# Storm Water Pollution Prevention Plan For

# **Aspen House Senior Apartments**

1680 E Frank Smith Way Wasilla, AK 99654

# Operator(s)

Developer/Contract Manager: Cook Inlet Housing Authority 3510 Spenard Road, Suite 100 Anchorage, AK 99503

Owner:

Wasilla Area Seniors, Inc (WASI) 1301 S. Century Circle Wasilla, AK 99654

Site Operator/General Contractor:
Contractor info when awarded

# **SWPPP Preparation Date**

2/8/2023

**Estimated Project Dates** 

Start of Construction Completion of Construction

5/15/2023

9/30/2024

**APDES Project or Permit Authorization Number:** 

# **RECORD OF SWPPP AMENDMENTS**

Date of Revision	Section	Description

# OPERATOR PLAN AUTHORIZATION/CERTIFICATION/DELEGATION

(To be signed by Responsible Corporate Officer)

I state that based on my review this SWPPP meets the minimum requirements of the Construction General Permit and that the Operator, Contractor, has day-to-day operational control of the project site. Contractor is responsible for the maintenance and implementation of the SWPPP including inspections, documentation, and application of the Best Management Practices at the site. Contractor will notify all subcontractors of the requirement of this SWPPP. Contractor has operational control over the project specifications, including the ability to make changes to the project specifications.

I hereby designate Contractor, SWPPP Administrator as my authorized representative. This designee is responsible for the preparation and management of the Storm Water Pollution Prevention Plan, consultation for compliance with the Construction General Permit, selecting and implementing additional Best Management Practices as conditions warrant, and signing all inspection reports required.

I certify under penalty of law that this document and all attachments were prepared under direction of Tim Alley, P.E. in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

# Signature Date Mark Fineman VP Development Printed Name Title

DATE: 2/8/2023

**Cook Inlet Housing Authority** 



# **TABLE OF CONTENTS**

1.0	PERMITTEE (5.3.1)	9
1.1 <mark>1.2</mark>	Operator(s)/Contractor(s)Subcontractors	
2.0	STORM WATER CONTACTS (5.3.2)	11
3.0	PROJECT INFORMATION (5.3.3)	12
3.1	Project Information	
3.2	Project Site Specific Conditions (5.3.3)	
4.0	NATURE OF CONSTRUCTION ACTIVITY (5.3.4)	13
4.1 4.2	Scope of Work	13
4.3 4.4	Sequence and Timing of Soil-disturbing Activities (5.3.4.2)	
4.5	Size of property and total area expected to be disturbed (5.3.4.3)	
4.6	Identification of All Potential Pollutant Sources (5.3.4.5)	14
5.0	SITE MAPS (5.3.5)	
6.0	DISCHARGES	16
6.1	Locations of Other Industrial Storm Water Discharges (5.3.8)	16
All ma	terial sources will be covered under a separate permit that pertains to their location	16
6.2	Allowable Non-Storm Water Discharges (1.4.3; 4.3.7; 5.3.9)	16
7.0	DOCUMENTATION OF PERMIT ELIGIBILITY RELATED TO TOTAL MAXIMUM DAILY LOADS (3.2, 5.6)	16
7.1 7.2	Identify Receiving Waters (5.3.3.3)	
8.0	DOCUMENTATION OF PERMIT ELIGIBILITY RELATED TO ENDANGERED SPECIES (3.3, 5.7)	17
8.1	Information on Endangered or Threatened Species or Critical Habitat (5.7.1)	17
9.0	APPLICABLE FEDERAL, STATE, TRIBAL, OR LOCAL REQUIREMENTS (4.15)	17
9.1 9.2	Historic Properties Projects near Public Water Systems (PWS) (4.10)	
10.0	CONTROL MEASURES/BEST MANAGEMENT PRACTICES (4.0; 5.3.6)	18
10.1 10.2 10.3	Maintain Natural Buffer Areas (4.2.3)	19
	0.3.1 Protect Steep Slopes (4.2.6)	
10.4 10.5	Storm Water Inlet Protection Measures (4.3.1)	21

10.6 D	own-Slope Sediment Controls (4.3.3)	23
10.7 St	tabilized Construction Vehicle Access and Exit Points (4.3.4)	23
10.8 D	ust Generation and Track-Out from Vehicles (4.3.5 and 4.3.6)	24
10.9 Sc	oil Management (4.3.7)	
10.10	Authorized Non-Storm Water Discharges (4.3.8)	25
10.11	Sediment Basins (4.3.9)	
10.12	Dewatering (4.4)	
10.13	Soil Stabilization (4.5, 5.3.6.3)	
10.14	Treatment Chemicals (4.6; 5.3.6.4)	
10.15	Active Treatment System Information or cationic treatment chemicals (4.6.7)	
10.16	Good Housekeeping Measures (4.8)	
10.16.		
10.16.		
10.16.3		
10.16.4		
10.16.		
10.17	Spill Notification (4.9)	
10.18	Construction and Waste Materials (4.8.6, 5.3.7)	
	PECTIONS (5.4; 6.0)	
11.1 In	nspection Schedules (5.4.1.2; 6.1; 6.2)	32
11.2 In	spection Form or Checklist (5.4.1.3; 6.7)	33
	orrective Action Procedures (5.4.1.4; 8.0)	
11.4 In	nspection recordkeeping (5.4.2)	33
12.0 MOI	NITORING PLAN (If Applicable) (5.5; 7.0)	33
12.1 D	etermination of Need for Monitoring Plan	33
12.2 N	1onitoring Plan Development	34
12.3 M	Nonitoring Considerations	34
13.0 POS	T-AUTHORIZATION RECORDS (5.8)	34
13.1 A	dditional Documentation Requirements (5.8.2)	35
13.1.1		
14.0 MAI	NTAINING AN UPDATED SWPPP (5.9)	36
14.1 Lo	og of SWPPP Modifications (5.9.2)	36
	eadlines for SWPPP Modifications (5.9.3)	
	DITIONAL SWPPP REQUIREMENTS (5.10)	
	etention of SWPPP (5.10.1)	
	Pain Entrance Signage (5.10.2)	
	vailability of SWPPP (5.10.3)	
	ignature and Certification (5.10.4)	
	ubmittal of a Modification to NOI (2.7)	

#### **APPENDICES**

- A. Site Maps and Drawings
- B. BMP Details
- C. Project Schedule
- D. Supporting Documentation:
  - TMDLs
  - Endangered Species
  - Other Permits or Requirements
- E. Delegation of Authority, Subcontractor Certifications
- F. Permit Conditions:
  - Copy of Signed Notice of Intent
  - Copy of Letter from ADEC Authorizing Coverage, with ADEC NOI Tracking Number
  - Copy of 2021 Construction General Permit
- G. Grading and Stabilization Records
- H. Monitoring Plan (If Applicable) and Reports
- I. Training Records
- J. Corrective Action Log
- K. Inspection Records
- L. Hazardous Material Control Plan
- M. Record of Rainfall





# **1.0 PERMITTEE** (5.3.1)

1.1 Operator(s)/Contractor(s)

1.1 Ope	1.1 Operator(s)/Contractor(s)					
Operator Information						
Organization:			Name:	Title:		
Phone:		Fax (opt	ional):	Email:		
Mailing Address:	: Street (PO Box):					
	City:			State: AK		Zip:
Area of	Day-to-day op	eration	al control of those acti	vities at a site w	vhich are n	ecessary to ensure
Control	compliance w	ith a SW	/PPP or other permit c	onditions.		
	•					
Owner Inform	mation					
Organization:	iiatioii		Name:		Title:	
_	ousing Authority	,	Tony Epple			dministrator
Phone:	distrig Authority	Fax (opt		Email:	SWELL	diffilistrator
907-230-6440	1	Tux (opt	ionary.	TEpple@cook	inlathausir	ng org
Mailing Address:	Street (PO Box):			TEPPIE @ COOK	iniethousii	18.018
.v.ag / taar ess.	St. cct (. 5 25/).					
	City:			State:		Zip:
	Anchorage			AK		
Area of		eration	al control of those acti		vhich are n	ecessary to ensure
Control			/PPP or other permit c			esessary to ensure
Owner Inform	nation					
Organization:	nation		Name:		Title:	
_	Conjors Inc		Chuck Foster			cutive Officer
Wasilla Area :	Semois, mc	Fax (opt		Email:		cutive Officer
907-952-4418	2	Tax (opt	ionar).	chuckf@alaskaseniors.com		am
Mailing Address:	Street (PO Box):			<u>CHUCKI@alask</u>	asemors.co	<u> </u>
Walling Address.	1301 S Centur	v Circle				
	City:	y Circic		State:		Zip:
	Wasilla			AK		99654
Area of		ontrol o	ver construction plans		ns includi	
Control			e plans and specification	•	Jiis, iliciaal	ing the ability to make
Control	mouncations	to those	e pians and specification	J115.		
<b>1.2</b> Sub	1.2 Subcontractors					
Subcontracto	r Information					
Organization:			Name:		Title:	
<b>Enter Text</b>			Enter Text		Enter Tex	t
Phone:		Fax (opt	ional):	Email:		
Enter Text		Enter	Text	<b>Enter Text</b>		
Mailing Address:	Street (PO Box):					
	Enter Text					
	City:			State:		Zip:
	Enter Text			Enter Text		Enter Text
	-					

DATE: 2/8/2023

Area of	
Control	Insert Area of Control (if more than one operator at site)

Repeat as necessary to include all subcontractors.



# 2.0 STORM WATER CONTACTS (5.3.2)

Qualified Personnel	Responsibility
Storm Water Lead/Superintendent	Authority to stop and/or modify construction activities as necessary to comply with the SWPPP and the terms and conditions of the permit.
SWPPP Preparer	
The Boutet Company, Inc.	
Timothy J. Alley, PE	Possess the skills to assess conditions at the
1508 E. Bogard Rd., Unit 7	construction site that could impact storm water
Wasilla, AK 99654	quality. Familiar with Part 5 as a means to implement
(907) 357-6770	the permit.
talley@tbcak.com	
AK CESCL #ASA-21-0072	
	Assess conditions at the construction site that could
Storm Water Inspector/SWPPP Manager	impact storm water quality. Assess the effectiveness
	of any erosion and sediment control measures
	selected to control the quality of storm water
	discharge, and familiar with Part 6 as a means to
	ensure compliance with the permit.



PROJECT NAME: Aspen House Senior Apartments DATE: 2/8/2023

# 3.0 PROJECT INFORMATION (5.3.3)

#### 3.1 Project Information

Project Nam	ne:								
Aspen Ho	Aspen House Senior Apartments								
Location	Street:					Borough or similar government subdivision:			
Address:	s: 1680 E Frank Smith Way				Matanuska Susitna Borough				
	City:					State:	City:		
	Wasilla					Alaska	Wasill	la	
	Latitude (decimal d	degree, 5 pl	aces):		Longitude	(decimal degr	ree, 5 plac	ces):	
	61.56701 N				-149. 4	4689W			
	Determined By:	☐ GPS	☐ Web Map: Enter Text	□ USGS	Торо Мар,	Scale: Enter T	ext	X Other: Google Earth	

#### 3.2 Project Site Specific Conditions (5.3.3)

Mean annual precipitation based on nearest weather stations (inches):

Wasilla 2 NE, Alaska Weather Station (509765) has an average annual precipitation of 18.32 inches.

Precipitation data for Alaska weather-recording stations are available at the Western Regional Climate Center Internet website: http://www.wrcc.dri.edu/summary/Climsmak.html

Size of the 2-yr, 24-hr storm event: 1.33 inches, based on NOAA Atlas 14 data for Wasilla 2 NE at

#### PF Map: Alaska (noaa.gov)

Soil Type(s) and Slopes: Based on the geotechnical subsurface investigation and location within the Matanuska Susitna Borough, the soils are expected to be 1 to 2 feet of surficial organic materials (e.g., leaf litter, woody debris, root masses, etc.) and underlying silt-rich deposits. The surficial silt-rich deposits likely classify as F4 (i.e.,highly frost susceptible) on the US Army Corps of Engineers (USACOE) Frost Susceptibility Scale. The surficial organic and silt-rich deposits are subsequently underlain by medium dense to dense sand and gravel deposits which contain varying fractions of silt-sized particles, and classify as PFS (i.e., possibly frost susceptible) on the USACOE Frost Classification Scale. These sand/gravel deposits contain some gravel particles ranging up to approximately three inches in diameter and a trace amount of cobble-sized particles. The majority of the project excavation is limited to 2 to 3 feet; however, there will be some deeper excavations in order to install on-site storm water catch basins, as well as deep utilities (water and sewer). Dewatering is not anticipated for this project. The proposed project will regrade the existing surface, add leveling course and pavement.

**Landscape Topography**: The project area is proposed to be developed as senior housing, as such the area is flat with slopes of less than 1-2% grade. No steep slopes exist within the project area.

**Drainage Patterns**: The existing conditions of the project perpetuates sheet flow from the north to the south and then generally west. The general direction of sheet flow will not be altered by this project. The existing parking lot will be improved by adding NFS (non-frost susceptible) classified materials, leveling course, and asphalt paving. An infiltration trench, along with drainage swales and a retention basin will be added to the site to treat the storm water runoff prior to being infiltrated into the subsurface of the site.

**Approximate Growing Season**: The growing season is generally from mid-May to late September. During these months, new vegetation can be expected to develop a suitable root base for permanent erosion control. The dates for the beginning and ending of the growing season for Cook Inlet are listed in the Alaska Regional Supplement to the Corps of Engineers Wetland Delineation Manual online. The beginning of the growing season shown in Table 5 on page 51 is May 8. The end of the growing season is October 5. The manual is available online at: http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg\_supp/erdc-el\_tr-07-24.pdf

**Type of Existing Vegetation**: Currently, much of the project area is undeveloped with mature vegetation, a small portion of the site was previously developed with small buildings (which have since been demolished) are now a mix of gravel surfaces.

Historic site contamination evident from existing site features and known past usage of the site: According to the ADEC Division of Spill Prevention and Response website: <u>Alaska DEC Contaminated Sites (arcgis.com)</u> there are no contaminated sites in the project boundaries or within 1500 feet

# 4.0 NATURE OF CONSTRUCTION ACTIVITY (5.3.4)

#### 4.1 Scope of Work

This project is the second phase of a three-phase development. This project will construct a 40-unit, three story, approximately 40,000 gross square foot building at the project site. The project includes site grading and drainage improvements and water, sewer, gas, electric and communication extensions to support the new structure.

# **4.2 Project Function (5.3.4.1)**

When complete, the project will provide living spaces in an accessible location.

# 4.3 **Support** Activities (As Applicable)

Support activities for this project are:

		<u>Dedic</u>	cated
Support Activity	<u>Location</u>	<u>Yes</u>	<u>No</u>
Concrete Batch Plant			$\checkmark$
Asphalt Batch Plant			$\overline{\checkmark}$
Equipment Staging Yards			$\overline{\checkmark}$
Material Storage Areas			$\overline{\checkmark}$
Excavated Material Disposal Areas			$\overline{\checkmark}$
Borrow Areas			$\overline{\checkmark}$

# 4.4 Sequence and Timing of Soil-disturbing Activities (5.3.4.2)

The project is estimated to be completed in the following sequence:

- 1. Mobilize to the site (June 2023)
- 2. Install BMP's (June 2023)
- 3. Clear and Grub as needed (site mostly cleared already)(July 2023)
- 4. Utility extensions (June-July 2023)
- 5. Excavate, fill and grade site (July-August 2023)
- 6. Install site lighting conduit and pole foundations (August 2023)
- 7. Complete temporary stabilization and landscaping outside of paved areas (August 2023)
- 8. Finish Leveling Course Grade (June 2024)
- 9. Pave (July 2024)
- 10. Stripe (July 2024)
- 11. Complete landscaping and Final stabilization (August 2024)
- 12. Maintain landscaping/seeded areas until site is permanently stabilized. (August 2024-September 2024)

# 4.5 Size of property and total area expected to be disturbed (5.3.4.3)

The following are estimates of the construction site: \*areas and coefficients have been updated based on current level of construction.

Total Project Area:	2.5	acres
Construction-site area to be disturbed:	2.5	acres
Percentage impervious area BEFORE construction:	10	%
Runoff coefficient BEFORE construction:	0.20	
Percentage impervious area AFTER construction:	80	%
Runoff coefficient AFTER construction:	0.80	

# 4.6 Identification of All Potential Pollutant Sources (5.3.4.5)

#### Potential sources of sediment to storm water runoff:

Source	Storm Water Pollutants	Location	
Excavation/Backfilling/Grading	Silt, Sand, Gravel, Organic Soil	Within the project limits and areas disturbed by construction activity	
Clearing and Grubbing	Silt, Sand, Gravel, Organic Soil	Within the project limits and areas disturbed by grubbing activity	
Vehicle Tracking	Silt, Sand, Gravel, Organic Soil	At project exits	

#### Potential pollutants and sources, other than sediment, to storm water runoff:

Trade Name Material	Storm Water Pollutants	Location	
Petroleum-based fuels, fluids and	Petroleum liquids	All site areas where equipment is	
lubricants	Petroleum Hydrocarbon lubricants	working, fueled, maintained,	
	and hydraulic fluids	parked and transported.	

Vehicle equipment and maintenance products including engine coolant and windshield washer fluid	Ethylene glycol or other anti- freeze agents, other alcohols, ammonia and detergents	All site areas where equipment is working, fueled, maintained, parked and transported.
Acid from vehicle and equipment batteries	Lead/lead sulfate/sulfuric acid	All site areas where equipment is working, fueled, maintained, parked and transported.
Various used consumables, general Litter and waste	Various general waste	Areas where consumables are staged, installed and where excess material and spent containers are staged as waste.
Human sanitary waste, Bio-waste and holding tank liquids	Glutaraldehyde or quaternary ammonium compounds with detergents, ethyl alcohol and human waste	Portable toilets
Asphalt, joint adhesives and sealants	Petroleum liquids and petroleum hydrocarbons	Areas where asphalt is demolished, ground, staged, delivered and applied, including on equipment used for these purposes.
Pavement and survey marking paints	Alkyd Resins or Acrylic Emulsions	Areas where these components are staged, used and where excess material and spent containers are staged as waste.
Portland Cement Concrete (PCC)/Grout	Limestone, sand, pH, chromium	Within the project limits and at concrete wash-out areas

# **5.0 SITE MAPS** (5.3.5)

Include a general location map in Appendix A of this SWPPP. (5.3.4.4)

Include site maps in Appendix A of this SWPPP. (5.3.5)

#### 6.0 DISCHARGES

#### 6.1 Locations of Other Industrial Storm Water Discharges (5.3.8)

All material sources will be covered under a separate permit that pertains to their location.

#### 6.2 Allowable Non-Storm Water Discharges (1.4.3; 4.3.7; 5.3.9)

Allowable non-storm water discharges will be prohibited or minimized to the extent feasible. The following list addresses allowable non-storm water releases expected at this site:

- Watering for dust control
- Landscaping irrigation
- Watering for compaction of soils
- Water main flushing

# 7.0 DOCUMENTATION OF PERMIT ELIGIBILITY RELATED TO TOTAL MAXIMUM DAILY LOADS (3.2, 5.6)

# 7.1 Identify Receiving Waters (5.3.3.3)

**Description of receiving waters**: This overall discharge for the area is Cottonwood Creek; however, the site is designed to capture runoff in infiltration trenches, swales, and a retention basin for treatment and infiltration/evaporation. This storm system does not directly discharge to waters of the U.S.

**Description of storm sewer and/or drainage systems**: The site is designed to capture runoff in infiltration trenches, swales, and a retention basin for treatment and infiltration/evaporation

# **7.2 Identify TMDLs (5.6.1)**

Is an EPA-established or approved TMDL published for the receiving water(s) listed in Section 7.1? ✓ Yes ☐ No.

**TMDL**: Cottonwood Creek is listed as an impaired waterbody for Fecal Coliform.

**Summary of consultation with state or federal TMDL authorities (5.6.2)**: ADEC website was accessed and provided information of TMDL for Cottonwood Creek.

Measures taken to ensure compliance with TMDL (5.6.3): Ensure porta-pottys are located away from drainage areas and are properly maintained. In the case of a spill, all effluent shall be contained, removed from the site, and disposed of at an adequate waste receiving facility.

**PROJECT NAME: Aspen House Senior Apartments** DATE: 2/8/2023

#### DOCUMENTATION OF PERMIT ELIGIBILITY RELATED TO 8.0 **ENDANGERED SPECIES (3.3, 5.7)**

8.1 Info	ormation on Endangered or Threatened Species or Critical Habitat (5.7.1)
Are endangere	ed or threatened species and critical habitats on or near the project area?   Yes   No.
Wasilla, AK. Th was made by r National Marir	this determination was made: The project is located within an existing commercial district in here are no Endangered Species or Critical Habitat designated for the location. This determination reviewing the federal and Alaska State endangered and threatened species list online including the Fisheries Service, United States Fish and Wildlife Service, and Alaska Department of Fish and the preparation of this SWPPP.
Will species or	habitat be adversely affected by storm water discharge?   Yes   No.
Include any ag	vency correspondence in the SWPPP (5.7.4)

Provide summary of necessary measures (5.7.5): N/A

#### APPLICABLE FEDERAL, STATE, TRIBAL, OR LOCAL 9.0 **REQUIREMENTS (4.15)**

This SWPPP is consistent with the APDES Construction General Permit and satisfies Federal and State requirements. There are no known tribal or local storm water requirements for the project area. Updates will be made to the SWPPP as necessary to reflect any revisions to applicable federal, state, tribal or local requirements for soil and erosion control.

There will be no adverse effects on cultural, archeological, or historical sites due to the construction activity at this site. If any previously unknown cultural, archeological, or historical sites are discovered during site construction, the State Historic Preservation Officer (SHPO) will be contacted and any work activity that might impact the site will be halted. The area will be segregated with flagging or barriers, and work will not resume in the area without approve from the SHPO. A copy of all documentation will be added to appendix D.

All known federal, state, tribal and local requirements have been satisfied for this site and all required permitting is in place or will be obtained by the operators/permittees for this site.

#### 9.1 **Historic Properties**

Are there any historic properties	on or near the construction site?
-----------------------------------	-----------------------------------

☐ Yes ☑ No.

If cultural or paleontological resources are discovered after the initial commencement of construction activities, work that would disturb such resources is to be stopped, and the Office of History and Archaeology is to be notified immediately at (907) 269-8721.

PROJECT NAME: Aspen House Senior Apartments DATE: 2/8/2023

## 9.2 Projects near Public Water Systems (PWS) (4.10)

A search of the ADEC Drinking Water Protection Areas (DWPA) map located at <a href="http://dec.alaska.gov/das/GIS/apps.htm">http://dec.alaska.gov/das/GIS/apps.htm</a> shows that the project does not intersect a PWS DWPA.

# 10.0 CONTROL MEASURES/BEST MANAGEMENT PRACTICES (4.0; 5.3.6)

#### 10.1 Minimize Amount of Soil Exposed During Construction Activity (4.2.2)

Through the delineation of the project site and phased construction activities, the contractor will preserve natural topsoil. Native topsoil will be preserved for later use with on-site stockpiles, unless deemed infeasible by space constraints or site design created impervious surfaces.

If disturbed, all exposed erodible areas of the project will be permanently stabilized. The contractor will initiate stabilization measures by the end of the next working day after grading activities have ceased and will not resume for more than fourteen days. All temporary erosion control measures will remain in place until the soil is stabilized.

BMP Description: Site Delineation BMP 54.00			
Source: AK DOT&PF Alaska SWF	Source: AK DOT&PF Alaska SWPPP Guide, October 2016		
□ Permane.	nt 🛮 🗗 Temporary		
Installation Schedule:	<ul> <li>Install in areas not to be disturbed by construction activities.</li> <li>Site delineation measures may be physical barriers, such as temporary fencing, or visual indications, such as staking or flagging.</li> <li>Site delineators are intended to remain until construction activity is complete.</li> <li>Install prior to land disturbing activities.</li> <li>Provide adequate maneuvering room for construction activities.</li> </ul>		
Maintenance and Inspection:	Inspect according to section 11.1 Remove and replace site delineation devices if damaged Replace if removed by construction activities		
Responsible Staff:	SWPPP Manager or Superintendent		
BMP Description: Preserve Topso	il and Vegetation BMP 38		
Source: IDEQ Catalog of Storm Water BMP's April 2020			
☑ Permanent ☐ Temporary			
Installation Schedule:	Prior to ground disturbing activities identify clearing limits and vegetation to be preserved.		

Maintenance and Inspection:	Inspect according to section 11.1
•	Look for areas where the preservation barrier has been removed
	or visibility of the barrier has been reduced
	Replace/repair if needed
Responsible Staff:	SWPPP Manager or Superintendent
1 33	
<b>BMP Description:</b> Construction Til	ning, BMP 36
Source: IDEQ Catalog of Storm Wo	nter BMP's April 2020 - Modified by SWPPP Preparer.
☑ Permanent □ Temporary	
Installation Schedule:	Scheduling and/or sequence the construction work to
	minimize the amount of soil that is exposed to the elements at
	a time.
Maintenance and Inspection:	Inspection: N/A
-	Maintenance: A project schedule describing work activities, dates
	and durations of each phase is included in Appendix C of this
	SWPPP. The schedule is designed to minimize the duration of
	ground disturbing activities. Disturbed areas will be stabilized
	by the end of the next working day whenever any clearing,
	grading, excavating or other earth disturbing activities have
	ceased permanently on any portion of the site, or temporarily
	ceased and will not resume for a period exceeding 14 calendar
	days.
Responsible Staff:	SWPPP Manager or Superintendent
1 33	

# 10.2 Maintain Natural Buffer Areas (4.2.3)

Are stream crossings or waters of the U.S. located within or immediately adjacent to the property?  $\square$  Yes  $\boxtimes$  No.

There are no stream crossings located within or adjacent to the project area; however there are wetlands present. Therefore, perimeter controls are to be utilized to prevent sediment laden runoff from entering adjacent wetlands. A vegetative buffer along the toe of embankment slopes will be utilized. Additionally, any BMP or combination of BMPs below may be used. In areas with standing water, additional BMP's maybe used in conjunction or independently of vegetative buffer.

BMP Description: Vegetation Buffer BMP 38.00		
Source: AK DOT&PF Alaska SWPPP Guide, October 2016		
☑ Permanent ☐ Temporary		
Installation Schedule:	<ul> <li>Identify/delineate area before any clearing begins</li> <li>Minimum width will be 25' unless found to be unfeasible.</li> </ul>	

Maintenance and Inspection:	Inspection: Inspect accordance with section 11.1.  If barrier has been removed or visibility reduced repair or replace barrier to that visibility is restored.  Maintenance: Repair or replace damaged vegetation immediately. If roots are exposed or damaged, prune ends just above damage with pruning shears or loppers and recover with native soil.	
Responsible Staff:	SWPPP Manager or Superintendent	
BMP Description: Fiber Rolls for Sea	liment Control BMP 10.01.a – modified by SWPPP Preparer	
Source: AK DOT&PF Alaska SWPPF	P Guide, July 2018	
□ Permanent	☑ Temporary	
Installation Schedule:	Install prior to soil disturbance in the drainage area as directed.	
Maintenance and Inspection:	Inspection: Inspect accordance with section 11.1. Look for roll ends remain abutted tightly. Ensure that the rolls are in contact with the soil and are entrenched. Look for scouring underneath the rolls.  Maintenance: If rolls are crushed, torn, slumping or split, the damaged sections must be replaced.  Remove sediment accumulated upslope of the roll when it reaches one-half the distance of the above ground height.	
Responsible Staff:	SWPPP Manager or Superintendent	

BMP Description: Silt Fence BMP 20.00		
Source: AK DOT&PF Alaska SWPPP Guide, October 2016 Modified by SWPPP Preparer		
□ Permanent	☑ Temporary	
Installation Schedule:	Install prior to soil disturbance in the drainage area as directed.	
Maintenance and Inspection:	Inspection: Inspect accordance with section 11.1, until work area is permanently stabilized, as defined by Appendix C of the Construction General Permit.  Maintenance: Repair functional deficiencies immediately. Reinforce fence line as needed to prevent undesirable sedimentation of sensitive areas. Replace torn or punctured fabric. Remedy fence sags as needed. Periodically remove accumulated sediment before it reaches one-third the distance up the above ground height.	
Responsible Staff:  SWPPP Manager or Superintendent		

### 10.3 Control Storm Water Discharges and Flow Rates (4.2.5)

Divert storm water around the site so that it does not flow onto the project site and cause erosion of exposed soils using a combination of the following BMPs. Use velocity dissipation devices such as fiber rolls or other perimeter controls to slow down or contain storm water and sediment. Fiber Rolls may be used at channels or structure discharge points.

<b>BMP Description:</b> Culvert Inlet Protection, BMP 8.00 – Modified by SWPPP Preparer			
^	· · · · · · · · · · · · · · · · · · ·		
Source: AK DOT&PF Alaska SWPPP Guide, October 2016			
□ Permanent	☑ Temporary		
Installation Schedule:	Install prior to soil disturbance in the drainage area as directed.		
Maintenance and Inspection:	Inspection: In accordance to Section 11.1. Inspections will include confirming that barriers are in full contact with the soil and that bypass routes are not present. Inspect for sediment accumulation, displacement, and structural damage.  Maintenance: Remove the sediment from containment before it reaches one-half of capacity. Restore structure to its original dimensions and full contact with soil around the inlet as soon as practicable. Repair any structural damage as soon as practicable.		
Responsible Staff:	SWPPP Manager or Superintendent		

# 10.3.1 Protect Steep Slopes (4.2.6)

Will steep slopes be present at the site during construction?  $\square$  Yes  $\boxtimes$  No.

# 10.4 Storm Water Inlet Protection Measures (4.3.1)

Culverts are present on-site and may require inlet protection. Fiber rolls maybe used for inlet protection if necessary.

BMP Description: Storm Drain Inlet Sediment Protection, BMP 29.00		
Source: AK DOT&PF Alaska SWPPP Guide, October 2016		
☐ Permanent ☑ Temporary		
Installation Schedule:	Installed prior to soil disturbance in the contributing drainage area.	

DATE	/2023

Maintenance and Inspection:	Inspection: In accordance to Section 11.1. Inspections will include checking for locations that are split, torn, and for sediment build up.
	<u>Maintenance:</u> Remove the sediment from containment before it reaches one-half of capacity. Damaged catch basin inserts will be repaired or replaced.
Responsible Staff:	SWPPP Manager or Superintendent

BMP Description: Fiber Rolls for Erosion Control BMP 10.00.a – modified by SWPPP Preparer		
Source: AK DOT&PF Alaska SWPPP Guide, October 2016		
□ Permanent	☑ Temporary	
Installation Schedule:	Install prior to soil disturbance in the drainage area as directed.	
Maintenance and Inspection:	Inspection: Inspect accordance with section 11.1. Look for roll ends remain abutted tightly. Ensure that the rolls are in contact with the soil and are entrenched. Look for scouring underneath the rolls.  Maintenance: If rolls are crushed, torn, slumping or split, the damaged sections must be replaced.  Remove sediment accumulated upslope of the roll when it reaches one-half the distance of the above ground height.	
Responsible Staff:	SWPPP Manager or Superintendent	

# 10.5 Water Body Protection Measures (4.3.2)

BMP Description: Vegetation Buffer BMP 38.00		
Source: AK DOT&PF Alaska SWPPP Guide, October 2016		
☑ Permanent	☐ Temporary	
Installation Schedule:	<ul> <li>Identify/delineate area before any clearing begins</li> <li>Minimum width will be 25' unless found to be unfeasible.</li> </ul>	
Maintenance and Inspection:	Inspection: Inspect accordance with section 11.1.  If barrier has been removed or visibility reduced repair or replace barrier to that visibility is restored.  Maintenance: Repair or replace damaged vegetation immediately. If roots are exposed or damaged, prune ends just above damage with pruning shears or loppers and recover with native soil.	
Responsible Staff:	SWPPP Manager or Superintendent	

**BMP Description:** Silt Fence BMP 20.00 Source: AK DOT&PF Alaska SWPPP Guide, October 2016 Modified by SWPPP Preparer □ Permanent **☑** Temporary Installation Schedule: Install prior to soil disturbance in the drainage area as directed. Inspection: Inspect accordance with section 11.1, until work area Maintenance and Inspection: is permanently stabilized, as defined by Appendix C of the Construction General Permit. Maintenance: Repair functional deficiencies immediately. Reinforce fence line as needed to prevent undesirable sedimentation of sensitive areas. Replace torn or punctured fabric. Remedy fence sags as needed. Periodically remove accumulated sediment before it reaches one-third the distance up the above ground height. Responsible Staff: **SWPPP** Manager or Superintendent

#### 10.6 Down-Slope Sediment Controls (4.3.3)

Fiber rolls can be used as a down-slope sediment control in conjunction with vegetative buffer. See section 10.3 for the BMP description, installation, maintenance, and inspection information.

# 10.7 Stabilized Construction Vehicle Access and Exit Points (4.3.4)

Any rubber tire operating on bare soils will utilize a stabilized entrance/exit prior to driving on paved surfaces whenever possible.

BMP Description: Prefabricated Driving Ground Protection Mat BMP 14.00		
Source: AK DOT&PF Alaska SWPPP Guide, October 2016		
□ Permanent	☑ Temporary	
Installation Schedule:	Install prior to construction at the designated entrances and exits.	
Maintenance and Inspection:	<u>Inspection:</u> In accordance to Section 11.1. Inspections will include checking for trackout, damaged or broken units.	
	<u>Maintenance:</u> Replace damaged mats and remove sediment that accumulates on mats. Clean or replace mats if trackout is observed.	
Responsible Staff:	SWPPP Manager or Superintendent	

# 10.8 Dust Generation and Track-Out from Vehicles (4.3.5 and 4.3.6)

BMP Description: Dust Control IDEQ BMP 43			
Source: IDEQ Storm Water BMP Catalog, April 2020			
□ Permanent			
Installation Schedule:	Use Dust Control measures as needed for duration of project: Other BMPs will be used to protect destabilized slopes. Water sprinkling will be used to minimize dust production during heavy trucking activity.		
Maintenance and Inspection:	Inspection: In accordance with 11.1, Dust control requires constant attention and may need to be inspected several times a day during hot, dry weather.  Maintenance: Remove sediments that accumulate and dispose in an approved location.		
Responsible Staff:	SWPPP Manager or Superintendent		

# 10.9 Soil Management (4.3.7)

Will soil stockpiles be at the site during construction? ✓ Yes ☐ No.

Stockpiles will either be stabilized or covered when not active. If possible stockpiles will be located away from inlets, water bodies and conveyance channels. Sediment control measure will be installed at downgradient perimeter areas.

BMP Description: Plastic Covering BMP 1.20			
Source: AK DOT&PF Alaska SWPPP Guide, February 2011			
☑ Permanent	□ Temporary		
Installation Schedule:	Plastic covering will be installed when the stockpile will not be actively worked on for more than 14 days. Plastic covering will be secured with either weighted or trenched method.		
Maintenance and Inspection:	Inspection: Inspect accordance with section 11.1 Inspections will include checking for unsecured covering or locations of erosion under the covering.  Maintenance: Re-secure covering.		

Responsible Staff:	SWPPP Manager or Superintendent	

BMP Description: Fiber Rolls for Erosion Control BMP 10.00 – modified by SWPPP Preparer			
Source: AK DOT&PF Alaska SWPPP Guide, October 2016			
□ Permanent	☑ Temporary		
Installation Schedule:			
Instatuation Schedule:	Install around stockpile when stockpile is established as directed.		
Maintenance and Inspection:	Inspection: Inspect accordance with section 11.1. Look for roll ends remain abutted tightly. Ensure that the rolls are in contact with the soil and are entrenched. Look for scouring underneath the rolls.  Maintenance: If rolls are crushed, torn, slumping or split, the damaged sections must be replaced.  Remove sediment accumulated upslope of the roll when it reaches one-half the distance of the above ground height.		
Responsible Staff:	SWPPP Manager or Superintendent		

BMP Description: Silt Fence BMP 20.00		
Source: AK DOT&PE Alaska SWPP	P Guide, October 2016 Modified by SWPPP Preparer	
Source. The DoTart Thinsand SWITT	Guide, October 2010 Modified by Sm111 Treparer	
□ Permanent		
Installation Schedule:	Install prior to soil disturbance in the drainage area as	
	directed.	
Maintenance and Inspection:	<u>Inspection:</u> Inspect accordance with section 11.1, until work area	
	is permanently stabilized, as defined by Appendix C of the	
	Construction General Permit.	
	Maintenance: Repair functional deficiencies immediately.	
	Reinforce fence line as needed to prevent undesirable	
	sedimentation of sensitive areas. Replace torn or punctured	
	fabric. Remedy fence sags as needed. Periodically remove	
	accumulated sediment before it reaches one-third the distance up	
	the above ground height.	
Responsible Staff:	SWPPP Manager or Superintendent	
Tresponsione stay,	STITE INTERIOR OF SUPERINCENCENT	

#### **10.10** Authorized Non-Storm Water Discharges (4.3.8)

Activities will be managed when practicable, to minimize water leaving the site. Any runoff will be controlled as described in section 10.3. When using water for dust control, water will be applied periodically until the ground surface is wet. If standing water is visible, water will not be applied to these areas to prevent water from leaving the site. A minimal amount of water will be used for surface watering for dust control. No runoff is expected from these activities.

DATF.	2/	ጸ/	21	12	3

10.11	Sediment Basins (4.3.9)	
Will a sedi	iment basin be required during construction?	☐ Yes, ☑ No.
10.12 I	Dewatering (4.4)	
Will dewa	itering be conducted during construction? $\square$ Yes, $ abla$	₫ No.
Will excav	ration dewatering be conducted within 1,500 feet of	a DEC mapped contaminated site found on the
following	website? ☐ Yes, ☑ No.http://www.arcgis.com/home	/item.html?id=315240bfbaf84aa0b8272ad1cef3cad3
10.13	Soil Stabilization (4.5, 5.3.6.3)	

A general sequence of the stabilization practices is as follows:

- All disturbed areas will be stabilized with crushed aggregate surface course, porous backfill, ditch lining or suitable material (as defined in section 10.9) by the end of the next working day when earth disturbing activities have temporarily ceased for more than fourteen days or permanently ceased, installation of the BMPs listed below will be initiated.
- Within 7 days of initiation of final stabilization and within 14 days of initiation of temporary stabilization, completion will be achieved.
- Prior to winter shutdown the site will be prepared to manage storm water flows until construction
  activity resumes. Temporary or final stabilization measures will be completed for all disturbed
  areas except in the case where temporary stabilization is precluded by snow fall or frozen ground
  conditions in which case stabilization measures will be initiated as soon as practicable following
  spring thaw.

BMP Description: Surface Roughening, BMP 30.00  Source: AK DOT&PF Alaska SWPPP Guide, October 2016		
□ Permanent	☑ Temporary	
Installation Schedule:	Installed prior to the application of stabilization measures. Installed within 7 days of initiation of final stabilization. Track walking will be performed up and down slopes to create <i>perpendicular</i> track marks in the slope to slow the flow of discharge.	

DATE: 2/	8/	2023

Maintenance and Inspection:	Inspection: In accordance with section 11.1 until work area is permanently stabilized, as defined by Appendix C of the Construction General Permit. More frequent inspection may be necessary after a heavy precipitation event that produces runoff during construction.  Maintenance: Reapply as necessary to prevent sediment erosion.
Responsible Staff:	SWPPP Manager or Superintendent

BMP Description: Rock Slope Armor	BMP 17		
Source: AK DOT&PF Alaska SWPPP Guide, October 2016			
☑ Permanent	□ Temporary		
Installation Schedule:	After surface roughening has been completed. Rock shall consist of a well graded mix of rock range and size. Angular or sub-angular rock should be used.		
Maintenance and Inspection:	Inspection: Inspect accordance with section 11.1.  Maintenance: Place material on areas that are graded as quickly as possible. Or stabilize with final material. Regrade and reapply immediately if rills appear.		
Responsible Staff:	SWPPP Manager or Superintendent		

# 10.14 Treatment Chemicals (4.6; 5.3.6.4)

Will treatment chemicals be used to control erosion and/or sediment during construction?  $\square$  Yes,  $\bowtie$  No.

# 10.15 Active Treatment System Information or cationic treatment chemicals (4.6.7)

Will an ATS or cationic treatment chemicals be used as a control measure at the site?  $\square$  Yes,  $\overrightarrow{\square}$  No.

# 10.16 Good Housekeeping Measures (4.8)

# 10.16.1 Washing of Equipment and Vehicles (4.8.1)

Will equipment and vehicle washing and/or wheel wash-down be conducted at the site? ☐ Yes, ☑ No.

PROJECT NAME: Aspen House Senior Apartments DATE: 2/8/2023

#### 10.16.2 Fueling and Maintenance Areas (4.8.2)

Will equipment and vehicle fueling, or maintenance be conducted at the site?  $\square$  Yes,  $\square$  No.

If possible, vehicles will be fueled off-site at fuel stations. All equipment onsite will be fueled by a qualified person. Equipment will be inspected by the operator each day it is used for leaks and if a problem is detected it is to be repaired promptly by the contractor's mechanics or taken out of service until repaired. Only minor maintenance shall be performed onsite and fuel and service trucks shall be stored offsite when not in use.

Absorbent/spill kit cleanup materials and spill kits will be located at the staging areas throughout the project. These locations can be identified on the site maps. Spill kit materials will be replaced after use. A general location map and site maps are included in Appendix A.

<b>BMP Description:</b> Vehicle/Equip	pment Storage, Maintenance and Fueling BMP 42.00	
Source: AK DOT&PF, Alaska SWPPP Guide, October 2016		
□ Permane	nt	
Installation Schedule:	<ul> <li>Designate areas to be used for storage, washing, maintenance, and fueling of equipment and vehicles. Locate these areas as far away from stormwater drainage systems and waters of the U.S. as practicable. Use paved surfaces if practicable.</li> <li>Place drip pans or absorbent pads under vehicles or equipment to contain potential drips or leaks that may develop during storage, maintenance, or fueling</li> <li>Have drip pans, absorbent pads, and spill kits located near or within the storage, maintenance or fueling area</li> <li>Fuel on a level grade area as far away from stormwater drainage systems and waters of the U.S., as practicable</li> <li>Automatic shut-off nozzles are preferred. Do not "top off" fuel tanks. Leave adequate space for fuel expansion and movement in the tank while equipment is in operation</li> </ul>	
Maintenance and Inspection:	<ul> <li>Clean up any leaks, spills, or contaminated surfaces immediately. Use absorbent pads to clean small spills and properly dispose of used pads</li> <li>Check ground under vehicles and equipment for evidence of leaks or drips</li> <li>Properly dispose of any used absorbent pads or any wastes collected in drip pans</li> <li>Check vehicles and equipment for excess buildup of oil and grease. Clean vehicle or equipment and properly dispose of excess oil and grease</li> </ul>	
Responsible Staff:	SWPPP Manager or Superintendent	

#### 10.16.3 Staging and Material Storage Areas (4.8.3)

Designated areas and secure containment to be used for staging and material storage areas. Locate such activities, to the extent practicable, away from storm water conveyance channels, storm water inlets, and waters of the U.S.; and minimize the exposure to precipitation and storm water and vandalism for all chemicals,

treatment chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment.

The contractor will establish proper building and material storage areas to avoid pollutants coming in contact with rainfall or flowing storm water. Any materials that have the potential to pollute storm water will be covered to prevent rainfall from coming into contact with them. Garbage containers will be covered to prevent debris from blowing away as well. Staging areas will be included in inspections and the SWPPP. No materials will be staged or stored, even temporarily in flowing water. A waste collection area on site that does not receive substantial amount of runoff from upland areas and does not drain directly to a water body will be designated. See Appendix B for BMP 77, Outdoor Storage.

BMP Description: Outdoor Storage BMP 77			
Source: IDEQ Catalog of Storm Water BMP's April 2020			
□ Permanen	t		
Installation Schedule:	<ul> <li>Designate areas to be used for storage. Locate these areas as far away from stormwater drainage systems and waters of the U.S. as practicable. Use paved surfaces if practicable.</li> <li>Have drip pans, absorbent pads, and spill kits located near or within the storage area</li> </ul>		
Maintenance and Inspection:	<ul> <li>Inspect accordance with section 11.1. Inspect for leaks, spills, vandalism, basic housekeeping concerns.</li> <li>Clean up any leaks, spills, or contaminated surfaces immediately. Use absorbent pads to clean small spills and properly dispose of used pads</li> <li>Properly dispose of any used absorbent pads or any wastes collected in drip pans</li> </ul>		
Responsible Staff:	SWPPP Manager or Superintendent		

# 10.16.4 Washout of Applicators/Containers Used for Paint, Concrete, and Other Materials (4.8.4)

Will washout areas for trucks, applicators, or containers of concrete, paint, or other materials be used at the site?  $\boxtimes$  Yes,  $\square$  No.

The concrete washout will be placed more than 50 feet away from the nearest inlet, wetland, river, or stream. The washout will consist of some type of water-tight containment device lined with plastic and large enough to contain the wash water and materials from the concrete used on site. Locations will be determined as needed and will be added to the appropriate site maps in Appendix A as necessary.

BMP Description: Concrete Washout, BMP 6.00
Source: AK DOT&PF Alaska SWPPP Guide, October 2016

☐ Permanent	
Installation Schedule:	Install prior to any construction activities associated with wet concrete and/or grout.
Maintenance and Inspection:	Inspection: Inspect washout facilities frequently to determine if/when they have been filled to 50% capacity.  Maintenance:
	Clean out facilities once half full
	If stored liquids are not evaporating and are reaching capacity, vacuum and dispose in an approved manner.
	<ul> <li>Remove hardened solids and re-use on site or haul away for recycling or disposal.</li> </ul>
	Inspect for signs of weakening or damage prior to relining.
	<ul> <li>Repair damaged facilities promptly. Contain any spill or discharge of waste material.</li> </ul>
	Replace or display new signage as needed.
Responsible Staff:	SWPPP Manager or Superintendent

#### 10.16.5 Fertilizer or Pesticide Use (4.8.5)

Will fertilizers or pesticides be used at the site?  $\square$  Yes,  $\square$  No.

The manufacturer's recommendations will be followed to minimize any loss of fertilizers to storm water runoff. If there is excess fertilizer it will be disposed of according to manufacturer's recommendations and in accordance with local, state, and federal regulations, however no BMP manual was used. Pesticides will not be used on this project.

# 10.17 Spill Notification (4.9)

Equipment and supplies for spill control will be stored on site for immediate retrieval. A detailed spill procedure is included in Appendix O. The Hazardous Material Control Plan includes the following information:

- Hazardous material handling
- Response
- Cleanup
- Spill reporting procedures

#### 10.18 Construction and Waste Materials (4.8.6, 5.3.7)

Waste materials expected to be stored on site include general construction trash and sanitary waste. A lockable construction trailer will also be on site to store tools and supplies (including any hazardous materials stored onsite) and minimize the exposure to the weather and vandalism. Items such as survey stakes, nails, ear plugs, gasoline, and oil will be stored in the trailer. Additionally, hazardous materials including hazardous & toxic waste, will be stored in sealed containers. See Appendix B for Construction Site Waste Management BMP. Equipment and materials will be located away from storm water conveyance channels and waters of the U.S. The handling and disposal of all waste will be in accordance with all local, state and federal requirements. Trash will be disposed of at local permitted landfill on an as needed basis by project staff.

BMP Description: Outdoor Storage BMP 77			
Source: IDEQ Catalog of Storm Water BMP's April 2020			
□ Permanen	t		
Installation Schedule:	Designate areas to be used for storage. Locate these areas as far away from stormwater drainage systems and waters of the U.S. as practicable. Use paved surfaces if practicable.		
	<ul> <li>Have drip pans, absorbent pads, and spill kits located near or within the storage area</li> </ul>		
Maintenance and Inspection:	Inspect accordance with section 11.1. Inspect for leaks, spills, vandalism, basic housekeeping concerns.		
	<ul> <li>Clean up any leaks, spills, or contaminated surfaces immediately. Use absorbent pads to clean small spills and properly dispose of used pads</li> </ul>		
	<ul> <li>Properly dispose of any used absorbent pads or any wastes collected in drip pans</li> </ul>		
Responsible Staff:	SWPPP Manager or Superintendent		

BMP Description: Sanitary Waste Management, BMP 41.00		
Source: AK DOT&PF Alaska SWPPP Guide, October 2016		
☐ Permanent	☑ Temporary	
Installation Schedule:	Temporary portable toilets will be provided during construction operations. Toilets will be secured to prevent tipping and will have secondary containment.	
Maintenance and Inspection:	Inspection: Inspect to make sure waste containers are being maintained often enough to prevent overflow.  Maintenance: Routine cleaning and disposal of waste as necessary.  Make repairs if any conditions under inspection are found.	

Responsible Staff:	SWPPP Manager or Superintendent

# 11.0 INSPECTIONS (5.4; 6.0)

Inspections will be performed by the contractors Superintendent, Storm Water Inspector, or their representative.

#### 11.1 Inspection Schedules (5.4.1.2; 6.1; 6.2)

Inspection frequency: once every 7 calendar days.

**Justification for reduction in inspection frequency, if applicable**: If the entire site is stabilized, inspection frequency may be reduced to at least once every month (with a minimum of 7 days between inspections) and within two business days of the end of a storm event at actively staffed sites that resulted in a discharge from the site.

If the project is undergoing winter construction the inspection frequency can be reduced to once per month if runoff is unlikely due to continuous frozen conditions that are likely to continue at the site for at least three months based on historic seasonal averages. If unexpected weather conditions (such as above freezing conditions or rain events) make discharges likely, regular inspection frequency will resume.

#### Estimated date of winter shutdown:

A winter shutdown period is planned as part of this project. The actual dates of shutdown shall be based on temperatures and general weather conditions. The fall freeze-up is the date in the fall that air temperatures will be predominately below freezing and the spring thaw date is the date in the spring that air temperatures will be predominately above freezing.

Based on the Fall 'Freeze' Probabilities and Spring 'Freeze' Probabilities for the weather station closest to the project, Wasilla 2 NE, Alaska Weather Station Alaska (509765), the estimated fall freeze-up date is September 13 and the estimated spring thaw date is June 16. Winter shutdown when working in this area may start on or after September 27 (14 days after the anticipated fall freeze date). Inspections shall resume on or before May 26 (21 days prior to the anticipated spring thaw date).

**Source:** Western Regional Climate Center, <a href="http://www.wrcc.dri.edu/summary/climsmak.html">http://www.wrcc.dri.edu/summary/climsmak.html</a> See Appendix D, for more information.

The SWPPP Manager will conduct inspection in accordance with the section above.

An authorized representative of ADEC, EPA or the MS4 operator is allowed to conduct a site inspection in accordance with the CGP Part 6.6.

Estimated date of winter shutdown: November 1, 2023

#### 11.2 Inspection Form or Checklist (5.4.1.3; 6.7)

The Inspection Report Form in Appendix K will be used for inspections on this site. Changes or revisions to the form are not permitted unless by SWPPP Amendment except for adding or deleting data fields that list location of discharge points and site-specific BMP's. Inspections will include visual examination for the parameters listed for each BMP. Copies of the SWPPP site maps will be updated with annotations as needed. The following will be inspected:

- All areas that have been disturbed and not permanently stabilized prior to the previous inspection.
- On-site areas where construction or waste materials are stored.
- Areas where equipment are staged, fueled or maintained.
- Locations where vehicles enter/exit the site.
- All points where site storm water discharges from the site at the perimeter.
- All BMP's

The inspector will insert a complete-by date for each corrective action listed that is within seven days from the date of the inspection and whenever practical, before the next rain event. The superintendent must review and sign each inspection report. The completed, signed reports will be inserted into Appendix K of the SWPPP.

#### 11.3 Corrective Action Procedures (5.4.1.4; 8.0)

Corrective actions must be done whenever any of the following conditions are identified, discovered or made aware of at the site:

- A required control measure was never installed, was installed incorrectly or not in accordance with this plan.
- A control measure is not operating as intended or has not been maintained in effective operation condition.
- Control measures installed and maintained are not effective enough to meet water quality standards.

Corrective actions will be completed before the next scheduled inspection or no later than the date on the Inspection Report.

#### **Corrective Action Log**

A sample Corrective Action Log is included in Appendix J.

#### 11.4 Inspection recordkeeping (5.4.2)

Records will be maintained for a minimum period of at least three (3) years after the permit is terminated.

# 12.0 MONITORING PLAN (If Applicable) (5.5; 7.0)

# 12.1 Determination of Need for Monitoring Plan

Is there an EPA-established or approved TMDL for Cottonwood Creek? yes

DATE: 2/8/2023

Is the receiving water listed as impaired for turbidity and/or sediment? $\square$ Yes, $\square$ No.	
What is the acreage of the disturbance in the proposed construction project? 2.5 acres	
Is the disturbed acreage equal to or greater than 20 acres? ☐ Yes, ☑ No.	
12.2 Manitaring Plan Davolonment	

#### Monitoring Plan Development

Monitoring schedules (5.5.1.2; 7.3.2): n/a

Monitoring form or checklist (5.5.1.3; 7.3.9): n/a

Corrective action procedures (5.5.1.4; 8.0): n/a

#### 12.3 **Monitoring Considerations**

- Locate upstream/upgradient sampling point(s) to determine background turbidity in the receiving water body. The location should be reasonably close to discharge but not so close as to experience increased turbidity from discharge. Clearly mark in field and on map in SWPPP.
- Sample the discharge where it enters the receiving water body or where it leaves the construction site. Clearly mark in field and on map in SWPPP.
- The discharge entering the water body impaired for turbidity or sediment must not exceed 5 nephelometric turbidity units (NTU) above natural conditions when the natural turbidity is 50 NTU or less, and may not have more than a 10-percent increase in turbidity when the natural turbidity is more than 50 NTU, not to exceed a maximum increase of 25 NTU.
- Correct control measures within seven (7) calendar days, update your SWPPP to reflect improvements, submit a Corrective Action Report consistent with the CGP, AND continue daily sampling until discharge meets allowable turbidity.
- If a specific waste-load allocation has been established for turbidity or sediment that would apply to the discharge of storm water from the construction site, the permittee must implement necessary steps to meet that allocation.
- If there is only a general waste-load allocation applicable to construction storm water discharges, the permittee must consult the ADEC to confirm consistency with approved TMDL.

# 13.0 POST-AUTHORIZATION RECORDS (5.8)

Copy of Permit Requirements (5.8.1)

The SWPPP must contain the following documents:

- copy of CGP (5.8.1.1);
- copy or signed and certified NOI form submitted to ADEC (5.8.1.2);

• upon receipt, a copy of letter from ADEC authorizing permit coverage, providing tracking number (5.8.1.3); and

#### These documents must be included in Appendix F.

#### 13.1 Additional Documentation Requirements (5.8.2)

- Dates when grading activities occur (5.8.2.1; insert in Appendix G).
- Dates when construction activities temporarily or permanently cease on a portion of the site (5.8.2.1.3; insert in Appendix G).
- Dates when stabilization measures are initiated (5.8.2.1.4; insert in Appendix G).
- Date of beginning and ending period for winter shutdown (5.8.2.2; insert in Appendix G).
- Copies of inspection reports (5.4.2; 5.8.2.3; insert in Appendix K).
- Copies of monitoring reports, if applicable (5.8.2.4; insert in Appendix H).
- Documentation in support of chemical-treatment processes (4.6; 5.8.2.6; insert in Appendix H).
- Documentation of maintenance and repairs of control measures (5.8.2.8; 8.1; 8.2; insert in Appendix J).
- Documentation of any rainfall monitoring records (6.7.1.3)

#### **13.1.1** Records of Employee Training (4.14; 5.8.2.7)

#### **Describe Training Conducted:**

#### General storm water and BMP awareness training for staff and subcontractors:

Staff and subcontractors will receive awareness training on general storm water issues and BMPs so that they understand their responsibilities in pollution storm water runoff prevention. During safety meetings and scheduled briefings, corrective actions from the previous period will be reviewed. Safety or other tailgate briefings may also be a discussion time of the timing of activities and stabilization requirements.

#### Detailed training for staff and subcontractors with specific storm water responsibilities:

Superintendent and the SWPPP Manger(s) will be as described above and will be aware of the requirements of the 2021 CGP and this SWPPP.

#### Individual(s) Responsible for Training:

All training will be documented by the SWPPP Manager. The SWPPP Manager will document the date, names of personnel that attended, and what was covered in the training session in the Training Log Form. Training Records will be maintained in Appendix I of the SWPPP.

# 14.0 MAINTAINING AN UPDATED SWPPP (5.9)

The permittee must modify the SWPPP, including site map(s), in response to any of the following:

- whenever changes are made to construction plans, control measures, good housekeeping measures, monitoring plan (if applicable), or other activities at the site that are no longer accurately reflected in SWPPP (5.9.1.1);
- if inspections of site investigations by staff or by local, state, tribal, or federal officials determine SWPPP modifications are necessary for permit compliance (5.9.1.2); and
- to reflect any revisions to applicable federal, state, tribal, or local laws that affect control measures implemented at the construction site (5.9.1.3).

#### 14.1 Log of SWPPP Modifications (5.9.2)

A permittee must keep a log showing dates, name of person authorizing the change, and a brief summary of changes for all significant SWPPP modifications (e.g., adding new control measures, changes in project design, or significant storm events that cause replacement of control measures). A form to document SWPPP amendments has been placed at the beginning of this template.

#### 14.2 Deadlines for SWPPP Modifications (5.9.3)

Revisions to the SWPPP must be completed within seven days of the inspection that identified the need for a SWPPP modification or within seven days of substantial modifications to the construction plans or changes in site conditions.

# 15.0 ADDITIONAL SWPPP REQUIREMENTS (5.10)

# **15.1** Retention of SWPPP (5.10.1)

A copy of the SWPPP (including a copy of the permit), NOI, and acknowledgement letter from ADEC must be retained at the construction site.

### **15.2 Main Entrance Signage (5.10.2)**

A sign or other notice must be posted conspicuously near the main entrance of the site. The sign or notice must include the permit authorization number assigned to the NOI, Operator Contact Name and phone number for obtaining additional construction site information, and location of the SWPP or name and telephone number of the contact person for scheduling SWPPP viewing times. If the location of the SWPPP or the name and telephone number of the contact person for scheduling SWPPP viewing times has changed (i.e., is different than that submitted to DEC in the NOI), the current location of the SWPPP or name and telephone number of a contact person for scheduling viewing times.

#### 15.3 Availability of SWPPP (5.10.3)

The permittee must keep a current copy of the SWPPP at the site. The SWPPP must be made available to subcontractors, government and tribal agencies, and MS4 operators, upon request.

# 15.4 Signature and Certification (5.10.4)

The SWPPP must be signed and certified in accordance with the requirements of the CGP Appendix A, Part 1.12. The certification form on page ii of this template meets the requirements of this paragraph.

#### 15.5 Submittal of a Modification to NOI (2.7)

Note: A permittee must file an NOI modification form to DEC (see Permit Part 2.3) to update or correct the following information on the original NOI within 30 calendar days of the change:

- Owner/Operator address and contact information;
- Site information;
- Estimated start or end dates;
- Number of acres to be disturbed; or
- SWPPP location and contact information.



## **APPENDICES**

APPENDIX A - SITE MAPS AND DRAWINGS

APPENDIX B - BMP DETAILS

APPENDIX C - PROJECT SCHEDULE

APPENDIX D - SUPPORTING DOCUMENTATION:

- TMDL
- ENDANGERED SPECIES
- OTHER PERMITS

APPENDIX E - DELEGATION OF AUTHORITY, SUBCONTRACTOR CERTIFICATIONS

#### APPENDIX F – PERMIT CONDITIONS:

- COPY OF SIGNED NOTICE OF INTENT
- COPY OF LETTER FROM ADEC AUTHORIZING COVERAGE
- ADEC NOI TRACKING NUMBER
- COPY OF ALASKA CONSTRUCTION GENERAL PERMIT

APPENDIX G - GRADING AND STABILIZATION RECORDS

APPENDIX H – MONITORING PLAN (IF APPLICABLE) AND REPORTS

APPENDIX I - TRAINING RECORDS

APPENDIX J - CORRECTIVE ACTION LOG

APPENDIX K - INSPECTION RECORDS

APPENDIX L - HAZARDOUS MATERIAL CONTROL PLAN

APPENDIX M - RECORD OF RAINFALL