Lowell Creek Flood Diversion Feasibility Study
Appendix F: Real Estate Plan
Seward, Alaska

September 2020

U.S. Army
Corps of
Engineers
Alaska District

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1.0 PURPOSE

The Lowell Creek Flood Diversion Feasibility Study, Seward, Alaska, will include the Real Estate Plan (REP). The primary purpose for this REP is to identify and describe the real estate requirements for the lands, easements, rights-of-way, relocations and disposal areas (LERR) for construction, operation and maintenance of the proposed navigational improvements, outline the costs and real estate considerations associated for the Tentatively Selected Plan (TSP) and assess the non-Federal sponsor's (NFS) capabilities for LERR acquisition. The City of Seward, Alaska, is the study sponsor and the proposed Project Partnership Agreement (PPA) sponsor. This REP is tentative; it is for planning purposes only, and both the final real property acquisition lines and the real estate cost estimates provided are subject to change even after approval of the General Investigation study.

2.0 AUTHORITY

This feasibility study is being conducted under the authority granted by Section 5032 of the Water Resources Development Act (WRDA) of 2007 (P.L. 110-114). The legislation reads as follows:

> SEC. 5032. LOWELL CREEK TUNNEL, SEWARD, ALASKA.
>
> (a) LONG-TERM MAINTENANCE AND REPAIR.—
>
> (1) MAINTENANCE AND REPAIR.—The Secretary shall assume responsibility for the long-term maintenance and repair of the Lowell Creek tunnel, Seward, Alaska.
>
> (2) DURATION OF RESPONSIBILITIES.—The responsibility of the Secretary for long-term maintenance and repair of the tunnel shall continue until an alternative method of flood diversion is constructed and operational under this section, or 15 years after the date of enactment of this Act, whichever is earlier.
>
> (b) STUDY.—The Secretary shall conduct a study to determine whether an alternative method of flood diversion in Lowell Canyon is feasible.
>
> (c) CONSTRUCTION.—
>
> (1) ALTERNATIVE METHODS.—If the Secretary determines under the study conducted under subsection (b) that an alternative method of flood diversion in Lowell Canyon is feasible, the Secretary shall carry out the alternative method.

> (2) FEDERAL SHARE.— The Federal share of the cost of carrying out an alternative method under paragraph (1) shall be the same as the Federal share of the cost of the construction of the Lowell Creek tunnel.

Implementation Guidance provided by HQUSACE for Section 5032 states that the feasibility study should be conducted in accordance with current budgetary policy and procedural guidance contained in ER 1105-2-100, the Planning Guidance Notebook, for projects authorized without a report. Because construction authority is included in Section 5032, the final product of this study will be a Report of the Director of Civil Works.

The City of Seward is the non-Federal sponsor (NFS) identified on the Feasibility Cost Sharing Agreement and executed on 12 August 2016.

3.0 PROJECT LOCATION & DESCRIPTION

The Lowell Creek Flood Diversion System is located at the end of Lowell Creek in Seward, Alaska, 125 miles south of Anchorage at the head of Resurrection Bay, as shown in Figure 1. The project reroutes Lowell Creek through Bear Mountain and around the City of Seward to Resurrection Bay. The project was completed in 1940, and responsibility for operation and maintenance was transferred to the City of Seward in 1946. Structures consist of an upstream diversion dam with an emergency spillway, inlet structure, tunnel, and outlet structure. The existing diversion dam is subject to overtopping from a heavy rainfall event, a plugged tunnel, or a surge-release event and is unusual in that the dam provides essentially no flood water storage, functioning only to divert water into the Lowell Creek Tunnel. Residential and commercial properties (including a hospital and senior citizens home) are in the inundation area and are subject to high velocities and water depths as well as large debris, should overtopping occur.

Figure 1 Project Location, Seward

3.1. Alternative Plans

In addition to a “no action” plan, seven alternatives were evaluated, which include improving or enlarging the existing tunnel, constructing a new tunnel, constructing an upstream retention basin, along with nonstructural measures. No alternative produced positive NED benefits. A NED exception waiver from ASA (CW) was obtained, and alternatives were evaluated using total life safety risk as exemplified by average annual life loss (AALL) as a metric for Cost-Effectiveness/Incremental Cost Analysis. The CE/ICA analysis produced three best buy alternatives (“no action,” Alternatives 4, and 4b), one cost-effective plan (Alternative 2), and two non-cost effective plans (Alternatives 3 and 3b). Alternative 4b was eliminated due to exorbitant incremental costs. This alternative would provide similar benefits to Alternative 4, but at a much higher cost. The alternatives considered were:

Alternative 2: Improve Existing Flood Diversion System.

Alternative 3: Enlarge Current Flood Diversion System to Convey Larger Flow considering two tunnel diameter options below:

(A) 18 ft Tunnel

(B) 24 ft Tunnel

Alternative 4: Construct New Flood Diversion System considering two tunnel diameter options below:

(A) 18 ft Tunnel

(B) 24 ft Tunnel

Alternative 5: Construct Debris Retention Basin.

3.2. Recommended Plan

The recommended plan consists of the construction of a new diversion dam, an 18-foot diameter tunnel, an extended outfall upstream of the existing diversion dam, and remove trees within the flooding area.

4.0 DESCRIPTION OF LANDS, EASEMENTS, AND RIGHTS-OF-WAY (LERR) REQUIRED

The features, owners, acres, and the standard/non-standard estates required for the TSP are shown in Table 1.

Table 1. LERR Required for the Project

Tract ID	Feature	Owner	Acres	Minimum Estate Required
1	Tree Removal	State of Alaska	45.51	Non-standard estate Permanent Easement
2	Tree Removal	NFS	16.74	Permanent Easement
3	Dam and Tunnel Canopy	NFS	25.32	Fee
4	Outfall and Staging	Federal Government	2.74	Public Domain
5	Outfall and Staging Area	NFS	.20	Fee
		TOTAL ACRES	110.04	

4.1. Lands, Easements, Rights-of-way (LERR) Already Owned by the NFS

The NFS owns US Survey (USS) 703, Mining Survey (MS) 981 and Alaska Tideland Survey (ATS) 174, these lands were acquired for the original project and O&M, and are identified in Table 2.

Table 2. LERR Already Owned by NFS

Project Tract ID	Feature	Tract Description	Held By
2	Tree Removal	USS 703	Deed
3	Dam and Tunnel Canopy	Mineral Survey No. 981 USS 703	09/27/1963 QCD issued to City of Seward Deed
5	Outfall and Staging Area	Tideland Survey 174	Tideland patent

4.2. LERR To Be Acquired

The NFS will negotiate to secure and acquire all necessary real estate interests in the lands for the project. Land values are expected to be nominally based on land acquisition for the original project. The NFS needs to acquire a permanent easement to access the State of Alaska land for tree removal. The lands to be acquired is identified in Schedule A, Exhibit A.

5.0 STANDARD ESTATE

The lands needed for the project were acquired for the original project. The LERR to be acquired are non-standard estate.

6.0 NON-STANDARD ESTATE

A perpetual and assignable right and easement on, over and across within Tract A, Township 1 South, Range 1 West, Seward Meridian, as described in Schedule A Tract No. 6, is necessary for occasionally conducting tree removal operations along the banks of the Lowell Creek, including the right to trim, cut, fell, remove and dispose of trees having a single trunk with diameter-exceeding 48 inches measured or multiple trunks with a diameter exceeding 30 inches measured. Reserving, however, to the landowners, their heirs and assigns all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads, and pipelines.

7.0 EXISTING FEDERAL PROJECTS

The federally authorized Lowell Creek Flood Control Project will be affected by the project footprint, shown in **Error! Reference source not found.**.

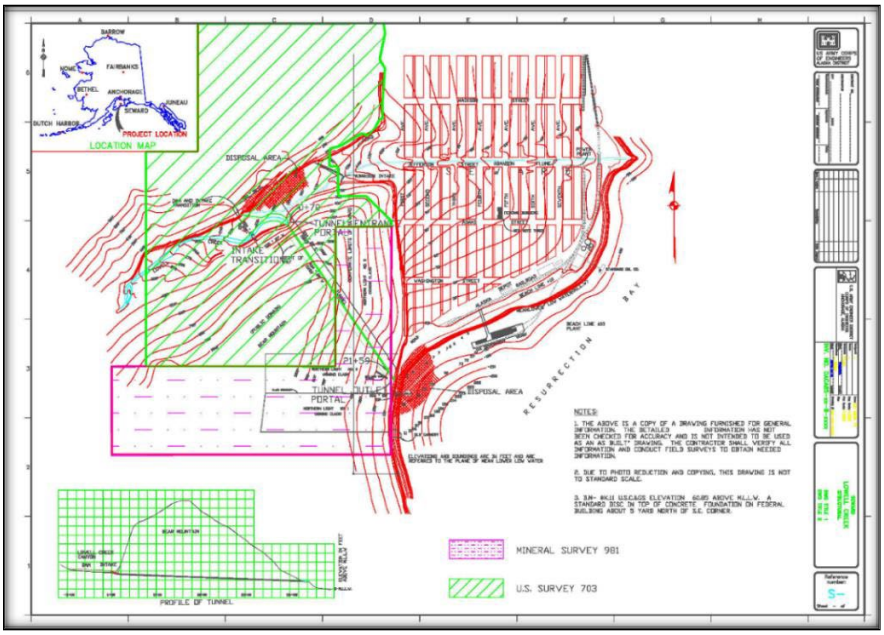

Figure 2. Lowell Creek Flood Control Project

8.0 FEDERALLY OWNED LANDS

Executive Order 8330, temporarily withdrew public land from settlement, location, sale, or entry, and reserved for flood control purpose in connection with the Lowell Creek Flood Control Project. The area has grown from 1acre (ac) to 22.27 ac. It has grown by an accumulation of gravel since the construction of the original project.

9.0 NAVIGATION SERVITUDE

The navigation servitude may only be exercised by the Federal Government for Congressionally authorized projects or measures that are related to navigation or pursuant to regulatory authorities to protect navigation. Navigation servitude is not being applied to this project.

10.0 PROJECT MAPS

Tentatively Selected Plan – Concept Plan Drawing is identified as Exhibit B, and Real Estate Project Map is identified as Exhibit C.

11.0 FLOODING INDUCED BY PROJECT

There is no flooding that will be induced by the construction or the operation and maintenance of the proposed project. As such, no Physical Takings Analysis is required.

12.0 BASELINE COST ESTIMATE FOR REAL ESTATE (BCERE)

The Baseline Cost Estimates for Real Estate (BCERE) was prepared by the realty specialist as a rough order of magnitude (ROM) estimate, as shown in Table 3. Baseline Cost Estimate for Real Estate and Table 4. Chart of Accounts. Federal and non-Federal administrative costs have also been included in the BCERE to account for project coordination, crediting, and miscellaneous expenses that may occur during the planning or implementation of the proposed project. The BCERE may be revisited during the Project Engineering & Design (PED) phase to apply additional costs if necessary. If land acquisition by the NFS is deemed necessary in the future, additional appraisals will be prepared to offer reasonable support for unit land values, which will, in turn, be used in calculating the BCERE for the proposed project.

Table 3. Baseline Cost Estimate for Real Estate (BCERE)

CATEGORY		COST
A. Lands		
I. Lands		$2,000
II. Improvements		
III. Severance Damages		
IV. Minerals		
V. Total Lands & Damages		$2,000
B. Administrative Costs		
I. Federal Review of Non-Federal Sponsor		
1. Sub-Total:		$1,000
2. Contingency (25%)		$500
3. Sub-Total	.	$1500
II. Non-Federal Sponsor Administrative Costs		
1. Sub-Total:		$2,000
2. Contingency (25%)		$250
3. Sub-Total	.	$2250
III. Public Law 91-646 Relocation Costs		0
IV. Total RE Cost Estimate:		$5,750

Table 4. Chart of Accounts

Chart of Accounts				
		FEDERAL	NON-FEDERAL	TOTALS
01A	PROJECT PLANNING			
	Other			
	Project Partnership Agreement (OC)		$1000	$1000
01AX	Contingencies (25%)		$250	$250
	Subtotal		$1250	$1250
01B	LANDS AND DAMAGES			
01B20	Acquisition by the non-Federal sponsor		$1000	$1000
01B40	Acquisition/Review of non-Federal sponsor		$500	$500
01BX	Contingencies (25%)		$375	$375
01R	RE PAYMENTS			
01R1	LAND PAYMENTS			
01R1A	By Government			
01R1B	By non-Federal sponsor		$1,000	$1,000
01R1C	By Government on behalf of the non-Federal sponsor			
01R1D	Review of non-Federal sponsor		$500	$500
01RX	Contingencies (25%)		$125	125
01R2	PL 91-646 Assistance Payments			
01R2A	By Government			
01R2B	By non-Federal sponsor			
01R2C	By Government on behalf of the non-Federal sponsor			
01R2D	Review of non-Federal sponsor			
	TOTALS		$5,750	$5,750

Any potential cost estimate for Federal and/or non-Federal real estate activities necessary for the implementation of the project after completion of the feasibility study for land acquisition, construction, LERRs, and other items are coded as delineated in the Cost Work Breakdown Structure are identified in the Chart of Accounts. This real estate cost estimate is then incorporated into the Total Current Working Estimate.

Values in the Baseline Cost Estimate are estimates and not a final LERRD value for crediting purposes.

13.0 RELOCATION ASSISTANCE BENEFITS (P.L. 91-646)

There will be no relocations required for this project.

14.0 MINERAL OR TIMBER ACTIVITY IMPACTED PRESENT/FUTURE

There are no current or anticipated mineral or timber activities within the vicinity of the proposed project that will affect the construction, operation, or maintenance of the proposed project. Nor will any subsurface minerals or timber harvesting take place within the project.

15.0 ASSESSMENT OF NON-FEDERAL SPONSOR LEGAL CAPABILITY

The City of Seward is a fully capable sponsor for acquiring the required lands, easements, and rights-of-way. (See Exhibit "A" - Sponsor Real Estate Acquisition Capability Assessment). The Sponsor's point of contacts are:

Scott Meszaros
City Manager of Seward
P.O. Box 167
Seward, AK 99664
Email: smeszaros@cityofseward.net

Doug Schoessler
Public Works Director
City of Seward
PO Box 167
Seward, AK 99664
Email: doug@cityofseward.net

16.0 ZONING ORDINANCES CONSIDERED IN SUPPORT OF LERR REQUIREMENTS

No zoning ordinances are proposed instead of or to facilitate acquisition in connection with the project.

17.0 REAL ESTATE SCHEDULE

The anticipated project schedule, unless revised after coordination with NFS, is shown in Table 5.

Table 5. Real Estate Schedule

ACTION	START
NFS - Receipt of final project drawings from USACE, AK District - Engineering	2-4 weeks after PPA execution
COE - Formal transmission of project drawing and instructions to acquiring LERRD	4-6 weeks after PPA execution
COE/NFS - Certify all necessary LERRD are available for construction.	6-9 months after PPA execution
NFS -Prepare and submit crediting request.	6-8 months after completion of Project
COE- Review, approve, or deny crediting request.	6 month after Sponsor submission

18.0 MITIGATION

No mitigation will be required.

19.0 FACILITY/UTILITY RELOCATION

No known utilities or facilities located in the project footprint will be impacted by the construction, either temporarily or permanently.

ANY CONCLUSION OR CATEGORIZATION CONTAINED IN THIS REPORT THAT AN ITEM IS A UTILITY OR FACILITY RELOCATION TO BE PERFORMED BY THE NON-FEDERAL SPONSOR AS PART OF ITS LERRD RESPONSIBILITIES IS PRELIMINARY ONLY. THE GOVERNMENT WILL MAKE A FINAL DETERMINATION OF THE RELOCATIONS NECESSARY FOR THE CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PROJECT AFTER FURTHER ANALYSIS AND COMPLETION AND APPROVAL OF FINAL ATTORNEY'S OPINIONS OF COMPENSABILITY FOR EACH OF THE IMPACTED UTILITIES AND FACILITIES.

20.0 ENVIRONMENTAL IMPACT

This project is supported by Federal, state, and regional agencies. The USACE has met with representatives of the NFS, City of Seward, Alaska, and other pertinent parties to discuss aspects of the proposed action. Further coordination will be ongoing. In compliance with NEPA rules/regulations, letters will be sent to resource agencies and residents in the area, and public notices will transpire within the project vicinity.

Reference the Environmental Assessment. An Environmental Assessment has been prepared, describing the initial evaluation of the effects of the project. It indicated that there would likely be little to no effect on several resources. No real estate avoidance is anticipated due to known or suspected Hazardous, Toxic, and Radioactive Waste (HTRW) located in, on, under, or adjacent to the LERR required for the construction, operation, or maintenance of the project, including LERR that is subject to the navigational servitude.

In addition, no impacts to HTRW sites are expected. The Alaska Department of Environmental Conservation (ADEC) contaminated site mapping tool was utilized to verify no HTRW sites are within the project footprint.

21.0 LANDOWNER OPPOSITION

The project has been described at several public meetings since the charrette. The public gave feedback about their concerns but had no opposition.

22.0 ADVANCE ACQUISITION AND RISK NOTIFICATION

The NFS has been notified in writing about risks associated with acquiring land before the execution of the PPA and the Government's formal notice to proceed with an acquisition. The City of Seward has been advised of P.L. 91-646 requirements, and they have been advised of the requirements for documenting expenses for LERR crediting purposes.

23.0 CULTURAL RESOURCES

The Lowell Creek Diversion Tunnel was listed on the National Register of Historic Places on 23 November 1977. No known cultural resources will be affected by the preferred alternative.

24.0 OTHER REAL ESTATE ISSUES

The real estate risk project is shown in Exhibit D.

PREPARED BY:

RONALD J. GREEN
Realty Specialist

REVIEWED AND APPROVED BY:

GARY C. HANSON
Chief, Real Estate Division

SCHEDULE A

LERRD to be Acquired				
Tract ID	Acres	Owner	Feature	Legal Description
1	45.55	State of Alaska	Tree Removal	A portion of Tract A, Township 1 South, Range 1 West, Seward Meridian, as identified in Schedule A, Exhibit A, attached.

ASSESSMENT OF NON-FEDERAL SPONSOR'S
REAL ESTATE ACQUISITION CAPABILITY
LOWELL CREEK FLOOD DIVERSION
SEWARD, ALASKA

1. **LEGAL AUTHORITY**:
   a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes? **YES** x **NO** _____

   b. Does the sponsor have the power of eminent domain for this project? **YES** _____ **NO** x

   c. Does the sponsor have "Quick-Take" authority for this project? **YES** _____ **NO** x

   d. Are any of the lands/interests in land required for this project located outside the sponsor's political boundary? **YES** x **NO** _____

   e. Are any of the lands/interests in land required for this project owned by an entity whose property the sponsor cannot condemn? **YES** x **NO** _____

2. **HUMAN RESOURCE REQUIREMENTS**:
   a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including P.L. 91-646, as amended? **YES** ✓ **NO** _____

   b. If the answer to 2a is "YES" has a reasonable plan been developed to provide such training? **YES** _____ **NO** ✓

   c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? **YES** ✓ **NO** _____

   d. Is the sponsor's projected in-house staffing level sufficient considering its other work load, if any, and the project schedule? **YES** ✓ **NO** _____

   e. Can the sponsor obtain contractor support, if required in a timely fashion? **YES** ✓ **NO** _____

   f. Will the sponsor likely request USACE assistance in acquiring real estate? **YES** _____ **NO** _____ N/A

3. **OTHER PROJECT VAIRABLES**:
   a. Will the sponsor's staff be located within reasonable proximity to the project site? **YES** ✓ **NO** _____

Exhibit A: Assessment of Non-Federal Sponsor's Real Estate Acquisition Capability

b. Has the sponsor approved the project/real estate schedule/milestones?
YES ✓ NO _____

4. **OVERALL ASSESSMENT**:
a. Has the sponsor performed satisfactorily on other USACE projects?
YES ✓ NO _____

b. With regard to this project, the sponsor is anticipated to be:

HIGHLY CAPABLE _____ FULLY CAPABLE ✓
MODERATELY CAPABLE _____ MARGINALLY CAPABLE _____
INSUFFICIENTLY CAPABLE _____

Justification for Insufficient Capability:

5. **COORDINATION**:
a. Has this assessment been coordinated with the sponsor?
YES ✓ NO _____

b. Does the sponsor concur with this assessment?
YES ✓ NO _____

Justification for Sponsor Non-concurrence:

SPONSOR: CITY OF SEWARD

Scott W. Meszaros
(Signature)
Scott W. Meszaros
(Printed Name and Title)

REPARED BY:

GREEN.RONALD.JONATHAN.1202579147 Digitally signed by GREEN.RONALD.JONATHAN.1202579147 Date: 2020.05.01 16:30:35 -08'00'

RONALD J. GREEN
Realty Specialist

REVIEWED AND APPROVED BY:

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GARY HANSON
Chief, Real Estate Branch

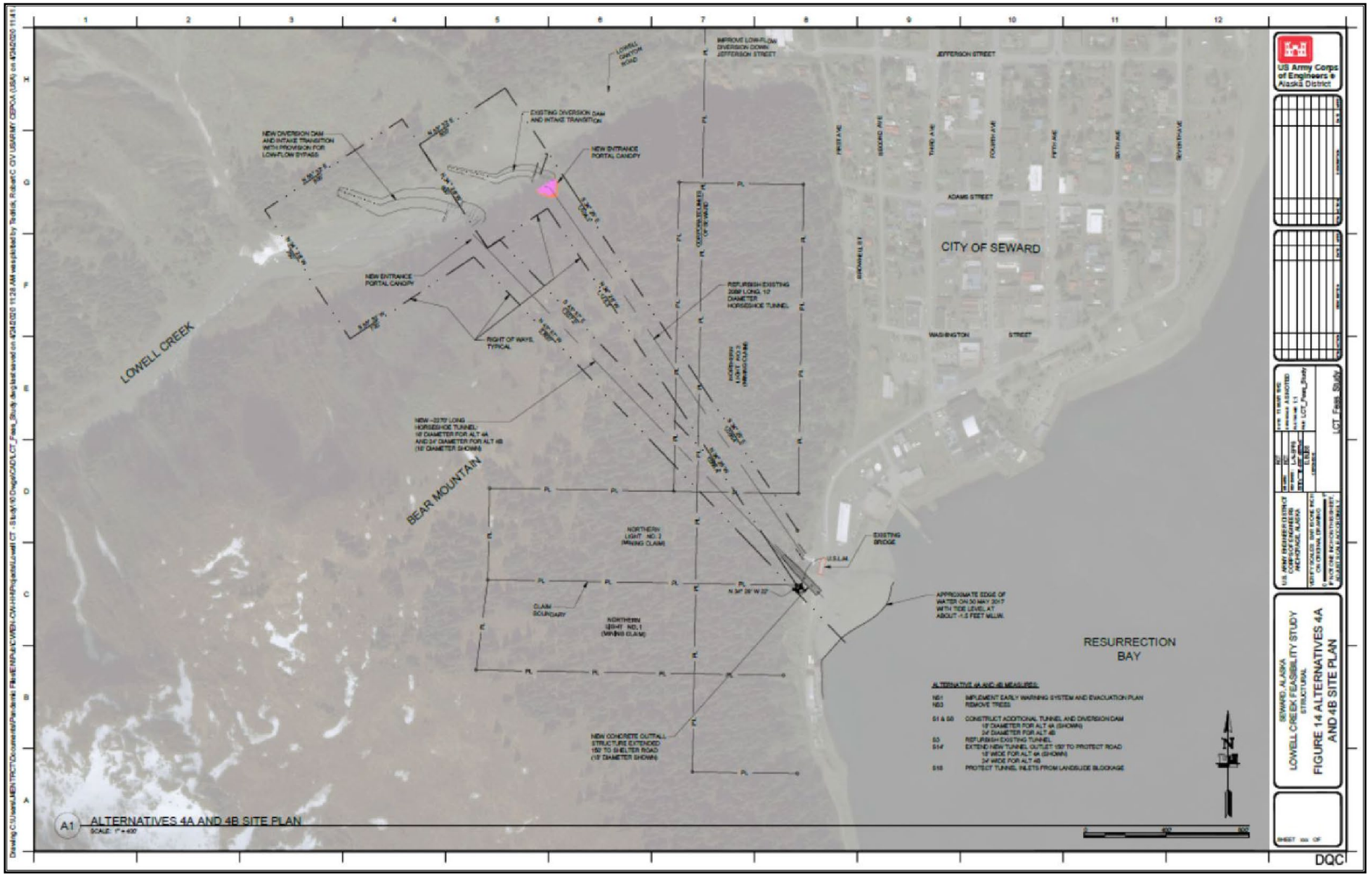

Exhibit B. Tentatively Selected Plan – Concept Plan Drawing

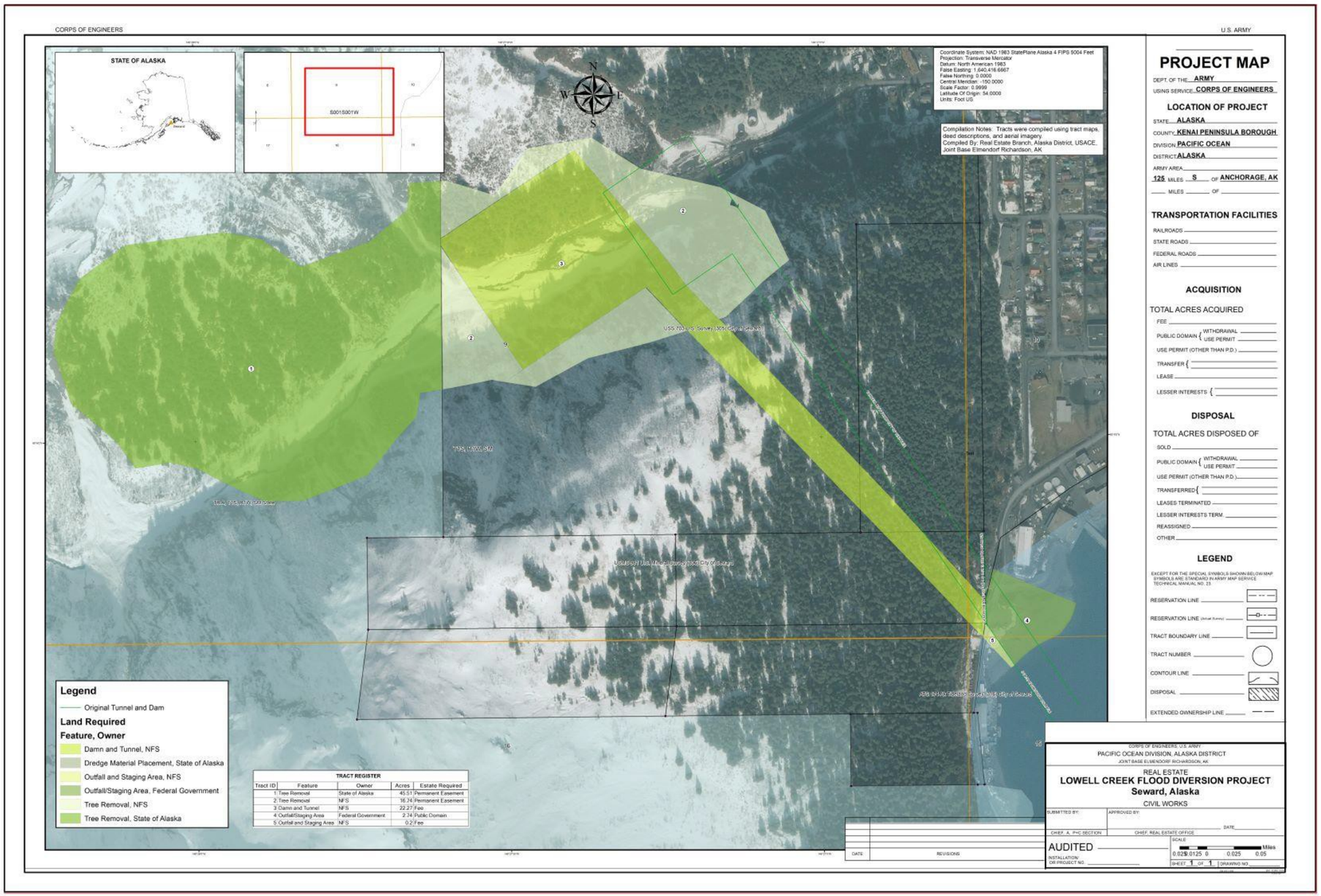

Exhibit C. Real Estate Map

REAL ESTATE RISK CHECKLIST
LOWELL CREEK FLOOD DIVERSION FEASIBILITY STUDY

(Risk: Any issue that could cause a cost or schedule variance)

Project Management Risks impacting Real Estate

- Project scope definition unclear, impacting real estate needs – Low Risk
- Project schedule in question (accelerated or protracted) – Low Risk
- Project competing with other projects for funding and resources – Low Risk
- Inexperienced or inadequate staff assigned – Low Risk

Technical Design Risks impacting Real Estate

- Land Surveys.– Yes, low risk
- Sufficiency/availability of as-built data/base map data – Data made available & sufficient
- Borrow/fill sources identified/secured – Not Applicable to this project
- Sufficiency/condition of borrow / fill sites – Not Applicable to this project
- Project Access has been defined and located – Yes, low risk.
- Locations for Plants /Equipment /Staging – Yes, staging located with PD land by EO8330 and Tide land.

Regulatory and Environmental Risks impacting Real Estate

- Historical/Cultural site, endangered species, or wetlands present – Low Risk
- Hazardous waste preliminary site investigation required – Low Risk
- Mitigation requirements clear – Low Risk

Exhibit D. Page 1

External Risks impacting Real Estate

- Adequacy of project funding (incremental or full funding) – Low Risk
- Local communities' support/opposition – Low Risk
- Political factors change at local, state or federal – Low Risk
- Late surprises, Scope changes – Low Risk
- New stakeholders emerge and demand new work – Low Risk
- Influential stakeholders request additional needs to serve other purposes – Low Risk
- Political opposition/threat of lawsuits – Low Risk

Lands and Damages – Real Estate

- Real Estate plan defined / Study definition – Yes, Low Risk
- Status of real estate/easement acquisition – Low Risk,
- Age of real estate estimate/potential to change over time – Low Risk
- Potential uneconomic remnants; – Low Risk
- Hidden or unforeseen aspects of property and improvements due to inability to physically inspect the project; – Low Risk
- Potential development pressures in the immediate area; – Not Applicable to this project
- Potential zoning changes; negotiation latitude beyond estimated market value; – Not Applicable to this Project
- Potential for condemnation awards and interest; and potential natural resources within the project area – Low Risk
- Objections to right-of-way appraisal – Low Risk

Exhibit E. Page 2

- Ancillary owner rights, ownerships in question – Not Applicable to this project

- Other Agency Involvements (freeway, city, railroad, navigation) – Not Applicable to this project
- Relocations adequately identified – Not Applicable to this project
- Relocations may not happen in time – Not Applicable to this project
- Records / as-built availability / inaccuracies – Low Risk
- Known and unknown utility impacts – Low Risk
- Vagrancy, loitering issues – Not Applicable to this project
- Quality of L&D estimates as “most likely” case – Low Risk
- Appraisal confidence with the volatile market over time – Low Risk
- Estimate already includes certain contingencies / Incremental Costs – Low Risk

RISK SUMMARY

Based on the above Risk Checklist, the above risk were summarized in Project Risk Register as LD1, after discussions with the cost estimator, that the Cost and Schedule Risk Analysis (CSRA) using USACE approved software will quantify the Real Estate concerns including mitigation risks. Real estate refers to the 25% contingency for the administrative expenses detailed in the Baseline Estimate for Real Estate (BCERE). Cost and schedule impacts of the mentioned Real Estate concerns are captured in the contingency of the costs. All potential risks/opportunities have been addressed.

The accompanying Real Estate Plan (REP) makes the following key assumptions based on the current project scope:

1) a permanent easement is needed for the north breakwater, and a temporary road easement for access from the upland are the Lands, Easements, Rights-of-Way, Relocations, or Disposal Areas (LERR) anticipated to be acquired for the proposed project;

2) No facility/utility relocations will be required for the proposed navigation project.