Final Environmental Report

Tununak Water Treatment Plant and Washeteria Facility

Prepared for:
Native Village of Tununak IRA Council, P.O. Box 97, Tununak, AK 99681

and

Alaska Department of Environmental Conservation
Village Safe Water
555 Cordova Street
Anchorage, AK 99501

Prepared by:
Stantec Consulting Services Inc.
725 East Fireweed Lane, Suite 200
Anchorage, AK 99503

December 31, 2017

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

Summary

This Environmental Report (ER) has been completed for the Native Village of Tununak IRA council and the Alaska Department of Environmental Conservation (ADEC) Village Safe Water (VSW) program, as part of an application for financial assistance from the U.S. Department of Agriculture (USDA), Rural Development, Rural Utilities Service (RUS) water and environmental loan and grant program. The ER includes evaluation of environmental issues that must be considered during the planning and design process and has been completed in tandem with the Preliminary Engineering Report (PER). This ER is meant to support the USDA's environmental review process as required by the National Environmental Policy Act (NEPA) as well as USDA environmental policies and procedures. This ER was prepared in accordance with the March, 2008 USDA RUS Bulletin 1794A-602 Version 1.2.

The purpose of this proposal is to provide a safe and functional washeteria and water treatment plant (WTP) to the community of Tununak. The condition of the existing WTP and washeteria is substandard and do not contribute to the continued health of the community. The treatment plant is in poor physical condition and disrepair. Several alternatives were evaluated as part of the PER process. The PER considered system capacities, reasonable growth, available funding, location options, and community input.

The Proposed Action (Alternative 4) would provide the community of Tununak with a new washeteria and WTP that would allow the Tununak Native Council to provide adequate volumes of treated water and washeteria facilities to the community. The preferred alternative would abandon the existing washeteria/WTP in-place and construct a new modular building that would house a combined washeteria and WTP. The modular building would be erected in a location immediately adjacent to the existing washeteria/WTP. Preliminary feedback from the community shows the preferred location for the new washeteria and WTP is Location B. The existing washeteria/WTP would remain in operation until the new modular building is fully on-line and operational.

Environmental, social, and economic effects were evaluated as part of the ER process. Community and agency outreach activities occurred to assist with alternatives evaluation, as well as identify avoidance and minimization measures, and permit requirements, if any.

Feedback from the agencies is still pending, however, no environmental issues have been identified or are anticipated. Impacts from construction of the Proposed Action are limited to a temporary increase in traffic, noise, and potential for erosion and sedimentation of disturbed areas during construction. The contractor will be required to comply with the State of Alaska Stormwater regulations, and coordinate with the community to reduce noise and reroute traffic in a manner that is least impactful to the community as practicable.

1.0 PURPOSE AND NEED FOR THE PROPOSAL

1.1 PROJECT DESCRIPTION (PROPOSED ACTION)

The Proposed Action (Alternative 4) would provide the community of Tununak with a new washeteria and wastewater treatment plant (WTP). The new facilities would allow the Tununak Native Council to provide adequate volumes of treated water and washeteria facilities to the community. The preferred alternative would abandon the existing washeteria/WTP in-place and construct a new modular building that would house a combined washeteria and WTP. The modular building would be erected in a location selected by the community. Preliminary feedback from the community shows the preferred location for the new washeteria and WTP is immediately adjacent to the existing washeteria/WTP (Location B). The existing washeteria/WTP would remain in operation until the new modular building is fully on-line and operational.

The Proposed Action consists of the following components:

- The new modular combined washeteria/WTP would be shipped by barge to Tununak, transported in sections overland from the barge site, and erected on a new multipoint steel frame foundation system.
- The modular building would consist of a 3,040 square foot (40’ by 76’) structure that would include a 1,600 square foot fully functional washeteria and a 1,440 square foot new WTP.
- The WTP would use a surface water treatment process similar to the process used in the existing WTP for the production of potable water, with added treatment to drinking water standards with an additional filtration system. The WTP would produce the equivalent flow as originally designed, but be capable of increase to match community growth.
- The new WTP would be plumbed via an aboveground utilidor to the existing 50,000-gallon water storage tank and water service connections to the clinic.
- The modular washeteria would be designed to accommodate 5 commercial grade washers and dryers, and 2 bathrooms (separate men and women) equipped with 4 toilets, 2 sinks, and 4 showers that are designed for handicap access.
- The wastewater from the modular washeteria would be plumbed to discharge into the existing sewer drain that flows to the existing off-site tank system (which serves only the washeteria and WTP).
- Backwash water from the water treatment pressure granular filter would be plumbed, if approved by Alaska Department of Environmental Conservation (ADEC), to discharge to the existing sewer drain line that flows to the community septic tank system (rather than discharging to the ground as currently).

1.2 PURPOSE AND NEED OF THE PROPOSAL

The purpose of this proposal is to provide a safe and functional washeteria and WTP to the community of Tununak.

The community of Tununak needs safe and functional washeteria and water treatment facilities. The condition of the existing WTP and washeteria is substandard and does not contribute to the continued health of the community. The treatment plant is in poor physical condition and disrepair. The majority of electrical equipment within the building has deteriorated past its useful life. The power distribution and associated equipment shows signs of significant deterioration due to corrosion. Numerous building code violations were found throughout the facility in the power distribution and lighting systems. These code violations include:

- An exit door from the boiler room that has been sealed shut
- Heating fuel oil tank is located within 5 feet of the building.
- The standby heater stack is located too close to combustible materials. It is unknown whether the heater is operational.
- The heat exchanger for the WTP is a single-wall design, which is not allowed by current codes due to the possibility of contamination of the water from the glycol heating fluid in the event of leakage.

The equipment within the building has deteriorated to a point that the facility can no longer serve its intended purpose with any reliability. Only two working washers and two dryers are available. The toilet/shower rooms have missing fixtures and are no longer usable. Control systems for the water storage tank and washeteria mechanical equipment appear to be non-functioning.

2.0 ALTERNATIVES TO THE PROPOSED ACTION

Several alternatives were evaluated as part of the Preliminary Engineering Report (PER) process. The PER considered system capacities, reasonable growth, available funding, location options, and community input. Alternatives evaluated included:

1. No build alternative.
2. Rehabilitate the existing washeteria and WTP.
3. Construct a new washeteria and WTP without new WTP equipment.
4. Construct new washeteria and WTP with new WTP equipment

This Section describes alternatives considered but ultimately dismissed as part of the PER process.

2.1 ALTERNATIVE 1 - NO BUILD

This No Build (No Action) Alternative would result in the continued use of the existing 40-year old, inadequate, deteriorated, washeteria/WTP facility. The WTP would continue to operate to supply non-potable (suitable for laundry and flushing use but not for drinking, showering, hand washing, or consumption) water to the existing washeteria, and health clinic. The existing washeteria is deficient in its current condition and would continue to be used (as is) without upgrades. Backwash water from the existing water filtration process would continue to be discharged directly onto the ground surface along the exterior of the building. This alternative would not mitigate current risk to the operators and users (public) resulting from the building code violations that were identified at the existing facility. This alternative does not meet the purpose and need of the project, to provide safe and functional washeteria and WTP facilities for the community.

2.2 ALTERNATIVE 2 - REHABILITATE EXISTING WASHETERIA/WATER TREATMENT PLANT IN THE EXISTING LOCATION AND REPLACE FOUNDATION

This alternative would rehabilitate the existing washeteria/WTP facility and replace its foundation system at its current location. This alternative provides for the upgrade of the existing WTP facility to treat the current water source from Unnamed Creek and provide drinking water for the washeteria and health clinic. This building rehabilitation alternative would mitigate current risk to the operators and users (public) resulting from the building code violations that were identified at the existing facility. However, rehabilitating the existing washeteria and WTP does not accommodate future community needs, is less sustainable than Alternative 4, and poses

much greater risk of capital cost overruns and potential construction challenges than a modular building. For these reasons, this alternative was removed from consideration.

2.3 ALTERNATIVE 3 - NEW MODULAR WASHETERIA WITH VACANT FLOOR SPACE FOR FUTURE WATER PLANT EQUIPMENT AND REHABILITATE THE EXISTING WATER TREATMENT PLANT

This alternative would rehabilitate the existing water treatment plant and install a new modular washeteria building in a location selected by the community. The existing washeteria/water treatment building would have its foundation system (post and pad) replaced at its current location. This alternative also provides for the upgrade of the existing WTP facility to treat the current water source from Unnamed Creek and provide drinking water for the washeteria and health clinic. The rehabilitation of the water treatment plant would mitigate current water treatment operator risk resulting from the numerous building code violations that have been identified at the current facility, however, the cost of rehabilitating the existing WTP in addition to providing a new modular washeteria is excessive, requiring an additional $1.27 million in funding. Rehabilitating the existing WTP poses much greater capital cost expenditures, risk of capital cost overruns, and potential construction challenges. In addition, heat would have to be supplied to both buildings, which negatively affects the sustainability of this alternative. For these reasons this alternative was removed from consideration.

3.0 AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES

This section describes the existing environmental, social, and economic setting that would be affected by the Proposed Action and establishes a baseline for evaluation of environmental consequences and mitigation organized by resource categories identified in the March, 2008 USDA RUS Bulletin 1794A-602 Version 1.2.

3.1 LAND USE/ IMPORTANT FARMLAND/ FORMALLY CLASSIFIED LAND

3.1.1 Affected Environment

3.1.1.1 General Land Use

The existing Washeteria and WTP lies on Tract D-1A as shown on U.S. Survey 4028, Tununak Townsite in the Village of Tununak. This property is currently owned by the Native Village of Tununak IRA Council as conveyed in 2016 in the Quickclaim Deed from the Tununak Traditional Council.

The area surrounding the Proposed Action is mostly residential, except for the clinic, store, and school property. The immediate project vicinity adjacent to the existing washeteria and WTP consists of roads, trails, and two utilidor corridors from the washeteria, one to the school, and one to the clinic. (Figure 2).

3.1.1.2 Important Farmland

The Farmland Protection Policy Act (FPPA), requires consideration of the potential effects a USDA action may have on important farmland. There is no designated prime or unique farmland in Alaska, or farmland of statewide importance[1], therefore FPPA does not apply.

3.1.1.3 Formally Classified Lands

No formally classified lands are present within the proposed project area. There are certain properties that are either administered by federal, state, or local agencies or have been accorded special protection through formal legislative designations. Formally classified lands include, but are not limited to, monuments, landmarks, wild and scenic rivers, wilderness areas, state or national parks, reservations, and recreational areas.

[1] USDA, NRCS. Accessed online March 30, 2017 at https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ak/soils/surveys/?cid=nrcs142p2_035988.

3.1.2 Environmental Consequences

No environmental consequences have been identified based on land use. No land use changes are anticipated with the projects under consideration. Impacts to the surrounding community are expected to be those typically experienced during construction projects: noise, traffic limitations, and increased employment.

3.1.3 Mitigation

No mitigation beyond use of construction best management practices (BMPs) has been identified. Contractors will be required to provide traffic control plans, limit operations and noise producing activities to standard business hours, and generally minimize community impacts to the extent practicable.

3.2 FLOODPLAINS

3.2.1 Affected Environment

The United States Army Corps of Engineers (USACE) rates the flood hazard at Tununak as low average[2]. No Flood Insurance Studies or Flood Insurance Rate Maps exist for Tununak. Longtime residents indicate that flooding only occurs in the main village due to storm-driven waves in combination with high tides to a maximum height of approximately 6 inches[3]. The project area is approximately 400 feet away from the north fork of the Tununak River and according to local residents, has not been susceptible to flooding in the past.

Executive Order 11988, *"Floodplain Management"* requires federal agencies to avoid actions, to the extent practicable, which will result in the location of facilities in floodplains and/or affect floodplain values. Facilities located in a floodplain may be damaged or destroyed by a flood or may change the flood-handling capability of the floodplain or the pattern or magnitude of the flood flow.

3.2.2 Environmental Consequences

No environmental consequences have been identified to the floodplain. The Proposed Action will not place new facilities in the floodplain, change floodplain values, or influence additional floodplain development. Impacts to the surrounding community are expected to be those typically experienced during construction projects: noise, traffic limitations, and increased employment.

[2] United States Army Corps of Engineers, Alaskan Community Flood Hazard Pertinent Data, 1977
[3] Phukan Consulting Engineers and Associates Inc, *Sanitation Feasibility Study and Environmental Review*,1993

3.2.3 Mitigation

No mitigation for floodplain impacts is proposed.

3.3 WETLANDS

3.3.1 Affected Environment

No U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory mapping exists for the Tununak area. However, based on available aerial and ground photography provided by community members, the ground surrounding the existing washeteria appears to be disturbed, and evidence of saturated soil, hydrophytic vegetation, and hydrology are not visible. In lower areas outside and further west of the washeteria, outside the project area, vegetation appears to grow on tussocks, and snow machine tracks have left scars in undisturbed tundra, showing evidence of darker, possibly wet soils underneath. Therefore, it is likely wetlands occur within undisturbed tundra outside the project area, but areas immediately adjacent to the existing washeteria and WTP are highly disturbed, and appear better drained. The USACE will be consulted in the event the Proposed Action design includes activities that would occur outside of the current project area within previously undisturbed tundra.

3.3.2 Environmental Consequences

No environmental consequences have been identified to area wetlands.

3.3.3 Mitigation

The Proposed Action would not construct new facilities in wetlands. However, any work, even maintenance to existing facilities within a wetland, stream, or other Water of the US, requires a USACE permit. Correspondence with the USACE is provided in Appendix A and agency comments are still pending. The USACE should be consulted prior to any work in and around streams, wetlands, or other Waters of the U.S., to verify permit applicability. As no impacts to wetlands are anticipated in order to construct the Proposed Action, no mitigation for wetland impacts is proposed.

3.4 HISTORIC PROPERTIES

3.4.1 Affected Environment

There is little available information in the Alaska Department of Natural Resources (ADNR) Office of History and Archaeology (OHA) Alaska Heritage Resource Survey (AHRS) database or Publicly available references regarding potential cultural and historic resources present within or adjacent to the Proposed Action. The preferred Location B is within the recorded boundary of the Historic Village of Tununak (assigned AHRS site number XNI-048). While no visible surface resources were reported during three cultural resources surveys conducted immediately

north of the Proposed Action area in 2010, 2011, and 2013, there are no available records that any subsurface investigations were completed within or adjacent to the Proposed Action Location B[4].

The National Historic Preservation Act of 1966, as amended (16 U.S.C. § 470 et seq.) and the Advisory Council on Historic Preservation's implementing regulations, 36 CFR Part 800 (Section 106 regulations), require federal agencies to take into account the effect their actions may have on historic properties that are within a proposal's *"area of potential effect."* The area of potential effect is the geographic area or areas within which a proposal may cause changes in the character or use of historic properties.

3.4.2 Environmental Consequences

The Proposed Action may require minimal grading of the existing ground surface and may involve boring of helical piles below the existing ground surface for utilidor support posts. Since the Proposed Action Location B is within the boundaries of an archaeological site, the ADNR OHA has been consulted to determine measures to avoid impacts to cultural resources from construction of the preferred alternative, and determine whether a survey is required. In addition, the Bureau of Indian Affairs (BIA) has been consulted to determine whether their agency has any additional documentation in their archives describing cultural resource investigations conducted in the area in the past that may inform determination of environmental consequences.

3.4.3 Mitigation

Consultation with OHA confirmed that Location B for the proposed new washeteria and WTP are within the boundary of the Historic Village of Tununak. There is a potential for effects to cultural and historic resources as a result of this project, depending on the nature of the project and scope of disturbance. The USDA RUS will need to conduct Section 106 consultation for this project to obtain a formal determination of effect.

During the Section 106 process, USDA will define the area of potential effect (APE) and propose a determination of effect for the project. As there is no documentation of subsurface investigations within the proposed building sites, justification will need to be made as to whether the nature of the project and scope of disturbance warrants completing a cultural resource survey. Our knowledge of the project and current design does not show any disturbance proposed for the new building foundation. Depending on the location of the proposed building site, and the

[4] *Boatwright, Mark A, 2000. Letter regarding Notification of Agency Findings per Section 106 (16 USC 470f) for the National Historic Preservation Act for BIA Proposed Undertaking in Tununak, Alaska. BIA, Alaska Region, Juneau, Alaska. On file at the OHA, Anchorage, Alaska; Sanka, Jennifer M. and M. Kelley Russell, 2013. Final Cultural Resources Report: Tununak Community Streets Project - AK DEN 2010(3). Atkins Project No. 100029585. Atkins. On file at the OHA, Anchorage, Alaska; Thompson, Daniel R. and Nicole Tozzi, 2011. Cultural Resources Survey of Proposed Airport Improvements in Tununak, Alaska: DOT&PF Project No. 51791. OHA Report Number 139. OHA, Division of Parks and Outdoor Recreation, ANR, Anchorage, Alaska.*

length of new utilidor that will be needed to connect the building to the water tank, a small number of helical piles may be needed for support. However, due to the very minimal disturbance associated with such work, we believe a justification of no historic properties affected is reasonable for this project. In addition, OHA requested the construction contract contain the following provision:

- *Should cultural or paleontological resources be discovered as a result of this activity, all work that could impact these resources will halt and the VSW Project Engineer and SHPO will be notified immediately. Work will not resume at these sites until Section 106 consultation is conducted with USDA and SHPO.*

3.5 BIOLOGICAL RESOURCES

3.5.1 Affected Environment

Biological resources within the project area are limited. Development surrounds the immediate project vicinity, and there are no wetlands or water bodies present (Figure 4). Habitats within the project area consist of disturbed ground with low shrubs and grasses that may provide shelter and/or travel corridors for small bird and mammal species. However, larger mammals and birds are likely to avoid the area due to the high human presence in the immediate project vicinity, and the abundance of undisturbed habitat in nearby areas. Therefore, biological resources included for evaluation in this ER are limited to federally protected species that may occur in the project area, as discussed in this section.

3.5.1.1 Threatened and Endangered Species

The community of Tununak and the project area are within the potential breeding range of the threatened Spectacled Eider, although no critical habitat for this species has been designated in the area[5].

The Endangered Species Act of 1973 establishes a national program for the conservation and protection of threatened and endangered species of plants and animals and the preservation of habitats upon which they depend. These programs are managed by the USFWS and/or the National Marine Fisheries Service for all threatened and endangered species.

Consultation with the USFWS has been initiated to determine construction measures that may be implemented, if any, to avoid accidental takes of Eiders. Given the project area is surrounded by development and is actively used by the community on a daily basis, it is unlikely this species would use the area for nesting.

3.5.2 Environmental Consequences

No environmental consequences have been identified to biological resources. No land use changes are anticipated and impacts will not extend to previously undisturbed areas. Disturbance of vegetation will be limited to areas underneath the new building foundation and would be less than an acre. Impacts are expected to be limited to those typically experienced during construction projects, primarily noise and temporary changes to traffic patterns, which are not anticipated to impact area wildlife or habitat.

At this time, no impacts to Threatened or Endangered species have been identified for the Proposed Action. Results of consultation with the USFWS regarding Spectacled Eiders is still pending.

[5] USFWS IPaC Information for Planning and Conservation website https://ecos.fws.gov/ipac/

3.5.3 Mitigation

No mitigation specific to biological resources have been identified at this time. Contractor specifications will include "no clearing" windows to prevent impacts to nesting migratory birds and other limits on scheduling or activities as required to accommodate wildlife.

3.6 WATER QUALITY

3.6.1 Affected Environment

The current washeteria and WTP use well water from a surface source approximately 900 feet east of the washeteria. The well is placed in an Unnamed Creek as shown on Figure 2. Community interviews show that residents do not trust the purity of treated water from Unnamed Creek. Multiple Boil Water notices are issued every year, because of indications of bacteriological contamination.

3.6.2 Environmental Consequences

The Proposed Action will not change the washeteria and WTP well water source. The community's raw water source will not be impacted. Water quality at the washeteria will be improved with the proposed additional filtration in the new WTP that will bring the water up to drinking water standards.

Other impacts are those typical of construction projects, namely erosion, sediment, and dust, which may reach area waterways.

3.6.3 Mitigation

No mitigation measures specific to water quality have been identified.

Because there is always the potential for construction sediments to reach area waterbodies, contractors will be required to implement BMPs for sedimentation control. This may include coverage under the Alaska Pollutant Discharge Elimination System Construction General Permit.

3.7 COASTAL RESOURCES

3.7.1 Affected Environment

The Alaska Coastal Management Program expired on June 11, 2011 and is no longer in effect. The Yukon-Kuskokwim Coastal Association Strategic Plan and Annual Operating Plan (2016) was evaluated to ensure no conflict with the proposed project.

3.7.2 Environmental Consequences

No environmental consequences have been identified with respect to coastal resources.

3.7.3 Mitigation

No mitigation for impacts to coastal resources is proposed.

3.8 SOCIO-ECONOMIC/ ENVIRONMENTAL JUSTICE ISSUES

3.8.1 Affected Environment

Tununak, a community of 387 residents (according to a 2016 Department of Labor Estimate), is located 115 miles northwest of Bethel, in a small bay on the northeast coast of Nelson Island. Tununak is a traditional Yup'ik Eskimo Village, with fishing and subsistence activities an integral part of the lifestyle[6].

There are no roads connecting Tununak with other communities; therefore, major means of transportation to or from the community are plane, small boat, and snow machine. Within the community, numerous residents have vehicles including snow machines, boats, and all-terrain vehicles. Nearly all local residents are dependent on varying degrees of fish and game resources.

3.8.2 Environmental Consequences

Impacts to the surrounding community are expected to be those typically experienced during construction projects: noise and traffic limitations. No changes to the socio-economic makeup of the area are anticipated beyond a slight employment increase during construction activities. The Proposed Action is not anticipated to change land use patterns. Like the rest of the community, minority and low-income populations will benefit from safe and functional washeteria and water treatment facilities.

3.8.3 Mitigation

No mitigation related to socio-economic or environmental justice issues is proposed.

[6] Alaska Department of Commerce, Community, and Economic Development website https://www.commerce.alaska.gov/dcra/DCRAExternal/community/Details/b3b97917-176e-4ace-9b18-8d5760bfd5bb

4.0 SUMMARY OF MITIGATION

This section summarizes all proposed mitigation measures described in Section 3.0. Mitigation measures by environmental resource category are compiled in the table below. All mitigation measures indicated will be implemented as part of standard construction methods and/or permitting requirements.

Table 1 – Mitigation Summary

Category	Mitigation
Land Use	The contractor will be required to provide traffic control plans, limit operations and noise producing activities to standard business hours, and generally minimize community impacts to the extent practicable.
Floodplains	None
Wetlands	To be included when agency comments are received. None anticipated.
Historic Properties	USDA will conduct Section 106 consultation. The construction contract will contain the following provision: *Should cultural or paleontological resources be discovered as a result of this activity, all work that could impact these resources will halt and the VSW Project Engineer and SHPO will be notified immediately. Work will not resume at these sites until Section 106 consultation is conducted with USDA and SHPO.*
Biological Resources	Contractor specifications will include "no clearing" windows to prevent impacts to nesting migratory birds and other limits on scheduling or activities as required to accommodate wildlife. Additional measures will be included when agency comments are received. None anticipated.
Water Quality	The contractor will be required to implement BMPs for erosion and sedimentation control, including measures to control dust.

Category	Mitigation
Coastal Resources	None
Socio-Economic/Environmental Justice Issues	None

5.0 CORRESPONDENCE

5.1 COMMUNITY INVOLVEMENT

Community involvement on this project has been ongoing since 2010. As part of an on-site assessment of sanitation facilities in Tununak, VSW engaged with the community and conducted a public meeting in May 2010. The meeting was attended by 56 residents and was considered by the Tununak Tribal Council to be one of the largest turnouts for a community meeting recorded in Tununak. A considerable amount of information concerning the resident's desires, experiences, and frustrations with the existing sanitation facilities was gathered from the public meeting. Much of that feedback went into the alternatives evaluation process and purpose and need development for this project.

Since 2010 the VSW staff have maintained close communication with the Native Village of Tununak and its predecessor the Tununak Traditional Council. In 2016, the Tununak Traditional Council signed a quickclaim deed that conveyed all its assets and liabilities with rights and titles to the Native Village of Tununak IRA Council.

During preparation of the PER document, VSW participated in several teleconferences with key personnel from the Native Village of Tununak IRA Council including James James (Administrator), Xavier Post (Administrative Assistant), and Josephine Hooper (resident of Tununak) to obtain information on the current conditions of the washeteria and WTP. As part of this information gathering process, the Native Village of Tununak provided copies of their records on the cost of operating the washeteria and WTP from 2014-2016, and income from the washeteria from 2009-2016. In addition, site plans were faxed to the Native Village of Tununak for their review and comment on three alternative locations in the immediate vicinity of the existing washeteria/WTP for the placement of a new replacement washeteria and WTP. Preliminary discussions with Tununak residents has shown that the current preferred location for the new washeteria and WTP is Location B.

5.2 AGENCY CORRESPONDENCE

Due to the previously developed nature of the site, and minimal environmental impacts anticipated, a focused agency coordination effort was conducted for this project. Three agencies were contacted regarding potential for resource impacts within the project area. Table 2 lists the agency representatives contact for the purposes of this ER. Copies of email correspondence is included in Appendix A.

Table 2 – Agencies Contacted

Agency	Individual Addressee
Alaska Department of Natural Resource, Office of History and Archaeology	Shina Duval, Archaeologist
Bureau of Indian Affairs	Sean Mack, Archaeologist
U.S. Fish and Wildlife Service	Catherine Yeargan, Biologist, Ecological Services
U.S. Army Corps of Engineers, Alaska District, Regulatory Division	Ryan Winn, Chief, North Section

5.3 RESPONSES

The response from OHA is included in Appendix A. Responses from the remaining agencies are still pending.

5.4 ISSUES IDENTIFIED

Feedback from the agencies is still pending, however, no environmental issues have been identified or are anticipated. Impacts from construction of the Proposed Action are limited to a potential increase in traffic and noise, potential for erosion and sedimentation of disturbed areas, and potential impacts to nesting migratory birds during construction. The contractor will be required to comply with the State of Alaska Stormwater regulations, adhere to USFWS recommended “no clearing” windows, and coordinate with the community to reduce noise and reroute traffic in a manner that is least impactful to the community as practicable. In addition, a provision for actions required in the event cultural resources are discovered during project activities will be added to the contract provisions.

6.0 EXHIBITS

Figure 1 - Vicinity and Location Map

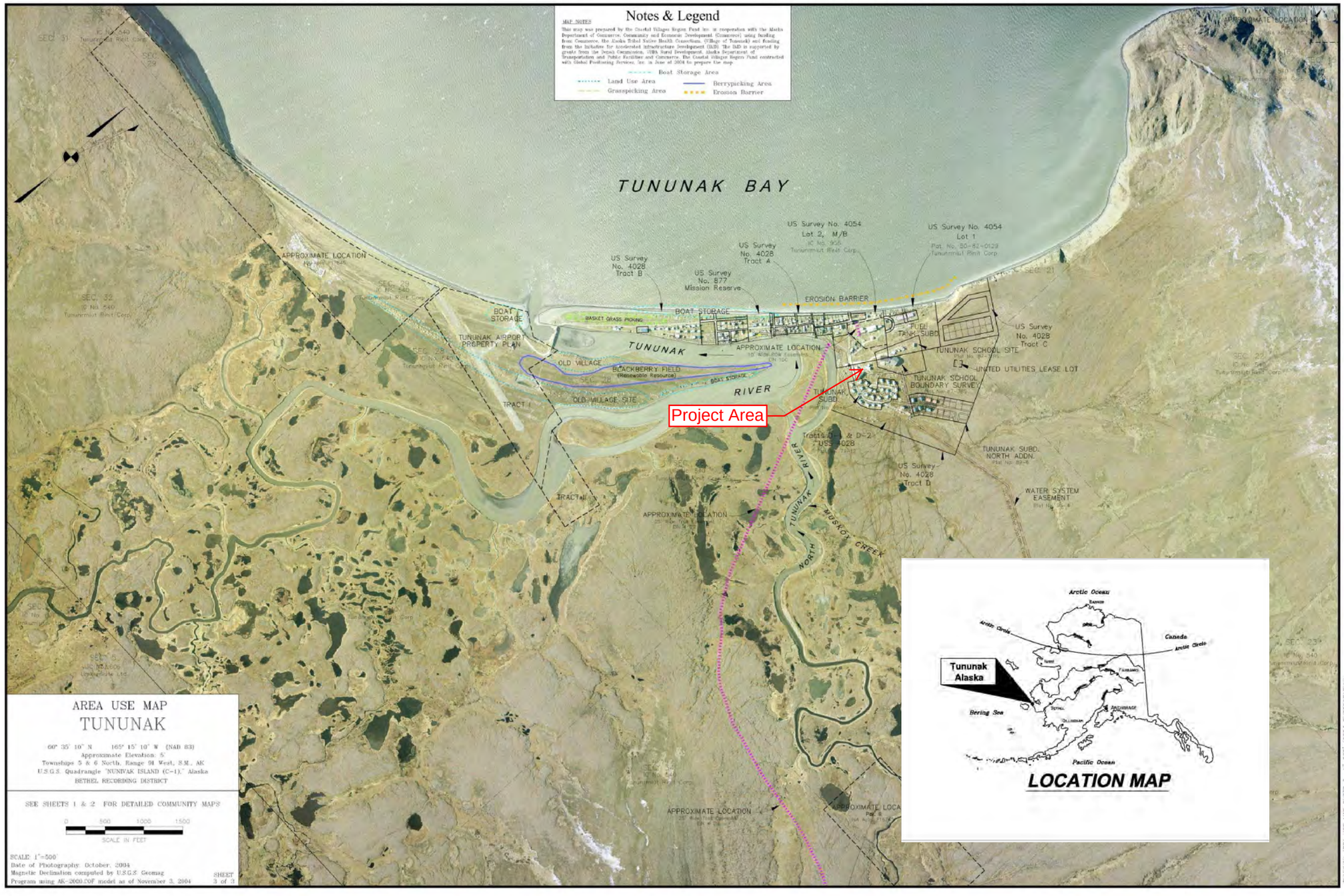
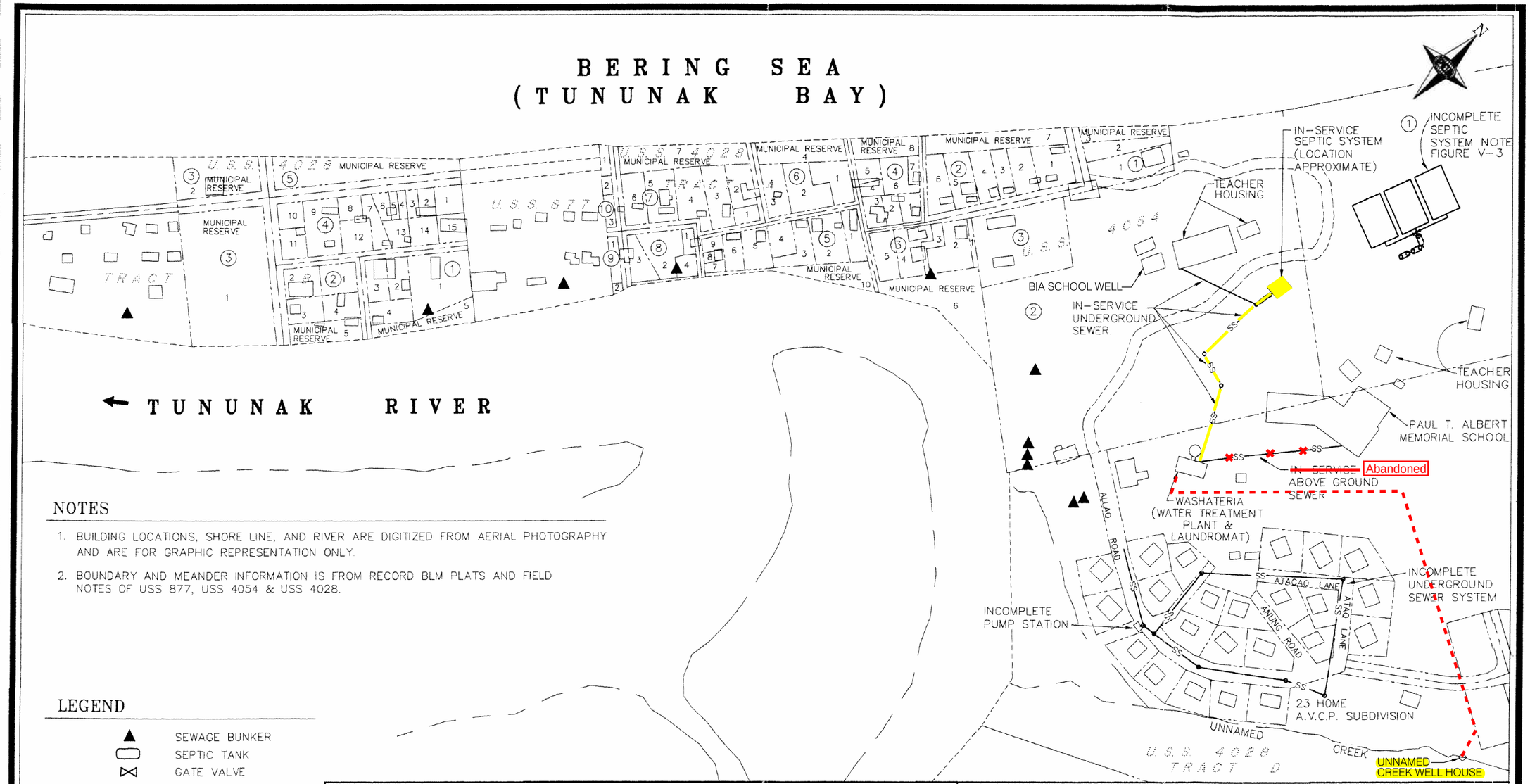


Figure 1
ADCRA Tununak Area Map and Location (Inset)

Stantec
Stantec Consulting Services Inc.
725 East Fireweed Lane Suite 200
Anchorage, AK 99503-2245
Tel (907) 276-4245 • www.stantec.com

FILE: D:\CAD\Proj\WSW - village safe water\TUNUNAK\Washotoria-Water Treatment Facility\draft\FIG A-1 ADCRA Tununak area map.dgn
TIME: 09-DEC-2010 12:06
JOB No. 1008875.040101

Figure 2 – Existing Facilities



NOTES

1. BUILDING LOCATIONS, SHORE LINE, AND RIVER ARE DIGITIZED FROM AERIAL PHOTOGRAPHY AND ARE FOR GRAPHIC REPRESENTATION ONLY.
2. BOUNDARY AND MEANDER INFORMATION IS FROM RECORD BLM PLATS AND FIELD NOTES OF USS 877, USS 4054 & USS 4028.

LEGEND

- SEWAGE BUNKER
- SEPTIC TANK
- GATE VALVE
- SEWER MAN HOLE
- SS — EXISTING SEWER LINE
- RECORD BOUNDARY
- RECORD CENTERLINE
- BLM RECORD MEANDERS
- ③ U.S. SURVEY BLOCK
- Raw Water Line (approx)

PHUKAN CONSULTING ENGINEERS & ASSOCIATES, INC.
Civil Geotechnical • Surveying • Environmental
PCA
Telephone: (907)272-7111 Fax: (907)272-3177
203 West 15th Avenue Suite 104 Anchorage, AK 99501

TUNUNAK SANITATION FEASIBILITY STUDY
EXISTING SANITATION FACILITIES

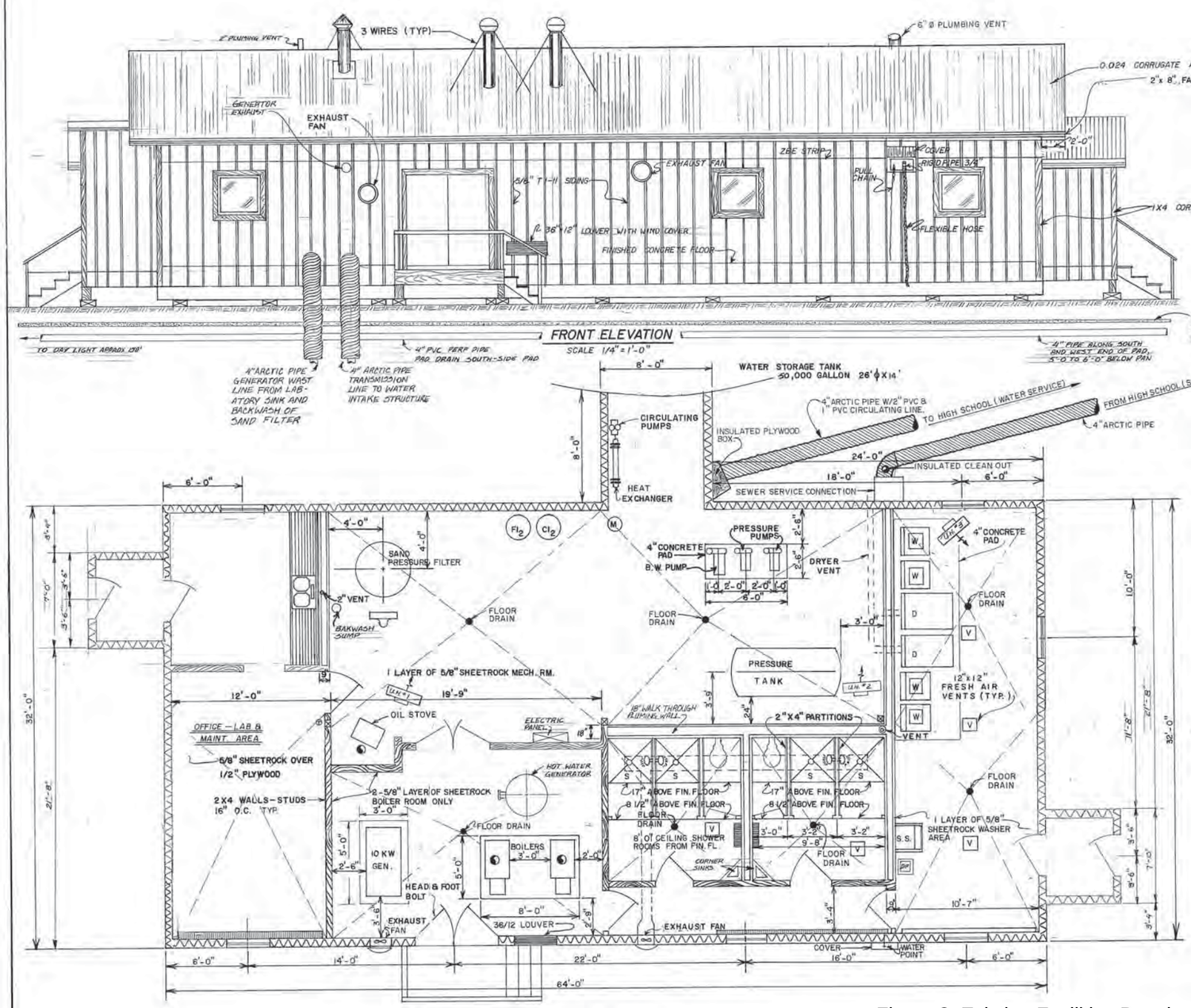
DRAWN	GRID	COMP FILE NO. 516V-1	FIGURE V-1
SCALE 1"=200'	DATE 12-21-92	FILE DRAWER NO.	
F.B. PG.	W.O. H92516		

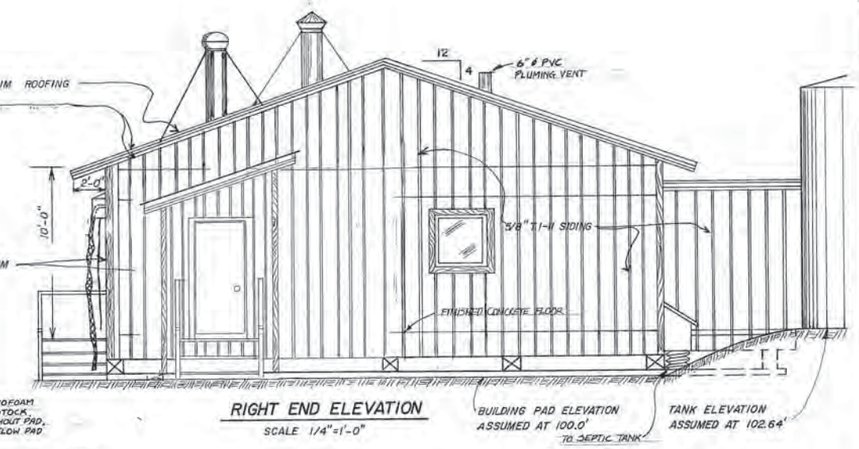
FILE: D:\CAD\Proj\WSW - village safe water\TUNUNAK\Washeteria-Water Treatment Facility\draft\FIG A-3.dgn
TIME: 09-DEC-2010 11:52
JOB No. 1008675.040101

Stantec
Stantec Consulting Services Inc.
725 East Fireweed Lane Suite 200
Anchorage, AK 99503-2245
Tel (907) 276-4245 • www.stantec.com

Figure 2
Site Plan

Figure 3 - Existing Layout





NOTES

1. SLOPE CONCRETE FLOOR TO FLOOR DRAIN, MINIMUM SLOPE 1/16" PER FOOT.
2. BOILER ROOM TO RECEIVE 2 LAYER OF 5/8" SHEET ROCK.
3. INTERIOR SIDE OF ALL BUILDING PANELS TO BE COVERED BY 5/8" SHEET ROCK INTERIOR PARTITIONS SHALL BE COVERED AS NOTED.
4. TAPE ALL JOINTS
5. EXTERIOR LATEX PAINT SYSTEM FOR BUILDING
6. PLACE 4 MIL VAPOR BARRIER BETWEEN 5/8" SHEET ROCK AND 1/2" PLYWOOD INTERIOR OF ALL BUILDING PANELS.

AS BUILT

DATE	REVISIONS	INITIALS
FEB 80	AS-BUILT	GLR
SEPT 80	AS-BUILT CHANGES	PML

U. S. Department of Health, Education & Welfare
Public Health Service
Indian Health Service

TUNUNAK, ALASKA
WATER TREATMENT AND WASHETERIA
FLOOR PLAN AND ELEVATIONS
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-77-631

SHEET NO. 7 OF 23 TOTAL SHEETS

DRAWN BY: georgia a. greatreaks
DATE: december 07, 1977
CHECKED BY: T.T.L
DATE: 9/6/78

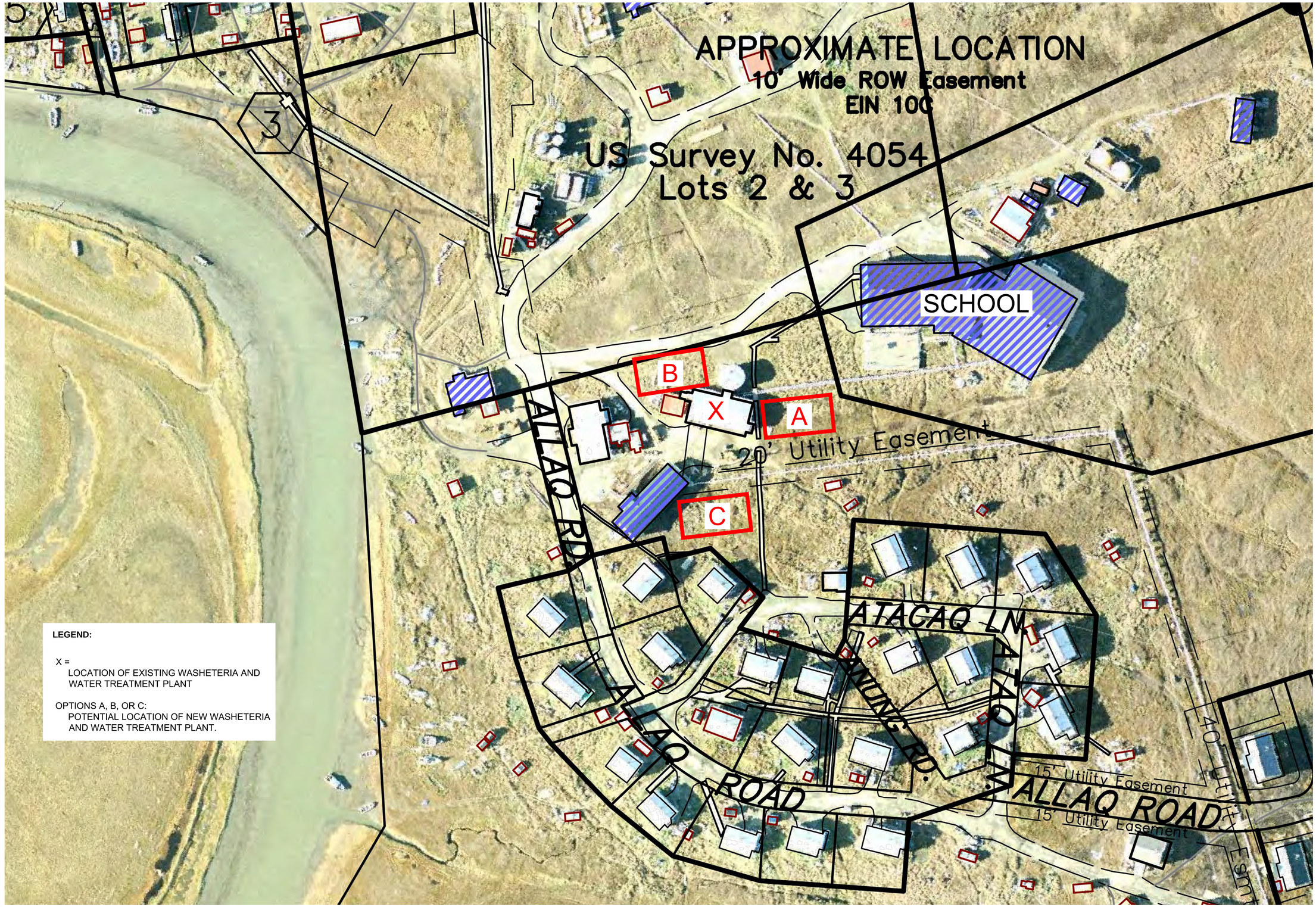
SANITATION FACILITIES CONSTRUCTION BRANCH
OFFICE OF ENVIRONMENTAL HEALTH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

T.T.L
Design Engineer
Maintenance Review
Material Take-off

STATE OF ALASKA 49TH
JOHN T. LOVETT No. 3312-E
REGISTERED PROFESSIONAL ENGINEER

Figure 3: Existing Facilities Drawing

Figure 4 – Preferred Alternative Location Options



SCALE: 1"=50'

<Pick location in Project Information>
3/14/2017 4:37:23 PM

ORIGINAL SHEET - ANSI D

Stantec

Stantec Consulting Services Inc.
725 East Fireweed Lane, Suite 200
Anchorage, AK 99503-2245
Tel: (907) 276-4245 • www.stantec.com

Consultant

No.	Issued/Revision	By	Appd	YYYY.MM.DD

Permit/Seal

PRELIMINARY NOT FOR CONSTRUCTION

Not for permits, pricing or other official purposes. This document has not been completed or checked and is for general information or comment only.

Figure 4 -
Location Options

Client/Project
Alaska DEC, Village Safe Water Program
VSW Tununak PER and ER

Project No.:2047057401

File Name: N/A

Scale:

Dwn.	Dsgn.	Chkd.	03/17/17 YYYY.MM.DD

Title
WASHETERIA OPTIONAL LOCATIONS PLAN

Revision:

Drawing No.
G1

7.0 LIST OF PREPARERS

Table 3 provides the list of personnel involved in the preparation of this ER.

Table 3 – ER Preparers

Name/Title	Affiliation	Area of Input
Susan Randlett, P.E., VSW Engineer	ADEC, VSW	Document review, and project and grant management for VSW
James James, Tununak Tribal Administrator	City of Tununak	Alternatives evaluation
Sara Lindberg, Environmental Lead	Stantec	ER development
Bob Gilfilian, P.E., Senior Civil Engineer	Stantec	PER development and review
Owen Haskell, Water Resources EIT	Stantec	PER and ER development and research
Ursula Dickeson, CDT, Technical Editor	Stantec	Technical editing, formatting, and review

Appendix A AGENCY CORRESPONDENCE

From:	Lindberg, Sara
To:	"catherine_yeargan@fws.gov"
Subject:	Comments requested- Tununak Water Treatment Plant and Washeteria
Date:	Tuesday, April 11, 2017 1:54:00 PM
Attachments:	Fig4_LocationOptionsA.pdf Location B- Tununak school (blue bldg) water storage tank and washeteria (red bldg) (002).JPG Location C- Water line to Clinic Tununak (002).JPG Location A vicinity- Tununak School Utilidor from Washeteria (002).JPG

Hello Catherine
I left you a voicemail as well, but I thought I would follow up with an email for additional background.
Stantec, on behalf of Village Safe Water is requesting your comments on the proposed new Water treatment Plant (WTP) and Washeteria in Tununak. The purpose of the project is to provide a safe and functional washeteria and WTP to the community. The condition of the existing WTP and washeteria is substandard and the facility is in poor physical condition and disrepair.

The Proposed Action would provide Tununak with a new washeteria and WTP within a modular building placed at a location selected by the community. The building would be placed on a triodetic foundation system which requires no fill or excavation, and very little disturbance. Three locations are being considered and are shown on the attached Figure 4. Initial comments from the community show they prefer location B. I have also attached ground photos of all three potential building locations for your review. VSW is in the process of applying for a USDA RUS grant for the design of this project, and Stantec is completing an Environmental Review to comply with the USDA NEPA process.

The IPaC website shows the project area is within the range of the Spectacled Eider. Given the disturbed nature of the project site and the concentration of human activity, we do not believe the project would affect their migration in this region.
Please provide your comments about requirements for Section 7 consultation for this project. It is our hope that we can incorporate any avoidance and minimization measures for the Spectacled Eider into the construction documents and be able to complete informal Section 7 consultation for via this email correspondence.
Thank you
Sara

Sara Lindberg
Manager, Environmental Services
Stantec
725 East Fireweed Lane, Suite 200
Anchorage, AK 99503-2245
Phone: (907) 343-5250
Cell: (907) 328-9622
Fax: (907) 258-4653
sara.lindberg@stantec.com

From:	Lindberg, Sara
To:	"Duvall, Shina A (DNR)"
Cc:	Smith, Ross
Subject:	Comments requested- Tununak Water Treatment Plant and Washeteria
Date:	Tuesday, April 11, 2017 11:44:00 AM
Attachments:	Fig4_LocationOptionsA.PDF Location B- Tununak school (blue bldg) water storage tank and washeteria....jpg Location C- Water line to Clinic Tununak (002).jpg Location A vicinity- Tununak School Utilidor from Washeteria (002).jpg conditions surrounding washeteria- washeteria and storage tank (002).jpg

---

Hi Shina
Stantec, on behalf of Village Safe Water is requesting your comments on the proposed new Water treatment Plant (WTP) and Washeteria in Tununak. The purpose of the project is to provide a safe and functional washeteria and WTP to the community. The condition of the existing WTP and washeteria is substandard and the facility is in poor physical condition and disrepair.

The Proposed Action would provide Tununak with a new washeteria and WTP within a modular building placed at a location selected by the community. The building would be placed on a triodetic foundation system which requires no fill or excavation, and very little disturbance. In addition to a new building, a new utilidor will be needed connecting the existing water tank to the new building. Depending on the building location selected, there may not be any ground disturbance associated with the utilidor. If new utilidor supports are needed, they would consist of helical piles that would be bored into the ground, and no excavation or backfill would be involved. Helical piles, if needed would be bored to an approximate depth of 4 feet below the ground surface. Three locations are being considered for the new building and are shown on the attached Figure 4. Initial comments from the community show they prefer location B. I have also attached ground photos of all three potential building locations for your review. VSW is in the process of applying for a USDA RUS grant for the design of this project, and Stantec is completing an Environmental Review to comply with the USDA NEPA process.

Ross Smith completed a literature review of available cultural and historic information for the project site. There is little available information in the AHRS database or other Publicly available references regarding potential cultural and historic resources present within or adjacent to the project site. The preferred Location B is within the recorded boundary of the Historic Village of Tununak (assigned AHRS site number XNI-048). While no visible surface resources were reported during three cultural resources surveys conducted immediately north of the Proposed Action area in 2010, 2011, and 2013, there are no available records that any subsurface investigations were completed within or adjacent to Location B.

Please let us know if you have any comments or concerns about the proposed work. I will follow up with a phone call to you this afternoon.
Thank you
Sara

Sara Lindberg
Manager, Environmental Services
Stantec
725 East Fireweed Lane, Suite 200
Anchorage, AK 99503-2245
Phone: (907) 343-5250
Cell: (907) 328-9622
Fax: (907) 258-4653
sara.lindberg@stantec.com

Lindberg, Sara

From: Lindberg, Sara
Sent: Thursday, April 13, 2017 2:38 PM
To: 'Duvall, Shina A (DNR)'
Cc: Smith, Ross
Subject: RE: Comments requested- Tununak Water Treatment Plant and Washeteria

Hi Shina
Thanks for speaking with me this morning.
I wanted to send you a summary of our conversation. I plan to add your feedback into the Environmental Report as discussed, and I'll put this email in the Appendix for the record. Please let me know if what I have captured here is accurate, or if you have any additions or changes.

It appears (and Ross double checked) that Location B for the proposed new washeteria and WTP are within the boundary of the Historic Village of Tununak. That designation does include some archaeological resources associated with it. There is a potential for effects to cultural and historic resources as a result of this project, depending on the nature of the project and scope of disturbance. USDA RUS will need to conduct Section 106 consultation for this project. During that process, the area of potential effect (APE) will be defined, and a determination of effect will be proposed.

As we found during our desktop review of the AHRS database and publicly available resources, there is no documenting of subsurface investigations within the proposed building sites. Therefore, justification will need to be made during the Section 106 process as to whether the nature of the project and scope of disturbance warrants completing a cultural resource survey. Our knowledge of the project and current design does not show any disturbance proposed for the new building foundation. Depending on the location of the proposed building site, and the length of new utilidor that will be needed to connect the building to the existing water tank, a small number of helical piles may be needed for support. However, due to the very minimal disturbance associated with such work, we believe a justification of no historic properties affected is reasonable for this project. In addition, the construction contract will contain the following provision:

- Should cultural or paleontological resources be discovered as a result of this activity, all work that could impact these resources will halt and the VSW Project Engineer and SHPO will be notified immediately. Work will not resume at these sites until Section 106 consultation is conducted with USDA and SHPO.

Thank you, let me know if you'd like to see anything else.
Sara

Sara Lindberg
Manager, Environmental Services
Stantec
725 East Fireweed Lane, Suite 200
Anchorage, AK 99503-2245
Phone: (907) 343-5250
Cell: (907) 328-9622
Fax: (907) 258-4653
sara.lindberg@stantec.com

From:	Lindberg, Sara
To:	"ryan.h.winn@usace.army.mil"
Subject:	Comments requested- Tununak Water Treatment Plant and Washeteria
Date:	Tuesday, April 11, 2017 11:44:00 AM
Attachments:	Fig4_LocationOptionsA.PDF Location B- Tununak school (blue bldg) water storage tank and washeteria....jpg Location C- Water line to Clinic Tununak (002).jpg Location A vicinity- Tununak School Utilidor from Washeteria (002).jpg conditions surrounding washeteria- washeteria and storage tank (002).jpg

---

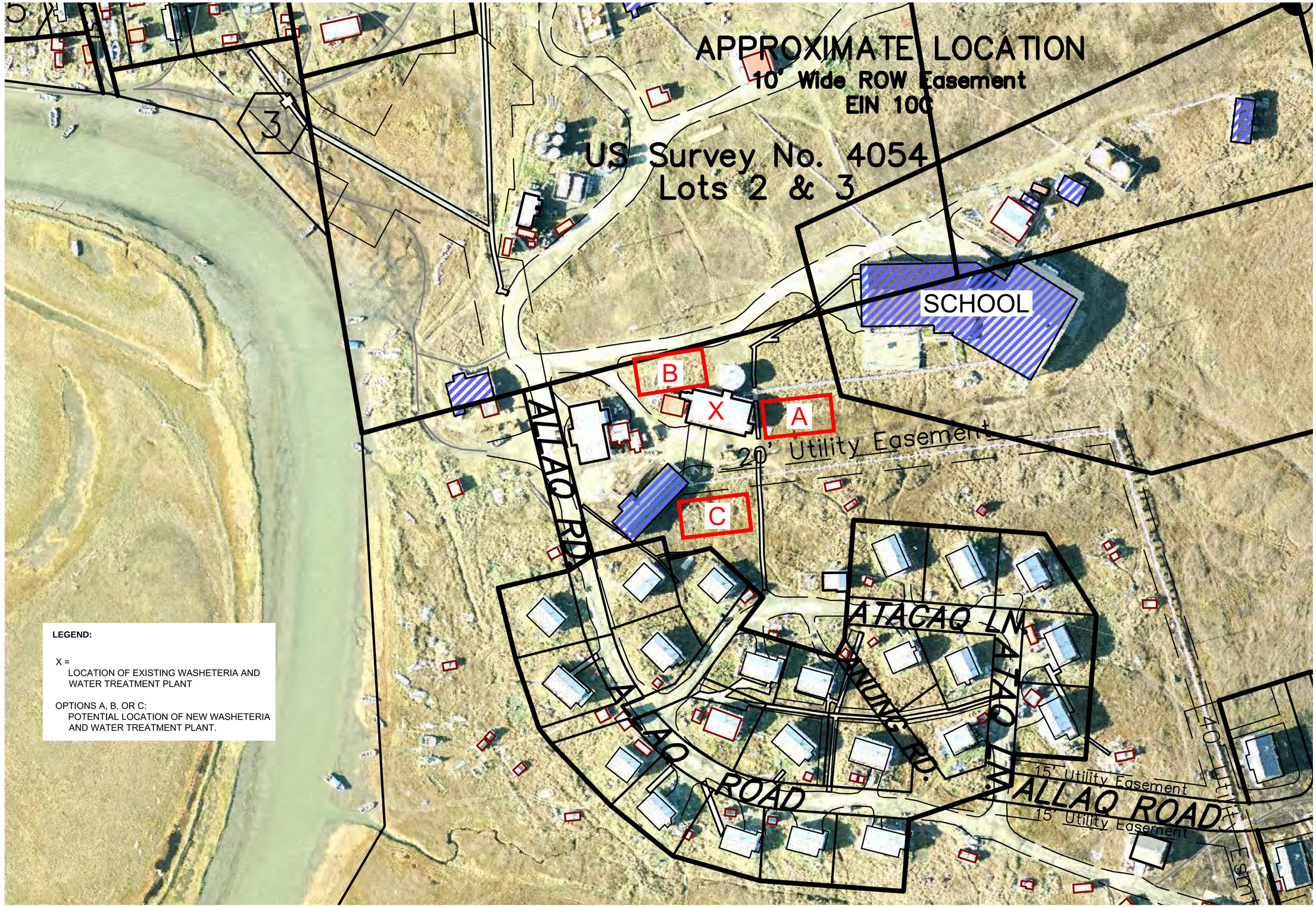
Hello Ryan,
I left you a voicemail as well, but thought I would follow up with an email to give you some further background.
Stantec, on behalf of Village Safe Water is requesting your comments on the proposed new Water Treatment Plant (WTP) and Washeteria in Tununak. The purpose of the project is to provide a safe and functional washeteria and WTP to the community. The condition of the existing WTP and washeteria is substandard and the facility is in poor physical condition and disrepair.

The Proposed Action would provide Tununak with a new washeteria and WTP within a modular building placed at a location selected by the community. The building would be placed on a triodetic foundation system which requires no fill or excavation, and very little disturbance. Three locations are being considered and are shown on the attached Figure 4. Initial comments from the community show they prefer location B. I have also attached ground photos of all three potential building locations for your review. VSW is in the process of applying for a USDA RUS grant for the design of this project, and Stantec is completing an Environmental Review for them to comply with the USDA NEPA process.

No NWI mapping exists for the Tununak area. However, based on available aerial and ground photography provided by community members (see attached), the ground surrounding the existing washeteria appears to be disturbed, and evidence of saturated soil, hydrophytic vegetation, and hydrology are not visible. In fact, some footpaths through the project site show rocky and apparently well drained soils. In lower areas outside and further west of the washeteria, outside the project area, vegetation appears to grow on tussocks, and snow machine tracks have left scars in undisturbed tundra, showing evidence of darker, possibly wet soils underneath. Therefore, we believe it is likely wetlands occur within undisturbed tundra outside the project area, but areas immediately adjacent to the existing washeteria and WTP are highly disturbed, and appear better drained. VSW requests your comments on the project. Should any proposed activities occur outside of previously disturbed lands adjacent to existing structures within the project area, we will recommend that the USACE be consulted again and that a Section 404 permit may be required. Please let us know if you have any comments or have any best management practices you would like to see incorporated into project documents.

Thank you
Sara

Sara Lindberg
Manager, Environmental Services
Stantec
725 East Fireweed Lane, Suite 200
Anchorage, AK 99503-2245
Phone: (907) 343-5250
Cell: (907) 328-9622
Fax: (907) 258-4653
sara.lindberg@stantec.com



SCALE: 1"=50'

<Pick location in Project Information>
3/14/2017 4:37:23 PM

ORIGINAL SHEET - ANSI D

Stantec

Stantec Consulting Services Inc.
725 East Fireweed Lane, Suite 200
Anchorage, AK 99503-2245
Tel: (907) 276-4245 • www.stantec.com

Consultant

No.	Issued/Revision	By	Appd	YYYY.MM.DD

Permit/Seal

PRELIMINARY NOT FOR CONSTRUCTION

Not for permits, pricing or other official purposes. This document has not been completed or checked and is for general information or comment only.

Figure 4 -
Location Options

Client/Project
Alaska DEC, Village Safe Water Program
VSW Tununak PER and ER

Project No.:2047057401

File Name: N/A

Scale:

Dwn.	Dsgn.	Chkd.	03/17/17 YYYY.MM.DD

Title
WASHETERIA OPTIONAL LOCATIONS PLAN

Revision:

Drawing No.
G1


PAUL T. ALBERT
MEMORIAL SCHOOL


HML