, to create a transitional zone between urban and rural.</del>                                             | x |   |   | City                                            |
| <i>Improved Standards and Regulations</i>                                                                                                                                                         |   |   |   |                                                 |
| ▪ Create a new City subdivision code.                                                                                                                                                             | x |   |   | City                                            |
| ▪ <del>Evaluate and consider shifting platting authority from Borough to City of Homer.</del>                                                                                                     |   |   | x | City and Kenai Peninsula Borough                |
| ▪ <del>Develop new parking standards for CBD to support higher density, more walkable commercial areas.</del>                                                                                     | x |   |   | City                                            |
| ▪ <del>Establish development standards for development in environmentally sensitive areas (wetlands, steep slopes), including upgrade of drainage policies, road policies, stream setbacks.</del> | x |   |   | City                                            |
| ▪ Establish development standards for higher density residential development, landscaping, lighting, grading, viewshed protection.                                                                |   | x |   | City                                            |
| ▪ Establish development standards for Cluster Housing/Open Space Ordinance.                                                                                                                       | x |   |   | City                                            |
| ▪ <del>Establish standards for Student Housing Development.</del>                                                                                                                                 |   | x |   | City and Kenai Peninsula College                |
| ▪ <del>Amend non-conforming use ordinance.</del>                                                                                                                                                  | x |   |   | City                                            |
| ▪ Review and consider revising existing Planned Unit Development code.                                                                                                                            |   | x |   | City                                            |
| ▪ Support LEED or other building efficiency programs.                                                                                                                                             |   | x |   | City                                            |
| ▪ Adopt building codes.                                                                                                                                                                           |   | x |   | City                                            |
| ▪ <del>Establish a maximum building setback for Town Center.</del>                                                                                                                                | x |   |   | City                                            |

| Project                                                                                                                                            | Timeframe |          |             | Primary Responsibility             |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|-------------|------------------------------------|
|                                                                                                                                                    | Near Term | Mid Term | Longer Term |                                    |
| Green Infrastructure                                                                                                                               |           |          |             |                                    |
| ▪ Evaluate incentives to promote development that uses the green infrastructure ideas presented in Appendix D.                                     | x         |          |             | City                               |
| ▪ Develop new standards to address issues related to shore stabilization and ocean front development.                                              |           | x        |             | City                               |
| ▪ Pursue sustainable development measures that promote energy efficiency, use of recycled materials, and low impact landscaping in city buildings. | x         |          |             | City                               |
| Pattern of Development                                                                                                                             |           |          |             |                                    |
| ▪ Work with Borough to prepare mutually acceptable development standards.                                                                          |           | x        |             | City, with Kenai Peninsula Borough |
| ▪ Establish a clear policy regarding delivery of City water outside of city limits.                                                                | x         |          |             | City, with Kenai Peninsula Borough |
| ▪ Establish more specific criteria, process, schedule and objectives for possible future annexations.                                              |           | x        |             | City                               |
| ▪ Amend city code to recognize the transfer of development rights to preserve environmentally sensitive or recreational areas.                     | x         |          |             | City                               |
| ▪ Develop a Homer Spit Master Plan.                                                                                                                | x         |          |             | City, Port & Harbor Dept           |



## Land Use

| Project                                                                                                                                                                                                                                                                                                                                                                                       | Timeframe |          |             |         | Primary Duty |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|-------------|---------|--------------|
|                                                                                                                                                                                                                                                                                                                                                                                               | Near Term | Mid Term | Longer Term | Ongoing |              |
| 1-A-1 Review implementation of the Land Use Recommendations Map                                                                                                                                                                                                                                                                                                                               |           |          |             | x       | HAPC         |
| 1-B-1 Propose zoning map amendments                                                                                                                                                                                                                                                                                                                                                           |           |          |             | x       | HAPC         |
| 1-B-2 Encourage alternative methods for preserving natural areas by creating improved cluster housing/open space/Planned Unit Development zoning standards and subdivision ordinance                                                                                                                                                                                                          |           |          |             | x       | HAPC         |
| 1-B-3 Develop standards and policies such as buffers and transitional densities to ensure high-quality higher density residential and/or mixed use development, particularly where this adjoins existing lower density residential areas. Create regulations that promote mixed use and high quality, attractive medium- to high-density development.                                         |           |          |             | x       | HAPC         |
| 1-B-4 Develop standards and policies for new mixed-use districts, including the recently established Gateway Business district. Use “form-based” zoning strategies, encouraging a modest scale of development while allowing for a wide range of uses. Tailor current residential office and central business district zoning to accommodate more mixed use, medium- to high-density housing. |           |          |             | x       | HAPC         |
| 1-B-5 Tailor current residential office and central business district zoning to accommodate more mixed use, medium- to high-density housing.                                                                                                                                                                                                                                                  |           |          |             | x       | HAPC         |
| 1-B-6 Develop consistent design standards for new development to complement the character of the land use. Include architectural and site development standards and standards for associated infrastructure (particularly roads and trails).                                                                                                                                                  |           |          |             | x       | HAPC         |
| 1-B-7 Re-evaluate height standards in commercial and mixed use districts to determine whether buildings over three stories should be permitted. Height standards must meet fire safety and insurance standards.                                                                                                                                                                               |           | x        |             |         | EDC          |

| Project                                                                                                                                                                                                                                      | Timeframe |          |             |         | Primary Duty                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|-------------|---------|-----------------------------|
|                                                                                                                                                                                                                                              | Near Term | Mid Term | Longer Term | Ongoing |                             |
| 1-C-1 Promote infill development in all housing districts, review zoning laws in existing districts to ensure a range of residential uses, identify new residential zoning districts, and provide for appropriate supporting infrastructure. |           |          |             | x       | HAPC                        |
| 1-C-2 Encourage inclusion of affordable housing in larger developments and affordable housing in general.                                                                                                                                    |           |          |             | x       | HAPC                        |
| 1-C-3 Maintain the availability of lands designated for rural residential use; improve the zoning code for this category to withstand pressure for platting large lots into smaller ones in that district.                                   |           |          |             | x       | HAPC                        |
| 1-D-1 Pursue environmentally sound development practices and measure success for every public facility project in Homer either by locally established benchmarks, LEED certification, or other contemporary concepts.                        |           |          |             | x       | Public Work, Adiminstration |
| 1-D-2 Encourage a concentrated development pattern to reduce the need for vehicle trips and encourage non-motorized transportation. <i>See more in the Transportation Section.</i>                                                           |           |          |             | x       | HAPC                        |
| 1-D-3 Support planning and zoning regulations that promote land use strategies that include compact, mixed-use development, higher density development, and infill.                                                                          | x         |          |             | x       | EDC, Administration         |
| 1-D-4 Adopt building codes and incentives to increase energy efficiency in all new residential and commercial development.                                                                                                                   |           | x        |             |         | HAPC, City Council          |
| 2-A-1 Consider adopting incentives to encourage use of the Green Infrastructure Map developed by the Homer Soil and Water Conservation District.                                                                                             |           | x        |             |         | HAPC                        |
| 2-A-2 Require developers to include details about environmental features and processes, along with plans for open space, when submitting subdivisions or other developments for approval.                                                    |           | x        |             |         | HAPC                        |

| Project                                                                                                                                                                                                                                                                                                           | Timeframe |          |             |         | Primary Duty   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|-------------|---------|----------------|
|                                                                                                                                                                                                                                                                                                                   | Near Term | Mid Term | Longer Term | Ongoing |                |
| 2-A-3 Require developers to demonstrate how features that cross multiple parcels will be protected in individual projects. Use this process to create links between open space areas and integrate new development into the network of open space.                                                                |           | x        |             |         | HAPC           |
| 2-A-4 When a Green Infrastructure Map is adopted, use it in the review process.                                                                                                                                                                                                                                   |           | x        |             |         | Planning, HAPC |
| 2-B-1 Continue to review and refine standards and guidelines to reduce bluff erosion and shoreline erosion, such as managing surface water runoff on coastal bluffs and implementing any other applicable best management practices.                                                                              |           | x        |             | x       | HAPC           |
| 2-B-2 Continue to review and refine standards for coastal bluff stabilization projects and building setbacks from coastal bluffs.                                                                                                                                                                                 |           | x        |             | x       | HAPC           |
| 2-B-3 Continue to review and refine standards for setbacks on streams and wetlands.                                                                                                                                                                                                                               |           | x        |             | x       | HAPC           |
| 2-B-4. Continue to review and refine standards for development on steep slopes, in wetland areas, and on other sensitive sites, including standards for grading and drainage, vegetation clearing, building setbacks, and building footprints. Include flexibility in road dimensions to avoid excessive grading. |           | x        |             | x       | HAPC           |
| 2-B-5 Continue to review and refine review processes for hillsides and other sensitive settings (e.g., allowance for development on steeper slopes subject to submission of more extensive site analysis and engineering reports).                                                                                |           | x        |             | x       | HAPC           |
| 2-C-1 Work with land trusts and/or public agencies to acquire land for protection and recreational use. Build on example set by Kachemak Heritage Land Trust.                                                                                                                                                     |           |          |             | x       | Administration |
| 2-C-2 Consider land trades or variations on the transfer of development rights.                                                                                                                                                                                                                                   |           | x        |             |         | HAPC           |
| 2-C-3 Recommend that the City purchase property vital for the protection of the Brdge Creek Watershed                                                                                                                                                                                                             | x         |          |             | x       | HAPC           |

| Project                                                                                                                                                                                                                                                                                                                                      | Timeframe |          |             |         | Primary Duty                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|-------------|---------|------------------------------------|
|                                                                                                                                                                                                                                                                                                                                              | Near Term | Mid Term | Longer Term | Ongoing |                                    |
| 2-D-1 Identify environmentally sensitive sites and natural systems of regional importance and work towards collaborative management of these areas. Options include implementing Special Use Districts to develop and pay for needed infrastructure and addressing drainage and trail issues on a regional or watershed approach.            |           | x        |             | x       | HAPC, Planning                     |
| 2-D-2 Encourage establishment of environmentally responsible development practices by the KPB on land surrounding Homer.                                                                                                                                                                                                                     |           |          |             | x       | HAPC, Administration               |
| 3-A-1 Synthesize existing rules and regulations for both public and private development in a comprehensive design manual. For instance, it is important that the Master Roads and Streets Plan is supplemented by the Community Design Manual, Transportation Plan, and a Streetscape Design Manual to balance functionality and aesthetics. |           |          |             | x       | HAPC, Planning, Public Works       |
| 3-A-2 Provide a clear and predictable approval process for every development including organizing project review and permitting and providing appropriate staff review.                                                                                                                                                                      |           |          |             | x       | HAPC                               |
| 3-A-3 Review code enforcement requirements and action in relation to meeting community expectations                                                                                                                                                                                                                                          |           |          |             | x       | HAPC                               |
| 3-B-1 Adopt building codes and create an inspection program.                                                                                                                                                                                                                                                                                 |           | x        |             |         | HAPC, Administration, Public Works |
| 3-B-2 Set standards that regulate the form of development to encourage attractive, diverse housing styles. Specific design objectives are presented under <a href="#">Goal 5, page 4-17</a> .                                                                                                                                                | x         |          |             |         | Planning, HAPC                     |
| 3-B-3 Develop specific policies regarding site development including standards for landscaping, grading, lighting, view protection, etc., in coordination with current national efforts that promote better site development (LEED certification standards, Sustainable Sites Initiative, Low Impact Development, etc.).                     |           |          | x           |         | HAPC                               |
| 3-B-4 Ensure that all utility service to new developments shall be underground.                                                                                                                                                                                                                                                              |           |          |             | x       | Planning, Public Works             |

| Project                                                                                                                                                                                                                                                                                                                                                                             | Timeframe |          |             |         | Primary Duty                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|-------------|---------|------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                     | Near Term | Mid Term | Longer Term | Ongoing |                                    |
| 3-B-5 Ensure that any redevelopment which moves overhead utilities requires moving those utilities underground.                                                                                                                                                                                                                                                                     |           |          |             | x       | Public Works                       |
| 4-A-1 Provide incentives for private investment in the CBD. Incentives can include public investments in improved infrastructure (e.g., roads, trails, parking) and in public facilities. Particular priorities include improved public parking and construction of a new east-west road through the center of the CBD roughly parallel to the Sterling Highway and Pioneer Avenue. |           | x        |             |         | HAPC, Public Works, Administration |
| 4-A-2 Create an overlay zone for the “Old Town” section of the CBD, establishing general standards for building design and construction. Aim for future buildings to continue in the style of the older buildings in the area as well as the several more recently constructed buildings that follow these traditions.                                                              |           | x        |             |         | HAPC                               |
| 4-A-3 Use public/private partnerships, <del>Business Improvement Districts, or Tax Increment Financing</del> to improve streetscapes, including better sidewalks, landscaping, and building facades. Develop an attractive, business friendly commercial streetscape for Pioneer Old Town businesses.                                                                               |           |          |             | x       | Administration                     |
| 4-A-4 Improve trail connections to and within the CBD. Provide a system of trails and sidewalks linking residential areas, commercial and civic uses.                                                                                                                                                                                                                               |           |          |             | x       | Public Works                       |
| 4-A-5 Concentrate commercial uses in the downtown.                                                                                                                                                                                                                                                                                                                                  |           |          |             | x       | Planning Commission                |
| 4-A-6 Support Pioneer Avenue beautification/revitalization efforts                                                                                                                                                                                                                                                                                                                  |           |          |             |         | HAPC, Public Works, Administration |
| 4-B-1 Use the zoning process to guide the majority of future commercial development into the central business district. Locate development as presented on the Land Use Recommendations Map. Implementation will require an ongoing balancing act. stations, adequate trash collection, park maintenance, etc.).                                                                    |           |          |             | x       | HAPC                               |



Appendix X - Land Use Information

Table X Zoning Designations

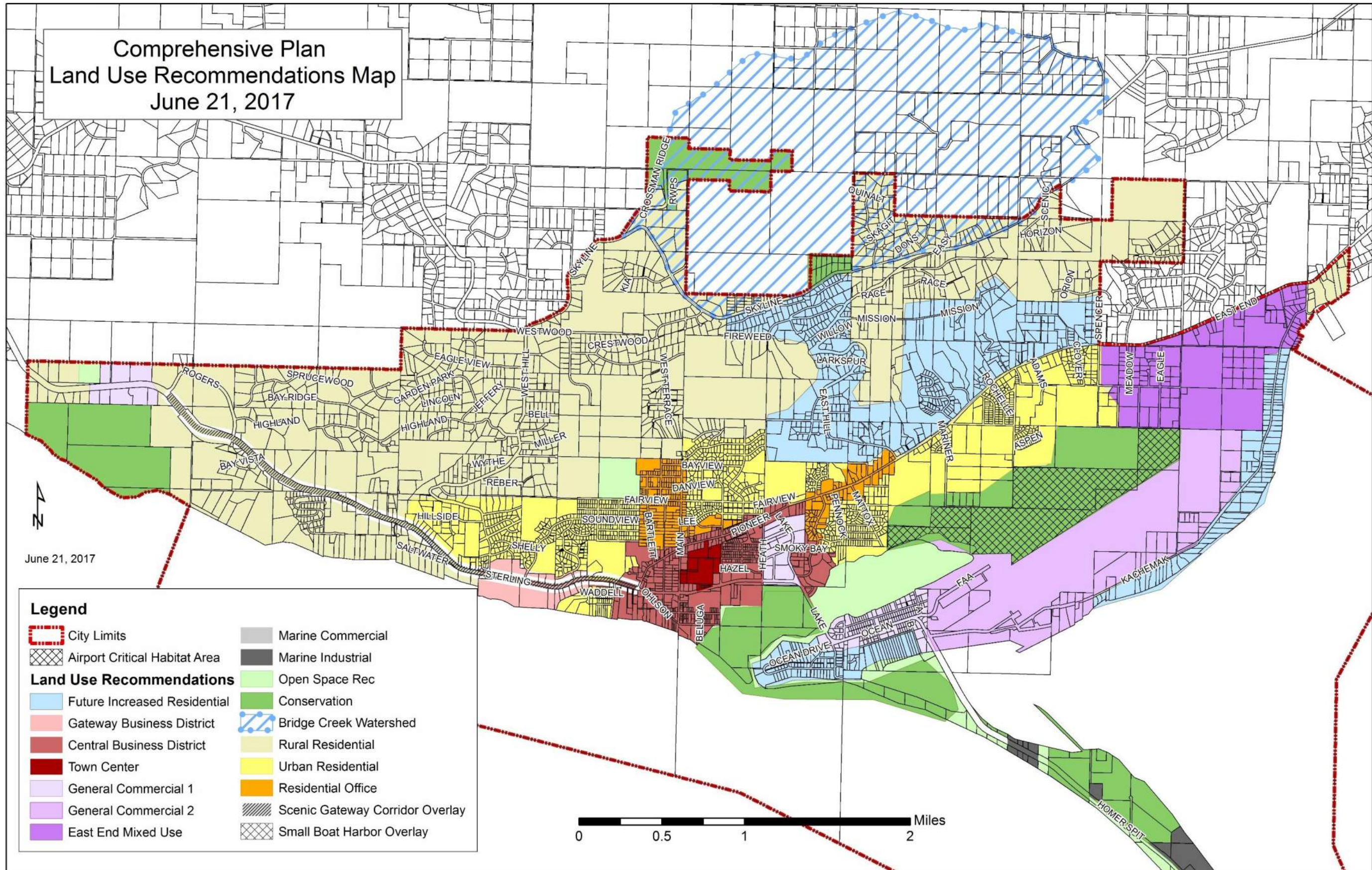
Maps

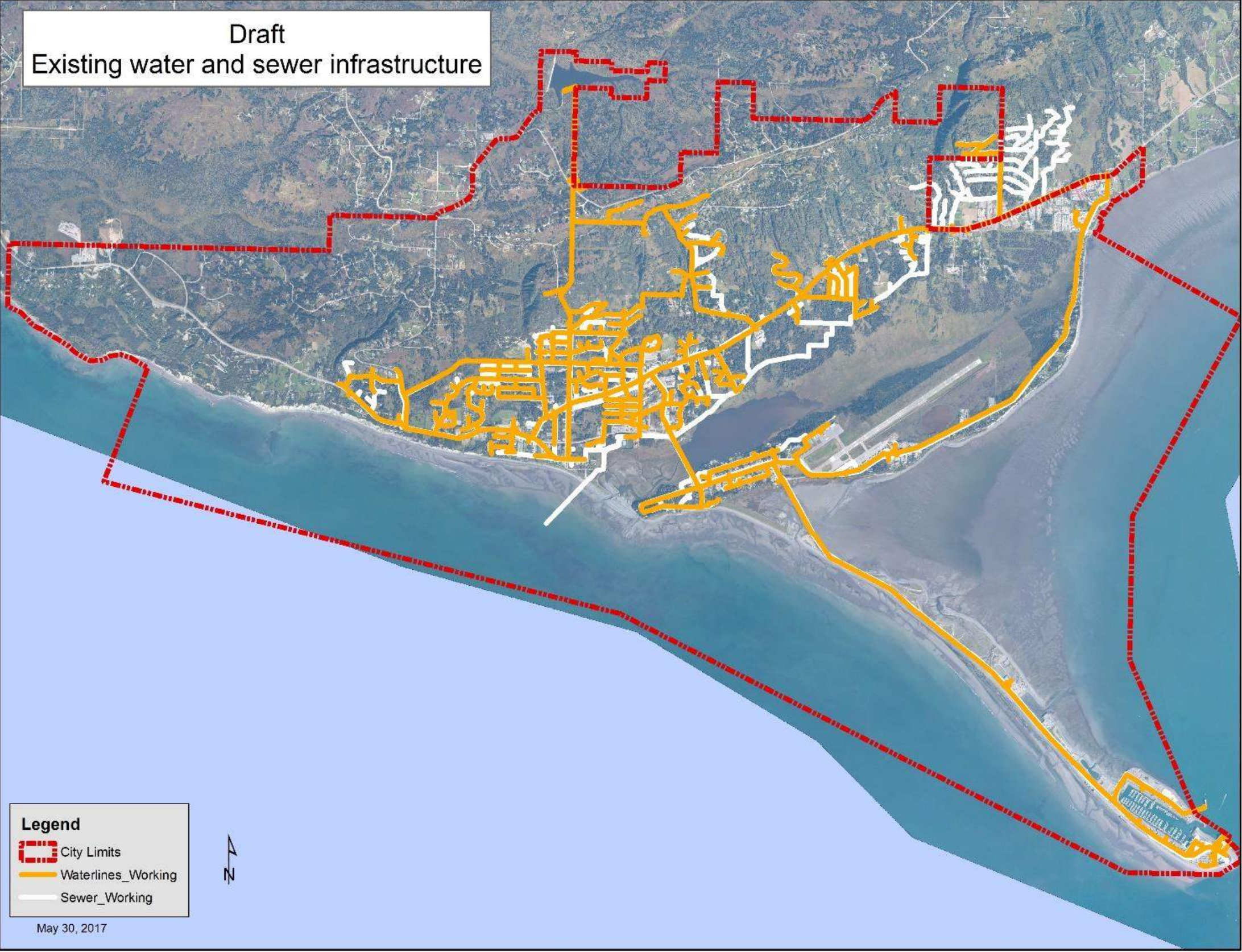
- 1. Comprehensive Plan Land Use Recommendations Map
- 2. Map of existing water and sewer infrastructure
- 3. 2016 Zoning Map
- 4. 2005 Wetlands Map
- 5. Green Infrastructure Mapping
- 6. Land Suitability Mapping

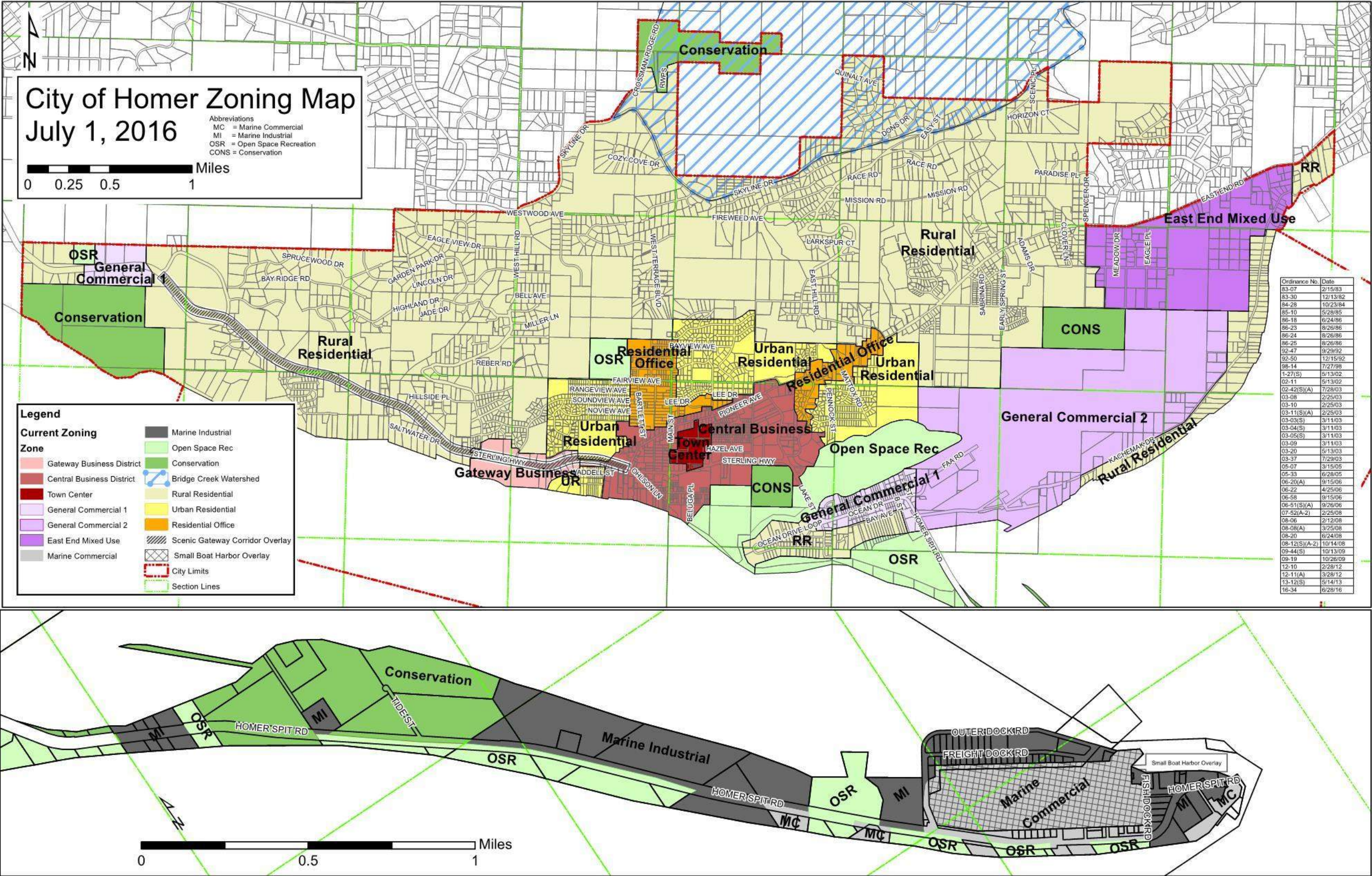
| Table X: Land Use Plan Classifications and Zoning Districts                                                                                                                                                  |  |                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------------|
| Residential                                                                                                                                                                                                  |  | Zoning Districts          |
| Larger lot residential areas with some agricultural uses                                                                                                                                                     |  | Rural Residential         |
| Smaller residential lots with higher density housing                                                                                                                                                         |  | Urban Residential         |
| Primarily residential areas that may be suited to more dense housing in the future                                                                                                                           |  | R-2                       |
| Low-density to medium-density residential uses and certain businesses and offices                                                                                                                            |  | Residential Office        |
| Commercial                                                                                                                                                                                                   |  | Zoning Districts          |
| Centrally located area for general retail shopping, personal and professional services, institutions, entertainment establishments, restaurants and other business uses, with a mixture of residential uses. |  | Central Business District |
| A centrally located area a core business area and a community focal point.                                                                                                                                   |  | Town Center               |
| Area for businesses that may require larger lots, on or near major streets.                                                                                                                                  |  | General Commercial<br>1   |
| Area for businesses that may require larger lots                                                                                                                                                             |  | East End Mixed Use        |

|                                                                                                                                                                               |                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Emphasis on visitor-oriented business, with a mix of commercial and residential uses.                                                                                         | Gateway Business          |
| Primarily for water-related and water-dependent business and support business, including fishing, tourism and marine transportation                                           | Marine Commercial         |
| Industrial                                                                                                                                                                    | Zoning Districts          |
| Heavy commercial and industrial activities such as manufacturing, processing assembly, packaging or treatment                                                                 | General Commercial 2      |
| Water dependent industrial uses that require direct marine access                                                                                                             | Marine Industrial         |
| Parks, Recreation and Open Space                                                                                                                                              | Zoning Districts          |
| Area for public recreation while protecting and preserving the natural and scenic resources                                                                                   | Open Space Rec            |
| Sensitive lands that are critical to fish and wildlife resources, or protect watershed resources or other key environmental functions                                         | Conservation              |
| Overlay Areas                                                                                                                                                                 | Zoning Districts          |
| Adds additional zoning regulations to protection public drinking water                                                                                                        | Bridge Cr Watershed       |
| Preservation of scenic vistas, to enhance the compatibility of development and to minimize future traffic congestion and maintain safety along the Sterling Highway corridor. | Scenic Gateway Corridor   |
| Additional development regulations specifically designed for the unique nature and needs of water- and tourism-oriented uses on platforms over the small boat harbor.         | Small Boat Harbor Overlay |

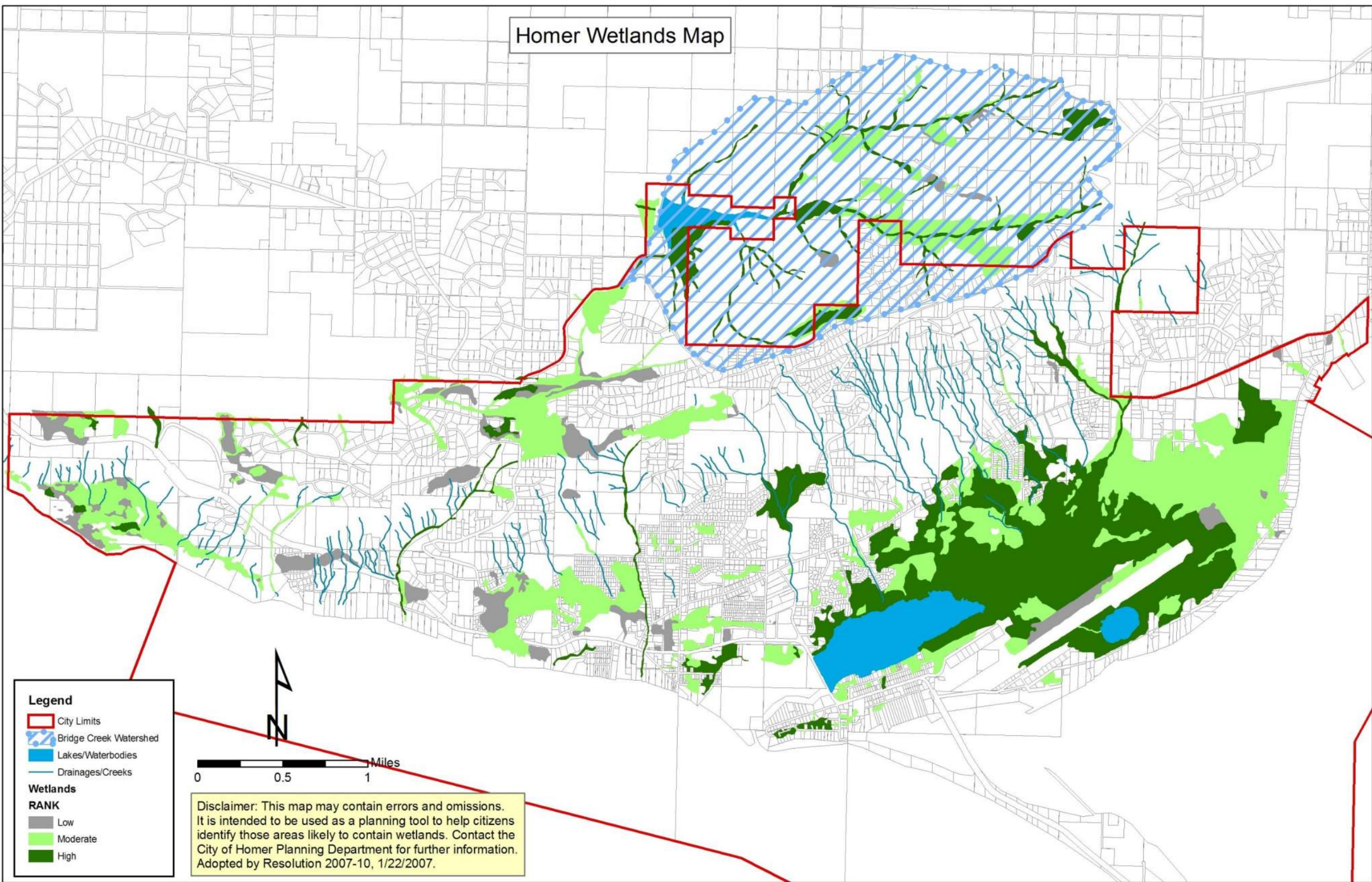
# Comprehensive Plan Land Use Recommendations Map June 21, 2017







# Homer Wetlands Map



## Green Infrastructure Mapping

Following is a draft Green Infrastructure map developed by DnA Design of Homer as part of an independent project with the local Soil & Water Conservation District. The map was developed as a way to define lands viable for future development while considering the need to protect drainage, open space and other environmental features that would complement development. The project defines incentives for developers to consider landscape systems in their projects while maintaining or enhancing their bottom line. The green infrastructure elements are determined by overlaying scientific, ecological and economic values to provide not only an ecological benefit, but also quantifiable economic and quality of life benefits. Since Green Infrastructure (GI) looks at larger scale landscape systems, the map extends beyond the boundaries of the city to include entire watersheds and other key features that cross the political boundary of the city limit. The map legend categories are defined more precisely as follows:

**Highly Developable/Developed (white)**—Areas that are well suited for development or are already developed.

**Some Green Infrastructure Elements (yellow)**—Areas that are well suited for development with consideration of larger landscape systems, such as storm water management, upland-wetland complexes, poor soils, unstable slopes, trails, habitat, etc. These areas will likely have associated incentives to maintain environmental systems while enhancing land values.

**Important Green Infrastructure Elements (light green)**—Development in these areas should consider the specific Green Infrastructure characteristics present. These are not critical natural areas. However, if development in these areas is not careful, it will negatively impact larger landscape systems. Construction costs in these areas will probably be higher if the natural characteristics are not considered. These are areas where the public and property owners should be made aware that there is some important characteristic that they should consider protecting (such as steep slope, valuable wildlife habitat, adjacent creeks, trails or wetlands). Carefully planned development that preserves or enhances Green Infrastructure elements can add value to real estate, for example, by retaining natural features and wildlife. These are areas that would benefit from clear development guidelines to preserve landscape systems, and would be eligible for special development or restoration incentives.

**Critical green infrastructure (dark green)**—These areas have sensitive or critical landscape systems, processes, or connections and are most appropriate for conservation. They are predominantly areas with steep slopes, critical wetlands, poor soils or other sensitive landscape features. These areas would likely be very difficult and expensive to develop, and are limited by existing federal regulation. Development in these areas will cause significant impacts on natural systems, neighboring properties and possibly view sheds, and will increase the risk and associated costs due to natural hazards. These areas should be considered amenities for the city and its residents because of their value for storm water management, habitat protection, view shed protection open space and trails. Options for preserving these lands should be explored, for example, through conservation easements, land or development trades, or other creative incentives, particularly for areas held in private ownership.

This Green Infrastructure map is generated from spatially explicit GIS base maps including and considering:

- Soils
- Creeks and drainages
- Slopes
- Bluff erosion
- Construction costs (essentially development costs due to slope, road access, soils, wetlands, open water and drainages)
- Trails and public amenities
- Storm water management
- Wetlands
- Vegetation habitat
- Wildlife habitat
- Accessible lands—lands already served by road and water and sewer (basically a weighted buffer by infrastructure construction costs)
- Views and view sheds

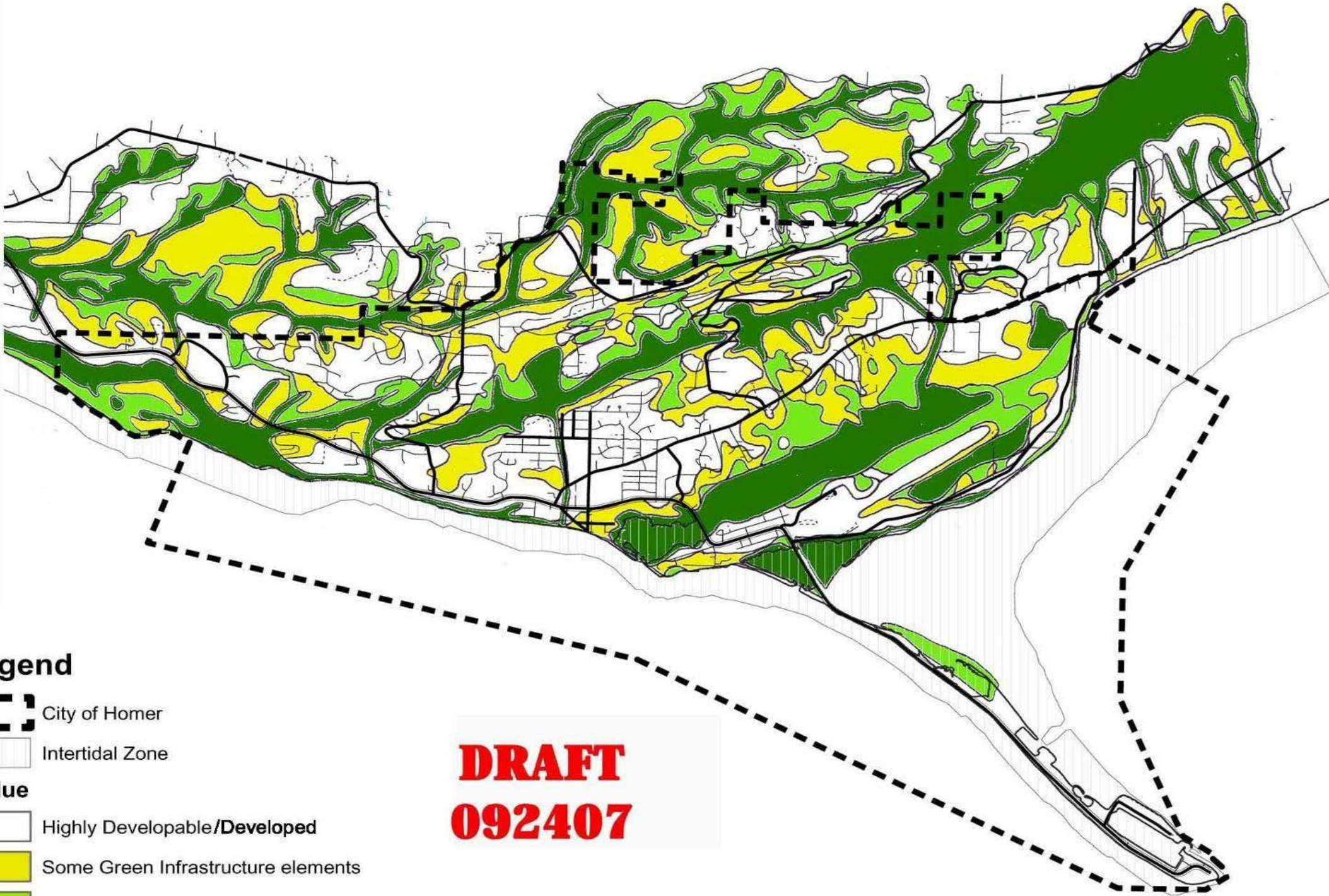
**Specific steps to establish a system of green infrastructure include those outlined below; the diagram provides a simplified illustration of this approach:**

1. Identify and map individual environmental features and processes – erosion areas, wetlands, steep slopes, aquifer recharge areas, shoreline access points, critical view sheds, etc.
2. Identify open space and recreation areas – trails, parks and recreation use areas, view sheds and other features that are best protected by allowing the land to remain largely undeveloped.
3. Overlay mapped environmental features with open space and recreation areas to create an integrated “green infrastructure” network map. This should identify features such as stream corridors and trails that cross multiple properties. Also identify areas that may be able to support development, but will require special standards to maintain environmental quality (e.g., steep slope areas).
4. Limit areas included in the green infrastructure map to those of highest value or greatest constraint. For example, the map should identify the most important trails, the most important wetlands and streams, the steepest slopes.
5. Formally adopt the map, recognizing that site-specific developments may lead to changes in the features that need protection for particular development projects.
6. Establish a formal process that balances the long term communitywide benefits of the green infrastructure concept with short-term impacts on individual private landowners.

**Note:** The map shown on this page is provided only as an illustration. It was developed by the Homer Soil and Water Conservation District to illustrate the objectives for green infrastructure that are endorsed by this plan, this draft map will not be adopted as part of this comprehensive plan.

# HOMER SUITABILITY MAPPING

## GREEN INFRASTRUCTURE



### Legend



City of Homer



Intertidal Zone

### Value



Highly Developable/Developed



Some Green Infrastructure elements



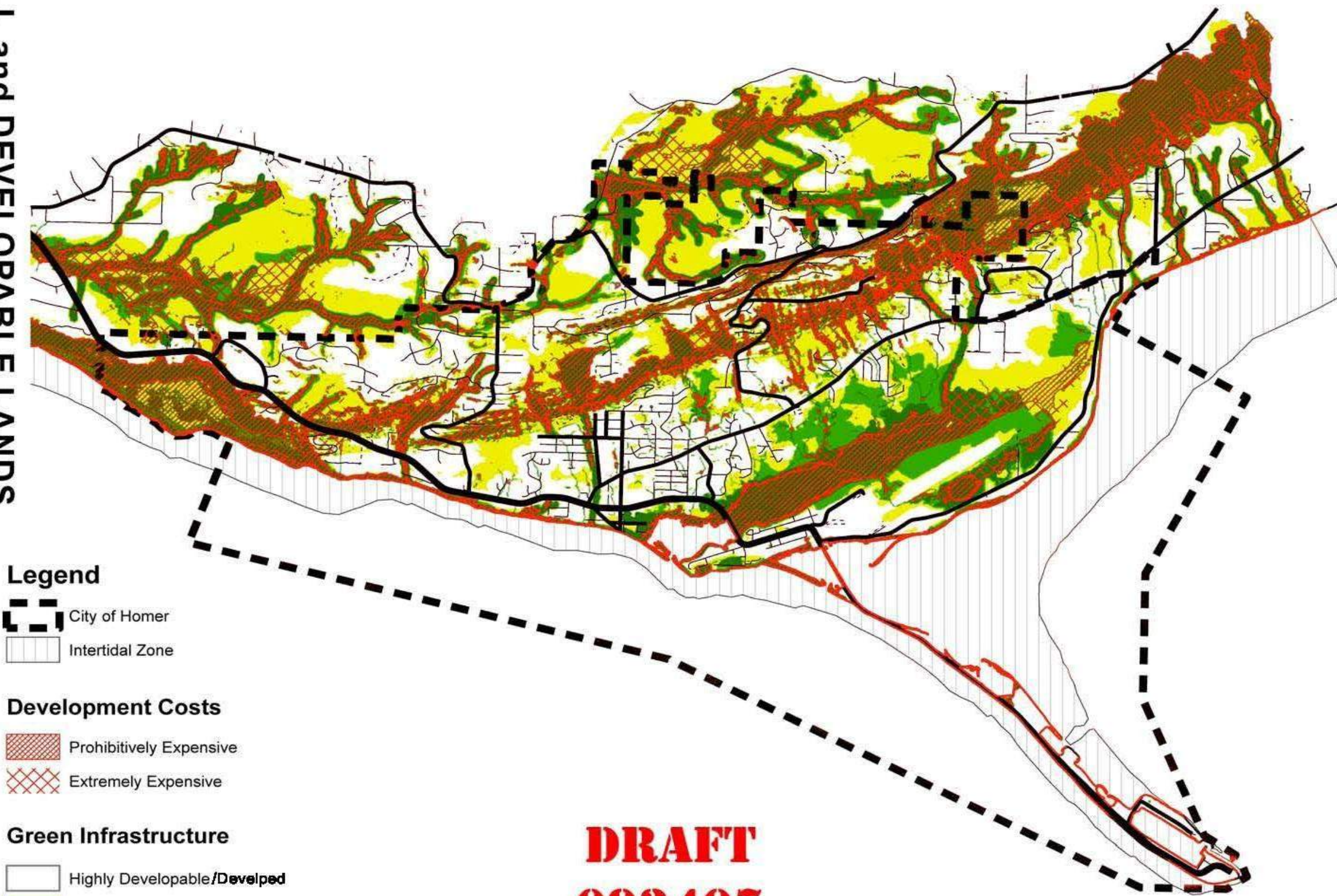
Important Green Infrastructure elements



Critical Green Infrastructure

**DRAFT**  
**092407**

# G.I. and DEVELOPABLE LANDS HOMER SUITABILITY MAP



**DRAFT  
092407**

# HOMER SUITABILITY MAPPING

## G.I. and DEVELOPABLE LANDS 2

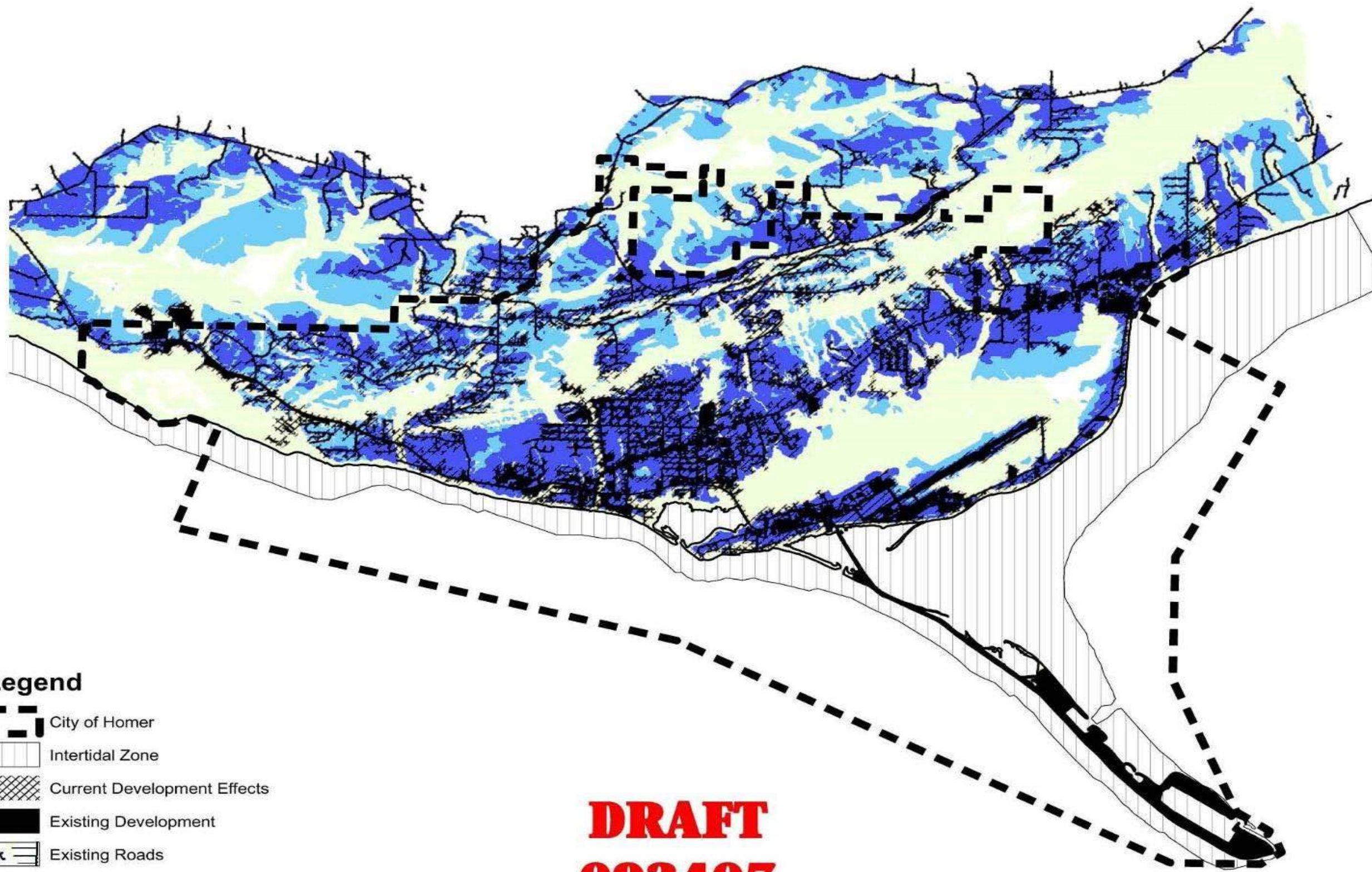


### Legend

-  City of Homer
-  Intertidal Zone
-  Current Development Effects
-  Existing Development
-  Existing Roads

### High-Value Development Lands

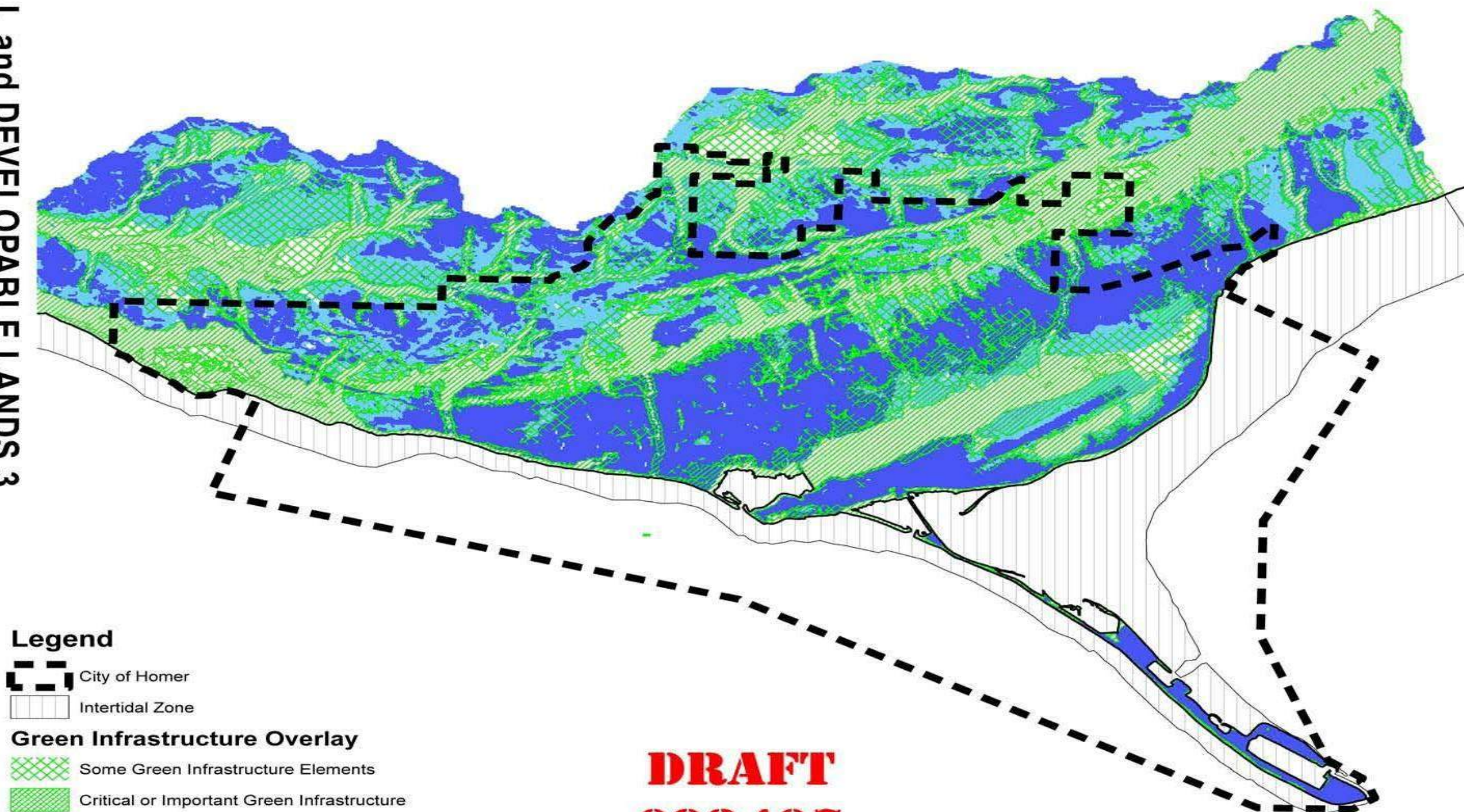
-  Moderate Value
-  High Value



**DRAFT**  
**092407**

# HOMER SUITABILITY MAPPING

## G.I. and DEVELOPABLE LANDS 3



### Legend

City of Homer

Intertidal Zone

### Green Infrastructure Overlay

Some Green Infrastructure Elements

Critical or Important Green Infrastructure

### High-Value Development Lands

Moderate Value

High Value

**DRAFT**  
**092407**



## Memorandum

TO: City of Homer Boards and Commissions  
FROM: Jenny Carroll, Special Projects & Communications Coordinator  
THROUGH: Katie Koester, City Manager  
DATE: June 14, 2017  
SUBJECT: City of Homer 2018-2023 Capital Improvement Plan (CIP)

---

Each year, the City of Homer updates its CIP. This is a six-year planning document describing capital projects which have been determined to be community priorities.

The purpose of this memo is to solicit input and recommendations from the City's advisory bodies. Your input will be forwarded to City Council with an updated draft of the CIP in September for final public comment, Council selection of Legislative priority projects and adoption.

The Legislative priorities represent the City's top five projects that will be the focus of efforts to obtain state and/or federal funding in the coming year. As expected, the State's capital budget was not funded due to Alaska's fiscal situation. However, setting community priorities still merits our attention. It helps focus attention on community needs and communicates community priorities to other potential funding sources.

I have provided the draft CIP (updated only minimally) to serve as a starting point for discussion. Substantive recommended updates and/or changes are indicated in red font. To date they include:

- Page 8) Combine Barge Mooring Facility (from mid-range projects) with the Large Vessel Haul Out Repair Facility (a Legislative priority project)
- Page 26) Promote Ramp 2 Public Restroom Upgrade from long-range project to mid-range project.
- Completed projects (at least the funding) include Boat House Pavilion and the two South Peninsula Hospital projects: Operating Room HVAC and Homer Medical Clinic Expansion. The City of Homer Public Safety Radio System Upgrade project received partial funding through a successful FEMA grant request.

The type of input the Advisory Planning Commission may choose to provide includes:

- Recommend one or more new projects to be added to the CIP.
- Recommend one or more projects to be dropped from the CIP.

- Suggest that a project scope of work be expanded, reduced, or otherwise changed.

**Please take the time to formally recommend two projects the Commission would like to see as Legislative Priorities** (either from the draft CIP, including the Legislative Request from last year, or proposed new projects, if any).

For Commissioners new to the CIP review process, I have included *Everything You Always Wanted To Know About The City of Homer Capital Improvement Plan*.

Thank you for your time and participation in this important planning process. I look forward to hearing your comments and incorporating your recommendations.



# REVIEW DRAFT

## City of Homer Capital Improvement Plan 2018-2023



F/V Time Bandit hauled out for maintenance on the Homer Spit next to Pier One Theatre.  
A haul out repair facility for large vessels is one of the priority projects on the City of Homer 2017-2022 CIP.

To be updated



# City of Homer

[www.cityofhomer-ak.gov](http://www.cityofhomer-ak.gov)

## Office of the City Manager

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[citymanager@cityofhomer-ak.gov](mailto:citymanager@cityofhomer-ak.gov)  
(p) 907-235-8121 x2222  
(f) 907-235-3148

October 10, 2016

To The Honorable Mayor and Homer City Council:

This document presents the City of Homer 2017 through 2022 Capital Improvement Plan. The CIP provides information on capital projects identified as priorities for the Homer community. Descriptions of City projects include cost and schedule information and a designation of Priority Level 1 (highest), 2, or 3. Projects to be undertaken by the State of Alaska and other non-City organizations are included in the CIP in separate sections. An overview of the financial assumptions can be found in the Appendix.

The projects included in the City of Homer's 2017-2022 CIP were compiled with input from the public, area-wide agencies, and City staff, as well as various advisory commissions serving the City of Homer.

It is the City of Homer's intent to update the CIP annually to ensure the long-range capital improvement planning stays current, as well as to determine annual legislative priorities and assist with budget development. Your assistance in the effort is much appreciated.

Sincerely,

Katie Koester  
City Manager

To be updated.



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## **Funded Projects from 2017-2022 CIP List**

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**The City of Homer is pleased to note that funding for the following projects have been identified or procured:**

- The Police Department secured FY2016 AK Division of Homeland Security and Emergency Management funds to complete two components of the City of Homer Radio Communication System Upgrades: relocating the public safety repeater on the Homer Spit and upgrading the dispatch consoles.

*The three projects below are likely to be added to the list, pending confirmation from organizations:*

- Boat House Pavilion and Plaza on Homer Spit
- SPH Homer Medical Clinic Expansion
- SPH Operating Room HVAC Replacement



## Introduction: The Capital Improvement Program

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A capital improvement plan (CIP) is a long-term guide for capital project expenditures. The CIP includes a list of capital projects a community envisions for the future, and a plan that integrates timing of expenditures with the City's annual budget. The program identifies ways a project will benefit the community, indicates the priorities assigned to different projects, and presents a target construction schedule.

A carefully prepared capital improvement plan has many uses. It can assist a community to:

- Anticipate community needs in advance, before needs become critical.
- Rank capital improvement needs in order to ensure the most important projects are given consideration for funding before less critical projects.
- Plan for maintenance and operating costs so expenses are budgeted in advance to help avoid projects that the community cannot afford.
- Provide a written description and justification for projects submitted for state funding so the legislature, governor and appropriate agencies have the information necessary to make decisions about funding capital projects.
- Provide the basis for capital projects as part of the annual budget.

A capital improvement project is one that warrants special attention in the municipal budget. Normally, public funds are not expended if the project is not listed in the CIP. A capital expenditure should be a major, nonrecurring budget item that results in a fixed asset with an anticipated life of at least two years. Projects eligible for inclusion in the City of Homer CIP have a lower cost limit of \$50,000 for City projects and \$25,000 for those proposed by non-profit organizations. Projects proposed by non-profit organizations and other non-City groups may be included in the CIP with City Council approval, but such inclusion does not indicate that the City intends to provide funding for the project.

The municipality's capital improvement plan is prepared in accordance with a planning schedule, usually adopted by City Council at the onset of the CIP process. A copy of the City of Homer CIP schedule appears in the appendix of this document.

The number of years over which capital projects are scheduled is called the capital programming period. The City of Homer's capital programming period coincides with the State's, which is a six year period. The CIP is updated annually, due to some of the projects being funded and completed within the year.

A capital improvement plan is not complete without public input. The public should be involved throughout the CIP process, including the nomination and adoption stages of the process. The City of Homer solicits input from City advisory bodies, advertises for public input during the CIP public hearing, and invites the public to participate throughout the entire process.

The City's capital improvement program integrates the City's annual budget with planning for larger projects that meet community goals. Though the CIP is a product of the City Council, the administration provides important technical support and ideas with suggestions from the public incorporated through the entire process.

**Determining project priorities:** City of Homer CIP projects are assigned a priority level of 1, 2, or 3, with 1 being the highest priority. To determine priority, the Council considers such questions as:

- Will the project correct a problem that poses a clear danger to human health and safety?
- Will the project significantly enhance City revenues or prevent significant financial loss?
- Is the project widely supported within the community?
- Has the project already been partially funded?
- Is it likely that the project will be funded only if it is identified as being of highest priority?
- Has the project been in the CIP for a long time?
- Is the project specifically recommended in other City of Homer long-range plans?
- Is the project strongly supported by one or more City advisory bodies?

Once the overall CIP list is finalized, the City Council names a subset of projects that will be the focus of efforts to obtain state and/or federal funding in the coming year. The overall CIP and the legislative priority list are approved by resolution.

# Integration of the CIP with Comprehensive Plan Goals

Each project listed in the CIP document has been evaluated for consistency with the City's goals as outlined in the Comprehensive Plan. The following goals were taken into account in project evaluation:

**Land Use:** Guide the amount and location of Homer's growth to increase the supply and diversity of housing, protect important environmental resources and community character, reduce sprawl by encouraging infill, make efficient use of infrastructure, support a healthy local economy, and help reduce global impacts including limiting greenhouse gas emissions.

**Transportation:** Address future transportation needs while considering land use, economics and aesthetics, while increasing community connectivity for vehicles, pedestrians and cyclists.

**Public Service & Facilities:** Provide public services and facilities that meet current needs while planning for the future. Develop strategies to work with community partners that provide beneficial community services outside of the scope of City government.

**Parks, Recreation & Culture:** Encourage a wide range of health-promoting recreation services and facilities, provide ready access to open space, parks, and recreation, and take pride in supporting the arts.

**Economic Vitality:** Promote strength and continued growth of Homer's economic industries including marine trades, commercial fishing, tourism, education, arts, and culture. Preserve quality of life while supporting the creation of more year-round living wage jobs.

**Energy:** Promote energy conservation, wise use of environmental resources, and development of renewable energy through the actions of local government as well as the private sector.

**Homer Spit:** Manage the land and other resources of the Spit to accommodate its natural processes, while allowing fishing, tourism, other marine-related development, and open space/recreational uses.

**Town Center:** Create a community focal point to provide for business development, instill a greater sense of pride in the downtown area, enhance mobility for all forms of transportation, and contribute to a higher quality of life.

# City of Homer State Legislative Request FY2019 Capital Budget



Homer's Port and Harbor is a major economic power for the City of Homer. The Port is a critical asset to attract new industry, create jobs, and provide a repair facility adjacent to the harbor. The Port is also a critical asset to the city to perform efficient and environmentally sound operations. The Port is a critical asset to the city to perform efficient and environmentally sound operations.

To be updated pending City Council selection of Legislative Priority projects.

City of Homer  
491 E. Pioneer Avenue  
Homer, Alaska 99603  
907-235-8121



## Legislative Request FY2019

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**City of Homer FY2019 State Legislative Priorities list  
approved by the Homer City Council  
via Resolution **17-XXX****

1. **Public Safety Building - ~~\$11,851,795~~ To be updated**
2. **Homer Large Vessel Harbor - \$111,809,700**
3. **Fire Department Fleet Management - \$1,219,500**
4. **Storm Water Master Plan - \$306,000**
5. **Large Vessel Haul Out Repair Facility - \$540,000**

**FY 2019 - DRAFT Document**



## 1. Public Safety Building, Phase 1

**Project Description & Benefit:** Homer's Police and Fire Department services are vital to the safety and health of our community. Adequate and safe working environments show respect for the public servants who provide these services, and at the same time, reduce vulnerability to emergencies and risk. A new public safety facility is needed to address safety and operational deficiencies in Homer's aging public safety facilities. Phase I of this facility will construct a new Police Station at the corner of the Sterling Highway and Pioneer Avenue (the site of the former Homer Junior High and current HERC building) and will address the following high risk design inadequacies and operational deficiencies in the current Police Station:

- no separation or protection between staff work areas and prisoner through traffic - prisoners have to pass by dispatch staff coming and going; the public service counter window is not secure either;
- a common air handling system which exposes personnel to airborne pathogen risks;
- lack of crisis cell for special needs prisoners, or a proper juvenile holding area;
- escape attempt issues due to building layout;
- lack of storage area for police evidence, equipment, and vehicles;
- lack of space for expanding and poor conditions for supporting modern electronic and communication systems causing premature equipment failure;
- flooding and water damage during heavy rains.

To be updated after new Public Safety Task Force options & recommendations and Council action.

Fully renovating the current Police Station so it complies with modern, energy efficient standards is cost-prohibitive compared with new construction. Moreover, site limits at its present location would not allow the Police Station facility to expand to accommodate current police duties and storage needs, much less allowing for growth as the community grows.

**Plans & Progress:** A Public Safety Building Review Committee formed in 2013 to oversee design and construction of a joint Public Safety Building which would have served both the Homer Police Department and the Fire Department. The City Council hired a design firm and general contractor/construction management team to see the project through construction. However, cost projections for the collocated Public Safety building led City Council to propose phasing the project in, starting first with construction of a new Homer Police Station and later proceeding with the addition of a new Fire Station. (It was determined that renovations to the current Fire Station should allow it to operate another ten years; \$80,000 of 2016's Public Safety Building design funds were re-directed toward designing Fire Station upgrades). The Public Safety Building site and architectural design ensures ability to eventually incorporate a new, collocated Fire Station and realize operational cost efficiencies.

City Council passed Ordinance 16-30(S-2)A authorizing the City to issue general obligation bonds of \$12,000,000 to finance final design and construction of Phase I, the new Police Station. While the bond question (and a 0.65% seasonal increase in sales tax to pay the debt service) was narrowly defeated by voters in the 2016 Regular City Election, need for a new police facility remains a top priority for City Council.

**Total Project Cost:** \$11,851,795

**2014-2016 (Planning/Concept Design/Public Involvement):** \$575,000 (completed)

**2017 Design:** \$687,362

**2018 (Site Preparation):** \$1,097,250

**2018-2019 (Construction Building Only):** \$8,342,515

**2018-2019 (Contingency/Inspection/Admin/Art):** \$1,724,668

**FY2018 State Request:** \$10,666,615

**(City of Homer 10% Match:** \$1,185,180)



Architectural concept for a new Police Station, which is Phase 1 of a new Homer Public Safety campus proposed for the intersection of the Sterling Highway and Pioneer Avenue.



## 2. Homer Large Vessel Harbor

**Project Description & Benefit:** This project will construct a new large vessel harbor system to the north of the existing small boat harbor in Homer harbor. It would enhance harbor capabilities by:

- Accommodating large commercial vessels (fishing vessels, work boats, landing craft, tugs, barges, etc.) outside the small boat harbor. Currently, large vessels are moored at System 4 and System 5 transient floats. Due to shortage of moorage space at the floats, large vessels are rafted two and three abreast constricting passage lanes, creating traffic congestion and overstressing the floats;
- Enabling Homer to accommodate and moor an additional 40 to 60 large commercial vessels that potentially would use Homer Harbor as a home port, but which have in the past been turned away due to lack of space;
- Providing moorage that meets the US Coast Guard's long-term mooring needs. Currently, the USCGC *Hickory* moors at the Pioneer Dock which provides inadequate protection from northeasterly storm surges. The large vessel harbor will be built to provide protected and secure moorage suitable to accommodate the cutter *Hickory* and the new line of 157' Sentinel-class fast response cutters which will be replacing the 1980's era Island-class 110-foot patrol boats.

Homer's Port and Harbor is centrally located in the Gulf of Alaska and is the gateway port to Cook Inlet, and the port of refuge for large vessels transiting Cook Inlet. The large vessel harbor will provide a regional facility to serve and support marine industry needs, and provide a place of refuge for Gulf of Alaska, Cook Inlet, and Kennedy Entrance marine traffic in event of severe weather or machinery malfunctions.

The new harbor will provide private moorings for the USCG while at the same time accommodating large deep draft commercial vessels. The proposed new harbor basin will be dredged to minus 20 feet Mean Lower Low Water (MLLW) to accommodate large commercial vessels so they will not touch bottom on the lowest tides of the year (minus 5.6 feet). It will be dredged to minus 22 feet MLLW in the entrance channel, fairway, and one side of the basin to accommodate the USCG cutters.

**Plans & Progress:** The Army Corps of Engineers completed a reconnaissance study in 2004 that indicated Federal interest in having a new harbor in Homer; at that time, though, subsequent analysis found that the cost/benefit ratio was too low for the Corps to recommend the project. Since initiating conceptual design work for the Port & Harbor's Deep Water Dock/Cruise Ship Expansion project, however, customer interviews indicate that the need for industrial moorage has only increased since the reconnaissance study was conducted. The City of Homer has requested a technical report from the Corps and established a study team to complete a concept design for the purpose of building support for the large vessel harbor and seeking funding sources.

**Total Project Cost:** \$124,233,000  
**Design and Permitting:** \$10,258,000  
**Breakwater Construction and Dredging:** \$90,275,000  
**Inner Harbor Improvements:** \$23,700,000

**FY2018 State Request:** \$10,258,000  
 (City of Homer 10% Match: \$1,025,800)



This large vessel harbor design adds a new basin with its own entrance adjacent to the existing Small Boat Harbor. It relieves large vessel congestion in the small boat harbor and provides secure moorage compatible with the USCG's new line of fast response cutters .



### 3. Fire Department Fleet Management

**Project Description & Benefit:** The Homer Volunteer Fire Department is in need of a number of vehicle upgrades to be able to safely and efficiently protect the lives and property of Homer residents.

**Quint (Ladder Truck):** Adding an aerial truck to HVFD's fleet will greatly enhance the City of Homer's firefighting capability. Over time, as Homer's population has grown, so has the size and complexity of its buildings. West Homer Elementary School, the Islands and Ocean Visitor Center, Kevin Bell Ice Arena, and South Peninsula Hospital Expansion are examples of large footprint, two story plus buildings where fighting fire from the ground or from ground ladders (the tallest of HVFD's is only 35') is no longer safe or practical. These locations require the use of elevated hose streams to fight fire effectively. Currently, HVFD is only able to provide elevated hose streams from ground ladders, which severely limits the application of water and endangers the lives of firefighters. Aerial apparatus allow for application of water to the interior of a building without placing firefighters in immediate danger. They also allow for the rescue of people trapped in upper stories or on rooftops by fire or other incidents that impede the use of interior stairways. In addition to increasing firefighting capability to protect large public buildings, an aerial truck will potentially lower insurance rates for the community.

**Brush/Wildland Firefighting Truck:** The Department's existing brush truck is a Ford F-350 that was converted to a brush unit in-house in 1990 by adding a manufactured tank, portable pump and a home-built tool storage compartment. The existing truck is severely deficient due to age-related wear and lack of capacity to handle the weight of fire fighting equipment. A new Ford F-450/550 4x4 with wildland pump unit, tank, and tool compartments will provide critical and reliable service. In addition to fighting wildfires, the truck provides fire protection to areas inaccessible with traditional large fire apparatus due to poor road conditions during winter and break-up.

**Harbor Fire Cart Replacement:** The Homer Port & Harbor is outfitted with seven motorized fire carts uniquely capable of responding to vessel fires located on the harbor's float system. These full-response fire apparatus are custom-made mini mobile fire engines capable of delivering AFFF foam to two attack lines at the same time. Because of Alaska's special conditions (harsh weather, extreme tides and the size of vessels) there are no pre-made, off-the-shelf fire apparatus that fully meets Homer's Port & Harbor response needs. On multiple occasions they have saved vessels and prevented the costly spread of fire in the small boat harbor. Unfortunately, the fire carts are over 20 years old. Many are failing due to the harsh marine environment and age, despite regular monthly and annual maintenance. This project would purchase the components necessary to refurbish and upgrade the seven fire carts, extending their functional life another twenty years.

**Plans and Progress:** Port & Harbor maintenance personnel constructed a prototype for a refurbished model two years ago. It passed operational tests conducted by the Homer Volunteer Fire Department and is currently in use at the Port & Harbor. Port and Harbor maintenance personnel will refurbish seven motorized fire cart apparatus utilizing both newly acquired components and old components that can be salvaged from the existing fire carts.

**Total Project Cost:** \$1,355,000

Quint Ladder Truck: \$1,000,000

Brush/Wildland Firefighting Truck: \$150,000

Harbor Fire Cart Replacement: \$205,000

**State Request FY2018: \$1,219,500**

(City of Homer 10% Match: \$135,500)



A ladder truck like the one shown here will increase firefighting capability, firefighter safety and potentially reduce insurance rates for homeowners.



## 4. Storm Water Master Plan

**Project Description & Benefit:** The City of Homer has an outdated storm water master plan. The current plan was prepared in the 1980's, projecting only basin runoff flows. The existing storm drainage system is expanding and a comprehensive storm water plan is needed to more effectively plan and construct storm water infrastructure, including sedimentation/detention facilities, snow storage and water quality improvements.

A new master plan will outline how the City can:

- Identify current and future storm runoff flows from individual drainage basins within the community.
- Identify infrastructure needed to effectively collect, transmit, treat, and discharge surface water runoff to Kachemak Bay.
- Provide a staged approach to constructing needed infrastructure to serve an expanding/developing community
- Establish pipe sizing, detention basin volumes, and cost estimates.
- Mitigate storm water runoff through the use of a wide variety of gray and green infrastructure practices and technologies that improve the quality and reduce the quantity of runoff discharging directly to receiving waters.
- Develop public education programs targeting specific stream degradation from storm water runoff.
- Provide storm water management systems and practices including collection, storage, conveyance and treatment structures that are components of a comprehensive plan to preserve or restore natural/stable in-stream hydrology.
- Identify projects that incorporate green infrastructure to manage, treat or reduce storm water discharges and urban non-point source runoff to the critical wildlife habitat of Kachemak Bay.

**Total Project Cost:** \$340,000

**State Request FY2018: \$306,000**

(City of Homer 10% Match: \$34,000)



A master plan is needed to address storm water management issues.



## 5. Large Vessel Haul Out Repair Facility

**Staff Recommendation: combine Haul Out Repair and Barge Mooring Facility into one project. See page 8.**

**Project Description & Benefit:** The Large Vessel Haul Out Repair Facility will consist of a haul out/launch ramp and site improvements to the upland portion of Lot TR 1A (east of the Nick Dudiak Fishing Lagoon). The site has accommodated approximately six to eight vessels (depending on size) with ample workspace. Upland improvements including a large vessel wash down pad (which can also be used by recreational/sport boats), lighting, electrical pedestals and a drainage/water management system will facilitate local, efficient and environmentally sound vessel repairs.

Because of the lack of facilities, large vessels currently have to travel to perform repairs which could otherwise be completed here in Homer. The project is a response to requests from vessel owners/managers seeking safe moorage and uplands haul out area for large shallow draft vessels. Availability of a haul out/repair facility in Homer benefits the local fleet of larger vessels, the local marine trades businesses and the City of Homer. The Large Vessel Repair Facility will operate year round. Vessel owners may arrange with contractors for required services, or perform the work themselves.

**Plans & Progress:** Project development is being carried out in phases. Phase 1, initiated in 2014, included formation of a Large Vessel Haul Out Task Force to assist with site selection and completion of Best Management Practices, vessel owner use agreements, and vendor use agreements for the facility. Staff have additionally completed a Stormwater Pollution Prevention Plan (SWPPP) with the Alaska Department of Environmental Conservation for a portion of lot TR-1-A. Since completing these basic requirements the haul out area has become a popular repair site option for some of our large vessel owners. This further justifies additional investments to improve our ability to serve these customers and bring more of these customers to Homer

Phase 2 will complete the design for the barge mooring facility and haul out ramp. Funding for Phase 2 is already in place. Phase 3 is construction of the Barge Mooring Facility, including the upland Haul Out Repair facilities (the wash down pad and drainage/water management system according to the SWPPP and electrical fixtures.)

**Total Project Cost:** \$600,000

**2016:** Phase 1 - Pre-Development (completed as part of Barge Mooring Facility preliminary planning & design work)

**2017:** Phase 2 - Design/Engineering/Permitting: \$105,000

**2019:** Phase 3 - Construction: \$495,000

**State Request FY2018: \$540,000**

(City of Homer 10% Match: \$60,000)



The Sesok and Surfbird hauled out for repairs on Homer Spit Lot TR 1 A next to Pier One Theatre.



## Homer Barge Mooring & Large Vessel Haul Out Repair Facility

**Staff Recommendation: combine Haul Out Repair Facility and the Barge Mooring Facility (a mid-range project) into one. See justification below.**

**Project Description & Benefit:** This project provides safe moorage and an associated uplands haul out repair facility for large shallow draft vessels. This improvement supports the marine transportation needs of central and western Alaska. Large vessels are currently turned away from the harbor's basin due to lack of moorage space; because of the lack of facilities, vessels currently have to travel to perform annually required maintenance and repairs which could otherwise be completed here in Homer. The facility benefits the local fleet of larger vessels and local marine trades businesses, and can accommodate the growing freight needs of existing Homer businesses.

The mooring facility, proposed along the beachfront of Lot TR 1A (between the Nick Dudiak Fishing Lagoon and Freight Dock Road on the west side of the harbor) will securely moor up to six barges in the tidal zone, with the bow end pulled tight to the beach and with access to pedestals delivering 440v electrical power.

The mooring facility will also feature a ramp for hauling vessels out onto dry ground above the high tide line for maintenance and minor repairs. A dead-man anchoring system will be provided for winching vessels up and down the ramp. Upland improvements will include a large vessel wash down pad (which can also be used by recreational/sport boats), electrical pedestals, lighting, security fencing and a drainage/water management system to facilitate local, efficient and environmentally sound vessel repairs. This site has accommodated approximately six to eight vessels (depending on size) with ample workspace; it will offer barges the ability to complete their required annual maintenance at the uplands repair facility while wintering over. The facility will also benefit the region's large fleet of commercial fishing vessels.

**Plans & Progress:** Project development is being carried out in phases. Phase 1, initiated in 2014, consisted of forming a Large Vessel Haul Out Task Force to assist with site selection and completion of Best Management Practices, vessel owner use agreements, and vendor use agreements. Staff additionally completed a Stormwater Pollution Prevention Plan (SWPPP) with the Alaska Department of Environmental Conservation for a portion of lot TR-1-A. Since completing these basic requirements the haul out area has become a popular repair site option for some of our large vessel owners. This further justifies additional investments to improve our ability to serve these customers and bring more of these customers to Homer

Phase 2 will complete the design for the barge mooring facility and haul out ramp and acquire permits. Funding for Phase 2 is already in place; completion of Phase 2 is expected September 2017. Phase 3 is construction starting with the Barge Mooring Facility and ramp then progressing to the upland improvements.

**Total Project Cost:** \$4,767,500

**2016:** Phase 1 - Pre-Development (completed as part of Barge Mooring Facility preliminary planning & design work)

**2017:** Phase 2 - Design/Engineering/Permitting: \$312,000 (funding secured)

**2018:** Phase 3 - Construction: \$4,456,500

**Port & Harbor and Public Works Departments recommend combining the Barge Mooring Facility (a mid-range project) with Large Vessel Haul Out Repair Facility (a Legislative Priority project). The two projects are related in that the barge mooring facility provides the ramp and dead-man anchoring/winch system for hauling vessels to the repair facility. The combined project was submitted to the EDA and was ranked the Kenai Peninsula's #1 priority project for potential Federal infrastructure funding. It will also be submitted as one of Homer's three municipal capital projects (requested by Gov Walker's administration) for consideration for this federal infrastructure funding program.**



# Mid-Range Projects

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## Part 2: Mid-Range Projects

- Local Roads .....10
- Parks and Recreation .....14
- Port and Harbor .....23
- Public Safety .....33
- Public Works .....36

FY 2019 - DRAFT Document



## Local Roads

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- **East to West Transportation Corridor .....10**
- **Land Acquisition for New Roads .....11**
- **Heath Street - Pioneer to Anderson .....12**



## East to West Transportation Corridor

**Project Description & Benefit:** Currently the only way for drivers to get through town is via Pioneer Avenue or the Sterling Highway. Extending Bartlett Street, acquiring and upgrading Waddell Way and putting a road through Town Center provides an alternate east - west route for traffic, easing congestion and allowing drivers to more quickly and efficiently get to their desired destination. This project fulfills a major objective of the City of Homer's 2005 Transportation Plan.

Building a road through Town Center, 30 acres of undeveloped land in the heart of Homer is the first step in opening up this prime real estate. The Homer Comprehensive Plan, Town Center Development Plan and Comprehensive Economic Development Strategy all call for careful development of Town Center. The roads will be built to urban road standards and include such amenities as sidewalks, storm drains, and street lighting. Development on newly opened lots will help grow Homer's downtown business sector.

**Plans & Progress:** The City has purchased a lot for the Bartlett Street extension. The first leg of the east to west transportation corridor, Waddell Way, was completed in 2016 with assistance of an FY15 State Capital Grant. The City dedicates a percentage of sales tax to the Homer Area Roads and Trails (HART) fund for road improvement projects and has pledged over \$2.1 million from the fund as a match for this project.

**Total Project Cost:** \$7,659,000

2019 (Land Acquisition): \$1,250,000

2020 (Design): \$543,000

2021 (Construction): \$5,866,000

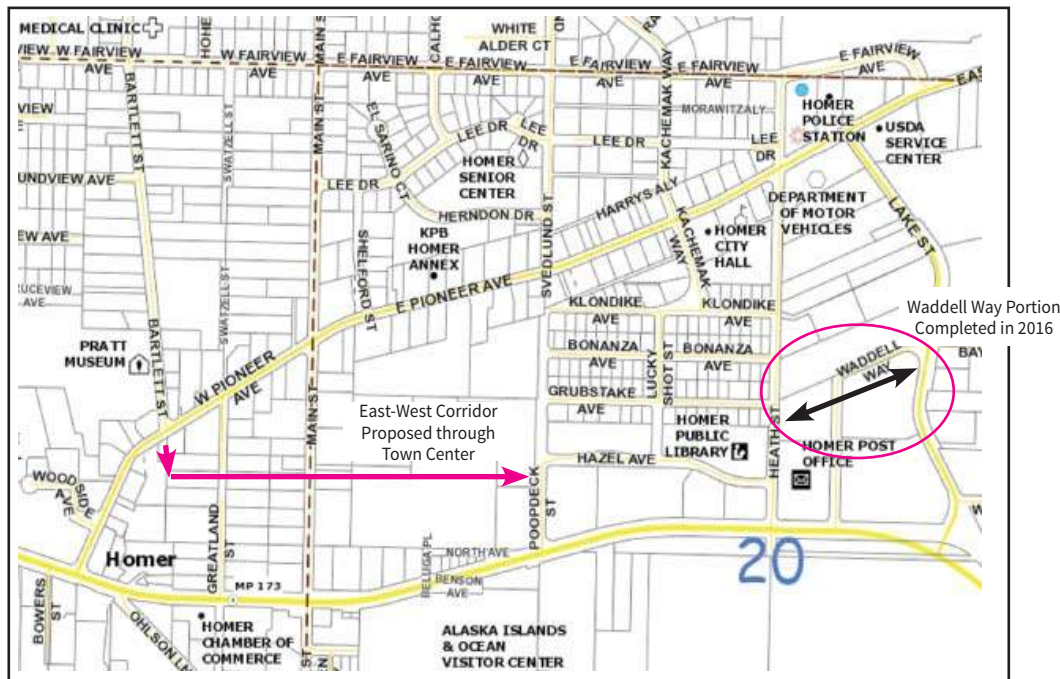
2022 (Inspection & Contingency): \$1,086,000

**State Request FY2016: \$4,939,250**

(City of Homer 25% Match: \$2,114,750)

(Waddell Way FY15 State Grant: \$1,405,000 completed)

**Priority Level: 1**



Map showing proposed extension of Bartlett Street and proposed east-west street through Town Center.



## Land Acquisition for New Roads

**Project Description & Benefit:** This project will help meet current and future transportation needs by acquiring specific land parcels and rights of way to extend three local roads. It will improve traffic flow in Homer by providing alternate connections between different sectors of town.

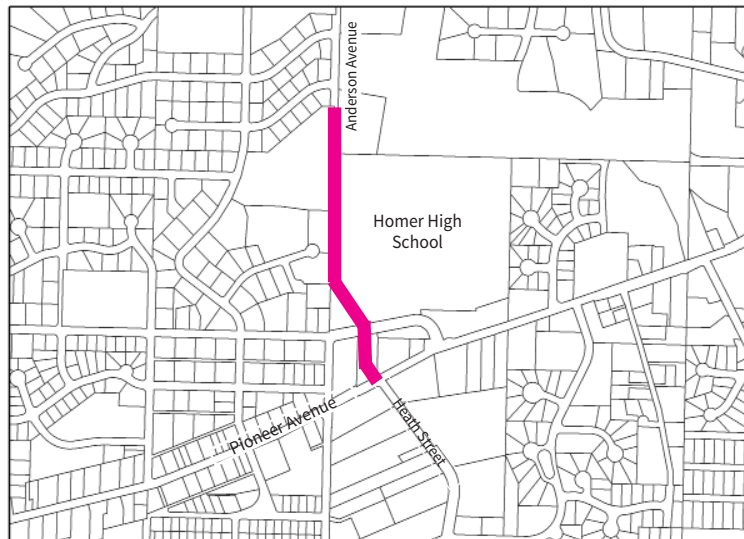
- Lake/Heath Street to Anderson Avenue
- Poopdeck Street extension north to Pioneer Avenue
- Early Spring Street extension north to East End Road

**Plans & Progress:** All three road projects are recommended in the 2005 Homer Area Transportation Plan.

**Total Project Cost:** \$2,200,000

**Schedule:** 2018-2020

**Priority Level:** 1



Heath Street to Anderson Avenue.



Poopdeck Street to Pioneer Avenue.



Early Spring Street to East End Road.



## Heath Street Extension: Pioneer to Anderson

FY 2019 - DRAFT Document

**Project Description & Benefit:** This project provides for the design and construction of a road connection from East End Road to Anderson Street. The project will address concerns raised in Alaska Department of Transportation and Public Facilities (ADOT&PF) 2005 Homer Area Transportation Plan regarding traffic flow and intersection congestion where Pioneer Avenue intersects Heath Street and Lake Street. Conditions should be improved by providing alternate connections between different sectors of town. The City of Homer will work with ADOT&PF engineers to determine the best route (extension of Heath Street vs. extension of Lake Street) to provide safer and more effective circulation, improve emergency access to and from the high school, provide for pedestrian access from the high school to a hillside trail system, and reduce congestion at existing intersections.

**Plans & Progress:** The improvement is recommended in the 2005 Homer Area Transportation Plan and would implement recommendations of the 2005 Homer Intersections Planning Study (ADOT&PF). The City of Homer has committed to funding 50% of the project with Homer Area Roads and Trails (HART) funds.

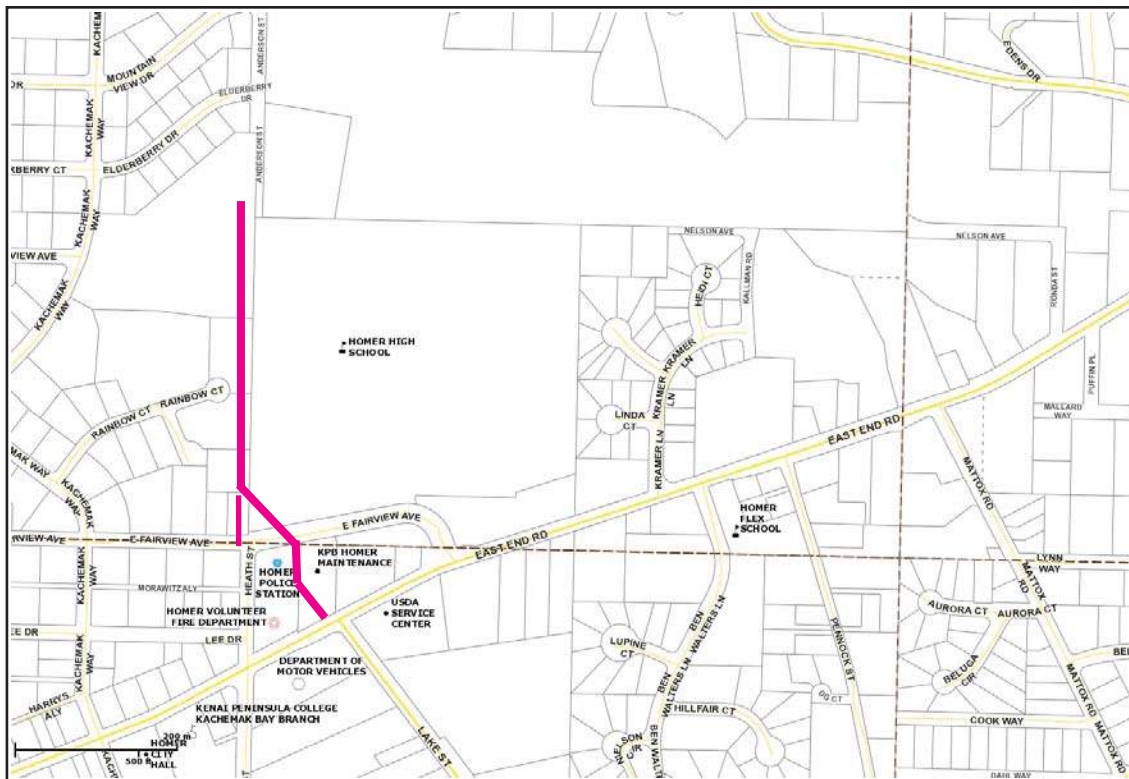
**Total Project Cost:** \$4,500,000

**Schedule:**

2020 (Design): \$500,000

2023 (Construction): \$4,000,000

**Priority Level:** 3



Connecting East End Road to Anderson Street improves emergency access to and from the high school and reduces congestion at existing intersections.



## **Parks, Art, Recreation & Culture**

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- **Baycrest Overlook Gateway Project .....14**
- **Bayview Park Restoration Project .....15**
- **Ben Walters Park Improvements, Phase 2 .....16**
- **Homer Spit Trailhead Restroom .....17**
- **Jack Gist Park Improvements, Phase 2 .....18**
- **Karen Hornaday Park Improvements, Phase 2.....19**
- **Main Street Sidewalk Facility: Pioneer Avenue North .20**
- **Multi-Use Community Center, Phase 1 .....21**



## Baycrest Overlook Gateway Project

FY 2019 - DRAFT Document

**Project Description & Benefit:** When you drive to Homer on the Sterling Highway, it is hard to resist pulling over at the Baycrest Hill Overlook, even if you have been there before. The overlook (constructed in the 1990's by visionaries at Alaska Department of Transportation and Public Facilities during a Sterling Highway reconstruction) has become the primary entrance to Homer. The first experience of that Baycrest view is cited by many residents as the primary reason for deciding to settle in Homer.

Baycrest Overlook is one of the major sites in Homer's Gateway Project, which entails enhancing visitor and resident experiences at the entrances to Homer. The other gateways are the Homer Airport and the Homer Port. Goals for improving the overlook gateway include welcoming residents and visitors in a comfortable setting without detracting from the view, instilling stewardship and inspiring visitors to learn about the diversity of Kachemak Bay and other potential experiences awaiting those just arriving in Homer or returning home.

Gateway improvements include overlook parking lot paving, landscaping, benches and picnic tables to enhance the visitor experience and comfort. Updated interpretive signage will tell the story of Homer and the surrounding communities and highlight the phenomenal natural resources of Kachemak Bay. Improvements to the overlook will welcome everyone, orient visitors to the natural landscape and community and help encourage commerce. Benches and picnic tables allow travelers a comfortable place to linger, rest and enjoy the spectacular setting.

**Plans & Progress:** The first Gateway Project began in 2009 when a collaborative effort (involving the City of Homer, Alaska State Parks, National Park Service, Kachemak Research Reserve and U.S. Fish and Wildlife Service) created a beautiful diorama in Homer's airport terminal highlighting the wealth of public and private lands available to everyone who comes to Kachemak Bay.

This group plus the Alaska Department of Fish and Game, Alaska Department of Transportation, Pratt Museum, Homer Chamber of Commerce, Kachemak Bay Conservation Society and Homer Garden Club are working on the Baycrest Overlook Gateway Project. The State and the City of Homer spent \$6,000 in 2013 to produce the Baycrest Overlook Interpretive Plan. The Plan included public comment meetings, design, development and locations for welcome and interpretive signage; it was officially adopted by Homer City Council in 2013. In 2016, Homer's Chamber of Commerce placed a welcome informational kiosk featuring brochures of Chamber-member businesses.

The project will consist of three phases:

Interpretive signage, benches and picnic areas

Enhanced landscaping

New restrooms and paving upgrades.

**Total Project Cost:** \$262,000

2020 (Preliminary Design): \$6,000

2021 (Construction): \$256,000

Signage/Benches: \$50,000

Landscaping: \$25,000;

Restrooms and Paving: \$181,000

**Priority Level:** 3



Baycrest Overlook is very often the first stop and introduction to Homer for many visitors. Interpretive signs need revamping to address the local area. The most prominent interpretive feature informs visitors about an obscure historic gold exploration expedition gone wrong on the Kenai Peninsula.



## Bayview Park Restoration

**Project Description & Benefit:** Bayview Park is a small, relatively quiet fenced neighborhood park at the top of Main Street. The goal of this project is to improve the accessibility and safety of the Park and its playground elements with a focus on making the park more user-friendly to young children (infant-toddler-preschool age) and for children and parents/caregivers with disabilities or mobility issues.

Over the last five years, thanks to a dedicated group of volunteers comprising the Playspaces Work Group of Homer's Early Childhood Coalition, some improvements (adding additional play features such as an embankment slide, log steps, an alder fort and boulders) have been started at the park. Homer's Early Childhood Coalition continues to adopt this little park and works to complete elements included in the Park's Master Plan. In 2014, they completed an ADA accessible pathway and made temporary repairs to the perimeter fence. They are currently working to replace the fence, add new play equipment and extend accessible pathway to all play features.

- **Summer 2018:** Replace existing white picket fence with a wood frame-chain link fence to improve the stability and durability of the fence (current fence is in constant need of repair). Parents and caregivers appreciate having a fence as it provides a level of safety for young children around the busy roads and ditches surrounding the park.
- **Summer 2018-19:** Upgrade ground cover to playground standards, replace jungle gym, add additional swing port, and extend ADA trail to new elements as needed. The goal is to provide new playground elements that are designed for younger/toddler age and to have some accessible for children with disabilities.

**Plans & Progress:** In 2011 Homer Early Childhood Coalition raised money and funded a new slide and boulders that were installed by the City of Homer. Several parents built and installed stepping logs and 2 small "bridges". In 2013 Homer Early Childhood Coalition coordinated with Corvus Design to meet with local families and children for project ideas and create a master plan with cost estimates. \$5,347.76 was raised to pay for design costs and install new play elements. ADA parking and access trail improvements were completed in 2014 utilizing in-kind donations of equipment and labor and an additional \$5,118 in fundraising dollars.

Homer Early Childhood Coalition Playspaces Work Group have developed a fundraising plan to raise additional funds through grant writing, community donations and in-kind donations of supplies, equipment, and labor. The group meets regularly to discuss design plans and fundraising.

**Total Project Cost:** \$189,974

**Schedule:** 2019

**Priority Level:** 2



Though charming, the white picket fence that surrounds Bayview Park is in need of constant repair. A more practical chain length fence is needed to keep young children out of roads and ditches.



## Ben Walters Park Improvements, Phase 2

**Project Description & Benefit:** Ben Walters Park comprises 2.5 acres on the shore of Beluga Lake, near the intersection of Lake Street and the Sterling Highway. With its central location, proximity to McDonalds restaurant, and access to the lake for winter and summer recreation, it is one of Homer's most frequently visited parks. Phase 2 will enlarge the parking area and renovate the picnic shelter that has become worn with heavy use over the years.

**Plans & Progress:** Phase 1 of the park improvement project, replacing the dock, was completed in 2009. Since then the Kachemak Bay Rotary Club has adopted the park under the City of Homer's Adopt-a-Park Program. They have made improvements such as painting the restrooms, installing a bench, resetting the posts and tending flower beds in the summer months.

**Total Project Cost:** \$250,000

**Schedule:** 2019

**Priority Level:** 2



Improvements are needed at Ben Walters Park including enlarging the parking lot and renovating the shelter.

FY 2019 - DRAFT Document



## Homer Spit Trailhead Restroom

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**Project Description & Benefit:** The parking lot at the intersection of the Ocean Drive bike path and Homer Spit Trail gets heavy use year round. The Spit trail is a popular spot for biking, running, walking, and roller blading. Parents bring their young children to ride bikes because the trail is relatively flat and has few dangerous intersections. A restroom would be heavily used by recreationalists and commuters using both trails.

**Total Project Cost:** \$295,000

**Schedule:** 2020

**Priority Level:** 3



The parking lot at the Spit trail head full of cars on a sunny day.



## Jack Gist Park Improvements, Phase 2

**Project Description & Benefit:** Jack Gist Park has been in development since 1998 on 12.4 acres of land donated to the City of Homer by a private landowner. As originally envisioned by the Jack Gist Recreational Park Association, this parcel has been developed primarily for softball fields. It also features a disc golf course.

The proposed project will complete Phase 2 by improving drainage around the upper ball field, constructing a concession stand/equipment storage building adjacent to the softball fields, and developing an irrigation system utilizing a stream on the property in conjunction with a cistern. Phase 3 will provide potable water (water main extension), construct a plumbed restroom, and acquire land for soccer fields.

**Plans & Progress:** Phase 1 of this project was completed in 2011 after a five year period of incremental improvements. In 2005-2006, a road was constructed to Jack Gist Park from East End Road, a 70-space gravel parking area was created, and three softball fields were constructed including fencing, dugouts, and backstops. In 2008, bleachers were installed at all three softball fields. In 2009, three infields were resurfaced. In 2010, with volunteer help, topsoil was spread and seeded on two of the three fields and the parking area was improved and expanded. 2011 saw improvements to the third ball field: drainage improvements on the outside perimeter (right and left field lines), imported material to improve the infield and topsoil and seeding to improve the outfield.

**Total Project Cost:** \$160,000

Drainage: \$50,000

Concession Stand and Equipment Storage: \$75,000

Irrigation System: \$35,000

**Schedule:** 2019-2020

**Priority Level:** 2



One of the new softball fields at Jack Gist Park

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## Karen Hornaday Park Improvements, Phase 2

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**Project Description & Benefit:** Homer's popular Karen Hornaday Park encompasses baseball fields, a day use/ picnic area, a playground, a campground, and a creek on almost 40 acres. It is also used to host community events such as the Highland Games. The Karen Hornaday Park Master Plan, updated and approved in 2009, sets forth goals and objectives to be accomplished over a 10-year period.

Phase 2 priorities focus on safe and inclusive access to the park and its essential facilities. The road to access the park runs between the park and the parking lot, requiring kids to have to cross in front of traffic to get to the park's attractions. Woodard Creek is one of the jewels of Karen Hornaday Park but gets little attention because there is no convenient way to access it. A trail along the creek would allow people to enjoy the City's only creek.

Phase 2 will address these safety and accessibility priorities by

- (1) Constructing ADA accessible trail along Fairview Avenue as an approach to an eventual Woodard Creek Trail;
- (2) relocating the park access road towards the easterly border of the park and relocating the parking lots to the westerly side of the new road, between the road and the park. Improvements will comply with the 2010 Americans with Disabilities Act for park access and include paving, striping, signage, informational kiosk and landscaping.

**Plans & Progress:** The Alaska Legislature appropriated \$250,000 for park improvements in FY 2011. This money, together with City funds and fundraising by HoPP (an independent group organized to make playground improvements), helped complete Phase 1: drainage improvements, ballfield improvements, new playground, new day use area and northern parking lot improvements. The City received a Land and Water Conservation Fund (LWCF) grant for campground improvements and development of a new day use area between the two ball fields which was completed in 2014. The City spent \$25,000 on preliminary engineering for moving the park access road, one of the goals of Phase 2. HART fund here? An eventual Phase 3 will replace the current aging bathroom facility and address handicap accessibility and ADA improvements within the playground.

**Total Project Cost:** \$948,569

Woodard Creek Access Trail

**Schedule:** 2018 - 2019

**Priority Level:** 2



The road into Karen Hornaday Park is between the park and the parking lot, requiring children to have to cross traffic to get to the park's attractions.



## Main Street Sidewalk Facility: Pioneer Avenue North

**Project Description and Benefit:** This project will provide ADA-compliant sidewalks, curb and gutter on Main Street from Pioneer Avenue north to Bayview Park.

Main Street is Homer's primary north-south corridor extending from Bayveiw Avenue (near the hospital) to Ohlson Lane (near Bishop's Beach); it crosses Homer's primary east-west thoroughfares, Pioneer Avenue and the Sterling Highway. It provides access to residential neighborhoods, South Peninsula Hospital and Bayview Park, yet has no sidewalks, making pedestrian travel unpleasant and hazardous. Sidewalks on this busy street will provide pedestrian safety, accessibility and enhance the quality of life for residents and visitors alike.

**Plans and Progress:** The need for Main Street sidewalks was first articulated in Homer's 2004 Non-Motorized Transportation and Trail Plan. Main Street sidewalk improvements for the State-owned portion of Main Street (from Pioneer Avenue south) have long been a project in the CIP. Completing a sidewalk facility on the City-owned portion from Pioneer Avenue northward would provide a continuous, safe pedestrian route through the heart of Homer.

The overall project is conceived as sidewalks on both sides of Main Street from Pioneer Avenue to Bayview Park. A phased approach is suggested, beginning with sidewalk on the west side of Main Street only, first to Fairview Avenue, then to Bayview Park.

**Plans & Progress:** A engineer's conceptual cost estimate for both phases of the project has been developed.

**Total Project Cost:** \$943,055

Phase I: \$422,604

Phase II: \$520,451

**Schedule:** 2020

**Priority Level:** 3



Pedestrian safety along Main Street, one of Homer's primary north-south roads, would benefit from a sidewalk facility.

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## Multi-Use Community Center, Phase 1

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**Project Description & Benefit:** This project would be the first phase in designing and constructing a Multi-Use Community Center to adequately serve the social, recreation, cultural, and educational needs of the Homer community. Years of growing numbers of requests to Parks and Recreation for access to indoor facilities highlights the need for this project. The 2015 City of Homer Parks, Art, Recreation and Culture (PARC) Needs Assessment validated this perceived need. Incorporating an extensive public input process, the PARC Needs Assessment reflects the community's high priority on community access to public recreational and educational spaces and identifies a community center as a significant future investment for the community.

The community center is currently broadly envisioned as a comprehensive multi-generational facility that offers something for people of all ages. Public input identified a general-purpose gymnasium and a multi-purpose space for safe walking/running, dance, martial arts, performing arts, community events and dedicated space for youth as priority features. In addition to social, health and quality of life benefits, a multi-use center provides considerable opportunity for positive economic impact to the community. Direct impacts include new revenues from admission and rental fees generated by hosting regional or statewide conferences, weddings and/or other private rentals. Participants and spectators visiting Homer for these events will also indirectly benefit the community through their use of restaurants, retail shops, lodging, transportation and other hospitality industry services. This facility would draw additional year round programs and events to Homer, contribute to the local economy by attracting additional visitors and businesses, and would be an incentive for families to relocate to Homer.

The PARC Needs Assessment included a statistically valid survey question asking the community's interest for constructing and funding an \$18 million facility. 30% of respondents agreed with the statement that this facility is a priority in the next five years; an additional 27% placed it as a priority in the next five to ten years. The success of this project requires sound capital and ongoing operations funding.

**Plans & Progress:** The first step is to complete a reconnaissance or a preliminary research of the size and type of facility, develop conceptual floor plans and site plans, estimate total construction cost and ongoing operational funding mechanisms.

**Total Project Cost:** \$500,000

**Schedule:** 2019

**Priority Level:** 2



The City of Unalaska's Community Center is the hub of community activities. Centrally located, the Community Center is widely used by both residents and visitors. It has everything from a cardio and weight room to music and art areas.



## Port and Harbor

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- ~~Barge Mooring Facility, Phase 1.....24~~  
~~(P&H recommend combining with Haul Out Repair Facility, a Legislative Priority Project. See p. 8 for justification.)~~
- Deep Water/Cruise Ship Dock Expansion, Phase 1 .....25
- Harbor Ramp 2 Public Restroom Upgrade .....26  
(P&H recommend move to mid-range from long-range)
- Harbor Ramp 8 Public Restroom .....27
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- Seafarers Memorial Parking Expansion .....29
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~~(probably move to completed list?)~~

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## Barge Mooring Facility, Phase I

**Staff Recommendation: combine Barge Mooring and Haul Out Repair Facility into one project. See page 8.**

**Project Description & Benefit:** Constructing a barge mooring facility will meet the growing freight needs of existing Homer businesses and attract additional large vessel business. The mooring facility, proposed along the beachfront of Lot TR 1A (between the Nick Dudiak Fishing Lagoon and Freight Dock Road on the west side of the harbor) could accommodate up to four, 70' x 250' barges located side-by-side. The barges would be moored in the tidal zone, with the bow end pulled tight to the beach. The barges would typically be moored at high tide with the intent that a portion of the barge would be 'dry' as the tide recedes.

Phase I of the mooring facility will include dead-man anchors along the beach, dolphins (constructed of driven piles) extending out into the water perpendicular to the beach, and mooring points (buoys or dolphins) astern of the barges. The facility would also feature a ramp that would enable barges to be hauled out onto dry ground above the high tide line to facilitate maintenance and minor repairs. The ramp would be set at a slope of 5 degrees. A dead-man anchoring system would be provided to allow the barge operators to winch the barge up and down the ramp. Phase II will install electrical pedestals delivering 440v electrical power to each mooring location.

This proposed improvement will increase the Port & Harbor's moorage capacity by providing secure moorings for vessels that cannot currently be accommodated within the harbor's basin due to lack of space. The Port and Harbor report demand for this mooring facility; creating winter storage supplies a valuable service to our marine industry and creates the opportunity for additional harbor moorage revenue by being able to move landing craft off the harbor's float system. It would also support (as well as serve as a draw) to the large vessel repair facility proposed as an upland improvement to the area directly above the Barge Mooring Facility.

**Plans & Progress:** The Barge Mooring Facility is being developed in two phases. Phase I will include the haul out ramp and barge mooring stations. Phase II will include electrical service pedestals for each station. Phase I Design/Engineering/Permitting/Geotechnical for Phase I is currently underway. Staff are working with Nelson Engineering to complete design work for the facility.

**Total Project Cost:** \$1,958,976

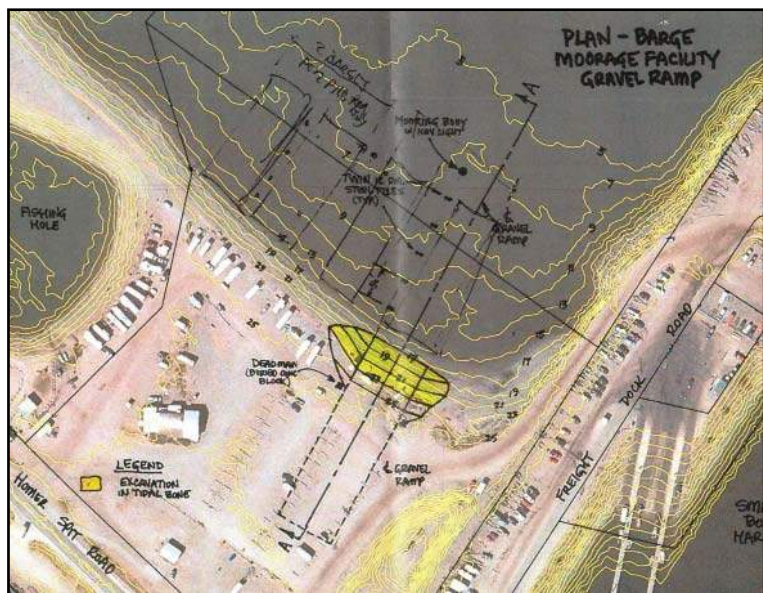
### Schedule:

2016-2017: Phase 1 - Design/Engineering/Permitting/Geotechnical: \$108,976

2017: Phase I - Construction: \$1,250,000

2018: Phase II - Construction: \$600,000

**Priority Level:** 1



Concept design for Barge Mooring Facility



## Deep Water/Cruise Ship Dock Expansion, Phase 1

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**Project Description & Benefit:** Upgrades to the Deep Water/Cruise Ship Dock are necessary to provide a facility that can accommodate multiple industry groups and provide the greatest economic benefit to the area. A feasibility study of expanding and strengthening the dock (with later phases including a terminal building and other upland improvements) is nearing completion. Expansion increases the Port & Harbor's capability to support regional resource development initiatives with moorage and a staging area for freight service to the Lake and Peninsula Borough (via the Williamsport-Pile Bay Road) and to potential future Cook Inlet region resource development projects. There is current demand for modifications to the existing dock to accommodate long-term mooring of large resource development vessels such as timber, mining and oil and gas barges, and as designed, the dock will be able to handle icebreakers, of particular importance given Alaska's strategic arctic location.

The facility will boost cargo capability. The City has a 30-acre industrial site at the base of the dock which can support freight transfer operations and serve as a staging area for shipping to and from the Alaska Peninsula, the Aleutians, and Bristol Bay. Handling containerized freight delivery to the Kenai Peninsula would reduce the cost of delivering materials and supplies to much of the Peninsula. The dock expansion will also enhance cruise ship-based tourism in Homer by providing moorage at the dock for two ships (a cruise ship and a smaller ship) at the same time, reducing scheduling conflicts.

Finally, improvements to the dock will fulfill a contingency planning requirement under Homeland Security provisions. The Port of Anchorage, through which 90% of the cargo for the Alaska Railbelt areas and the Kenai Peninsula passes, is vulnerable. If the Port of Anchorage were to be shut down and/or incapacitated for any reason, Homer's port would become even more important as an unloading, staging, and trans-shipping port.

**Plans & Progress:** In 2005 the City of Homer spent \$550,000 for cathodic protection of the existing dock and conceptual design of an expanded dock. \$2 million in federal transportation earmark funds were appropriated in FY 2006 to prepare preliminary design and conduct further economic analysis. The Alaska Legislature appropriated an additional \$1 million for FY 2011. The Homer City Council has authorized the sale of \$2 million in bonds to help fund the construction of this project. Currently the City is working with R&M consulting to complete design and feasibility. To date the team completed an extensive conditions survey of the existing infrastructure, bottom condition survey, soils core drilling, and a very detailed tide/current profile for the dock. A nearly completed feasibility study of dock improvement/uplands land use options helped identify the best option for expansion to improve freight and cargo handling capabilities. The team also completed some uplands improvements that benefit cargo movement and storage on land close to the deep water dock: paving outer dock truck bypass road, removing the old wooden fence around the concrete storage yard and replacing it with a chain link fence, stormwater runoff handling, lighting and security cameras.

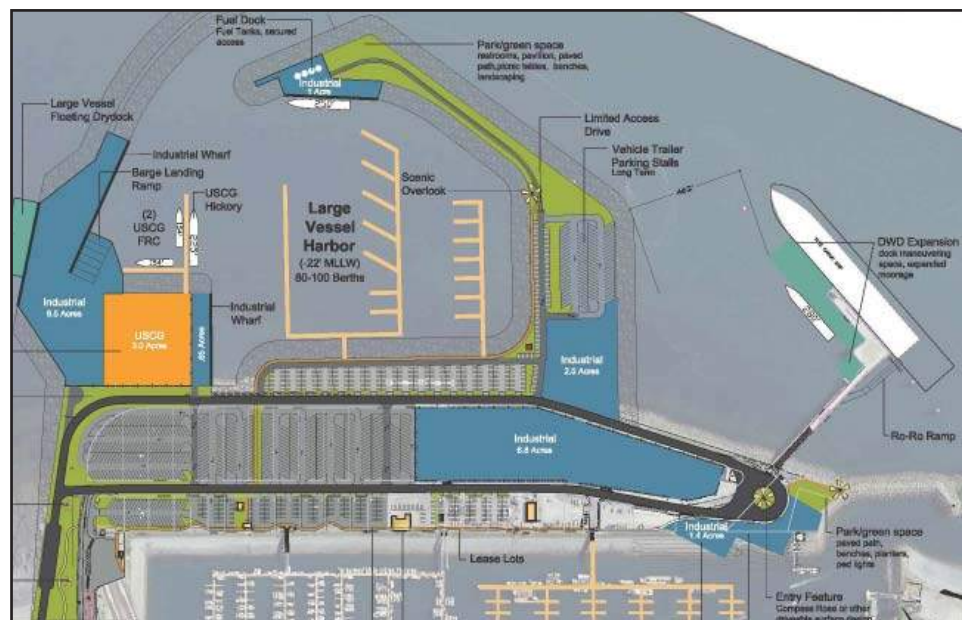
**Total Project Cost:** \$35,000,000

**Feasibility:** \$1,250,000  
(Completed September 2016)

**Design:** \$1,750,000

**Construction:** \$32,000,000

**Priority:** 1



Deep Water Dock Expansion (white dock on right of diagram) proposed design.



## Harbor Ramp 2 Public Restroom Upgrade

**New project proposed for mid-range; has been in long-range section.**

**Project Description & Benefit:** Ramp 2 public restroom, built 43 years ago with Land and Water Conservation grant funds, is the oldest restroom facility on the Spit yet serves one of the busiest parts of the Spit. Located near the site of the former Harbormaster Office at the top of Harbor Ramp 2, it experiences high traffic by tour and school groups gathering for across the bay excursions, cruise ship passengers and other visitors when sightseeing, shopping at nearby boardwalk businesses and accessing the tour boats located on the float systems below. Use of the facility is expected to increase after completion of the adjacent Boathouse Pavilion (a public shelter and gathering place) and an eventual bus and van pull-out for passenger drop offs.

The facility's advanced age is apparent. Worn interior finishes make cleaning the eight men's stalls and six women's stalls difficult; aged bathroom fixtures, plumbing and dilapidated stalls make it nearly impossible for City maintenance personnel to provide a safe, sanitary facility. T-111 siding is weather-worn, has rot and is in need of replacement.

The project consists of tearing down the current restroom building and rebuilding a new concrete block restroom facility on the existing foundation, similar in construction to the other public restrooms on the Spit. The new facility will better serve Homer Spit visitors and recreationalists, be more energy efficient and reduce operational and maintenance costs.

**Plans & Progress:** . In 2017, City Council accepted a Commercial Vessel Passenger Tax Program Pass Through Grant from the Kenai Peninsula Borough. Noting that the funds must be used for port and harbor projects that benefit cruise ship passengers, the acceptance Ordinance proposed using the proceeds of the Tax Program Funds to replace Ramp 2 Public Restroom. Design and cost estimates are being prepared. Public notice has been advertised to solicit public feedback on the proposed rebuild.

**Total Project Cost:** . Option A: stick build/same configuration \$743,000  
Option B: concrete block/same configuration \$765,208  
Option C: concrete block/individual stalls \$813,296

**Design:** \$55,000 - \$45,000

**Demolition:** \$12,000 - \$25,000

**Construction:** \$681,000

**Priority:** 1

**Ramp 2 Restrom has been a long-range project. With development of the Boat House Pavilion, the facility is expected to experience even greater use. Public input is being accepted on the three options.**

**Port & Harbor and Public Works Departments recommend moving project up to a Mid-Range project. The project is eligible (and in a high priority category) for LWCF grant funds; Commercial Vessel Passenger Tax Program funds (approved in Ordinance 17-19) are proposed for matching funds; P&H Advisory Commission approved forward funding the cost of completing construction from the Enterprise Fund should a grant request prove successful.**



Ramp 2 Restroom, at forty-three years old, needs upgrading for sanitation, energy efficiency and maintenance cost reduction..



## Harbor Ramp 8 Public Restroom

**Project Description & Benefit:** Ramp 8 serves System 5, the large vessel mooring system. Previously, restroom facilities for Ramp 8 consisted of an outhouse capable of occupying only two people at a time. This outdated restroom brought many complaints to the Harbormaster's office. Sanitary restroom facilities are expected in modern, competitive harbors along with potable water and adequate shore power. The Ramp 8 outhouse was removed in 2015. A new public restroom in this location is needed to serve the crew members of large vessels when they come to port.

**Plans & Progress:** Design costs for this project would be minimal as the City has standard public restroom plans engineered that can be easily modified for this location.

**Total Project Cost:** \$295,000

**Schedule:** 2020

**Priority Level:** 3



Ramp 8 sees heavy use from crews of large vessels moored in System 5. Since this outhouse was removed in 2015, crews walk 1.5 blocks to use the nearest restroom facility.



## Ice Plant Upgrade

**Project Description & Benefit:** The ice plant at the Fish Dock is a critical component of the overall Port and Harbor enterprise, providing more than 3,500 tons of flake ice each year to preserve the quality of more than 20 million pounds of salmon, halibut, sablefish, and pacific cod landed at the Port of Homer. Having been built in 1983, the ice plant compressors do not operate as efficiently as new state-of-the-art high efficiency refrigeration compressors. The long-term upgrade for the Ice Plant is to replace six of the seven old compressors within the ice plant with new, more highly efficient ones. This would increase the plant's efficiency and reduce operating costs.

Presently, though, the facility's refrigeration components are running smoothly and are not in need of a costly major overhaul. A smaller, more feasible Phase I upgrade consists of adding a refrigeration unit back by the cold storage room so that the Ice Plant can remain operational year round. This would help the fisherman and also keep some revenue coming in during the winter shut down.

**Total Project Cost:** \$660,000

**Schedule:**

2018: Purchase/install new refrigeration equipment for the bait room: \$160,000

2021: Purchase new/replace old compressors: \$500,000

**Priority:** 1



Four of the Ice Plant's aging compressors are shown here.



## Seafarers Memorial Parking Expansion

**Project Description & Benefit:** This project would use materials from dredging the harbor to build up a parking lot between Seafarers Memorial and the east end of the nearby boardwalk complex. The additional parking will be a welcome improvement as it is often hard to find parking during peak summer months on this section of the Spit. The project has the added benefit of replenishing the beaches on the east side of the Spit and protecting infrastructure from erosion. The material will be placed on the beaches as part of the Army Corps of Engineers' dredging/disposal operations. Funding is needed to supplement hauling costs, compact material, cap with gravel and pave the lot. A Corps permit will be needed to accomplish this work.

**Plans & Progress:** The City has appropriated \$15,000 for the Homer Area Roads and Trails (HART) fund for preliminary engineering design and permitting. 95% of engineering design work was completed in 2015. The dredged materials are scheduled to be placed in the lot in 2017. A phased approach to construction will be used.

**Total Project Cost:** \$635,000

**Schedule:**

2017: Design and Permitting at 95% complete: \$8,000

2018: Dredged Material Placement by Corps: In kind

2019: Install drainage, riprap protection, paving/stripping and all parking lot delineation: \$627,000

**Priority Level:** 1



This project would fill in, level and pave the grassy area pictured above between the Seafarer's Memorial and the nearby boardwalk.

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## System 4 Vessel Mooring Float System

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**Project Description & Benefit:** System 4 is made up mostly of floats that were relocated from the original harbor construction in 1964. In the 2002 Transfer of Responsibility Agreement (TORA) project, System 4 was completed by moving the old floats into place. Within two years it was filled to maximum capacity. System 4 floats are over 20 years beyond their engineered life expectancy and are showing their age. This project can be done in phases.

**Plans & Progress:** Phase 1 floats HH, JJ, and headwalk float AA between those floats were replaced in fall of 2014. Power and water was extended from ramp 7 to JJ and HH as part of the same project. A new landing float was installed for Ramp 7 in the spring of 2014. Phase 2 floats CC, DD, EE, GG will be replaced next.

**Total Project Cost:** \$5,600,000

**Schedule:**

2019 Design: \$600,000

2020-2023 Construction: \$5,000,000

**Priority Level:** 2



System 4 ramps to be replaced next.

Detail of aging Float DD, at right.





## Truck Loading Facility Upgrades at Fish Dock

**Project Description & Benefit:** Approximately 22 million pounds of fish are landed at the Homer Fish Dock each year and loaded onto trucks. The resulting truck, fork lift, and human traffic creates considerable congestion as fish buyers jockey for space to set up portable loading ramps. Lack of adequate drainage in the area creates further problems as the vehicles must maneuver in soft and often muddy conditions.

This project will construct a loading dock to facilitate the loading of fish onto trucks. In addition, it will provide for paving of Lot 12-B and other improvements to address the drainage problems that impact the area.

**Total Project Cost:** \$300,000

**Schedule:** 2018

**Priority:** 1



Currently at the Fish Dock, fish buyers have to contend with a muddy lot and lack of a loading dock to facilitate the transfer of fish to trucks.

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## Boat House Pavilion and Plaza on the Homer Spit

Move to completed projects?

FY 2019 - DRAFT Document

**Project Description & Benefit:** The Homer Spit is one of our community's greatest treasures. It serves as an economic hub for maritime and retail activities, provides unsurpassed recreational opportunities, contains important habitat for fish and wildlife, and serves as a gateway to countless visitors. Recent improvements to the Spit, including an expanded trail, new docks, public art, and new restrooms, have added tangibly to the quality of life and the visitor experience in Homer. The completion of a new Harbormaster's Office provided a unique opportunity to build off the excitement and momentum of recent Homer Spit improvements to redevelop the vacant old Harbormaster Office site and surrounding land.

The old Harbormaster's Office sat near the top of Harbor Ramps 1-3, an area of the Spit that teems with pedestrians, vehicles, retail shops, restaurants, commercial fishing activities, charter boat and tour operations, and constant visitors to the public restrooms. This project will redevelop the site to increase pedestrian safety, calm traffic, improve dilapidated restrooms and add a new resource to the Spit: a public pavilion—called the "Boat House." The Boat House, a maritime pavilion, would be a community gathering space, destination for visitors, and attractive reference point on the Spit. It would be a resource for boat owners, harbor users, charter boat operations, cruise ship passengers, Spit trail users, and anyone else on the Spit. The Boat House would provide a needed public space to get out of the weather, be a staging area for people and gear, offer a scenic view of the Harbor, and be a striking monument to Homer's rich maritime traditions and ways of life.

This project aligns with two important goals laid out in the 2011 Spit Comprehensive Plan. Initially, it addresses the need for a gathering space, "attractive shelter," and "central plaza." Additionally, the project facilitates the plan's long term goal of over slope development around the Harbor. An attractive pavilion and plaza will help catalyze development of additional retail facilities on the Spit, particularly through over slope development around the busiest area of the Harbor. By keeping people longer on the Spit, it would boost economic activity. The City of Homer, as owner of Lot 28 has agreed to own, operate and maintain the Boat House Pavilion upon approval of all aspects of the project from design and planning to permitting, site development and construction. Ongoing costs would be kept at a minimum through careful design, highly durable building materials, and low maintenance landscaping.

**Plans & Progress:** This project will be carried out in phases. Phase I involves design, fundraising, Boat House Pavilion and pedestrian plaza construction. Phase II is landscaping and remodel of existing restrooms. Phase III is overslope development. A volunteer Boat House Committee comprised of a maritime business owner, former co-coordinators of the Homer Playground Project (HoPP), and others have spearheaded design, public outreach and fundraising. To date the Boat House Committee has produced preliminary site and building designs (through pro bono services provided by architectural and design firms Corvus and ECI respectively), secured \$135,000 in cash donations, \$67,00 in-kind donations for Phase I and a fiscal agent, the Homer Foundation. The City of Homer has requested \$25,000 in construction funds from the Rasmuson Foundation through its Tier 1 grant program.

**Total Project Cost:** \$277,000

**Schedule: Phase I:** 2016-17

**Priority Level:** 2



Preliminary design proposal for The Boat House Pavilion. Situated on the northwest corner of the parking lot between Ramp 2 and the Salty Dawg on the Spit, the Pavilion features a 20' x 45' Boat House, a covered, maritime-themed public gathering space.



## Public Safety

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- **City of Homer  
Radio Communications System Upgrade.....34**
- **Fire Department Rescue 1 Remount .....35**

**FY 2019 - DRAFT Document**



## City of Homer Radio Communication System Upgrades

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**Project Description & Benefit:** The City's radio communication system is a complex, high-tech, multi-component communication infrastructure that serves the daily needs of the Homer Police, Fire, Port & Harbor and Public Works Departments and is critical for effective emergency response to natural disasters and man-made incidents. Communication system technology has changed tremendously during the last thirty years of the digital age. They are now completely digital, can carry encrypted data in addition to voice communications and must comply with FCC bandwidth requirements. Homer's entire system is aging and must be replaced soon to keep up with technological advances.

The Public Safety Radio System consists of central dispatch consoles, five repeaters (two each for fire and police and one for joint use, strategically located at two different sites and elevations), and several Motorola subscription handheld and mobile communication units. The system provides (1) full radio coverage across Homer and outlying communities despite geographically diverse terrain, (2) redundancy in the event a natural or manmade disaster renders one site inoperable, (3) interoperability with all local, borough and state agencies utilizing the ALMR system allowing easy communication with almost any Alaska-based unit during both everyday incidents and large multi-agency events and (4) Moto-Bridge to electronically connect disparate radios to ensure quality communications with agencies who do not share a common channel with Homer.

However, Motorola will be ending anti-virus protection and software update support for the repeaters and dispatch consoles in 2018. As a result, ALMR will be replacing all of their repeaters and dispatch consoles in 2018. Homer's repeaters and dispatch consoles are identical equipment. If we do not upgrade when ALMR does, Homer will slowly begin to lose communication features before completely losing functionality within three to five years. Additionally, Motorola will cease part replacement support for these components and all the subscription communication devices starting in 2018. A critical parts failure in dispatch or in the repeaters could possibly shut Homer's public safety communication system down. Finally, Public Safety subscription units operate within a specifically licensed bandwidth. FCC is in the process of implementing another round of narrowing bandwidth requirements. The entire system will have to be upgraded to comply with new FCC regulations that will phase in starting in 2020, with full compliance required by 2022.

Port & Harbor and Public Works Radio Systems are of a simpler design -- they need only a basic level of interoperability to communicate with dispatch, police and fire and do not transmit data or need encryption. They will, however, have to meet the new FCC bandwidth requirements in 2022, so all of these radios will have to be replaced. Port & Harbor has one base radio, 7 mobile and 7 portable radios and may need to add a repeater to their system to improve system coverage. Public Works has one base unit, one repeater, 11 portable and 22 mobile radios and a Trimble UHF data radio system for infrastructure locates. Their need for portables is likely to increase as high as 18 to meet new safety requirements with confined space policy changes. It is unknown if the Trimble UHF system will be impacted by FCC's new narrow banding requirements.

**Plans and Progress:** Homer's Police Department received FY2016 AK Division of Homeland Security and Emergency Management funds to relocate the public safety repeater on the Spit and replace dispatch consoles. Still, considerable funds will be needed to replace the entire radio communication system by 2022.

**Total Project Cost:** \$1,220,018 - \$1,300,018  
(\$343,363 funded through FY16 State Homeland Security and Emergency Management grant award.)

|                                                  |                        |
|--------------------------------------------------|------------------------|
| Public safety repeater relocation on Homer Spit: | \$ 47,363 (completed)  |
| Dispatch consoles and associated equipment:      | \$ 296,000 (completed) |
| Public Safety repeater upgrade:                  | \$ 127,668             |
| Public Safety radios:                            | \$ 558,987             |
| Port & Harbor radios and possible repeater:      | \$ 40,000 - \$ 70,000  |
| Public Works radios:                             | \$ 100,000 - \$120,000 |
| Public Works data radio system:                  | \$ 50,000 - \$ 80,000  |

**Schedule:** 2018-2022

**Priority:** 2



City-wide radio system upgrades are needed to maintain full communication operability.



## Fire Department Rescue 1 Remount

**Project Description & Benefit:** Homer Volunteer Fire Department's Rescue 1 vehicle is a 1999 Saulsbury Rescue Truck made up of a 20' stainless steel rescue body mounted on a commercial Freightliner chassis. This apparatus carries a wide assortment of light and heavy equipment necessary for specialized rescue operations such as hydraulic cutters and spreaders (like the Jaws of Life), high and low pressure air lift bags, confined space rescue equipment and an assortment of hand tools to aid in the extrication of entrapped victims. Additionally, the apparatus is equipped with a dual-agent firefighting package that can extinguish small fires in vehicles or prevent them from occurring during rescue operations.

Rescue 1 also carries two additional support systems critical to personnel safety and operations: a breathing air cascade system for on-scene filling of firefighters air bottles and operating air powered equipment and tools, and a 9,000 watt telescoping light tower used to provide scene lighting.

This project will replace Rescue 1's aging and underpowered chassis with a new chassis with a larger motor, making it more capable of navigating the 7-9% road grades within our jurisdiction.

**Total Project Cost:** \$200,000

**Schedule:** 2018

**Priority Level:** 1



Rescue 1, a workhorse in the Homer Volunteer Fire Department fleet, is in need of a new chassis with a larger motor, making it more capable of navigating the area's 7-9% road grades with a load.



## Public Works Projects

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- **Water Storage/Distribution Improvements .....37**



## Water Storage/Distribution Improvements, Phase 2

**Project Description & Benefit:** This project will design and construct improvements that will increase water storage capabilities, improve water system distribution, drinking water quality/public health, and treatment plant and water transmission effectiveness. Improvements are designed to be completed in multiple phases as community need dictates.

- **Phase 1:** Installation of 4,500 linear feet of water main extension on Kachemak Drive and 2,600 linear feet of distribution main across Shellfish Avenue, connecting isolated sections of town with a new pressure reducing vault (PRV) was funded and will be completed in 2016.
- **Phase 2:** Installation of an underground water storage tank and 2,000 linear feet of water main between the new tank and the water system.
- **Phase 3:** Replacement of 3 PRVs on the East Trunk and installation of micro turbines generating power to the grid, abandonment of an existing functionally obsolete steel water tank and replacement of adjacent PRV station, and slip-lining of old cast iron water main on the Homer Spit.

**Plans & Progress:** The need for this project has been documented in the Homer Water & Sewer Master Plan (2006). The design has been completed through a \$884,000 Special Appropriation Project grant the City received from the Environmental Protection Agency. The Department of Environmental Conservation recommended funding phase 1 through the Municipal Matching Grant program which is reflected in The States FY16 capital budget approved by the Governor.

**Total Project Cost:** \$9,828,934

2014 (Design, Completed): \$900,000

2016 Phase 1 Construction(Funded, Completed):\$2,828,934

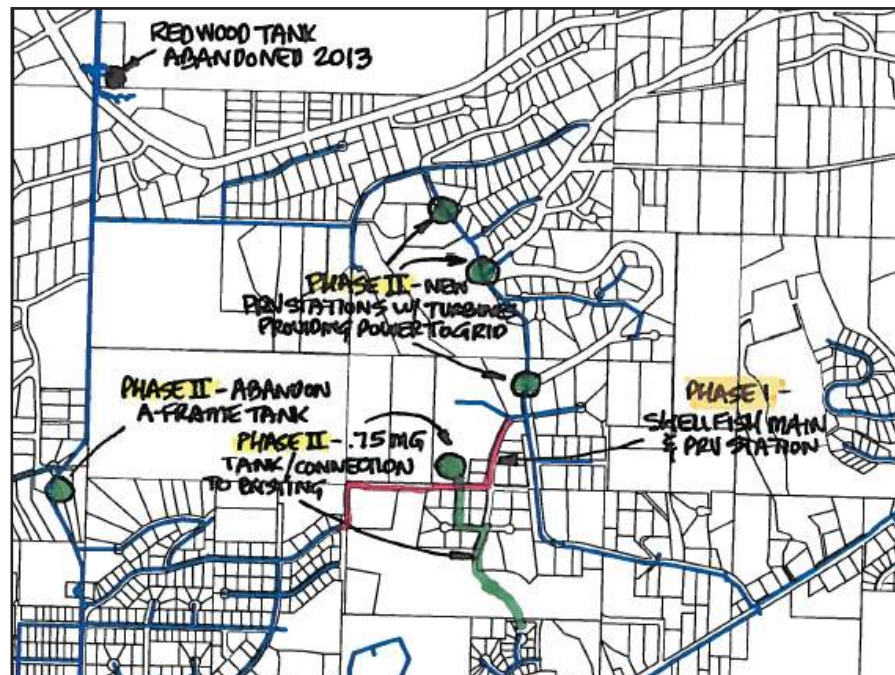
2019 Phase 2 Construction: \$3,900,000

2020 Phase 3 Construction: \$2,200,000

**FY2016 State Capital Allocation: \$1,980,254**

(City of Homer 30% Match: \$848,680)

**Priority Level: 1**



Phase 1, Shellfish Subdivision Main and PRV Station (indicated by red line) was completed in 2016. Phase 2 (green line) consists of installing an underground water storage tank and 2,000 linear feet of water main to increase water storage and distribution capabilities.



## State Projects

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The City of Homer supports the following state projects which, if completed, will bring significant benefits to Homer residents.

Transportation projects within City limits:

- **Homer Intersection Improvements.....39**
- **Kachemak Drive Rehabilitation/Pathway.....40**
- **Main Street Reconstruction/Intersection .....41**

Transportation projects outside City limits:

- **Sterling Highway Reconstruction,  
Anchor Point to Baycrest Hill .....42**



## Homer Intersection Improvements

**Project Description & Benefit:** This project implements recommendations of the 2005 Homer Intersections Planning Study commissioned by the Alaska Department of Transportation and Public Facilities. The study analyzed the needs of twelve intersections according to traffic forecasts, intersection safety records, pedestrian concerns and intersection options. The benefit of the improvements will be to enhance traffic safety and quality of driving and pedestrian experiences for residents and visitors, particularly as the community continues to grow.

The study noted that for intersections identified as needing control measures, either roundabouts or traffic signals will function well. The Alaska Department of Transportation and Public Facilities report supports the development of modern roundabouts at many locations (“because of the good operational performance of roundabouts, superior safety performance, and reduced maintenance”). However, traffic signals have been chosen alternatives for the two Main Street intersection improvements.

Many of the intersections need traffic signals for two reasons: 1) to provide gaps for turning vehicles and 2) provide safer crossings for pedestrians in the center of town where traffic volumes are increasing and worsening in the summer months. The intersection study also analyzed areas with poor or non-existent lane and crosswalk pavement markings, missing or inadequate crosswalk signage and heavy traffic volumes. While the City and DOT&PF have improved pedestrian mobility and safety through some crosswalk projects, accessible standards have not been met by the State when they make intersection improvements.

The City of Homer expects the State of Alaska to adhere to 2010 ADA standards when newly constructing, altering or repaving streets and intersections, including mandated curb ramps or other sloped areas at intersection having curbs or other barriers to entry from a street level pedestrian walkway. Further, while not mandated, the City’s ADA Committee endorses upgrading Homer’s four traffic signals to audible pedestrian signals and evaluating potential additional traffic control/pedestrian crosswalk installation in areas where there are major pedestrian traffic generators or where multi-use trails crosses the roadway.

Problem intersections and recommended improvements are as follows:

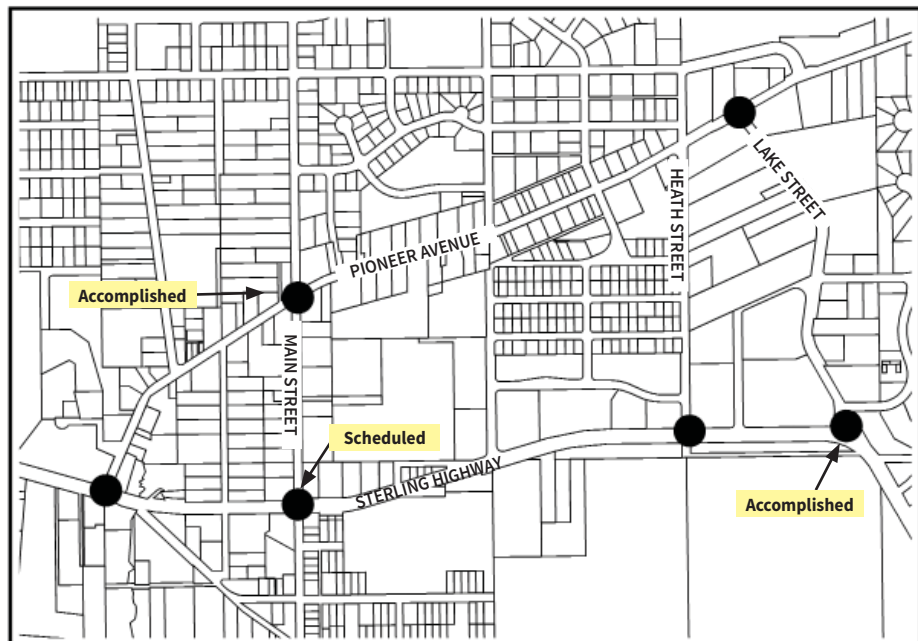
Sterling Highway and Pioneer Ave. - Roundabout or traffic signal;

Sterling Highway and Main Street - Traffic signal;

Sterling Highway and Heath Street - Roundabout or traffic signal;

Pioneer Ave. and Lake Street/East End Road - Roundabout or traffic signal.

**Plans & Progress:** State of Alaska DOT/PF obtained \$2.8 million to make safety improvements to Main Street Intersections. Traffic control at the Pioneer Avenue and Main Street intersection was accomplished in 2016 by installing a four-way stop and flashing overhead beacon. State of Alaska DOT/PF will be moving forward in 2018 to complete improvements at the Main Street intersection by installing a traffic signal at the Main Street and Sterling Highway intersection.



Alaska DOT/PF has recommended roundabouts or traffic signals at four additional central Homer intersections, to be accomplished as soon as possible.



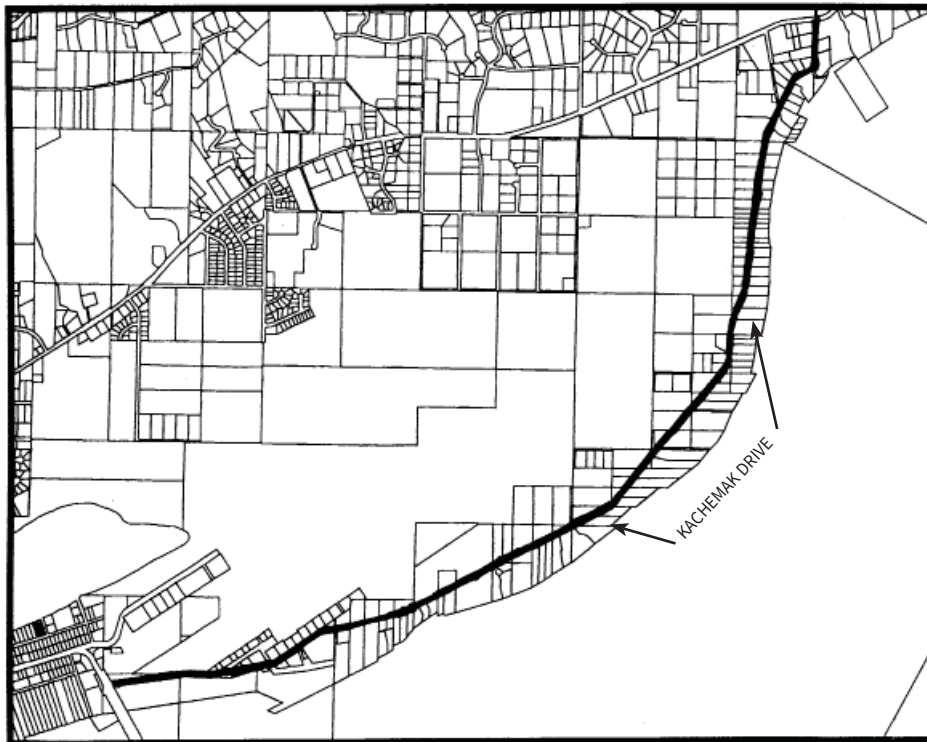
## Kachemak Drive Rehabilitation/Pathway

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**Project Description & Benefit:** Kachemak Drive connects Homer Harbor with Homer's industrial boat yards, serves drivers as a connector from the Homer Spit to East End Road, has a residential community, and serves as an alternate route to the airport. Truck, boat trailer, residential and commuter traffic are often heavy, with an approximate daily traffic of 1,500 vehicles. The road needs rehabilitation including raising the embankment, resurfacing, widening the road, and drainage improvements.

Bicyclists, pedestrians and occasional moms with strollers use Kachemak Drive to connect to the Spit, Ocean Drive, and East End Road bike paths. Kachemak Drive has narrow to non-existent shoulders, forcing cyclists to the left of the fog line. Motorists typically slow down behind bicyclists, wait until there is no oncoming traffic, then pass by crossing the center line. This procedure is dangerous to motorists and cyclists, especially on the hill leading up from the base of the Spit to the airport, where visibility is low. Bicycle traffic has increased in the past couple of years due to the advent of wide-tire winter bicycles and Homer's increasing popularity as a bicycle friendly town. Construction of a separated pathway along East End Road will increase recreational and commuter bicycle and pedestrian traffic on Kachemak Drive and will improve driver, bicycle, and pedestrian safety. Because of the significant right-of-way acquisition involved, this project will likely take several years to complete.

**Plans & Progress:** The Kachemak Drive Path Committee has worked with the City of Homer Advisory Parks and Recreation Commission and Transportation Advisory Committee to explore potential alternatives. The City performed preliminary engineering in 2012 on a portion of the trail and found significant grade and easement challenges to the project.



Project location for Kachemak Drive pathway.



## Main Street Reconstruction

**Project Description & Benefit:** This project will provide curb and gutter, sidewalks, storm drainage, and paving for Main Street from Pioneer Avenue to Bunnell Street.

Homer's Main Street is a primary north-south corridor running from Bayview Avenue (near the hospital) to Ohlson Lane (near Bishop's Beach). In the process, it connects Homer's primary downtown street, Pioneer Avenue, with the Sterling Highway and provides the most direct access to the Old Town district. It also provides the western border to Homer's undeveloped Town Center district.

Despite its proximity to the hospital, businesses and residential neighborhoods, Main Street has no sidewalks, making pedestrian travel unpleasant and hazardous. Sidewalks on this busy street will enhance the quality of life for residents and visitors alike and provide economic benefits to local businesses and the community as a whole.

**Plans & Progress:** Main Street is a City street from Pioneer Avenue northward, and a State street from Pioneer Avenue south. The Homer Non-Motorized Transportation and Trail Plan, adopted by the City Council in 2004, calls for construction of sidewalks on both sides of Main Street to provide a safe means for pedestrians to travel between Old Town and Pioneer Avenue, and stresses that this should be regarded as a "near term improvement" to be accomplished in the next two years. The Homer City Council passed Resolution 06-70 in June 2006 requesting that Alaska Department of Transportation and Public Facilities (DOT/PF) "rebuild and upgrade Main Street from Pioneer Avenue to Bunnell Avenue as soon as possible in exchange for the City assuming ultimate ownership, maintenance, and operations responsibility."

State of Alaska DOT/PF has obtained \$2.8 million to make safety improvements to Main Street Intersections. In 2016, they installed a four-way stop and flashing overhead beacon at the Pioneer and Main Street intersection. They will be moving ahead with the preferred alternative of installing a traffic signal at the Sterling Highway and Main Street intersection (2017). However, much work remains to be done to improve and reconstruct of the entire section of Main Street from Pioneer Avenue to Bunnell Street.



A mother pushes a stroller along Main Street between the Sterling Highway and Bunnell Street, while another pedestrian walks on the other side of the road.



## Sterling Highway Reconstruction Anchor Point to Baycrest Hill

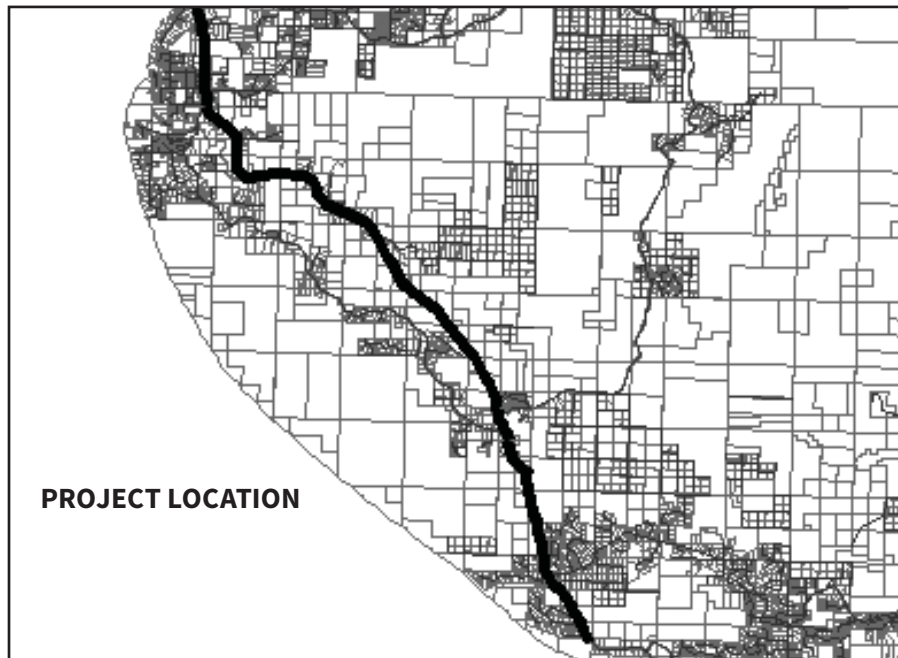
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**Project Description & Benefit:** This project will reconstruct 12 miles of the Sterling Highway between Anchor Point (MP 157) and the top of Baycrest Hill in Homer (MP 169) to address severe safety issues resulting from curves, hills and blind spots on the existing road. The project has been identified as a high priority of the Kenai Peninsula Borough.

Many major side road intersections, gravel hauling operations, and school bus stops contribute to dangerous conditions on the 12-mile section of highway, which has been the scene of several serious accidents, many with fatalities, over the past several years. Continued population growth has led to more subdivisions with intersecting roads and more traffic on the highway, exacerbating the problem. School buses must stop in some locations with blind corners and hills.

The project calls for construction of an improved two-lane highway paralleling the alignment of the existing highway. The reconstructed highway will be designed to allow two additional lanes to be added at a future date.

**Plans & Progress:** The Sterling Highway MP 157-169 Rehabilitation project is included in the 2012-2015 Alaska Statewide Transportation Improvement Program (STIP). Two and a half million dollars was included in the FY2013 capital budget for design and right of way phases of this project. Total costs are expected to exceed \$36 million; consequently, the project may be constructed in phases. Preliminary engineering and environmental assessment services began in the summer of 2014, with design, permitting and right-of-way acquisition scheduled to begin in 2016.





## Projects Submitted by Other Organizations

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The City of Homer supports the following projects for which local non-profit organizations are seeking funding and recognizes them as being of significant value to the Homer community:

- **Beluga Slough Trail Extension .....44**
- **Haven House:  
Safety/Security Improvements .....45**
- **Homer Council on the Arts:  
Re-configuration and Facility Upgrade.....46**
- **Homer Hockey Association:  
Kevin Bell Ice Arena Acquisition.....47**
- **Homer Senior Citizens Inc.:  
Alzheimer's Unit .....48**
- **Kachemak Shellfish Growers Association:  
Kachemak Shellfish Hatchery .....49**
- **Kachemak Ski Club:  
Rope Tow Motor House Relocation .....50**
- **Pratt Museum:  
New Facility and Site Redesign.....51**
- **South Peninsula Hospital:  
Homer Medical Clinic Expansion.....52**
- **South Peninsula Hospital:  
Operating Room HVAC Replacement.....53**

Move SPH projects to completed list? No project update from SPH yet.

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## Beluga Slough Trail Extension

**Project Description and Benefit:** The goal of this project is to extend the existing Beluga Slough Trail around the northern perimeter of Beluga Slough to expand recreational and educational opportunities for the Homer community and its visitors. Beluga Slough is a unique environment which has been the focus of environmental education activities for decades. Naturalists from federal, state and non-governmental agencies bring local families and visitors to the existing trail to share the rich natural history of the slough's vegetation, wildlife and invertebrates. The 0.5 mile extension provides greater viewing opportunities for shorebirds, salt marsh habitats and intertidal flats. The extension would create a quiet, non-motorized trail away from the Sterling Highway with connections to Bishop's Beach, Homer's Old Town District and Ben Walters Park.

**Plans and Progress:** This trail concept is included in the 2004 Homer Non-Motorized Transportation and Trail Plan. A community-based project team has formed to honor Carmen Field, a beloved local naturalist, who taught so many about Beluga Slough through her work at the Kachemak Bay National Estuarine Research Reserve and Alaska Department of Fish and Game. This trail extension would allow Carmen's memory and her love for bringing people out into the natural world to live on.

The trail (see map below) would be on City of Homer property, except for one private parcel (indicated by yellow star). Discussions with the landowner about purchase or easement opportunities are ongoing. Alternatively, the trail could be routed on existing City property which would require more boardwalk infrastructure.

Project proponents have discussed potential project sponsorship and/or trail coalition membership with The Homer Foundation and other area organizations. Discussions with City of Homer Park, Arts, Recreation & Culture Advisory Commission and City staff, yielded the following issues that will need to be addressed and budgeted for as the project moves forward::

- security vulnerability of the Public Works complex and sewer treatment facility;
- places recreational feature in floodplain, which is inconsistent with AK Department of Transportation & Public Facilities emergency response plan in the event of potential Beluga Slough Dam failure;
- mitigation of illegal use of lands newly accessed by the trail and the added security measures (landscaping/patrol time) it requires to insure public safety;
- environmental permitting /land use authorizations.

**Total Project Cost:** The project will be accomplished in three phases with significant community-based labor and supplies anticipated.

Phase 1: negotiation with private land owner for purchase or easement, project design work, and construction of 375 feet of the western-most part of the trail (backcountry – recreational trail design): \$100,000 - 200,000

Phase 2: construction of 1,200 feet of the eastern and driest part of the trail (backcountry - recreational trail design): \$50,000 - 150,000

Phase 3: construction of 1,000 feet of the middle and wettest section requiring a semi-improved trail design: \$300,000 - 450,000



Proposed extension of the Beluga Slough Trail indicated by white dashed line.



## Haven House Safety/Security Improvements

**Project Description & Benefit:** Haven House provides protection through emergency shelter and program services to adults and children who are victims of domestic violence, sexual assault and child abuse. Domestic violence and sexual assault offenders are among the most dangerous type of violent offender and such shelters warrant a high degree of security systems, equipment, and technology. Haven House is requesting \$25,000 to improve the security of the facility through upgrading existing surveillance equipment, adding additional, much-needed surveillance equipment, upgrading existing security system, improving communications between all offices in the building, as well as instant communication to law enforcement, and improving equipment that contributes to security, such as doors, windows, locking systems, and fence. According to feedback collected on surveys from Haven House shelter employees and clients, as well as security challenges we have faced in the past, there is a need to provide improvements to our security systems currently in place. This will protect Haven House clients, staff, and community members and provide a much-needed public safety function for the entire southern Kenai Peninsula communities.

**Plans & Progress:** In July of 2014 Haven House completed Phase 1 of security improvements, the addition of a secured arctic entry, which provided a layer of security at our main entrance. The first part of Phase 2, completed winter 2015, included adding the security doors to the arctic entry. Additionally, funds from the Rasmuson Foundation and the State of Alaska helped to complete the remaining Phase 2 items which included front and back doors surveillance systems, replacing aging windows, and fortifying the existing yard fence, but only at one specific location. This portion of Phase 2 was completed in fall of 2016. Haven House is seeking further funding for a Phase 3 to completely secure our yard and property perimeter to ensure staff and client safety and confidentiality.

**Total Project Cost:** \$25,000



Haven House provides protection through emergency shelter and program services to adults and children who are victims of domestic violence, sexual assault and child abuse.

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## Homer Council on the Arts Facility Upgrade & Addition

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**Project Description & Benefit:** Guided by the conviction that the arts are for everyone, Homer Council on the Arts (HCOA) provides opportunities for all people in our community to experience and participate in the arts. HCOA provides arts education, arts advocacy, creative opportunities and a place for Homer's residents, regardless of socioeconomic status and abilities, to participate in and experience the arts.

For the past decade HCOA has been working toward facility improvements that will better meet community and programmatic needs. The need for indoor space for arts programs and community events emerged as the most significant priority in a Homer Recreation and Culture Needs Assessment completed in 2015. Taking the necessary steps to fulfill HCOA's vision of an improved facility that can meet these needs, HCOA worked with the Foraker Group and the Rasmusson Foundation on a Pre-Development Program to produce a feasible, appropriately scaled remodel of its current facility and affordable addition. The upgrades will provide space for programs, dance, a medium-sized performance space (serving approximately 200 people), and improved overall accessibility, flexibility, longevity and aesthetics of the existing building.

**Plans & Progress:** The three tiered upgrade, reconfiguration, and addition plan includes Phase One: energy efficiency and maintenance improvements; Phase Two: raising the big top yurt construction; and Phase Three: reconfiguration of the main building.

Through grants and a mortgage refinance, Phase One will be completed early this summer (2017). To date, HCOA has raised \$140,000 through grants and community donations to complete Phase Two. A Facility Improvement Committee consisting of board members, local engineers and donors is working with structural and mechanical engineers, the fire marshal, and local contractors to design the yurt structure to meet all requirements for a commercial facility serving approximately 200 people.

**Total Project Cost:** \$500,000



Architectural rendering of HCOA's facility upgrade and yurt addition, which will provide a community dance and performance art space serving approximately 200 people.



## Homer Hockey Association Kevin Bell Ice Arena Acquisition

**Project Description & Benefit:** The Kevin Bell Arena was constructed in 2005, with initial funding from grants associated with the 2006 Arctic Winter Games combined with a loan from English Bay Corporation /Homer Spit Properties. Homer Hockey Association (HHA) has successfully operated the Arena since its opening. HHA has met operating and capital acquisition costs within a yearly budget of \$300,000 to \$350,000. HHA is seeking financial support to retire the remaining debt of \$2.1 million dollars from purchasing the Arena.

HHA's mission is to cultivate on-ice recreation of all kinds, for all ages, on the Lower Kenai Peninsula. HHA has been accomplishing this mission for more than a decade as one of the few non-profit, volunteer run ice rinks in the United States. Volunteers contribute an estimated 14,000 hours annually, representing a huge commitment of time and effort by our community. Over the years, programs have been expanded to include activities for all: figure skating, hockey at all age and skill levels, broomball, curling and numerous community and school open skate events. The public and open skate events bring up to 1000 additional users during the busiest months. These efforts earned HHA the 2012 Alaska Recreation and Parks Association Outstanding Organization award and more recent recognition from the USA Hockey Association.

The Kevin Bell Arena hosts numerous games, tournaments and events that bring commerce to the City of Homer. This is especially important during the winter when tourism and occupancy rates are low. HHA hosts several separate youth and adult hockey tournaments totaling approximately 150 games each year. In 2015-2016 these games brought over 1,160 out of town players to Homer, accompanied by family and fans that contributed an estimated \$646,187 to the local economy through lodging, transportation, dining and merchandise purchases. KBA has hosted several consecutive youth State Hockey Championship Tournaments which are widely attended by families from all over the State.

**Plans and Progress:** HHA has an active and committed Board and membership. The volunteer hours are leveraged by several successful fundraisers, sponsor and advertising campaigns, grant awards and donations each year. This covers approximately one third of the annual operating and capital expenses. The remaining expenses are covered by user fees.

The purchase of the building would provide HHA the opportunity to open more programs and expand existing programs to include more of the community. The high user fees are a barrier for many families but necessary just to meet annual expenses. The building purchase would allow HHA to adequately fund and plan for the replacement of the major mechanical components of the ice arena. It would also allow for the major building maintenance projects to be funded. It could allow for heating and additional seating to accommodate the spectators. Major projects that could increase revenue such as year around flooring could become feasible. The building purchase would allow this important community resource to grow and prosper into the future.

**Total Project Cost:** \$2, 100,000



Christmas Eve public skate at Kevin Bell Arena is well attended.



## Homer Senior Citizens Inc. Alzheimer's Unit

**No update received from Homer Senior Citizens yet.**

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**Project Description & Benefit:** Seniors are the fastest growing population for the State of Alaska. Homer is projected as the second city in the State which will see the most significant growth in this demographic. Homer Senior Citizens (HSC) operates a 40 bed assisted living facility. We have sent four seniors from our community due to Alzheimer's disease in the past four years. Losing one senior a year is unacceptable as it tears away the fabric of our community. All of the seniors have families remaining in the Homer community.

In order to maintain the health of a senior, a full continuum of care is required. Maintaining physical, mental and social capacity supports the dignity of our most vulnerable adults. An Alzheimer's Unit has been a strategic priority for the HSC's Board of Directors to keep our seniors home in the community.

The Alzheimer's Unit will include fifteen beds and 24/7 nursing care. Additionally, it will include a memory care unit to help maintain residents' existing cognitive capacity. Specific features of the facility (therapy pool and activities room) will be open to all seniors 55 years of age and older. The activities room will be Phase 2 of the project and will incorporate low-impact exercise equipment to maintain seniors' physical capacity. This also opens up the possibility to contract with South Peninsula Hospital for use of the therapy pool for other age groups, benefiting the entire population of Homer.

Operating funds will be secured from "fees for service;" room and board; billing for Physical Therapy in both the therapy pool and the exercise program in the activities room (once Phase 2 has been completed) and fees for contracted use of therapy equipment and the pool. Projected five year profit will be approximately \$1,508,600. This does not include contractual arrangements with third party vendors.

**Plans & Progress:** Currently HSC staff is completing the State of Alaska Certificate of Need. Design work continues; HSC has met with HydroWorx to incorporate the Therapy Pool with the Alzheimer's Unit.

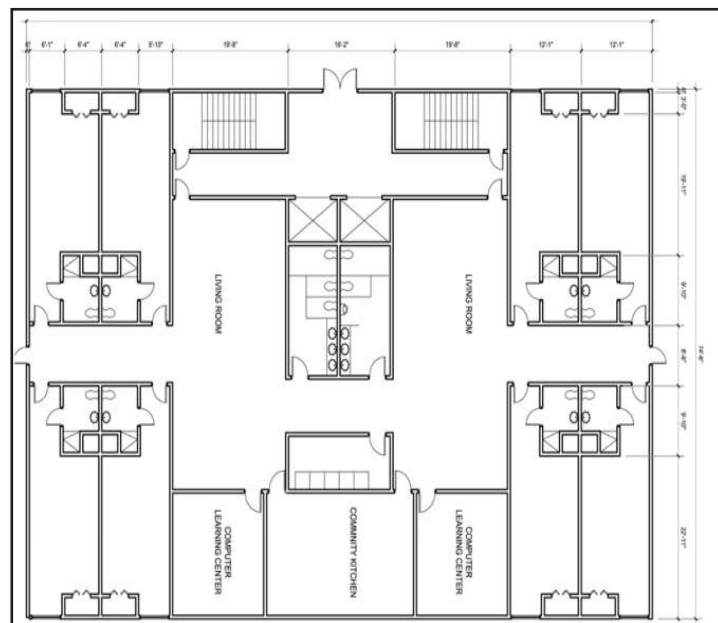
HSC is in the initial stages of fundraising for the Alzheimer's Unit. Three foundations that fund this type of project have been identified. One of the priorities for scoring in these grant programs is City of Homer support through Capital Improvement Plan designation. HSC will be holding many fundraising events to secure the match for foundation grants. Fundraising activities include hosting "Backing out of Time" Alzheimer's documentary at the Homer Theatre and a Wine/Beer Tasting event at the Beluga Lake Lodge in September of 2016. HSC also recently held a matching campaign which secured \$40,000 in seed money for the Alzheimer's Unit.

**Total Project Cost:** \$3,000,000

Funding Received to date: \$40,735.50



Example of a HydroWorx Therapy Pool Room .





## Kachemak Shellfish Mariculture Association Kachemak Shellfish Hatchery

**Project Description and Benefit:** For twenty-four years Kachemak Shellfish Mariculture Association (KSMA), a 501c5 organization, has worked to fulfill its primary mission of assisting shellfish growers in Kachemak Bay to establish an economically sustainable oyster industry. Today through its close partnership with the Kachemak Shellfish Growers Cooperative (KSGC), twelve farms in the Bay utilize a facility on the Spit for processing, marketing, shipping and now culturing seed.

Five years ago the industry was severely impacted by an oyster seed shortage affecting the entire Pacific Coast. Local leaders volunteered and developed a small proof of concept experiential oyster hatchery/setting facility in the KSMA building to address the seed needs of all Kachemak growers and beyond. Over the past four years, on a thin budget, along with the assistance of industry professionals, and some financial support from the State of Alaska, the “experimental” hatchery has consistently set millions of spat every year. Some experts gave this under-manned nursery only a 10% chance of success. However, thanks to the nutrient rich waters of Kachemak Bay and the dedication and expertise of KSMA’s staff, the oyster spat experiment has thrived and now the next critical step is to upgrade an important piece of equipment to become compliant with State regulations, improve safety and security and scale up production to meet demand. Applications for new mariculture farms are up from the five in a typical year to 15 this year, potentially adding 1,000 acres of new Alaskan oyster and kelp farms to the current 320 acres under production.

The piece of equipment is called a FLUPSY. Microscopic oyster seed, or spat, cannot go directly from the hatchery to oyster farms. The next stage of development happens in a FLUPSY -- a floating upwelling system that takes the microscopic seed from the hatchery into the waters of Kachemak Bay in appropriately sized bins through which water is constantly moved by an electrically-driven paddle wheel. Spat in the FLUPSY are regularly cleaned, graded and placed in graduated bins for a full year prior to going to individual farm sites.

At fifteen years old, KSMA’s FLUPSY is showing the wear-and-tear of exposure to the harsh maritime climate; spat production has outgrown the FLUPSY’s capacity; its design is ergonomically antiquated. Its deteriorating Styrofoam flotation is out of compliance with regulatory standards. It is also unsecured; a recent vandalism threatened a year’s worth of spat. A new, covered FLUPSY will provide compliant, state-of-the-art flotation and adequate spat capacity. It will safeguard workers with ergonomically superior equipment and safer, covered decking. Locking security will dissuade costly acts of vandalism.

The benefit of a thriving oyster farm industry in Homer is huge. In their 25th year of production, oysters have become a sparkling year-round addition to Homer’s seafood options available to residents and attracting tourists. Every cooler of oysters delivered to the dock represents approximately \$150 to the grower. By the time the end user receives those oysters, the economic ripple effect becomes approximately \$725. Excess seed is sold to other farmers eager for a reliable supplier (both in State and out). This economic benefit has been recognized by the State of Alaska. Mariculture is a top economic development priority for Governor Walker and is a Business Development goal in *Northern Opportunity*, Alaska’s Comprehensive Economic Development Strategy.

Our local hatchery and state-of-the-art FLUPSY can also provide a great educational lab for high school and university students, who currently have to travel to Seward for mariculture studies. (The Seward hatchery hatches opilio crab as the waters of Resurrection Bay are less conducive to oyster seed.) A mariculture course could easily be developed around oyster seed development, culturing and marketing right here in our own backyard.

**Plans and Progress:** A new FLUPSY will be developed in two phases. Design and permitting followed by construction.

**Total Project Cost:** \$175,000

Preconstruction: \$25,000

Construction: \$150,000



Cleaning the FLUPSY bins on a beautiful Kachemak Bay day.



## **Kachemak Ski Club**

### **Ohlson Mt. Rope Tow Motor House Relocation**

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**Project Description & Benefit:** This project will provide safety improvements to an historic public recreation treasure on the Kenai Peninsula--the Ohlson Mountain ski facility. Local fishermen and homesteaders originally founded KSC in 1948 (making it perhaps the oldest operational nonprofit in the Homer area) to get families out of the house during the slow winter months and meet school requirements for physical education. Since then, KSC has provided thousands of lower Kenai Peninsula youths, adults and families with affordable downhill skiing (and more recently snowboarding) opportunities every Sunday (weather permitting) through its 800 foot long rope tow. It is also used by school programs and offers ski and snow board lessons. In addition to the rope row, the facility includes a small lodge/warming hut and outhouse facilities. This historic facility promotes sports education and fitness in the community, and the all-volunteer, non-profit KSC has efficiently utilized countless hours of volunteer labor and a variety of grants to maintain and improve the area. Without this support the ski area would be unable to operate. The ski area is the only facility offering downhill skiing and snowboarding opportunities in Southcentral Alaska other than Alyeska resort in Girdwood and is proud of its 100% safety record.

The ski area has weathered decades of harsh weather conditions; in the past ten years most of the infrastructure has been refurbished and improved. However, the mounting structure and foundation of the Rope Tow's top station, which supports the engine, bullwheel and weight of the rope in motion is very old and after 52 years of service is showing some structural weaknesses. In conjunction with replacing the top station's foundation, an enormous safety and ergonomic improvement will be realized by relocating the top station southward. KSC has always struggled to keep the top of the towpath and rope tow unloading area smooth, safe and efficient due to 1) the steep grade of the hill's apex in relation to the unload area and safety gate; 2) the steep angle of the rope at the apex and 3) a minimum distance between the unload area and the safety gate guarding skiers from entanglement in the bullwheel.

KSC proposes to solve all these problems in one operation: building a new top station foundation 30 feet to the south, relocating the motor higher and further back, protecting the new foundation and motor with a 6' x 12' weatherproof hut and associated grade work. This project extends the life of this historic and well-used recreation area for the next 50 years, significantly improves user safety by more than doubling the existing time and distance an operator and potential victim have in averting an entanglement situation, and greatly improves the rope angle for rider comfort and safety.

**Plans and Progress:** Scope of work, project design and detailed cost estimates have been prepared. Commitment of fifty hours of volunteer labor from Board members (valued at \$10/hour) has been secured to help accomplish this maintenance and safety upgrade.

**Total Project Cost:** \$25,435

Foundation (materials, labor & equipment): \$9,160  
Motor Relocation (tear down, inspection, cleaning and relocation): \$3,400  
Motor Hut Construction (includes materials & volunteer labor): \$2,775  
Extend Power Supply to New Location: \$6,000  
Excavator and Grade Work: \$4,100



Ohlson Mountain Rope Tow's top station, which supports the engine, bullwheel and weight of the rope in motion, is in need of foundation repair.



## Pratt Museum Facility Renovation and Site Redesign

**Project Description & Benefit:** The national award-winning Pratt Museum preserves the stories of the Kachemak Bay region and provides a gathering place for people to learn and to be inspired by this region and its place in the world. For nearly 50 years, the Pratt's exhibits, education programs, and collections have worked to foster self-reflection and dialogue among the Museum's community and visitors. Today, the Pratt serves up to 30,000 visitors annually, with more than 4,000 young and adult learners participating in its programs. The Pratt Museum is consistently viewed as one of Alaska's most important cultural institutions and as a leader among small community museums across the country.

The Pratt Museum opened its doors to the public in May 1968. The Museum's collection has grown with the community through that period and our current facility does not meet the needs of the Museum's growing collection, which are held in public trust and require specific conditions and storage practices for preservation and display. In addition, the building's current design limits community engagement activities. To better serve our community and visitors long into the future, the Pratt Museum plans to renovate the current museum building so that all gallery and meeting areas are ADA-accessible, the roof protects the collection, and collection items are stored and cared for according to best practices for cultural and natural history artifacts. The front area of the museum will be renovated to improve the visitor experience, and community engagement areas will be modified to better accommodate community conversations, presentations, and school group activities. The Museum may also renovate the aquarium curatorial area and the kitchen to ensure that these areas meet standards for animal care and food prep. The outcome of this immediate renovation will maintain the building as a well-functioning Museum through the next 10 years, allowing the Museum to expand its outreach programs with a growing membership and student base, even as the organization continues to work towards a new museum facility in the future.

**Plans & Progress:** For the past decade, the Pratt Museum has been working on a capital project for the new museum building. By 2015, \$3.4 million had been secured for building design and early site work. In 2016, the trail expansion and architectural designs for the new building were completed. It is anticipated that a new museum building, designed to incorporate museum-quality climate controls, accessibility for all community members, and new programming areas, will require another decade to complete.

At this time, the Museum will focus on renovating the current building to move our mission and community engagement goals forward through that next decade. This renovation will also serve the larger project by preparing the current building as an auxiliary storage and outreach building and/or as an improved building for lease once the new museum is built.

**Total Project Cost:** \$2,000,000 (Renovation of Current Building)

### Status of New Building Capital Project

Total Project Cost: 9,500,000

Preconstruction: \$2,000,000 (complete)

Construction: \$7,500,000

New Building Funding Raised to date: \$3,400,000



Architectural rendering of the new Pratt Museum facility.



## South Peninsula Hospital: Homer Medical Clinic Expansion

**Move to completed project list? No update received from SPH yet.**

**Project Description and Benefit:** The Kenai Peninsula Borough owns and provides for the operation of the South Peninsula Hospital. South Peninsula Hospital, Inc. (SPH Inc.) manages the operations of the facilities through a Sub Lease and Operating Agreement with the Borough and the City of Homer. The Hospital is run on a nonprofit basis in order to ensure the continued availability of medical services to the area. The Homer Medical Center falls under this umbrella, and is located near the hospital's main campus.

Homer Medical Center provides a central location for family practice, OB/GYN, midwifery and other primary care services. They have outgrown their current space, multiple physicians are sharing office space; storage is an ongoing problem as well as challenges with patient flow. With the limited number of exam rooms the facility is not able to function at the current level of demand, let alone the expected growth based on an aging population. This project is intended to improve patient as well as service provider satisfaction, while allowing the facility to function at a more optimum capacity, and will support the clinic's goal to become a certified Patient Centered Medical Home, which is the preferred model of primary care.

The existing Medical Center is a roughly 5,000 sq. ft. wood framed structure and while it is 30 years old, it has been maintained relatively well. Homer Medical Center is comprised of 27 nurses and clerical personnel, six physicians and two midlevel providers. Only two of the physicians are full time. There are four or five family practice providers on any given day using the main clinic. The clinic is open six days a week until 5pm, with extended hours on Tuesday and Thursday evenings. The current patient load is 65 to 70 patients per day.

**Plans and Progress:** The plan is to expand the facility east and south on the existing lot, adding a total of 5,700 square footage to accommodate additional exam rooms, waiting area and office space. In addition to expanded space, renovations and site improvements will also be done, such as expanded parking. The expansion and improvements will eliminate the need to rent the building across the street, currently rented for the purposes of the clinic's business office. Architectural schematics are nearly complete. Bond funding is being requested by the Borough by vote of the service area, but no change in the mil rate is expected.

**Total Project Cost:** The estimated cost of the proposed addition is \$2,800,000 - \$3,000,000. This includes final project design, project management and administrative costs.



Homer Medical Clinic



## South Peninsula Hospital Operating Room HVAC Replacement

**Move to completed project list? No update received from SPH yet.**

**Project Description & Benefit:** The Kenai Peninsula Borough owns and provides for the operation of the South Peninsula Hospital. South Peninsula Hospital, Inc. (SPH Inc.) manages the operations of the facilities through a Sub Lease and Operating Agreement with the Borough and the City of Homer. The Hospital is run on a nonprofit basis in order to ensure the continued availability of medical services to the area.

The heating, ventilation and air conditioning (“HVAC”) units for South Peninsula Hospital’s operating rooms were installed in 1974. Currently, air handling unit AC-2 and the rooftop air cooled condensing unit associated with it are past their expected useful life and the entire system no longer provides sufficient control of room temperature and humidity levels required for hospital operating rooms under FGI Guidelines for Design and Construction of Hospitals and Outpatient Facilities. The existing HVAC system is also not well equipped to provide for proper operating room pressure control to meet FGI criteria.

Air conditioning alters the properties of air (temperature, humidity and sterile filtration) to more favorable conditions for keeping the hospital hygienic and to facilitate treatment of disease. Proper ventilation and filtration in the operating room are the most important means of reducing contamination and preserving the correct pressure relationships between functional areas. Maintaining the required level of relative humidity is essential to control the growth of microorganisms, prevent electrostatic discharge and is important to the shelf life of sterile supplies and maintenance of electro-medical devices. Temperatures also need to be adequately controlled given the heat produced by operating room lighting, equipment and staff.

**Plans and Progress:** Recommendation for long-term system replacement is to first provide new rooftop air handling unit(s) to serve the operating rooms and related spaces. Ultimately, a complete replacement of the HVAC systems serving the operating rooms is necessary for proper humidity and temperature control, air exchange rates, and room pressurization for the operating room environment. This system configuration will serve the entire surgery department and will be determined under a subsequent design phase. Modifications to HVAC systems serving the spaces adjacent and related to the operating rooms may also be warranted.

**Total Project Cost:** The estimated cost of the proposed project is \$1,800,000. This includes project management and administrative costs.



FY 2019 - DRAFT Document



## Capital Improvement Long-Range Projects

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FY 2019 - DRAFT Document

The following projects have been identified as long-range capital needs but have not been included in the Capital Improvement Plan because it is not anticipated that they will be undertaken within the six-year period covered by the CIP. As existing CIP projects are funded or as other circumstances change, projects in the long-range list may be moved to the six-year CIP.

### Local Roads

**Fairview Avenue – Main Street to East End Road:** This project provides for the design and construction of Fairview Avenue from Main Street to East End Road. The road is approximately 3,000 linear feet and the project will include paving, water and sewer mains, stub-outs, storm drains, and a sidewalk or trail. The project extends from the intersection of Main Street to the Homer High School, and finally to East End Road, and will provide an alternative to Pioneer Avenue for collector street access east/west across town. This roadway would benefit the entire community by reducing congestion on Pioneer Avenue, the major through-town road, and would provide a second means of access to the high school. It would also allow for development of areas not currently serviced by municipal water and sewer.

This improvement is recommended by the 2005 Homer Area Transportation Plan. Necessary right of way has already been dedicated by the Kenai Peninsula Borough across the High School property.

**Cost:** \$1.75 million      **Priority Level** 3

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**Fairview Avenue – Main Street to West Hill Road:** This project provides for the design and construction of Fairview Avenue from Main Street to West Hill Road. The road is approximately 4,200 linear feet and the project will include paving, water and sewer mains, stub-outs, storm drains, and a sidewalk or trail. In conjunction with the Fairview to East End Road project, this project will benefit the entire community by providing an alternative to Pioneer Avenue for collector street access east/west across town, thereby reducing congestion on Pioneer Avenue and developing alternative access for emergency vehicle response. The need for the road extension has increased markedly with the development of three major residential subdivisions in the area.

This improvement is recommended in the 2005 Homer Area Transportation Plan.

**Cost:** \$3 million      **Priority Level** 3

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### Parks And Recreation

**Beach Access from Main:** This project will provide residents and visitors with coastal viewing stations and access to the beach at the southern end of Main Street, utilizing City-owned land. The project will enhance connectivity in Homer's developing trails and park system, providing additional access so that beachgoers can walk onto the beach at one point and off at another, on a loop through Old Town, Town Center, etc. For those not physically able to walk all the way to the beach, platforms near the roads will provide nice views and benches on which to relax. Interpretive signage could provide information on Homer history, beach formation, and other topics.

The Main Street beach access point is envisioned to have a small parking area, a viewing platform with a bench, and stairs with landings.

**Cost:** \$250,000      **Priority Level** 3

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## Capital Improvement Long-Range Projects

FY 2019 - DRAFT Document

**East Trunk/Beluga Lake Trail System:** This project will create two connecting trails:

- The Beluga Lake Trail will partially encircle Beluga Lake with a raised platform trail that includes a wildlife observation site. The trail will connect neighborhoods and business districts on the north and south sides of the lake.
- The East Trunk Trail will provide a wide gravel pathway from Ben Walters Park east along the City sewer easement, along the north side of Beluga Lake (connecting with the Beluga Lake Trail), and eventually reaching East End Road near Kachemak City.

The completed trail system will connect Paul Banks Elementary School, the Meadowood Subdivision, and other subdivisions and residential areas to Ben Walters Park. It will additionally provide hiking, biking, and wildlife viewing opportunities around Beluga Lake. In addition, it will provide an important non-motorized transportation route.

The Beluga Lake Trail, a trail connection to Paul Banks Elementary School and East End Road are included in the 2004 City of Homer Non-Motorized Transportation and Trail Plan.

**Cost:** Beluga Lake Trail—\$1.5 M      East Trunk Trail—\$2 M      Priority Level 3

**Horizon Loop Trail, Phase 1:** The Homer Horizon Loop Trail is proposed as a four to five mile route that would run clockwise from Karen Hornaday Park up around the top of Woodard Creek Canyon, traverse the bluff eastward, and then drop down to Homer High School. The parking lots of Karen Hornaday Park and Homer High School would provide trailhead parking. Those wishing to complete the loop will easily be able to walk from the high school to Karen Hornaday Park or vice versa via Fairview Avenue. A later stage of trail development will connect the Horizon Loop Trail with the Homestead Trail at Bridge Creek Reservoir.

**Cost:** Staff Time      Priority Level 3

**Jack Gist Park Improvements, Phases 3:** Jack Gist Park has been in development since 1998 on 12.4 acres of land donated to the City of Homer by a private landowner. As originally envisioned by the Jack Gist Recreational Park Association, this parcel was developed primarily for softball fields. The long-term goal is to acquire adjacent properties that will provide space for soccer fields. Phase 3 development will construct a plumbed restroom at the park and develop soccer fields.

**Cost:** \$400,000      Priority Level 3

**Karen Hornaday Park Improvements, Phase 3:** Phase 3 park improvements will include building a concession stand, shed, landscaping, signage, and revegetating Woodard Creek.

**Cost:** \$860,000      Priority Level 2

**Mariner Park Improvements:** This project will provide significant improvements to Mariner Park as called for in the park's master plan: Construct a bike trail from the "Lighthouse Village" to Mariner Park (\$325,000); Construct a pavilion, additional campsites, and interpretive kiosk (\$150,000); and improve the appearance of the park with landscaping (\$75,000).

**Total:** \$500,000      Priority Level 3

**Public Restrooms – Homer Spit:** With increased activity on the Homer Spit, the need for restroom facilities has also increased. The restroom at Ramp 2 is in poor condition and needs to be replaced.

**Cost:** \$295,000      Priority Level: 2

With Boat House coming on line and potential LWCF funding, Port & Harbor / Public Works recommends moving this project to mid-range section.



## Capital Improvement Long-Range Projects

FY 2019 - DRAFT Document

### PUBLIC PROJECTS

**Homer Conference Center:** Homer is a popular visitor destination and the visitor industry is a critical component of the local economy. However, millions more dollars might be spent in Homer if a meeting facility large enough to attract conferences with several hundred participants was available. Currently, Homer has no facility capable of providing meeting space for groups of more than 180 people.

Homer's reputation as an arts community will help attract meetings and audiences if a facility exists to accommodate and showcase these events. The conference center, featuring banquet/ballroom space and flexible meeting space, will fill this need. If the facility is located in Homer's developing Town Center, other area businesses would also benefit from the increased number of visitors attending meetings at the conference center.

A conference center will increase Homer's ability to compete with other communities in that important niche of the visitor industry, and will also provide a venue for meetings and cultural events hosted by local organizations, such as the Kachemak Bay Writers Conference and Shorebird Festival events.

In partnership with the Homer Chamber of Commerce, the City of Homer commissioned a conference center feasibility study completed in summer 2005. The study predicts moderate demand from outside groups for a conference center in Homer. The Conference Center Feasibility Study Steering Committee made a formal recommendation that the City support efforts to encourage the construction of a conference center in Homer's Town Center. In August 2005, the Homer City Council passed Resolution 05-86(A) which recommends further consideration and authorizes the City Manager to pursue ideas and discussions that will increase the likelihood of a conference center being built in Homer.

**Cost:** \$5 million      **Priority Level 3**

**Public Works Complex:** The City of Homer Public Works complex on the Sterling Highway was constructed in phases from 1974-1986 (except for the recently completed large equipment storage shed). In 1980, Homer's population was 2,209. Since that time, the population has grown more than 150%, with a corresponding increase in roads, water/sewer lines, and other construction activity that requires employee and equipment time. The existing facility is no longer adequate to meet these needs and the problem will become more acute with continued growth.

A new Public Works complex will include the following:

- Increased office space to provide adequate room for employee work areas, files, supplies, and equipment storage
- Adequate space for Parks Division and Engineering staff and equipment
- A waiting area for the public, contractors, etc.
- A conference room that doesn't double as the employee break room
- A break room with adequate seating, storage, and locker space
- A laundry room
- A garage for the motor pool large enough to accommodate more than one or two projects at a time
- Improvements in ventilation throughout the facility and wiring for computer technology

**Cost:** Design—\$500,000      Construction—\$4,500,000      **Priority Level 2**

### UTILITIES

**Spit Water Line – Phase 4:** The existing Homer Spit water line is 40 years old and is constructed of 10-inch cast iron. In recent years it has experienced an increasing number of leaks due to corrosion. The condition has been aggravated by development on the Spit resulting in increased load from fill material on an already strained system. Phase 4 of this project consists of slip lining approximately 1,500 linear feet of water main to the end of the Spit. Slip lining the Homer Spit waterline, versus replacing, will reduce cost while ensuring an uninterrupted water supply for public health, fire/life safety needs, and expanding economic activities on the Spit. Grant funds from the EPA allowed the City to complete project design in the fall of 2014.

**Cost:** \$400,000      **Priority Level 3**



## Capital Improvement Long-Range Projects

**Bridge Creek Watershed Acquisition:** Currently, the Bridge Creek watershed is the sole source of water for Homer. To protect the watershed from development that could threaten the water supply and to ensure the availability of land for possible future expansion of water treatment operations within the watershed, the City seeks to acquire additional acreage and/or utilize conservation easements to restrict development that is incompatible with clean water.

**Cost:** \$1,000,000      Priority Level 3

**Alternative Water Source:** Currently Homer's sole water source is the Bridge Creek Reservoir. Population growth within the City, increased demands for city water from residents outside City limits, increasing numbers of tourists and summer residents, and climate change that has reduced surface water availability are all factors in the need for a new water source to augment the existing reservoir.

**Cost:** \$16,750,000      Priority Level 3

**West Hill Water Transmission Main and Water Storage Tank:** Currently, water from the Skyline treatment plant is delivered to Homer via two transmission mains. One main (12-inch) is located along East Hill Road and delivers water to the east side of town. The other (8-inch) runs directly down to the center of town. A third transmission main is needed to deliver water to the west side of town, provide water to the upper West Hill area, and provide backup support to the two existing transmission mains. A new water storage facility is also needed to meet the demands of a rapidly growing community.

The addition of a third water transmission main has been identified in comprehensive water planning documents for over 20 years.

**Cost:** Design—\$500,000      Construction—\$4.5 M      Priority Level 2

### STATE PROJECTS

**Ocean Drive Reconstruction with Turn Lane:** Ocean Drive, which is a segment of the Sterling Highway (a State road) connecting Lake Street with the Homer Spit Road, sees a great deal of traffic, particularly in the summer, and has become a source of concern for drivers, bicyclists, pedestrians, and tour bus operators. This project will improve traffic flow on Ocean Drive and reduce risks to drivers, bicyclists, and pedestrians by creating a center turn lane, providing well-marked crosswalks, and constructing a separated bike path. The project will also enhance the appearance of the Ocean Drive corridor by moving utilities underground and providing some landscaping and other amenities.

Currently, a bicycle lane runs on the south side of Ocean Drive. However, it is common for cars and trucks to use the bicycle lane to get around vehicles which have stopped in the east-bound traffic lane in order to make a left turn. Some frustrated drivers swing around at fairly high speeds, presenting a significant risk to bicyclists and pedestrians who may be using the bike lane. In recent years, the Homer Farmers Market has become a popular attraction on the south side of Ocean Drive during the summer season, contributing to traffic congestion in the area. In addition, Homer is seeing more cruise ship activity which also translates into more traffic on Ocean Drive. All of these factors have led to increased risk of accidents.



## **Capital Improvement Appendices**

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## Capital Improvement Appendices

**CITY OF HOMER**  
**2018-2023 CAPITAL IMPROVEMENT PLANNING PROCESS**  
**FY 2019 LEGISLATIVE REQUEST DEVELOPMENT SCHEDULE**

| ACTION                                                                                        | TIME FRAME                  |
|-----------------------------------------------------------------------------------------------|-----------------------------|
| City Council Approval of CIP Planning Schedule                                                | May 8, 2017                 |
| Solicit new/revised project information from City Departments, local agencies and non-profits | May 10                      |
| Input for New Draft Requested By                                                              | June 9                      |
| Prepare and Distribute Draft CIP to City Advisory Groups for Review and Input:                | Meeting dates:              |
| Park, Arts, Recreation and Culture Advisory Commission                                        | June 15, August 17          |
| Planning Advisory Commission                                                                  | June 21, July 19            |
| Port and Harbor Advisory Commission                                                           | June 28, July 26            |
| Economic Development Advisory Commission                                                      | July 11, August 8           |
| ADA Compliance Committee                                                                      | July 13                     |
| Library Advisory Board                                                                        | August 1                    |
| Administrative Review and Compilation                                                         | August 9- August 22         |
| City Council Worksession to Review Proposed Projects                                          | August 28                   |
| Introduction of Resolution on CIP/Legislative Request                                         | September 11                |
| Public Hearing on CIP/Legislative Request                                                     | September 25                |
| Adoption of Resolution by City Council                                                        | September 25                |
| Administration Forwards Requests for Governor's Budget                                        | September 29                |
| Distribution of CIP and State Legislative Request                                             | October 2017 & January 2018 |
| Compilation/Distribution of Federal Request                                                   | February 2017               |

## Capital Improvement Appendices

**To be updated with final Resolution**

**CITY OF HOMER  
HOMER, ALASKA**

Mayor/City Council

**RESOLUTION 16-101(A)**

A RESOLUTION OF THE HOMER CITY COUNCIL ADOPTING THE 2017-2022 CAPITAL IMPROVEMENT PLAN AND ESTABLISHING CAPITAL PROJECT LEGISLATIVE PRIORITIES FOR FISCAL YEAR 2018.

WHEREAS, Duly published hearings were held on September 26 and October 10, 2016 in order to obtain public comments on capital improvement projects and legislative priorities; and

WHEREAS, The Council received comments from all of the Commissions and held a Worksession on September 26, 2016; and

WHEREAS, It is the intent of the City Council to provide the Governor, the State Legislature, State agencies, the Alaska Congressional Delegation, and other potential funding sources with adequate information regarding the City's capital project funding needs.

NOW, THEREFORE BE IT RESOLVED by the City Council of Homer, Alaska, that the “City of Homer Capital Improvement Plan 2017-2022” is hereby adopted as the official 6-year capital improvement plan for the City of Homer.

BE IT FURTHER RESOLVED that the following capital improvement projects are identified as priorities for the FY 2018 State Legislative Request:

1. Public Safety Building
2. Homer Large Vessel Harbor
3. Fire Department Fleet Management
4. Storm Water Master Plan
5. Large Vessel Haulout Repair Facility

BE IT FURTHER RESOLVED that projects for the FY 2018 Federal Legislative Request will be:

1. Public Safety Building
2. Homer Large Vessel Harbor

BE IT FINALLY RESOLVED that the City Manager is hereby instructed to advise appropriate State and Federal representatives and personnel of the City's FY 2018 capital project priorities and take appropriate steps to provide necessary background information.



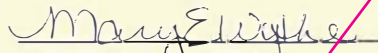
## Capital Improvement Appendices

Page 2 of 2  
RESOLUTION 16-101(A)  
CITY OF HOMER

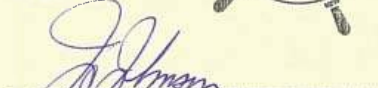
PASSED AND ADOPTED by a duly constituted quorum of the City Council of Homer,  
Alaska, on this 10<sup>th</sup> day of October, 2016.

CITY OF HOMER



  
MARY E. WYTHE, MAYOR

ATTEST:

  
JO JOHNSON, MMC, CITY CLERK

Fiscal Note: N/A



## Capital Improvement Appendices

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### City of Homer Financing Assumptions: Capital Improvement Program

Implementation of the City of Homer Capital Improvement Plan requires utilization of various financing mechanisms. Financing mechanisms available to the City of Homer include:

- Federal grants or loans
- State grants or loans
- General obligation bonds
- Limited obligation bonds
- Revenue bonds
- Special assessment bonds
- Bank loans
- Pay as you go
- Private sector development agreements
- Property owner contributions
- Lease or lease–purchase agreements

The use of any of the financing mechanisms listed above must be based upon the financial capability of the City as well as the specific capital improvement project. In this regard, financing the CIP should take into consideration the following assumptions:

1. The property tax cap of six-mill (at which point sales tax goes away) precludes use of this revenue source for major capital improvements. Available revenue should be utilized to fund operation and maintenance activities.
2. The operating revenue of enterprise funds (Port & Harbor, Water & Sewer) will be limited and as such, currently only fund operation and maintenance activities.
3. The utilization of Federal and State grants will continue to be significant funding mechanisms. Grants will be pursued whenever possible.
4. The 1½ percent sales tax approved by voters of Homer for debt service and CIP projects is dedicated at ¾ percent to sewer treatment plant debt retirement, with the remaining balance to be used in water and sewer system improvement projects, and ¾ percent to the Homer Accelerated Roads and Trails (HART) Program. Currently, though, the HART fund balance will not grow as the ¾ percent dedicated to the HART Program fund has been suspended until 2019.
5. The HART Program will require property owner contributions of \$30 per front foot for road reconstruction, with an additional \$17 per front foot for paving.
6. The Accelerated Water and Sewer Program will only be considered if the fund has a debt service of 1.25 or greater.
7. The private sector will be encouraged to finance, construct, and operate certain nonessential capital improvements (e.g., overslope development).
8. The utilization of bonds will be determined on a project-by-project basis.
9. The lease and/or lease–purchase of capital improvements will be determined on a project-by-project basis.



## City of Homer

[www.cityofhomer-ak.gov](http://www.cityofhomer-ak.gov)

## Office of the City Manager

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(p) 907-235-8121 x2222

(f) 907-235-3148

## Memorandum

TO: Mayor Zak and Homer City Council  
FROM: Katie Koester, City Manager  
DATE: June, 2017  
SUBJECT: June 12 City Manager's Report

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### **Kachemak Bay Water Trail Pavilion Celebration**

Mayor and Council are invited to a picnic and celebration of the Kachemak Bay Water Trail at the new Pavilion behind Pier One on June 17 from noon to 3. The picnic will be to thank donors, including the City of Homer, and volunteers the made the project possible.

### **Welcome New Deputy City Clerk Smith**

Please welcome newly hired Deputy City Clerk 1 Hayley Smith. Haley is a Homer High Graduate and is excited to join the City of Homer team.

### **Homer steps it up challenge trophy**

If you noticed a large gold trophy in the City Hall lobby, it is because City of Homer employees are the proud winner of the first annual Homer Steps it Up challenge. City employees participated in a wellness challenge with The Center, South Peninsula Hospital and Seldovia Village Tribe Clinic during the month of May. The challenge culminated in an awards picnic at WKFL Park on June 1 where various awards were handed out to participants and healthy snacks were shared. A big thank you goes out to organizers who put the multi organization competition together, include Mike Illg with the City of Homer. It was a fun way to get to know our neighbors and inspire some friendly competition. We hope to be able to participate in future years and grow the participating organizations.



### Vote for Homer

Homer is in the running for the USA Today Readers' Choice Best Alaska Attraction. Please ask EVERYONE to vote! <http://www.10best.com/awards/travel/best-alaska-attraction/> These articles trend really well, generate tons of free press and allow us to share with the world what we all know – Homer is the best place to live and play. You can vote once a day until Monday, July 3<sup>rd</sup>.

### City Campgrounds

Last year at the request of the Parks Art Culture and Recreation Advisory Commission, Council increased RV camping fees to \$20 and got rid of the weekly rate. Preliminary numbers indicate people are choosing to pay a little bit more and move onto campgrounds with improvements. City of Homer campgrounds were down considerably over Memorial Day while all the other campgrounds on the Spit (private) were jam-packed. I will present council with an analysis at the end of the season to see if decreased use negates any increase in revenue from raised prices.

### June Employee Anniversaries

I would like to take the time to thank the following employees for the dedication, commitment and service they have provided the City and taxpayers of Homer over the years.

|                   |              |    |       |
|-------------------|--------------|----|-------|
| Bob Painter,      | Fire         | 26 | Years |
| Levi Stradling,   | Public Works | 15 | Years |
| Melissa Jacobsen, | Clerks       | 13 | Years |
| Mike Illg,        | Admin        | 11 | Years |
| Manfred Kirchner, | Public Works | 5  | Years |
| Mike Szocinski,   | Public Works | 5  | Years |

Enc:

Thank you letter from Hospice of Homer

Thank you letter from Prince William Sound Regional Citizens' Advisory Council



## **KENAI PENINSULA BOROUGH**

### **PLANNING DEPARTMENT**

144 North Binkley Street • Soldotna, Alaska 99669-7520

**PHONE:** (907) 714-2215 • **FAX:** (907) 714-2378

Toll-free within the Borough: 1-800-478-4441, Ext. 2215

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**MIKE NAVARRE**  
**BOROUGH MAYOR**

May 11, 2017

### **NOTICE OF DECISION KENAI PENINSULA BOROUGH PLAT COMMITTEE MEETING OF MAY 8, 2017**

RE: Eagle View Subdivision 2017 Replat Preliminary Plat

The Plat Committee reviewed and granted conditional approval of the subject preliminary plat during their regularly scheduled meeting of May 8, 2017 based on the findings that the preliminary plat meets the requirements of the Kenai Peninsula Borough Code 20.25; 20.30; 20.40 and 20.60.

#### **AMENDMENT MOTION**

An amendment motion to grant exception to KPB 20.30.240, Building Setback – not carry the 20-foot building setback plat note forward from the parent plat passed by unanimous consent based on the following findings of fact.

Standard 1. That special circumstances or conditions affecting the property have been shown by application.

#### *Findings*

1. The subdivision is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is in the Rural Residential Zoning District.
4. Per HM 84-4 (formerly HM 83-59), a building setback of 20 feet is required from all street right-of-ways unless a lesser standard is approved by resolution of the appropriate planning commission.
5. The subject property was outside the Homer City limits when the parent plat was approved per the Planning Commission's April 11, 1983 meeting minutes.
6. KPB Ordinance 80-4, Amending the Subdivision Ordinance to Clarify Building Setback Requirements in the Area of the Borough within the Boundaries of a First-Class City, was enacted on February 19, 1980.
7. Ordinance 83-25, enacted on May 3, 1983, delegated zoning regulations to the City of Homer.
8. The Planning Commission approved the parent plat on April 11, 1983.
9. Building setbacks within the subdivision must comply with the requirements of the zoning district per KPB 20.30.250.
10. Approval of the exception will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.
11. Plat Note 2 states the subdivision is subject to the zoning regulations of the City of Homer.

Standard 2. That the exception is necessary for the preservation and enjoyment of a substantial property right and is the most practical manner of complying with the intent of this title.

#### *Findings*

1. The subdivision is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is in the Rural Residential Zoning District.
4. Per HM 84-4 (formerly HM 83-59), a building setback of 20 feet is required from all street right-of-ways unless a lesser standard is approved by resolution of the appropriate planning commission.

5. The subject property was outside the Homer City limits when the parent plat was approved per the Planning Commission's April 11, 1983 meeting minutes.
6. KPB Ordinance 80-4, Amending the Subdivision Ordinance to Clarify Building Setback Requirements in the Area of the Borough within the Boundaries of a First-Class City, was enacted on February 19, 1980.
7. Ordinance 83-25, enacted on May 3, 1983, delegated zoning regulations to the City of Homer.
8. The Planning Commission approved the parent plat on April 11, 1983.
9. Building setbacks within the subdivision must comply with the requirements of the zoning district per KPB 20.30.250.
10. Approval of the exception will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.
11. Plat Note 2 states the subdivision is subject to the zoning regulations of the City of Homer.

**Standard 3.** That the granting of the exception will not be detrimental to the public welfare or injurious to other property in the area in which said property is situated.

*Findings*

1. The subdivision is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is in the Rural Residential Zoning District.
7. Ordinance 83-25, enacted on May 3, 1983, delegated zoning regulations to the City of Homer.
9. Building setbacks within the subdivision must comply with the requirements of the zoning district per KPB 20.30.250.
10. Approval of the exception will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.
11. Plat Note 2 states the subdivision is subject to the zoning regulations of the City of Homer.

This notice and unapproved minutes of the subject portion of the meeting were sent May 11, 2017 to:

**City of:** City of Homer  
491 East Pioneer Avenue  
Homer, AK 99603

**Advisory Planning Commission/Community Council:** Homer Advisory Planning Commission  
491 East Pioneer Avenue  
Homer, AK 99603

**Survey Firm:** Seabright Surveying + Design  
1044 East Road, Suite A  
Homer, AK 99603

**Subdivider/Petitioner:** David & Kara Clemens  
PO Box 15167  
Fritz Creek, AK 99603-1855

**KPB File Number:** 2017-054

## AGENDA ITEM E. SUBDIVISION PLAT PUBLIC HEARINGS

### 6. Eagle View Subdivision 2017 Replat KPB File 2017-054 [Seabright / Clemens]

Staff Report given by Patti Hartley

Plat Committee Meeting: 5/8/17

|                          |                                     |
|--------------------------|-------------------------------------|
| Location:                | Off Eagle View Drive, City of Homer |
| Proposed Use:            | Residential                         |
| Water/Sewer:             | On-site                             |
| Zoning:                  | Rural Residential                   |
| Assessing Use:           | Residential, Vacant                 |
| Parent Parcel Number(s): | 173-690-27, 173-690-28              |

#### Supporting Information:

The proposed subdivision is a simple replat of two lots into one lot containing 3.7 acres. Per KPB 20.40.020, a new soils report is not required. The subdivision fronts Eagle View Drive, which is maintained by the City of Homer.

Notice of the proposed plat was mailed to the beneficial interest holders on April 18, 2017. The beneficial interest holders will be given 30 days from the date of the mailing of the notification to respond. They are given the opportunity to notify staff if their beneficial interest prohibits or restricts subdivision or requires their signature on the final plat. If no response is received within 30 days, staff will assume they have no requirements regarding the subdivision and it may be finalized.

Physical addresses may be affected by the replat. The Homer Planning and Zoning Department can answer questions about the effect of the replat on addresses.

Homer Advisory Planning Commission approved the proposed plat on April 5, 2017 subject to staff comments and recommendations:

Public Works Comments: The Water Sewer Master Plan shows the need for a future sewer main along the western and southern property line. A 15-foot wide easement for the sewer will need to be granted this plat. See attached drawings.

#### Planning Staff Recommendations:

1. Along the right of way, grant and depict only the 15 foot utility easement.  
*Borough Staff Comments:* The preliminary plat distributed to the utility providers included the plat note granting the front 15 feet adjoining the rights-of-way and 20 feet within 5 feet of side lot line as a utility easement. Staff does not object to the Homer Commission's recommendation; however, if the plat note is changed per the Homer Commission's recommendation, **staff recommends** the surveyor re-distribute the plat with the revised utility note to all utility providers for review and comments to ensure the revised utility easement is acceptable to the remainder of the utility providers.
2. Provide all lot dimensions.  
*Borough Staff Comments:* Per KPB 20.60.110, **staff recommends** compliance with the Homer Commission's recommendation.
3. Provide a 15-foot utility easement along the west and south lot lines as shown on the attachment.  
*Borough Staff Comments:* The City of Homer is a utility provider so the plat needs to comply with the Homer Commission's recommendation based on KPB 20.30.060. However, staff is concerned about the easement requested along the southern boundary.

*Per Plat Note 8 on the parent plat, streams shown are subject to flooding and glaciation 20 feet each side of centerline. Per Plat Note 11 on the parent plat, there is a 20 foot drainage easement along all*

streams shown and depicted hereon. Per the parent plat, a stream is generally not within the proposed plat, but it may cross the western and southern boundary lines on the west and abuts the plat's southern boundary as depicted on the parent plat. It is possible the stream has moved since the parent plat was approved 34 years ago. **Staff recommends** the surveyor confirm with the Public Works Department of their wish to have a sewer easement along the southern boundary of the subject plat.

Literally interpreted, the parent plat Note 11 places a 20-foot easement along each side of the streams depicted on the parent plat. **Staff recommends** that the City of Homer's Public Works Department's request for the 15-foot sewer easement not compromise the stream or the stream's protective easement(s).

4. Carry over the stream depiction from the parent plat and the associated plat note: Streams shown are subject to flooding and glaciation 20 feet each side of centerline.  
*Borough Staff Comments:* **Staff recommends** compliance with the Homer Commission's recommendation (KPB 20.25.070).

**Staff recommends** that notes be placed on the final plat indicating any exceptions granted by the Plat Committee with the meeting date.

Exception Requested: KPB 20.30.240 – Building setback – exception is required so the 20-foot building setback plat note does not have to be carried forward from the parent plat.

Staff Discussion: Plat Note 4 on HM 84-4 states the plat is subject to a 20-foot building setback along all rights-of-way. The exception is a housekeeping matter to ensure the plat complies with the current requirements of the city's zoning district.

KPB Ordinance 80-4, Amending the Subdivision Ordinance to Clarify Building Setback Requirements in the Area of the Borough within the Boundaries of a First-Class City, was enacted on February 19, 1980. Ordinance 83-25 delegated zoning regulations to the City of Homer three years later.

AS 29.40.120 states a recorded plat may not be altered or replatted except by the platting authority on petition of the state, the borough, a public utility, or the owners of a majority of the land affected by the alteration or replat. Enactment of zoning regulations by a city will not automatically erase notations on the recorded plat.

The proposed plat is within the City of Homer and is subject to the requirements of the zoning code. Removing the 20-foot building setback from the plat will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.

## Findings

1. The subdivision is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is in the Rural Residential Zoning District.
4. Per HM 84-4 (formerly HM 83-59), a building setback of 20 feet is required from all street right-of-ways unless a lesser standard is approved by resolution of the appropriate planning commission.
5. The subject property was outside the Homer City limits when the parent plat was approved per the Planning Commission's April 11, 1983 meeting minutes.
6. KPB Ordinance 80-4, Amending the Subdivision Ordinance to Clarify Building Setback Requirements in the Area of the Borough within the Boundaries of a First-Class City, was enacted on February 19, 1980.
7. Ordinance 83-25, enacted on May 3, 1983, delegated zoning regulations to the City of Homer.
8. The Planning Commission approved the parent plat on April 11, 1983.
9. Building setbacks within the subdivision must comply with the requirements of the zoning district per KPB 20.30.250.
10. Approval of the exception will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.

11. Plat Note 2 states the subdivision is subject to the zoning regulations of the City of Homer.

Staff reviewed the exception request and recommends granting approval. Staff recommends the Committee select the findings they determine are applicable, make additional findings if needed, tie the findings to the following standards, and vote on the exception in a separate motion.

Unless prohibited under this title, the commission (committee) may authorize exceptions to any of the requirements set forth in this title. Application for an exception shall present the commission (committee) with substantial evidence, justifying the requested waiver or exception stating fully the grounds for the application and the facts relied upon. All exceptions must be requested and granted at the time of preliminary plat approval. Exceptions may not be requested with a final plat submittal.

The commission (committee) shall make findings of fact meeting the following standards before granting any exception:

1. That special circumstances or conditions affecting the property have been shown by application;  
**Findings 1-11 appear to support this standard.**
2. That the exception is necessary for the preservation and enjoyment of a substantial property right and is the most practical manner of complying with the intent of this title;  
**Findings 1-11 appear to support this standard.**
3. That the granting of the exception will not be detrimental to the public welfare or injurious to other property in the area in which said property is situated.  
**Findings 1-3, 7, and 9-11 appear to support this standard.**

**STAFF RECOMMENDATIONS:**

- **GRANT APPROVAL OF THE PRELIMINARY PLAT SUBJECT TO ANY ABOVE RECOMMENDATIONS, AND**
- **REQUIRE COMPLIANCE WITH KPB 20.25.070 (FORM AND CONTENTS), KPB 20.25.080 (PETITION REQUIRED), KPB 20.30 (DESIGN REQUIREMENTS); AND KPB 20.40 (WASTEWATER DISPOSAL), SUBJECT TO EXCEPTION(S) GRANTED.**

**20.25.070 - Form and contents required.**

Platting staff comments: Additional information is provided for the following portions of 20.25.070 or additional information, revision or corrections are required

- A. Within the Title Block
1. Name of the subdivision which shall not be the same as an existing city, town, tract, or subdivision of land in the borough, of which a plat has been previously recorded, or so nearly the same as to mislead the public or cause confusion;
  2. Legal description, location, date, and total area in acres of the proposed subdivision; and
  3. Name and address of owner(s), as shown on the KPB records and the certificate to plat, and registered land surveyor;  
*Platting Staff Comments: **Staff recommends** the owners' address be confirmed. Per KPB records, their address is P.O. Box 1855, Homer.*
- D. A vicinity map, drawn to scale showing location of proposed subdivision, north arrow if different from plat orientation, township and range, section lines, roads, political boundaries, and prominent natural and manmade features, such as shorelines or streams;  
*Platting Staff Comments: **Staff recommends:***
1. *Add the suffix to the Sterling Highway label in Section 27 or remove it.*

2. Complete the label for Diamond Ridge Road or remove it.
3. Add the suffix to East End Road.
4. Use a distinctive line style for the city limits, like dashes or dots.

- F. The names and widths of public streets and alleys and easements, existing and proposed, within the subdivision;  
*Platting Staff Comments:* Per the parent plat, there is a 20-foot drainage easement along all streams shown. **Staff recommends** the surveyor determine if the 20-foot drainage easement extends into the subject plat. If so, **staff recommends** the easement be shown and labeled and its source cited.
- H. Approximate locations of areas subject to inundation, flooding, or storm water overflow, the line of ordinary high water, wetlands when adjacent to lakes or non-tidal streams, and the appropriate study which identifies a floodplain, if applicable;  
*Platting Staff Comments:* The parent plat indicates the stream follows the subject plat's southern boundary and is generally outside of the plat.

*Per the Homer City staff report, the plat may be affected by a discharge slope and riparian wetlands. The low wet areas have been shown and labeled, and the appropriate note is on the plat.*

### KPB 20.30 Design Requirements

Platting staff comments: Additional information is provided for the following portions of 20.30 or additional information, revision or corrections are required

#### 20.30.030. Proposed street layout-Requirements.

- C. Preliminary plats fronting state maintained roads will be submitted by the planning department to the State of Alaska Department of Transportation and Public Facilities (DOT) for its review and comments.

*State Department of Transportation Comments:* No comment.

*State Department of Natural Resources:* No comment.

*Platting Staff Comments:* The plat does not front a State right-of-way.

#### 20.30.060. Easements-Requirements.

- C. The subdivider bears the responsibility for coordination with the utility companies during the design and development phases. When a subdivider and the utility company cannot agree on easements, the final plat will be taken to the planning commission for determination of easements.

*Platting Staff Comments:* The affected utility providers were mailed the subdivision plat public hearing notice as part of the routine notification process. GCI submitted a statement of no comments. The City of Homer's Public Works Department requested a 15' sewer line easement along the west and southern boundaries.

#### 20.30.070. Lots on major streets-Access requirements.

Lots fronting on arterial streets with less than 200 feet of right-of-way as identified in the arterial road plan adopted by the borough or lots fronting on state maintained roads with less than 200 feet of right-of-way may be required to provide interior or frontage road access after review and recommendation by the Kenai Peninsula Borough Road Service Area staff and upon a finding by the planning commission that due to size, topography, physical characteristics, or heavy traffic flow, that direct access to the arterial or state maintained road may present a traffic hazard.

*KPB Roads Department Comments:* Not available when the staff report was prepared.

*Platting Staff Comments:* The plat does not front a KPB right-of-way.

#### 20.30.100. Cul-de-sacs.

- A. Streets designed to have one end permanently closed shall be no more than 1000 feet long. The closed end of the cul-de-sac shall have a suitable turnaround with a minimum radius of 50 feet to the property line. The turnaround shall be constructible to a 4 percent grade or less.

*Platting Staff Comments: It is approximately 1,200 feet from the terminus of Eagle View Drive to Garden Park Drive. Cul-de-sacs were not discussed during the Commission's preliminary and final reviews for the parent plat. The surveyor for the parent plat noted connection of Eagle View Drive to Charlie Drive to the north would require a waiver to the slope requirements.*

*The maximum cul-de-sac length was 1,000 feet (KPB 20.20.090) at the time of plat approval. The Planning Commission did not discuss cul-de-sac length, and the right-of-way retained a through street suffix (Drive).*

#### 20.30.170. Blocks-Length requirements.

Blocks shall not be less than 330 feet or more than 1,320 feet in length. Along arterial streets and state maintained roads, block lengths shall not be less than 800 feet. Block lengths shall be measured from centerline intersections.

*Platting Staff Comments: This oddly shaped block is generally defined by Garden Park Drive, Eagle View Drive, West Hill Road, Diamond Ridge Road, Sheep Drive, and Charlie Drive. The western portion of the block is incomplete.*

*Per the surveyor's submittal for the parent plat, Eagle View Drive was not connected to Charlie Drive due to steep slopes. KPB GIS 4-foot contours indicate terrain in the area through which Charlie Drive would be extended exceeds 20 percent slopes.*

*The proposed plat is sandwiched between two cul-de-sacs and cannot provide practical help to shorten the block.*

#### 20.30.280. Floodplain requirements.

*Platting Staff Comments: River Center review was not available when the staff report was prepared.*

*The City of Homer administers the floodplain program through Homer City Code 21.41 Flood Prone Areas. Per the Homer City staff report, the proposed subdivision is within Flood Zone D, flood hazards undetermined.*

#### 20.30.290. Anadromous habitat protection district.

*Platting Staff Comments: Per KPB GIS mapping, the subdivision is not affected by the Anadromous Habitat Protection District. If the River Center review states the plat is affected by 20.30.290, staff recommends compliance with River Center recommendations per KPB Code.*

*Per KPB GIS mapping, no anadromous streams flow through or are adjacent to the proposed plat.*

### **KPB 20.40 -- Wastewater Disposal**

*Platting Staff Comments: The Alaska Department of Environmental Conservation approved and signed the parent plat. **Staff recommends** the wastewater disposal note for the final plat be in accordance with KPB 20.40.020 and ADEC's June 15, 1983 approval date be included.*

### **STAFF RECOMMENDATIONS: COMPLIANCE WITH KPB 20.60 TO ENSURE ADMINISTRATIVE APPROVAL OF THE FINAL PLAT.**

Platting staff comments: Additional information is provided for the following portions of 20.60 or additional information, revision or corrections are required

#### 20.60.020. Filing-Form and number of copies required.

The subdivider shall file a standard number of prints as determined by the planning director. All prints shall be folded as required by KPB 20.25.030 except those to be recorded with the district recorder.

*Platting Staff Comments: **Staff recommends** one full-sized paper copy of the plat be submitted for final review prior to submittal of the mylar. Electronic submittals are not acceptable for final reviews.*

20.60.080. Improvements-Installation agreement required.

A final plat of a subdivision located within city limits shall not be recorded with the district recorder prior to compliance with any city ordinances concerning the installation of improvements. Evidence of compliance shall be provided by the subdivider in the form of a written statement from the appropriate city official that improvements required by city ordinance are or will be installed. Evidence of compliance shall be a part of the final plat submission and the time for action required by KPB 20.60.210 shall not commence until evidence of compliance is submitted.

*Platting Staff Comments: **Staff recommends** compliance with KPB 20.60.080.*

20.60.110. Dimensional data required.

A. The bearing and length of every lot line, block line, and boundary line shall be shown. Dimensions of lots shall be given as net dimensions to the boundaries of adjoining streets and shall be shown in feet. No ditto marks shall be used. Information shall be shown for all curves, including radius, central angle, arc length, chord length and chord bearing. The initial point of survey shall be shown and labeled.

*Platting Staff Comments: **Staff recommends** compliance with 20.60.110.*

20.60.120. Accuracy of measurements.

All linear measurements shall be shown to the nearest 1/10 foot, and angular measurements shall be at least to the nearest minute. All lot areas shall be shown to the nearest 10 square feet or to the nearest 1/1,000 of total acres. Meander lines, dry land areas and submerged land areas shall be shown in addition to total area when applicable. All boundary closures shall be to a minimum accuracy of 1:5,000. Boundary and lot closure computations must be submitted with the final plat.

*Platting Staff Comments: KPB GIS will verify closure complies with 20.60.120. **Staff recommends** boundary and lot closure computations be provided with the paper final plat.*

20.60.150. Utility easements.

B. The following note shall be shown on the final plat:

No permanent structure shall be constructed or placed within a utility easement which would interfere with the ability of a utility to use the easement.

*Platting Staff Comments: **Staff recommends** compliance with 20.60.150.*

20.60.160. Easements.

A. The plat shall clearly show the location, width, and use of all easements. The easements must be clearly labeled and identified and, if already of record, the recorded reference given. If public easements are being granted by the plat, they shall be properly set out in the owner's certification of dedication.

*Platting Staff Comments: **Staff recommends** a plat note be provided for the blanket easement granted to Homer Electric Association.*

20.60.170. Other data required by law.

B. Private covenants and restrictions of record in effect at the time the final plat is approved shall be referenced on the plat.

*Platting Staff Comments: **Staff recommends** a plat note be provided for the private restrictive covenants that affect the replat.*

*The borough will not enforce private covenants, easements, or deed restrictions per KPB 21.44.080.*

20.60.190. Certificates, statements, and signatures required.

*Platting Staff Comments: **Staff recommends** the owners' names match the final Certificate to Plat, for example, Kara Bakken Clemens.*

20.60.200. Survey and monumentation.

*Platting Staff Comments: **Staff recommends** all record monumentation from the parent plat be shown as of record.*

**NOTE: A PARTY OF RECORD MAY REQUEST THAT A DECISION OF THE PLAT COMMITTEE BE REVIEWED BY THE PLANNING COMMISSION BY FILING A WRITTEN REQUEST WITHIN 10 DAYS OF NOTIFICATION OF THE DECISION IN ACCORDANCE WITH KPB 2.40.080.**

**PARTIES OF RECORD: UNLESS SPECIFIED OTHERWISE MEANS THOSE PERSONS WHO HAVE COMMENTED IN A WRITTEN AND SIGNED DOCUMENT OR IN PERSON ON AN AGENDA ITEM BEFORE THE PLANNING COMMISSION OR PLAT COMMITTEE WHO OWN PROPERTY WITHIN THE NOTIFICATION RADII ESTABLISHED IN THIS CHAPTER.**

END OF STAFF REPORT

Vice Chairman Ernst opened the meeting for public comment. Seeing and hearing no one wishing to comment, Vice Chairman Ernst closed the public hearing and opened discussion among the Committee.

**MAIN MOTION:** Commissioner Lockwood moved, seconded by Commissioner Whitney to grant preliminary approval for Eagle View Subdivision 2017 Replat based on staff recommendations.

**AMENDMENT MOTION:** Commissioner Lockwood moved, seconded by Commissioner Whitney to grant exception to KPB 20.30.240, Building setback – not carry the 20-foot building setback plat note forward from the parent plat.

Standard 1. That special circumstances or conditions affecting the property have been shown by application.

*Findings*

1. The subdivision is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is in the Rural Residential Zoning District.
4. Per HM 84-4 (formerly HM 83-59), a building setback of 20 feet is required from all street right-of-ways unless a lesser standard is approved by resolution of the appropriate planning commission.
5. The subject property was outside the Homer City limits when the parent plat was approved per the Planning Commission's April 11, 1983 meeting minutes.
6. KPB Ordinance 80-4, Amending the Subdivision Ordinance to Clarify Building Setback Requirements in the Area of the Borough within the Boundaries of a First-Class City, was enacted on February 19, 1980.
7. Ordinance 83-25, enacted on May 3, 1983, delegated zoning regulations to the City of Homer.
8. The Planning Commission approved the parent plat on April 11, 1983.
9. Building setbacks within the subdivision must comply with the requirements of the zoning district per KPB 20.30.250.
10. Approval of the exception will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.
11. Plat Note 2 states the subdivision is subject to the zoning regulations of the City of Homer.

Standard 2. That the exception is necessary for the preservation and enjoyment of a substantial property right and is the most practical manner of complying with the intent of this title.

*Findings*

1. The subdivision is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is in the Rural Residential Zoning District.
4. Per HM 84-4 (formerly HM 83-59), a building setback of 20 feet is required from all street right-of-ways unless a lesser standard is approved by resolution of the appropriate planning commission.
5. The subject property was outside the Homer City limits when the parent plat was approved per the Planning Commission's April 11, 1983 meeting minutes.
6. KPB Ordinance 80-4, Amending the Subdivision Ordinance to Clarify Building Setback Requirements

in the Area of the Borough within the Boundaries of a First-Class City, was enacted on February 19, 1980.

7. Ordinance 83-25, enacted on May 3, 1983, delegated zoning regulations to the City of Homer.
8. The Planning Commission approved the parent plat on April 11, 1983.
9. Building setbacks within the subdivision must comply with the requirements of the zoning district per KPB 20.30.250.
10. Approval of the exception will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.
11. Plat Note 2 states the subdivision is subject to the zoning regulations of the City of Homer.

**Standard 3.** That the granting of the exception will not be detrimental to the public welfare or injurious to other property in the area in which said property is situated.

**Findings**

1. The subdivision is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is in the Rural Residential Zoning District.
7. Ordinance 83-25, enacted on May 3, 1983, delegated zoning regulations to the City of Homer.
9. Building setbacks within the subdivision must comply with the requirements of the zoning district per KPB 20.30.250.
10. Approval of the exception will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.
11. Plat Note 2 states the subdivision is subject to the zoning regulations of the City of Homer.

**AMENDMENT VOTE:** The motion passed by unanimous consent.

|              |                 |               |                   |                |                   |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|
| ERNST<br>YES | LOCKWOOD<br>YES | MORGAN<br>YES | RUFFNER<br>ABSENT | WHITNEY<br>YES | 4 YES<br>1 ABSENT |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|

**MAIN MOTION VOTE:** The motion passed by unanimous consent.

|              |                 |               |                   |                |                   |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|
| ERNST<br>YES | LOCKWOOD<br>YES | MORGAN<br>YES | RUFFNER<br>ABSENT | WHITNEY<br>YES | 4 YES<br>1 ABSENT |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|

**AGENDA ITEM E.** SUBDIVISION PLAT PUBLIC HEARINGS

7. Murray Subdivision Martin Addition No. 4 Revised Preliminary  
KPB File 2015-066R1 [Eastham / Martin]

Staff Report given by Patti Hartley

Plat Committee Meeting: 5/8/17

Location: Off of Murray Lane, Sterling area  
Proposed Use: Residential  
Water/Sewer: On-site  
Zoning: Unrestricted  
Assessing Use: Vacant  
Parent Parcel Number(s): 063-460-28

**Supporting Information:**

The Plat Committee conditionally approved the preliminary plat on July 13, 2015, which is valid through July 13, 2017. The preliminary plat created 5 lots and dedicated a short cul-de-sac for three interior lots.

The revised preliminary plat creates 5 lots and dedicates 2 short cul-de-sacs. Lot sizes range from 1 to 5.6 acres. A soils report is required for all lots except B4, and an engineer will sign the plat. Three lots front the



## **KENAI PENINSULA BOROUGH**

### **PLANNING DEPARTMENT**

144 North Binkley Street • Soldotna, Alaska 99669-7520

**PHONE:** (907) 714-2215 • **FAX:** (907) 714-2378

Toll-free within the Borough: 1-800-478-4441, Ext. 2215

[www.kpb.us](http://www.kpb.us)

**MIKE NAVARRE**  
**BOROUGH MAYOR**

May 11, 2017

### **NOTICE OF DECISION KENAI PENINSULA BOROUGH PLAT COMMITTEE MEETING OF MAY 8, 2017**

RE: Lloyd Race 2017 Revised Preliminary Plat

The Plat Committee reviewed and granted conditional approval of the subject revised preliminary plat during their regularly scheduled meeting of May 8, 2017 based on the findings that the preliminary plat meets the requirements of the Kenai Peninsula Borough Code 20.25; 20.30; 20.40 and 20.60.

#### **AMENDMENT MOTION**

An amendment motion **failed** by unanimous consent to grant exception to KPB 20.40, Soils Report based on the following findings of fact.

#### *Findings*

7. Slopes greater than 20 percent have been shown and labeled.
8. Per the submittal, the majority of Lot 11-B1 is subject to slopes much greater than 20 percent.
11. Based on the submittal, staff estimates Lot 11-B1 has approximately 6,000 square feet of developable upland area.
12. Once Lot 11-B1 is created, it can be conveyed to anyone.
13. The subdivision contains approximately 15 acres.
14. The parent lot was not reviewed or approved by the Alaska Department of Environmental Conservation.
15. The parent plat file does not contain a signed affidavit by the owner acknowledging the State's wastewater review process and asking KPB to record the plat (a standard statement for plats reviewed in the 1970s).
16. Per the submittal, the replat does not add 1,000 square feet or more of area suitable for conventional development per KPB 20.40.020 to Lot 11-B1.

#### **AMENDMENT MOTION**

An amendment motion passed by unanimous consent to approve the revised preliminary plat based on staff recommendations and based on removing Lot 11-B from the plat and/or providing a soils analysis for Lot 11-B1.

This notice and unapproved minutes of the subject portion of the meeting were sent May 11, 2017 to:

**City of:** City of Homer  
491 East Pioneer Avenue  
Homer, AK 99603

**Advisory Planning Commission/Community Council:** Homer Advisory Planning Commission  
491 East Pioneer Avenue  
Homer, AK 99603

**Survey Firm:** Ability Surveys  
152 Dehel Ave  
Homer, AK 99603

**Subdivider/Petitioner:** Scott & Catherine Ulmer  
PO Box 1950  
Homer, AK 99603-1950  
  
Phillip & Tanya Rojas  
240 Ranch Ct.  
Montrose, CO 81403-3664

**KPB File Number:** 2017-027R1

AGENDA ITEM E.      SUBDIVISION PLAT PUBLIC HEARINGS

5.      Lloyd Race 2017 Revised Preliminary  
         KPB File 2017-027 [Ability / Ulmer]  
         Parcels 174-030-20 & 21; 174-030-14 & 15

Staff Report given by Patti Hartley

Plat Committee Meeting: 5/8/17

After the Plat Committee conditionally approved the preliminary plat on March 27, 2017, the surveyor submitted a request for an exception to wastewater review for Lot 11-B1. Staff determined the most appropriate method to address the surveyor's request was to consider it as a revised preliminary plat.

The City of Homer advised staff that the Homer Advisory Planning Commission did not need to review the requested exception.

The plat's design is unchanged. Since the only new item to consider is the exception to KPB 20.40, and in the interest of having a shorter staff report, staff elected to address the exception only in this report.

**Staff recommends** that notes be placed on the final plat indicating any exceptions granted by the Plat Committee with the meeting date.

Exception Requested: KPB 20.40.

**Surveyor's Explanation and Justification:** The Ulmers would like to finalize the plat with the lot configuration as shown, but for Lot 11-B1 would like to add the note required for subdivisions with no wastewater disposal (20.40.080). He has had the soils engineering done for the other lots in the subdivision but has no plans for sale or development of said Lot 11-B1 at this time. He lives on Lot 12 and uses the proposed Lot 11-B1 for parking and storage. The added expense is more than he can bear at this time, and he plans on continued use of Lot 11-B1 with no generation of wastewater for the foreseeable future. He feels he may be able to afford wastewater soils investigation and reporting at a future date if and or when that may be needed, but not now.

Mr. Ulmer feels the preliminary plat request to replat the three Lots 11B, 11C, and 12 (all formerly not approved under KPB Wastewater provisions), into two lots (one to be approved under KPB Wastewater provisions, is an improvement to the health, safety, and welfare of KPB residents beyond the alternative offered by a rejection of inclusion of Lots 11-B and 11-C, which will necessitate removing them from the plat. If the plat is not allowed to add the requested wastewater note, we will be forced to remove Lots 11-B and 11-C from the subdivision and only replat Lots 12 and 13, leaving two lots of marginal wastewater disposability (11-B & 11-C), instead of the proposed one (11-B1).

It is also notable that the plat very nearly meets several of the criteria of KPB 20.40.020 Wastewater System Review Not Required A. 1 & 2, but due to its unique attributes (generally steep terrain) does not. For instance A.2 says, "The plat increases lot sizes by 1,000 square feet or more of area suitable for conventional development." The proposed Lot 11-B1 is 38,240 square feet larger but may not add to "area suitable for conventional development." Although there may be room to fudge here depending on the interpretation of "area suitable for conventional development." Also, it would meet the provision for "A.1.a. Vacating lot lines to create fewer lots," but the former plats were not approved by DEC or this chapter (KPBC 20.40).

It is also notable that the lot is over 642 feet long, and any future development of the lot in the proposed configuration would most likely happen within the northerly 150 feet leaving a large buffer of nearly 400 feet to the south boundary.

Staff Discussion: The Plat Committee granted an exception to the 3:1 depth to width ratio for Lot 11-B1 on March 27. One finding cited in support of approval was that a soils report was required for Lot 11-B1.

KPB 20.40.080 applies to subdivisions where no wastewater will be generated or disposed, and the land use cannot produce wastewater. To date this wastewater disposal note has been used for substandard-sized remnant lots created by rights-of-way that cannot support residential use. This note has been requested to be used in the past where difficult wastewater disposal areas have been encountered because of steep slopes or where shallow groundwater conditions exist and this request has been denied.

Current ADEC regulations require that conventional soil absorption systems (SAS) maintain a horizontal setback of 50 feet from slopes greater than 25%. Soil absorption beds require slopes of five (5) percent or less; trenches require ground slopes of 25% or less. Both types of SAS are subject to the 50-foot setback from steep slopes. Per KPB GIS 4-foot contours, staff calculated the steep slopes within Lot 11-B1 range from 25 to 100 percent. Staff could not find an area within proposed Lot 11-B1 where a conventional SAS could be constructed based upon current ADEC regulations; therefore, it appears that an alternate wastewater treatment system designed by a professional engineer must be utilized.

Lacking a soils report with adequate information about wastewater disposal systems, a future owner would most likely wish to install a standard soil absorption system, which is much less expensive than an engineered system. Steep slopes within Lot 11-B1 could result in partially or untreated wastewater effluent surfacing and then flowing downhill via nearby ravines. Any effluent discharge downhill is not an effective mechanism to protect the health, safety and welfare of the public.

Staff believes Lot 11-B1 needs an engineer's evaluation and recommendation of the wastewater disposal options available.

#### **Platting Staff Findings**

1. The subdivision is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is in the Rural Residential zoning district.
4. Per comments from the City of Homer, wastewater concerns are addressed as part of the zoning permit process.
5. Per KPB GIS mapping, city water and sewer lines are within Stream Hill Park to the south and East Hill Road to the west.
6. Lot 11B contains 1.611 acres; Lot 11-B1 contains 2.489 acres.
7. Slopes greater than 20 percent have been shown and labeled.
8. Per the submittal, the majority of Lot 11-B1 is subject to slopes much greater than 20 percent.
9. Per Kenai Watershed Forum 2013 Cook Inlet Wetlands Mapping, the plat is not affected by low wet areas.
10. A soils report has been submitted and approved by the Platting Officer for Lot 13-A.
11. Based on the submittal, staff estimates Lot 11-B1 has approximately 6,000 square feet of developable upland area.
12. Once Lot 11-B1 is created, it can be conveyed to anyone.
13. The subdivision contains approximately 15 acres.
14. The parent lot was not reviewed or approved by the Alaska Department of Environmental Conservation.
15. The parent plat file does not contain a signed affidavit by the owner acknowledging the State's wastewater review process and asking KPB to record the plat (a standard statement for plats reviewed in the 1970s).
16. Per the submittal, the replat does not add 1,000 square feet or more of area suitable for conventional development per KPB 20.40.020 to Lot 11-B1.

Based on Findings 7, 8, and 11-16 staff does not support approval of the exception. **Staff recommends** compliance with KPB 20.40.

If the Committee grants the exception staff recommends the Committee select the findings they determine are applicable, make additional findings if needed, tie the findings to the following standards, and vote on the exception in a separate motion.

Unless prohibited under this title, the commission (committee) may authorize exceptions to any of the requirements set forth in this title. Application for an exception shall present the commission (committee) with substantial evidence, justifying the requested waiver or exception stating fully the grounds for the application and the facts relied upon. All exceptions must be requested and granted at the time of preliminary plat approval. Exceptions may not be requested with a final plat submittal.

The commission (committee) shall make findings of fact meeting the following standards before granting any exception:

1. That special circumstances or conditions affecting the property have been shown by application;
2. That the exception is necessary for the preservation and enjoyment of a substantial property right and is the most practical manner of complying with the intent of this title;
3. That the granting of the exception will not be detrimental to the public welfare or injurious to other property in the area in which said property is situated.

STAFF RECOMMENDATIONS: Compliance with staff recommendations and conditions for preliminary plat approval in the March 27, 2017 staff report, subject to exceptions granted.

**NOTE: A PARTY OF RECORD MAY REQUEST THAT A DECISION OF THE PLAT COMMITTEE BE REVIEWED BY THE PLANNING COMMISSION BY FILING A WRITTEN REQUEST WITHIN 10 DAYS OF NOTIFICATION OF THE DECISION IN ACCORDANCE WITH KPB 2.40.080.**

**PARTIES OF RECORD: UNLESS SPECIFIED OTHERWISE MEANS THOSE PERSONS WHO HAVE COMMENTED IN A WRITTEN AND SIGNED DOCUMENT OR IN PERSON ON AN AGENDA ITEM BEFORE THE PLANNING COMMISSION OR PLAT COMMITTEE WHO OWN PROPERTY WITHIN THE NOTIFICATION RADII ESTABLISHED IN THIS CHAPTER.**

#### END OF STAFF REPORT

Vice Chairman Ernst opened the meeting for public comment.

1. Gary Nelson, Ability Surveys  
Mr. Nelson was the surveyor on the project. He stated that if the exception request was not granted then they will remove Lot 11-B from the proposed subdivision replat. Mr. Nelson asked staff if they would be able to have this plat approved by eliminating Lot 11-B from this subdivision.

Mr. Voeller replied that could be done. Mr. Nelson stated that he just wanted to make sure that could be done.

Mr. Nelson presented an exhibit of the property which was placed in the subdivision file. The exhibit had green and orange highlighted lines. The green highlighted line on the plat map showed the area that has a narrow ridge. They were trying to have the property line go down the ravine which is shown with an orange highlighted line. He stated that eliminating Lot 11-B would make Lot 11-C almost twice as big which may help ADEC give a waiver to an engineer if they can ever get a system approved for Lot 11-B1.

Mr. Nelson thought that staff findings totally ignored Finding 4 which states, *"Per comments from the City of Homer, wastewater concerns are addressed as part of the zoning permit process."* He referred to Rick Abboud, Homer City Planner's, written response to Paul Voeller's question about the need for the City of Homer to review the submittal again due to the exception request. It was determined by the City that they do not need to review the plat again. Mr. Nelson stated that Mr. Abboud's letter meant that if they need a building permit then they will have to have an ADEC approved septic system. He felt that the City of Homer has this pretty much taken care of for future development. As said, the owner cannot afford it right now and felt that in the future it would be easier because the ADEC administration would hopefully have more time to adjust their procedures to these

new types of septic systems that work with minimal areas. ADEC was still constrained by the past requirements that totally ignored these systems that were not in existence at that time.

Mr. Nelson thought that staff findings ignored their requests in that they did not mention anything about their request or their reasoning. In these meetings there was common sense reasoning and there was political reasoning. He thought they were getting a political reasoning out of staff and hoped the commission could see the common sense of their reasoning.

Seeing and hearing no one else wishing to comment, Vice Chairman Ernst closed the public hearing and opened discussion among the Committee.

**MAIN MOTION:** Commissioner Whitney moved, seconded by Commissioner Lockwood to approve Lloyd Race 2017 Revised Preliminary.

Commissioner Whitney stated that he supported staff's recommendation and would be voting against approval.

**AMENDMENT A MOTION:** Commissioner Whitney moved, seconded by Commissioner Lockwood to grant exception to KPB 20.40.

There being no comments or questions, Vice Chairman Ernst called for a roll call vote.

**AMENDMENT A VOTE:** The motion **failed** by unanimous consent.

|             |                |              |                   |               |                           |
|-------------|----------------|--------------|-------------------|---------------|---------------------------|
| ERNST<br>NO | LOCKWOOD<br>NO | MORGAN<br>NO | RUFFNER<br>ABSENT | WHITNEY<br>NO | 0 YES<br>4 NO<br>1 ABSENT |
|-------------|----------------|--------------|-------------------|---------------|---------------------------|

**AMENDMENT A-1 MOTION:** Commissioner Whitney moved, seconded by Commissioner Lockwood to cite the following findings in support of denying the exception request to KPB 20.40.

*Findings*

7. Slopes greater than 20 percent have been shown and labeled.
8. Per the submittal, the majority of Lot 11-B1 is subject to slopes much greater than 20 percent.
11. Based on the submittal, staff estimates Lot 11-B1 has approximately 6,000 square feet of developable upland area.
12. Once Lot 11-B1 is created, it can be conveyed to anyone.
13. The subdivision contains approximately 15 acres.
14. The parent lot was not reviewed or approved by the Alaska Department of Environmental Conservation.
15. The parent plat file does not contain a signed affidavit by the owner acknowledging the State's wastewater review process and asking KPB to record the plat (a standard statement for plats reviewed in the 1970s).
16. Per the submittal, the replat does not add 1,000 square feet or more of area suitable for conventional development per KPB 20.40.020 to Lot 11-B1.

**AMENDMENT A-1 VOTE:** The motion passed by unanimous consent.

|              |                 |               |                   |                |                   |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|
| ERNST<br>YES | LOCKWOOD<br>YES | MORGAN<br>YES | RUFFNER<br>ABSENT | WHITNEY<br>YES | 4 YES<br>1 ABSENT |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|

Commissioner Lockwood asked if there was anything that they needed to address on Lot 11-B1 being removed from the preliminary plat. Mr. Voeller replied no.

There being no comments or questions, Vice Chairman Ernst called for a roll call vote.

**MAIN MOTION VOTE:** The motion **failed** by unanimous consent.

|             |                |              |                   |               |                           |
|-------------|----------------|--------------|-------------------|---------------|---------------------------|
| ERNST<br>NO | LOCKWOOD<br>NO | MORGAN<br>NO | RUFFNER<br>ABSENT | WHITNEY<br>NO | 0 YES<br>4 NO<br>1 ABSENT |
|-------------|----------------|--------------|-------------------|---------------|---------------------------|

Mr. Voeller believed the plat was ok to go forward if Lot 11-B was removed from the preliminary plat. This revised preliminary was to entertain the exception to a Soils Report for Lot 11-B. He stated that exception was denied so the plat could be approved since Lot 11-B will no longer be part of it or a soils report will have to come in for Lot 11-B if it remains in the plat

**MAIN MOTION:** Commissioner Lockwood moved, seconded by Commissioner Whitney to grant preliminary approval of the revised plat with the removal of Lot 11-B based on staff recommendations.

Mr. Voeller replied that this entire subdivision plat could be approved either with the removal of Lot 11-B or provide a soils report for the proposed Lot 11-B1. He stated that staff supports either of these scenarios.

**AMENDMENT MOTION:** Commissioner Lockwood moved, seconded by Commissioner Whitney to approve the preliminary plat based on staff recommendations and based on removing Lot 11-B from the plat and/or providing a soils analysis for Lot 11-B1.

**AMENDMENT VOTE:** The motion passed by unanimous consent.

|              |                 |               |                   |                |                   |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|
| ERNST<br>YES | LOCKWOOD<br>YES | MORGAN<br>YES | RUFFNER<br>ABSENT | WHITNEY<br>YES | 4 YES<br>1 ABSENT |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|

**MAIN MOTION VOTE:** The motion passed by unanimous consent.

|              |                 |               |                   |                |                   |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|
| ERNST<br>YES | LOCKWOOD<br>YES | MORGAN<br>YES | RUFFNER<br>ABSENT | WHITNEY<br>YES | 4 YES<br>1 ABSENT |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|

**AGENDA ITEM E.** SUBDIVISION PLAT PUBLIC HEARINGS

6. Eagle View Subdivision 2017 Replat  
KPB File 2017-054 [Seabright / Clemens]

Staff Report given by Ratti Hartley

Plat Committee Meeting: 5/8/17

Location: Off Eagle View Drive, City of Homer  
Proposed Use: Residential  
Water/Sewer: On-site  
Zoning: Rural Residential  
Assessing Use: Residential, Vacant  
Parent Parcel Number(s): 173-690-27, 173-690-28

**Supporting Information:**

The proposed subdivision is a simple replat of two lots into one lot containing 3.7 acres. Per KPB 20.40.020, a new soils report is not required. The subdivision fronts Eagle View Drive, which is maintained by the City of Homer.

Notice of the proposed plat was mailed to the beneficial interest holders on April 18, 2017. The beneficial interest holders will be given 30 days from the date of the mailing of the notification to respond. They are given the opportunity to notify staff if their beneficial interest prohibits or restricts subdivision or requires their signature on the final plat. If no response is received within 30 days, staff will assume they have no requirements regarding the subdivision and it may be finalized.





## **KENAI PENINSULA BOROUGH**

### **PLANNING DEPARTMENT**

144 North Binkley Street • Soldotna, Alaska 99669-7520

**PHONE:** (907) 714-2200 • **FAX:** (907) 714-2378

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[www.kpb.us](http://www.kpb.us)

**MIKE NAVARRE**  
**BOROUGH MAYOR**

May 10, 2017

### **NOTICE OF DECISION KENAI PENINSULA BOROUGH PLANNING COMMISSION MEETING OF MAY 8, 2017**

**RE:** Homer Enterprises, Inc. Subdivision Resetarits Replat Time Extension Request

Based upon the following findings of fact and during their regularly scheduled meeting of May 8, 2017, the Kenai Peninsula Borough Planning Commission granted an exception to KPB 20.25.110, Approval – Scope – Expiration restriction and granted approval of the subject time extension for one year through May 8, 2018.

#### *Findings*

1. The proposed plat is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is within the Urban Residential Zoning District.
4. Homer Advisory Planning Commission consented to extending preliminary plat approval on April 5, 2017.
5. No changes that would affect this plat have taken place in the block.
6. The proposed subdivision is a simple replat of two lots created by a 1959 plat into one lot with no right-of-way dedications required.
7. A final review of the proposed replat has been conducted in accordance with the KPB Plat Committee's approval and KPB 20.60.190.
8. The surveyor and owner received a copy of the final review letter in December 2014.

Draft, unapproved minutes of the pertinent portion of the meeting are attached.

If you have any questions, please contact the Kenai Peninsula Borough Planning Department.

This notice and unapproved minutes were sent May 10, 2017 to:

**City of:** City of Homer  
491 East Pioneer Avenue  
Homer, AK 99603

**Advisory Planning Commission/Community Council:** Homer Advisory Planning Commission  
491 East Pioneer Avenue  
Homer, AK 99603

**Survey Firm:** Segesser Surveys  
30485 Rosland St.  
Soldotna, AK 99669

**Subdivider/Petitioner:** Anthony Resetarits  
Joseph Resetarits  
PO Box 3063  
Homer, AK 99603-3063

**KPB File Number:** 2014-139



AGENDA ITEM I. SPECIAL CONSIDERATIONS

1. Time Extension Request  
Homer Enterprises, Inc. Subdivision Resetarits Replat  
KPB File 2014-139 [Segesser / Resetarits]  
Location: City of Homer

Staff Report given by Max Best

PC Meeting: 5/8/17

This is a preliminary plat that expired due to the surveyor's inability to get the mylar submitted. Staff has recently instituted a new software and database collection system that will allow them to send out notifications when this type of situation occurs.

2014

Homer Advisory Planning Commission conditionally approved the proposed subdivision, which is a simple replat of two lots into one lot, on September 3, 2014.

The KPB Plat Committee conditionally approved the replat on October 13, 2014, which was valid through October 13, 2016.

The paper final plat was submitted, and the final review letter was distributed on December 5, 2014. The final review letter advised the surveyor and owners that preliminary plat approval was valid for two years from the date of the Committee's approval.

2017

The surveyor was notified on February 15 that although preliminary plat approval had expired, Borough staff would support a request for a time extension due to the late date of the notification letter.

The surveyor submitted a time extension on March 17, stating that the mylar was not yet recorded.

Staff Discussion: In January 2017, staff began using a new, entirely different subdivision database. Features include data sharing among KPB Departments (regardless of physical location) through web-based software, automatic reminders of deadlines (such as preliminary plat approval expiration), contact lists (utility companies, surveyors), and electronic submittal of comments.

The reminder feature of the database will electronically alert staff before an approval expires so notice can be issued to the surveyor, and requests for time extensions can be timely submitted.

Before the new database was created, the responsibility for ensuring preliminary plat approval did not expire rested entirely with the surveyor and owner(s) because the Planning Department did not have adequate staff or time to search through hundreds of paper plat files every year to look for expired preliminary plats.

Although the subject plat was approved under the new subdivision code, it was not entered into the new database in time for the electronic alerts to be set in place.

Staff understands the surveyor and owner(s) are responsible for ensuring the plat approval remains valid, but staff believes part of that responsibility rests with staff because it is part of good customer service. It is possible a few more plats reviewed under the new subdivision code may have expired approvals that were inadvertently overlooked. Time extension requests and required exceptions will be evaluated on a case-by-case basis.

Because preliminary plat approval expired before the time extension was requested, an exception to KPB 20.25.110 is required.

**Staff recommends** that notes be placed on the final plat indicating any exceptions granted by the Plat Committee with the meeting date.

Exception Requested: KPB 20.25.110 – Approval – Scope – Expiration restriction

#### **Findings**

1. The proposed plat is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is within the Urban Residential Zoning District.
4. Homer Advisory Planning Commission consented to extending preliminary plat approval on April 5, 2017.
5. No changes that would affect this plat have taken place in the block.
6. The proposed subdivision is a simple replat of two lots created by a 1959 plat into one lot with no right-of-way dedications required.
7. A final review of the proposed replat has been conducted in accordance with the KPB Plat Committee's approval and KPB 20.60.190.
8. The surveyor and owner received a copy of the final review letter in December 2014.

Staff reviewed the exception request and recommends granting approval. Staff recommends the Committee select the findings they determine are applicable, make additional findings if needed, tie the findings to the following standards, and vote on the exception in a separate motion.

Unless prohibited under this title, the commission (committee) may authorize exceptions to any of the requirements set forth in this title. Application for an exception shall present the commission (committee) with substantial evidence, justifying the requested waiver or exception stating fully the grounds for the application and the facts relied upon. All exceptions must be requested and granted at the time of preliminary plat approval. Exceptions may not be requested with a final plat submittal.

The commission (committee) shall make findings of fact meeting the following standards before granting any exception:

1. That special circumstances or conditions affecting the property have been shown by application;  
**Findings 1-8 appear to support this standard.**
2. That the exception is necessary for the preservation and enjoyment of a substantial property right and is the most practical manner of complying with the intent of this title;  
**Findings 1-8 appear to support this standard.**
3. That the granting of the exception will not be detrimental to the public welfare or injurious to other property in the area in which said property is situated.  
**Findings 1-8 appear to support this standard.**

STAFF RECOMMENDATIONS: Extend preliminary plat approval for one year, through May 8, 2018, subject to the following:

1. Current utility reviews submitted with the final plat.
2. The plat must comply with any subsequent changes to KPB Title 20 up to February 10, 2014.
3. Submittal of the mylar in accordance with the December 5, 2014 final review letter and KPB Title 20.

**NOTE: An appeal of a decision of the planning commission made under this section (KPB Title 20) shall be taken to the board of adjustment in accordance with the requirements of KPB Chapter 21.20.250.**

END OF STAFF REPORT

Chairman Martin opened the meeting for public comment. Seeing and hearing no one wishing to speak Chairman Martin closed the public comment period and opened discussion among the Commission.

**MOTION:** Commissioner Ecklund moved, seconded by Commissioner Carluccio approval of the time extension for the Homer Enterprises, Inc. Subdivision Resetarits Replat and grant exception to KPB 20.25.110, Time Extension; citing the 8 findings and tying them to the three standards.

*Findings*

1. The proposed plat is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The proposed plat is within the Urban Residential Zoning District.
4. Homer Advisory Planning Commission consented to extending preliminary plat approval on April 5, 2017.
5. No changes that would affect this plat have taken place in the block.
6. The proposed subdivision is a simple replat of two lots created by a 1959 plat into one lot with no right-of-way dedications required.
7. A final review of the proposed replat has been conducted in accordance with the KPB Plat Committee's approval and KPB 20.60.190.
8. The surveyor and owner received a copy of the final review letter in December 2014.

**VOTE:** The motion passed by unanimous consent.

|                  |                |                   |                  |                   |              |                    |
|------------------|----------------|-------------------|------------------|-------------------|--------------|--------------------|
| CARLUCCIO<br>YES | ECKLUND<br>YES | ERNST<br>YES      | FOSTER<br>ABSENT | GLENDENING<br>YES | ISHAM<br>YES | LOCKWOOD<br>YES    |
| MARTIN<br>YES    | MORGAN<br>YES  | RUFFNER<br>ABSENT | VENUTI<br>YES    | WHITNEY<br>YES    |              | 10 YES<br>2 ABSENT |

AGENDA ITEM J. SUBDIVISION PLAT PUBLIC HEARINGS

Vice Chairman Ernst reported that the Plat Committee reviewed and conditionally approved 7 preliminary plats.

AGENDA ITEM K. OTHER/NEW BUSINESS

1. Findings Work Session

Memorandum & Staff Report given by Max Best

PC Meeting: 5/8/17

Following is an excerpt from the June 2015 Kenai Peninsula Borough Planning Commission Manual. The discussion regarding findings below is based on decisions by the Alaska Supreme Court applicable to local planning commissions in Alaska. Two additional articles were included in the Planning Commission's desk packet:

Findings are the commission's reasons for a particular decision. Findings need to be in writing and distributed to the parties who participated before the commission so that parties can determine why an application was approved or denied. Findings must be based on the evidence presented to the commission and the findings must support the ultimate decision reached. Additionally, findings must be based on the standards found in applicable statutes, borough ordinances, or other planning documents; otherwise, the decision may be viewed as arbitrary or without foundation. Without findings, parties cannot determine the reasons for the planning commission's decision or the grounds for an appeal. A reviewing body, such as the board of adjustment ("BOA") or court, also has difficulty determining which pieces of a planning commission discussion and evidence presented formed the basis for the commission's decision if the decisional document is void of findings. When findings are made by the planning commission, it means the BOA will not have to search the record for the reasons for the commission's decision; likewise, when the BOA makes findings of fact, the reviewing court, if any, will not have to glean support for the BOA decision from the evidence spread across a voluminous record.





## **KENAI PENINSULA BOROUGH**

### **PLANNING DEPARTMENT**

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**MIKE NAVARRE**  
**BOROUGH MAYOR**

May 11, 2017

### **NOTICE OF DECISION KENAI PENINSULA BOROUGH PLAT COMMITTEE**

#### **MEETING OF MAY 8, 2017**

RE: Barnett's South Slope Subdivision Fell Addition Preliminary Plat

The Plat Committee reviewed and granted conditional approval of the subject preliminary plat during their regularly scheduled meeting of May 8, 2017 based on the findings that the preliminary plat meets the requirements of the Kenai Peninsula Borough Code 20.25; 20.30; 20.40 and 20.60.

#### **AMENDMENT A MOTION**

An amendment motion to grant exception to KPB 20.30.120, Streets – width requirements based on the following findings of fact passed by unanimous consent.

##### *Findings*

1. The proposed replat is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The plat is within the Rural Residential District.
4. Homer Advisory Planning Commission conditionally approved the proposed plat on January 4, 2017 with no concern about road width.
5. West Tasmania Court is a cul-de-sac, which is approximately 350 feet long.
6. West Tasmania Court serves seven lots.
7. The 50-foot width was acceptable per Ordinance 26 when the parent plat was approved by the Planning Commission on August 29, 1977.
8. The proposed replat has 150 feet of frontage on West Tasmania Court.
9. If the proposed plat provided a dedication, it would create a jog in the right-of-way.
10. Per the Homer Public Works Department road maintenance map, West Tasmania Court is maintained by the city at a reduced level of service (second priority).

#### **AMENDMENT B MOTION**

An amendment motion to grant exception to KPB 20.30.240, Authorization to not carry forward the 20-foot building setback per HM 77-61 based on the following findings of fact passed by unanimous consent.

##### *Findings*

1. The subdivision is within the City of Homer.
2. Per HM 77-61, there is a twenty-foot building setback from all front lot lines.
3. KPB Ordinance 80-4, Amending the Subdivision Ordinance to Clarify Building Setback Requirements in the Area of the Borough within the Boundaries of a First-Class City, was enacted on February 19, 1980.
4. Ordinance 83-25, enacted on May 3, 1983, delegated zoning regulations to the City of Homer.
5. The parent plat was recorded prior to zoning regulations being delegated from KPB to the City of Homer.
6. Building setbacks within the subdivision must comply with the requirements of the zoning district per KPB 20.30.250.

7. The proposed plat is within the Rural Residential zoning district.
8. Allowing the 20-foot building setback from the parent plat to not be carried forward will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.
9. Plat Note 4 states the subdivision is subject to the City of Homer zoning regulations.
10. Homer Advisory Planning Commission approved the proposed plat on January 4, 2017 with no discussion or concern about building setbacks.

This notice and unapproved minutes of the subject portion of the meeting were sent May 11, 2017 to:

**City of:** City of Homer  
491 East Pioneer Avenue  
Homer, AK 99603

**Advisory Planning Commission/Community Council:** Homer Advisory Planning Commission  
491 East Pioneer Avenue  
Homer, AK 99603

**Survey Firm:** Geovera, LLC  
PO Box 3235  
Homer, AK 99603

**Subdivider/Petitioner:** Michael & Mary Fell  
PO Box 149  
Homer, AK 99603-0149

**Interested Parties:** Paul J. Allan & Louise E. Ashmun  
457 Mountain View Dr.  
Homer, AK 99603

**KPB File Number:** 2017-042

## AGENDA ITEM E. SUBDIVISION PLAT PUBLIC HEARINGS

4. Barnett's South Slope Subdivision Fell Addition  
KPB File No. 2017-042 [Geovera LLC / Fell]

Staff Report given by Patti Hartley

Plat Committee Meeting: 5/8/17

Location: off South Slope Drive, City of Homer  
Proposed Use: Residential  
Water: City  
Sewer: On-site  
Zoning: Rural Residential  
Assessing Use: Residential, Vacant  
Parent Parcel Number(s): 177-020-32, 177-020-35

### Supporting Information:

The proposed subdivision is a simple replat of two lots into one lot containing approximate one acre. Per KPB 20.40.020, a soils report is not required. The plat fronts city-maintained West Tasmania Court and Shellfish Avenue.

The Kenai Peninsula Borough Planning Commission approved the utility easement vacation at their regularly scheduled meeting of April 24, 2017.

Homer Advisory Planning Commission approved the replat on January 4, 2017, subject to:

### Public Works Comments

1. A development agreement is required to connect to water.  
*Borough Staff Comments: **Staff recommends** compliance per KPB 20.60.080.*
2. PW will provide any comments about the 50-foot right-of-way dedication at the meeting.  
*Borough Staff Comments: No comments or public testimony was heard during the Homer Commission's public hearing per the Commission's meeting minutes.*

### Homer Planning Staff

**Review any PW comments on the right-of-way width and add any necessary recommendations or comments.**

1. Property owner should contact the Army Corps of Engineers prior to any on-site development or construction activity to obtain the most current wetland designation (if any). Property owners are responsible for obtaining all required local, state and federal permits.  
*Borough Staff Comments: The appropriate note is on the plat. **Staff recommends** the note be revised to reflect the single lot created by this plat, e.g., This lot is subject to City of Homer . . .*
2. Street name correction to West Tasmania Court.  
*Borough Staff Comments: **Staff recommends** compliance with the Homer Commission's recommendation.*

Per the preliminary Certificate to Plat, beneficial interest holders do not affect the proposed plat. Notification per KPB 20.25.090 will not be required unless the final Certificate to Plat states the property is affected by beneficial interest holders.

A physical address may be affected by the replat. The Homer Planning and Zoning Department can answer questions about the effect of the replat on the address.

**Staff recommends** that notes be placed on the final plat indicating any exceptions granted by the Plat Committee with the meeting date.

Exception Requested:

- A. KPB 20.30.120 – Streets – Width requirements

Staff Discussion: Per the Homer Public Works Department road maintenance map, West Tasmania Court is maintained by the city at a reduced level of service (second priority).

**Findings**

1. The proposed replat is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The plat is within the Rural Residential District.
4. Homer Advisory Planning Commission conditionally approved the proposed plat on January 4, 2017 with no concern about road width.
5. West Tasmania Court is a cul-de-sac, which is approximately 350 feet long.
6. West Tasmania Court serves seven lots.
7. The 50-foot width was acceptable per Ordinance 26 when the parent plat was approved by the Planning Commission on August 29, 1977.
8. The proposed replat has 150 feet of frontage on West Tasmania Court.
9. If the proposed plat provided a dedication, it would create a jog in the right-of-way.
10. Per the Homer Public Works Department road maintenance map, West Tasmania Court is maintained by the city at a reduced level of service (second priority).

Staff reviewed the exception request and recommends granting approval. Staff recommends the Committee select the findings they determine are applicable, make additional findings if needed, tie the findings to the following standards, and vote on the exception in a separate motion.

Unless prohibited under this title, the commission (committee) may authorize exceptions to any of the requirements set forth in this title. Application for an exception shall present the commission (committee) with substantial evidence, justifying the requested waiver or exception stating fully the grounds for the application and the facts relied upon. All exceptions must be requested and granted at the time of preliminary plat approval. Exceptions may not be requested with a final plat submittal.

The commission (committee) shall make findings of fact meeting the following standards before granting any exception:

1. That special circumstances or conditions affecting the property have been shown by application;  
**Findings 1-10 appear to support this standard.**
2. That the exception is necessary for the preservation and enjoyment of a substantial property right and is the most practical manner of complying with the intent of this title;  
**Findings 1-10 appear to support this standard.**
3. That the granting of the exception will not be detrimental to the public welfare or injurious to other property in the area in which said property is situated.  
**Findings 1-10 appear to support this standard.**

Exception Requested:

- B. KPB 20.30.240 – Authorization to not carry forward the 20-foot building setback per HM 77-61.

Plat Note 2 on HM 77-61 states there is a 20-foot building setback from all front lot lines. The exception is a housekeeping matter to ensure the plat complies with the current requirements of the city's zoning district.

KPB Ordinance 80-4, Amending the Subdivision Ordinance to Clarify Building Setback Requirements in the Area of the Borough within the Boundaries of a First-Class City, was enacted on February 19, 1980.

Ordinance 83-25 delegated zoning regulations to the City of Homer three years later.

AS 29.40.120 states a recorded plat may not be altered or replatted except by the platting authority on petition of the state, the borough, a public utility, or the owners of a majority of the land affected by the alteration of replat. Enactment of zoning regulations by a city will not automatically erase notations on the recorded plat.

The proposed plat is within the City of Homer and is subject to the requirements of the zoning code. Removing the 20-foot building setback from the plat will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.

Per the Homer City staff report, Public Works Department staff reviewed the 50-foot right-of-way and would provide comments (if any) during the city's public hearing. No one from the Public Works Department commented so apparently the width of West Tasmania Court is not an issue.

### Findings

1. The subdivision is within the City of Homer.
2. Per HM 77-61, there is a twenty-foot building setback from all front lot lines.
3. KPB Ordinance 80-4, Amending the Subdivision Ordinance to Clarify Building Setback Requirements in the Area of the Borough within the Boundaries of a First-Class City, was enacted on February 19, 1980.
4. Ordinance 83-25, enacted on May 3, 1983, delegated zoning regulations to the City of Homer.
5. The parent plat was recorded prior to zoning regulations being delegated from KPB to the City of Homer.
6. Building setbacks within the subdivision must comply with the requirements of the zoning district per KPB 20.30.250.
7. The proposed plat is within the Rural Residential zoning district.
8. Allowing the 20-foot building setback from the parent plat to not be carried forward will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.
9. Plat Note 4 states the subdivision is subject to the City of Homer zoning regulations.
10. Homer Advisory Planning Commission approved the proposed plat on January 4, 2017 with no discussion or concern about building setbacks.

Staff reviewed the exception request and recommends granting approval. Staff recommends the Committee select the findings they determine are applicable, make additional findings if needed, tie the findings to the following standards, and vote on the exception in a separate motion.

Unless prohibited under this title, the commission (committee) may authorize exceptions to any of the requirements set forth in this title. Application for an exception shall present the commission (committee) with substantial evidence, justifying the requested waiver or exception stating fully the grounds for the application and the facts relied upon. All exceptions must be requested and granted at the time of preliminary plat approval. Exceptions may not be requested with a final plat submittal.

The commission (committee) shall make findings of fact meeting the following standards before granting any exception:

1. That special circumstances or conditions affecting the property have been shown by application;  
**Findings 1-10 appear to support this standard.**
2. That the exception is necessary for the preservation and enjoyment of a substantial property right and is the most practical manner of complying with the intent of this title;  
**Findings 1-10 appear to support this standard.**
3. That the granting of the exception will not be detrimental to the public welfare or injurious to other property in the area in which said property is situated.  
**Findings 1-10 appear to support this standard.**

#### STAFF RECOMMENDATIONS:

- GRANT APPROVAL OF THE PRELIMINARY PLAT SUBJECT TO ANY ABOVE RECOMMENDATIONS, AND
- REQUIRE COMPLIANCE WITH KPB 20.25.070 (FORM AND CONTENTS), KPB 20.25.080 (PETITION REQUIRED), KPB 20.30 (DESIGN REQUIREMENTS); AND KPB 20.40 (WASTEWATER DISPOSAL), SUBJECT TO EXCEPTION(S) GRANTED.

#### 20.25.070 - Form and contents required.

Platting staff comments: Additional information is provided for the following portions of 20.25.070 or additional information, revision or corrections are required

- D. A vicinity map, drawn to scale showing location of proposed subdivision, north arrow if different from plat orientation, township and range, section lines, roads, political boundaries, and prominent natural and manmade features, such as shorelines or streams;  
*Platting Staff Comments:* **Staff recommends** the label for Kachemak Drive be corrected.
- K. Within the limits of incorporated cities, the approximate location of known existing municipal wastewater and water mains, and other utilities within the subdivision and immediately abutting thereto or a statement from the city indicating which services are currently in place and available to each lot in the subdivision;  
*Platting Staff Comments:* Per the Homer City staff report, the city water main was recently constructed, and a final as-built was not yet available.

#### 20.25.080. Petition required. A petition shall be submitted with each subdivision, abbreviated subdivision and plat waiver subdivision and shall include:

Platting staff comments: Additional information is provided for the following portions of 20.25.080 or additional information, revision or corrections are required:

- F. Other information the subdivider may care to present.  
*Platting Staff Comments:* Per the submittal, the City of Homer recently completed a water main extension on Shellfish Avenue and extended service to Lot 19. Combining Lots 16 and 19 allows the property to front on Shellfish Avenue. The owners' house is on Lot 16. The lot line vacation is required in order for them to connect their house to the new water service.

#### KPB 20.30 Design Requirements

Platting staff comments: Additional information is provided for the following portions of 20.30 or additional information, revision or corrections are required

#### 20.30.030. Proposed street layout-Requirements.

- C. Preliminary plats fronting state maintained roads will be submitted by the planning department to the State of Alaska Department of Transportation and Public Facilities (DOT) for its review and comments.  
*State Department of Transportation Comments:* Not available when the staff report was prepared.

*Platting Staff Comments:* The subdivision does not front a State right-of-way.

#### 20.30.060. Easements-Requirements.

- C. The subdivider bears the responsibility for coordination with the utility companies during the design and development phases. When a subdivider and the utility company cannot agree on easements, the final plat will be taken to the planning commission for determination of easements.

*Platting Staff Comments: The affected utility providers were emailed the subdivision plat public hearing notice as part of the routine notification process. GCI submitted a statement of no comments.*

**20.30.070. Lots on major streets-Access requirements.**

Lots fronting on arterial streets with less than 200 feet of right-of-way as identified in the arterial road plan adopted by the borough or lots fronting on state maintained roads with less than 200 feet of right-of-way may be required to provide interior or frontage road access after review and recommendation by the Kenai Peninsula Borough Road Service Area staff and upon a finding by the planning commission that due to size, topography, physical characteristics, or heavy traffic flow, that direct access to the arterial or state maintained road may present a traffic hazard.

*KPB Roads Department Comments: Not available when the staff report was prepared.*

*Platting Staff Comments: The subdivision does not front a KPB right-of-way.*

**20.30.170. Blocks-Length requirements.**

Blocks shall not be less than 330 feet or more than 1,320 feet in length. Along arterial streets and state maintained roads, block lengths shall not be less than 800 feet. Block lengths shall be measured from centerline intersections.

*Platting Staff Comments: The block is generally defined by Anderson Street, Shellfish Avenue, and East Hill Road. The southern portion of the block is incomplete at this time.*

*Two segments of Nelson Avenue are located such that this right-of-way could be the block's southern boundary at some point in the future.*

*The proposed replat is sandwiched between Shellfish Avenue and West Tasmania Court so it cannot help with block length.*

**20.30.280. Floodplain requirements.**

*Platting Staff Comments: River Center review was not available when the staff report was prepared.*

*The City of Homer administers the floodplain program by Homer City Code 21.41 Flood Prone Areas. Per the Homer City staff report, the subdivision is within Zone D, flood hazards undetermined.*

**20.30.290. Anadromous habitat protection district.**

*Platting Staff Comments: Per KPB GIS mapping, the subdivision is not affected by the Anadromous Habitat Protection District. If the River Center review states the plat is affected by 20.30.290, staff recommends compliance with River Center recommendations per KPB Code.*

*Per KPB GIS mapping, no anadromous streams flow through the subdivision.*

**STAFF RECOMMENDATIONS: COMPLIANCE WITH KPB 20.60 TO ENSURE ADMINISTRATIVE APPROVAL OF THE FINAL PLAT.**

Platting staff comments: Additional information is provided for the following portions of 20.60 or additional information, revision or corrections are required

**20.60.020. Filing-Form and number of copies required.**

The subdivider shall file a standard number of prints as determined by the planning director. All prints shall be folded as required by KPB 20.25.030 except those to be recorded with the district recorder.

*Platting Staff Comments: **Staff recommends** one full-sized paper copy of the plat be submitted for final review prior to submittal of the mylar. Electronic submittals are not acceptable for final reviews.*

**20.60.040. Dedication of public use lands.**

Any land shown on a plat as a street, public park or other public area must be dedicated on the final plat to a tax exempt governmental entity. If the governmental entity is not the Kenai Peninsula Borough, the governmental entity shall be required to execute an acceptance of the dedication on the plat.

*Platting Staff Comments: A Certificate of Acceptance is not required for new utility easements, but it is acceptable if the city requires it. If the Acceptance Certificate remains, **staff recommends** the new 10-foot utility easement along the western boundary of former Lot 19 be included.*

#### 20.60.120. Accuracy of measurements.

All linear measurements shall be shown to the nearest 1/10 foot, and angular measurements shall be at least to the nearest minute. All lot areas shall be shown to the nearest 10 square feet or to the nearest 1/1,000 of total acres. Meander lines, dry land areas and submerged land areas shall be shown in addition to total area when applicable. All boundary closures shall be to a minimum accuracy of 1:5,000. Boundary and lot closure computations must be submitted with the final plat.

*Platting Staff Comments: KPB GIS will verify closure complies with 20.60.120. **Staff recommends** boundary and lot closure computations be provided with the paper final plat.*

#### 20.60.200. Survey and monumentation.

*Platting Staff Comments: **Staff recommends** the missing information be included in the legend; show original monuments of record on the face of the plat.*

#### KPB 20.70 – Vacation Requirements

*Platting Staff comments: The proposed utility easement vacation was approved at the Planning Commission review on April 24, 2017. **Staff recommends** a plat note with the vacation approval date be provided.*

**THE FINAL PLAT MUST BE RECORDED WITHIN ONE YEAR OF THE VACATION CONSENT IN KPB 20.70.110.**

**NOTE: A PARTY OF RECORD MAY REQUEST THAT A DECISION OF THE PLAT COMMITTEE BE REVIEWED BY THE PLANNING COMMISSION BY FILING A WRITTEN REQUEST WITHIN 10 DAYS OF NOTIFICATION OF THE DECISION IN ACCORDANCE WITH KPB 2.40.080.**

**PARTIES OF RECORD: UNLESS SPECIFIED OTHERWISE MEANS THOSE PERSONS WHO HAVE COMMENTED IN A WRITTEN AND SIGNED DOCUMENT OR IN PERSON ON AN AGENDA ITEM BEFORE THE PLANNING COMMISSION OR PLAT COMMITTEE WHO OWN PROPERTY WITHIN THE NOTIFICATION RADII ESTABLISHED IN THIS CHAPTER.**

#### END OF STAFF REPORT

Vice Chairman Ernst opened the meeting for public comment. Seeing and hearing no one wishing to comment, Vice Chairman Ernst closed the public hearing and opened discussion among the Committee.

**MAIN MOTION:** Commissioner Lockwood moved, seconded by Commissioner Whitney to grant preliminary approval of Barnette's South Slope Subdivision Fell Addition based on staff recommendations.

**AMENDMENT A MOTION:** Commissioner Lockwood moved, seconded by Commissioner Whitney to grant exception to KPB 20.30.120, Streets – width requirements; citing the 10 findings and tying them to the three standards.

#### *Findings*

1. The proposed replat is within the City of Homer.
2. Development within the subdivision must comply with the requirements of the zoning district.
3. The plat is within the Rural Residential District.
4. Homer Advisory Planning Commission conditionally approved the proposed plat on January 4, 2017 with no concern about road width.
5. West Tasmania Court is a cul-de-sac, which is approximately 350 feet long.

6. West Tasmania Court serves seven lots.
7. The 50-foot width was acceptable per Ordinance 26 when the parent plat was approved by the Planning Commission on August 29, 1977.
8. The proposed replat has 150 feet of frontage on West Tasmania Court.
9. If the proposed plat provided a dedication, it would create a jog in the right-of-way.
10. Per the Homer Public Works Department road maintenance map, West Tasmania Court is maintained by the city at a reduced level of service (second priority).

**AMENDMENT A VOTE:** The motion passed by unanimous consent.

|              |                 |               |                   |                |                   |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|
| ERNST<br>YES | LOCKWOOD<br>YES | MORGAN<br>YES | RUFFNER<br>ABSENT | WHITNEY<br>YES | 4 YES<br>1 ABSENT |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|

**AMENDMENT B MOTION:** Commissioner Lockwood moved, seconded by Commissioner Whitney to grant exception to KPB 20.30.240, Authorization to not carry forward the 20-foot building setback per HM 77-61; citing the 10 findings and tying them to the three standards.

*Findings*

1. The subdivision is within the City of Homer.
2. Per HM 77-61, there is a twenty-foot building setback from all front lot lines.
3. KPB Ordinance 80-4, Amending the Subdivision Ordinance to Clarify Building Setback Requirements in the Area of the Borough within the Boundaries of a First-Class City, was enacted on February 19, 1980.
4. Ordinance 83-25, enacted on May 3, 1983, delegated zoning regulations to the City of Homer.
5. The parent plat was recorded prior to zoning regulations being delegated from KPB to the City of Homer.
6. Building setbacks within the subdivision must comply with the requirements of the zoning district per KPB 20.30.250.
7. The proposed plat is within the Rural Residential zoning district.
8. Allowing the 20-foot building setback from the parent plat to not be carried forward will allow the building setback to conform to current city codes as well as create the flexibility of changing if the building setback in the zoning district changes.
9. Plat Note 4 states the subdivision is subject to the City of Homer zoning regulations.
10. Homer Advisory Planning Commission approved the proposed plat on January 4, 2017 with no discussion or concern about building setbacks.

**AMENDMENT B VOTE:** The motion passed by unanimous consent.

|              |                 |               |                   |                |                   |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|
| ERNST<br>YES | LOCKWOOD<br>YES | MORGAN<br>YES | RUFFNER<br>ABSENT | WHITNEY<br>YES | 4 YES<br>1 ABSENT |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|

**MAIN MOTION VOTE:** The motion passed by unanimous consent.

|              |                 |               |                   |                |                   |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|
| ERNST<br>YES | LOCKWOOD<br>YES | MORGAN<br>YES | RUFFNER<br>ABSENT | WHITNEY<br>YES | 4 YES<br>1 ABSENT |
|--------------|-----------------|---------------|-------------------|----------------|-------------------|

~~AGENDA ITEM E.~~ SUBDIVISION PLAT PUBLIC HEARINGS

5. Lloyd Race 2017 REVISED PRELIMINARY  
KPB File 2017-027 [Ability / Homer]  
Parcels 174-030-20 & 21; 174-030-14 & 15

Staff Report given by Patti Hartley

Plat Committee Meeting: 5/8/17

