

E. NEW BUSINESS

1. Conditional Use Permit: PC Resolution 2024-03

Applicant: City of Soldotna

Request: Repair and replace a portion of a wastewater treatment line and a manhole within the 50-foot Habitat Protection District of the Kenai River

City of Soldotna

January 3, 2024

Samantha Lopez
Kenai River Center Manager
514 Funny River Road
Soldotna, AK 99669

Re: Kenai River Center Multi-Agency Permit Application
Project: Soldotna Wastewater Treatment Facility Outfall Rehabilitation

Dear Ms. Lopez:

The City of Soldotna is requesting authorization to repair a damaged section of the Soldotna wastewater treatment facility (WWTF) outfall pipe at river mile 20 of the Kenai River. The proposed project is located in Soldotna, Alaska (Section 31, Township 5 North, Range 10 West, Seward Meridian; USGS Quadrangle Map Kenai B-3 NW; Latitude 60.482595, Longitude -151.091130). Solstice Alaska Consulting, Inc. (SolsticeAK) is assisting with permitting the project, and CRW Engineering Group is assisting with design and engineering.

Project Description

The City of Soldotna is proposing to repair a portion of the existing WWTF outfall pipe, replace another portion of the outfall pipe with a new HDPE pipe, and replace one of four existing manholes. This section of the outfall pipe is damaged and in need of repairs in order to allow the continued use of the WWTF.

The proposed action would:

- Install a temporary cofferdam to enable construction within the Kenai River
- Replace a damaged section of outfall pipe with a new HDPE section of outfall pipe
- Replace a damaged manhole
- Repair a damaged section of outfall pipe using a “sliplining” method

Impact Summary

The proposed project would occur within the Kenai River, an anadromous stream according to the Alaska Department of Fish and Game (ADF&G). The project also requires dredging and the placement of 272 cubic yards (cy) of fill below ordinary high water (OHW), and excavation and the placement of 43 cy of fill above OHW. Additionally, the project would clear vegetation within the 50-foot Habitat Protection District of the Kenai River. See the attached project description for details.

Permits Required

An ADF&G Fish Habitat Permit and a Kenai Peninsula Borough Conditional Use Permit would be required. The City of Soldotna anticipates that the proposed project would fall under Nationwide Permit #58 (Utility Line Activities for Water and Other Substances), and a pre-construction notification (PCN; attached) is being submitted to the U.S. Army Corps of Engineers concurrent with this application.



If you have any questions or require additional information, please contact me, Robin Reich, at robin@solsticeak.com or at 907-929-5960.

Sincerely,

A handwritten signature in blue ink that reads "Robin Reich". The signature is written in a cursive style with a large initial "R".

Robin Reich
President, Solstice Alaska Consulting, Inc.

Enclosed: Kenai River Center Multi-Agency Permit Application; USACE PCN
Copies: J. Ryan Moyers



Multi-Agency Permit Application



514 Funny River Road, Soldotna, AK 99669 • (907) 714-2460 • KenaiRivCenter@kpb.us

Applicant Information: (must be a landowner)

Name: Michael Allen (City of Soldotna)
 Mailing: 328 Porcupine Court
Soldotna Alaska 99669
 Phone: 907 714 1205
 Email: mallen@soldotna.org

Agent Information: (if applicable)

Name: Robin Reich (Solstice Alaska Consulting, Inc.)
 Mailing: 2607 Fairbanks St., Suite B
Anchorage AK 99503
 Phone: 907 929 5960
 Email: robin@solsticeak.com

Project Location:

KPB Parcel ID: _____
 Physical Address: Between 347 Porcupine Ct and 351 Porcupine Ct
Soldotna Alaska 99669
 Subdivision: _____
 Lot: _____ Block: _____ Addition/No.: _____

Waterbody Information:

Waterbody: Kenai River
 Riverbank: (*looking downstream*) Left Right
 River Mile: 20

State of Alaska Permit Fees:

\$100 - ADNR State Parks Permit

KPB Permit Fees: (select one)

\$50 - KPB Habitat/Floodplain Permit
 \$300 - KPB Conditional Use/Floodway Permit

Project Information: New **OR** Extension/Amendment to **RC#** _____

Please select all activities that apply to your project:

- | | | |
|---|--|--|
| <input type="checkbox"/> Bank Stabilization | <input type="checkbox"/> Fish & Wildlife Management | <input type="checkbox"/> Road Construction |
| <input type="checkbox"/> Boat Launch | <input type="checkbox"/> Floating Dock | <input type="checkbox"/> Structure (Accessory) |
| <input type="checkbox"/> Bridge | <input type="checkbox"/> Fuel Storage Green Infrastructure | <input type="checkbox"/> Structure (Residential) |
| <input type="checkbox"/> Coir Logs | <input type="checkbox"/> In-Stream Structures (Weir) | <input type="checkbox"/> Spruce Tree Revetment |
| <input type="checkbox"/> Culvert | <input type="checkbox"/> Oil & Gas | <input type="checkbox"/> Stream Crossing |
| <input type="checkbox"/> ELP Structures | <input type="checkbox"/> On-Site Utilities | <input checked="" type="checkbox"/> Utility Line/Easement |
| <input checked="" type="checkbox"/> Equipment Stream Crossing | <input checked="" type="checkbox"/> Prior-Existing Structure | <input type="checkbox"/> Veg Mat |
| <input checked="" type="checkbox"/> Excavation, Dredging, and/or Fill | <input type="checkbox"/> Revegetation | <input checked="" type="checkbox"/> Vegetation Removal |
| <input type="checkbox"/> Fence Installation | <input type="checkbox"/> Root Wads | <input checked="" type="checkbox"/> Water Withdrawal |
| | | <input checked="" type="checkbox"/> Other: <u>Wastewater Treatment Outfall</u> |

Project Description: Provide a detailed description of your project; attach additional pages if necessary.

Please see attached project description

Cost-Share: Is this project funded by the Cost-Share Program? Yes No

KPB Tax Credit Program: The Borough provides a tax credit as partial reimbursement for new habitat protection and restoration projects within 150 feet of anadromous streams. If you would like to pre-qualify for this credit, please provide your estimated project cost(s) below. Do not include grants or other funding assistance:

Elevated Light Penetrating Structures \$ _____
Habitat Restoration & Protection \$ _____
Green Infrastructure \$ _____
Other Activities \$ _____

Project Questions:

1. Start date: Spring 2024 End date: Summer 2024 Estimated Days of Construction: 21
2. Is any portion of the work already complete? If yes, please describe: Yes No

Ordinary High Water (OHW) and Mean High Water (MHW):

3. Is the project located within 50 feet of OHW or MHW a waterbody? Yes No
4. Does any portion of the project extend below the OHW or MHW of the waterbody? Yes No
5. Does any portion of the project cantilever or extend over the MHW of the waterbody? Yes No
6. Will anything be placed below OHW or MHW of the waterbody? Yes No

Regulatory Floodplains:

7. Is the property where the project is taking place near or within a regulatory floodplain? Yes No
a. Is this project within or adjacent to a regulatory floodway? Yes No
b. Is this project within or adjacent to a coastal high hazard zone? Yes No
c. For new buildings and/or additions, list all project costs (labor, materials, etc.): \$ _____

Excavation, Dredging, and Fill:

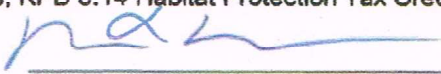

8. Will material be excavated or dredged from the site? Yes No
a. Type of material(s): Soil
b. Area to be dredged below OHW or MHW:
Length: 152 (ft) Width: 14.2 (ft) Depth: variable (ft) Total Cubic Yards: 284
c. Area to be excavated above OHW or MHW:
Length: 18.8 (ft) Width: 18.8 (ft) Depth: variable (ft) Total Cubic Yards: 45
d. Location materials will be deposited: Pipe bedding and back fill
9. Will any material (including soils, debris, and/or overburden) be used as fill? Yes No
a. Type of material(s): _____
b. Is this fill permanent or temporary? Perm Temp
c. Area to be filled above OHW or MHW:
Length: 18.8 (ft), Width: 18.8 (ft), Depth: variable (ft), Total Cubic Yards: 43
d. Area to be filled below OHW or MHW:
Length: 152 (ft), Width: 14.2 (ft), Depth: variable (ft), Total Cubic Yards: 272

Motorized Equipment:

10. Will you be using motorized equipment for this project? If yes, please list all equipment: Yes No
Excavator, small boat, barge
a. Will you be crossing a stream or waterbody? Yes No
b. How long will equipment be used below OHW or MHW? Duration of construction

Signature & Certification:

This application is hereby made requesting permit(s) to authorize the work described in this application form. I certify the information in this application is complete and accurate to the best of my knowledge and that my site plans or drawings are attached. If applying for a tax credit, I certify that I have not begun construction of the project and that the project will be constructed to the standards in KPB 5.12 Real Property and Personal Property Taxes, KPB 5.14 Habitat Protection Tax Credit, and other applicable federal, state, and local regulations.


Applicant Signature (required)

Agent Signature (if applicable)

1/3/2024
Date
1.3.24
Date

Kenai River Center Multi-Agency Permit Application
Soldotna Wastewater Treatment Facility Outfall Rehabilitation
Project Description
January 2024

The proposed project would:

- Remove damaged pieces of the existing wastewater treatment facility (WWTF) outfall pipe
- Slipline a section of the damaged WWTF pipe
- Replace a section of the damaged WWTF pipe with a new outfall pipe
- Replace a damaged manhole
- Involve vegetation clearing and grubbing

Overview

The City of Soldotna proposes to repair a damaged section of the Soldotna wastewater treatment facility (WWTF) outfall pipe in Soldotna, Alaska (Township 5N, Range 10W, Section 31, Seward Meridian; U.S. Geological Survey [USGS] Quadrangle Kenai B-3 NW; Latitude 60.4826°N, Longitude -151.0910°. The lower section of the outfall pipe and a manhole were installed in 1972 and are damaged and in a state of disrepair. No blasting or pile driving is proposed with this project.

Location

Soldotna is located on the Kenai Peninsula, 150 highway miles south of Anchorage (Alaska Division of Community and Regional Affairs 2023). The community is located about 10 miles from Cook Inlet and is bordered by the Kenai River to the south and west. The WWTF outfall pipe runs southwest from the Soldotna WWTF along a 50-foot-wide right of way to the Kenai River.

Purpose and Need

The purpose of the Soldotna WWTF Outfall Rehabilitation project is to repair the damaged WWTF outfall pipe and manhole. The project is needed because the corrugated metal and concrete outfall pipe, installed in 1972, partially collapsed in spring 2023. The collapsed pipe, which leads from a manhole (manhole #4001) on the river bank to the Kenai River, has caused water to back up and overflow from the manhole. An effluent sensor inaccurately measures the amount of effluent discharged into the Kenai River due to the collapsed pipe and associated overflow. Accurate effluent measurements are needed for the WWTF to meet Alaska Department of Environmental Conservation (ADEC) wastewater outfall permitting requirements. The WWTF serves approximately 4,000 people, a majority of Soldotna's population (City of Soldotna 2023). Repairs to the outfall pipe and manhole #4001 are needed to allow the continued use of the City's WWTF and to ensure that treated water discharged into the Kenai River is accurately measured.

To minimize impacts to anadromous fish species, and to avoid construction during the busy Kenai River fishing season, work for the proposed project would occur during the early spring when water levels are low and the river bed is exposed near the banks of the river. Construction activities would take place for approximately three weeks in early spring, 2024.

Construction Methods and Equipment

The proposed action would replace the portion of the outfall pipe that runs from manhole #4001 to the headwall, repair the portion of the outfall pipe above manhole #4001, and replace manhole #4001 (Figure 1). During construction, a cofferdam and bypass line would be used to move wastewater around the area. The project would occur within wetlands and waters of the United States (U.S.), and the City of Soldotna anticipates that the proposed project would fall under Nationwide Permit #58 (Utility Line Activities for Water and Other Substances) authorization.

Cofferdam and Bypass Line

A 6-inch-diameter high-density polyethylene (HDPE) temporary bypass line would be installed for the duration of project construction, running approximately 575 feet from the WWTF ultraviolet (UV) disinfection basin to the Kenai River (Figure 1). The temporary line would be removed upon construction completion. Temporary asphalt ramps would be placed over the temporary bypass line where it crosses Porcupine Court to protect the line from vehicle traffic.

A cofferdam would be installed around the existing outfall pipe during project construction, and would consist of one of three options:

- A polypropylene and polyethylene tube would be filled with approximately 290,000 gallons of water to form the sides of the cofferdam. This water would be sourced from the temporary bypass line or the Kenai River, and released back into the river after construction is complete.
- Approximately 700 supersacks filled with earth or gravel would make up the cofferdam walls, and the cofferdam would be lined with an impermeable membrane.
- A preconstructed steel framework with flexible waterproof membrane walls would be installed around the work area. The walls would be freestanding and would not require pile installation.

The cofferdam would have a perimeter of approximately 80 feet by 200 feet (Figure 1). The cofferdam would be dewatered using a pipe with a mesh screen on the intake. A screen with a maximum mesh size of 0.04 inches (1.0 millimeters) and a maximum velocity of 0.1 feet per second would be used in accordance with Alaska Department of Fish and Game (ADF&G) recommendations for water withdrawals in water with fry and juvenile stage whitefish and salmon (McLean 1998). Installation of the cofferdam may require the use of a small boat. Any boat used for the proposed project would adhere to the Alaska State Parks Kenai River boat and motor regulations.

Sliplining

The 93-foot portion of the existing pipe that runs between manhole #4001 and manhole #4002 would be repaired using a sliplining method. The sliplining process would involve cleaning the pipe, and then inserting a new 18-inch-diameter HDPE pipe into the existing pipe and grouting the annular space between the pipes at either end. The sliplining pipe and equipment would be transported to the site via one of two site access options described below. The sliplining pipe would be inserted from the lower end of the pipe at manhole #4001, and run up to manhole #4002. Staging for the sliplining process would occur above the proposed project, within the 50-foot right of way between Porcupine Court and existing manhole #4002, and within the dewatered cofferdam (Figure 1).

Outfall Pipe and Manhole Replacement

Approximately 152 feet of the existing 21-inch-diameter pipe between manhole #4001 and the outfall within the Kenai River would be replaced with a new 18-inch-diameter HDPE pipe. An excavator would be used to remove the damaged portion of pipe, excavating approximately 284 cubic yards (cy) (2,160 square feet [sf]) of river bed to create a 14.2-foot-wide trench. The new outfall pipe would be secured to the river bed with 18-inch-long concrete anchors and a new headwall, similar to the existing design. The new outfall pipe would require approximately 272 cy (2,160 sf) of fill below ordinary high water (OHW) (Table 1).

Replacement of the manhole would involve excavation around the existing manhole, removal of the manhole, and installation of a new 48-inch Type A sewer manhole. The manhole replacement, along with approximately seven feet of the outfall pipe, would require approximately 45 cy (354 sf) of excavation and placement of 43 cy (354 sf) of fill above OHW (Table 1).

Excavation and placement of fill for the new outfall pipe would occur above and below OHW of the Kenai River. Excavation and placement of fill for the replacement of the manhole would occur above OHW. A portion of the project would occur within the Kenai Peninsula Borough 50-foot habitat protection area and within the Kenai River floodplain (Figure 1).

Figure 1. Soldotna WWTF Outfall Rehabilitation Project Site Overview

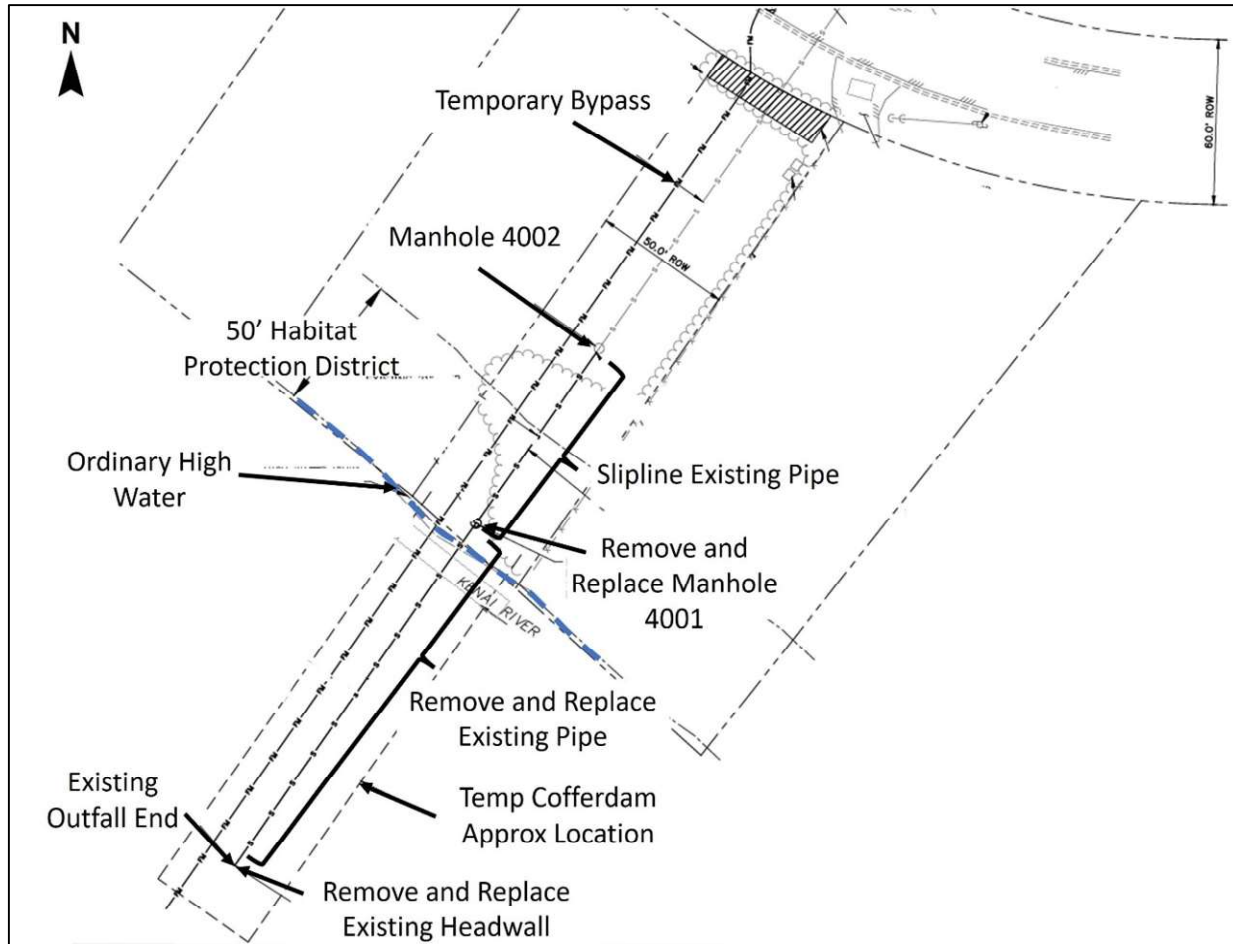


Table 1. Soldotna WWTF Outfall Rehabilitation Project Excavation and Fill Quantities

Action	Surface Area (ft ²)	Volume (CY)
Above OHW		
Excavation above OHW	354	45
Fill above OHW	354	43
Below OHW		
Dredging below OHW	2,160	284
Fill below OHW	2,160	272

Site Access Options

There are three site access options for the proposed project:

- A barge would support construction activities by transporting an excavator and materials to the project site.
- A crane or winch, positioned near Porcupine Court within the outfall pipe easement, would be used to place the excavator and materials at the project site. The crane would remain upland of the project site, and would not be driven below OHW.

- A small boat launched from the Centennial Park Campground boat launch (approximately 3,000 feet downriver from the project site) or from the Swiftwater boat launch (approximately 2.5 miles upriver from the project site) would be used during placement of the cofferdam to maneuver the dam into place.

Wetlands

According to the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapper, the proposed project would impact riverine habitat (R1UBV) along the Kenai River (USFWS 2023). Approximately 2,514 sf (315 cy) of fill placed for this project would occur above and below OHW. Fill would be placed above OHW during replacement of the manhole and for a small portion of the new outfall pipe (Table 1; Drawings: Sheet 5). The area above OHW is not mapped on the NWI mapper, but it appears to be made up of freshwater forested/shrub wetland or freshwater emergent wetland, similar to wetlands mapped in the vicinity of the project site. The proposed project involves replacing a previously permitted structure.

Fish Habitat

The Kenai River is an anadromous stream listed in the ADF&G Anadromous Waters Catalog (AWC# 244-30-10010). All five species of Pacific salmon are found in the Kenai River (CHp, COp, COr, Ks, Kr Ps, Sp)¹ along with Dolly Varden, Pacific lamprey, eulachon, steelhead trout, and whitefish (ADF&G 2023). In-water work would impact fish and fish habitat through localized turbidity and the temporary placement of a cofferdam. An ADF&G Fish Habitat Permit would be required for impacts to the Kenai River during construction.

Due to the urgent need for repairs, construction would occur as soon as approvals are obtained and may result in unavoidable short-term impacts to fish. To minimize impacts to salmon, installation and removal of the outfall pipe would occur as much as possible between May 15 and July 15². A screen would be used during dewatering of the cofferdam to protect anadromous fish that may be present.

To meet the purpose and need of this project, complete avoidance of floodplains, wetlands, and fish habitat is not possible. To minimize the impacts to these resources, the following measures would be implemented:

- Construction limits will be staked and clearly demarcated
- No stockpiles will be placed within wetland areas
- Water quality will be protected during construction through best management practices
- Natural vegetation will be retained wherever possible.
- The project uses the minimum amount of excavation and fill needed to conduct repairs to the WWTF outfall pipe.

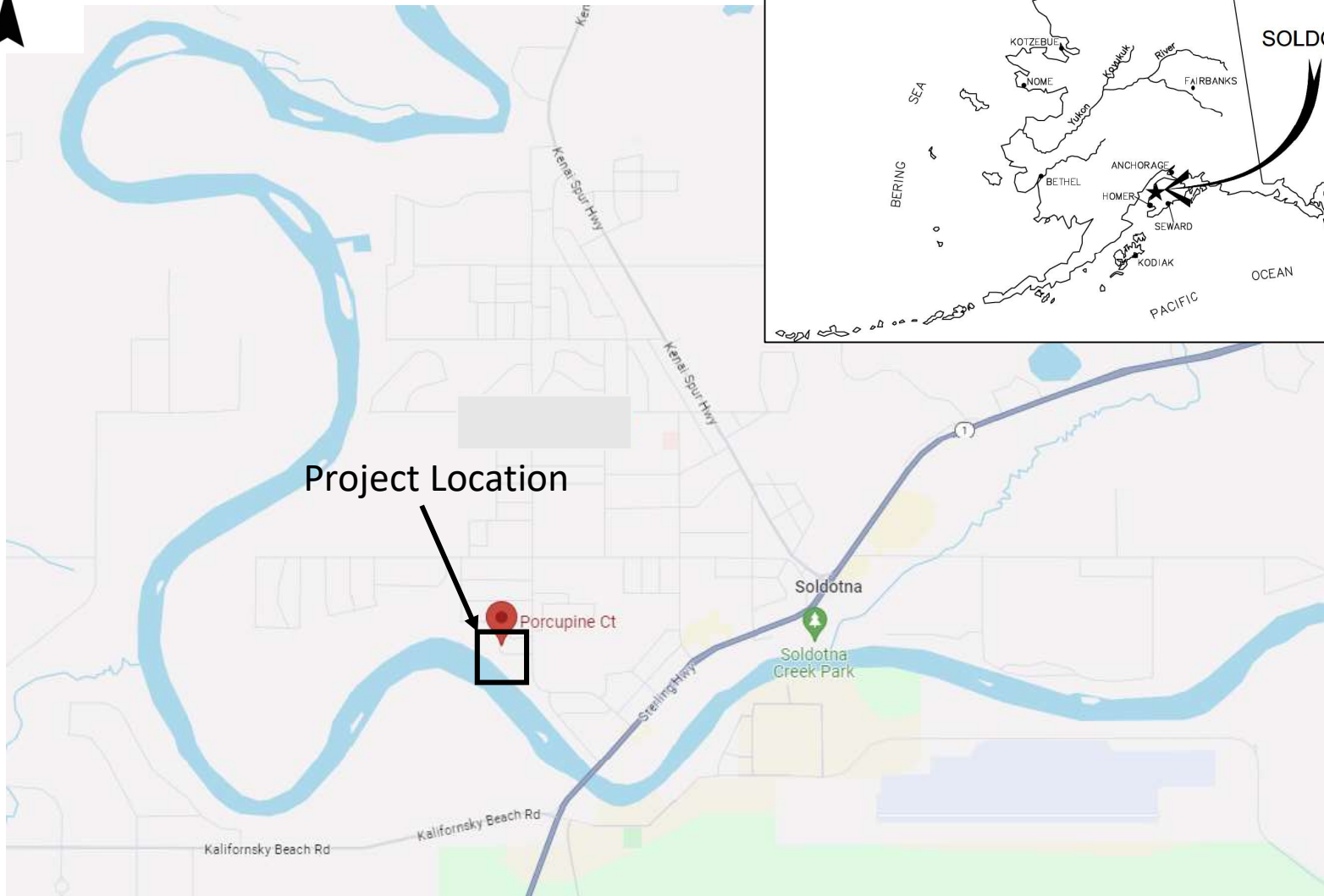
¹ CH=chum, CO=coho, K=Chinook, P=pink, S=sockeye; p=present, r=rearing, s=spawning

² Based on personal communication with Kaitlynn Cafferty, Habitat Biologist, ADF&G, on October 26, 2023.

References

- Alaska Department of Fish and Game. 2023. Alaska Fish Resource Mapper. Accessed at <https://experience.arcgis.com/experience/1a4eb07b42ff4ebb8c71ba45adaedf0c/> on June 16, 2023.
- Alaska Division of Community and Regional Affairs. 2023. Soldotna. Accessed at <https://dccc.dmaps.arcgis.com/apps/MapJournal/index.html?appid=1e993e279a224ea5b8ffe8134bc87ea9> on December 19, 2023.
- City of Soldotna. 2023. Wastewater Treatment Facility. Accessed at <https://www.soldotna.org/departments/utilities/waste-water-treatment> on June 16, 2023.
- McLean, R.F. 1998. Water Intake Structures: An Alternative to Traditional Screened-Box Enclosures for the Protection of Fish. Technical Report No. 97-8. Alaska Department of Fish and Game. Accessed at https://www.adfg.alaska.gov/static/license/uselicense/pdfs/97_08.pdf on August 14, 2023.
- United States Fish and Wildlife Service. 2023. National Wetlands Inventory. Accessed at <https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper> on October 31, 2023.

Project Drawings



Project Location

Porcupine Ct

Soldotna

Soldotna Creek Park

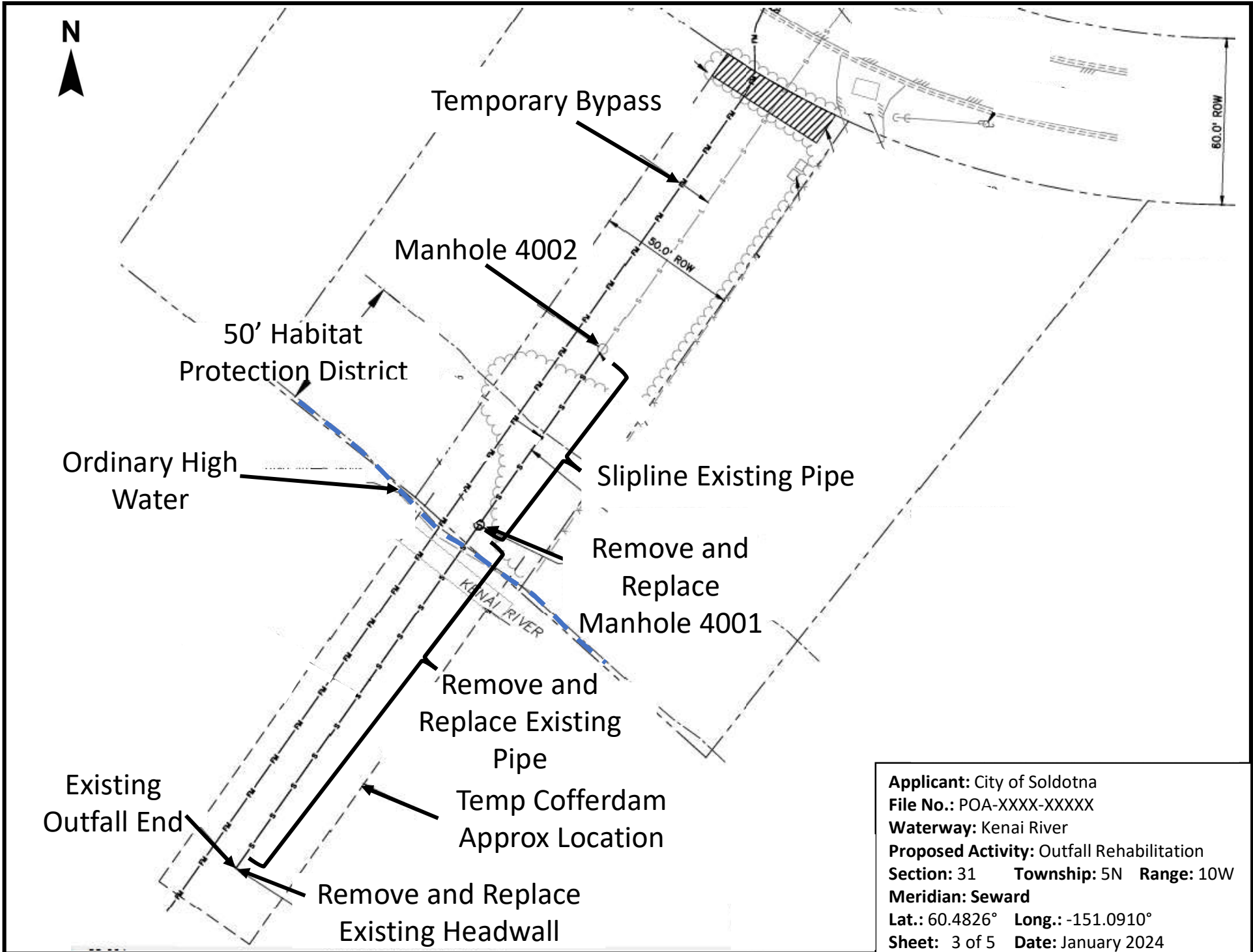
Kalifornsky Beach Rd

Kalifornsky Beach Rd

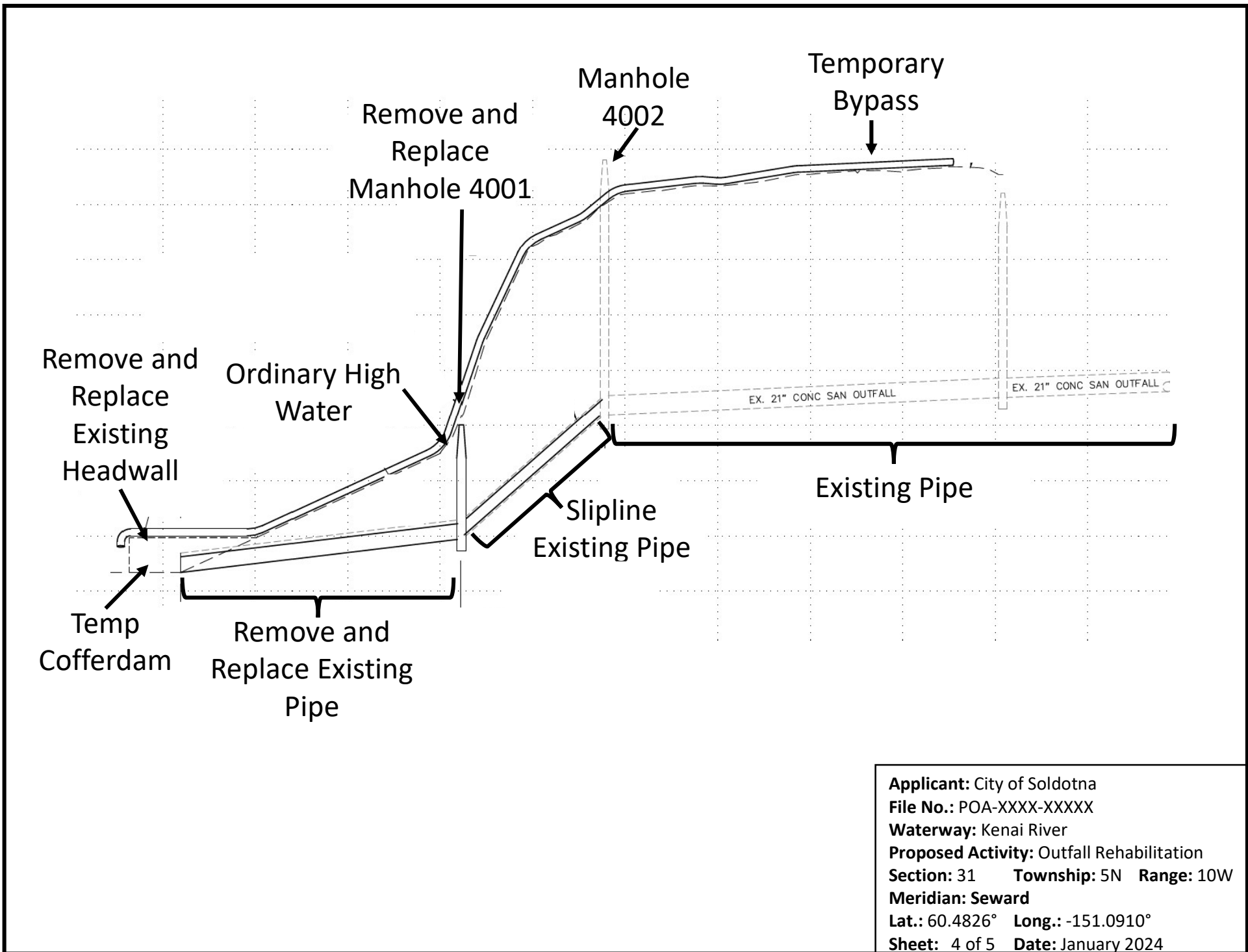
Applicant: City of Soldotna
File No.: POA-XXXX-XXXXX
Waterway: Kenai River
Proposed Activity: Outfall Rehabilitation
Section: 31 **Township:** 5N **Range:** 10W
Meridian: Seward
Lat.: 60.4826° **Long.:** -151.0910°
Sheet: 1 of 5 **Date:** January 2024



Applicant: City of Soldotna
File No.: POA-XXXX-XXXX
Waterway: Kenai River
Proposed Activity: Outfall Rehabilitation
Section: 31 **Township:** 5N **Range:** 10W
Meridian: Seward
Lat.: 60.4826° **Long.:** -151.0910°
Sheet: 2 of 5 **Date:** January 2024

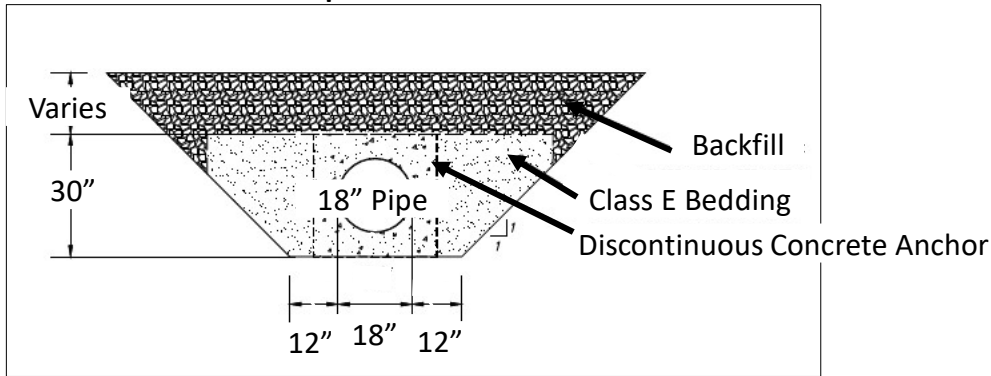


Applicant: City of Soldotna
File No.: POA-XXXX-XXXX
Waterway: Kenai River
Proposed Activity: Outfall Rehabilitation
Section: 31 **Township:** 5N **Range:** 10W
Meridian: Seward
Lat.: 60.4826° **Long.:** -151.0910°
Sheet: 3 of 5 **Date:** January 2024

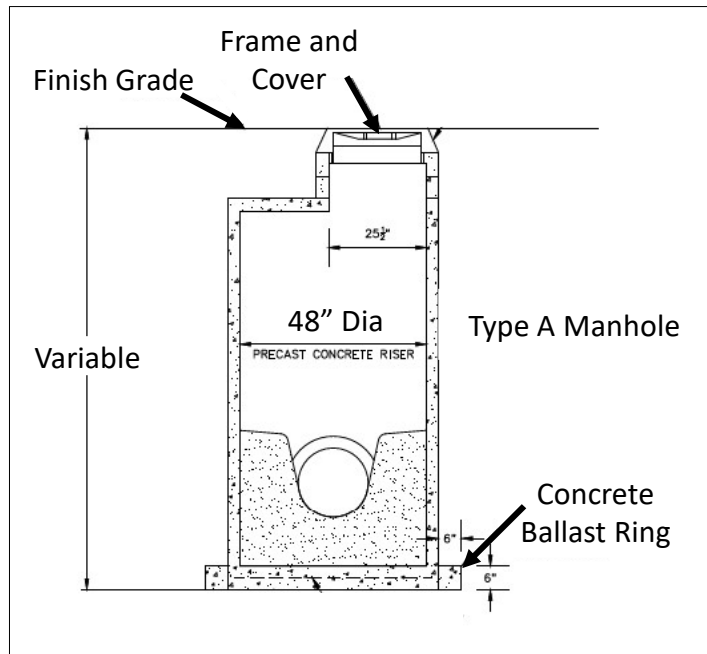


Applicant: City of Soldotna
File No.: POA-XXXX-XXXXX
Waterway: Kenai River
Proposed Activity: Outfall Rehabilitation
Section: 31 **Township:** 5N **Range:** 10W
Meridian: Seward
Lat.: 60.4826° **Long.:** -151.0910°
Sheet: 4 of 5 **Date:** January 2024

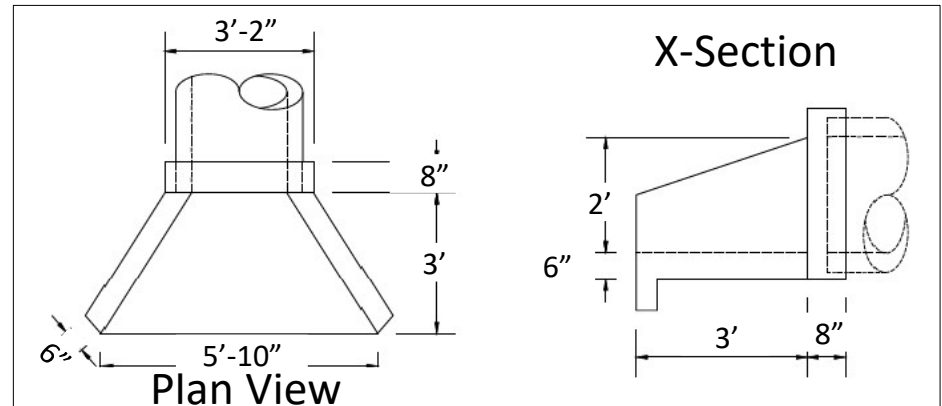
New Pipe Trench Detail



New Manhole 4001 Detail



New Headwall Detail



Applicant: City of Soldotna
File No.: POA-XXXX-XXXXX
Waterway: Kenai River
Proposed Activity: Outfall Rehabilitation
Section: 31 **Township:** 5N **Range:** 10W
Meridian: Seward
Lat.: 60.4826° **Long.:** -151.0910°
Sheet: 5 of 5 **Date:** January 2024

Project Plan Set

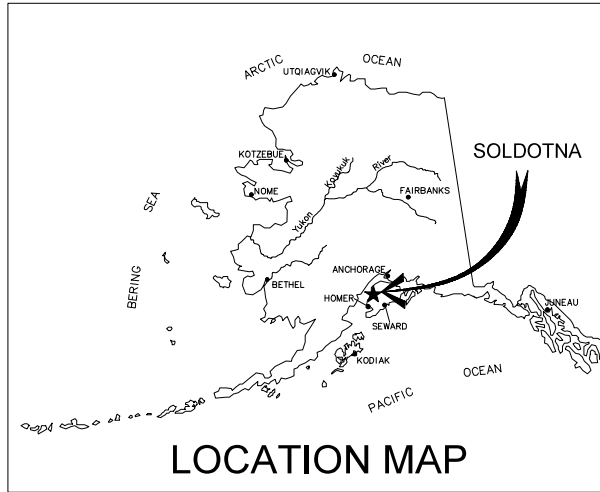


CITY OF SOLDOTNA

SOLDOTNA WWTF OUTFALL REHABILITATION



SOLDOTNA
City of Soldotna, Alaska



SHEET INDEX	
SHEET NO.	SUBJECT
1	COVER AND SHEET INDEX
2	GENERAL NOTES, LEGEND, AND ABBREVIATIONS
3	SURVEY CONTROL
4	SITE PLAN
5	PLAN AND PROFILE OF OUTFALL
6	TRENCH DETAILS
7	BYPASS DETAILS



NOT FOR
CONSTRUCTION

PROJECT NO.	
CITY GRID	
WATER GRID	
SEWER GRID	

CITY OF SOLDOTNA
SOLDOTNA WWTF OUTFALL REHABILITATION
COVER AND SHEET INDEX

STATUS: DATE: DECEMBER 2023

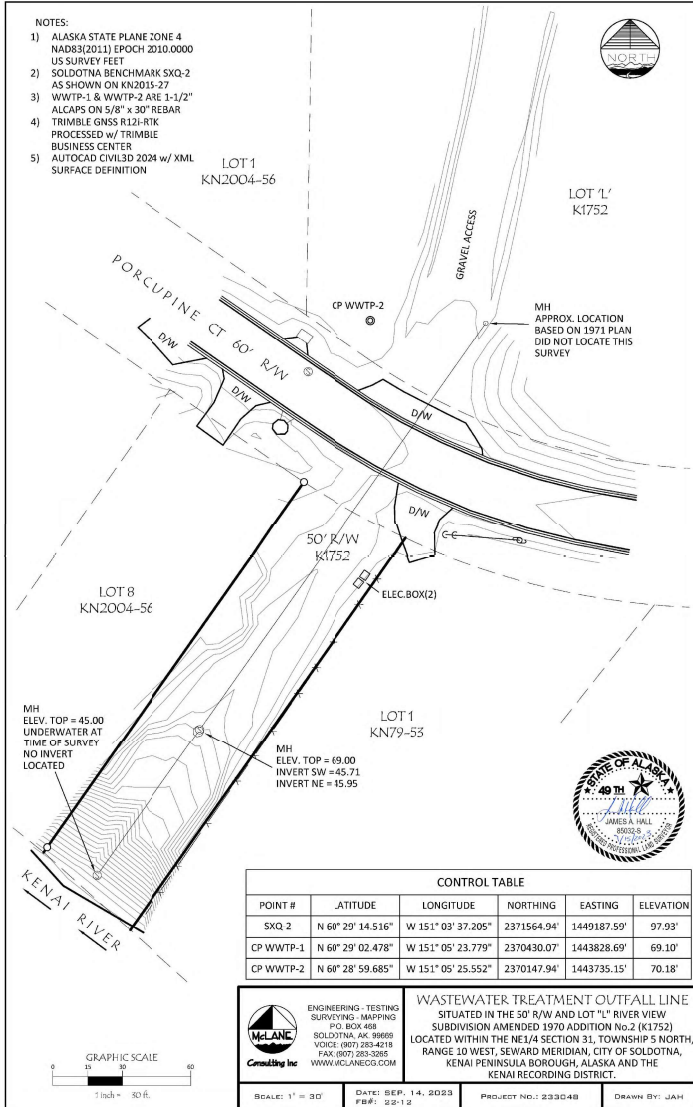
NO.	DATE	DESCRIPTION	REVISION	BY

DESIGNED BY	
DRAWN BY	
CHECKED BY	
APPROVED BY	

1

I:\Projects\230100_Soldotna WWTF Outfall Rehabilitation\00_CADD\01_Working_S4\1\00_General\230100_Cover.dwg PLOT DATE: 12/18/2023 2:22 PM

File: J:\Vedotna\22001-05 Soldotna WWTP Outfall Rehabilitation\05_CADD\01_Working_S4\1\05_General\22001-05_Survey_Control.dwg PLOT DATE: 12/16/2023 2:22 PM



VICINITY MAP



Parcel ID	Address	Owner Name
06015015	215 S KOBUK ST	City of Soldotna
06015020	347 PORCUPINE CT	IBW LLC
06015007	415 W RIVERVIEW AVE	Gary & Cheri Odens
06015047	359 PORCUPINE CT	Gloria Adkins-Lindhartsen
06015046	363 PORCUPINE CT	Mavis Blazy
06015021	343 PORCUPINE CT	IBW LLC
06015045	367 PORCUPINE CT	Eldon Paul Mulder
06015022	375 W RIVERVIEW AVE	Bruce & Karen Vadla
06015049	351 PORCUPINE CT	Guy & Judith Hayes
06015048	355 PORCUPINE CT	Guy & Judith Hayes
06015023	399 W RIVERVIEW AVE	Bruce & Karen Vadla



NOT FOR CONSTRUCTION

PROJECT NO. _____
 CITY GRID _____
 WATER GRID _____
 SEWER GRID _____

CITY OF SOLDOTNA
 SOLDOTNA WWTF OUTFALL
 REHABILITATION
 SURVEY CONTROL

DATE: DECEMBER 2023

STATUS: _____

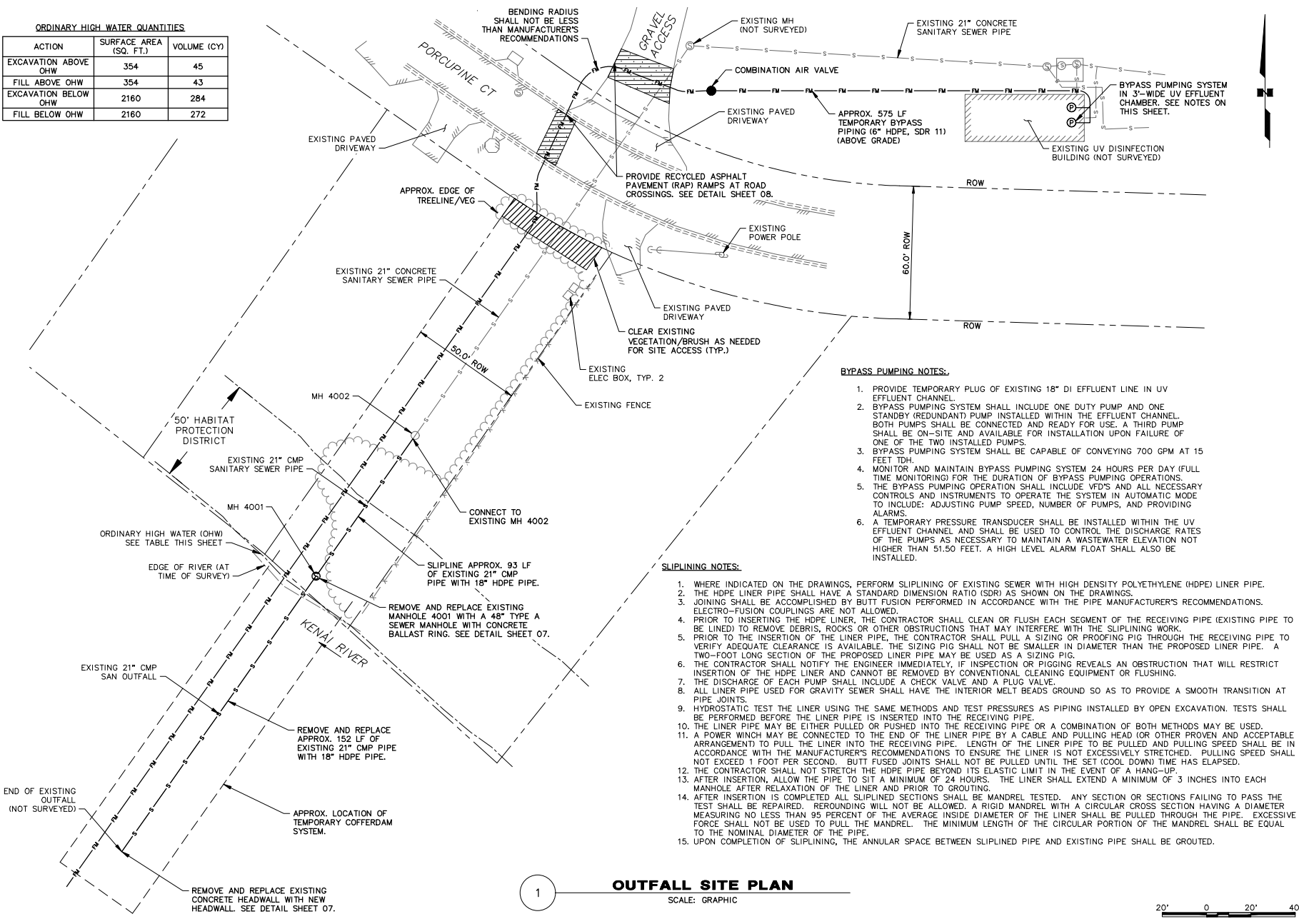
REV	DATE	DESCRIPTION	REVISION	BY

SCALE	PROJ. NTS	VER. NTS	DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY

SHEET NO. **3**

ORDINARY HIGH WATER QUANTITIES

ACTION	SURFACE AREA (SQ. FT.)	VOLUME (CY)
EXCAVATION ABOVE OHW	354	45
FILL ABOVE OHW	354	43
EXCAVATION BELOW OHW	2160	284
FILL BELOW OHW	2160	272



OUTFALL SITE PLAN

SCALE: GRAPHIC



1

File: J:\soldera\23201\05_Soldera_WWTP_Outfall_Rehabilitation\05_CADD\01_Working_S4\01_CAD\23201\05_Site_Plan.dwg PLOT DATE: 12/16/2023 2:21 PM



NOT FOR CONSTRUCTION

PROJECT NO.	CITY GRID	WATER GRID	SEWER GRID
-------------	-----------	------------	------------

CITY OF SOLDOTNA
**SOLDOTNA WWTF OUTFALL
REHABILITATION**
SITE PLAN

DATE: DECEMBER 2023

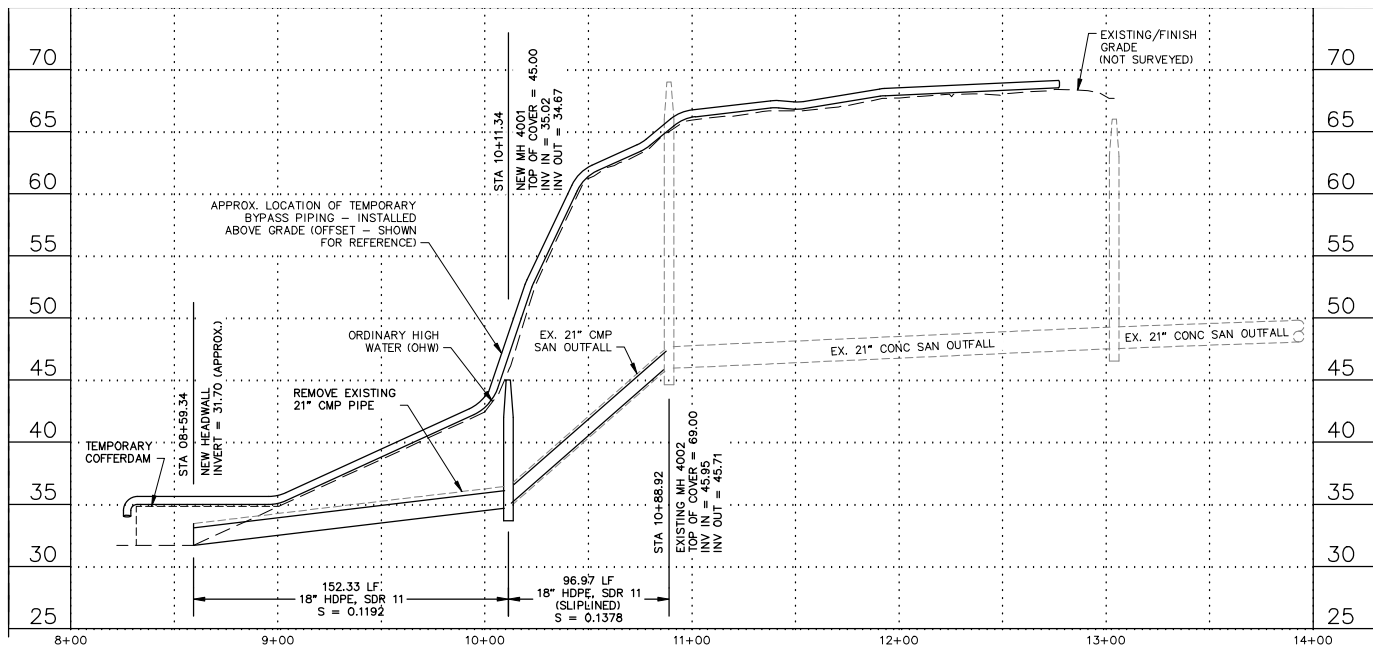
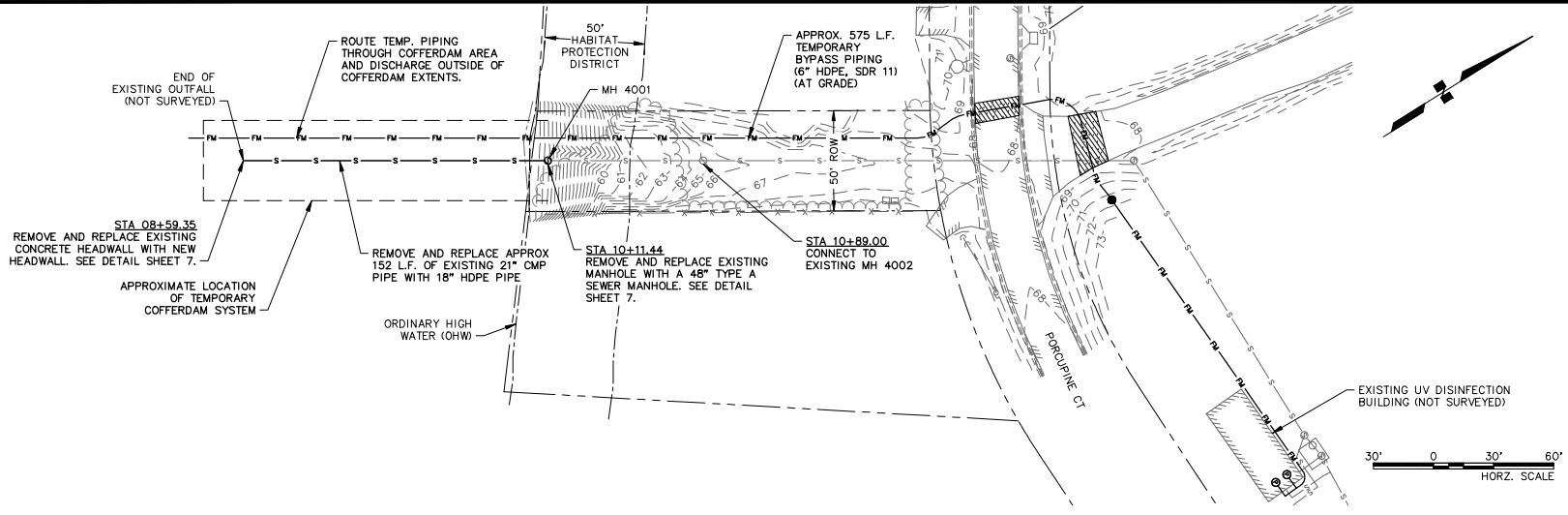
STATUS:

NO.	DATE	DESCRIPTION	REVISION

DESIGNED BY	CHECKED BY	APPROVED BY

SHEET NO. **4**

File: J:\substation\220100_Soldotna WWTP Outfall Rehabilitation\00_CADD\01_Working_S4\01_DWG\220100_Plan_and_Profile.dwg PLOT DATE: 12/17/2023 3:21 PM



1

OUTFALL PLAN & PROFILE



NOT FOR CONSTRUCTION

PROJECT NO.	CITY GRID	WATER GRID	SEWER GRID

STATUS: DATE: DECEMBER 2023

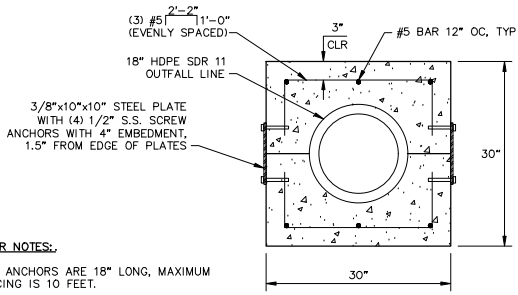
CITY OF SOLDOTNA
SOLDOTNA WWTF OUTFALL
REHABILITATION
PLAN AND PROFILE OF OUTFALL

REV	DATE	DESCRIPTION	REVISION

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY

SCALE: HOR. 1"=30'	VER. 1"=5'
SHEET NO.	5

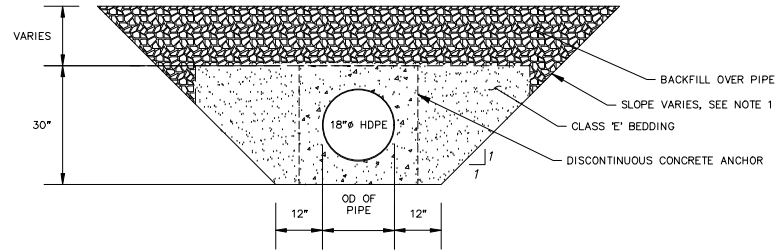
File: J:\solderate\220100_Solderate WWTP Outfall Rehabilitation\00_CADD\01_Working_S&I\01_CNA\220100_Details.dwg PLOT DATE: 12/18/2023 2:21 PM



PIPE ANCHOR NOTES:

1. PIPE ANCHORS ARE 18" LONG, MAXIMUM SPACING IS 10 FEET.

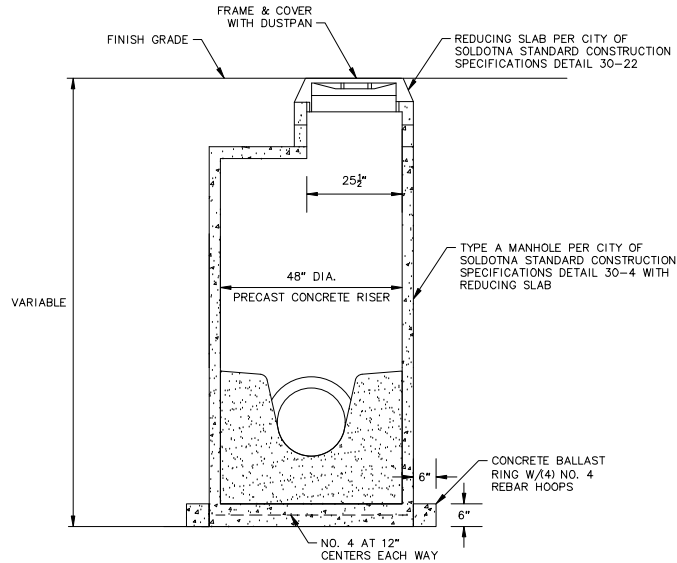
1 CONCRETE PIPE ANCHOR DETAIL
SCALE: NTS



TRENCH NOTES:

1. TRENCH WALL SLOPES WILL VARY WITH SOIL STRENGTH AND CHARACTER. SLOPES SHALL CONFORM TO OSHA SAFETY STANDARDS.
2. COMPACT TRENCH BACKFILL TO A MINIMUM OF 95% MAXIMUM DENSITY.

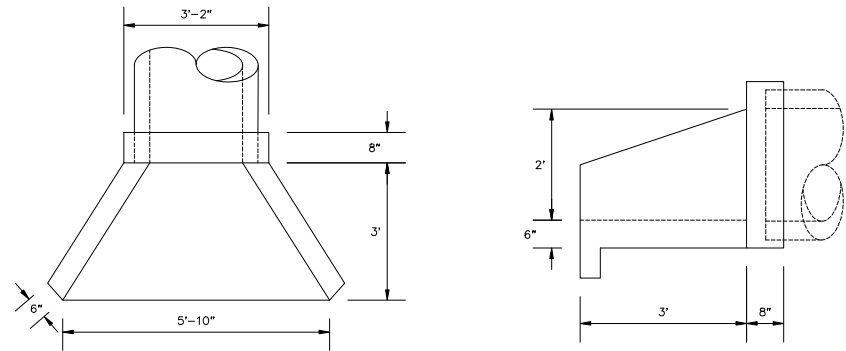
3 TYPICAL TRENCH DETAIL
SCALE: NTS



MANHOLE NOTES:

1. ALL MANHOLE SECTIONS SHALL CONFORM TO ASTM C-478-69.

2 STANDARD M.H. TYPE A WITH REDUCING SLAB AND CONCRETE BALLAST RING
SCALE: NTS



HEADWALL NOTES:

1. CONCRETE WILL BE CLASS II CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION INCLUDING WALLS AND FLOOR.
2. REINFORCEMENT WILL BE GRADE 60 REINFORCED. NO. 4 STEEL REBAR TO CONFORM TO ASTM A615 ON REQUIRED CENTERS OR EQUAL. BAR BENDING AND PLACEMENT SHALL WITH THE LATEST ACI STANDARDS.
3. PRECAST CONCRETE HEADWALL SHALL BE PARK USA HWBS OR EQUAL.

4 CONCRETE HEADWALL DETAIL
SCALE: NTS



NOT FOR CONSTRUCTION

PROJECT NO.	CITY GRID	WATER GRID	SEWER GRID

CITY OF SOLDOTNA
SOLDOTNA WWTF OUTFALL REHABILITATION
TRENCH DETAILS

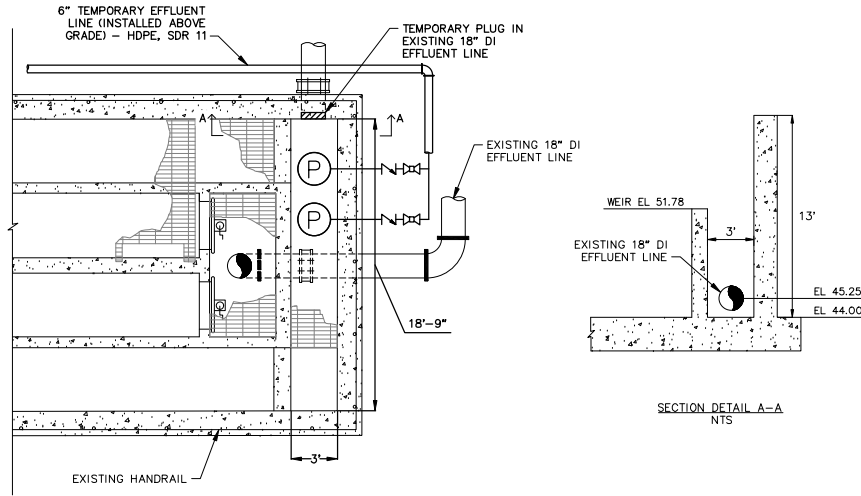
DATE: DECEMBER 2023

STATUS: _____

NO.	DATE	DESCRIPTION	BY	REVISION

6

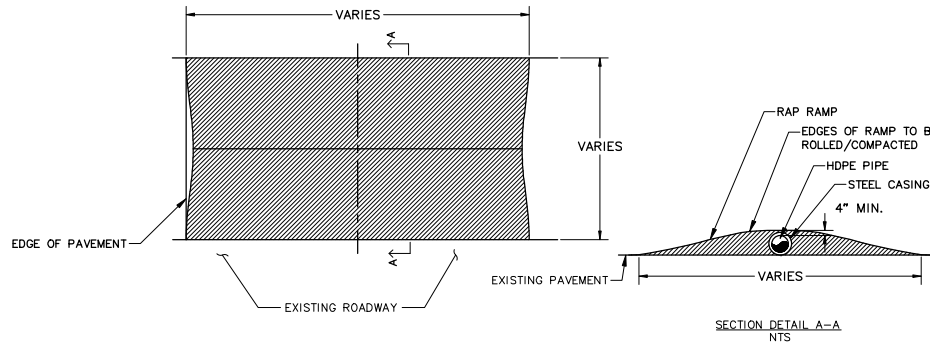
File: J:\soldera\2201\05 Soldera WWP Outfall Rehabilitation\05 CAD\01 Work\SA\01 DVA\2201\05 Details.dwg PLOT DATE: 12/18/2023 2:21 PM



BYPASS PUMPING NOTES:

1. TEMPORARILY PLUG EXISTING 18" DI EFFLUENT LINE IN UV EFFLUENT CHANNEL.
2. BYPASS PUMPING SYSTEM SHALL INCLUDE ONE DUTY PUMP AND ONE STANDBY (REDUNDANT) PUMP INSTALLED WITHIN THE EFFLUENT CHANNEL. BOTH PUMPS SHALL BE CONNECTED AND READY FOR USE. A THIRD PUMP SHALL BE ON-SITE AND AVAILABLE FOR INSTALLATION UPON FAILURE OF ONE OF THE TWO INSTALLED PUMPS.
3. BYPASS PUMPING SYSTEM SHALL BE CAPABLE OF CONVEYING 700 GPM AT 15 FEET TDH.
4. THE BYPASS PUMPING OPERATION SHALL INCLUDE VFD'S AND ALL NECESSARY CONTROLS AND INSTRUMENTS TO OPERATE THE SYSTEM IN AUTOMATIC MODE TO INCLUDE: ADJUSTING PUMP SPEED, NUMBER OF PUMPS, AND PROVIDING ALARMS.
5. A TEMPORARY PRESSURE TRANSDUCER SHALL BE INSTALLED WITHIN THE UV EFFLUENT CHANNEL AND SHALL BE USED TO CONTROL THE DISCHARGE RATES OF THE PUMPS AS NECESSARY TO MAINTAIN A WASTEWATER ELEVATION NOT HIGHER THAN 51.50 FEET. A HIGH LEVEL ALARM FLOAT SHALL ALSO BE INSTALLED.

1 **EXISTING UV DISINFECTION EFFLUENT CHANNEL PLAN & SECTION**
SCALE: 1/4" = 1'



2 **RECYCLED ASPHALT PAVEMENT (RAP) RAMP**
SCALE: NTS



NOT FOR CONSTRUCTION

PROJECT NO.	CITY GRID	WATER GRID	SEWER GRID

CITY OF SOLDOTNA
SOLDOTNA WWTF OUTFALL
REHABILITATION
BYPASS DETAILS

DATE: DECEMBER 2023

STATUS: _____

REV	DATE	DESCRIPTION	REVISION

SCALE	NO. NTS	DESIGNED BY	CHECKED BY	APPROVED BY

SHEET NO. **7**



Project Overview and Vicinity Map



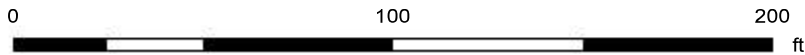
City of Soldotna Wastewater

 Project Area

Vicinity



Map created by Aldridge, Morgan



The information depicted hereon is for a graphical representation only of best available sources. The Kenai Peninsula Borough assumes no responsibility for any errors on this map.



Project Area

Text



Points



Multipoints



Polylines



Polygons



Tax Parcels



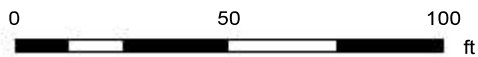
Landcover Features

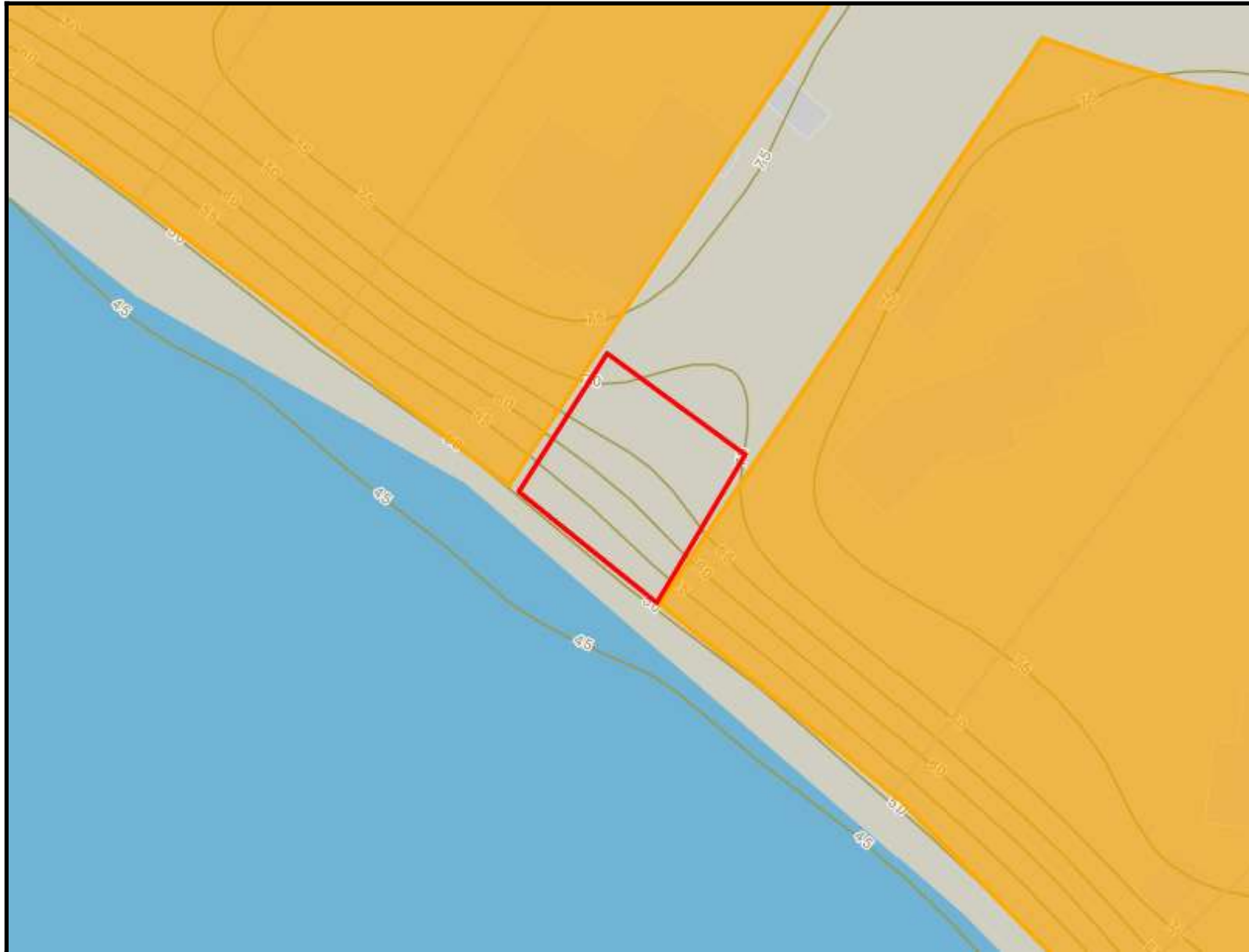
KWF Wetlands Assessment

- DISTURB
- Depression
- Discharge Slope
- Drainageway
- Floating Island
- Headwater Fen
- Kettle
- LAKE
- Lakebed
- Late Snow Plateau
- Riverine
- Tidal
- Wetland / Upland

Map created by Aldridge, Morga

Thursday, January 25, 2024





 Project Area

Text



Points



Multipoints



Polylines



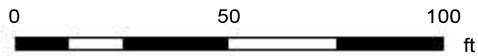
Polygons

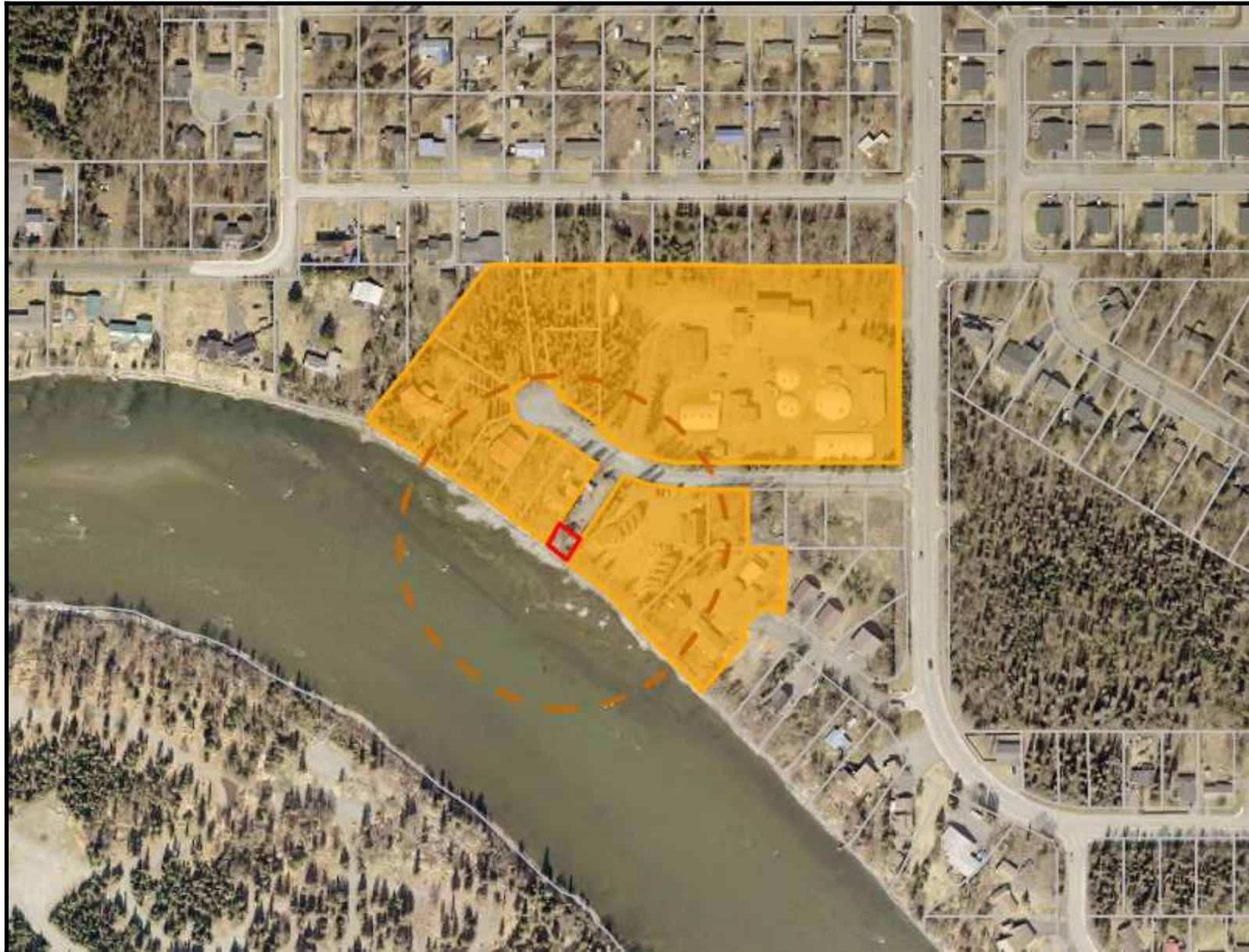


Tax Parcels



Map created by Aldridge, Morga
Thursday, January 25, 2024





 Project Area

Text



Points



Multipoints



Polylines



Polygons

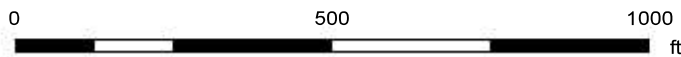


Tax Parcels



Map created by Aldridge, Morga

Thursday, January 25, 2024





Donald E. Gilman River Center

514 Funny River Road, Soldotna, Alaska 99669 • (907) 714-2460 • (907) 260-5992 Fax

A Division of the Planning Department

Peter A. Micciche
Borough Mayor

KENAI PENINSULA BOROUGH PLANNING COMMISSION NOTICE OF PUBLIC HEARING

The Kenai Peninsula Borough received an application for a Conditional Use Permit under KPB 21.18.081 for a project within the 50-foot Habitat Protection District (HPD) of the Kenai River. This project has been scheduled for a public hearing before the Kenai Peninsula Borough Planning Commission.

Why are you receiving this notice?

Per code, property owners within 300 feet of the proposed project must receive notice of the public hearing. This project is located on a City Right of Way on Porcupine Court within the City of Soldotna, Alaska. Our records indicate that you are a property owner within 300 feet of the project.

Project Description:

The City of Soldotna is requesting to repair and replace a portion of a wastewater treatment line and a man hole within the 50-foot HPD of the Kenai River.

How can you look at the application?

The meeting packet will be posted the week prior to the meeting. Once it has been posted it can be viewed at <https://kpb.legistar.com/Calendar>.

How do you attend the Planning Commission meeting?

When: Monday, February 12, 2024 at 7:30 p.m.

Where: This meeting will be held in the Betty Glick Assembly Chambers at the George Navarre Building located at 144 N Binkley St and also electronically via Zoom.

Zoom: Meeting ID 907 714 2200
<https://us06web.zoom.us/j/9077142200>
1-888-788-0099 or 1-877-853-5247

How do I comment on the project?

You can provide verbal comment at the meeting (see information above). You may also submit written comments. **Written comments must be received by 1:00 pm Friday, February 9, 2024.**

Mail comments to:
Donald E. Gilman River Center
514 Funny River Road
Soldotna, Alaska 99669

Email comments to:
KenaiRivCenter@kpb.us

For additional information, please contact Morgan Aldridge at maldridge@kpb.us or (907) 714-2465.

**Conditional Use Permit
Anadromous Waters Habitat Protection District
Staff Report**

KPB File No.	2024-03
Planning Commission Meeting:	February 12, 2024
Applicant	City of Soldotna
Mailing Address	328 Porcupine Ct Soldotna, AK 99669
Location Description	City of Soldotna right of way on Porcupine CT

Project Description

A Conditional Use Permit is sought pursuant to KPB 21.18 for the repair and maintenance of a water line and manhole within the 50-foot Habitat Protection District of the Kenai River, as established in KPB 21.18.040.

Background Information

The City of Soldotna is planning to repair and partially replace a failing outfall pipe and manhole that is currently not accurately reporting effluent discharge into the Kenai River due to a partial collapse of the line and backflow of water out of the manhole.

Project Details within the 50-foot Habitat Protection District

1. Slip-line 40 feet of the existing pipe for repair
2. Replace 8 feet of 21 inch pipe with 18 inch pipe between the manhole and the outfall
3. Remove and replace existing manhole with new 48 inch type A sewer manhole
4. Excavate about 45 cubic yards of materials and place 43 cubic yards of fill during the manhole replacement
5. Temporary placement of approximately 20 foot total of cofferdam and 50 feet of 6 inch bypass line- to be removed upon completion of project
6. Minimal removal of vegetative material

Findings of fact pursuant to KPB 21.18.081 Conditional Use Permit

1. Portions of this proposed project are within the 50-foot habitat protection district as defined by KPB 21.18.040.
2. Pursuant to KPB 21.18.081(B)(5), construction of transportation and utility infrastructure may be approved as a conditional structure/use within the habitat protection district.
3. Pursuant to 21.18.081(D) General Standards, staff finds that the proposed project meets the five general standards.
4. Pursuant to KPB 21.18.020(A), this chapter was established to protect and preserve the stability of anadromous fish through controlling shoreline alterations and disturbances along anadromous waters and to preserve nearshore habitat.
5. Pursuant to KPB 21.18.20(B)(5), one purpose of this chapter was established to separate conflicting land uses.
6. The water line needs repair in order to adequately function and meet standards for wastewater outfall.

7. The man hole and water line were installed in 1972 and are damaged, necessitating repair so that the facility can continue to service the 4,000 members of the City of Soldotna.
8. Pursuant to KPB 21.06.081(D)(3), the proposed work will occur on the applicant's property and shall not have an adverse effect on adjoining properties.
9. Kenai Peninsula Borough Planning Commission Resolution 2015-35 defines water-dependent as:

"...a use or structure located on, in or adjacent to water areas because the use requires access to the waterbody. The definition is applicable to facilities or activities that must be located at or near the shoreline and within the 50-foot buffer. An activity is considered water dependent if it is dependent on the water as part of the intrinsic nature of its operation. Examples of water dependent facilities may include, but are not limited to, piers, boat ramps, and elevated walkways."
10. The River Center found the application complete and scheduled a public hearing for February 12, 2024.
11. The City of Soldotna Planning Commission reviewed this project at their February 7, 2024 meeting.
12. Agency review was distributed on January 31, 2024. No comments or objections have been received from resource agencies to date.
13. Pursuant to KPB 21.11.030, public notice was mailed to all property owners within a radius of 300 feet of the project on January 24, 2024. A total of 11 mailings were sent.
14. Pursuant to KPB 21.11.020, public notice was published in the Peninsula Clarion on January 31, 2024 and February 7, 2024.
15. The applicant is currently in compliance with Borough permits and ordinances.

Permit Conditions

1. Construction techniques and best management practices shall be utilized to ensure that land disturbing activities do not result in runoff or sedimentation to the Kenai River.
2. The outfall pipe and manhole must be designed and installed to meet KPB floodplain requirements, however this project falls within the Soldotna City Limits, and the City does not participate in the National Flood Insurance Program, so no floodplain permit is required.
3. The permittee shall minimize damage to all vegetation and shall revegetate all disturbed areas with native vegetation.
4. For each tree removed, two seedlings less than 5.5-feet tall of a species native to the region will be planted within the 50-foot HPD.
5. Storage or use of fuel is prohibited within 50-feet of any open water.
6. The River Center shall be notified at least 3 days prior to the start of the project.
7. If changes to the approved project described above are proposed prior to or during its siting, construction, or operation, the permittee is required to notify the River Center to determine if additional approval is required.
8. The permittee shall be held responsible for the actions of the contractors, agents, or others who perform work to accomplish the approved plan.
9. The construction or installation phase of this Conditional Use Permit must be completed within one calendar year from the date of the permit's issuance, or the Conditional Use Permit shall expire unless the Planning Commission finds that more time is necessary to effectuate the purposes of this chapter, in which case the commission may extend the deadline for a maximum of six years from the date of issuance. Prior to its expiration date and upon written request, the Planning Director may grant a Conditional Use Permit extension for 12 months (KPB 21.18.081 (H)).
10. In addition to the penalties provided by KPB 21.18.110, and pursuant to KPB 21.50, the permit may be revoked if the permittee fails to comply with the provisions of this chapter or the terms and conditions of a permit issued under this chapter. The Borough Clerk shall provide at least 15 day's written notice to the permittee of a revocation hearing before the hearing officer (KPB 21.18.082).
11. The permittee shall comply with the terms, conditions and requirements of the Kenai Peninsula Borough Code of Ordinances Chapter 21.18, and any regulations adopted pursuant to this chapter.

12. The permittee is responsible for abiding by all other federal, state, and local laws, regulations, and permitting requirements applicable to the project (KPB 21.18.081 (G)).

General Standards

Pursuant to 21.18.081(D) General Standards, the following standards shall be met before conditional use approval may be granted:

- 1. The use or structure will not cause significant erosion, sedimentation, damage within the habitat protection district, an increase in ground or surface water pollution, and damage to riparian wetlands and riparian ecosystems; **Conditions 1, 3-4 appear to support this standard.**
- 2. Granting of the conditional use shall be consistent with the purposes of this chapter, the borough comprehensive plan, other applicable chapters of the borough Code, and other applicable planning documents adopted by the borough; **Condition 11 and Findings 1-2 appear to support this standard.**
- 3. The development of the use or structure shall not physically damage the adjoining property; **Finding 8 appears to support this standard.**
- 4. The proposed use or structure is water-dependent; **Finding 9 appears to support this standard.**
- 5. Applicant’s or owner’s compliance with other borough permits and ordinance requirements; **Finding 14 appears to support this standard.**

Attachments

Multi-Agency Application
Draft Resolution 2024-03

Recommendation

Based on the findings, staff finds that the proposed project meets the five general standards of KPB 21.18.081. The Planning Commission could consider additional permit conditions to mitigate for any habitat loss if it chooses.

Staff recommends the Planning Commission grant a Conditional Use Permit for the proposed project details subject to adopted conditions as set forth in 2024-03.

Note: An appeal of a decision of the Planning Commission may be filed to the Hearing Officer, in accordance with the requirements of the Kenai Peninsula Borough Code of Ordinances, Chapter 21.20.250. An appeal must be filed with the Borough Clerk within 15 days of date of the notice of the decision using the proper forms and be accompanied by the filing and records preparation fee.

END OF STAFF REPORT

KENAI PENINSULA BOROUGH PLANNING COMMISSION

RESOLUTION 2024-03

A RESOLUTION GRANTING A CONDITIONAL USE PERMIT PURSUANT TO KPB 21.18 FOR THE CONSTRUCTION OF UTILITY LINE WITHIN THE 50-FOOT HABITAT PROTECTION DISTRICT OF THE KENAI RIVER.

- WHEREAS,** Chapter 21.18 provides for the approval of Conditional Use Permits for certain activities within the habitat protection district; and
- WHEREAS,** KPB 21.18.081 provides that a conditional use permit is required for construction not meeting the standards of KPB 21.18.071; and
- WHEREAS,** KPB 21.18.091 provides for mitigation measures by the planning department staff to address impacts to the Habitat Protection District from a proposed, ongoing, or completed project; and
- WHEREAS,** an application to repair and replace a water line and manhole within the 50-foot habitat protection district was received on January 4, 2024; and
- WHEREAS,** this application was reviewed by the City of Soldotna Planning Commission at their February 7, 2024 meeting and _____; and
- WHEREAS,** public notice was sent to all property owners within a 300-foot radius of the proposed activity as provided in Section 21.11.030; and
- WHEREAS,** public notice was published in the Peninsula Clarion on January 31, 2024 and February 7, 2024 as provided in Section 21.11.020; and
- WHEREAS,** a public hearing was held at the February 12, 2024 meeting of the Kenai Peninsula Borough Planning Commission;

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING COMMISSION OF THE KENAI PENINSULA BOROUGH:

That the Planning Commission makes the following findings of fact pursuant to KPB 21.18:

Section 1. Project Details Within the 50-foot Habitat Protection District

1. Slip-line 40 feet of the existing pipe for repair
2. Replace 8 feet of 21 inch pipe with 18 inch pipe between the manhole and the outfall
3. Remove and replace existing manhole with new 48 inch type A sewer manhole
4. Excavate about 45 cubic yards of materials and place 43 cubic yards of fill during the manhole replacement
5. Temporary placement of approximately 20 foot total of cofferdam and 50 feet of 6 inch bypass line- to be removed upon completion of project
6. Minimal removal of vegetative material

Section 2. Findings of fact pursuant to KPB 21.18.081

1. Portions of this proposed project are within the 50-foot habitat protection district as defined by KPB 21.18.040.
2. Pursuant to KPB 21.18.081(B)(5), construction of public transportation and utility infrastructure may be approved as a conditional structure/use within the habitat protection district.
3. Pursuant to 21.18.081(D) General Standards, staff finds that the proposed project meets the five general standards.
4. Pursuant to KPB 21.18.020(A), this chapter was established to protect and preserve the stability of anadromous fish through controlling shoreline alterations and disturbances along anadromous waters and to preserve nearshore habitat.
5. Pursuant to KPB 21.18.20(B)(5), one purpose of this chapter was established to separate conflicting land uses.
6. The water line needs repair in order to adequately function and meet standards for wastewater outfall.
7. The man hole and water line were installed in 1972 and are damaged, necessitating repair so that the facility can continue to service the 4,000 members of the City of Soldotna.
8. Pursuant to KPB 21.06.081(D)(3), the proposed work will occur on the applicant's property and shall not have an adverse effect on adjoining properties.
9. Kenai Peninsula Borough Planning Commission Resolution 2015-35 defines water-dependent as:

"...a use or structure located on, in or adjacent to water areas because the use requires access to the waterbody. The definition is applicable to facilities or activities that must be located at or near the shoreline and within the 50-foot buffer. An activity is considered water dependent if it is dependent on the water as part of the intrinsic nature of its operation. Examples of water dependent facilities may include, but are not limited to, piers, boat ramps, and elevated walkways."
10. The River Center found the application complete and scheduled a public hearing for February 12, 2024
11. The City of Soldotna Planning Commission reviewed this project at their February 7, 2024 meeting.
12. Agency review was distributed on January 31, 2024. No comments or objections have been received from resource agencies to date.
13. Pursuant to KPB 21.11.030, public notice was mailed to all property owners within a radius of 300 feet of the project on January 24, 2024. A total of 11 mailings were sent.
14. Pursuant to KPB 21.11.020, public notice was published in the Peninsula Clarion on January 31, 2024 and February 7, 2024.
15. The applicant is currently in compliance with Borough permits and ordinances.

Section 3. Permit Conditions

1. Construction techniques and best management practices shall be utilized to ensure that land disturbing activities do not result in runoff or sedimentation to the Kenai River.
2. The outfall pipe and manhole must be designed and installed to meet KPB floodplain requirements, however this project falls within the Soldotna City Limits, and the City does not participate in the National Flood Insurance Program, so no floodplain permit is required.
3. The permittee shall minimize damage to all vegetation and shall revegetate all disturbed areas with native vegetation.
4. For each tree removed, two seedlings less than 5.5-feet tall of a species native to the region will be planted within the 50-foot HPD.
5. Storage or use of fuel is prohibited within 50-feet of any open water.

6. The River Center shall be notified at least 3 days prior to the start of the project.
7. If changes to the approved project described above are proposed prior to or during its siting, construction, or operation, the permittee is required to notify the River Center to determine if additional approval is required.
8. The permittee shall be held responsible for the actions of the contractors, agents, or others who perform work to accomplish the approved plan.
9. The construction or installation phase of this Conditional Use Permit must be completed within one calendar year from the date of the permit's issuance, or the Conditional Use Permit shall expire unless the Planning Commission finds that more time is necessary to effectuate the purposes of this chapter, in which case the commission may extend the deadline for a maximum of six years from the date of issuance. Prior to its expiration date and upon written request, the Planning Director may grant a Conditional Use Permit extension for 12 months (KPB 21.18.081 (H)).
10. In addition to the penalties provided by KPB 21.18.110, and pursuant to KPB 21.50, the permit may be revoked if the permittee fails to comply with the provisions of this chapter or the terms and conditions of a permit issued under this chapter. The Borough Clerk shall provide at least 15 day's written notice to the permittee of a revocation hearing before the hearing officer (KPB 21.18.082).
11. The permittee shall comply with the terms, conditions and requirements of the Kenai Peninsula Borough Code of Ordinances Chapter 21.18, and any regulations adopted pursuant to this chapter.
12. The permittee is responsible for abiding by all other federal, state, and local laws, regulations, and permitting requirements applicable to the project (KPB 21.18.081 (G)).

Section 4. Pursuant to 21.18.081(D) General Standards, the following standards shall be met before conditional use approval may be granted:

1. The use or structure will not cause significant erosion, sedimentation, damage within the habitat protection district, an increase in ground or surface water pollution, and damage to riparian wetlands and riparian ecosystems; **Conditions 1, 3-4 appear to support this standard.**
2. Granting of the conditional use shall be consistent with the purposes of this chapter, the borough comprehensive plan, other applicable chapters of the borough Code, and other applicable planning documents adopted by the borough; **Condition 11 and Findings 1-2 appear to support this standard.**
3. The development of the use or structure shall not physically damage the adjoining property; **Finding 8 appears to support this standard.**
4. The proposed use or structure is water-dependent; **Finding 9 appears to support this standard.**
5. Applicant's or owner's compliance with other borough permits and ordinance requirements. **Finding 14 appears to support this standard.**

THIS CONDITIONAL USE PERMIT EFFECTIVE ON _____ DAY OF _____, 2024.

Jeremy Brantley, Chairperson
Planning Commission

ATTEST:

Ann Shirnberg
Administrative Assistant

Note: An appeal of a decision of the Planning Commission may be filed to the hearing officer, in accordance with the requirements of the KPB Code of Ordinances, Chapter 21.20.250. An appeal must be filed with the Borough Clerk within 15 days of date of the notice of the decision using the proper forms and be accompanied by the filing and records preparation fee.