

STAFF REPORT



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Development Services Division

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DEVELOPMENT SERVICES DIVISION STAFF REPORT

Date: November 21, 2024

File Number: 10301

Applicant/Property Owner: Mass Excavation, Inc.

Property Owner: Fairview Park Inv LTD

Request: Request for Earth Materials Extraction Administration Permit in accordance with MSB Chapter 17.30 – Conditional Use Permit (CUP) for Earth Materials Extraction Activities

Subject Properties: 4290, 4370, & 4480 East Fireweed Road and 4401 East Fairview Loop, Tax ID #s 17N01E18A005, A012, A013, & A014

Property Size: 53.92 acres

Mining Site Size: Approximately 13 acres

Reviewed By: Jason Ortiz, Development Services Manager

Staff: Peggy Horton, Current Planner

Staff Recommendation: Approval with conditions

EXECUTIVE SUMMARY

The Administrative Permit will allow for the removal of approximately 350,000 cubic yards from April 2025 through April 2027. The earth material extraction activity will occur on less than 13 acres within the 53.92-acre group of four parcels. An Administrative Permit for earth material extraction is required under MSB 17.30 – Conditional Use Permit for Earth Materials Extraction Activities. The applicant is requesting a permit to supply products for the ADOT Seward Meridian Parkway Road Improvements Project.

The site is located within the Midway Road Service Area, Assembly District 3, and the Gateway Community Council area.

LAND USE

Existing Land Use:

The subject parcels total 53.92 acres, have uneven terrain, and were previously used as an unpermitted earth material extraction site.

Surrounding Land Uses:

East Fireweed Road bounds the subject property to the north and East Fairview Loop to the south. Undeveloped land lies directly east and west. Southeast of the subject property is another industrial use earth material extraction activity, which is undergoing the earth material extraction CUP process and was previously used as an unpermitted extraction site. Properties further east and west are for residential or commercial use. The property on the south side of East Fairview Loop is used industrially as a grandfathered earth material excavation activity. Directly north is the Parks Highway right-of-way. Further north is Black Lake, and land is used commercially along the feeder road, East Blue Lupine Drive. Properties within a half-mile of the subject parcel range in size from 0.92 to 40 acres.

REVIEW OF APPLICABLE CRITERIA AND FINDINGS

The subject parcel is situated within the Borough’s Core Area. The proposed operation will not produce noise in excess of MSB 17.61.080 – Noise Standards. The proposed operation will not generate traffic of more than 100 vehicles during the morning or afternoon peak hours or produce more than 750 vehicles daily. The proposed operation does not involve processing, manufacturing, or storing hazardous substances exceeding those thresholds described within MSB 17.61.020(A)(1) through (4). Furthermore, the operation will not generate contaminated water runoff. Therefore, a Core Area Conditional Use Permit is not required based on the information provided within the application packet.

MSB 17.03 – Public Notification

Notices were mailed to all property owners within a one-half-mile radius of the subject property and to the Gateway Community Council. A total of 321 notices were mailed on October 22, 2024. The administrative permit application notification was published in the Frontiersman newspaper’s October 23, 2024, issue. The application material was posted on the Borough website for public review on October 21, 2024. The public notice, application material, and a request for comments were emailed to the Gateway Community Council on October 21, 2024. The Gateway Community Council did not submit any comments for the proposed use.

Staff received an objection regarding dust and sediment from the extraction activities, and a concern whether reclamation would occur.

Section 17.30.040 Criteria to Qualify for an Administrative Permit

(A) To qualify for an administrative permit, all of the following criteria must be met:

(1) [Repealed by Ord. 16-102, § 11, 2016]

(2) extraction activities subject to the permit shall not exceed:

(a) twenty-four months.; or

(b) annual volume of 7,000 cubic yards (one cubic yard equals one and one-half tons) or less; and

(3) any proposed batch plant use shall not exceed 24 months

Findings of Fact:

1. According to the application material, the operation proposes to extract 350,000 over the course of this permit.
2. According to the application material, the operation proposes to extract earth materials from the subject parcels for two years.
3. According to the application material, a batch plant is not proposed at this site.

Conclusion of Law: Based on the above findings, the application meets the criteria to qualify for an Administrative Permit for Earth Material Extraction Activities (MSB 17.30.040(A)).

(B) The director may also set basic conditions of approval for issuance of the administrative permit, as appropriate for the area in which the development is sited, for the following:

- (1) setbacks (no less than minimum setback requirements as established in MSB 17.55; however, may be increased as appropriate for existing surrounding development);*
- (2) visual screening, noise mitigation, lighting restrictions and roads/access restrictions as appropriate for surrounding development and in accordance with development standards referenced in MSB 17.28.060, site development standards; and*
- (3) road maintenance may be required of the permittee.*

17.30.055 REQUIRED COMPLIANCE WITH STATE AND FEDERAL LAWS.

(A) All applicants for permits for earth materials extraction are required to demonstrate compliance with state and federal law. Prior to final approval of the permit, the applicant or agent shall provide written documentation of compliance with the following:

- (1) mining license as required by the Alaska State Department of Revenue, pursuant to A.S. 43.65;*
- (2) mining permit as required by the Alaska State Department of Natural Resources (ADNR) if extraction activities are to take place on state land;*
- (3) reclamation plan as required by ADNR, pursuant to A.S. 27.19;*
- (4) notice of intent (NOI) for construction general permit or multi-sector general permit and storm water pollution prevention plan, and other associated permits or plans required by the Department of Environmental Conservation (DEC) pursuant to the Alaska Pollutant Discharge Elimination System (APDES) requirements; and*
- (5) United States Army Corps of Engineers permit pursuant to Section 404 of the Clean Water Act, 33 U.S.C. 1344, if material extraction activity is to take place within wetlands, lakes and streams.*

Findings of Fact:

1. An Alaska State Department of Revenue mining license is not required for this operation because Alaska law was amended in 2012, and rock, sand, and gravel quarries are now exempt from the requirement.
2. An Alaska State Department of Natural Resources mining permit is not required for this application because the extraction activities will not take place on state land.
3. According to the application materials, ADNR accepted the reclamation plan submitted by the applicant, and a copy of the financial assurance filed with the State of Alaska was provided.
4. According to the application material, ADEC assigned a permit authorization number AKR10H0K2 and acknowledged that Mass Excavation, Inc. submitted a NOI for coverage

under the APDES General Permit for Stormwater Discharges for Construction General Permit Activity, modified to include the subject properties.

5. This application does not require a United States Army Corps of Engineers permit pursuant to Section 404 of the Clean Water Act, as the applicant is not proposing any extraction activity within any identified wetlands, lakes, streams, or other water bodies.

Conclusion of Law: Based on the above findings, the applicant has complied with state and federal law to qualify for an Administrative Permit for Earth Materials Extraction Activities (MSB 17.30.055(A)).

Section 17.30.060 General Standards for Approval

(A) *In granting an administrative permit, the director must make the following findings:*

- (1) *that the use is not inconsistent with the applicable comprehensive plan;*

Comprehensive Plan: Two adopted plans apply to the subject parcel. The plans are listed below, and excerpts from each plan are delineated after.

1. Core Area Comprehensive Plan (2007 Update)
2. Matanuska-Susitna Borough Economic Development Strategic Plan

The subject parcels are located within the Core Area planning area. The Core Area Comprehensive Plan (2007 Update) addresses sand and gravel extraction. The plan recognizes that sand and gravel are essential for borough development, and there are significant sand and gravel resources located in the Core Area. The plan addresses potential conflicts with neighboring land uses regarding traffic and public safety, visual aesthetics, dust, noise, and water quality. The plan also addresses the reclamation of extraction sites for future residential subdivisions., business parks, retail centers, and recreational facilities.

The project is consistent with Goal 1, Land Use: *"Foster a pattern of land development that protects the appealing features of the Core Area, offers developers and consumers choices in the market place, and allows local government to provide cost-effective infrastructure and services economically."*

Policy 1-M: *"Collaborate with operators of large earth materials extraction sites to plan for site reclamation and re-use after earth material extraction activities are finished."*

This policy proposes that the borough work jointly with property owners, consistent with borough ordinances, to plan for the redevelopment of these material extraction sites for production and profitable reuse. The applicant has stated that the property will be used for residential or commercial purposes.

Although this property is located within the Core Area Comprehensive Plan planning area, a Core Area conditional use permit is not required since the proposed use does not exceed any of the thresholds requiring a conditional use permit.

The Matanuska-Susitna Borough Economic Development Strategic Plan offers the following information beginning on page 29.

Strategy 1G, in part, states: *"Promote the sustainable development of Mat-Su's natural resources for economic development. The MSB should support sustainable natural resource development*

and the natural resource industries with an emphasis on meeting local needs and local value-added product manufacturing, as well as ensuring compatibility with other parts of the local economy. Indeed, natural resource development is a high priority for the Borough Assembly. The main natural resources in Mat-Su, in addition to agricultural land, include coal, gravel, timber, some gold mining, and some metallic mineral potential.”

Action 1G-3, in part, states: “Work with the gravel mining industry to balance the need for the sector’s growth with other economic development considerations, as well as environmental and resource protection. The MSB is developing gravel operations while addressing community and other economic development concerns regarding buffers from roadways, water protection, and reclamation. These regulations should balance the concerns of gravel mining businesses with the need to protect the environment and visual beauty of the Borough.”

Findings of Fact:

1. The subject property is located within the boundary of the Gateway Community Council Area. A community comprehensive plan has not been adopted for this area.
2. The subject property falls within the Core Area Comprehensive Planning Area.
3. The Core Area Comprehensive Plan Land Use Goal 1 states: Foster a pattern of land development that protects the appealing features of the Core Area, offers developers and consumers choices in the market place, and allows local government to provide cost-effective infrastructure and services economically.
4. The Core Area Comprehensive Plan Land Use Policy 1-M states: Collaborate with operators of large earth materials extraction sites to plan for site reclamation and re-use after earth material extraction activities are finished.
5. The Economic Development Strategic Plan Strategy 1G in part, states: Promote the sustainable development of Mat-Su’s natural resources for economic development. The MSB should support sustainable natural resource development and the natural resource industries with an emphasis on meeting local needs and local value-added product manufacturing, as well as ensuring compatibility with other parts of the local economy. Indeed, natural resource development is a high priority for the Borough Assembly. The main natural resources in Mat-Su, in addition to agricultural land, include coal, gravel, timber, some gold mining, and some metallic mineral potential.
6. The Economic Development Strategic Plan Action 1G-3, in part, states: Work with the gravel mining industry to balance the need for the sector’s growth with other economic development considerations, as well as environmental and resource protection. The MSB is developing gravel regulations and guidelines to provide for continued commercial gravel operations while addressing community and other economic development concerns regarding buffers from roadways, water protection, and reclamation. These regulations should balance the concerns of gravel mining businesses with the need to protect the environment and visual beauty of the Borough.
7. According to the Rutgers Noise Technical Assistance Center, heavy trucks produce approximately 90 decibels (dB) when operating, which falls in the “very loud” category.
8. According to the Rutgers Noise Technical Assistance Center, a quiet to noisy home produces sound around 30-60 decibels (dB), which falls in the “faint” and “moderate” categories.
9. MSB 8.52.010(A) declares: “Loud noise and amplified sounds have an adverse effect on the psychological and physiological well-being of persons.”

10. Earth material extraction activities are an industrial use that can cause excessive noise, dust, and heavy truck traffic.
11. According to the application material, access to the extraction site will be from East Fireweed Road, a collector road maintained by the State of Alaska Department of Transportation & Public Facilities (ADOT&PF).
12. According to the application material, the noise mitigation plan includes strategies involving a mixture of mufflers on heavy equipment, operating equipment behind existing berms and hills, and the construction of a minimum of 10-foot tall berms of clearing and grubbing material or gravel in those areas where the terrain does not provide sufficient noise barriers.
13. According to the application material, visual screening will be achieved by maintaining a 100-foot buffer between the proposed excavation site and road traffic along East Fireweed Road, constructing berms that are 10 feet tall by 40 feet wide with a slope of 1:2 at the perimeter of the excavation area, and utilizing existing topography to position equipment below the surrounding grade.
14. According to the application material, water trucks will be used as a dust control measure as needed during operations. The applicant obtained a DNR Temporary Water Use Authorization (TWUA A2024-49) for withdrawing water from Cottonwood Creek for this purpose.
15. The Alaska Department of Environmental Conservation (ADEC) produced a user manual of best management practices for owners and operators of gravel/rock extraction operations to protect surface water and groundwater quality in Alaska.
16. ADEC Best Management Practices for Gravel/Rock Aggregate Extraction Projects Manual includes the recommended drinking water buffer zones for public water system (PWS) sources. These zones are called Drinking Water Protection Areas.
17. There are no Drinking Water Protection Areas within the extraction area.
18. According to the application material, the applicant is not proposing to mine below or within four feet of the seasonal high-water table.
19. According to the application material, the operation will monitor the seasonal high water table by excavating test pits.
20. According to the application material, the end use of the properties is for residential or commercial use.
21. According to the application material, side slopes will be left at the perimeter at a 1:2 slope, covered with grubbing and topsoil from the site, and hydroseeded for grass growth to stabilize and protect surface areas against erosion.

Conclusion of Law: Based on the above findings, the proposed use is consistent with the applicable comprehensive plans (MSB 17.30.060(A)(1)).

(2) that the use will preserve the value, spirit, character, and integrity of the surrounding area;

Findings of Fact:

1. According to the application material, the earth material extraction activity will occur on approximately 13 acres within four properties totaling 53.92 acres.

2. Properties within a half-mile of the subject parcel range in size from 0.92 to 40 acres, and land uses include undeveloped, residential, industrial, and commercial.
3. Land use directly east and west is undeveloped. Further east and west are commercial and residential uses. Property to the southeast is currently undergoing the Conditional Use Process for an earth material extraction activity.
4. Land use to the north is ADOT right-of-way, including East Fireweed Road, East Parks Highway, East Blue Lupine Drive, and commercial property. Land use to the south is East Fairview Loop, Alaska Railroad, and a grandfathered earth materials extraction operation.
5. According to the application material, the operation will extract sand, gravel, and rock from the subject parcel for use on the ADOT Seward Meridian Parkway Road Improvements Project.
6. According to the application material, the applicant is not proposing to mine below or within four feet of the seasonal high-water table.
7. According to the application material, the operation will monitor the seasonal high water table by excavating test pits.
8. According to the application material, water trucks will be used as a dust control measure as needed during operations. The applicant obtained a DNR Temporary Water Use Authorization (TWUA A2024-49) for withdrawing water from Cottonwood Creek for this purpose.
9. Access to the subject parcel is obtained from East Fireweed Road, with driveway permit number 33634 approved by ADOT&PF.
10. According to the application material, the proposed peak hour of operations will be approximately 10:00 a.m. to 1100 a.m., with an estimated 26 trips.
11. According to the application material, street sweeping will be performed on East Fireweed Road commensurate with gravel hauling activities to remove sediment track-out from paved road surfaces.
12. According to the application material, the site's ground conditions will consist of a permeable gravel surface that will allow stormwater to infiltrate. Additional shallow trenching will be constructed adjacent to berms as needed should stormwater need additional time for infiltration.
13. According to the application material, the noise mitigation plan includes strategies involving a mixture of mufflers on heavy equipment, operating equipment behind existing berms and hills, and the construction of a minimum of 10-foot tall berms of clearing and grubbing material or gravel in those areas where the terrain does not provide sufficient noise barriers.
14. According to the application material, visual screening will be achieved by maintaining a 100-foot buffer between the proposed excavation site and road traffic along East Fireweed Road, constructing berms that are 10 feet tall by 40 feet wide with a slope of 1:2 at the perimeter of the excavation area, and utilizing existing topography to position equipment below the surrounding grade.
15. According to the application material, the operation proposes to extract earth materials from the subject parcels for two years.
16. According to the application material, the end use of the properties is for residential or commercial use.

17. According to the application material, side slopes will be left at the perimeter at a 1:2 slope, covered with grubbing and topsoil from the site, and hydroseeded for grass growth to stabilize and protect surface areas against erosion.
18. According to the application material, the operation will operate from approximately April 1 to November 15 each year, depending on seasonal weight restrictions and weather.
19. According to the application material, hours of operation will be 24 hours a day, Monday through Sunday.

Conclusion of Law: Based on the above findings, the proposed use will not detract from the value, character, and integrity of the surrounding area (MSB 17.30.060(A)(2)).

(3) that the applicant has met all other requirements of this chapter pertaining to the use in question;

Finding of Fact:

1. The applicant provided all site development and reclamation plans and the required site plans.

Conclusion of Law: Based on the above finding, the applicant has met the requirements of this chapter (MSB 17.30.060(A)(3)).

(4) that granting the permit will not be harmful to the public health, safety and general welfare; and

Findings of Fact:

1. According to the application material, the noise mitigation plan includes several measures: using mufflers on heavy equipment, operating equipment behind existing berms and hills, and constructing berms that are at least 10-foot tall using clearing and grubbing material or gravel in those areas where the terrain does not provide sufficient noise barriers.
2. According to the application material, visual screening will be achieved by maintaining a 100-foot buffer between the proposed excavation site and road traffic along East Fireweed Road, constructing berms that are 10 feet tall by 40 feet wide with a slope of 1:2 at the perimeter of the excavation area, and utilizing existing topography to position equipment below the surrounding grade.
3. Access to the subject parcel is obtained from East Fireweed Road, with driveway permit number 33634 approved by ADOT&PF.
4. According to the application material, water trucks will be used as a dust control measure as needed during operations. The applicant obtained a DNR Temporary Water Use Authorization (TWUA A2024-49) for withdrawing water from Cottonwood Creek for this purpose.
5. According to the application material, the applicant is not proposing to mine below or within four feet of the seasonal high-water table.
6. According to the application material, the operation will monitor the seasonal high water table by excavating test pits.
7. According to the application material, a batch plant is not proposed at this site.

8. According to the application material, side slopes will be left at the perimeter at a 1:2 slope, covered with grubbing and topsoil from the site, and hydroseeded for grass growth to stabilize and protect surface areas against erosion.

Conclusion of Law: Based on the above findings, the proposed use will not be harmful to public health, safety, convenience, and welfare (MSB 17.30.060(A)(4)).

(5) that the sufficient setbacks, lot area, buffers or other safeguards are being provided to meet the conditions listed in MSB 17.30.050(B).

Findings of Fact:

1. According to the application material, the earth material extraction activity will occur on approximately 13 acres within four properties totaling 53.92 acres.
2. According to the site plan, any permanent or semi-permanent structures will be placed outside of the setbacks as required in MSB 17.55.
3. According to the application material, side slopes will be left at the perimeter at a 1:2 slope, covered with grubbing and topsoil from the site, and hydroseeded for grass growth to stabilize and protect surface areas against erosion.
4. According to the application material, visual screening will be achieved by maintaining a 100-foot buffer between the proposed excavation site and road traffic along East Fireweed Road, constructing berms that are 10 feet tall by 40 feet wide with a slope of 1:2 at the perimeter of the excavation area, and utilizing existing topography to position equipment below the surrounding grade.
5. Access to the subject parcel is obtained from East Fireweed Road, with driveway permit number 33634 approved by ADOT&PF.

Conclusion of Law: Based on the above findings, sufficient setbacks, lot area, buffers, or other safeguards are being provided (MSB 17.30.060(A)(5)).

Section 17.28.060 Site Development Standards

(A) Standards for earth materials extraction site development plan are as follows:

(1) identification of surrounding property owners, existing land uses, and wetlands and waterbodies within one-quarter mile of the site;

Finding of Fact:

1. Maps are included in the record identifying surrounding property ownership, existing land uses, wetlands, and waterbodies within one-quarter mile of the proposed site.

Conclusion of Law: Based on the above finding, the surrounding property ownership, existing land uses, and wetlands and water bodies within one-quarter mile are identified (MSB 17.28.060(A)(1)).

(2) phases of proposed mining activities including a map showing the area to be mined, a description of the topography and vegetation, approximate time sequence for mining at particular locations, and general anticipated location of semi-permanent equipment such as conveyor belts, crushers, dredges, batch plants, etc.;

Findings of Fact:

1. According to the application material, the earth material extraction activity will occur on approximately 13 acres within four properties totaling 53.92 acres.
2. According to the application material, the operation proposes to extract earth materials from the subject parcels for two years.
3. According to the application material, there will be one phase of extraction, beginning at the north and moving south. The area labeled Phase Two on the site plan will not be mined but used for scales, a scale house, a driveway, and product stockpiling.
4. The record includes a topographic contour map, bare earth map, and aerial photography. These items show the topographic features and vegetation of the subject property and adjacent properties.
5. The application includes a site plan showing the location of the earth materials extraction site, screening equipment, potential crusher, scale house, and scales.
6. According to the application material, the operation may include a crusher, depending on the material found on-site.
7. According to the application material, a batch plant is not proposed at this site.

Conclusion of Law: Based on the above findings, the application provides the phases of proposed mining activities, a description of the topography and vegetation, and an approximate time sequence for the duration of the mining activity (MSB 17.28.060(A)(2)).

(3) The road and access plan shall include anticipated routes and traffic volumes, and shall be approved by the director. If the level of activity exceeds the minimum levels specified in MSB 17.61.090, Traffic Standards, a traffic control plan consistent with state regulations may be required;

(a) Road maintenance may be required of permittee;

Findings of Fact:

1. Access to the subject parcel is obtained from East Fireweed Road, with driveway permit number 33634 approved by ADOT&PF.
2. According to the application material, the operation will extract sand, gravel, and rock from the subject parcel for use on the ADOT Seward Meridian Parkway Road Improvements Project.
3. According to the application material, the haul route is identified as traveling east from the permitted approach onto East Fireweed Road, then north onto South Hyer Road, and then west onto the East Parks Highway.
4. According to the application material, the proposed peak hour of operations will be approximately 10:00 a.m. to 11:00 a.m., with an estimated 26 trips.
5. According to the application material, the proposed operation will not generate traffic of more than 100 vehicles during the morning or afternoon peak hours or produce more than 750 vehicles daily.

Conclusion of Law: Based on the above findings, the proposed traffic route and traffic volumes are

identified. Traffic generated from the proposed use will not exceed 100 vehicles during the morning or afternoon peak hours or produce more than 750 vehicles a day (MSB 17.28.060(A)(3)).

(4) visual screening measures shall include a detailed description of the type of visual screening to be utilized, and shall be maintained as necessary during the course of extraction activities. Visual screening may include, but is not limited to, berms, natural vegetation, solid fences, walls, evergreen hedges or other means as approved by the commission. If mining is planned to be conducted within 300 feet of the property line, berms or other visual screening methods shall be a minimum of ten feet in height. If mining is planned to be conducted greater than 300 feet from the property line, the applicant shall utilize commission-approved screening methods to minimize visual impacts of the mining operation. The commission shall adopt policies and procedures to assist applicants in developing screening plans. In its discretion, the commission may waive screening requirements where the topography of the property or the placement of natural barriers makes screening not feasible or not necessary. Screening requirements shall be required in consideration of and in accordance with existing uses of the adjacent property at the time of designation of the interim materials district. An interim materials district shall not be required to screen the district from uses which arise after the designation of the interim materials district;

Finding of Fact:

1. According to the application material, visual screening will be achieved by maintaining a 100-foot buffer between the proposed excavation site and road traffic along East Fireweed Road
2. According to the application material, the operation will construct berms that are 10 feet tall by 40 feet wide, with a slope of 1:2, at the perimeter of the excavation area for visual screening purposes.
3. According to the application material, the operation will utilize existing topography to position equipment below the surrounding grade as part of the visual screening measures.

Conclusion of Law: Based on the above findings, vegetative buffers, earthen berms, and operations below the existing topography will meet the visual screening requirements (MSB 17.28.060(A)(4)).

(5) noise mitigation measures shall include a description of measures to be taken by the applicant to mitigate or lessen noise impacts to surrounding properties and shall include, but not be limited to, hours of operation of noise-producing equipment, erecting noise barriers (i.e., berms a minimum of ten feet in height) between noise-producing equipment and adjacent uses, location of noise-producing equipment (i.e., below grade in excavated pit areas), and measures to utilize equipment with noise reduction features.

(a) no sound resulting from the earth materials extraction activities shall create a sound level that exceeds the limits set forth for the existing receiving land use category in Table 1 when measured at or within the property boundary of the receiving land us:

Table 1. Sound Levels by Receiving Land Use

Receiving Land Use Category	Time	Sound Level Limit (dB(A))
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<i>Residential Use</i>	<i>7 a.m. – 10 p.m.</i>	<i>60</i>
	<i>10 p.m. – 7 a.m.</i>	<i>50</i>
<i>Commercial Use</i>	<i>7 a.m. – 10 p.m.</i>	<i>70</i>
	<i>10 p.m. – 7 a.m.</i>	<i>60</i>
<i>Industrial Use or Undeveloped Land</i>	<i>At all times</i>	<i>80</i>

(b) [Repealed by Ord. 08-150, § 2, 2008]

(c) for any sound that is of short duration, between the hours of 7 a.m. and 7 p.m. the levels established in Table 1 may be increased by:

(i) five dB(A) for a total of 15 minutes in any one hour; or

(ii) ten dB(A) for a total of five minutes in any hour; or

(iii) fifteen dB(A) for a total of one and one-half minutes in any one-hour period.

(d) an interim materials district or a conditional use permit for earth materials extraction activities shall not be required to provide noise mitigation measures to mitigate or lessen noise impacts if a land use requiring lesser noise levels than for an industrial area arises on properties adjacent to earth materials extraction sites after the designation of the interim materials district or the effective date of the conditional use permit.

Findings of Fact:

1. The closest residential structure is located approximately 440 feet to the west of the proposed extraction area.
2. According to the application material, the operation will operate from approximately April 1 to November 15 each year, depending on seasonal weight restrictions and weather.
3. According to the application material, hours of operation will be 24 hours a day, seven days a week.
4. According to the application material, heavy equipment is routinely checked and serviced as needed to ensure that backup alarms and white noise alarms remain operational. Exhaust mufflers are maintained to ensure they operate as designed.
5. According to the application material, the noise mitigation plan includes several measures: using mufflers on heavy equipment, operating equipment behind existing berms and hills, and constructing berms that are at least 10-foot tall using clearing and grubbing material or gravel in those areas where the terrain does not provide sufficient noise barriers.
6. According to the application material, a batch plant is not proposed at this site.

Conclusion of Law: Based on the above findings, the noise mitigation measures included in the application will ensure that sounds generated from earth material extraction activities do not exceed sound levels set forth in MSB 17.28.060(A)(5). Noise levels exceeding the levels in 17.28.060(A)(5)(a) are prohibited.

(6) lighting standards are:

(a) exterior lighting shall be located and shielded to direct the light towards the ground, in order to minimize light spillage onto adjacent properties and upward

- into the night sky.*
- (b) illumination or other fixtures mounted higher than 20 feet or 150 watts or more shall have downward directional shielding.*

Finding of Fact:

1. According to the application material, exterior lighting will be located and shielded to direct the light towards the ground. When fixtures are mounted higher than 20 feet or have 150 watts or more, they will have downward-directional shielding.

Conclusion of Law: Based on the above finding, the application meets lighting standards (MSB 17.28.060(A)(6)).

- (7) Except as permitted by MSB 17.30.037, the following restrictions shall apply: an undisturbed buffer shall be left and no earth material extraction activities shall take place within 100 linear feet from a lake, river, stream, or other water body, including wetlands (unless permitted by U.S. Army Corps of Engineers 404 Permit, MSB 17.28.040(A)(5)).*
- (a) an undisturbed buffer shall be left and no earth material extraction activities shall take place within 100 linear feet from a lake, river, stream, or other water body, including wetlands (unless permitted by United States Army Corps of Engineers 404 Permit, MSB 17.28.040(A)(5)).*
- (b) a four-foot vertical separation between all excavation and the seasonal high water table shall be maintained.*

Findings of Fact:

1. According to the application material, earth materials extraction activities will not take place within 100 feet of any identified wetlands or waterbodies.
2. The record includes maps identifying surrounding property ownership, existing land uses, wetlands, and waterbodies within one-quarter mile of the proposed site.
3. According to the application material, the applicant is not proposing to mine below or within four feet of the seasonal high water table.
4. According to the application material, the operation will monitor the seasonal high water table by excavating test pits.

Conclusion of Law: Based on the above findings, the applicant will not conduct earth material extraction activities within 100 linear feet of any identified wetland, stream, river, or other waterbodies, and the operator will not extract material within four feet of the seasonal high water table (MSB 17.28.060(A)(7)).

STAFF RECOMMENDATIONS

Staff recommends approval of an Administrative Permit for Earth Materials Extraction Activity to commercially extract approximately 350,000 cubic yards for two years from 4290, 4370, & 4480 East Fireweed Road and 4401 East Fairview Loop, Tax ID #s 17N01E18A005, 17N01E18A012, 17N01E18A013, and 17N01E18A014. The application meets all the standards of MSB 17.30 and 17.28, and staff recommends approval of this permit with the following conditions:

1. All aspects of the operation shall comply with the details outlined in the application material. An amendment to the Administrative Permit shall be required prior to any alteration or expansion of the material extraction operation.
2. Material extraction shall be limited to the area identified in the applicant's site plan, submitted on October 8, 2024.
3. The authorization for earth material extraction activities approved by this Administrative Permit begins on April 1, 2025, and expires on April 1, 2027.
4. Each contractor or company working at the site shall be provided with a copy of the approved permit.
5. The operation may operate 24 hours a day, seven days a week; however, it shall comply with the maximum permissible sound level limits allowed in the MSB Code, as specified in MSB 17.28.060—Site Development Standards.
6. Vehicles and equipment shall be inspected for leaks daily.
7. Vehicle on-site maintenance shall be done in an area where drip pans or other discharge prevention devices can contain all leaks.
8. Any hazardous materials, drips, leaks, or spills shall be promptly attended to and adequately treated.
9. All construction exits shall comply with standard Alaska Pollutant Discharge Elimination System requirements to minimize off-site vehicle tracking of sediments and discharges to stormwater.
10. The operation shall perform dust mitigation techniques as described in the application as needed to minimize dust impacts to the surrounding areas.
11. All track-out sediments from the site shall be removed from the right-of-way daily.
12. The operation shall comply with all applicable federal, state, and local regulations.
13. A four-foot vertical separation shall be maintained between all excavations and the seasonal high-water table.
14. The use of either a batch plant or a hot mix plant at the site is prohibited.
15. The property owner shall comply with the reclamation standards of MSB 17.28.067.
16. All junk, junk vehicles, and trash, as defined by MSB 8.50, shall be removed and properly disposed of prior to the completion of reclamation on the subject parcel.
17. If reclamation information is updated with the Alaska Department of Natural Resources, a copy of the updated information shall be provided to the MSB Development Services Division.
18. If cultural remains are found during material extraction activities, the MSB Planning Department shall be contacted immediately so the remains can be documented.
19. Borough staff shall be permitted to enter any portion of the property to monitor compliance with permit requirements. Such access will, at minimum, be allowed on demand when activity is occurring and, with prior verbal or written notice, and at other times as necessary to monitor compliance. Denial of access to Borough staff shall be a violation of this Administrative Permit.

The background of the cover is a landscape photograph. In the foreground, there is a wide, flat field of dry, golden-brown grass. A dense line of tall, thin, bare trees, likely birches, stretches across the middle ground. In the background, a range of rugged mountains is covered in snow, with some peaks partially obscured by light, wispy clouds. The sky is a clear, bright blue.

Matanuska-Susitna Borough Core Area Comprehensive Plan

2007 Update

**Matanuska-Susitna Borough
Department of Planning and Land Use**

Acknowledgements

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Chapter 1. Introduction

1.1 Purpose of the Comprehensive Plan

The Matanuska-Susitna Borough's Core Area has about 25,000 residents. It is more populous than any incorporated city in the state except Fairbanks. It is growing at a faster rate than any city in the state. The Core Area is expected to more than double in population over the next two decades. More than 40 percent of the Core Area's total land base is already developed. Much of the balance is primed for development.

The purpose of this Core Area Comprehensive Plan Update is to set out goals and policies to guide development in the Core Area in a manner that will enhance the quality of life and the public health, safety, and welfare. These goals and policies will guide public and private decisions about land use and public infrastructure for the Core Area.

The time horizon for the plan extends from the present through 2025. In the Core Area, by 2025¹

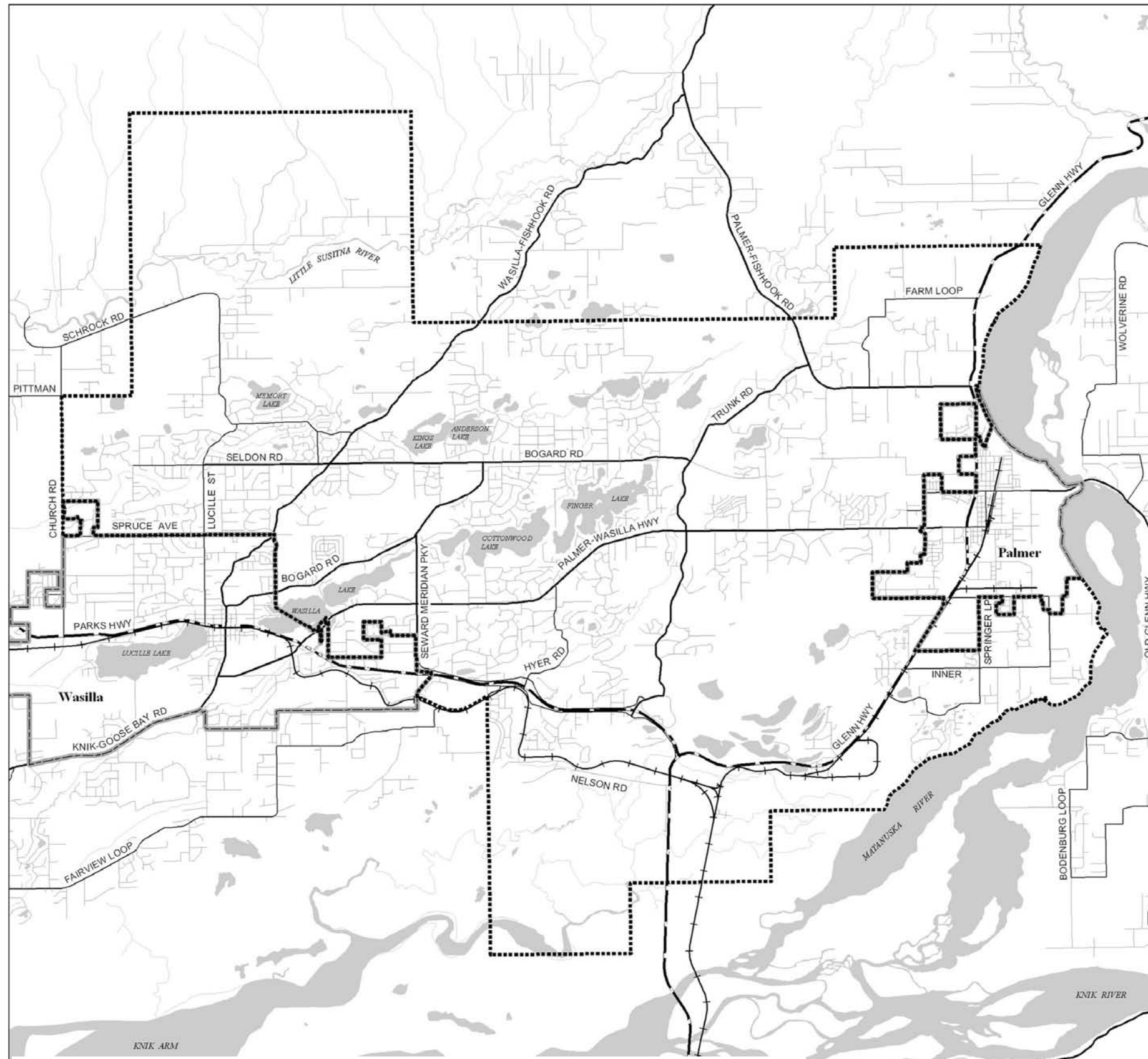
- About 15,200 new homes will be built;
- Trade and services activity will triple;
- Most vacant private land will be developed for homes and businesses;
- The transportation system will need to more than double its capacity;
- Unless properly managed, opportunities to acquire public open space and sites for public facilities will decrease;
- Unless properly managed, some treasured features of life in the Core Area – a semi-rural lifestyle, the natural landscape, plentiful open space – will diminish;
- The structure for local governance will evolve;
- Borough government will spend billions of dollars for public improvements and services, and private investors will invest many billions more.

The Comprehensive Plan Update is a policy blueprint for future community development. After its adoption, its effectiveness will stem from its influence on public and private land use decisions, public decisions about capital improvements and public services, environmental management, and inter-governmental coordination.

1.2 Definition of the Core Area

The Core Area is a 91 square-mile unincorporated area between the cities of Palmer and Wasilla (Figure 1). It includes suburban and semi-rural residential subdivisions, mushrooming commercial corridors along the Parks Highway and Palmer-Wasilla Highway, public lands, numerous lakes and stream corridors, and large-acre farmland and homestead tracts with potential for future development.

¹ The population, economic, and land use forecasts are from Chapter 3.



Matanuska-Susitna Borough
CORE PLANNING AREA

- Legend**
- Core Planning Area
 - City Boundary
- Road Classification**
- HIGHWAY
 - MAJOR
 - MEDIUM
 - MINOR
 - RAILROAD



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Figure 1: Vicinity Map, Core Area

Beyond that, the Core Area is a mixture of political, administrative, and social units. It includes

- Five advisory community councils (Farm Loop, Gateway, North Lakes, South Lakes, Tanaina), plus areas outside any community council;
- Parts of five road service areas, plus areas outside any road service area;
- Parts of three fire service areas, plus areas outside any fire service area;
- Parts of the water/sewer service areas of the cities of Palmer and Wasilla;
- Parts of five assembly districts;
- Five lake management plans;
- Seven residential land use districts;
- One census designated place, plus parts of eight others;
- Much of the Palmer and Wasilla trade areas.

In summary, the Core Area is a well-defined planning area, but has numerous political, administrative and advisory bodies that share responsibility to make and implement local governmental decisions.

1.3 Relation to other Borough Plans and Planning Ordinances

Alaska state law mandates that all boroughs “shall provide for planning, platting, and land use regulation on an areawide basis”.² The Matanuska-Susitna Borough has adopted a comprehensive plan, exercises platting authority, and regulates land use borough-wide except that it has delegated selected planning powers to the cities of Palmer, Wasilla and Houston. The borough comprehensive plan is a mosaic of many separate plan elements:

- The borough-wide Comprehensive Plan and Coastal Management Plan
- The Core Area Comprehensive Plan and several other city and community comprehensive plans
- Functional plans such as the Long Range Transportation Plan; the Parks, Recreation and Open Space Plan; the Recreational Trails Plan; the Point McKenzie Port Master Plan; the Community Health Plan; and the Rail Corridor Study
- Thirty-five lake management plans

The relevant recommendations of other borough comprehensive plan elements are integrated into this Core Area Comprehensive Plan. This plan may not contradict any of the goals and policies found within the borough’s overall Comprehensive Plan.

The Core Area is distinct from the cities of Palmer and Wasilla, but its ongoing development is intertwined with those cities and with Anchorage’s economy. Palmer and Wasilla, under borough-delegated authority, have adopted and implement their own comprehensive plans which are part of the borough comprehensive plan. The cities collaborate with the borough in delivery of some public services (libraries, fire, EMS) outside their boundaries. They have authority to exercise other extra-territorial powers, most importantly, public water and sewer services. The Core Area and the cities interact most directly at their common boundaries. Both cities have

² AS 29.40.010(a).

recently annexed territory from the Core Area. They may seek future annexations of adjacent urbanizing tracts. For all these reasons, coordination between Core Area and Palmer and Wasilla comprehensive plans is advisable.

The borough's annual Capital Improvement Program is a vital tool for plan implementation, but not an official element of the borough comprehensive plan.

The main borough planning ordinances that affect the Core Area are

- The general provisions for borough planning administration in MSB Title 15;
- The platting requirements of MSB Title 27;
- The Core Area conditional use permit requirements of MSB 17.61;
- The regulations on earth material extraction industries in MSB 17.28 – 17.30;
- The regulation of motorized uses on certain lakes and waterways in MSB 17.58;
- Several other land use regulations in MSB Title 17.

The Assembly adopted MSB 17.02, Mandatory Land Use Permit, in March 2007. The borough has not adopted a building permit system or comprehensive building code, and the Core Area has no such requirements.

The borough actively participates in the planning and decision-making processes of federal and state agencies with planning or land management responsibilities within the borough. This is an important means of coordinating state and federal activities with borough plans and policies.

1.4 Summary of Previous Core Area Comprehensive Planning

The first Core Area Comprehensive Plan was adopted in 1993, later amended in 1994 and 1997. In 2002, the borough hired the planning consultant firm peter j. smith & company, inc. to update the plan. The consultants, together with borough staff, conducted an extensive public process through May of 2004. At that time, the borough paused the comprehensive plan update project, in part to synchronize it with the Long Range Transportation Plan (LRTP), another key element of the borough Comprehensive Plan. The LRTP is now complete, and the Core Area Comprehensive Plan Update is being completed in coordination with the final LRTP.

1.5 Public Participation and Review

The typical public involvement process includes; open houses, survey questionnaires, public presentations, focus groups, and both informal and formal requests for public comments.

The Borough uses a formal process to adopt its plans. The formal process begins with the plan's review by the affected community council(s) and area residents. During the 30 day public review period the draft is available on-line, at the planning office, and local libraries. Comments about the draft should be submitted during the review period to the planning department. After the plan is reviewed it is introduced and a public hearing is held by the Planning Commission. The Planning Commission then makes its recommendations to the Borough Assembly. Another

public hearing is held at this stage, giving residents another opportunity to speak about the plan. Following the public hearing the assembly will give the final decision to either adopt, amend, or defeat the plan.

Chapter 2. Background for Planning

This background chapter summarizes the key facts about the Core Area that help frame planning issues and choices.

Population and economic growth drives demand for sites for homes, workplaces, public improvements and other land uses. This chapter highlights recent population, economic, and land use trends for the Core Area, and presents data and forecasts for the planning period 2005-2025. It also briefly profiles the public infrastructure and services that are most critical to the ongoing development of the Core Area.

2.1 Introduction

Over the past fifteen years, the rate of population and job growth in the Matanuska-Susitna Borough has surpassed all other regions of the state. The Core Area has been one of the fastest-growing parts of the borough. Palmer and Wasilla have both grown significantly, but the unincorporated suburban/rural area between the two towns has experienced even greater growth (Figure 2).

The Core Area now has more than twice as many residents as Palmer and Wasilla combined. The broad settlement pattern resembles two small central towns, surrounded by extensive suburbanizing areas forming at the outskirts of the towns, along the main highways, and on lakefronts. Much of the more accessible and attractive private property is already developed or being developed.

Historically, job opportunities in the Core Area have been scarce. Many Core Area residents traveled to Palmer, Wasilla, Anchorage and elsewhere in the state to work, shop, and obtain services. This pattern is gradually changing as the local trade and services economy expands.

The Core Area's appeal – lower land and housing costs, a more rural “Alaskan” quality of life, an attractive natural landscape, light-handed government – draws many homebuyers from Anchorage. Many Core Area residents have moved there despite the inconvenience of a daily work commute to Anchorage.

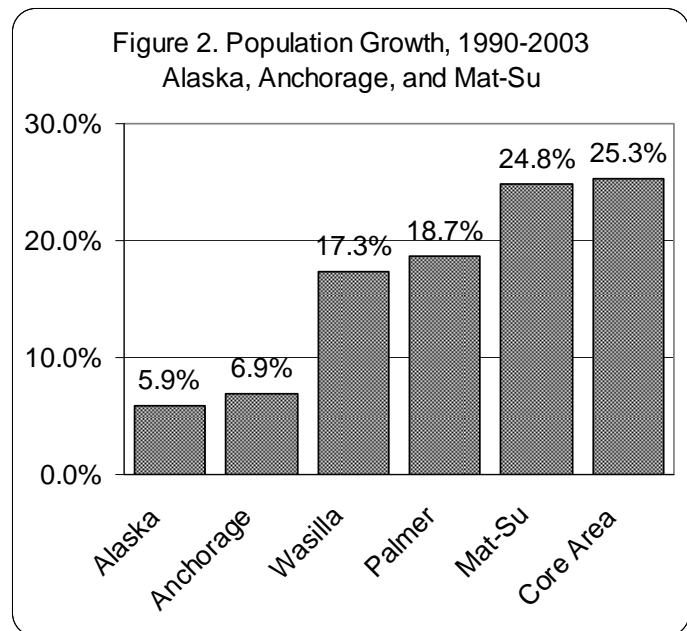


Figure 2

History and Archaeology

The history of the Matanuska-Susitna Borough Core Area is the history of the Matanuska and Susitna Valley region. The Core Area, which spans the distance between Palmer and Wasilla, is rich in the history of those two principal borough communities. The towns were respectively founded to support gold mining north of the core area and farming within it early in the twentieth century. The Alaska Railroad and its spur to coal fields north of Palmer add to the area's history. But long before this more well-known history, the Dena'ina (Tanaina) Athabascan Indians used and perhaps settled in the core area.



Dena'ina Chief Vasilla, his wife Undudya, and their son circa 1906, near Wasilla Lake (Anchorage Museum of History and Art)

For planning purposes, locating sites related to past events and past people is important, because such sites give residents a sense of place and pride in their community and because such sites can attract visitors. The borough is fortunate to have some of the best examples of historic agricultural sites in the state. The Alaska Division of Parks and Outdoor Recreation Office of history and Archaeology lists 180 Alaska Heritage Resource Survey (AHRs) sites in the core area. The vast majority of these historical or archaeological sites are related to farms and homesteads. They have been reported, but most have not been thoroughly analyzed for significance. While there may be many significant sites among the 180 sites, the limited analysis has led to limited recognition of national significance. Only eight sites have been determined eligible for inclusion of the National Register of Historic Places. As development continues in the Core Area into the twenty-first century, the borough and state will want to be sure that no invaluable site is lost and may want to actively encourage preserving some sites so that future generations of valley residents understand how the region developed.

2.2 People

From 1990 to 2000, the Core Area added about 5,500 residents to reach about 20,600 residents. Since 2000, growth has accelerated. The Core Area has added another 5,200 residents, up to about 25,800 residents by 2005 (Table 1). The growth rate averaged about five percent annually during that time. Some population groups are growing faster than others.³

³ The figures below are from the 2000 census and Alaska Economic Trends, December 2005.

Table 1. Historic Population, 1990 -2005
Core Area, Palmer, Wasilla, and Mat-Su Borough

	1990 ¹	2000 ¹	2005 ²
Core Area (estimated)	15,081	20,593	25,798
Palmer	2,866	4,533	5,382
Wasilla	4,028	5,469	6,413
Mat-Su Borough	39,683	59,322	74,041

Sources: ¹U.S. Census Bureau; ²Alaska Department of Labor and Workforce Development.

- More of the Core Area’s growth stems from net migration (more in-migrants than out-migrants) rather than natural increase (more births than deaths). The Mat-Su Borough, including the Core Area, is the only region of the state where net migration exceeds natural increase. This fact signifies that most new Core Area residents live there by choice, not because they were born there or work there. This in-migration helps drive housing demand.
- The 25 to 40 year age group is growing faster than the overall population. Many newcomers in that age belong to families with young children. This group particularly drives new housing demand and construction.
- School-age children have remained a constant share of total population – about 25 percent. This suggests that demand for schools and other public services geared to schoolchildren will rise in step with overall population growth.
- Seniors are a small part of the total population, but also the fastest growing age group. This implies that demand will climb for the types of services and housing (e.g., health care and smaller single-floor dwelling units) favored by seniors.
- Many young adults move away after high school to pursue educational and career opportunities. There are about half as many residents in the 20-24 years age group as in the 15-19 years age group. This gap is a rough measure of the extent to which young adults are leaving the community.

Question: How many people live and work in the Core Area?

Answer: We don’t know exactly.

The U.S. Census Bureau and the Alaska Department of Labor and Workforce Development are the most authoritative sources of local population and economic data. These agencies do not publish data for the Core Area, which is not a defined political unit. They do, however, publish data for other local geographic units that more or less approximate the Core Area. These data can be used to estimate population and economic activity for the Core Area.

The estimates give a good picture of population and economic trends in the Core Area. Even though the absolute numbers are estimates, the percentage breakdowns are reliable.

2.3 Economy

After a long period as a satellite to Anchorage’s economy, the Mat-Su Borough, including the Core Area, is emerging as a dynamic economic region on its own account. In the 1990s, it was the state’s strongest growing economic region.

The Core Area’s workforce is highly mobile. Its job market includes the greater Palmer and Wasilla labor areas as well as Anchorage. Ninety-six percent of Mat-Su Borough’s local employment is in the Palmer and Wasilla labor areas. Thus, borough-wide data fairly reflect the Core Area’s local job market.

Historically, the borough has been job poor. Its employment base was concentrated in Palmer and Wasilla and depended heavily on the public sector. The ratio of residents to local jobs was very high; in 1990, there were 5.6 residents for every local wage job (Table 2). Unemployment rates were high, typically above 10 percent. About half of Mat-Su’s workers commuted to jobs in Anchorage and other parts of the state.

More recently, strong population growth and prosperity have been transforming the region’s economy in two ways. First, a residential and commercial building boom has boosted construction, building and landscape materials supply, home furnishings, banking and real estate, and other growth-linked sectors.

Second, rapid population growth has also expanded the market for local trade and service businesses. With market growth, it becomes profitable to sell locally many goods and services formerly bought or brought from elsewhere. This process – economists call it “import substitution” – can be a powerful force for local growth. It can trigger job growth and further population growth, and create spiraling demand for commercial development. This “virtuous cycle” has intensified job and population growth over the past decade. As the region’s economy continues to mature over the years ahead, it will add many more retail and service sector businesses and jobs before it reaches saturation.

Table 2. Residents per Local Job MSB, 1990-2004

	Residents per Local Job
1990	5.6
2000	4.8
2004	4.4

Source: Alaska Department of Labor & Workforce Development.

Even so, the region’s basic employment – jobs that earn income for the home region by selling local goods and services to buyers in other regions – remains weak. For example, manufacturing, agriculture and mining account for only 2 percent of the region’s jobs compared to 14 percent nationally. Instead, local residents still bring home much of their household income from out-of-region employment. Commuters are, in effect, the region’s basic employees, exporting their labor and bringing home income. As late as 2003, about 45 percent of Mat-Su workers commuted to jobs in Anchorage (34 percent) or elsewhere in the state (11 percent).⁴

⁴ Alaska Economic Trends, December 2005.

Lately, job growth has accelerated, even outpacing population growth. Since 2000, job growth has averaged seven percent annually, almost twice the rate of population growth four percent). The ratio of residents per job dropped from 4.8 to 4.4 (Table 2). Job growth has been especially strong in the construction, trade, health care, and leisure and hospitality sectors (Table 3). These sectors accounted for 63 percent of all job growth.

Table 3. Employment in Selected Growth Sectors, Mat-Su Borough, 2000-2004

Sector	Employment		Increase 2000-2004	
	2000	2004	Number	Percent
Construction	1,136	1,736	+573	49%
Trade	2,467	3,036	+569	23%
Health care & social assistance	1,561	2,161	+600	38%
Leisure & hospitality	1,323	1,917	+594	45%
All other	5,874	7,237	+1,363	23%
Total	12,361	16,087	+3,726	30%

Source: Alaska Department of Labor and Workforce Development.

These economic trends have significant land use implications. The make-up of economic growth affects the mix of demand for specific land uses, e.g, big box stores, professional offices, eating establishments, and motels. Also, different types of workplaces typically support different employment densities. For example, office-based businesses are intensive land uses that typically support twice as many employees per acre as service businesses, and three times as many as retail stores (Table 4). Industry and transportation-related businesses such as warehousing are extensive land uses that support the fewest jobs per acre.

Similarly, diversification of the local support sector and the persistence of commuting influences on local and inter-regional traffic patterns. More local businesses mean fewer shopping trips to Anchorage, but more local daytime and evening traffic. On the other hand, commuters boost week-day work-day traffic between Mat-Su and Anchorage. Mat-Su residents spend more time going to and from work (average travel time to work is 40.7 minutes) than any region in the state, more than twice Anchorage's (19.6 minutes). Also, 50 percent more Mat-Su households than Anchorage households own three or more vehicles.⁵

Table 4. Employees per Acre by Land Use

Land Use	Employees per Acre
Retail	18
Services	29
Offices	58
Industrial	6
Transportation	1-2

Source: Adapted from the Anchorage Bowl Commercial and Industrial Land Use Study.

Household incomes and purchasing power in the Core Area are well above average. According to the 2000 census, the median household income in all four of the census designated places that together comprise most of the Core Area (Farm Loop - \$55,234; Gateway - \$60,385; Lakes - \$63,250; Tanaina - \$64,491) was higher than the in borough overall (\$51,221) or statewide (\$51,571).

History of Settlement in the Core Area

The following series (Figures 3-6) of aerial photos illustrates how landforms and roads have shaped the pattern of settlement in the Core Area.

1949: Settlement is centered at Palmer, mostly on agricultural lands, and near the Glenn Highway and Alaska Railroad. Wasilla is a small cross-roads town. The future circulation pattern – partly section line right-of-ways, partly winding roadways dictated by lakes and landforms – is already visible. Core Area development is spotty along rural roads.

1985: With completion of the Parks Highway, Wasilla’s development footprint has expanded. The elongated east-west lakes and moraines inhibit north-south travel, so Core Area development takes an east-west form. Commercial corridors are emerging along the Parks and Palmer Wasilla highways. Subdivisions cluster along main roads and around the lakes between Palmer and Wasilla.

1996: Residential settlement accelerates, notably north of Wasilla, east of Wasilla between the Parks Highway and Bogard Road, and west of Palmer.

2004: Development continues to intensify along the Parks and Palmer Wasilla highways. Infill residential development coalesces north and east of Wasilla and west of Palmer. Few large undisturbed natural areas, most of them public lands, remain.



Retail Development, Palmer-Wasilla Highway (Sandra Petal, MSB)

⁵ The 2000 census is the source for the travel time to work and vehicle ownership figures.



Matanuska-Susitna Borough
CORE PLANNING AREA
Historical Imagery
1949

Legend

 Core Planning Area

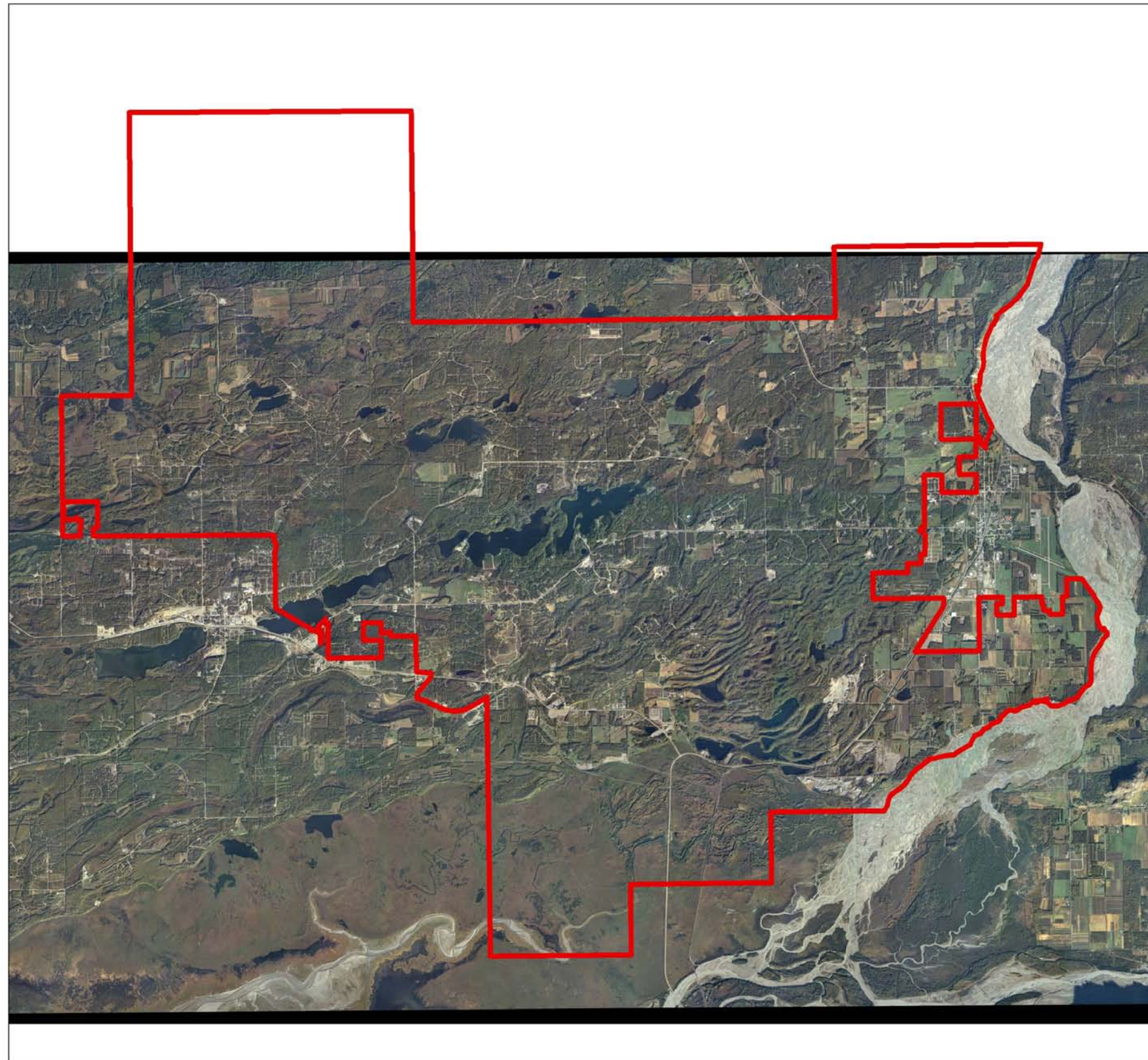


Source: 1949 Imagery from AeroMap

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Figure 3: 1949 Aerial Photograph, Core Area



Matanuska-Susitna Borough
CORE PLANNING AREA
Historical Imagery
1985

Legend

 Core Planning Area



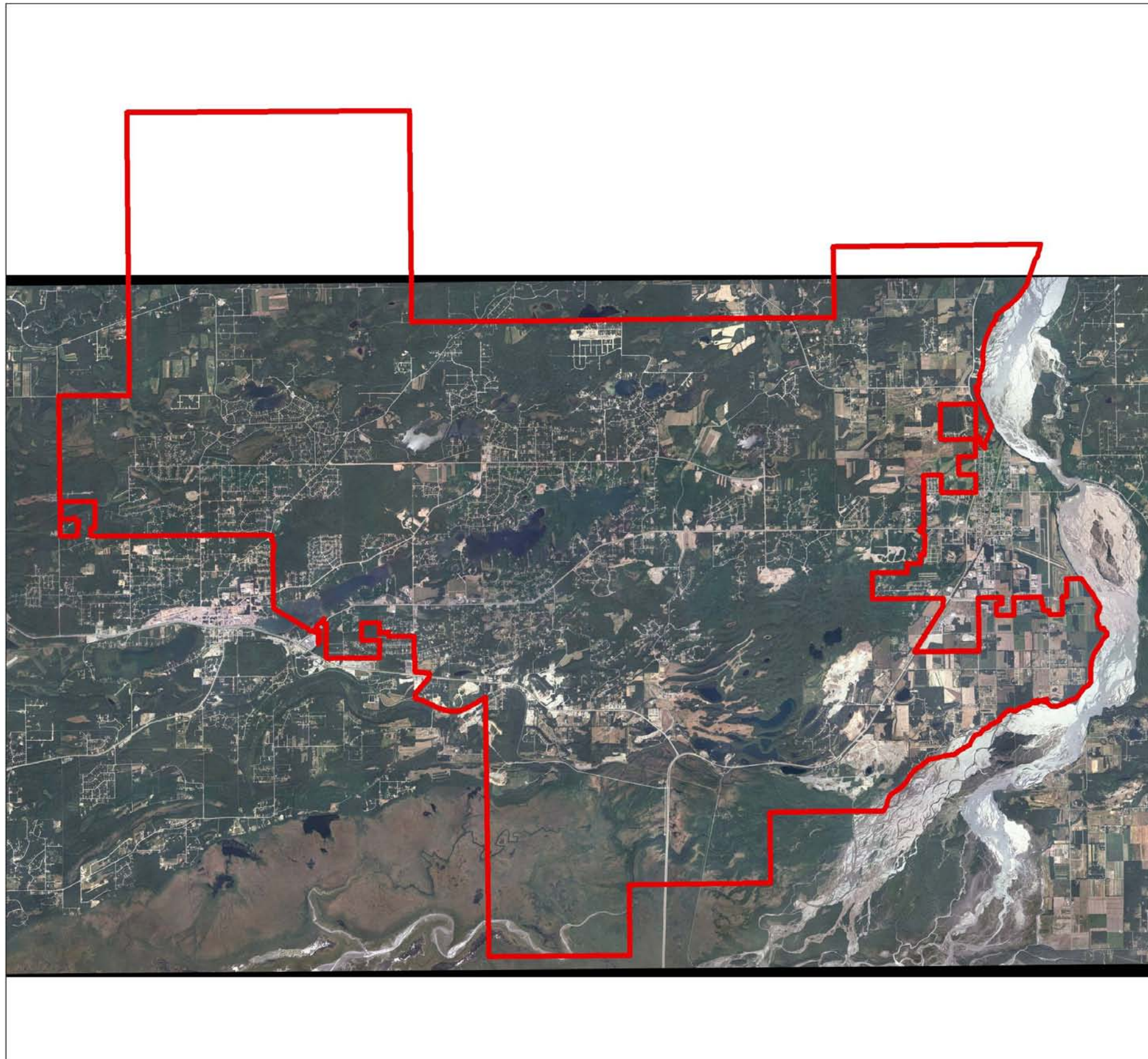
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Source: 1985 Imagery from AeroMap

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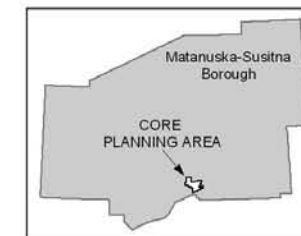
Figure 4: 1985 Aerial Photograph, Core Area



Matanuska-Susitna Borough
CORE PLANNING AREA
Historical Imagery
1996

Legend

 Core Planning Area



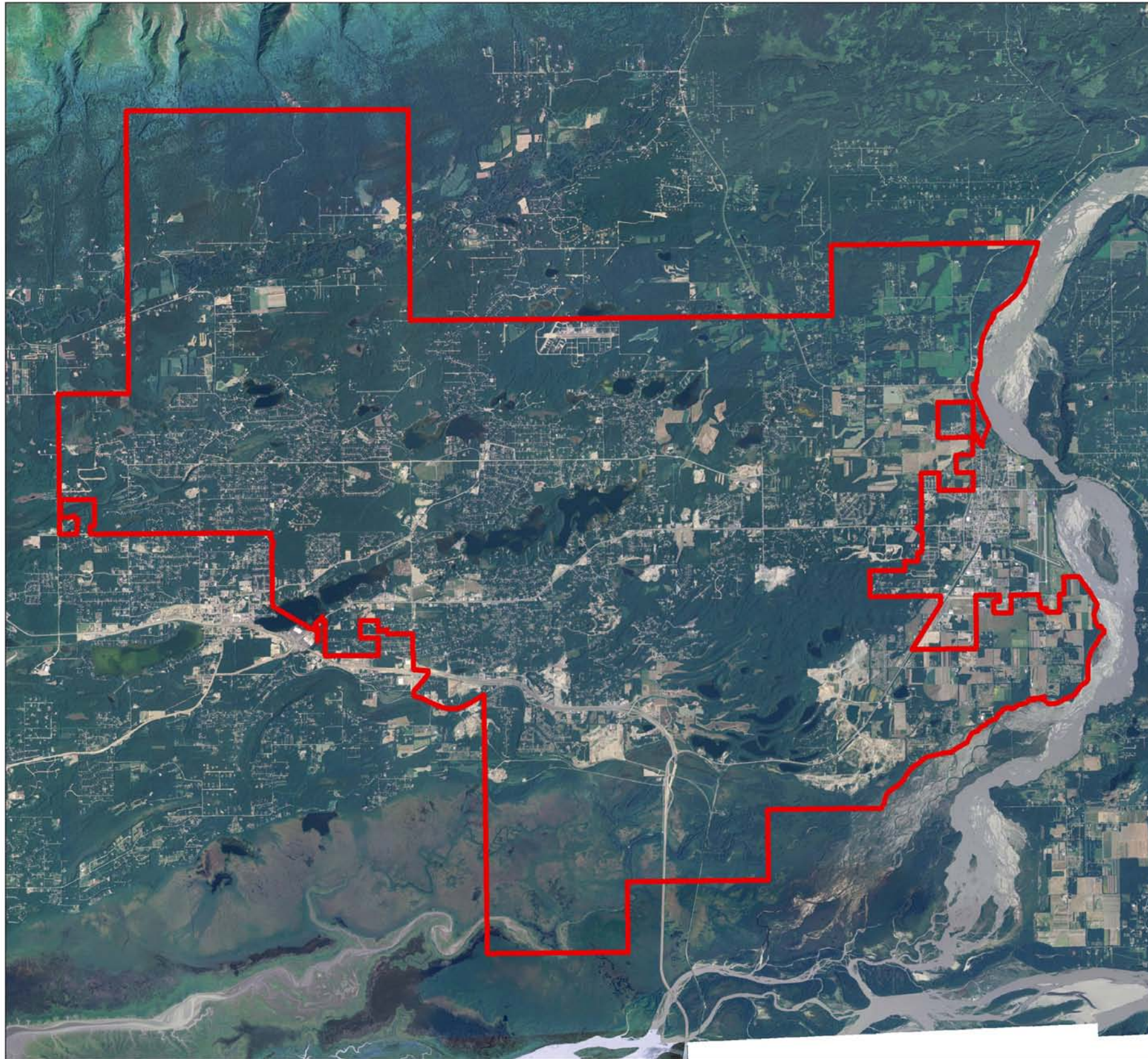
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Source: 1996 Imagery from AeroMap

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Figure 5: 1996 Aerial Photograph, Core Area



Matanuska-Susitna Borough
CORE PLANNING AREA
Historical Imagery
2004

Legend

 Core Planning Area



Source: 2004 USDA/NRCS Aerial Survey

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Figure 6: 2004 Aerial Photograph, Core Area

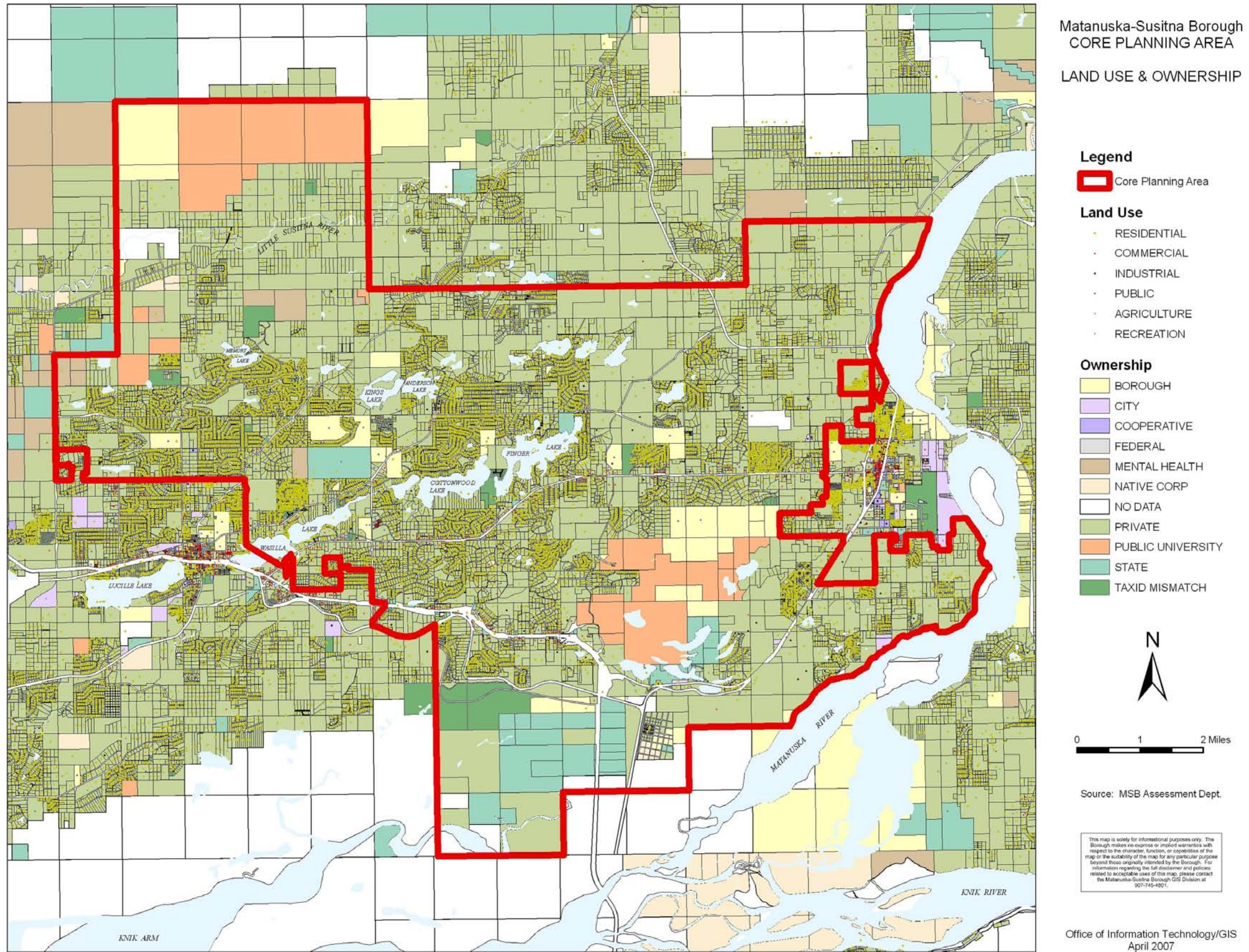


Figure 6a - Existing Land Use and Ownership

2.4 Land Use

2.4.a Land Inventory and Ownership

Even with the headlong residential and commercial growth of the past two decades, the Core Area still has a substantial but diminishing supply of undeveloped private land.

The Core Area's land base encompasses about 53,559 acres (Table 5).⁶ Overall, most land (76.7 percent) in the Core Area is privately owned. Public lands are owned by the State of Alaska (8.5 percent), the borough (1.3 percent), and other public owners (3.5 percent). Finally, the Mental Health Trust Authority (5.6 percent) and the University of Alaska (4.3 percent) own trust lands.

Table 5. Land Ownership (acres), Core Area, 2005

	Developed	Vacant	Total	Percent
Private	21,209	19,894	41,103	76.7%
Public				
State of Alaska	381	4,179	4,560	8.5%
MHTA	826	2,150	2,976	5.6%
Other	0	1,882	1,882	3.5%
Trust Lands				
University of Alaska	49	2,267	2,316	4.3%
Borough	130	592*	722	1.3%
Total	22,595	30,964	53,559	100%

Source: Mat-Su Borough GIS.

Note: This information is based on assessment records of taxable property and may not fully reflect all developed public lands.

*The borough land identified as vacant is classified as a reserved use. Contact the borough Department of Community Development for details.

There is a substantial difference in the development status of private and publicly owned lands. Overall, as of 2005, about 22,595 acres or 42 percent was developed, that is, improved with one or more structures. Almost all (94 percent) of the developed land was privately owned. About two-thirds of the remaining vacant land was privately owned. Relatively little developed land was publicly owned (6 percent) and relatively little public land was developed (about 1,400 of 11,100 acres or 11 percent). State properties such as the Palmer Hay Flats State Game Refuge and Kepler-Bradley Lakes State Recreation Area comprise a substantial share of all public lands in the Core Area and are dedicated to recreation and wildlife habitat.

As of 2005, more private land was already developed (about 21,200 acres) than remained vacant (about 19,900 acres) for future development. This measurement of the acreage available to absorb additional growth in the Core Area needs several qualifiers. Some of the "developed" property consists of farmlands, large homesteads, and earth materials extraction sites with potential for subdivision and more intensive development. Additionally, some trust land owned

⁶ These land use data are based on borough assessment records. For various technical reasons, assessment data categories do not correspond exactly with conventional land use data categories. Nevertheless, the assessment records generally reflect the overall land use picture in the Core Area.

by the University of Alaska or the Mental Health Trust Authority and intended for revenue generation may be made available for private development. Some vacant lands have limited or no potential for building purposes due to site limitations such as steep slopes, wetlands, poor soils, or flood or erosion hazards. Also, about 20 to 25 percent of the gross acreage of unsubdivided tracts is typically needed for such purposes as rights-of-way and easements.

2.4.b Existing Land Use

The Core Area’s pattern of existing land use (Table 6) reflects its early history as an agricultural settlement, then as a bedroom community for commuters. Only in the past decade has the Core Area begun to develop its due share of commercial uses. The net result is that the Core Area’s land use pattern is heavily skewed toward residential uses, with a lagging but growing share of commercial land uses. Industrial uses are few, consisting mainly of earth materials extraction sites. Agriculture land uses, once prevalent, are declining as farmland is developed for other uses.⁷ Even so, agriculture remains a viable economic activity and a substantial land use.

Table 6. Existing Land Use, Core Area, 2005

Land Use	Acres
Residential	18,604
Commercial	1,100
Industrial	574
Agricultural	605
Public	1,405
Recreation	262
Total	22,595

Note: The extent of agricultural land use is understated because parcels in multiple use (e.g., farmhouse plus agriculture) are typically classified as in residential use.

Source: Mat-Su Borough GIS.

A comparison of the Core Area’s land use profile with the more urbanized, but similarly sized, Anchorage Bowl⁸ shows the extent to which residential uses predominate (Table 7). Residences account for over 82 percent of land use in the Core Area compared to only 48 percent in the Anchorage Bowl. On the other hand, commercial and industrial uses in the Core Area together add up to less than 8 percent of existing uses compared to about 14 percent in the Anchorage

⁷ Table 6 understates the acreage currently in agricultural use. The assessment data on which the land use inventory is based assigns a primary use to parcels that support multiple uses. Thus, a parcel with both a farmhouse and agricultural uses may be classified as a residential use.

⁸ The Anchorage Bowl includes the 100 square mile area between Muldoon Road and Potter and bounded by Chugach State Park. By comparison, the Core Area encompasses approximately 91 square miles.

Bowl. The dominance of residential land uses and the relative lack of commercial and industrial development significantly affects local transportation patterns and the borough’s property tax base.

Table 7 points to another major difference between the Core Area and the Anchorage Bowl. The Core Area has less than 300 acres of dedicated local parks and open space. For comparison, the densely settled Anchorage Bowl, with over 10,800 acres of dedicated local parks and open space, has nearly five times as much park and open space per resident as the Core Area. Much of the Core Area’s “apparent” open space is actually private farmland and woodlands and unbuilt subdivisions apt to be developed in the years ahead.

Table 7. Comparative Land Use
Core Area and Anchorage Bowl

Land Use	Core Area (91 sq. miles)	Anchorage Bowl (100 sq. miles)
Residential	82.3%	47.1%
Commercial	4.9%	7.0%
Industrial	2.6%	6.8%
Agricultural	2.7%	--
Public	6.4%	10.1% ¹
Parks/Open Space	1.1%	29.0%
Total	100.0%	100.0

¹ Omits Ted Stevens International Airport, the Alaska Railroad, the Port of Anchorage, and public rights-of-way.

Source: Mat-Su Borough GIS; Anchorage 2020.

With the above considerations in mind, and assuming the Core Area’s population grows at the rate forecast, it is plausible that its buildable private vacant land will be almost fully subdivided and largely developed over the next two decades. A major factor for the long-term capacity of the Core Area to absorb additional residents will be the extent to which the diminishing land supply and rising land prices induce home builders and buyers to opt for higher residential densities. Escalating land costs will prompt development of agricultural land and more intensive redevelopment of underused or obsolete properties. Meanwhile, potential sites for public improvements will become increasingly scarce and expensive. Most privately owned apparent open space will disappear from view.

Sand and Gravel Extraction

Sand and gravel are essential for development. The Core Area has abundant sand and gravel resources which are the basis for a major local industry. The Core Area produces about half of the state's sand and gravel supply, including much of Mat-Su's and most of Anchorage's supply. Figure 12 shows the location of gravel pits now in operation in the Core Area.

The growth forecast for Mat-Su and Anchorage means that sand and gravel extraction will remain a major industry in the Core Area.



Earth Materials Extraction (Sandra Petal, MSB)

Large-scale sand and gravel extraction poses significant public issues. During operations, there is potential for conflicts with neighboring land uses over traffic and public safety, visual aesthetics, dust, noise, and water quality. Site restoration or reclamation after operations are over may become an issue.

MSB 17.28 limits earth materials extraction on 20+ acre sites to borough-designated interim use districts. The ordinance also requires

- A site development plan, consistent with standards for site characteristics, phasing of operations, access, visual screening, noise and light mitigation, and water quality protection;
- Compliance with applicable federal and state laws, including a reclamation plan per AS 27.19.

MSB 17.30 requires administrative or conditional use permits for extraction operations on sites smaller than 40 acres.

In time, as growth continues and land values appreciate, depleted gravel pits with advantageous locations often become valuable real estate. In fact, some of the gravel pits near the Glenn-Parks Y and south of Palmer are particularly well-located for future development for other uses. They have good access to the Glenn or Parks Highways, are near regional university and hospital facilities and parklands, with access to water, sewer, power, and natural gas utilities. These features endow them with potential to become prime sites for such uses as residential subdivisions, major institutions, business and industrial parks, retail centers, and recreational facilities.

Many of Anchorage's former gravel pits have been reclaimed for residential subdivisions (e.g., Kincaid Estates, Eastridge, Reflection Lake), public parks (Cheney and Taku Lakes, Waldron Park), institutions (Tudor Centre/Alaska Native Medical Center, Alaska Native Heritage Center, University of Alaska Anchorage), retail centers (Northway Mall, Lowe's), and industry.

2.4.c Housing

Housing is the most extensive single land use in the Core Area and most families' biggest investment. Housing patterns in the Core Area are distinctive in ways that are significant for land use planning. According to the 2000 census, the Core Area

- Has the highest rate of home ownership (84 percent) in the state, well above the statewide average (63 percent);
- Has a higher rate of single-family homes (83 percent) than any of the state's urban boroughs, well above the statewide average (59 percent);
- Has a higher average household size than any of the urban boroughs for both owner-occupied (3.1 persons per household) and rented (2.9 persons) housing units;
- Has a smaller share of mobile homes (5 percent) in its housing stock than any of the state's urban boroughs;
- Has the youngest housing stock in the state, because of its recent growth and home building boom.



Development near Colony Schools (Sandra Petal, MSB)

In 2004, Mat-Su Borough reported more new housing starts than the Municipality of Anchorage.⁹ Most (75 percent) of Mat-Su Borough's new starts outside Palmer and Wasilla were single family homes, but the number of multi-family starts (24 percent) rose sharply over the previous year (13 percent). It is not clear whether this increase signifies a long-term trend or an unusual year.

2.5 Residential Density

The Core Area may seem relatively low in density with plentiful open space. In fact, part of the Core Area is already more densely populated than the City of Wasilla (Table 8), and most of the open space is privately owned. Overall, the average density of the Core Area is 271 persons per square mile, about half the City of Wasilla. After allowance is made for undeveloped public lands and private farmlands, these figures suggest that the actual residential density in Core Area neighborhoods and the cities is quite similar.

Table 8. Population Density, Core Area and Cities of Palmer and Wasilla, 2005

Census Designated Place/City	Persons per Square Mile
Core Area	271
Farm Loop CDP	135
Gateway CDP	226
Lakes CDP	569
Tanaina	244
Balance of Core Area	209
City of Palmer	1,431
City of Wasilla	547

Sources: Alaska Department of Labor and Workforce Development.

⁹ Alaska Housing Market Indicators, Alaska Housing Finance Corp.

2.6 Forecasts

Population and employment forecasts are vital planning tools. Forecasts prefigure the pace and place of population and job growth and future demand for home sites, workplaces, and sites for public facilities and services.

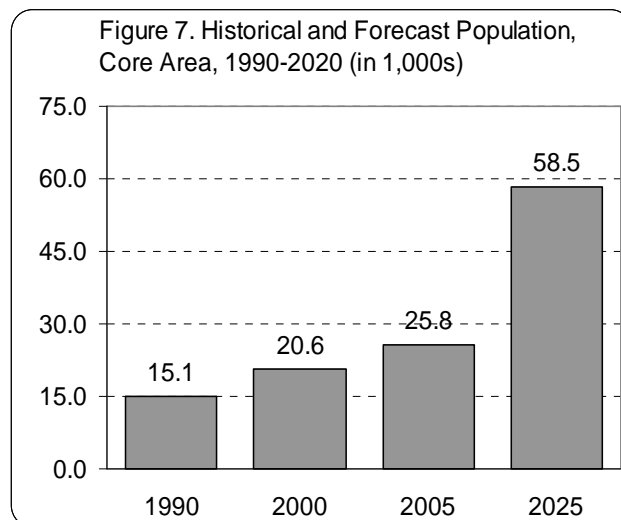
This plan update and the Long Range Transportation Plan (LRTP) use the same growth forecasts and commuter assumptions so their land use and transportation planning recommendations will match. The LRTP adapted borough-wide population and employment forecasts developed for the Knik Arm Bridge and Toll Authority (KABATA) by the Institute for Social and Economic Research (ISER). ISER prepared two forecasts: with and without construction of the proposed Knik Arm Bridge. For the Core Area, the two forecasts differ only slightly. This plan uses the “without construction” forecast. When a final decision about building the bridge is made, the growth forecasts for this plan can be updated as needed. In any event, bridge construction is not expected to begin before 2010.

The Core Area plan’s time horizon is the year 2025. A forecast is an informed guess, not a sure bet. The Core Area may reach its forecasted growth level a few years sooner or later than 2025. If growth is much faster or slower than forecast, then the urgency for implementing some plan policies may change accordingly.

ISER’s base case (i.e., most probable) forecast is that the central Mat-Su Valley’s population will average more than four percent annual growth through 2025. This extraordinary growth rate – the annual growth rate for the nation and State of Alaska is about one percent – is sustained by overflow residential growth funneled to the Mat-Su Valley from the Anchorage Bowl whose own expansion is blocked by the Chugach Mountains, Knik and Turnagain Arms, and military bases.

The LRTP allocated ISER’s regional growth forecast into traffic analysis zones (TAZs) which it used to analyze future traffic patterns.¹⁰ From the LRTP, we identified a group of 53 TAZs that best fits the Core Area, and compiled the growth forecasts for those TAZs.

This plan and the LRTP both anticipate that the Core Area’s population would more than double by 2025 from 25,800 to 58,500 residents (Figure 7 and Table 9). This forecast envisions that the Core Area will continue its rapid growth, but Palmer and Wasilla will still be the “central



¹⁰ Chapter 3 of the LRTP explains the method used to distribute regional growth to TAZs.

towns” for the Mat-Su Valley. By this forecast, the population density of the Core Area would reach 650 persons per square mile. This would exceed the City of Wasilla’s present population density of about 550 persons per square mile.

Table 9. Existing and Forecast Population and Employment Core Area, 2000, 2005, and 2025					
	2000	2005 (estimated)	2025 (forecast)	Increase 2005-2025	% Increase 2005-2025
Population	19,555	25,000	58,488	33,488	+134%
Dwelling Units	8,104	10,360	25,514	15,154	+146%
Households	6,984	8,929	20,888	11,959	+134%
Retail Jobs	1,419		4,395		
Non-retail Jobs	5,322		15,434		
Note: The minor numerical discrepancies between Table 9 and Table 1 are due to minor differences in geographic coverage. Source: Adapted from ISER and LRTP.					

The Core Area would add about 15,200 more homes to the existing housing stock of 10,400 dwelling units. Employment based in the Core Area is forecast to triple.

Generally, residential growth in the Core Area is forecasted to be strongest near Palmer and the Mat-Su Regional Medical Center/College campuses and, to a lesser extent, north and north east of Wasilla (Figure 8). Otherwise, residential growth is relatively diffused throughout the Core Area. Retail and non-retail job growth in the Core Area gravitates toward the main highway corridors east of Wasilla and west of Palmer. These existing commercial corridors attract most of the new business growth. The Regional Medical Center/College campuses vicinity is expected to become a major employment center.

As shown on Figure 8, the parts of the Core Area expected to show the strongest population and residential growth and job growth are:

- **Population and Housing** – off both sides of the Glenn Highway south of Palmer; west and northwest of Palmer; north of Bogard Road; east of Trunk Road between the Parks and Palmer Wasilla highways; west of the Parks/Glenn intersection and south of the Regional Medical Center; and north Wasilla off Seldon Road. Twelve of the Core Area’s 53 TAZs account for over half of the residential growth.
- **Retail jobs** – three-fourths of new retail jobs are concentrated east of Wasilla near the Parks and Palmer Wasilla highways and Seward Meridian Road and near the Regional Hospital. Eight TAZs account for three-fourths of retail job growth.
- **Non-retail jobs** – non-retail jobs are distributed similarly to retail jobs, except that a major new center for non-retail jobs emerges in the vicinity of the Regional Hospital/University campuses.

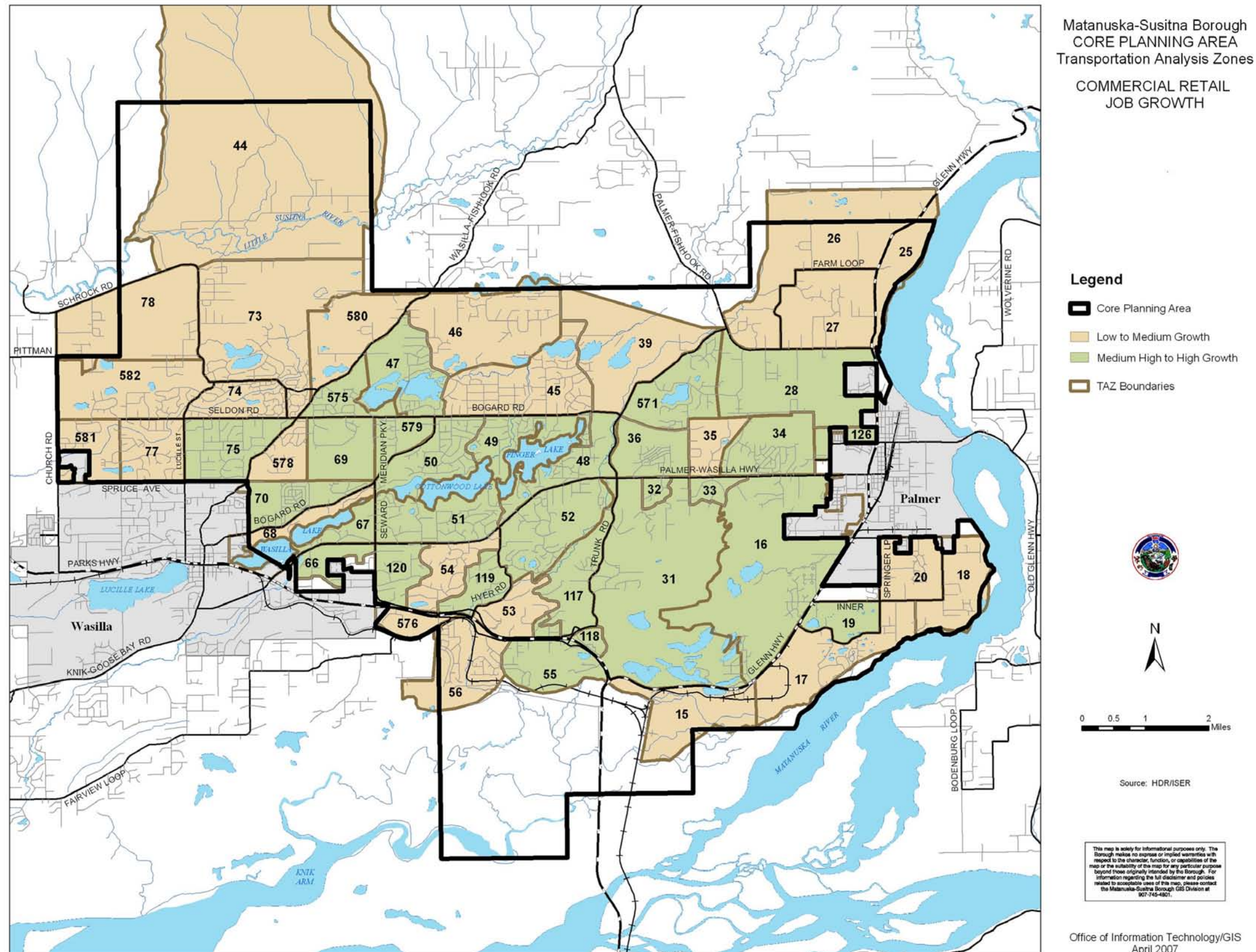


Figure 8: Potential Commercial/Retail Job Growth Areas, Core Area, 2005-2025

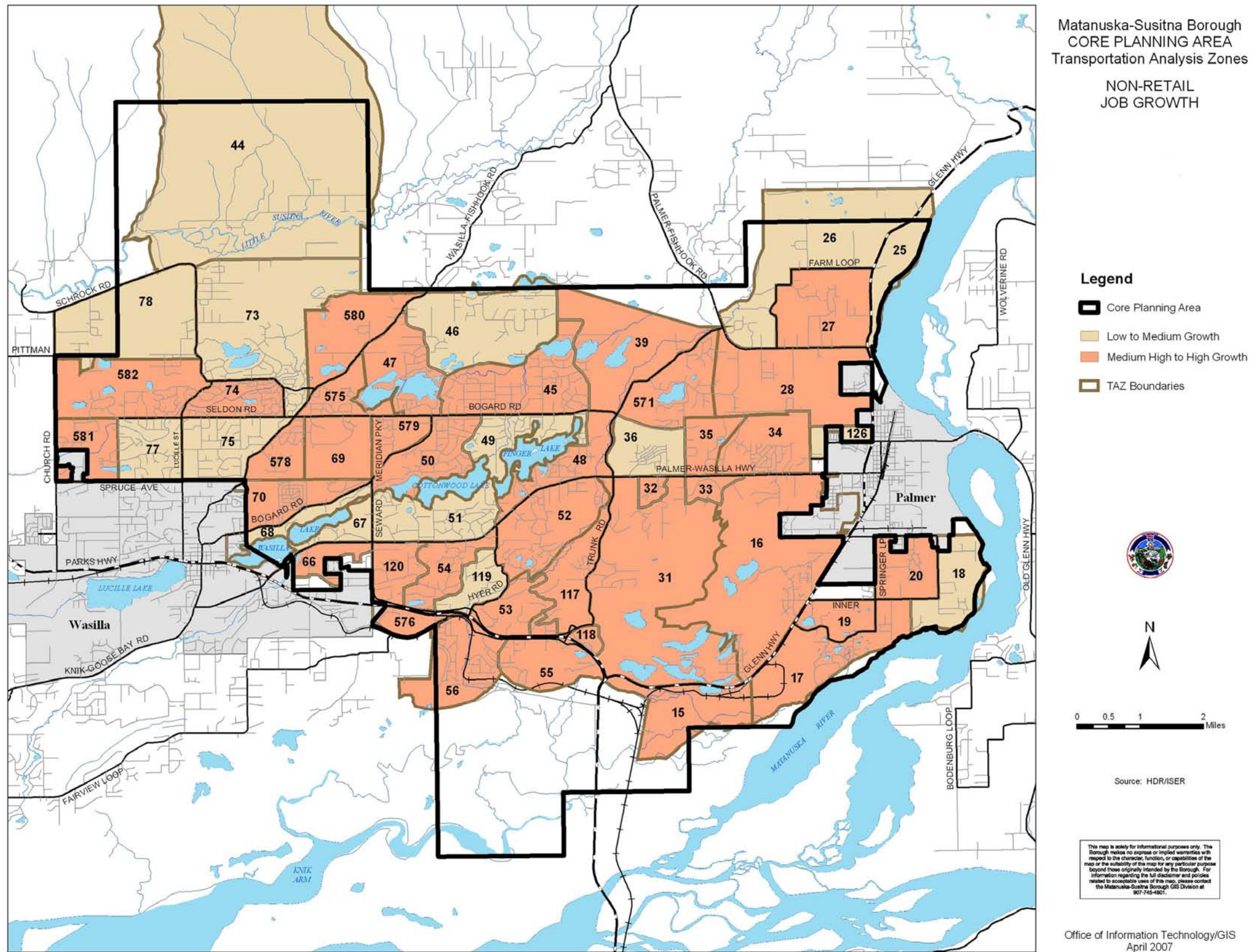
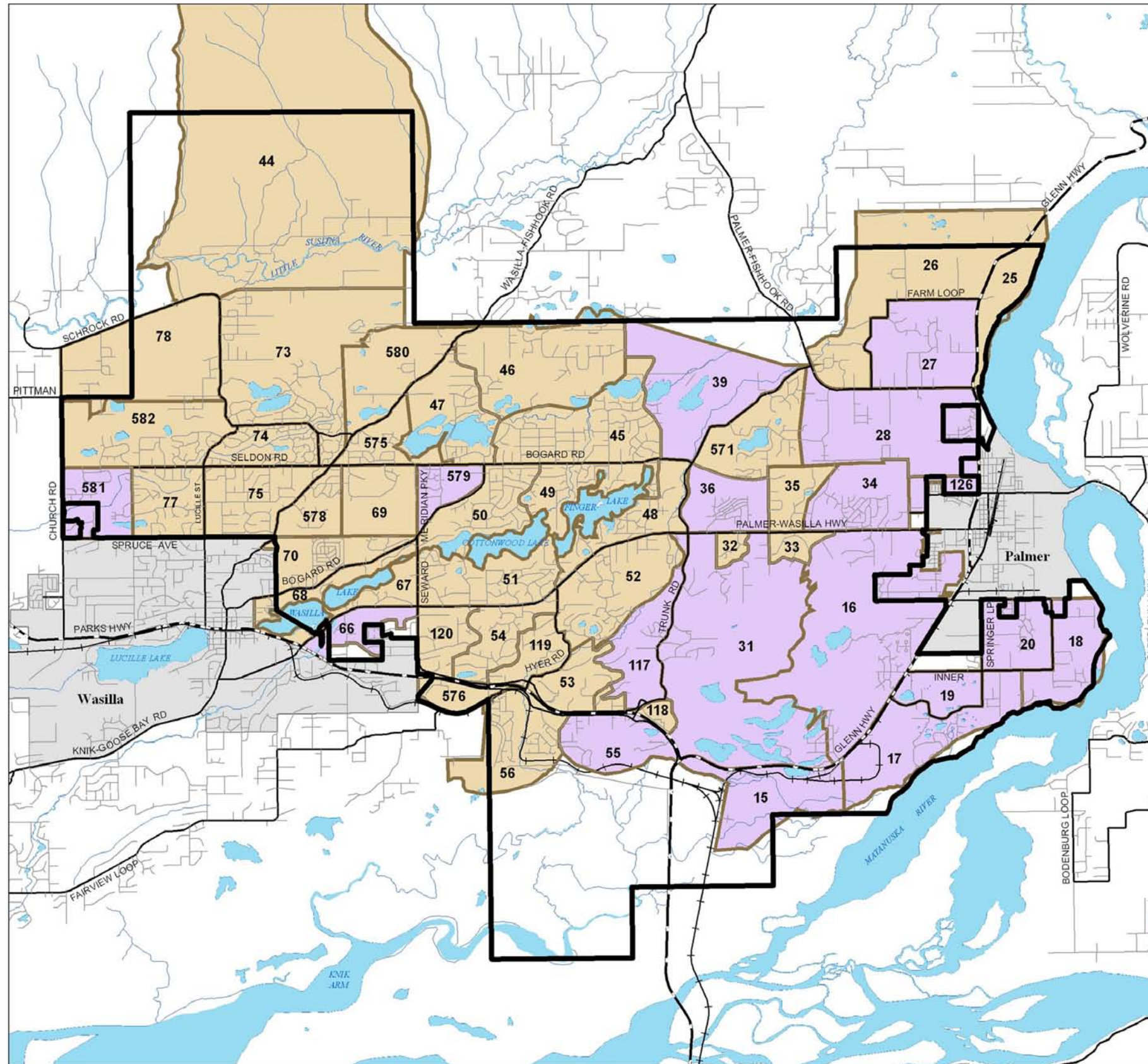


Figure 9: Potential Non-Retail Job Growth Areas, Core Area, 2005-2025



Matanuska-Susitna Borough
CORE PLANNING AREA
Transportation Analysis Zones

RESIDENTIAL
GROWTH

Legend

- Core Planning Area
- Low to Medium Growth
- Medium High to High Growth
- TAZ Boundaries



0 0.5 1 2 Miles

Source: HDR/ISER

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Office of Information Technology/GIS
April 2007

Figure 10: Potential Residential Growth Areas, Core Area, 2005-2025

This overall pattern reinforces the existing trend of denser residential settlement in the vicinity of Palmer and Wasilla with commercial development focused along the highways and major arterials. In sum, the cities and the major highway corridors attract more intensive residential and commercial uses, and the more rural areas capture most large-lot residential development with relatively few commercial activities.

The continuing strong growth projected by ISER foreshadows several trends:

- Dramatically rising land prices for private and public development
- Development of private “apparent open space” and infill of vacant parcels
- Accelerating demand on groundwater resources
- Denser residential and commercial development, posing potential problems for safe on-site sewage disposal
- Rising demand for population-based public facilities, e.g., schools
- Heavier traffic burdens on the road system
- Accelerating growth of local trade and services, and related land use demand
- Rising demand for in-region higher education
- Strong growth in professional offices and residential neighborhoods in the vicinity of the hospital
- Higher – but not high – densities along corridors and nodes with appropriate infrastructure (roads, water & sewer utilities, urban amenities, etc.)

2.7 Transportation

The Core Area’s network of highways and arterials defines high-traffic corridors and nodes, facilitates access and circulation, influences land values, and frames the pattern of land development and use. The borough’s LRTP is designed to facilitate efficient, safe vehicular circulation as the borough and the Core Area grow.

This plan and the borough’s Long Range Transportation Plan share common assumptions about the pace and place of growth in the Core Area. The LRTP recommends many new road construction or upgrade projects, and other transportation system improvements needed to maintain transportation efficiency throughout the borough. The LRTP also makes recommendations for numerous new trail connections and public transportation.



Glenn Parks Highway Interchange
(Sandra Petal, MSB)

The LRTP identifies Base Level road projects which it assumed would be completed during the 2005-2025 period.¹¹ The LRTP also identifies additional road projects recommended to maintain an efficient local transportation system. The Core Area plan incorporates the relevant recommendations of the LRTP. Together, the two plans comprise a consistent, coordinated approach to land use and transportation planning.

The LRTP identifies the following Base Level projects for completion in the Core Area between 2005 and 2025 (Figure 9):

- Parks Highway is a 4-lane highway from Seward Meridian Road to Big Lake Road
- Glenn Highway is a 4-lane arterial/highway from Parks Highway to Palmer Fishhook Road
- Palmer-Wasilla Highway is a 4-lane arterial from the Glenn Highway to the Parks Highway
- Seldon Road is added as a 2-lane facility from Lucille Street to Pittman Road
- Hermon Road is added as a 2-lane facility from Parks Highway to Palmer Wasilla Highway
- Seward Meridian Road from Parks Highway to Bogard Road is a 4-lane facility
- Seward Meridian is added as a 2-lane facility from Bogard Road to Seldon Road
- Hyer Road is realigned to collector standards
- Trunk Road is realigned and widened to a 4-lane facility from Parks Highway to Bogard Road; and as a 2-lane facility from Bogard Road to the Palmer-Fishhook Road
- Bogard Road is extended from 49th State Street to Glenn Highway as a 2-lane facility
- Hemmer Road is extended from the Glenn Highway to the Palmer Wasilla Highway as a 2-lane facility



Four Corners Intersection, Palmer-Wasilla Highway
(Sandra Petal, MSB)

¹¹ The LRTP also identified road improvements that might be needed if the Knik Arm Bridge were built.

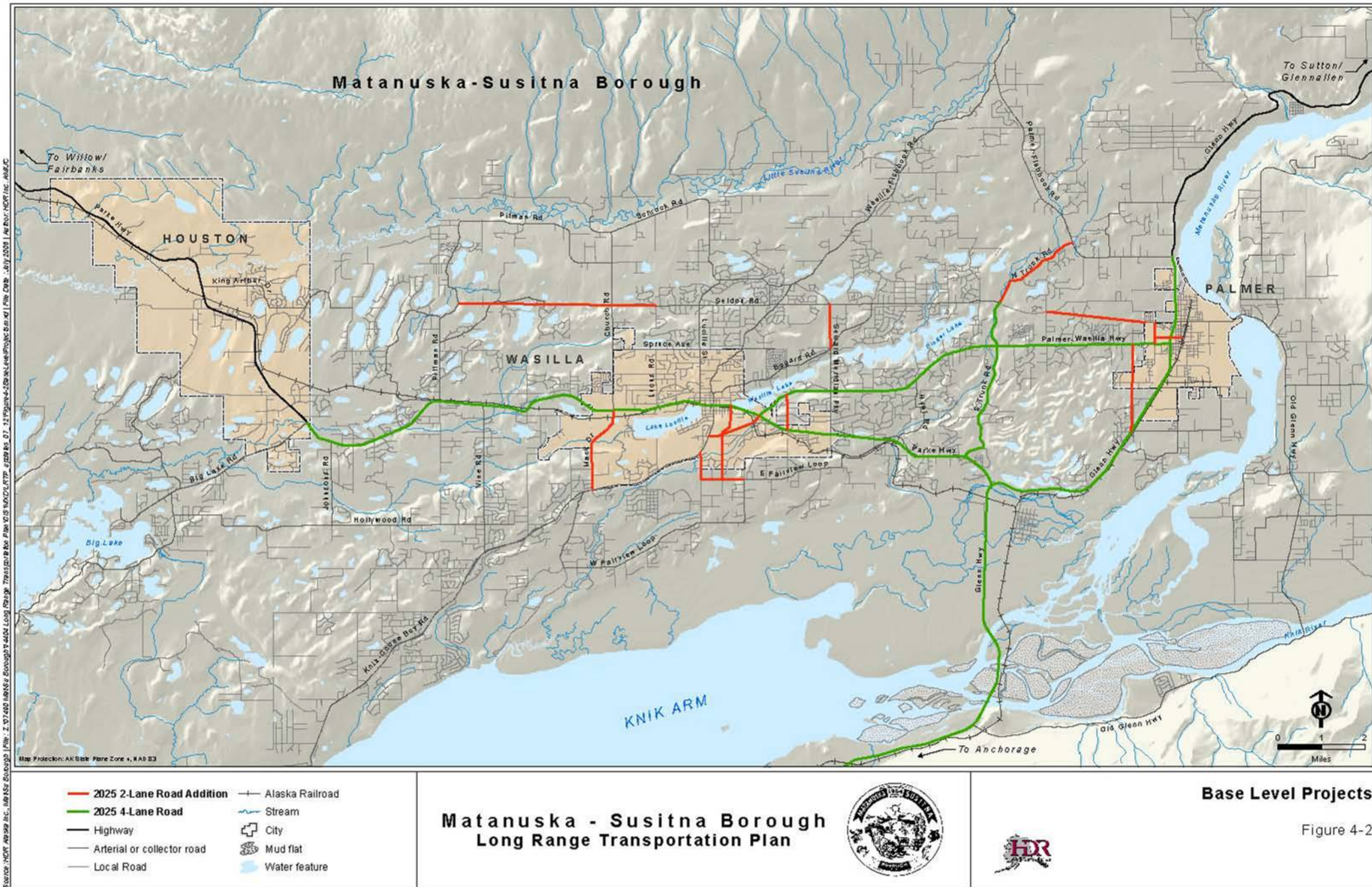


Figure 11. Recommended LTRP Transportation Improvements through 2025

The LRTP also recommends the additional projects shown in Table 10 as essential to maintain an efficient local transportation system:

Location	Segment	2025 Base	Improvement to 2025 base
Seward Meridian	Parks Hwy – Bogard Rd.	Collector/4-lane/40 mph	Major Arterial/4-lane/40 mph
Seward Meridian	Bogard Rd. – Seldon Rd.	Collector/4-lane/40 mph	Major Arterial/4-lane/40 mph
Wasilla Fishhook	Bogard Rd. – Seldon Rd.	Minor Arterial/2-lane/30-40 mph	Major Arterial/2-lane/30-40 mph
Bogard/Seldon	Wasilla Fishhook – Glenn Highway	Minor Arterial/2-lane/30-45 mph	Minor Arterial/4-lane/35-45 mph
Bogard/Seldon	Church Rd. – Wasilla Fishhook	Collector and Minor Arterial	Minor Arterial
Bogard	Wasilla Fishhook – Seldon Rd.	Minor Arterial/2-lane/25-50 mph	Major Arterial/2-lane/25-50 mph
Hermon Rd.	Bogard Rd. – Seldon Rd.		Collector/2-lane/40 mph
Hermon Rd.	Palmer Wasilla – Parks Hwy	Minor Arterial/2-lane/40 mph	Major Arterial/2-lane/40 mph
Hemmer Rd.	Palmer Wasilla Hwy – Palmer Fishhook Rd.		Minor Arterial/2-lane/40 mph
S Trunk Rd./Nelson Rd.	Parks Hwy – Fairview Loop		Collector/2-lane/40 mph
Lucille St.	Spruce Ave – Seldon Rd.	Collector/2-lane/35 mph	Minor Arterial/2-lane/35 mph

Source: Excerpted from the LRTP, February 2007.

The LRTP additionally recommends numerous collection-level street improvements throughout the Core Area to be completed as the neighborhoods they serve are built out with subdivision road improvements.

The LRTP made the following recommendations for trail connections in or partly in the Core Area:

- Seldon/Bogard Road from Church Road to Trunk Road, 8.9 miles
- E. Bogard Road, from N. Peck Street to Seldon Road, 3.7 miles
- Trunk Road, from Bogard Road to the Parks Highway, 4.1 miles

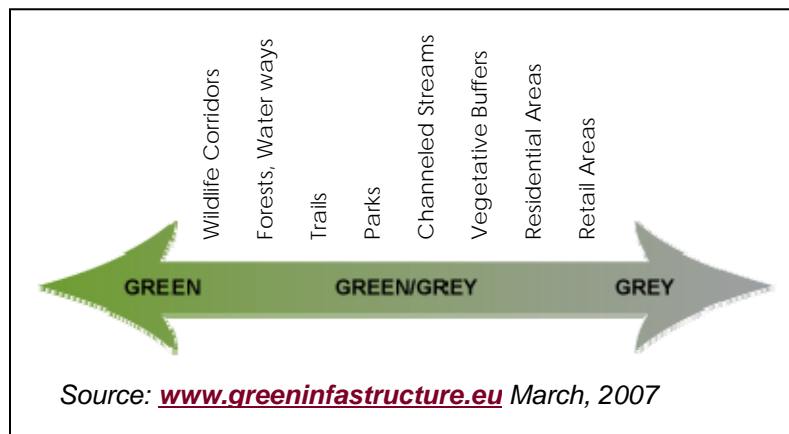
- Seward Meridian, From Parks Highway to Seldon Road, 3.0 miles
- Wasilla-Fishhook Road, from E. Nelson Avenue to Seldon Road, 2.7 miles
- Fairview Loop, from the Parks Highway to Knik Goose Bay Road, 11.1 miles
- North Trunk Road, from Palmer-Fishhook Road to Seldon Road, 2.3 miles
- Palmer-Fishhook Road, from the Glenn Highway to Wasilla-Fishhook Road, 6.9 miles
- Wasilla-Fishhook Road, from Palmer-Fishhook Road to Seldon Road, 7.7 miles
- Church Road, from Seldon Road to Pittman Road, 1.0 miles
- Werner Road, from Arctic Avenue to Farm Loop, 3.0 miles
- Blunck Street, from the Glenn Highway to the Palmer-Wasilla Highway, 1.9 miles

With regard to public transportation, the LRTP recommends that the borough continue to pursue expansion of the publicly-supported Matanuska-Susitna Community Transit (MASCOT) service. MASCOT provides limited local scheduled bus service, provides bus service in coordination with numerous local no-profit agencies, and contracts for taxi service for medical appointments. Additionally, the LRTP recommends continued borough efforts to promote commuter transit service.

2.8 Green Infrastructure

Just as communities benefit from planning their infrastructure (roads, subdivisions, schools, fire stations, utilities – (“grey infrastructure”), communities can benefit from interconnected wildlife corridors, recreational trails, forests, wetlands, waterways, parks, open and green spaces and other natural areas (“green infrastructure”).

Green infrastructure is an interconnected system of green space, such as forest, agricultural lands, farms, wetlands, wildlife corridors, and parks that conserves the community’s natural resources and assets, and provides benefits to the residents. By providing green infrastructure - clean air, water quality, and natural resources can be sustained for future generations and enhance the quality of life in the Core Area.



As land is subdivided and converted, it is often fragmented into smaller and more isolated patches of open space, which can alter the way in which natural systems, such as wetlands, function. As these natural areas diminish, habitat diversity declines, and the degradation of water

and natural resources occurs. The goal of green infrastructure is to place development and green space where it is most needed and most appropriate.

Proactive planning of green infrastructure can help guide future land development decisions, accommodating population growth while protecting community assets and natural resources. It is important to understand that “green infrastructure” does not require or imply public ownership of all of the land in the system.

“Just as we must carefully plan for and invest in our capital infrastructure – our roads, bridges, waterlines or grey infrastructure, we must invest in our environmental or green infrastructure – our forests, wetlands, streams and rivers.”

***Parris Glendening
Former Maryland Governor***

2.9 Utilities

Rapid residential and commercial development may impose substantial demands on public infrastructure, including utilities, particularly where facilities are lacking or at capacity. Timely installation of public improvements and utilities – roads, schools, water and sewage systems, power, natural gas, drainage – can greatly influence the place and timing of development.

2.9.a Water Supply and Sewage Disposal

The cities of Palmer and Wasilla are certified to provide public water and sewer services to most of the Core Area (Figure 10). At present, the cities actually provide services only within their boundaries with the exception of the City of Palmer’s project now underway to extend service along the Glenn Highway to the Mat-Su Regional Medical Center.

Many homes and many businesses in the Core Area depend on onsite water supply and septic waste disposal systems, or on small private systems.

The City of Palmer recently prepared a long-range plan to extend water and sewer services to the Southwest Palmer Service Area, first to the Mat-Su Regional Medical Center, and eventually to the entire service area bounded by the Glenn and Parks highways, Trunk Road, and Palmer Wasilla Highway. Construction of the systems south along the Glenn Highway and west to the Medical Center is scheduled for completion in 2007.

The Core Area’s dependence on groundwater resources means that its supply and quality is vital to the local economy and community well-being. Therefore, conservation of public groundwater aquifers is a major planning issue. Protection of onsite well-water resources from contamination is critical, especially in areas where installation of public water systems is impractical or prohibitively costly. In the latter areas, reliance on on-site septic waste disposal systems has potential to impair groundwater quality, endanger public health, and require costly solutions, if those systems fail.

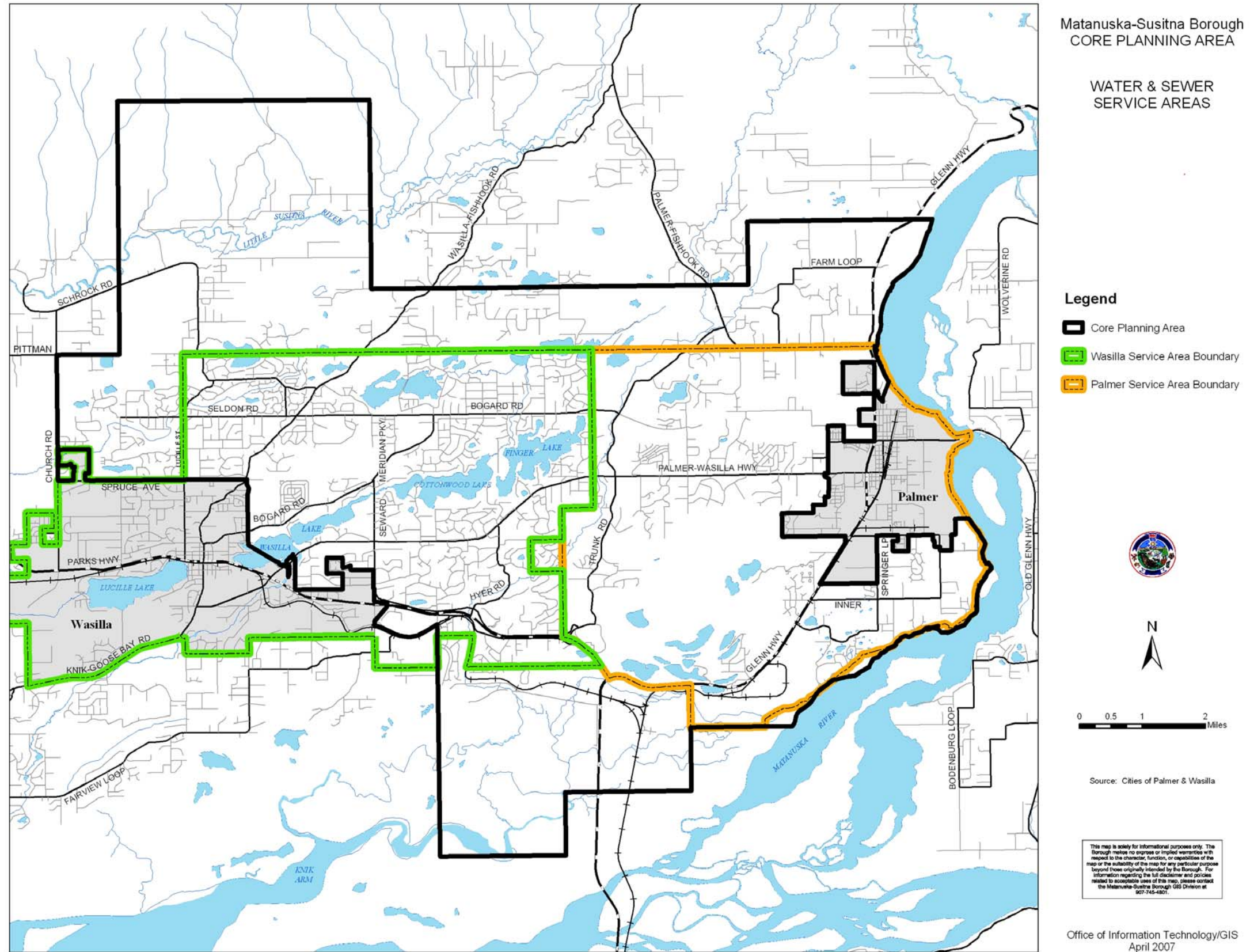


Figure 12: Certified Service Areas for Public Water and Sewer Utilities, Cities of Palmer and Wasilla

2.9.b Solid Waste Disposal

The borough-owned and operated central landfill is located on a 620 acre site one half mile south of the Palmer Wasilla Highway via 49th State Street. Commercial firms offer solid waste collection services. Many households haul their solid waste to the central landfill.

The Central Landfill Twenty Year Master Plan, prepared in 1996, designates the entire site for eventual landfill use. The Master Plan projects that a quarter of the 620 acres located in the most northwestern area of the property would be developed for the landfill and other facilities by 2016. About 20 acres are actively used at any one time. The landfill's capacity extends well beyond the term of this plan.

The Crevasse Moraine Trail System is situated on the eastern half of the landfill property. The borough Recreation Services Division maintains the trail system by agreement with the borough Department of Public Works which has management authority. The current Master Plan does not propose landfill expansion into the main trail system before 2016. However, the recent revision of the Master Plan¹² does identify expansion to the east, which would affect the trail head and trail system. Undeveloped land is available for compatible recreational and other uses. Closed and restored landfill surface areas may be available for compatible uses in the future.

2.9.c Electric Power

The Matanuska Electric Association (MEA) distributes electric power within the Core Area. MEA's Long-Range Plan, completed in 1996, did not identify any specific new transmission line corridors needed in the Core Area between 2005 and 2015. However, the Core Area's recent and projected rapid growth required a new transmission line to the Mat-Su Regional Medical Center. This growth may warrant revisiting whether and where new transmission corridors should be identified and reserved to support future residential and commercial development.

2.9.d Natural Gas

ENSTAR supplies natural gas to most Core Area residences and other consumers. The Core Area compares to Anchorage for the highest share of homes using natural gas for home heating. ENSTAR has not identified new transmission pipeline corridors required to serve future consumers.

2.9.e Storm Water and Meltwater Drainage; Snow Disposal Sites

As land development proceeds, more ground area is covered by impermeable surfaces – roofs, roads, parking areas, sidewalks, trails, etc. Over time, disposal of storm and melt water drainage will become an increasing problem. Also, as road and parking surface area increases, there is more need for private and public snow disposal sites. Without a good drainage system, potential problems include local flooding, surface water pollution, and erosion.

¹² Central Landfill Future Cell Sequencing Plan, Onsite Leachate Treatment Evaluation, and Closure Cost Evaluation.

2.10 Community Services

2.10.a Education

The Matanuska-Susitna School District operates the borough school system. In the Core Area, there are six borough elementary schools (Cottonwood Creek, Finger Lake, Larson, Pioneer Peak, Shaw, Tanaina), two middle schools (Colony and Teeland), and one high school (Colony). Funds have been approved for construction of a new South Palmer elementary school on a site in the Gateway Community Council. Several other schools in the peripheral areas also enroll Core Area students.

If the school-age population remains constant at about 25 percent of the total population, the school district will need to more than double its classroom capacity to serve projected population growth. This will require acquisition of additional school sites in the Core Area and, possibly, expanded enrollment at existing schools.

2.10.b Police Protection

The Mat-Su Borough has not adopted police powers. At present, the Alaska State Troopers provide police protection within the Core Area. The Palmer and Wasilla city police departments police those jurisdictions.

2.10.c Fire Protection

Three fire service areas provide fire protection to the Core Area. There are three fire stations in the Core Area. Another four stations located outside the Core Area serve parts of the Core Area. Notwithstanding the growth forecast for the Core Area, the existing fire stations are well-located to provide future fire protection services, though additional buildings, equipment and staff will be needed.

2.10.d Recreation

The borough assembly adopted the borough-wide Parks, Recreation & Open Space Plan in June 2001. The plan inventories, sets standards, and identifies needs for various types of recreational assets.

The Core Area is rich in drive-to out-of-area recreation lands and open space, and poor in permanently protected local recreational assets. State, federal, and borough governments own and manage major parks and recreational areas elsewhere in the borough that are accessible to Core Area residents. However, the amount of parks, public recreational facilities, and open space in the Core Area is limited.

The major large-acre recreational areas are Kepler-Bradley State Recreational Area (345 acres), Finger Lake State Recreational Site (47 acres), and Alcantra Athletic Complex (140 acres). The Palmer Hay Flats State Game Refuge is partly in the Core Area. There are also on-site recreational facilities at all the borough schools in the Core Area.

The largest and most popular open space in the Core Area consists of contiguous state, University of Alaska, and borough-owned properties. This area is comprised of Kepler-Bradley Lakes State Recreation Area, Mat-Su Central Landfill, University of Alaska land, and adjacent undeveloped property. The Kepler-Bradley Lakes State Recreation Area, University of Alaska’s experimental farm, Crevasse Moraine Trail System, and other public trail systems are located in this area. The university’s property is not dedicated open space and thus may be developed for other uses. The recent controversy over a new transmission line corridor across this recreation area illustrates its popularity and its vulnerability in its current status.

Table 11 summarizes the recreation and open space standards established in the park plan. Based on these standards, the Core Area needs about 1,450 acres of parks and open space for its present population, and an additional 1,825 acres for additional residents by 2025. Within the Core Area, there are still substantial opportunities to acquire and dedicate additional open space, greenbelts, and wildlife habitat for the perpetual benefit of future residents.

Table 11. Standards for Parks and Open Space

	Acres per 1,000		
	Residents	Service Area	Size in Acres
Local play areas	0.5-1	1-2 mi.	1-2
Neighborhood parks	5	1-5	5-40
Community park	10	10-15	40-120
Regional parks	20	1 hr. driving	200+
Open space/greenbelt	20	1 hr. driving	200+
Total	55.5-56		

Source: Parks, Recreation & Open Space Plan.

2.11 Local Government: Structure, Powers, and Finances

2.11.a Structure and Powers

The Mat-Su Borough was incorporated in 1964 as a second-class borough. The borough is a regional government, headquartered in Palmer, with a seven-district assembly, an elected borough mayor, and an appointed borough manager. Five separate assembly districts represent parts of the Core Area, but none are entirely within it.

The Core Area is unincorporated and has no official status except as a borough planning district which is subject to certain conditional use permit requirements. The boundaries of the Core Area are defined by borough ordinance. Its boundaries may be altered by the borough assembly or by city annexations. The cities of Palmer and Wasilla have recently annexed parts of the Core Area and are likely to pursue further annexations as their development progresses. Likewise, ongoing development at the Core Area’s perimeter may warrant future adjustments to its boundaries.

Table 12 charts the structures that have evolved for local governance in the Core Area. The borough exercises the borough-wide powers mandated by state law: education; planning,

planning, and land use regulation; and tax assessment and collection. The borough school district administers education. The borough exercises all planning powers in the Core Area, but has delegated planning and land use regulation to the cities of Palmer and Wasilla within their boundaries. Additionally, the borough exercises several area-wide powers (parks and recreation, ports, ambulance, transportation, air pollution control, day care, historic preservation) and several optional non-areawide powers. Five borough road service areas and three fire service areas are each partly inside, partly outside the Core Area. Road and fire service area boundaries do not coincide. The cities of Palmer and Wasilla have exclusive authority to extend public water and sewer services to the Core Area, but their past practice has been to operate only within their city confines. Recently, the City of Palmer extended water services to the Mat-Su Regional Medical Center. Under agreement with the borough, Palmer and Wasilla offer library services to all borough residents. The borough does not exercise police powers but relies on the Alaska State Troopers for public safety. Palmer and Wasilla have city police departments.

Table 12. Structures for Local Governance in the Core Area

Function/Service	Structure
Borough Assembly and Mayor	Five of seven assembly districts are partly in Core Area, none wholly in Core Area; mayor is elected at large
Community Councils	Five advisory community councils inside Core Area; some Core Area outside any community council
Education, Planning, Tax Assessment & Collection, Parks & Recreation, Ports, Ambulance, Transportation, Animal Care and Regulation, Air Pollution Control, Historic Preservation	Borough administers on area-wide basis, except planning and land use regulation and animal care and regulation in cities which are delegated to the cities; MSB School District administers local education
Roads	Five borough road service areas, all partly inside, partly outside Core Area; some Core Area outside any road service area
Fire/EMS	Three borough fire service areas, all partly inside, partly outside Core Area; some Core Area outside any fire service area
Land Use Districts and Lake Management Plans	Borough administers seven land use districts and five lake management plans in Core Area
Power, Natural Gas, Telecommunications	MEA, ENSTAR, MTA, various private telecom firms
Public Water & Sewer	Palmer and Wasilla certified to provide public water/sewer services in east and west Core Area. Palmer is currently providing services for the “Mat-Su Regional Medical Center”
Library	Available to all borough residents via borough and Palmer and Wasilla libraries

The borough assembly has established community councils outside cities to advise on community planning, capital improvements, and government programs. There are five community council districts in the Core Area.¹³ None of them coincide with road or fire service area boundaries. Minor parts of the Core Area are outside any community council district or road or fire service area.

In summary, the structure for local governance that has evolved for the Core Area is many-sided – geographically, politically, administratively, and functionally. With no unified political or administrative body of its own to make and carry out local governmental decisions, the Core Area relies on the borough assembly and administration for those purposes.

2.11.b Borough Finances

In the Core Area and elsewhere, the borough faces the double fiscal challenge of maintaining essential services for established residents and funding new facilities and expanded services for newcomers. The Core Area plan update can help meet this challenge. Smart planning that fosters efficient land use patterns, cost-effective capital improvements, and economical service delivery also saves tax dollars.

Under Alaska’s constitution, cities and boroughs are the only local governmental units that can levy taxes or appropriate revenues. As the Core Area is not an incorporated government, the borough levies and appropriates all revenues for local governmental services there, including education and service areas. There is no separate budget for the Core Area.

This short profile illustrates the borough’s financial circumstances. In FY 2006, the borough levied an area-wide property tax of 10.58 mills or \$1,058 annually per \$100,000 in assessed taxable value. The borough also imposed additional mill levies to fund fire and road service areas and non-areawide services. The borough does not levy a sales tax, but does levy a 5 percent bed tax.

Compared to the state’s four other most populous boroughs (Tables 13 and 14),¹⁴ Mat-Su Borough¹⁵

- Relies on property taxes for its local revenue – for almost 99 percent;
- Relies on single family homes and vacant land (82 percent for Mat-Su vs. average of 66 percent) for property tax revenue, and least (10 percent for Mat-Su vs. average of 22 percent) on commercial and industrial property;
- Collects and spends the least local tax revenue per resident;
- Has the second-lowest assessed property tax base per resident;
- Has a below-average bonded debt.

¹³ MSB 2.76.040(A) defines community council districts so as “to group residents within natural communities and to recognize community interests in setting boundaries. ‘Natural communities’ means areas within the borough that have or are achieving distinct identity by reason of geography, history, population, transportation, fire protection and other factors. Population is not a criterion. Service area boundaries may be considered, but shall not be determinative.”

¹⁴ Municipality of Anchorage, Fairbanks North Star Borough, City and Borough of Juneau, and Kenai Peninsula Borough.

¹⁵ The sources for the fiscal data are Alaska Taxable 2004 and Alaska Taxable 2005.

These figures underline how rapid growth pinches the borough’s finances and its homeowner taxpayers. The borough’s local revenues come almost wholly from a modest real property tax base which, in turn, consists mostly of single family homes and vacant land. In times of rapid growth, the public outlays for new infrastructure and expanded services typically start before tax revenues accrue from new private construction. In effect, established homeowners absorb part of the local public costs incurred for new residents. Meanwhile, budgets to maintain facilities and services for existing residents are compromised. All of these circumstances apply to the Core Area. The Comprehensive Plan proposes some options to diversify the borough’s revenue sources and distribute the local tax burden more fairly.

	Mat-Su Borough	Select Boroughs ¹
Single family homes	68.0%	60.4%
Vacant land	13.9%	5.7%
Commercial	9.9%	14.8%
Other residences	7.5%	10.6%
Industrial	0.4%	7.3%
Other	0.3%	1.2%
Total	100.0%	100.0%

¹Municipality of Anchorage, Fairbanks North Star Borough, City and Borough of Juneau, Kenai Peninsula Borough.
Source: Alaska Taxable, 2004.

	Mat-Su Borough	Select Boroughs ¹
Per capita tax revenues	\$925	\$1,328
Per capita assessed value	\$86,238	\$91,861
Per capita bonded debt	\$2,239	\$3,210

¹Municipality of Anchorage, Fairbanks North Star Borough, City and Borough of Juneau, Kenai Peninsula Borough.
Source: Alaska Taxable 2005.

Chapter 3. Comprehensive Plan Goals and Policies

3.1 Introduction

This Core Area Comprehensive Plan Update proposes goals and policies to guide public and private decisions about the Core Area’s future development. The proposed Core Area Land Use Plan graphically represents the goals and policies that relate to land use.

The Core Area Comprehensive Plan Update is not a stand-alone plan. It is part of the borough comprehensive plan, which consists of several borough-wide plans and numerous functional and local plans. Two borough plans – the Long Range Transportation Plan and the Parks, Recreation & Open Space Plan supply the borough-wide framework to link transportation and open space planning for the Core Area with its surrounding region. Likewise, the Core Area Comprehensive Plan Update and the plans of its neighboring cities (Palmer and Wasilla) and community councils (Knik-Fairview and Meadow Lakes) should mesh where they intersect.

For purposes of this Plan Update, **goals** are brief, broad statements of the positive results the plan seeks to achieve. The goals represent the aspirations of the community. The **policies** provide more detailed guidance for public and private actions to implement the planning goals. The goals, then, are benchmarks against which more specific policies and implementation actions can be measured.

Community plans do not take shape in a vacuum. They should embody the community’s prevailing values and goals. A recent borough-wide survey tells what local residents like about life in Mat-Su Borough, how they regard its development, and what they think the borough needs to do about ongoing development. According to the survey (see sidebar)¹⁶

- 82 percent of borough residents agree that they “like the rural, small town character of the Mat-Su Borough;”
- Many residents (57 percent) are not, on the other hand, “satisfied with the way the Borough has been developed;”
- 81 percent agree that “the Borough must do a better job of managing growth and development;”
- Substantial majorities agree the borough should adopt land use zoning (74 percent) and spend more funds for road improvements (61 percent) and open space preservation (60 percent).

Surveys are only one source of information about community values and goals. The extensive, diverse spoken and written public comments given at several open houses and workshops during plan development have strongly shaped the planning goals and policies. So has the evolving history of community acceptance of the role of local



Core Area Community Open House (Sandra Petal, MSB)

planning in guiding community growth and development. The community survey shows that, while residents still prefer limited local government and low taxes, they are also open to work through their local government to improve and preserve the community features they prize in the Core Area – to “do a better job of managing growth and development.” Adopting the updated comprehensive plan and land use plan is a first step in that process

¹⁶ The percentages cited are for all borough residents; responses for Core Area community council residents are consistent with these percentages.

Question: What do your neighbors think about land use planning?

Answer: The University of Alaska Anchorage, Mat-Su College, and the Mat-Su Borough recently surveyed 2,600 borough residents for their opinions on land use planning issues, among other topics. Here's what they said.

Survey question	Agree	No Opinion	Disagree
I like the rural, small town character of the Mat-Su Borough.	81.6%	6.7%	11.7%
The Borough must do a better job of managing growth/development.	81.3%	9.6%	9.2%
I support a system of zoning that designates: residential; agricultural; and commercial/industrial (with specific regulations for each).	74.1%	9.5%	16.4%
Traffic congestion is a serious problem in the Borough.	74.1%	6.2%	19.8%
Over the next 10 years, the Borough will need to develop/preserve more park land.	61.5%	14.2%	24.3%
More tax money should be spent to improve Borough roads.	60.9%	15.3%	23.8%
Funds should be spent to preserve open spaces in the Borough.	59.8%	15.8%	24.5%
I support a system of zoning allowing different land uses to be located near one another, with standards for noise, traffic and other impacts.	58.1%	11.7%	30.2%
I support imposing an impact fee on developers for residential/commercial properties to pay for services.	57.7%	13.1%	29.2%
I am very concerned about water quality in the Borough.	46.8%	25.7%	27.4%
Funds should be spent to preserve agricultural land in the Borough.	48.9%	20.9%	30.2%
As of today, I am satisfied with the way the Borough has been developed.	28.2%	15.0%	56.8%

Source: The Matanuska-Susitna Borough Community Survey, 2006.

3.2 Goals and Policies

Each of the goals focuses on a particular plan element, but in practice the goals often interact. Similarly, each policy is listed under the primary goal it supports, even though individual policies may promote several goals. In particular, many of the land use policies affect multiple goals. Policies often work together to reinforce each other. Table 15 shows how the policies can work together in overall support of the planning goals.\

Goal 1. Land Use: Foster a pattern of land development that protects the appealing features of the Core Area, offers developers and consumers choices in the market place, and allows local government to provide cost-effective infrastructure and services economically.

Policy 1-A: Adopt and implement a land use plan.

Discussion: A land use plan is the essential foundation for effective land use planning. Previous Core Area comprehensive plans did not include a land use plan. That omission has limited their usefulness for managing growth and keeping development in harmony with the rural, small town character that residents say they value. This plan update proposes a land use plan. It is a generalized picture of land uses and densities toward which the Core Area can evolve as its population and built environment continue to grow in the coming years.

Policy 1-B: Promote an orderly land use pattern suited to the demand for attractive settings in which to live, work, shop, learn, play, and carry on other daily activities.

Discussion: As the Core Area's population grows – it is forecast to double by 2025 and absorb most of the remaining vacant land in the Core Area – the limited vacant land supply must provide a balanced supply of well-located sites for homes, businesses, private and public institutions, industry, parks and recreation, public improvements, and other purposes. The plan needs to provide a place for every permitted land use, but not all land uses go well side-by-side. Some uses such as residences and open space or retail trade and service business are usually compatible and enhance each other. Others, like heavy industrial activities and residential subdivisions, make poor neighbors and are best separated by distance or buffers. The need and place for each major land use is addressed in policies below.

Policy 1-C: Encourage density patterns that make best use of public investment in infrastructure.

Discussion: Higher-density residential, commercial, and institutional developments generally require greater investment in transportation and other public improvements and services than large-lot subdivisions or small, free-standing commercial buildings. Mixing high- and low-density land uses together usually results in under-use of some costly public infrastructure and extra infrastructure elsewhere. Clustering high-density uses with high public service requirements permits cost-effective provision of new infrastructure where it can be most productive. It can also minimize the need for new public infrastructure elsewhere. Promoting an efficient density pattern saves public dollars.

Policy 1-D: Develop and adopt land use regulations to guide private land use development.

Discussion: The assembly previously considered but did not adopt a proposed zoning ordinance for the Core Area. At present, the main ordinance governing land use in the Core Area is the Core Area Conditional Use Permit (MBC 17.61) which regulates certain features of commercial and industrial uses. The recent community survey indicates widespread support for a more comprehensive system of zones and regulations to guide land use development.

Zoning ordinances generally limit permitted uses and densities for the benefit of protecting nearby property owners and occupants against unwelcome new uses and development. Zoning ordinances vary widely in the extent to which they limit and protect property owners. Each local jurisdiction must resolve, in accord with its community values, the best balance between acceptable limits and desirable protections. The policy proposed here is that the borough re-start the process of developing a basic zoning map and code to implement the proposed land use plan.

Policy 1-E: Coordinate land use with the Long Range Transportation Plan

Discussion: The Core Area Comprehensive Plan Update and the borough-wide LRTP are matching parts of a coordinated land use and transportation planning effort. Land uses generate traffic and require transportation improvements. Conversely, the network of highways and major arterials defines high-traffic corridors and crossroads, facilitates access and circulation, influences land values, and frames the pattern of land use and development. The success of the two plans depends on their coordination in place and time. For that reason, the two plans have been developed with similar assumptions about the future population and economy of the Core Area, its future land use patterns, and its transportation requirements.

Policy 1-F: Foster an affordable mix of residential areas and housing types at suitable locations, in balance with market demand, and with appropriate public infrastructure.

Discussion: The analysis of existing land use patterns and trends indicates that homesites will remain the most extensive land use in the Core Area. Housing patterns and trends indicate that single-family homes will be the most popular type of housing. Even so, changing economic and demographic conditions, such as a diminishing land supply, rising land costs, and a growing senior population, will shift some demand toward higher-density single-family subdivisions, multi-family dwellings and senior housing with good access to support services. The plan should provide adequate opportunities for the needed mix of housing types – large-lot single family homes, full-service residential subdivisions, multi-family dwellings, special-needs housing – at suitable locations. In particular, higher residential densities can improve access to affordable housing for persons who live and work in the local community, and thereby strengthen the local economy.

Policy 1-G: Secure the stability and viability of established residential neighborhoods.

Discussion: As more of the Core Area's vacant land is built up, securing the stability and viability of established residential neighborhoods will become an increasing concern, as vital as ensuring that new subdivisions are well-located and well-designed. Several other planning policies proposed to separate or buffer incompatible uses from residential areas, conserve public open space, and promote equitable property taxes also serve to protect the viability of established residential neighborhoods.

Policy 1-H: Encourage concentration of major commercial development at central locations and along already developed major transportation corridors.

Discussion: The land use forecast underlying the LRTP anticipates that retail and non-retail job growth in the Core Area will gravitate toward the existing highway commercial corridors east of Wasilla and west of Palmer. These existing commercial corridors are expected to attract most of the new business growth in the Core Area. Overall, about three-fourths of new retail jobs are estimated to locate east of Wasilla near the Parks and Palmer Wasilla highways and Seward Meridian Road and near the Mat-Su Regional Medical Center. Non-retail jobs are distributed similarly to retail jobs, except that a major new center for professional services and other non-retail jobs is expected to emerge in the vicinity of the Medical Center/College campuses. Even so, the established sub-regional commercial centers in Wasilla and Palmer will continue to capture a major share of the Core Area's trade and services business.

The land use plan should encourage major commercial development at locations consistent with the LRTP, and discourage major commercial development at dispersed locations with inferior highway access elsewhere in the Core Area. This general policy will facilitate successful commercial development and still help protect the rural character and natural landscape of the balance of the Core Area.

Neither this plan update nor the LRTP propose development of a new sub-regional commercial center in the Core Area at the Palmer Wasilla Highway/Trunk Road intersection. That intersection is at the margin of two sub-regional trade areas centered in Wasilla and Palmer. The Parks Highway is also experiencing ongoing commercial development. In those circumstances, the competitive viability of a third sub-regional commercial center is very uncertain. Moreover, reliance on nearby established commercial centers will better retain the rural character of the Core Area.

Policy 1-I: Encourage neighborhood commercial districts at suitable locations for neighborhood-scale retail and service needs.

Discussion: Neighborhood commercial districts enable nearby residents to take care of some retail and service needs near home. This reduces the need for longer trips to larger commercial districts, thereby reducing traffic congestion at the busiest locations.

This land use policy seeks to concentrate neighborhood-serving commercial activities at several convenient, high-traffic crossroads, where they have the best chance of success. It seeks to discourage new dispersed commercial uses in predominantly residential neighborhoods and to maintain the character of residential neighborhoods situated along arterials.

This plan policy proposes neighborhood commercial districts with market areas of about 8,000 to 10,000 residents, suited for businesses that can thrive by serving market areas of that size. Typical businesses might include convenience stores, gas stations, small professional offices, day care centers, restaurants, and similar small-scale businesses. Industrial uses are not appropriate in these districts.

The land use plan identifies seven highway/arterial crossroads locations for neighborhood commercial districts:

- Glenn Highway/Inner Springer Loop Road/Hemmer Road
- Trunk Road/Palmer Fishhook Road
- Palmer Wasilla Highway/Trunk Road
- Palmer Wasilla Highway/Hyer Road
- Bogard Road/Seldon Road
- Wasilla Fishhook Road/Seldon Road
- Lucille Street/Seldon Road

Policy 1-J: Encourage light industrial parks

Discussion: The Core Area does not have and is not expected to attract much heavy industry, not including earth materials extraction sites. However, the Core Area already has pockets of light industrial uses such as outdoor storage, construction yards and shops, building materials supply, garage and outdoor vehicle storage yards, warehousing, utility buildings, miscellaneous outdoor storage, etc. These industrial uses are necessary and a good fit for the local economy, with good growth potential. Demand for sites for industrial uses will increase as the Core Area's economy matures. Even so, industry will remain a modest land use in the overall picture.

These light industrial uses are generally mutually compatible. They tend to have similar locational requirements, such as a good highway access and public utilities, and separation from residential neighborhoods, schools and recreation facilities, and public institutions. Designating sufficient well-situated tracts for light industry will help create a more attractive climate for these activities by enabling them to operate efficiently and with minimal conflict with other uses. Restored earth materials extraction site with good highway access can be prime candidates for light industrial uses.

Policy 1-K: Expand the "planned unit development" ordinance (MSB 17.36) to authorize commercial, industrial, and mixed use PUDs; encourage subdivision and development of large tracts as "planned unit developments".

Discussion: The Core Area’s farming and homesteading history has left a legacy of many large-acreage tracts. Some of these large tracts have potential for future subdivision and planned development for commercial, industrial, and mixed uses. At present, the borough’s planning ordinance now provide for residential PUDs (MSBC 17.36) with minor non-residential uses allowed in large development.

PUDs are a flexible and innovative alternative to strict application of subdivision and zoning regulations. PUDs allow property owners and the public to take advantage of the special design opportunities and economies of scale afforded by large-scale development. For example, PUDs may facilitate shared parking, retention of natural vegetation and drainage, safer interior circulation, consistent building design, and more effective landscaping. PUDs may also be more adaptable to sites with special conditions such as unusual topography or prior uses such as earth materials extraction sites.

Policy 1-L: Develop a district plan for the Educational/Medical/Glenn Park District



Matanuska-Susitna College
(Sandra Petal, MSB)

Discussion:

The proposed Educational/Medical/Glenn Park District is bounded by the Parks Highway, Trunk Road, the Palmer Wasilla Highway, City of Palmer, and the Glenn Highway, and includes abutting properties. It encompasses the Matanuska-Susitna College and Mat-Su Regional Medical Center campuses, recreation lands in state or borough ownership, extensive undeveloped private and University of Alaska property, several large earth materials extraction sites, and the borough central landfill.

This area is poised for robust growth as the Mat-Su Valley’s regional center for higher education, health services, and related professional and commercial services; as a residential community; and as a regional natural recreational area. The LRTP and this Comprehensive Plan Update both envision that the district will develop into a major employment center, residential community, and traffic destination.



University of Alaska Experimental Station
(Sandra Petal, MSB)



Construction of Mat-Su Regional Medical Center (Sandra Petal, MSB)

Several public infrastructure improvements, spurred partly by construction of the Mat-Su Regional Medical Center, will prime the district's growth. The City of Palmer has installed public water and sewer service via the Glenn Highway to the Mat-Su Regional Medical Center. Matanuska Electric Association is building a new high-voltage transmission line to the hospital. The Parks Highway was recently upgraded, and near-term upgrades are programmed for Trunk Road and the Glenn Highway. Further, the earth materials extraction sites have substantial potential for redevelopment for residential, commercial, light industrial and other uses after they are depleted.

This policy proposes that the borough initiate a joint public planning process with the University of Alaska, the City of Palmer, the State of Alaska, and private landowners to develop a concept plan for optimal realization of the Ed/Med/Glenn Park District's long-term institutional, economic, settlement, and recreational potential.

Policy 1-M: Collaborate with operators of large earth materials extraction sites to plan for site reclamation and re-use after earth materials extraction activities are finished.

Discussion: Earth materials extraction sites – gravel and sand pits – are an extensive active interim land use in the Core Area. Several former sites have been redeveloped or await redevelopment. Earth materials extraction is expected to continue as a local industry, with additional sites being put to that interim use in the future.

Rising land values will enhance the development potential of former sites which often become prime real estate for new uses. Redevelopment of these sites makes good use of the borough's land base and enhances the value and economic potential of nearby properties.

This policy proposes that the borough work jointly with property owners, consistent with borough ordinances, to plan for redevelopment of these sites for productive and profitable reuse. The borough can facilitate redevelopment by ensuring that earth materials extraction is managed in a manner that conserves future redevelopment options and by providing essential public infrastructure for redevelopment.

Policy 1-N: Initiate a joint planning effort in order to create consistency among utilities in the core area. The joint planning effort will work to identify utility corridors for future water, sewer, natural gas, and power transmission lines. All community water and sewer systems should be managed by a public or private utility provided.

Discussion: Fragmented and belated planning for major utility corridors can be inefficient, costly, excessive, and disruptive to affected property owners. Advance joint planning for future utility corridors can reserve suitably located corridor, reduce land acquisition costs, minimize conflicts, avoid delays and displacement of existing development, facilitate multiple use of shared corridors, conserve open space. Also, coordinate with planning for new road development.

Policy 1-O: Evaluate the feasibility and advisability of development impact fees.

Discussion: Development impact fees are a means to fund installation of new public infrastructure required to serve new development. Local governments charge the developer a one-time advance fee that is dedicated to defray public costs for new infrastructure. In effect, part or all of the extra costs of new development are charged back to the beneficiaries rather than shared by all local taxpayers. Development impact fees are popular in fast-growing localities as a method of financing new development without raising property taxes for established residents. Development impact fees are not an appropriate funding means to remedy deficiencies in existing development.

Development impact fees can be geared to the actual costs of providing infrastructure. In that way, they are a market incentive for cost-effective development patterns.

As development impact fees potentially affect the interests of a broad range of stakeholders, the process for evaluating impact fees should engage all stakeholders.

Policy 1-P: Coordinate implementation of the Core Area plan with other borough comprehensive plan elements and the community plans of adjacent jurisdictions.

Discussion: The Core Area is a distinct planning area, but it shares basic infrastructure, such as road systems, public utilities, and educational, health care, and recreational facilities, with its surrounding region. It also shares boundaries, service areas, and some public facilities and services with several neighboring community planning jurisdictions. As a practical matter, implementation of the Core Area plan needs to be coordinated with other borough-wide functional plans and, on issues of shared concern, with neighboring cities and community councils. For example, because the cities of Palmer and Wasilla are exclusively authorized to provide public water and sewer utilities in the Core Area, coordination is essential to plan for extensions of those utilities.

The dynamic growth of the region may also warrant periodic consideration of Core Area boundary changes via city annexations or adjustments to the boundaries of the Core Area and neighboring community councils.

Goal 2. Transportation: Provide for safe and efficient vehicular and non-motorized travel within the Core Area and between the Core Area and other destinations.

Policy 2-A: Incorporate the LRTP's recommendations for major transportation improvements in the Core Area.

Discussion: The borough-wide LRTP is designed to facilitate efficient, safe vehicular circulation throughout the borough and within Core Area. Coordination of the Core Area Plan Update and the LRTP and incorporation of its recommended improvements will

promote orderly growth patterns, facilitate efficient traffic movement between the Core Area and surrounding areas, and strengthen the link between fiscal, transportation, and land use planning. The Comprehensive Plan Update incorporates the LRTP's recommendations for improvements to these major road segments in the Core Area through 2025:

- Glenn Highway
- Parks Highway
- Palmer Wasilla Highway
- Trunk Road
- Seward Meridian Road
- Wasilla-Fishhook Road
- Bogard Road
- Seldon Road
- Hyer Road
- Hemmer Road
- Hermon Road
- Trunk Road/E. Nelson Road/Linlu Lane
- Lucille Lane

Similarly, this Plan Update incorporates the LRTP's many recommendations for collector level street improvements and trail connections in the Core Area, as listed in the previous chapter.

Future revisions to the LRTP will become part of the Borough comprehensive plan and will, in effect, also revise the Core Area Comprehensive Plan.

Policy 2-B: Improve and maintain connectivity within the arterial road network.

Discussion: Maintaining good connectivity, with multiple points of access to and from the arterial road network, contributes to safe and efficient routing of vehicular traffic, quick access for fire-fighting apparatus, good school bus service, and alternative emergency exits. In some parts of the Core Area, the topography and water bodies require thoughtful road planning and design to maintain good connectivity.

Policy 2-C: Support increased use of local transit services and of commuter service between the Core Area and Anchorage.

Discussion: The Core Area's continuing population growth will enhance the feasibility and cost-effectiveness of upgraded local transit services as a means of mobility along higher-density corridors and for special groups such as seniors, youth, and persons needing health care. Increased reliance on local transit can also help reduce local traffic congestion. Likewise, as the volume of commuter traffic between the Core Area and the Anchorage area rises, commuter transit service offers similar benefits.

Policy 2-D: Retain needed section line and utility easements.

Discussion: Public land policy governing the land survey and conveyance process has reserved an extensive network of undeveloped section line and utility easements for the borough. Many of these easements will be needed and should be retained for future road and utility system extensions. Other easements may not be useful for their intended purpose because of engineering constraints or existing development patterns. This policy recommends that the borough review existing section line and utility easements with affected utilities in order to identify those with potential public value and which should therefore be retained. This review will also identify easements that can be prudently vacated for other public or private uses, or in response to requests for vacation.

Goal 3. Parks and Open Space: Establish a permanent system of publicly owned natural open space, parklands, greenways, corridors, and habitats for the enjoyment of present and future residents.

Policy 3-A: Incorporate the borough Parks, Recreation & Open Space Plan and Recreation Trails Plan.

Discussion: The recent community survey indicates strong community support for programs and outlays to develop and conserve more parkland and for preservation of agricultural lands. The background analysis found that the Core Area is deficient in dedicated public parklands and open space. The Core Area has relatively little dedicated public open space for current and future residents. Much of the Core Area's "apparent" open space is private property that is likely to be developed in coming years. As development progresses, opportunities for public acquisition of more open space will diminish and acquisition costs will rise.



Cycling
(Frankie Barker, MSB)

The conservation of natural areas throughout the Core Area is vital to perpetuate its natural character and provide convenient access to a variety of outdoor recreation opportunities. The borough's Parks, Recreation & Open Space Plan identifies a variety of natural areas, park lands, outdoor recreation areas, trails, and wildlife habitat throughout the Core Area to meet future needs. This policy incorporates the relevant major recommendations of the Parks, Recreation & Open Space Plan and Recreational Trails Plan into the Core Area plan update.

The Comprehensive Plan incorporates these elements from the Parks, Recreation and Open Space Plan: (See Figure 11.)

- Crevasse Moraine Trails
- Wasilla Creek Corridor
- Kepler-Bradley Lakes State Recreation Area
- 7 Mile Canoe Trail Corridor
- Finger Lake State Recreation Site
- Matanuska River Corridor
- Little Susitna River Corridor
- Palmer Hay Flats State Game Refuge



Figure 13: Matanuska-Susitna Borough Parks, Recreation, and Open Space Plan Map – Central Area

Policy 3-B: Work in partnership with private land conservancy organizations to conserve open space and natural areas.

Discussion: Private land conservancy organizations such as The Nature Conservancy, the Alaska Farmland Trust and the Great Land Trust have resources and expertise to conserve open space and natural areas. As private entities, they have great flexibility to work with willing landowners for conservation purposes. Often, they use tools such as purchase of development rights or conservation easements that retain land in private ownership and use and conserve woodlands, wetlands, stream corridors, wildlife habitat and other high-value natural areas.



Wasilla Creek Corridor (Sandra Petal. MSB)

Goal 4. Green Infrastructure: Plan, develop, and grow in a way that protects natural functions while respecting the needs and desires of the landowners and other stakeholders.

Policy 4-A: Identify and Map

Discussion: Identify and map waterways, wildlife habitat and corridors, wetlands, forests, natural hazards, erosion and fire prone areas. Mapping of outdoor recreation and trail networks is also encouraged. Identifying where green infrastructure is desired will aid in the protection of natural resources.

Policy 4-B: Proactive Planning

Discussion: Protect natural systems prior to development. By coordinating and integrating land use planning and design for roads, trails, water, electric, drainage, etc. with green infrastructure, costs to restore and repair natural systems can be avoided.

Policy 4-C: Connectivity

Discussion: Where possible, link waterways, wildlife habitat and corridors, trails, etc. to create an interconnected system of natural corridors in the Core Area. Developing interconnected green space systems benefits communities by providing areas for recreation, protecting water quality, and other public values.

Policy 4-D: Public Awareness

Discussion: Promote community education and information on the benefits of green infrastructure. Green infrastructure can reduce the risk to residents' homes and properties from fire, erosion, flooding, septic failure, and other hazards.

Goal 5. Public Facilities: Provide timely, cost-effective public improvements and services] and explore alternative means of financing from both public and private sectors.

Policy 5-A: Coordinate and synchronize provision of public improvements and services consistent with land use planning.

Discussion: The extension or upgrade of public improvements and services can be a powerful influence upon ongoing development. For example, timely road improvements, plans for utility service extensions, and new school construction can be strong stimulants for new residential or commercial development in areas designated for those purposes. For the near term, Borough coordination with the cities of Palmer and Wasilla to plan for extension of public water and sewer services along commercial corridors and to areas with high potential for large-scale, small-lot residential development is vital for orderly development of such areas.

For cost-effectiveness, the Borough should seek to make maximum use of alternative means of financing public improvements, working in concert with other local, state, and federal sources as well as the private sector.

Policy 5-B: Identify and acquire or retain sites needed for future public improvements.

Discussion: Early identification and advance acquisition of sites for future schools, public safety facilities, neighborhood recreation, and similar public improvements can ensure that public facilities are optimally located. It can also save on site acquisition costs. This is especially so in a dynamic land market like the Core Area with dynamic growth and rapidly rising land prices. The borough is now preparing an updated borough-wide public facilities plan which can be used to guide public facility site acquisition.

Goal 6. Economic Development: Promote private sector development and a strong local job market suited to the region's economic assets, with a prosperous support sector and affordable housing.

Policy 6-A: Identify suitably located tracts with necessary infrastructure to accommodate economic development.

Discussion: The borough can support new economic development in the Core Area by ensuring there are adequate suitable locations with public infrastructure and a regulatory environment that minimizes land use conflicts and provides regulatory incentives for well-planned development. It is particularly important to anticipate the site requirements of growth sectors such as health care and professional services, retail trade, and light industry. Fostering an adequate supply of affordable housing for resident workers will also strengthen the local job market.

Goal 7. Environment: Protect and conserve the natural resources that support the well-being of residents and the region's tourism and recreation economy.

Policy 7-A: Protect groundwater supplies and quality.

Discussion: Many existing and future residences and businesses will depend on on-site groundwater resources for their water supply. Protection of the supply and quality of groundwater is vital to sustain this arrangement.

Policy 7-B: Protect surface water quality.

Discussion: The Core Area's many lakes are valuable natural and economic assets. They provide an attractive setting for residential development, enhance property values, support a variety of public and private recreational activities, and provide natural habitat, absorb runoff. These lakes are linked to steams and wetlands with similar positive values. The borough's existing program of lake management plans already provides some protection for surface water quality.

Policy 7-C: Provide for storm water and meltwater drainage and snow disposal sites.

Discussion: Proper management of storm water and meltwater that finds its way into natural drainage ways will become increasingly critical as more land surface is cleared and paved. With development, there will also be greater need for private and public snow disposal sites which can impact surface water quality. Implementing surface drainage standards and providing surface drainage improvements where needed can avoid such potential problems as local flooding, surface water pollution and siltation, and erosion.

Policy 7-D: Establish minimum landscaping, signage, and lighting standards for new major commercial development.

Discussion: As commercial development of the Core Area progresses, the positive impact of amenities such as landscaping and retention of natural vegetation, and appropriate signage and lighting on the appearance and visual quality of the build environment will be increasing appreciated. These amenities are difficult to retrofit after development has occurred.

Goal 8. Hazards: Protect life and property from harm from natural and man-made hazards such as floods, erosion, wildfire, earthquakes, air and water pollution, and hazardous materials.

Policy 8-A: Maintain emergency response preparedness capability.

Discussion: The Core Area is relatively free of several natural hazards that constrain land development in other areas of the state. Most of the Core Area is free of major flood and erosion hazards, though some stream corridors are subject to periodic local flooding. Relatively good soils provide good foundations and lower the exposure to seismic hazards. The area is free of avalanche hazard. Experience has shown that the potential for wildfires is a local concern as it is generally throughout southcentral Alaska. The borough has identified and mapped the location of sites that have been contaminated with hazardous materials.

This policy proposes that the borough continue to monitor potentially hazardous conditions and maintain its emergency preparedness response capability. Additionally, the borough can monitor proposed development that might be exposed to or apt to add to hazardous conditions.

Policy 8-B. Reduce risk to persons and property from natural or man-made hazards and encourage natural hazard mitigation.

Discussion: This policy proposes that the borough monitor proposed development that might be exposed to or contribute to hazards such as flooding, erosions, wildfire, and hazardous materials. The borough should discourage development in such hazard-prone areas, or encourage adoption of measures to mitigate hazards. As appropriate, mitigation measures might include floodproof construction, retention of natural vegetation to prevent rapid run-off and erosion, retention of natural drainage ways and wetlands to absorb run-off, and remediation of contaminated sites.

Goal 9. Agriculture: Promote the continued viability of local agriculture.

Policy 9-A: Establish priorities for conservation and acquisition of agricultural lands.

Discussion: Agriculture is an important economic activity and land use in the Core Area and an important part of local heritage. Farmlands enhance the “rural, small town character” that appeals to Core Area residents. A majority of residents agree that funds should be spent to preserve agricultural lands and to preserve open spaces.



Trunk Road Farm (Sandra Petal, MSB)

As land prices rise and development pressures intensify, agricultural land will be increasingly in demand for settlement uses. State law (AS 29.45.060) requires the borough to assess farmlands at “farm use value” rather than full market value. This helps maintain the economic viability of farmlands in general.

Beyond that, the borough has limited financial resources to purchase or conserve agricultural lands as open space and natural areas or for other public purposes. In fact, agricultural lands are prime candidates for future public facilities such as schools, recreational facilities, and public safety and utility buildings for the Core Area.

This policy proposes that the borough inventory and prioritize large-acreage agricultural tracts according to their potential value as public open space, natural areas, and wildlife habitat, or for future public facilities. Based on that information, the borough can then target its efforts and resources on the agricultural lands with greatest value as open space or for public facilities.

Policy 9-B: Pursue a multi-pronged approach to enhance the continuation and economic success of local agriculture.

Discussion: Population growth and economic changes are altering the economics of agriculture in the Matanuska-Susitna Valley. These changes are eroding the viability of traditional large-scale, stand-alone agriculture. At the same time, agriculture’s potential value is rising as a feature of the Core Area’s historic heritage, as a local source of high-quality foodstuffs, as open space and habitat, and as an element of a variety of other productive economic activities.

This policy proposes a set of strategies that, pursued in concert, will help perpetuate the Core Area’s farming tradition and assist farm enterprises to realize their full economic potential while also fulfilling public goals. Possible strategies include:

- Purchase of a variety of development rights to conserve open space, natural habitat, and historic buildings, consistent with the continuation of active private agriculture
- Encouragement of small farms geared to production of high-value crops and specialized crops (e.g., organic foods) for local and regional markets
- Support the development of local processing to add value to and expand markets for local agricultural products
- Promotion of a community gardens program to enable residents to rent small tracts of farmland for family use
- Promotion of the greenhouse and landscape supplies industry to meet the rapidly growing local demand for landscape plant materials
- Promotion of agritourism to supplement farm income

Policies		Goals							
		Land Use	Transportation	Parks and Open Space	Public Facilities	Economic Development	Environment	Hazards	Agriculture
1-A	Adopt and implement a land use plan	X	o	o	o		o		o
1-B	Promote an orderly land use pattern	X							
1-C	Encourage appropriate density patterns	X							
1-D	Develop and adopt land use regulations	X							
1-E	Coordinate land use with the LRTP	X	o						
1-F	Foster a mix of residential areas and housing types	X							
1-G	Secure the stability and viability of established residential neighborhoods	X							
1-H	Encourage concentration of major commercial development	X				o			
1-I	Encourage neighborhood commercial districts	X				o			
1-J	Encourage light industrial parks	X				o			
1-K	Authorize commercial, industrial, and mixed use PUDs	X				o			
1-L	Develop a district plan for the Educational/Medical/Glenn Park District	X				o			
1-M	Plan for reclamation and re-use of large earth materials extraction sites	X				o			

Table 15. Matrix of Goals and Policies

Key: X = Primary Policy o = Secondary Policy		Goals							
		Land Use	Transportation	Parks and Open Space	Public Facilities	Economic Development	Environment	Hazards	Agriculture
Policies									
1-N	Plan with major utility providers for future major utility corridors	X		O	O		O		
1-O	Evaluate development impact fees	X			O				
1-P	Coordinate with borough and community plans	X							
2-A	Incorporate the LRTP's recommendations	O	X						
2-B	Improve and maintain road connectivity within arterial road network		X						
2-C	Support local and commuter transit services	O	X						
2-D	Retained needed section line and utility easements	O	X		O				
3-A	Implement the Parks, Recreation & Open Space Plan	O		X	O		O		O
3-B	Partner with private land conservancies	O		X			O		O
4-A	Identify and map various feature to create and improve green infrastructure	X					O		O
4-B	Proactively plan to protect and preserve natural features	O		O			X		O
4-C	Create interconnected system of natural features	X				O	O		O
4-D	Promote community education and information about green infrastructure	O			X		O		O

Policies		Goals						
		Land Use	Transportation	Parks and Open Space	Public Facilities	Economic Development	Environment	Hazards
5-A	Coordinate public improvements with land use planning	o			X			
5-B	Identify and acquire future public facility sites	o			X			
6-A	Designate tracts for economic development	o				X		
7-A	Protect groundwater supplies and quality						X	
7-B	Protect surface water quality						X	
7-C	Provide for surface drainage				o		X	
7-D	Establish minimum standards for major commercial development					o	X	
8-A	Maintain emergency response preparedness capability	o						X
8-B	Discourage or mitigate development in areas at risk from hazards	o					o	X
9-A	Establish priorities for conservation and acquisition of agricultural lands.	o		o	o		o	
9-B	Pursue a multi-pronged approach to enhance the continuation and economic success of local agriculture.	X		o		o	o	X

Chapter 4. Land Use Plan Map

Introduction

The land use plan map (Figure 12) designates the types of development – e.g., residential, commercial, industrial, and transportation improvements – proposed for different parts of the Core Area. Once adopted by the borough assembly, the land use plan map, together with the goals and policies, becomes a policy framework to guide public and private decisions about land development. It also becomes a policy framework for development and administration of the ordinances and regulations that shape land development on a day-to-day, case-by-case basis.

The land use plan map is general and conceptual in nature. It presents a picture of the eventual land use pattern toward which the Core Area might evolve through ongoing land use decisions. The land use plan map is not a map of existing uses or a zoning map that applies to proposed development. Adoption of the land use plan map does not, by itself, impose any new limitations on land use, although it may be the conceptual basis for implementing regulations on future land uses.

In the future, as determined by the borough assembly, the land use plan map may be used to implement various land use regulations:

- Site development standards
- Special use or conditional use permits
- A zoning map and ordinance
- The platting ordinance
- Public improvements
- Public land acquisition programs

This plan update's goals and policies, and the accompanying land use plan map, are meant to reflect the community's aspirations for its long-term future. After its adoption, the plan's effectiveness will stem from its influence on ongoing private and public decisions about community development and on the actions the community supports to implement its goals for community development.

Land Use Plan Map Definitions

The section below defines the terms that are used on the land use plan map and legend to illustrate proposed future land use patterns.

Major Transportation Improvements. Major transportation improvements include the major road segments the LRTP proposes for improvement in the Core Area through 2025.

Residential. Residential areas are reserved principally for residential development. These areas may also include other development compatible with residential neighborhoods such as schools, churches, and similar institutional uses; low impact neighborhood commercial, home-based

offices and occupations; bed & breakfasts; non-commercial outbuildings such as garages, sheds, greenhouses, and stables, as consistent with borough codes.

Neighborhood Commercial. Neighborhood commercial designates locations that are well suited for retail and service businesses that serve nearby residential neighborhoods. Neighborhood commercial districts are scaled to serve a trade area of about 8,000 to 10,000 residents. Other compatible uses, such as multi-family housing, may also be appropriate.

Major Commercial. The major commercial areas designate parts of the Core Area whose prime location in the regional trade area positions them for retail trade and service business expansion, office industries, and related job growth and property development. The major commercial areas are located near the existing sub-regional commercial centers near the Core Area border with Wasilla and Palmer and along major transportation corridors best suited for highway-oriented commercial development.

Educational/Medical/Glenn Park District. The Educational/Medical/Glenn Park District encompasses the Matanuska-Susitna College and Mat-Su Regional Medical Center campuses, developed and undeveloped private property, University of Alaska lands, the borough central landfill, public recreation lands and trails. This area has high potential for growth into a regional center for education, health care, and related professional and commercial services; as a planned residential community; and as a regional natural recreational area. To realize that potential, the land use plan recommends creation of a district plan to achieve its long-term institutional, economic, residential, and recreational potential.

Potential Earth Materials Extraction Redevelopment Sites. This category includes current or former earth materials extraction sites of 20+ acres. The borough code treats materials extraction sites as interim uses. These sites are prime candidates for eventual redevelopment for residential, commercial, industrial, or institutional uses. Mixed-use development may also be appropriate, depending on site location and characteristics.

Industrial. The industrial category designates areas suited for industrial and light industrial uses. Additionally, areas identified as potential earth materials extraction redevelopment sites may be candidates for redevelopment for industrial uses.

Parks, Recreation, and Open Space. Here, it may be noted that the land use plan map does not display the major recommendations of the borough's already adopted Parks, Recreation & Open Space Plan Parks and Open Space for the Core Area. Those recommendations are, however, incorporated into this Core Area Comprehensive Plan Update and are illustrated in Figures 11 and 12.

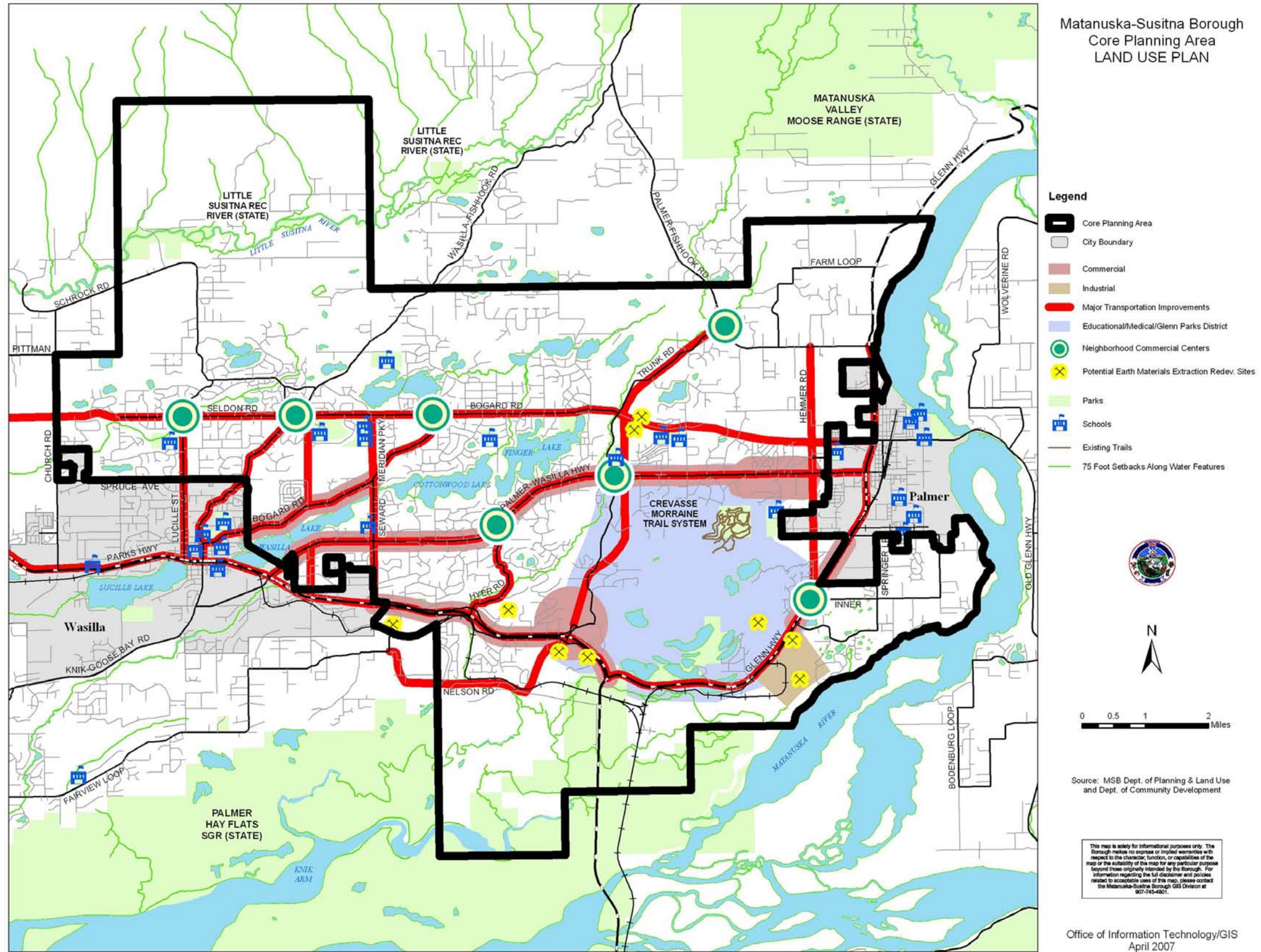


Figure 14: Matanuska-Susitna Borough Core Area Land Use Plan Map

Conclusion

For the past decade, the Core Area has been Alaska's the fastest-growing community. The recent pace of population and economic growth is forecasted to continue for the next two decades. By the end of that period, most of the remaining vacant land in the Core Area will be built up. The long-term development patterns will be set. By that time, the practicality and feasibility of altering established development patterns will be limited. In particular, the opportunity to acquire and conserve public open space, parklands, greenbelts, and natural habitat for future residents will be seriously reduced.

This comprehensive plan provides specific goals and policies to ensure that the core area's residents, economies, natural environment, and general quality of life will be protected and enhanced as the area continues to evolve. Planning for the future of a community is a dynamic and challenging effort. Therefore, it is recommended that this plan be re-visited and amended as necessary on a regular basis (every five to seven years).

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CODE ORDINANCE

By: Borough Manager
Introduced: 08/21/07
Public Hearing: 09/04/07
Adopted: 09/04/07

**MATANUSKA-SUSITNA BOROUGH
ORDINANCE SERIAL NO. 07-131**

AN ORDINANCE OF THE MATANUSKA-SUSITNA BOROUGH ASSEMBLY AMENDING MSB TITLE 15 - PLANNING, TO ADOPT THE 2007 CORE AREA COMPREHENSIVE PLAN UPDATE.

BE IT ENACTED:

Section 1. Classification. This ordinance is of a general and permanent nature and shall become a part of the Borough Code.

Section 2. Amendment of section. MSB 15.24.030(B) is hereby amended as follows:

(8) Matanuska-Susitna Borough Core Area Comprehensive Plan, September 1993, amended September 1997; amended [date].

Section 3. Effective date. This ordinance shall take effect upon adoption by the Matanuska-Susitna Borough Assembly.

ADOPTED by the Matanuska-Susitna Borough Assembly this 4 day of September, 2007.

/ S /

LYNNE WOODS, Deputy Borough Mayor

ATTEST:

/ S /

MICHELLE M. MCGEHEE, CMC, Borough Clerk

(SEAL)

PASSED UNANIMOUSLY: Woods, Church, Kvalheim, Bettine, Wells, and Kluberton.

MATANUSKA-SUSITNA BOROUGH, ALASKA

Economic Development Strategic Plan

Prepared for:

The Mat-Su Borough



Prepared by:



APRIL 22, 2010

ACKNOWLEDGEMENTS

TIP Strategies would like to thank the many individuals who participated in the development of this plan. We are particularly grateful to the business and public sector representatives who generously gave their time and input. Their knowledge and creativity contributed greatly to our understanding of the Borough and our recommendations. Each participant is listed beginning on the next page.

We would also like to thank the plan advisory steering committee as well as the leadership and staff of the Matanuska-Susitna Borough (MSB) for their critical guidance, support, and feedback.

Mat-Su Borough Assembly

Talls Colberg, Borough Mayor	Lynne Woods, Deputy Mayor
Pete Houston, Assembly Member	Ronald G. Arvin, Assembly Member
Mark Ewing, Assembly Member	Cindy Bettine, Assembly Member
Jim Colver, Assembly Member	Vern Halter, Assembly Member

Plan Advisory Steering Committee

Hans Vogel, Triverus	Al Strawn, Matanuska Valley Federal Credit Union
Elizabeth Ripley, Mat-Su Health Foundation	Bonnie Quill, Mat-Su Convention and Visitors Bureau
David Weisz, 3 Bears	Jake Libby, Crystal Clear Creative
Kerry Aguirre, Mat-Su Regional Medical Center	

About TIP Strategies

TIP Strategies, Inc. (TIP) is a privately held Austin-based business and economic development consulting firm committed to providing quality solutions for both public and private-sector clients.

Established in 1995, the firm's areas of practice include economic development consulting, strategic planning, site selection, economic impact analysis, regional economic development, target industry analysis, cluster analysis, technology audit, transit-oriented development, workforce analysis, feasibility studies, market analysis, and redevelopment analysis and planning.

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Alaska Green Energy	Murph O'Brien	Owner
Alaska Host B&B	Kathy Huston	Owner
Alaska Journal of Commerce	Tim Bradner	Journalist
Alaska Rock Products Association	Tom Healy	Executive Director
Alaska USA Federal Credit Union	Roberta (Bobbie) Rawcliffe	Asst. VP Mortgage Lending
Alaska USA Federal Credit Union	Paula Nance	
Alaska View Motel	Gary Neth	Owner
Alaska Waste	Chris Welker	Manager
Alaska Workforce Investment Board	John Cannon	Board Member
Analytica Group	Elizabeth Rensch	Principal
Anchorage Convention & Visitors Bureau	David Kasser	VP - Tourism Development & Sales
Anchorage Economic Development Corp	Bill Popp	President & CEO
Anchorage Economic Development Corp	Erin Ealum	Business & Economic Development Director
AT&T Sports Center	Scott Johannes	Developer
Big Lake Chamber of Commerce	Linda Lockhart	President
BMI Property	Richard Stryken	Owner
Bond, Stephens & Johnson	Chris Stephens	CCIM Associate Broker
Capital Idea	Kay Slack	Management Consultant
Capstone Family Medicine	Wade Erickson	Owner and Physician
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Charter College	Kim Ford	Director of Career Services
Colony High School	Becky Krupa	Counselor



Colony Manor Assisted Living	Nathan Dahl	Administrator
Combs Insurance Agency	Cheryl Combs	Owners
Cook Inlet Housing Authority	Gabe Layman	CIHA Sr. Manager of Business & Legal Affairs
Country Insurance & Financial	Reum Marcus	Financial Advisor
Cross Creek	Berkley Tilton	Owner
Crowley	Scott Geuss	Marketing & Sales
Crowley	Mark Forrester	Terminal Manager
Crystal Clear Creative	Jake Libby	Owner
Denali Log & Lumber	Mark Stahl	Owner, Manager
DG Smith Builders	Dennis Smith	Owner
DotCONN Productions	John Conn	Owner of Stage 2 Studios (a partner company)
Dowl HKM	Jennifer Payne	Corporate Marketing
Dowl HKM	LaQuita Chmielowski	Department Manager
Eagle Quest Cabins & Lodge	Raymond Roth	Owners
Economic Competitiveness Group, Inc.	Alec Hansen	President
Garden Gate B&B	Karen Harris	Owner
GCI	Heather Wagner	Human Resources Manager
Geneva Woods Mat-Su Pharmacy	Dave Johnston	Pharmacist
Glacier Creek Distillery	Toby Foster	Partner Owner
Granite Construction (formerly Wilder)	Steve Connelly	Resource Manager
Greater Palmer Chamber of Commerce	Sue Welton	President
Greater Wasilla Chamber of Commerce	Chris Abernathy	President
Greater Wasilla Chamber of Commerce	Mike Gabel	Past President
Greatland Welding & Machine	Gary Feaster	Owner
Hageland Aviation	Mike Harris	Director of Maintenance
Hall Quality Homes	Jesse Hall	Owner
Hatcher & Associates	Kelci Hatcher	Owner



Hatcher Pass B&B	Liz Hejl	Owner
Heiny's Alaska ATV Adventures	Marty Heintzman	Owner
Homestate Mortgage Company	Annie Davenport	Branch Manager
Houston Chamber of Commerce	Nancy Sult	President
Howdie Construction	Todd Nugent	President
Infusion Boutique	Ruth Villaneuva	Owner
Institute of Social Economic Research	Steve Colt	Interim Director
ITS Alaska	Quentin Allgood	Owner
Kahiltna Birchworks	Dulce Ben-East	Owner
KMBQ Radio Station	John Klapperich	Station Owner/President
KMBQ Radio Station	Kyle Maxwell	Programs
Knik River Lodge	Peter Schadee	Owner
Kristan Cole Team	Kristan Cole	Owner
KTNA Radio Station	Charlie Loeb	Acting General Manager
KTNA Radio Station	Sussan Mossanen	Director
Lake Lucille B&B	Carol	Owner
Larson Chiropractic	Kristofer larson	Owner
Lead Dog Enterprises (tour guide)	Ryan Seibert	Owner
Life Family Chiropractic	Dr. Stacie Lowe	Owner
Lifetime Adventures	Dan McDonough	Owner
Matanuska Creamery	Karen Olsen	Financial Officer
Matanuska Trout Fishers (fishing guide)	Jhan Haddeland	Owner
Matanuska Valley Federal Credit Union	Al Strawn	General Manager, Palmer Branch
Matanuska Valley Federal Credit Union	Lori Kraft	Human Resources Specialist
Mat-Su Convention Visitors Center	Bonnie Quill	Director
Mat-Su Convention Visitors Center	Tammy Bruce	Marketing Manager
Mat-Su Energy	George Sikat	Owner



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Mat-Su Health Foundation	Don Zoerb	Finance & Human Resources Manager
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McKinley View Real Estate	Holly Stinson	Realtor
Meandering Moose Lodge	Kathy Stoltz	Owner
Meekin's Air Service	Mike Meekin	Owner
Meekin's Air Service	Samantha Keller	Co-Owner
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MWH Americas	Chris Brown	VP - Pacific Northwest Regional Manager
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New Horizons Telecom	Donna Morigeau	Human Resources Manager
Northrim	Erika Bills	Asst. VP Business Development Officer
Outdoors and More Sporting Goods	Jerry Holbrook	Owner
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Physician	Larry Lawson	Oncologist
Poppert Milling	Dave Poppert	Owner
Prudential/Jack White Vista Realty	Jerry Moses	Realtor
Pyrah Farm	Ted Pyrah	Owner
Quest Engineering	Mark Cottini	Partner in Flintstone
Radio Free Palmer	Mike Chmielewski	President
Rainbow River Expeditions	Norman Haynes	Owner
Re/Max of Wasilla	Kibe Lucas	Realtor
Regional Advisory Council for Alaska Workforce Improvement Board	Marty Metiva	Chair
Rempel Farms	Mark Rempel	Owner



Resource Development Council	Carl Portman	Deputy Director
River Crest Manor B&B	Jarolyn Nelson	Owner
Rock Ridge Services	Fritz Hoffman	
Sheep Mountain Lodge	Zack Steer	Owner
Sumner Company (construction)	Rick Sumner	Owner
Sunset View B&B	Kathy Glines	Owner
Swiss-Alaska Inn	Werner & Renamary Rauchenstein	Owners
Tailgaters Sports Bar & Grill	Phil Lundstrom	Owner
Talkeetna Air Taxi	Sandra Loomis	Owner/Manager
Talkeetna Chamber of Commerce	Trisha Costello	President
Talkeetna Lodge	Sharlene Berg	Director of Operations
TerraSond	Tom Newman	Owner
TerraSond	Butch Hallford	VP of Finance
TerraSond	Tracy Haven	Human Resources Manager
Three Bears	Weisz, David	Owner
Three Rivers Fly & Tackle	Mike Hudson	Owner
Three Rivers Fly & Tackle	Steve Runyan	Manager
Triverus	Hans Vogel	Owner
Tru Built Construction	Bob Pevan	Owner
Tyonek Enterprise Developments	John D. McClellan	Principal Engineer
UPS Store	Stacy Stigar	Owner
Usibelli Coal Mine	Steve Denton	VP Business Development
Usibelli Coal Mine	Robert "Rob" Brown	Project Manager
USKH	Jim Huttel	Former CEO
USKH	Tim Vig	President
Valley Mediation Solutions	Tammy Sunderland	Mediator
Wal-Mart	Chris Abernathy	Wasilla Store Co-Manager



Weldin Construction	Dick and Jennie Weldin	Owners
Wells Fargo Bank	Annette Andres	Community Bank President
WHPacific	Ron Bissett	Department Manager
William Scotsman	Mike Frizzell	Operations Manager
Willow Chamber of Commerce	Jim Huston	President
Wolf Architecture	Gary Wolf	Owner
Public Entity	Person	Position
Alaska Department of Fish & Game	Samantha Oslund	Biologist
Alaska Department of Fish & Game	David Rutz	Area Management Biologist
Alaska Dept. of Labor & Workforce Development	Neal Fried	Economist
Alaska DNR - Division of Agriculture	Amy Pettit	Development Specialist
Alaska DNR - Division of Agriculture	Franci Havemeister	Director
Alaska Job Corps	John Douglas	Community Liaison
Alaska Job Corps	Susan Van Gorder	Career Technical Education & Student Services Director
Alaska Job Corps	Tina Cloyd	Human Resources Manager
Alaska Railroad Corporation	Wendy Lindskoog	Assistant VP of Corporate Affairs
Big Brothers/Big Sisters	Erin Williamson	Director
City of Houston	Lance Wilson	Deputy Mayor
City of Palmer	Sara Jansen	Special Assistant
City of Palmer	Alice Williams	Human Resources Manager
City of Wasilla	Marvin Yoder	Deputy Administrator
City of Wasilla	Gwen Brew	Human Resources Manager
Department of Transportation & Public Facilities	Alan Kemplen	Area Planner Central Region Planning
Friends of Mat-Su	Kathy Wells	Executive Director
Friends of Mat-Su	Mimi Peabody	Project Coordinator
M.A.S.C.O.T	Lou Friend	Executive Director
Matanuska Electric Association	Lorali Carter	Manager of Government & Corporate Communications



Matanuska Electric Association	Joe Griffith	Interim General Manager
Matanuska Electric Association	Heidi Kelley	Sr. Human Resource Administrator
Matanuska Telephone Association	Kristy Bernier	Community Relations specialist
Matanuska Telephone Association	Will Askren	Human Resources Manager
Matanuska-Susitna Borough	John Duffy	Borough Manager
Matanuska-Susitna Borough	Dave Hanson	Economic Development Director
Matanuska-Susitna Borough	Eileen Probasco	Planning Chief
Matanuska-Susitna Borough	Lauren Kruer	Planner
Matanuska-Susitna Borough	Rob McFerron	Human Resources Manager
Matanuska-Susitna Borough School District	Ray DePriest	Director of Career & Technical Education
Matanuska-Susitna Borough School District	George Troxel	Superintendent
Matanuska-Susitna College	Dennis Clark	Director
Matanuska-Susitna College	Harlen Harmon	Director of Administrative Services
Matanuska-Susitna School District	Katie Gardner	Human Resource Director
Radio Free Palmer	Mike Chmielewski	Vice President
Small Business Development Center, UAA Anchorage	Julie Nolen	Director

Finally, **MSB staff** provided essential management, administration, and support to the planning process.

John Duffy, Borough Manager	Dave Hanson, Economic Development Director
Eileen Probasco, Planning Chief	Lauren Kruer, Borough Planner
Kathy Rocci, Administrative Secretary	



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INTRODUCTION

The Matanuska-Susitna Borough (MSB) engaged TIP Strategies. Inc., an Austin-based economic development consulting firm, to assist in developing an economic development strategic plan for the Borough. The following recommendations are the result of a 10-month process incorporating input and ideas from key stakeholders throughout the Borough. The purpose of the plan is to provide a blueprint for positioning Mat-Su for sustainable economic growth and prosperity.

The information for the planning effort was provided primarily by four stakeholder committees and seven focus groups of business people, as well as representatives of public entities (cities, utilities, state agencies, etc.) and workforce development representatives. In addition, individual interviews and discussions were conducted with business representatives throughout the Borough. Over 180 people – 80 percent of whom are from the region’s business community – participated in plan committees, focus groups, and interviews. TIP would like to thank representatives of the committees, organizations, businesses, and groups who gave their valuable time to participate in this process. The complete list of participants is included in the acknowledgements section.

The plan itself is organized into seven main sections. Following the introduction, an executive summary summarizes the key challenges facing the Borough, as well as the vision, goals, and priority strategies needed to meet those challenges. The document then features the plan itself, including its five goals, 23 strategies, and dozens of actions and sub-tasks. After the plan, an implementation matrix is provided listing all the goals, strategies, and actions in a single table. The matrix also includes a realistic timeframe for completing each action and the regional partners needed to successfully implement them. Recommended economic performance measures for tracking the economic vitality of Mat-Su follow the implementation matrix. A quantitative assessment is then provided, including an overview and an assessment of the local economy. The final section of the plan is a summary of the strengths, weaknesses, opportunities, and threats (SWOT) identified by the consulting team as well as the four standing committees. The latter sections provide both a quantitative and qualitative basis for many of the initiatives highlighted in the plan.

Standing Committees

- Advisory Steering Committee
- Business Group
- Public Sector Group
- Workforce Development Group

Focus Groups

- Entrepreneurs
- Human Resource Managers
- Professional Services Sector
- Young Professionals
- Tourism/Hospitality/Recreation
- Real Estate, Builders, Finance Experts
- Anchorage Business and Economic Development Representatives



EXECUTIVE SUMMARY

Introduction

The Matanuska-Susitna Borough (MSB) engaged TIP Strategies, Inc., an Austin-based economic development consulting firm, to assist in developing an economic development strategic plan for the Borough. Developing an economic development plan was deemed by the Borough Assembly to be a high priority goal for the MSB. The following recommendations are the result of a 10-month process incorporating input and ideas from key stakeholders throughout the Borough. The purpose of the plan is to provide a blueprint for positioning Mat-Su for sustainable economic growth and prosperity. The plan identifies projects and initiatives and presents guidelines for implementation.

Over the course of the engagement, TIP held meetings throughout the Borough in which the following questions were aired:

- What economic challenges face the Borough?
- How well is Mat-Su positioned to cope with these challenges?
- How best can the MSB position Mat-Su for long-term economic vitality?

The information for the planning effort was provided primarily by four stakeholder committees and seven focus groups of business people, as well as representatives of public entities (cities, utilities, state agencies, etc.) and workforce development representatives. In addition, individual interviews and discussions were conducted with business representatives throughout the Borough. Over 180 people – 80 percent of whom are from the region's business community – participated in plan committees, focus groups, and interviews. TIP would like to thank representatives of the committees, organizations, businesses, and groups who gave their valuable time to participate in this process. The complete list of participants is included in the acknowledgements section.

The Challenge

Since 1970, Mat-Su has experienced explosive population growth. The Borough's population first reached 10,000 residents in 1975 and subsequently expanded five-fold over the next 20

Government & Geographic References in the Document

MSB – Mat-Su Borough government

The Borough –geographic area

Mat-Su –geographic area

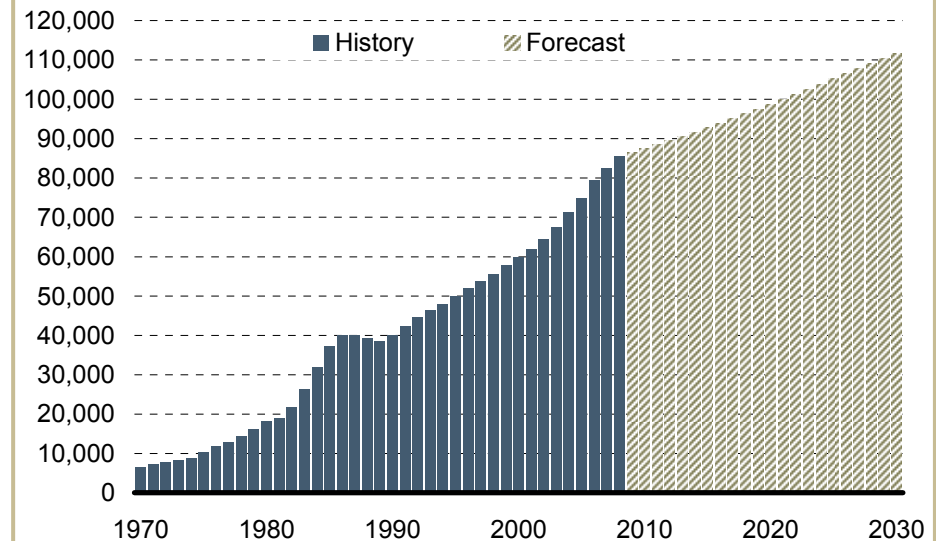


years. By 2000, the Census counted nearly 60,000 local residents. Since the beginning of the decade, Census estimates show the Borough's population surging approximately 43 percent in eight years to over 83,000 residents. Indeed, Mat-Su has been the fastest growing region in the state of Alaska.

Much of Mat-Su's growth has been sustained by Anchorage residents seeking more affordable housing options and the Borough's appealing lifestyle. Such rapid population growth, however, has not come without costs. The Borough's exploding population fueled a boom in residential construction, culminating in a significant market correction in 2005-2006. The rapid pace of population expansion and development in Mat-Su has also challenged its capacity to absorb and manage growth. The residential construction surge also resulted in haphazard growth patterns and conflicting land uses. For example, a substantial amount of Mat-Su's valuable agricultural land has been consumed by new housing construction. Additionally, public services and infrastructure have struggled to keep pace with the growth. Other key challenges facing the Borough include:

- With few large private employers, the Mat-Su economic base remains undiversified and largely dependent on external factors, including federal and state fiscal policy, the health of the Anchorage economy, and the price of oil.
- The Borough lacks a common vision for growth and development, which deters new investment by creating the perception that Mat-Su does not offer a stable and positive business climate.
- The image of Mat-Su to non-residents is negatively affected by the haphazard character of physical development patterns in the Borough.
- Mat-Su's competitiveness for export-oriented industrial development is limited by the state's remoteness relative to high growth markets, as well as high transportation, labor, and energy costs. The Borough is, however, well positioned within the state to attract companies serving the Alaska market. Furthermore, the ongoing development of Port Mackenzie and the expected rail extension will enhance Mat-Su's competitive position for export-oriented industrial development.

Mat-Su Population and Growth



SOURCE: U.S. Bureau of the Census (history) and Moody's Analytics (forecast)



The Response

Economic development goals, strategies, and actions must be driven by a clear vision. While conceptually this makes sense, the more practical value of the vision is in directing resources in the Borough for the express purpose of economic development. As a result, successful vision statements are bold but provide a clear direction and can be supported by goals and strategies. We believe that the following vision achieves those objectives for Mat-Su:

The Mat-Su Borough is the premier destination for quality development and jobs in Alaska.

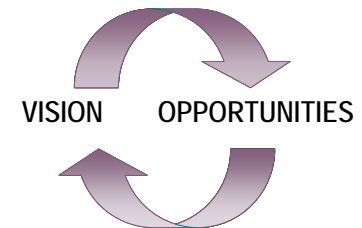
This vision statement presents a clear focus for MSB's economic development efforts with aggressive, yet attainable, goals. Mat-Su will establish itself as a magnet for the highest quality development and jobs within the state of Alaska.

This vision, however, can only be reached if goals are established as pillars to support key proposals. We believe that the following five goals will accomplish that:

- **Goal One: Position Mat-Su for sustainable economic growth and vitality.**
- **Goal Two: Build capacity to conduct economic development within the Borough.**
- **Goal Three: Expand Mat-Su's economic development infrastructure.**
- **Goal Four: Attract, retain, and engage talent.**
- **Goal Five: Raise awareness of economic development opportunities.**

Priority Strategies

TIP, with the strong encouragement of the Borough's business, public, and community leadership, has sought to address the question of Mat-Su's future economic vitality in a practical way. Based on our understanding of the Borough's opportunities and challenges, and in light of current economic conditions, we believe the seven economic development strategies outlined below represent the highest priorities for Mat-Su.



- The MSB should work with the University of Alaska Anchorage, Mat-Su College, the University of Alaska Fairbanks, and the Mat-Su Regional Medical Center to **establish a university-medical district within the Borough**. Such a district would serve as a focal point in the Borough for attracting high-level jobs, facilities, research, education, and training, while preserving the area's natural beauty and amenities.
- **Build greater awareness of Mat-Su as a destination for new investment among employers in Anchorage.** Mat-Su should be top of mind to companies seeking expansion within the region. The greatest emphasis should be placed on attracting professional and technical services sector firms to the Borough.
- **Establish a new Borough-wide partnership to support economic development in Mat-Su.** The primary mission of the partnership would be to act as an economic development advisory council for the MSB and to assist with the implementation of this plan. Additionally, the new partnership should bring businesses and organizations throughout the Borough together to advocate for a common vision for economic development in Mat-Su.
- **Bring business, workforce training, and education communities closer together.** Facilitate greater partnerships and communication on issues of employer needs and corresponding training, apprenticeship, and education programs. Expand post-secondary educational options and programs in Mat-Su.
- **Continue investing in the tourism infrastructure and marketing of Mat-Su.** As an export-based sector that supports many small businesses, tourism is growing increasingly important to the Borough's economy. Expanding the Borough's capacity to attract and accommodate greater numbers of independent travelers is critical to the sector's success.
- **Continue developing multimodal transportation infrastructure at Port Mackenzie,** including the construction of a rail extension from the port to the Alaska Railroad's mainline and ferry service to Anchorage. A fully-developed multi-modal port would serve as a key transportation asset for the state of Alaska and would position Mat-Su to attract significant new private investment and employment opportunities. The port

Recommended Opportunity Sectors

To support the borough's economic development efforts, TIP identified opportunity business and industry sectors. We chose potential opportunities using a combination of quantitative, qualitative, and strategic approaches. The recommended industries capitalize on existing and emerging assets in Mat-Su, as well as the broader Anchorage-Mat-Su region. These industries were also chosen in light of the current economic environment, as they are likely to endure recessionary times and could possibly benefit from governmental support.

- Professional & Technical Services
- Healthcare & Wellness
- Transportation, Ports, & Warehousing
- Retail/Arts/Recreation/Leisure
- Clean Tech (green building & renewable energy)
- Value-Added Agriculture and Forest Products (agricultural processing facilities)



would also open up Mat-Su to international trade and investment possibilities with the entire Pacific Rim.

- Continue to **update the Mat-Su Borough planning code**. MSB leadership and planning staff will work with citizen groups, community councils, and incorporated cities to ensure that the Borough's land and resources are efficiently used for the benefit of Mat-Su's economy and population as well as to protect its natural beauty.

These seven priority strategies address some important short-term and long-term economic development needs of the Borough. However, they alone don't meet all of Mat-Su's needs and challenges. The plan also recommends strategies to address other critical issues. These include business retention and expansion, engaging young professionals and new residents, and enhancing the image of Mat-Su throughout Southcentral Alaska.

Final Thoughts

The purpose of this plan is to provide the MSB and its partners with specific guidance regarding the commitment of resources for enhancing economic vitality. Based on TIP's experience working with similar organizations throughout the nation, we feel that for MSB to successfully implement this plan, it will require further staffing resources. At a minimum, the MSB Economic Development Department needs an additional economic development professional to assist with business retention, recruitment, and marketing activities.

A point must also be made about the plan's orientation. We recognize the MSB is principally responsible for promoting new jobs and new investment for the entire Borough. However, many of the recommendations in this plan deal with what are considered non-traditional economic development activities. Yet, the overall economic vitality of the Borough is impacted by the MSB's ability to influence issues such as talent attraction and image enhancement. Since the MSB's resources and expertise in these areas are limited, it must rely on partner organizations (such as local chambers of commerce) to carry out many of these functions.

Finally, the MSB has committed itself to an effective planning effort. The next step is implementation. Aligning Borough-wide resources in support of these strategies will require a team effort. Mat-Su has the assets and the talent to achieve sustained economic vitality. All that is needed is a shared commitment.

2010 Borough Assembly Priorities

Many of the recommended goals and strategies in the plan mirror some 2010 Assembly priorities, which were adopted on January 7, 2010. Indeed, completion of the economic development plan was ranked as a high priority. Below are the Assembly priorities reinforced in this plan.

- Tourism infrastructure
- Natural resource development
- Economic development plan
- Increase private sector employment
- Education funding
- Hatcher Pass
- Revise codes to urban/rural districts



GOAL ONE: POSITION MAT-SU FOR SUSTAINABLE ECONOMIC GROWTH AND VITALITY.

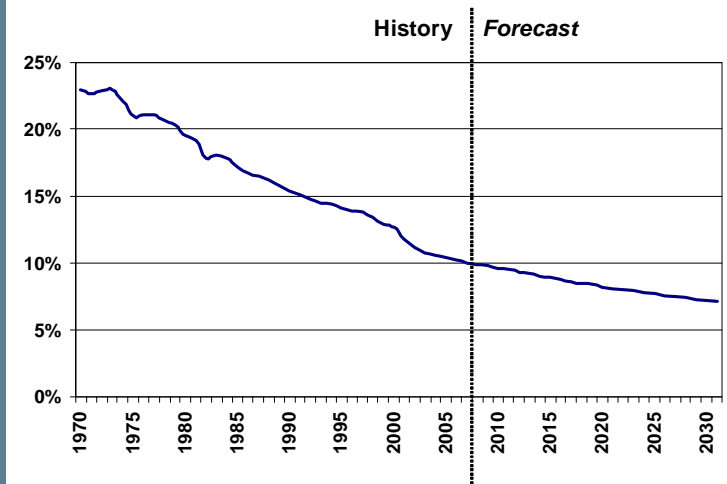
The U.S. economy – indeed, the global economy – is experiencing seismic shifts. Many of these changes are extensions of longer term trends, accelerated by the impact of the *Great Recession*. Sectors such as energy, finance, and healthcare must now contend with market forces as well as greater levels of public sector involvement. The continued decline of U.S. manufacturing employment not only affects the prosperity of cities and regions but also the practice of economic development. These changes are forcing communities and practitioners to rethink what we mean by a primary job, how we measure economic impact, and how we design incentives.

Mat-Su is not immune to these changes. The Borough Assembly recognizes increasing private sector employment to be a high priority for the MSB. For this reason, the recommended strategies address the full complement of economic development activities, including business retention and expansion, targeted business attraction, and entrepreneurship promotion. Recommended opportunity sectors include professional and technical services, healthcare, clean technology, transportation and warehousing, retail/arts/recreation/leisure, and value-added agriculture and forest products. The recommendations also consider the infrastructure needs of the Borough (including port development and Class A office space) and sustainable development of Mat-Su's natural resources.

Strategy 1A: Develop professional & technical services sector. Growing the professional services sector is central to the economic vitality of Mat-Su. America has transitioned from an economy based on producing goods to one that provides services. As a consequence, the professional services sector is now central to the U.S. economy. It is a source of high-wage employment opportunities with a relatively low impact on local infrastructure and on the environment.

The Borough's position as a growing residential destination for working professionals will open the door for Anchorage firms to establish satellite offices in Mat-Su. The Borough's rapidly expanding retail sector, concentrated in Wasilla, only adds to its attractiveness. Additionally,

Manufacturing as a Percent of Total U.S. Jobs



Source: Moody's Analytics



Anchorage-based professional firms are considering the Borough in the pursuit of local contracts in such fields as engineering and architecture. For Mat-Su to capitalize on these opportunities, the Borough must actively market itself as an advantageous destination for new investment. Mat-Su must also develop the appropriate space and sites to accommodate new or expanding firms.

Actions:

1A.1: Identify targets. Professional services firms should be targeted for recruiting in ways similar to traditional manufacturing recruitment. This means identifying gaps; targeting specific firms capable of, and interested in, expanding; and offering incentives. Filters for this strategy include.

- **Existing strengths.** Targets that support existing sectors in the Borough are an appropriate starting point. These include construction, agriculture, government contracting, and natural resource development support functions.
- **Geographic connections.** Anchorage's competitive assets make recruitment of large professional services firms to the Borough unlikely. However, identifying specific firms in Anchorage with ties to Mat-Su may yield prospects for expansion (i.e., firms that may be interested in establishing satellite offices to service the Borough). Likewise, targeting firms with a significant number of residents already living in the Borough.
- **Workforce connections.** A substantial number of Mat-Su residents employed in the professional services sector commute daily to Anchorage for work. Human resource managers report a growing number of these professionals are willing to earn lower wages by taking positions in the Borough to avoid the long and expensive daily commute. In order to retain skilled professionals,

Why Professional Services?

While economic developers are accustomed to providing incentives to manufacturing firms, they rarely turn their attention to the service sector. This is both possible and desirable. Continued loss of manufacturing jobs, coupled with increasing use of technology and the growing trend of outsourcing of non-core functions, means that future U.S. employment growth will be concentrated in the service sector. Much of this growth has come in the form of low wage jobs in retail and personal services. However, this sector also includes firms that provide high-end support services—such as computer programming, legal services, accounting, and marketing—to other companies. In addition to providing a source of relatively high-wage employment, the presence of a well-rounded professional services sector is key to the retention of existing businesses and the recruitment of new industries of all types. The growth of this sector, which is heavily dependent on Class A office space, can also serve as a catalyst for real estate development as well as redevelopment.



Anchorage firms employing significant numbers of Borough residents might choose to establish a satellite office in Mat-Su.

- Wage levels. Identifying firms that pay relatively high wages should be an important consideration. In addition to raising the standard of living for residents, such firms tend to be more productive and innovative. This can directly and indirectly lead to greater productiveness and innovation among existing businesses.

1A.2: Implement direct recruitment strategy. Professional service companies are typically not recruited using standard approaches (e.g., attending trade shows and marketing to site consultants). The following actions should be taken on behalf of specific industries and occupations:

- Associations. The first step is to identify relevant professional associations (and networking organizations) for each occupation or industry group. The focus of the research should be on Anchorage-based organizations. The MSB economic development representative should provide formal support (and participation) on behalf of specific organizations.
- Database. Once relevant organizations have been identified, membership lists should be used to build a database of potential firms and individuals for marketing purposes. This database should focus on small firms and individual practitioners.
- Strategy. Information obtained in the above two action items should be used to craft a regional marketing strategy for the professional services sector. The strategy should address a variety of communication channels, including direct mail, e-mail, social networking, and word-of-mouth. The marketing strategy should emphasize the Borough's exceptional quality of life, low-



cost business environment, growth potential, beautiful scenery, and abundant outdoor amenities.

1A.3 Build the sector from within. While recruitment is the near-term focus, as the Borough's talent and business base expands more emphasis should be given to building the sector from within.

- Work with higher education officials in the Borough to catalog and publicize research efforts with the greatest potential for local commercialization. These may include renewable energy and value-added agriculture.
- Continue supporting the efforts of Mat-Su College to expand their academic degree and certificate programs, especially programs in business, information technology, and engineering.
- Celebrate local success stories (when startups are launched or significant contracts are secured). The Mat-Su and Anchorage media should be provided with press releases and Borough residents should seek speaking engagements throughout the region.

1A.4 Ensure appropriate space is available. Having an appropriate mix of commercial office space plays an important role in promoting professional services development. One of the most significant barriers to professional services development in the Borough is the lack of Class A office space. The shortage of lease space has forced some business owners to construct their own buildings. Most small businesses, however, do not have the time or resources to pursue such a strategy.

- Working with local real estate professionals, the MSB should inventory the sites in the Borough appropriate for commercial office space. This information should be fed into a database and updated regularly.



- Work with leadership and planning staff in the Borough to identify and prioritize appropriate sites for new commercial and office development.
 - Communicate with commercial developers in the Anchorage region about the potential for new office development opportunities in the Borough.
- 1A.5 Target incentives to this sector.** Incentives may be considered for professional service firms who pay above-median wages and who are in an expansion mode. These incentives can include low interest loans for building improvement and capital equipment (machinery and equipment ranging from copiers to computers). Other creative financing options might consist of subsidizing favorable lease rates in unoccupied office buildings.
- 1A.6 Provide general support.** Qualified firms should be offered general support including job training assistance, help in accessing new clients, and participating in networking events that match them with potential clients. This task mirrors many of those under the heading of business retention and expansion.



Strategy 1B: Support the local expansion of the healthcare and education sectors.

Active support for local healthcare and education sectors has not been viewed as a core function for economic developers. These sectors were valued for supporting a healthy, dependable, and skilled local workforce, critical to attracting new employers. As more jobs in manufacturing and services are sent offshore or eliminated, there is a growing acceptance that the health and education sectors serve as vitals sources of output and employment growth.

Indeed, healthcare and education are now the fastest-growing occupations in the U.S. Sometimes referred to “proximity services,” these sectors cannot be off-shored and often involve personal interactions requiring creativity and high skill levels. Demographics are also driving the rise of these sectors. Aging Baby Boomers are requiring more healthcare services. For example, healthcare related jobs account for seven of the top 20 fastest growing occupations and 14 out of the 20 fastest growing jobs in the U.S.

Mat-Su is fortunate in that it is home to quality healthcare and varied educational institutions. In fact, the Mat-Su Regional Medical Center and the Mat-Su Borough School District are the two largest employers in the Borough. Post-secondary institutions offering higher education opportunities in the Borough include Mat-Su College, the Alaska Job Corps Center, Charter College, and Wayland Baptist University. Providence Health System also operates a full-spectrum clinic and laboratory center in Wasilla, as well an imaging center at Parks/Glenn.

To secure the future economic vitality of Mat-Su, the Borough must sustain and grow its existing institutions, as well as enhance the environment for attracting new health and education programs and services.

Actions:

1B.1: Create a “University-Medical” district. The MSB should work with the University of Alaska Anchorage, Mat-Su College, the University of Alaska Fairbanks, and the Mat-Su Regional Medical Center to

Medical Districts

Medical districts are special-use zoning districts that traditionally promote, maintain, and develop medical healthcare facilities and medical education and research. The first districts date back to the early 1940s in large urban areas. In recent years, the medical district concept has transformed into a strategy leveraging the local healthcare employee base as a foundation for economic development and redevelopment projects. In some urban areas, medical districts are used to link medical facilities with older neighborhoods to spur economic revitalization. In addition to the urban districts, self-contained “healthcare villages” are being developed—usually on suburban green-field locations. In recent years, medical villages have been established in places such as Clarkston, MI; Jackson, NJ; and Skokie, IL.

A nearby example of a more novel concept is the Universities & Medical District (U-Med) in Anchorage. Encompassing 1,130 acres of land 2.5 miles from downtown Anchorage, the U-Med District is home to some of the largest private and public employers in Alaska. Anchored by Providence Health System and the University of Alaska Anchorage, the U-Med District is the focal point of the knowledge economy in Anchorage and is one of the fastest growing centers of employment in Alaska.



establish a university-medical district within the Borough. Such a district would serve as a focal point in the Borough for attracting high-level jobs, facilities, research, education, and training, while preserving the area's natural beauty and amenities.

The logical target for such a district is the growing medical and commercial area near Trunk Road and the Parks Highway. This area serves as the central gateway to Mat-Su and is anchored by the Mat-Su Regional Medical Center, the University of Alaska Experimental Farm, Mat-Su College, and the Borough recycling facility (which also serves as a renewable energy classroom for Mat-Su College). The area features established recreation and trail systems and is one of the most beautiful natural areas in all of Alaska. The exact dimensions and boundaries of a district would be defined through a master planning process involving stakeholders and public input.

Permitted land uses within such a district could include medical, mixed-use commercial, residential, and institutional (educational). However, any development should be compatible and complementary to the existing uses and resources of the area. The district would also maintain certain design guidelines that convey the qualitative nature of development within the district, including the preservation of open space. TIP recommends such guidelines emphasize high quality development that would elevate the stature of the district within Southcentral Alaska and set new benchmarks for other developments in Mat-Su.

- Constitute a steering committee of key stakeholders to refine the concept, define the objectives, and outline the boundaries of a "U-Med District" for the Borough. The committee would take the lead securing buy-in from affected parties and in shepherding negotiations. The committee would also communicate information to the public.

Leveraging Hospitals for Economic Development

Hospitals play a pivotal role in promoting regional economic development. Hospitals, represent the largest source of employment in the healthcare sector, which is a growing a segment of the U.S. economy. Indeed, hospitals are often one of the largest employers in a region, particularly in rural areas. They offer high-quality jobs and consistent job growth for a wide range of skill levels as part of the fast-growing healthcare sector. They provide stable employment in most economic conditions. Earnings of hospital workers, on average, are higher than those of workers in service-providing industries as a whole. Have high economic multipliers, leading to additional economic value through creation of jobs and business opportunities in the region. According to a 2007 report by the American Hospital Association, each hospital job supports about two more jobs and every dollar spent by a hospital supports about \$2.30 of additional business activity.

Despite this, hospitals are often missing from economic development strategies, as the significant contributions hospitals make to the economic base of regions tends to be overlooked. Health care is perceived to be a local activity, yet it can be essential in an area's economic prosperity. Recent research at the University of New Orleans (Nelson, 2009) indicates that hospitals are substantial contributors to the economic base of slow-growth and larger metros. The study indicated that hospitals in small metropolitan regions have the potential to evolve as a significant export industry because they often provide services to residents from surrounding geographic areas.



- The steering committee should also work with the public entities involved to evaluate if an oversight body for the district is needed and the form it should take. Examples could include an appointed commission or a non-profit foundation.
 - For example, the Mid-Illinois Medical District in Springfield has an eleven-member commission made up of appointments by the Illinois Governor, the City of Springfield, and the Sangamon County Board. (<http://www.midillinoismedicaldistrict.org/index.php>)
 - The Memphis (Tennessee) BioWorks Foundation is a 501 (c)(3) organization comprised by major medical institutions, private technology businesses, and political representatives. (<http://www.memphisbioworks.org/>)
 - Commission a master plan to examine and resolve the objectives and priorities of the institutional, commercial, residential, and environmental interests within and adjacent to the district.
 - Once a master plan is complete and adopted, a marketing strategy is required to support its implementation.
- 1B.2: Encourage local healthcare providers to collaborate and partner in healthcare education, workforce training, and talent attraction and recruitment efforts.** Borough-wide workforce development and training efforts have more credibility and leverage when all major healthcare interests are involved. It results in more workers entering healthcare fields and more staying in healthcare. It is an inefficient use of resources for rural healthcare employers to compete with each other for a limited pool of workers.
- 1B.3: Grow healthcare workforce locally.** It is always more cost-effective to “grow your own talent” than to import it from the outside. The Mat-



Su Regional Medical Center is generally able to hire and retain talent for its non-physician positions. However, recruiting physicians to the Borough is still a challenge. Growing doctors locally is limited by the absence of a medical school in Alaska. However, the MSB and local healthcare providers could work with the state in designing incentive programs for Alaska students receiving a medical education at outside medical schools to return and practice in the state.

Links to organizations providing best practices in local healthcare workforce development include:

- The Center for Health Workforce Development in Tennessee (www.healthworkforce.org/guide/toolkit_sec3_1.htm)
- The Greater Dallas Chamber, DFW Regional Healthcare Cluster (<http://www.dallaschamber.org/healthcare/>)

1B.4: Support and strengthen the mission of Mat-Su College. One of Mat-Su's most valuable economic development assets is Mat-Su College (MSC). The two-year campus is a valued provider of post-secondary education and skills training for residents of the Borough. The global recession places even greater importance on the presence of MSC. Traditionally, in times of high unemployment, enrollment in post-secondary institutions increases as more workers and students seek additional training, skills, and education to prepare for future opportunities. Many education officials refer to two-year colleges as "recession insurance." Indeed, MSC's fall 2009 enrollment reached a near-record enrollment of 1,782 students, representing a 20 percent gain over the previous year and only one shy of the record set in 2003.

Community leaders should explore ways to enhance the relationship of the local economic development partners and the college. Improving the flow of information between the community and the college is essential. MSC leadership and faculty should be



encouraged to develop innovative curricula and programs that address both current and future education and skills needs. Programs expected to see greater demand include healthcare, computer sciences, education, business, and accounting. Local partners should also encourage regional businesses, non-profits, and the State of Alaska to ensure that MSC and its clients receive the financial support needed to meet current and future demand. The addition of the Paramedic Technology program at MSC is a prime example of how the MSB can play an integral role in supporting the educational mission of the college. This program will strengthen MSC's academic curriculum and the Borough's healthcare workforce.

- Leadership within the MSB and MSC should encourage joint participation on relevant boards, commissions, and panels.
- The MSB and MSC should establish a coordinated marketing message highlighting the Borough's economic development, quality of life, and higher education assets.
 - The MSB should incorporate information regarding specific academic and training programs at MSC in its economic development marketing materials. Training and academic programs that support economic development goals and priority sectors should be highlighted.
 - MSC should provide updated Borough-wide information, data, and events on its website and in its student recruitment materials.
 - MSC should also consider inviting community and the MSB representatives to participate in student and faculty recruitment events.



1B.5: Support capital and educational program expansion at MSC.

Continue to support MSC's long-range plans for expanding programs and facilities.

- Continue cooperative efforts by local governmental, the MSB, and MSC officials to advocate for needed resources from the State of Alaska. For example, the MSB and MSC are currently working together to acquire state funding for construction of paramedic training classrooms.
- Encourage the University of Alaska Anchorage to support more four-year programs at the MSC campus.
- Encourage local businesses and nonprofits to financially support MSC's capital and program needs.



Strategy 1C: Support the retention and expansion of existing businesses in the Borough. Business retention and expansion (BRE) should be the heart of any economic development program. A solid BRE program can help communities and regions protect and grow their existing base of employers. Focusing on existing employers makes sense – they are already invested in the community. In the context of the private sector, a business retention program is like the adage that says you must attend to your existing customers first. If you don't, you jeopardize your base. This is especially true in light of current economic conditions, with fewer recruitment prospects and more existing businesses in distress.

At its simplest, a BRE program helps the economic development organization arrive at a clear understanding of the businesses already in the community and helps keep tabs on changes and challenges area businesses face. The primary functions of a BRE program are threefold:

1. to ensure that at-risk businesses receive support, especially when that risk is the result of labor issues or other factors the community can influence in some way;
2. to expand and support growing businesses; and
3. to advocate for local businesses generally, by identifying their issues and needs.

Actions:

1C.1: Maintain an inventory of existing businesses and available properties. Publicly available business records, such as DBA filings, tax records, utility hookups, and ownership transfers, can be good sources of information. This inventory should be recorded and maintained in an electronic database or a Customer Relationship Management (CRM) System.

1C.2: Administer a regularly scheduled survey of employers. This survey will identify which companies may be at risk of leaving the

A Bird in the Hand

Existing businesses form the backbone of a thriving economy. They typically represent the best opportunity for increasing the employment and tax base of a community and the greatest economic threat if they close or relocate. But local firms are often overlooked in a community's enthusiasm to recruit new, headline-generating businesses.

Given the fiercely competitive environment for business attraction and the myriad of issues facing most communities with regard to the recruitment of new business, business retention should be a baseline activity for economic development organizations. In other words, all other initiatives, including business recruitment, should be considered in light of their ability to complement and support the existing business network.



community and which companies plan to expand. In addition, these surveys can uncover employers' issues. If possible, the survey should be administered annually. The use of online survey tools, such as Survey Monkey (www.surveymonkey.com), Zoomerang (www.zoomerang.com), SurveyGizmo (www.surveygizmo.com), and PollDaddy (www.polldaddy.com) make this an inexpensive method for keeping in touch with area employers.

- 1C.3: Conduct business visitations.** To supplement findings from the survey, the MSB manager and economic development director should visit at least 20 businesses per year. The purpose of the visits should be to gauge the ability and needs of local businesses to operate successfully and to expand in the Borough. A set procedure should be established for these visits to ensure that consistent information is gathered.
- 1C.4: Create business forums.** Provide opportunities for local businesses to meet regularly with the MSB's economic and community development staff. The purpose of these meetings is similar to that of the employer survey, but the face-to-face approach often stimulates discussion that a survey cannot. This could be accomplished by holding quarterly business forums or industry roundtables. Forums could be organized around a specific topic of interest (such as planning code issues or transportation infrastructure) or could be used as a moderated discussion about general concerns. These meetings do not need to be elaborate. Local restaurants will often donate meeting space in return for the lunch or dinner traffic. The goal is simply to keep an open line of communication between employers and public officials.
- 1C.5: Provide networking opportunities.** In addition to the forums discussed above, networking opportunities can be a valuable part of a BRE program. Hosting a monthly luncheon or "after hours" event has been a mainstay of chambers and economic development

The Importance of Connections

Helping local businesses connect to trade associations, think tanks, academic institutions, and other similar companies is a key element of the economic gardening approach introduced by Littleton, Colorado:

We are aware of research in network theory that indicates that an increase in the number of business connections increases the innovation levels of companies. In particular, "weak ties" to "hubs" outside a business's normal daily connections are important for bringing in new ideas.

We have made a point of connecting our businesses to our local community college and the University of Colorado, as well as the work of interesting research organizations like The Santa Fe Institute and The Colorado Issues Network.

<http://www.littletongov.org/bia/economicgardening/>



organizations. Unlike the forums, these events should be solely designed to facilitate business-to-business contact. Business card exchanges, “speed networking” events, or featuring a small number of businesses are examples of formats frequently used. Supporting existing events – rather than introducing competing events – should be the focus of this task.

1C.6: Have an intervention strategy. Develop a “rapid response” strategy for dealing with potential layoffs or business closures. Under the Federal Worker Adjustment and Retraining Notification Act (WARN) of 1989, companies with 100 or more employees must notify local governments and state workforce organizations about business closings or mass layoffs at least 60 days in advance of the event. However, at this point, it is frequently too late to do anything. Identify “at-risk” companies early-on and develop an aggressive intervention strategy. As part of this effort, the community should identify the tools available to help avert such actions or ameliorate their impact.

Examples of these tools include:

- Working with at-risk companies to avoid layoffs. As part of its Dislocated Worker Initiative, the U.S. Department of Labor sponsored the development of a *Layoff Aversion Guide*, a national compendium of job retention and layoff aversion strategies for states and communities. The guide was developed in cooperation with the department’s National Rapid Response Workgroup.
- Partnering with the Alaska Department of Labor and Workforce Development and the ARDOR rapid response teams to provide assistance to workers facing dislocation. The Alaska Department of Labor and Workforce Development provides information and links regarding state and federal programs on the Rapid Response section of its website.



- Cultivating relationships with site selectors, developers, and real estate brokers to ensure prompt reuse of a closed facility by a new tenant. For example, local groups including the MSB, City of Palmer, state and federal agencies, and local business people, worked to find a new user for the valley hospital building after it was replaced by the new Mat-Su Regional Medical Center.

To be effective, intervention must occur early. As such, this strategy relies heavily on the information-gathering steps outlined above.

1C.7: Report on progress. Provide ongoing evaluation and reporting by preparing an annual report to the community on progress-on-goal. This effort could be tied to state reporting requirements or could be expanded to include specific business issues and relevant partner initiatives (such as a joint report on labor issues with local workforce organizations).

Strategy 1D: Pursue developing opportunity sectors. The attraction of companies is the activity most commonly associated with economic development organizations. Indeed, target industry recruitment is a cornerstone of most programs. While essential, industry recruitment is a staff and resource-intensive activity. Large metropolitan areas are able to afford it, but it is problematic for most smaller areas.

The MSB Economic Development Department does not actively engage in targeted marketing to industries. To do so, the department would require additional resources, both in terms staff and funds. Alaska's distance from major employment centers in the U.S. makes targeted marketing even more expensive.

The consulting team recommends the MSB economic development staff concentrate on building greater awareness of the Borough as a destination for new investment among employers in Anchorage, especially in the recommended opportunity sectors (see text box). Mat-Su should be top of mind to companies seeking expansion within the region. The greatest

Recommended Opportunity Sectors

To support the borough's economic development efforts, TIP identified opportunity business and industry sectors. We chose potential opportunities using a combination of quantitative, qualitative, and strategic approaches. The recommended industries capitalize on existing and emerging assets in Mat-Su, as well as the broader Anchorage-Mat-Su region. These industries were also chosen in light of the current economic environment, as they are likely to endure recessionary times and could possibly benefit from governmental support.

- Professional & Technical Services
- Healthcare & Wellness
- Transportation, Ports, & Warehousing
- Retail/Arts/Recreation/Leisure
- Clean Tech (green building & renewable energy)
- Value-Added Agriculture and Forest Products (agricultural processing facilities)



emphasis should be placed on attracting professional and technical services sector firms to the Borough. In addition, manufacturing that is economically viable to take place in Alaska and reflects Alaska development needs such as building module fabrication is also an opportunity for development.

Actions:

1D.1: Build awareness among private employers in Anchorage. The MSB and local Chambers of Commerce should raise the profile of the Borough in the region and position it to capture potential business consolidation and expansion activities of Anchorage companies.

- **Regional publications.** Implement a public relations campaign targeted at regional publications. TIP recommends identifying key regional publications and sending press releases on recent business successes. The initial press release should promote the importance of economic development planning and how local leadership worked together to determine the best opportunities for Mat-Su.
- **Visitation.** Call on owners and managers of Anchorage companies to present the benefits of Mat-Su as a location for future expansion or for consolidation of facilities and operations.

1D.2: Conduct lead generation activities. While marketing and direct outreach to prospective companies is often a large component, indirect channels can yield more promising leads in a more cost-effective manner. For this reason, the MSB and local chambers should focus on creating a strong network of relationships that will generate high quality leads. To do so, Mat-Su's economic development partners should concentrate on building relationships with regional developers, brokers, and site selectors, as well as with state and regional business organizations. Forging relationships with these groups can help staff stay abreast of local private development

Economic Development Websites

A professional economic development website should include the following basic components:

- **Community profile(s):** This section should contain information on area demographics. Community profiles also often highlight primary quality of place assets, such as school district descriptions and basic statistics, higher education institutions description and location, arts and entertainment facilities, and any other amenities.
- **Business climate.** This section should contain information on the area's workforce, major employers, target industry profiles, tax rates, utility providers and rates (if available), transportation access, and available incentives.
- **News.** The news section should contain announcements of any new initiatives of the economic development organization as well as any events or happenings in the community that have economic development implications.

Additional sources of information for prospects include a list of available buildings and sites in the region and maps indicating where major economic development assets are located.



efforts, tap into new networks of businesses, and become aware of prospects looking to relocate in Alaska. The following actions support this task:

- Database. Create and maintain a database of developers, brokers, and site consultants. Due to its geographic proximity, the MSB should initially focus on Southcentral Alaska. Eventually, the database should be expanded to contacts in the Pacific Northwest.
- Information. Continue to maintain and update information typically of interest to commercial and industrial developers on the Economic Development Department page of the MSB website. (See text box)
- Newsletter. Develop and distribute a quarterly e-newsletter to local businesses, regional public officials, site selectors, real estate developers, investment prospects, and other key stakeholders. In addition to communicating achievements and successes in the Borough, each issue should highlight a different opportunity in the region. Services such as Constant Contact – an email marketing and contact management program for small businesses – make this a low-cost option for reaching target audiences. Email addresses can be gathered with a link on the MSB website and via contacts with individuals and organizations during the course of outreach activities.
- Visitation program. Staff should call on developers, brokers, and site consultants in Anchorage to discuss new developments in Mat-Su, the advantages of locating in the Borough, and how the MSB can support new investments.
- Marketing assistance. Offer assistance to market developers' and land owners' properties and buildings to future tenants. This could include adding the properties to the Economic



Development Department web page or including links to the owners' site, and featuring the property in relevant materials (such as e-newsletters). Having printed materials available in the office will be important in the short-term, but should be phased out as greater acceptance of the e-newsletter takes hold.

- Events. The MSB should periodically host events that showcase specific assets, such as available land and buildings or new projects. Local and regional developers, site consultants and industrial and commercial brokers may be invited to attend. These may be structured as “developer forums” and should be a regular feature of Mat-Su’s economic development efforts.

1D.3: Establish a prospect management system. Once a prospective company expresses interest in relocation assistance in the Borough, it should be entered into a formal prospect management system. Use of a formal system will help set the prospect’s expectations and allow the MSB to track the status of future deals quickly and easily. Having a transparent and efficient process is an effective way to gain an edge in business recruitment. It allows staff to respond to requests in a timely, coordinated fashion. The following worksteps address this task:

- Process. The first step is formalizing the process by which prospects can indicate interest, receive information packets, visit the Borough, and apply for relocation assistance. This documentation should cover the prospect lifecycle – from lead generation through evaluation to receiving of relocation assistance.
- Intake questionnaire. Post an electronic form on the Economic Development Department web page that prospects can use to request an information packet, set up a visit and tour, and indicate interest in locating in the community. This questionnaire



can also collect information on the prospect that the organization can use to tailor its response.

- **Response.** Create a standard information packet that is provided to prospects. Adapt pieces such as suitable sites and maps as well as workforce availability to respond specifically to the needs of the prospect. Arrange a visit for the prospect to tour the Borough and view its primary assets.

1D.4: Provide relocation assistance. For prospects who are interested in locating in Mat-Su (and who have been evaluated as being of direct economic benefit the region), the MSB should provide assistance in navigating the local development process, negotiating incentives, and structuring training programs for new employees, as necessary. Due diligence and an incentives policy are important elements of this strategy.

Strategy 1E: Promote entrepreneurship and small business development. The MSB and its community partners should encourage and foster small business development and growth-oriented entrepreneurship in the Borough. Fostering entrepreneurship is important for multiple reasons. In general, small businesses are responsible for a significant portion of jobs created. Local businesses that have matured in a community often have much stronger ties to the region and require less effort to retain. Entrepreneurial enterprises add to those elements: they contribute to economic vitality through their creativity and innovation. In other words, they create a center of gravity for talent and capital. The unique quality of entrepreneurial ventures rests on the following understanding:

- *Export Oriented:* unlike many small businesses, entrepreneurial companies seek markets beyond the immediate region.
- *Capital Intensive:* since these companies are on a growth trajectory, they require substantial operating and expansion investment.

Mat-Su Business Incentives

The Borough's primary business incentive is the ability to offer below-market sale and lease values on Borough-owned land. This tool is particularly important for attracting employers to Port Mackenzie. Other incentives offered by the Mat-Su Borough are listed below.

- Site development assistance
- Industrial revenue bond financing
- Tax increment financing
- Job training
- Fast track permitting
- Sale or lease of borough land at less than fair market value
- Project financial assistance
- Deferral of property taxes
- Exemption of property taxes

More on each incentive is available on the Mat-Su Borough Economic Development Department Web site.



- *Technology Driven:* even non-technology companies require a technology infrastructure (broadband, e-commerce transaction capability, highly skilled workforce).
- *Professional Service Dependent:* since many entrepreneurs have some form of intellectual property (including patents, specialized equipment or processes), they need easy access to legal, financial, and marketing services.

The Mat-Su Small Business Development Center (SBDC) in Wasilla is a strong asset for nurturing small businesses in the Borough. While SBDCs are beneficial to the locally-oriented start-up, they are not designed to assist the specialized needs of high-growth entrepreneurs. The facilities, networks, and support they need fall into a different category. As a consequence, this recommendation speaks to the assistance the MSB should provide in building an entrepreneurial cluster in Mat-Su.

Actions:

1E.1: Reassess the existing entrepreneurial programs and services available in Mat-Su. Work with representatives of the Mat-Su Small Business Development Center (SBDC), the University of Alaska, local communities, informal entrepreneur business groups, and chambers to formally assess the needs of area entrepreneurs and identify gaps in services and support that are not being provided.

1E.2: Work with partners to enhance services for entrepreneurs.

- Encourage the Alaska SBDC to offer entrepreneurship training. Courses such as FastTrac or NxLevel provide intensive training for potential entrepreneurs. Encourage the SBDC to partner with Mat-Su College in offering local entrepreneurship training programs.



- Support the creation of a youth entrepreneurship education program in the Mat-Su Borough School District.
- Encourage the development of a mentor network to match new entrepreneurs with experienced business owners.
- Support the establishment of a formal angel investor network to aid entrepreneurs in raising seed capital by providing opportunities to present business plans and financing needs to an audience of local investors.

1E.3: Celebrate and support entrepreneurship in the region. The MSB and its partners should engage in a public relations campaign profiling area entrepreneurs (“success stories”) – current and past – and informing residents of entrepreneurial activity and initiatives. This will help foster an entrepreneurial spirit and a community that values business start-ups.

1E.4: Encourage local entrepreneurs to submit entries in the Alaska Business Plan Competition. This annual Alaska Business Plan Competition is jointly organized by Alaska Pacific University, the University of Alaska Anchorage, and many businesses. The competition seeks to provide prospective entrepreneurs with a real-world process of learning, continuous improvement, and raising private capital collectively needed for business growth. The competition also provides a formal deal path for entrepreneurs to link with potential investors. (www.akbizplan.org/index.htm)

Strategy 1F: Support the preservation and expansion of the agricultural sector in the Borough. Mat-Su is home to the most productive agricultural land in Alaska. The Borough’s rich soil and long hours of daylight during the summer growing season produce a bountiful mix of crops. Potatoes, peas, carrots, dairy, forage products, and birch syrup account for the majority of the Borough’s agricultural output. Moreover, the agricultural sector is a major part of the cultural and historical fabric of Mat-Su. Beyond its historical

Entrepreneurship Training Curricula

Founded by the Kauffman Foundation of Kansas City, Missouri, FastTrac is a boot camp for entrepreneurs. According to the foundation’s materials, 70 percent of companies that go through the program succeed beyond three years – the oft-touted threshold by which the majority of small businesses fail. The program can be brought to any town provided there is an organization willing to become certified to teach the program. <http://www.fasttrac.org/>

Another popular program is NxLevel, a curriculum developed by the University of Colorado at Denver. NxLevel includes 7 different curriculum tailored for different types of entrepreneurs. Since 1996, over 80,000 students have participated in NxLevel trainings. A third-party evaluation of the program shows that over 90 percent of business start-ups that participated in the program were still in business after 3 years. The program is taught by certified trainers in over 600 communities in 48 states. <http://www.nxlevel.org/>



significance, agriculture represents a sustainable economic development opportunity for the Borough. It is an export industry that returns outside dollars and visitors to Mat-Su. Mat-Su's agricultural products also serve the local market, which results in lower prices, higher wages, a cleaner environment, and a more stable supply. Over the years, the MSB has provided vital support to such initiatives as farmland protection, the Alaska State Fair, farmers markets, and value added processing. These and other support activities should continue in order to strengthen and expand the Borough's agricultural base.

Actions:

1F.1: Continue generating funding support from the State of Alaska for the Vegetable Processing and Product Development Center.

MSB should continue leading the funding initiative for the proposed facility. To date, the MSB has succeeded in obtaining funds through the U.S. Department of Housing and Urban Development to pay for a feasibility study for the project. In addition, the MSB has received \$250,000 from the State of Alaska to fund project design, which is to begin in March 2010.

- Secure the appropriations to fund the construction of the center.

1F.2: Continue supporting farmland protection efforts. The rapid pace of residential development in the Borough has put at risk much of the Mat-Su's agricultural land. To help protect Mat-Su's agricultural sector, the MSB Assembly has set funding aside to assist in the purchase of agricultural development rights to preserve agricultural land. The MSB should also continue working with the Alaska Division of Agriculture and the state Board of Agriculture to identify and preserve designated farmland in Mat-Su.

1F.3: Encourage community support and patronage of local agricultural businesses and farmers markets. The MSB should continue encouraging local citizens and visitors to support local ag-



based businesses such as Matanuska Creamery and local farmers markets.

- Highlight local agricultural assets and businesses as part of the economic development department's community and business outreach activities.
- Participate in *Alaska Grown* marketing initiatives and activities.
- Communicate the direct, indirect, and induced economic benefits of buying locally produced milk and produce.

1F.4: Support and promote the export of certified seed potatoes from Mat-Su to China and Taiwan. Mat-Su's agricultural sector is in a unique position to capitalize on the growing demand for seed potatoes in Taiwan and China.

- Actively support proper funding for the Plant Pathology and Biotechnology Laboratory at the University of Alaska, Fairbanks.

1F.5: Develop an Agricultural Economic Development Plan for the Borough. The MSB should work with the agricultural and business community in the Borough to develop a plan focused on fully leveraging the economic development potential of Mat-Su's agricultural base. The need for such a plan was suggested by local business focus group participants.

Strategy 1G: Promote the sustainable development of Mat-Su's natural resources for economic development. The MSB should support sustainable natural resource development and the natural resource industries with an emphasis on meeting local needs and local value-added product manufacturing, as well as ensuring compatibility with other parts of the local economy. Indeed, natural resource development is a high priority for the Borough Assembly. The main natural resources in Mat-Su, in addition to agricultural land, include coal, gravel, timber, some gold mining and some metallic mineral potential.

Alaskan Seed Potato Exports

Alaska is the only state in the country and one of the few places in world from which China and Taiwan have agreed to accept seed potatoes. It is estimated the per annum needs and value of seed potatoes in Taiwan (3,000 metric tons; \$2 million) and China (1.4 million metric tons; \$154 million) are the largest in the world.

Alaskan farmers have three distinct advantages regarding seed potato exports: (1) established commercial relationships with China and Taiwan, (2) certified seed potato export status, and (3) having relatively disease free potatoes. Moreover, the Chinese government mandates that only seeds tested at the Plant Pathology and Biotechnology Laboratory at the University of Alaska, Fairbanks enter their country. These factors position Alaskan farmers uniquely positioned as the primary exporters of seed potatoes to the largest consumers of seed potatoes in the world. With most of the developed agricultural land in the state, Mat-Su is well suited to reap most of the benefits of an expanded seed potato export market.



The MSB also places major emphasis on continued development of Port MacKenzie to serve as a major export facility for natural resources from Interior Alaska, as well as the Borough (see Goal 3). It is expected that most of the export potential will be related to metallic mines in the Alaska interior and other interior Alaska resource development.

A key component of the MSB economic development policy will be aligned around continued development of the port with the associated rail extension, deep draft dock, and ferry service, as well as development of port district industrial land.

Actions:

1G.1: Ensure infrastructure access for coal mining operations. While coal deposits are found throughout the Borough, the highest quality concentrated coal resources are located in the Sutton area. The MSB should continue working with coal companies to provide infrastructure access so that this coal might be produced compatibly with area communities and then shipped out of Port MacKenzie.

1G.2: Support the sustainable development of forest resources through the Timber Management Plan. Mat-Su's timber resources are mainly used to meet local needs and demand (from residential construction to firewood). Local forest products manufacturers produce valued added products such as kiln dried tongue and groove cotton wood, specialty lumber, cabin logs, firewood, and birch syrup. Borough timber is also used for a small birch bowl production industry.

In past years, Borough timber was also harvested, chipped, and shipped through Port Mackenzie to Asia. However, future chipping activities have been hindered by market volatility, higher fuel prices, and competing forest resource demands (e.g., tourism). Certain areas of Mat-Su that are used for "flight seeing" and helicopter tours are considered by many to be off limit areas for logging. Moreover,



the MSB does not own sufficient forested land to support a chipping industry on a sustainable basis on its own.

- The MSB should consider providing some sustainable timber harvest to meet local value-added manufacturing and local use needs.
- The MSB should also consider setting aside some timber area for testing wood-burning technologies for possible use in heating schools.

1G.3: Work with the gravel mining industry to balance the need for the sector's growth with other economic development considerations, as well as environmental and resource protection. Mat-Su is home to a number of sand and gravel mining operations. Four large mining operations export approximately 2 to 3 million tons of gravel a year, primarily to Anchorage. These large operations, combined with medium and small operation production, may provide as much as 2 million tons for local road and construction use in 2010. Three or four medium sized operations are partly involved in specialty gravel production for such things as asphalt production, or specific needs such as landscaping and concrete block businesses. At least 23 smaller sand and gravel operations operate in the Borough, serving specialty or local gravel market.

The MSB is developing gravel regulations and guidelines to provide for continued commercial gravel operations while addressing community and other economic development concerns regarding buffers from roadways, water protection, and reclamation. These regulations should balance the concerns of gravel mining businesses with the need to protect the environment and visual beauty of the Borough. This contribution to the visual beauty of Mat-Su will assist other economic development efforts, such as workforce recruiting efforts, tourism expansion, worker lifestyle considerations, and new business attraction.

Forest Management in Mat-Su

The public review draft (December 2009) of the *Matanuska-Susitna Borough Asset Management Plan: Natural Resource Management Units* includes the following forest management goal:

“Provide a sustained yield of forest products for commercial and personnel uses. Meet the needs for value-added, small-scale wood processors including non-extractive uses, and larger scale industries where appropriate.”



GOAL TWO: BUILD CAPACITY TO CONDUCT ECONOMIC DEVELOPMENT WITHIN THE BOROUGH.

For any economic development plan to be successful, it must have the support of the citizens and stakeholders it is designed to serve. Since the ultimate goal of economic development is to stimulate private investment, the support of the private sector is particularly important to a plan's success. The goals, strategies, and actions must also correspond to the available local resources and capacity for conducting economic development. That being said, certain initiatives deemed central to Mat-Su achieving its economic vision will require additional commitments.

Several recommendations in the plan reach beyond traditional economic development. Their implementation will require the support of partners from both the public and private sectors. It is, therefore, critical for partnerships and joint ventures to support its implementation. This need for cooperation and partnerships extends to communities within the Borough, as well as regional economic development efforts.

The MSB can approach the need for building capacity and involving the business community in different ways. One option is for the MSB to dedicate additional internal resources toward the implementation of this plan. A two-person staff responsible for executing an ambitious plan in a territory as large and diverse as Mat-Su is not realistic. Along with additional staff, a business advisory council should be formed to lead the implementation of the plan and advise the Borough Assembly on economic development matters. Another option is to establish a completely new Borough-wide organization that would independently coordinate and execute economic development activities for the Borough, including business recruitment, retention, and marketing.

Because there is some urgency for implementation of this plan, increasing the borough's internal economic development resources, supported by a new advisory council, is the most practical approach. This is especially true given the five-year timeframe of this plan and past difficulties organizing Borough-wide economic development associations. However, as the Borough continues to grow and the plan's implementation results in demonstrable successes, the idea of establishing a new economic development partnership organization should be considered.

Economic Development Functions

Economic development organizations are expected to perform some, or all, of the functions listed below.

- marketing and recruitment (targeted industries)
- business advocacy
- business expansion and retention (targeted industries)
- financial incentives
- real estate disposition and improvements
- land and buildings
- bonding authority
- infrastructure improvements
- workforce and professional training
- business start-up support



Strategy 2A: Expand internal resources for economic development. The MSB Economic Development Department has a full-time staff of two (a director and administrative secretary). The existing demands on the small staff limit its ability to be more active in baseline activities such as business attraction, retention, and marketing. For the MSB to implement the priority projects in this plan, additional commitments to economic development will have to be made.

Actions:

2A.1: Increase staffing. Add at least one additional FTE to the department staff. Ideally, the candidate(s) would be experienced in economic development marketing, business recruitment, and business retention. The primary job duties would be to implement routine economic development functions, such as maintaining marketing materials, calling on existing businesses, and conducting lead generation activities. This would free up the department director to focus on project implementation, outreach, and partnership development.

2A.2: Increase marketing and outreach budget. The department's current allocation of \$25,000 for marketing and outreach (travel, advertising, printing, and materials) is not sufficient for conducting many of the baseline recommendations in this plan. To be successful, an additional commitment of resources is needed to fund the development of new marketing materials and activities and travel expenses. Doubling the marketing allocation to \$50,000 would significantly contribute to the ability of the economic development department to carry out the recommendations.

Strategy 2B: Establish a Borough-wide business partnership to support economic development. One of the frustrations often expressed to the consulting team is the lack of a common vision for growth and development within the Borough. Conflicting views on such issues as land use, environmental protection, and taxes have created a contentious tone among differing



parties. This dynamic can deter outside investment by creating the perception that Mat-Su does not offer a stable and positive business climate.

Economic development programs are rarely successful if they do not enjoy the support and participation of the entire business community. Such is the case in Mat-Su. Local businesses report a traditional lack of involvement in efforts to attract new investment and jobs to the Borough. Part of this is due to the geographic expanse of the Borough; part is due to a lack of trust. Economic development efforts in the Borough also suffer from a lack of awareness. Many Borough residents are likely unaware the MSB led the initiative to establish the Mat-Su Regional Medical Center and has been championing development efforts at Port Mackenzie.

Because of Mat-Su's size and diversity of interests, it makes sense that a formal Borough-wide partnership be created to deliver a clear vision and common voice for economic development. To be truly effective, it is essential that the private sector and other key employers play an active role in its formation and policy implementation.

The primary mission of the partnership would be to act as an economic development advisory council for the MSB and to assist with the implementation of this plan. Additionally, the new partnership should bring businesses and organizations throughout the Borough together to advocate for a common vision for economic development in Mat-Su.

It should be obvious that the success of this partnership rests on agreement around the broad goals of this plan. This will not happen overnight, but the need is clear and the results can be transformative.

Actions:

2B.1: Form an advisory council. *The first step to forming a partnership is establishing a business advisory council.*

Recruit a diverse group of business leaders in the Borough to form an independent economic development advisory council for the



MSB. The council should be asked to advise the MSB Assembly and staff on economic development issues. In addition, the council would work with the MSB in prioritizing the plan's initiatives for implementation and identifying the necessary resources.

- The advisory council should be a non-political group composed of business leaders and other key employers representing diverse interests in the Borough.
- The initial mission of the advisory council would be to assist in implementation of the plan.
- With the assistance of the MSB staff, the advisory council should strive to demonstrate specific successes toward implementation of the plan, especially on higher profile priority projects. Success will build credibility among the business sector, leading to greater willingness to support and participate in a partnership.
- Once notable successes are achieved, consideration should be given to broadening participation within the policy council to include wider private sector support from within the Borough. The evolution of the council should lead to the eventual establishment of a formal Borough-wide economic development partnership.

Strategy 2C: Expand regional economic development cooperation. A prevailing view among economists and economic development practitioners is that economic growth and competitive advantage occur at a regional level, rather than at the local or state levels. Regional economies share talent, transportation assets, investment capital, and networks. Mat-Su is not a single economy. Rather, it is an increasingly important part of the Anchorage-Mat-Su metropolitan region. Consequently, the Borough should be taking a more prominent role in regional economic development efforts. Indeed, many participants in the planning process, both in Mat-Su and in Anchorage,



suggested that much more could be done to promote regional cooperation in economic development matters.

A recent example of greater regional economic development cooperation in the region is the April 2008 agreement between the Anchorage Economic Development Corporation (AEDC), the MSB, and the Kenai Peninsula Borough to jointly promote business opportunities in Southcentral Alaska. For Mat-Su, the primary benefit of the partnership is having available sites and buildings listed in AEDC's online Anchorage Prospector property search database. Expanding efforts such as this will lead to more efficient uses of regional economic development resources and closer economic integration.

Actions:

2C.1: Hold regular meetings with Anchorage economic development officials. Mat-Su economic development stakeholders should schedule regular meetings with counterparts in Anchorage to establish a regular dialogue regarding economic development issues.

- Stakeholders may include local business, chamber, workforce, transportation infrastructure, and education representatives.
- Meetings should alternate between Mat-Su and Anchorage.
- Consideration should be given to establishing an annual public forum for discussing regional economic development issues.

2C.2: Jointly pursue federal grants. The MSB and the City of Anchorage should collaborate to identify projects and pursue economic development funding grants. For example, the U.S. Economic Development Administration is emphasizing projects that involve regional economic development strategies in its grants programs.



2C.3: Jointly attend trade events and business recruitment trips. Mat-Su and Anchorage economic development officials should team on call trips to recruitment prospects and to attend industry trade shows.

Strategy 2D: Link sub-regional economic plans to the MSB Economic Development Plan. A central focus of this planning effort has been to incorporate input from diverse areas of the Borough. As a result, a great deal of local area interest has been generated for completing sub-regional plans for smaller areas of the Borough as a follow-up to completion of the overall Economic Development Plan. There is a general desire to link local area economic development efforts with the MSB's activities, especially in the unincorporated areas of the Borough (i.e., Talkeetna/Y area).

Actions:

2D.1: Provide personal briefings on the plan to local representatives. The economic development director should meet personally with local groups to discuss the plan's key recommendations and discuss ways of linking them to local efforts.

2D.2: Pursue a sub-regional economic development planning initiative. After the Borough-wide planning process is complete, a sub-regional economic development planning effort should be initiated. This could apply to as many as 10 areas of the Borough.

- The economic development director should have a coordinating role in organizing the sub-regional planning process.
- Each sub-region should independently develop its own plan. However, they should all be connected to the overall initiatives of the MSB.
- The individual plans should share a common organizational format and structure. Once completed, they should be compiled into a master document.



- Depending on the situation, local economic development planning could be achieved as part of existing community comprehensive planning efforts or as a separate effort to be incorporated as part of an existing plan. For example, within the local plans a chapter could be dedicated to local economic development goals and strategies. This would require additional coordination between the MSB's economic development and planning departments.
- Communities and the MSB should work together to explore possible funding sources for local economic development planning efforts.
 - A potential source of funding is the United States Department of Agriculture's (USDA) Rural Business Cooperative Service. USDA's Rural Development Office in Alaska is located in Palmer.



GOAL THREE: EXPAND MAT-SU'S ECONOMIC DEVELOPMENT INFRASTRUCTURE.

Compared to most other boroughs in Alaska, Mat-Su enjoys a competitive advantage in infrastructure. Both of the state's major highways – the Parks Highway and the Glenn Highway – traverse the heart of the Borough, intersecting between its two largest cities. The Alaska Railroad runs parallel to the Parks Highway, carrying both freight and passengers through the Borough. Port Mackenzie offers deepwater access for exporting natural resources from the state's interior. The majority of Mat-Su residents are a 45-minute drive to the state's largest airport. The Matanuska Electric Association (MEA) and the Matanuska Telephone Association (MTA) provide the Borough with reliable energy and telecommunications services, respectively.

Despite these advantages, continued improvement and expansion of infrastructure is critical to the long-term economic growth of Mat-Su. Rapid population growth has resulted in an overburdened transportation network and commuter congestion. The MSB estimates \$1 billion needs to be invested in the Borough's road system in 10 years in order to avoid future gridlock. In addition, concerns have arisen about the long-term supply and price of energy for commercial and residential users. The full development of Port Mackenzie will require substantial investments. Tourism resources must be improved to attract more visitors and capture more tourism spending within the Borough. Various areas of Mat-Su will need improved broadband telecommunications to connect residences, schools, and businesses. The MSB should continue supporting the development of these infrastructure improvements, as well as others that enhance economic development opportunities in the Borough.

Strategy 3A: Continue developing multimodal transportation and industrial infrastructure at Port Mackenzie. Situated across the Knik Arm from the Port of Anchorage, the Port Mackenzie marine port and industrial complex is Mat-Su Borough's largest and most important development project. The development presently consists of a 500-foot bulkhead barge dock, a 1,200-foot long deep-draft dock that requires no dredging, and 8,940 acres (14 square miles) of adjacent uplands available for commercial and industrial lease. Unlike other ports in Southcentral Alaska, Port Mackenzie is not constrained by urban growth or geography, making it ideal for large



industrial, processing, transportation, warehousing, and storage developments.

Considerable analysis, planning, investment, and construction has already gone into developing the port district. Present construction includes a bulk commodities road loop to facilitate the trans-shipment of natural resources by truck. Planned improvements include a water ferry system connecting the port to Anchorage and a 30 to 45-mile rail line extension from the port to the Alaska Railroad's mainline. Successful completion of these projects would elevate Port Mackenzie to one of the most important transportation and industrial assets in Alaska. It would position Mat-Su to attract substantial new private investment and employment opportunities. It would also open up the Borough to significant international trade and investment possibilities with the entire Pacific Rim. In addition, a prospective 2.75-mile vehicular toll bridge across the Knik Arm would further enhance the economic potential of Port Mackenzie.

Actions:

3A.1: Secure approval and funding for the construction of the rail extension. The rail extension project offers tremendous economic benefits for the port and for the Borough. The rail line is the key to unlock Port Mackenzie's potential as a bulk export and import facility. It would also support natural resource development, including the construction of natural gas pipelines from the North Slope.

- Work with the Alaska Railroad Corporation and the Surface Transportation Board to win final environmental approval for the project.
- Work with state and federal partners to identify and secure the funding for the project.
- Expand the coalition of communities and businesses in Central Alaska (Anchorage, Mat-Su, Denali Borough, and Greater



Fairbanks North Star Borough) supporting the rail extension and focus their support actions.

3A.2: Complete current and planned infrastructure improvements, including road improvements, paving, and marine facility expansions.

3A.3: Complete development plan for Port that appropriately maximizes use of land and dock space for water dependent and rail dependent uses. Work with other Port District land owners to assure a coordinated development plan that maximizes economic opportunity.

3A.4: Market the port district for new private investment and employment opportunities.

- Develop a specific marketing strategy for attracting new private investment to the port.
- Work with other major landowners in the Port District, specifically CIRI and the University of Alaska, to coordinate and broaden marketing and development efforts.

Strategy 3B: Increase the availability of commercial and industrial land. Aside from the industrial complex at Port Mackenzie and the limited industrial/commercial land within the three cities, there is a lack of dedicated industrial and commercial sites in the Borough. The shortage is especially acute for small and medium sized companies requiring an available building on five to 10 acres. Some businesses expressed a concern to the consulting team that existing business parks in the Borough lacked the space and facilities needed for possible expansion.

In Anchorage, the combination of rising development and construction costs, with dwindling developable land, is causing many businesses to look elsewhere for new locations or for expansion. This situation presents an



excellent opportunity for Mat-Su to capture spillover investment from Anchorage. But while there is ample developable land suitable for light industrial or commercial development, there are few shovel-ready sites with utilities in place and appropriate land use designations.

Targeting strategic sites in the Borough and designating the land needed for development is critical to realize this opportunity. The MSB should identify target sectors and land uses, such as light industrial and commercial office, that support existing and emerging sectors. The MSB should work with land owners and developers to designate and develop land for such purposes. Another consideration is public sector involvement in site development (e.g., development of business and industrial parks).

Actions:

3B.1: Update information on preferred sites. Determining and communicating ownership, zoning, legal disposition, infrastructure, and other related issues should be the first step in the process.

- Assemble/update information on number of parcels, ownership, and current asking price (for those properties being offered for sale).
- Ensure that properties are zoned or otherwise designated to allow for the selected uses. For example, ensure the selected property for a medical district will support medical offices, ancillary, and support uses, as well as be an accepted use by area land owners.
- Determine the status of infrastructure and transportation-related improvements that might be needed to support proposed developments.

3B.2: Determine if public sector support is required for development. The MSB could explore assembling land for commercial and



industrial use. There are several different development options requiring varying levels of public sector involvement. These can be broadly outlined along two paths, based on ownership of the land:

- MSB ownership. In general terms, public sector ownership of the chosen properties would improve the area's ability to attract developers and provide significant flexibility in negotiating terms. If it is decided that the public sector should take an active role in developing specific properties, a long-term horizon for development is necessary. This typically occurs using one of two approaches: a master developer strategy or some form of public-private partnership.
- Private ownership. In this scenario, the public sector serves primarily as a facilitator. For example, a developer agrees to make an investment in a property in return for MSB-financed improvements. While the level of cooperation varies dramatically, this approach is most successful when the public sector has a clear vision of how it wants the properties to develop and uses public improvements to guide private investment. This can be accomplished by zoning and codes, by design standards, and by the scale and location of physical improvements – from roads to water and sewer.

3B.3: Engage development community. Engaging the development community early in the process will help to determine the market feasibility of new commercial/industrial site developments and if public sector involvement is needed.

Strategy 3C: Continue expanding basic tourism infrastructure. Tourism has emerged as one of the Borough's key industry sectors. Tourism is important to economic development because it represents a unique opportunity to attract outside dollars (i.e., serve as an export sector), create new residents, and cement the Mat-Su's reputation as an area with a strong sense of place.



Among its 1010 priorities, the Borough Assembly ranked tourism infrastructure as the highest priority goal using a point system.

In addition to providing a livelihood for many residents, tourism also supports small businesses spread across the Borough including both rural and remote areas, and allows such businesses and related lifestyles to exist. According to the Tourism Infrastructure Needs Study of the Borough conducted by the McDowell Group, the total annual value of the visitor industry to Mat-Su is \$282 million, including \$201 million in direct spending and \$81 million in indirect and induced spending. The industry also supports nearly 4,000 jobs and more than \$100 million in payroll.

For the Borough to maximize the economic benefits of tourism, additional investments are required in basic tourism infrastructure and facilities. Recognizing the need, the MSB commissioned an infrastructure needs study (mentioned above), organized a tourism summit, and held a destination trailhead workshop. These activities identified several priority tourism infrastructure needs. The MSB should continue existing efforts to invest in smaller, high priority needs; promote the development of large anchor projects; and identify the most appropriate funding sources.

Actions:

3C.1: Invest in high priority infrastructure needs. The Tourism Infrastructure Study identified high priority infrastructure needs in the categories of visitor support services, highway enhancements, and trail and public recreation enhancements. These relatively low-cost investments include:

- Information kiosks and signage
- Highway gateways, restrooms, viewpoints, and signage
- Trailhead improvements, signage, and mapping



3C.2: Promote the development of larger anchor projects. The MSB has been actively involved in promoting the development of anchor tourism and recreation attractions in the Borough. Such projects include:

- Hatcher Pass Ski Resort
- South Gateway Visitors Center
- Independence Mine State Park
- South Denali Visitors Center
- Glenn Highway Raptor Center
- Palmer Hay Flats State Game Refuge Natural Science Education/Community Center

3C.3: Identify funding sources. A major component of both the needs study and the tourism summit is the identification of appropriate sources of funding for tourism infrastructure. Options considered include raising the bed tax rate from 5 percent, a new liquor tax, obtaining a portion of the state cruise ship head tax, additional car rental taxes, and license fees on four-wheelers. Other possible funding sources might include the U.S. Department of Transportation's National Scenic Byways Program or other federal, state, and MSB partnerships.

Strategy 3D: Continue improving and expanding Mat-Su's transportation system. Transportation plays a key role in economic development. Good transportation systems provide a clear competitive edge by facilitating easy access to local businesses, maintaining regional mobility, and reducing congestion costs.



Actions:**3D.1: Work with state and local partners to address the following critical transportation needs in the Borough.**

- Address the following Safety Corridors and Nominated Safety Corridors:
 - Parks Highway: Wasilla to Big Lake
 - Knik-Goose Bay Road: Parks Highway to Point Mackenzie Road
 - Palmer-Wasilla Highway: Glenn Highway to Parks Highway
- Develop a viable road network to improve route choice and reduce traffic congestion for residents and businesses.
- Improve the core Arterial System (Knik-Goose Bay Road, Parks Highway, Palmer/Wasilla Highway, Trunk Road, Seward Meridian Parkway, Seldon Road, Bogard Road, Palmer Fishhook reduce traffic congestion for residents and businesses.
- Improve/develop roads providing access to Port Mackenzie and areas of the Borough containing natural resources.
- Support public transit services such as the M/V Susitna Ferry, Mat-Su Community Transit bus service, future commuter rail, and the Regional Transit Authority to reduce congestion and allow residents affordable access to medical services, jobs, and shopping.
- Support a regional trail system as a component of the local transportation systems as well as tourism infrastructure.



Strategy 3E: Support the expansion and enhancement of technology infrastructure and services in the Borough. Technology is embedded in nearly every aspect of business today. Access to the latest technology and the most robust services is critical to the development of professional services and businesses across the Borough. In the modern economy, services such as high-speed Internet access are becoming as important to a region's infrastructure as highways, electricity, water, and sewer.

Residents and businesses in the core area of the Borough are benefiting from more competition, higher speeds, and more competitive costs. However, some local professionals reported difficulty uploading large files such as blueprints and graphic designs, especially files destined for clients in the lower 48. To meet the ever-expanding data requirements of businesses and the demands of clients in the lower 48, the Borough needs to work with local and state partners to improve infrastructure and service offerings in all areas of the Borough. A more sophisticated and robust service offering would have a positive impact on education, health, business, and quality of life in Mat-Su.

Actions:

- 3E.1: Work with state and local telecommunications and other technology providers to improve and extend technology infrastructure and service throughout the Borough.**
- 3E.2: Convene Borough users (businesses, technology professionals, institutions, and residents) to discuss and identify needed improvements and share their observations with broadband and other technological infrastructure providers.** Possibly have a provider's meeting to examine how such improved services can be provided.
- 3E.3: Consider the creation of a Technology Advisory Board consisting of local businesses, technology professionals, and**



other interested parties to identify emerging technology needs and possible solutions.

- 3E.4: Pursue federal grants.** As part of the American Recovery and Readjustment Act, the federal government allocated \$7.2 billion toward extending broadband access to rural areas of the nation. These funds are being awarded through the U.S. Commerce Department's National Telecommunications Information Administration (NTIA) and the U.S. Agriculture Department's Rural Utility Service. In conjunction with state and local partners, the MSB should identify grant opportunities and pursue funds to extend and improve broadband infrastructure in the Borough.



GOAL FOUR: ATTRACT, RETAIN, AND ENGAGE TALENT.

Nurturing and attracting talent is fundamental for long-term, sustainable economic vitality. Much of this is due to the changing needs of U.S. employers as the economy transitions from manufacturing to services. More importantly, shifting demographic patterns are changing the way employers evaluate areas they are considering for possible relocation or expansion. Workforce availability is the predominant site selection criterion for most industries.

With national unemployment rates at levels not experienced in decades and the Borough's population growth due to domestic migration, it might be difficult to see the urgency in attracting and retaining talent. While national economic conditions are less certain, future demographic trends are clear. The largest generation of workers in U.S. history is reaching retirement age and there will be fewer working age people to replace them. Once the economy recovers, educated and skilled workers will again be in high demand. Mat-Su will not be immune from this challenge. Local human resource directors reported to the consulting team ongoing difficulty in recruiting skilled professionals to the Borough.

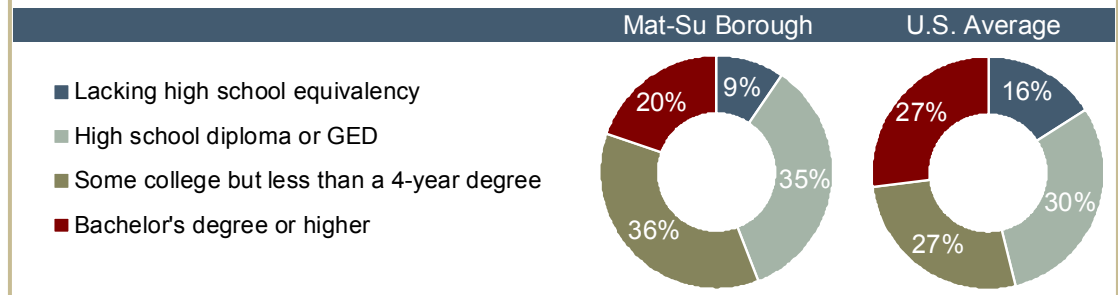
Mat-Su's most important talent asset is access to higher and career education. The presence of Mat-Su College and other post-secondary institutions gives the Borough a competitive advantage in keeping young talent from around the region. Offering additional higher education programs and opportunities would help ensure a stable base of educated professionals. Rather than duplicate degree programs, MSC should compliment the offerings at the University of Alaska Anchorage (UAA).

In addition to attracting and developing more educated professionals, additional efforts should be made to retain and strengthen the Borough's existing base of middle-skill workers. Currently, the share of the Borough's adult population lacking high school equivalency is below the national average. In

Educational Attainment (2005-2007 average)

	Mat-Su Borough	U.S. Average
Lacking high school equivalency	9.3%	16.0%
High school diploma or GED	34.8%	30.0%
Some college but less than a 4-year degree	36.2%	27.0%
Bachelor's degree or higher	19.6%	27.0%
Total	100.0%	100.0%

SOURCE: U.S. Census Bureau, American Community Survey (accessed via Moody's Analytics)



SOURCE: U.S. Census Bureau, American Community Survey (accessed via Moody's Analytics)



addition, the percent with a four-year degree is also below the national level. This means that most Mat-Su residents fall in between these two educational bookends. In other words, they finished high school but never got as far in college as a four-year degree. Two-thirds (66 percent) of Mat-Su's adult population fits this profile, compared to 57 percent nationwide. Mat-Su's higher percentage of middle-educated adults offers employers a solid workforce well-suited for moderately skilled jobs, both blue- and white-collar. Providing additional career and technical education opportunities and apprenticeships for this important talent base is also an important strategy.

Other critical talent retention and development challenges for Mat-Su include closer engagement between the education and business communities, more coordinated regional workforce efforts, expanded apprenticeship opportunities, and retention of military veterans and retirees.

Strategy 4A: Expand business and education partnerships. A common concern was the lack of effective communication and interaction between Mat-Su's businesses and educators. Employers, training providers, and educational institutions are often forced to be reactive to issues of mutual concern. Facilitating greater communication and coordination between the private sector and the education sector will help the Borough meet its most important long-term goals.

Actions:

4A.1: Continue supporting educational excellence. Borough leaders should continue striving for educational excellence in Mat-Su's public schools. This is critical for preparing current and future generations of children to thrive in the modern economy. It is also key for making the region an attractive destination for new talent, families, and employers, as well as for recruiting professional workers for existing businesses.

- Continue commitment to improve the facilities and performance of the Mat-Su School District.

Redefining Talent

The concept of talent means more than a skilled workforce. It means recruiting talented people as well as cultivating the talent pool represented by groups as diverse as students, retirees, and entrepreneurs. It also means ensuring that the employees and companies that have been responsible for a community's growth continue to see a reason to remain in the area.

National demographic trends, most notably the aging of the baby boomers, suggest that demand for workers may soon outstrip supply. As a result, competition for labor is expected to increase among companies as well as communities. Focusing on the development, attraction, and retention of talent should, therefore, be an important part of any economic development strategy.



4A.2: Align economic development, workforce, and education programs. Key partners to the Borough's economic development efforts are educational institutions and workforce training providers. Employers must be assured access to trainable workers. At the same time, young adults, families with children, and even retirees are all drawn to locations offering access to continuing education opportunities.

- Work with local post-secondary education institutions and the Mat-Su Borough School District to align career and technical education and professional certification programs with target sector development efforts.
- Encourage more local employers to participate in the Mat-Su School to Apprenticeship Initiative. The result of this program could be a significant increase in the number of apprenticeship programs and the number of student/worker participants.
- Encourage the involvement of the Mat-Su Regional Advisory Council, the Alaska Workforce Investment Board, and the (recommended) Mat-Su Borough Business Advisory Council in aligning economic development, education, and workforce training programs.

Strategy 4B Retain and engage military veterans and retirees. The presence of Fort Richardson, Kulis Air National Guard Base, and Elmendorf AFB in Anchorage are valuable economic development assets Mat-Su. According to a 2009 study conducted by Northern Economics on the economic influence of the military on Mat-Su, these installations employ over 1,000 active duty military and civilian employees who reside in the Borough. In 2007, these personnel earned approximately \$68 million annually, about \$36 million of which was spent locally. Mat-Su businesses also earned almost \$20 million in military contracts with the three installations.

Mat-Su School to Apprenticeship Initiative

The Mat-Su Borough School District, Alaska the Department of Labor & Workforce Development, and the Alaska Department of Transportation are partnering to develop a Borough-wide apprenticeship outreach initiative. The Mat-Su School to Apprenticeship Initiative links area high school students to targeted employers through a registered apprenticeship programs. The focus is on career areas and occupations for which the Mat-Su Career and Technical High School provides training. The curriculum will become part of the first year of related technical studies for the apprenticeship program. The remaining related instruction courses will be provided by local post-secondary institutions or other approved training provider.



In addition to the direct economic impact of the military presence on Mat-Su, these installations represent a valuable source of talent for the Borough. Every year hundreds of these personnel separate from service through one of these installations. As a labor pool, military veterans and retirees are highly sought after by the private sector. Opportunely, many choose the Borough to live and work.

4B.1: Post and forward employment opportunities to installations.

The Army Career and Alumni Program (ACAP) and the Air Force Airman and Family Readiness Center (AFRC) are organizations charged with helping active duty personnel and their families transition to civilian careers. Both organizations provide career counseling, job search assistance, and organize job fairs for service members separating from service. Most service members begin searching for employment opportunities months before their scheduled separation date. As a consequence, making them aware of job opportunities before they leave the service can result in more veterans remaining in Southcentral Alaska.

- The MSB human resource office should forward all job postings to ACAP and AFRC to post on their job opportunity network.
- The economic development department should encourage other private and public employers in the Borough to forward job postings to ACAP and AFRC.
- The MSB and/or a local business association should regularly participate in job fairs to encourage service members to remain in the region after their service ends.
- The MSB and appropriate business groups should meet with ACAP and AFRC to see if there are ways they could promote employment and business opportunities in Borough to the military community.



4B.2: Continue to meet with installation commanders. The MSB Manager currently meets with installation commanders at Fort Richardson and Elmendorf AFB two or three times a year. These important visits allow MSB officials to establish personal ties with new commanders, hear about issues of mutual concern, and offer to assist these installations meet their missions.

Strategy 4C: Leverage post-secondary instruction and research activities. Work with communities, chambers, and other appropriate parties to establish a formal mechanism for raising greater regional awareness of the potential for capitalizing on research and instruction activities. UAF's Palmer Research & Extension Center conducts research in sustainable agriculture, land reclamation, and other environmental issues. MSC hopes to become the center of green education in Alaska through its new renewable energy program. The program will offer instruction in renewable energy principles and is the first to feature an occupational education certificate.

Actions:

4C.1 Support additional four-year degree programs at Mat-Su College.

- Communicate the economic development benefits of additional four-year degree programs at Mat-Su College with local, state, and University of Alaska Anchorage officials.
- Encourage UAA and state officials to expand the renewable energy center program to include an associates degree program and include some research activities.
- Highlight research, education, and training activities in MSB marketing materials and in discussions with regional employers.
- Explore the long-term potential for developing a Science and Technology Park as part of the college or medical district.



- Coordinate the use of existing facilities in the Borough with educational programs. Existing examples include utilizing the MSB recycling center to support the college renewable energy program and the Mat-Su Regional Medical Center as a resource for the college Paramedic's Program.



GOAL FIVE: RAISE AWARENESS OF ECONOMIC DEVELOPMENT OPPORTUNITIES.

Mat-Su should undertake a sustained internal and external marketing campaign to generate and promote a positive image of the Borough to existing residents and businesses, as well as outside tourists, workers, and employers. Marketing and advertising are key ways to interact with Mat-Su's target audiences, and should, therefore, be viewed as an investment to achieve broader goals within the Borough.

While Mat-Su has made great strides in growing its population and bringing in new residential and commercial development, interviews with business leaders and residents revealed that the Borough suffers from a poor image within Southcentral Alaska. Major themes for the borough's marketing efforts should focus on high-quality developments (i.e., the proposed U-Med district), tourism and recreational amenities, and business opportunities. This presents an opportunity to establish both external and internal buy-in on Mat-Su's "product" by touting the borough's growth as well as the opportunities that it presents to businesses and residents alike.

As with all successful marketing, it is critical to identify target audiences and to focus efforts on them. The primary target audiences for the Borough are:

1. local and regional business leaders who can influence business location and other investment decisions;
2. key regional and statewide allies [e.g., Anchorage Economic Development Corporation (AEDC), Alaska Department of Commerce, Community, and Economic Development, and other regional organizations] that could influence economic development prospects;
3. members of the region's various media outlets; and
4. decision makers at regional companies within target sectors.

The most important audience, however, is comprised of Mat-Su's existing residents and businesses.



Strategy 5A: Initiate a local campaign to promote a more positive image of Mat-Su.

The most important target of this marketing effort is existing residents and businesses. They are the ones who have already made an investment in the area and represent Mat-Su on a daily basis in both their business and personal interactions. Making sure that existing residents and local business leaders have a positive image of the Borough is a critical first-step for any external campaign. These are the people who can best tell the Mat-Su story to the outside world and influence opinions of the area.

Actions:

5A.1: Build consensus for a primary theme and message to market Mat-Su. Some cost effective initiatives to market Mat-Su internally include the following:

- Convene a focus group comprised of MSB officials, chambers, and others to discuss the merits of a coordinated business and tourism marketing message for Mat-Su. If a common message is developed, it should be used consistently in all materials by local entities.
- Once a marketing theme has been established, conduct a local awareness campaign for economic development to increase public support for specific recommendations, such as the prospective U-Med district. Ideally, the roll-out of this plan would assist in building initial support and “buy-in”.
- Incorporate the new theme into current and future economic development marketing materials and the borough’s website. The website should also incorporate priority projects highlighted in this plan, including the prospective U-Med district and distinguishing attributes (e.g., proximity to Anchorage, the port, etc.).



- Prepare an updated press packet with a summary of Mat-Su's business highlights and contact information. Specific items to include are:
 - Fact sheet about Mat-Su, including list of major employers
 - Mat-Su attributes: the port, educated workforce, proximity to Anchorage, lifestyle, reasonable housing costs, and the proposed U-Med district
 - Copies of articles that have been published about Mat-Su
 - New expansions and locations in Mat-Su
 - Successful business profiles
 - High quality photographs of Mat-Su
- Continue to enhance and maintain Mat-Su's community profile information.

5A.2: Build awareness among Mat-Su's leadership and local residents. Leadership development should be a jointly pursued effort between the MSB, chambers of commerce, communities, educational institutions, and other organizations such as the Mat-Su Regional Medical Center.

- Create a **Leadership Mat-Su** program as a vehicle for communicating economic development goals and understanding the needs of various groups in the community.
 - Develop targeted networking opportunities (e.g. evening and weekend functions) for professionals living and working in the area.



- Establish a **Young Professionals Organization** (YPO) group to serve as a source for identifying potential emerging community and business leaders (an excellent resource for YPO's is www.yppcommons.org).
- Commit to identifying current and future leaders within the community who represent various groups (e.g., professional, youth, minority, etc.).
- Establish a **Mat-Su Ambassadors** program, with the purpose of: 1) building an awareness of the Borough's strengths among area business and community leaders, and 2) providing information to them to spread a more positive image of the area in their relationships outside the Borough.
 - Identify and recruit community and business leaders to serve as Ambassadors. Ideally, they would represent diverse demographic and professional interests and would be most able to influence decision makers.
 - Create a brief presentation, profile, and script promoting Mat-Su's positive aspects to be used by Ambassadors during the course of their business interactions both within and outside the area.
 - Create a mechanism for the Ambassadors to refer prospect leads.
 - Meet quarterly with Ambassadors keeping them up to date on current economic development initiatives, progress, and honing the borough's marketing message.

Developing New Generations of Leaders

This is a challenge faced by communities across the nation. Many traditional social and volunteer organizations (e.g., Lions, Rotary, and Altrusa clubs) are no longer popular among the X, Y, and millennial generations. Younger people often choose more informal social networks linked by common interests. Technology now allows people to network and engage in civic issues via the Internet. Moreover, younger families coping with the time demands of two-income households and longer commutes tend to have less time for community leadership and volunteer activities.



- Create a brief profile promoting Mat-Su's positive aspects to be used by area community and business leaders (this document can be used for both the Leadership and Ambassador's programs).
- Develop a **Speakers' Bureau** of professionals who are available to speak at community meetings to promote local initiatives and positive business environment in the Borough.

Strategy 5B: Enhance the image of Mat-Su throughout Southcentral Alaska. Beyond standard economic development marketing strategies, Mat-Su should work with local partners such as the Mat-Su Chamber and Anchorage Chamber to utilize non-traditional social networking tools for enhancing the image of Mat-Su within the region.

Actions:

5B.1: Focus Mat-Su's primary external marketing efforts on the region's real estate development community.

- Hold information sharing meetings to inform real estate community about what government projects are going on in the Borough, positive developments, and key positive image focus areas.
- Hold a semi-annual Developers' Days to promote on-going and future developments in the Borough to the region's real estate development and brokerage community.
- Identify parties that could refer leads to Mat-Su and set up a visitation schedule with a focus on Anchorage. Examples include local and regional developers, real estate brokers, banks, construction firms, and service firms (legal and accounting), and industry associations.



5B.2: Employ word-of-mouth marketing techniques. Word-of-mouth marketing allows information about Mat-Su to be disseminated without the MSB's direct involvement. This type of marketing leverages existing social and IT networks. It can extend the reach of the MSB at a very low cost. Internal marketing efforts will assist in building positive information exchanges around economic development initiatives in Mat-Su. Efforts should include giving community leaders, business owners, managers, residents, and staff the information and tools to communicate with the internal and external community in order to generate this type of information exchange.

- For Mat-Su, viral marketing offers low-cost marketing strategies for targeting the Anchorage market and beyond. Partners should create entertaining or informative messages designed to be passed along in an exponential fashion, especially electronically or by email.
- A one-page "cheat sheet" for an internal audience and one for an external audience should be created and distributed. These sheets should outline the primary message that the MSB would like to have conveyed, important talking points, and three to five concise sales points.

5B.3: Influence the image of Mat-Su portrayed on the Web. Use non-traditional approaches to raising Mat-Su's profile. Social networking sites, such as Facebook, Twitter, and Google Buzz have rapidly emerged as prominent marketing vehicles.

- Coordinate the borough's marketing messages with the newly established Mat-Su Ambassadors group and the YPO.
- Assume ownership of Mat-Su Borough's entry on Wikipedia. Regularly update the information and data with references.



- Employ social networking websites to spread a positive message of Mat-Su.
 - Consider such sites as Twitter, Facebook, and LinkedIn.
 - Invite local residents and professionals to post positive messages about the area on these websites.
 - Send invitations through Facebook and other sites for Mat-Su events (e.g., economic summit, etc.).
 - Post photos from activities and events in Mat-Su on networking and sharing sites, such as and Flickr, Photobucket.
 - Post video from activities and events in Mat-Su on networking and sharing sites, such as YouTube.
- Coordinate social media strategies with other organizations in the Borough, including the chamber.
- Enhance the economic development portion of the MSB website. Suggestions include:
 - Community Profile. Create an updated community profile available for download from the website. The existing profile dates back to 2003 and is 68 pages long. An updated profile should be much more concise and focused on meeting the information needs of site selection consultants. The text box right provides a link to the International Economic Development Council's data standards matrix.

SETTING THE STANDARDS

The International Economic Development Council (IEDC) has prepared a comprehensive set of data standards for communities to use when presenting themselves to site selectors or prospective businesses. The data standards matrix and related information is available at: http://www.iedconline.org/?p=Data_Standards.



- Business Climate. The website would benefit from an expanded section on business climate in the Borough. This section should contain information on the area's workforce, major employers, target industry profiles, tax rates, utility providers and rates (if available), transportation access, and available incentives.
- Available sites. The website should have a direct link to AEDC's Anchorage Prospector website, which provides information on available properties in the Borough.
- Contact info. The Economic Development Department website needs visible names and contact information of economic development staff.

5B.4: Implement a traditional public relations campaign targeted at regional publications.

- Work with local chambers, cities, and other business organizations to identify business success stories in Mat-Su.
- Send press releases about recent business successes to regional publications, such as the *Anchorage Daily News* and the *Mat-Su Valley Frontiersman*. The initial press release should promote the economic development plan and explain how local leadership worked together to determine the best opportunities for Mat-Su.
- Explore setting up an agreement with the newspapers to provide business profiles or positive business information on a regular periodic (every two weeks) basis for publication.



- Consider developing a quarterly newsletter focused on business issues in Mat-Su and send to developers in Anchorage to generate business leads. Consider the inclusion of editorials on a host of topics written by local public officials, business owners, as well as other potential partners and stakeholders.

5B.5: Employ other regional awareness initiatives.

- Participate in joint marketing activities with organizations that can refer prospect leads. Examples include regional economic development organizations [e.g., Anchorage Economic Development Corporation (AEDC); Alaska Department of Commerce, Community, and Economic Development; State of Alaska Chamber of Commerce; and other regional organizations] and area utilities and ports.
- Host an annual ***Economic Development Summit*** to formally present progress on economic development issues in the Borough. A panel of presenters can address regional issues and provide a project profile from each community. Invitees should include real estate developers, agents, and brokers; business leaders; community leaders; and regional media. Consider hosting an award for a local visionary that has helped Mat-Su meet its goals.

Strategy 5C: Increase tourism marketing efforts. Mat-Su offers a wide variety of natural amenities that have drawn visitors to the region for years, and its economy has clearly benefitted from tourism spending. For example, a tourism study performed for the MSB in 2009 stated that “the annual value of the visitor industry to the Borough is estimated to be \$282 million.” Building on this substantial impact, Mat-Su should continue marketing efforts toward increasing visitor traffic. Doing so will require a cohesive approach that promotes amenities from the entire Borough that can be enjoyed throughout the year and attract a wide audience. This will require coordinated efforts from all major stakeholders.



Actions:

5C.1: Increase resources devoted toward marketing tourism amenities and recreational options throughout the Borough.

- Participate in cross-organizational marketing activities with various public and private sector partners. Examples include the various municipalities, retail and dining establishments, and lodging facilities.

5C.2: Broaden awareness of retail options and tourism amenities to increase spending by visitors in the Borough.

- Work with relevant groups to raise awareness of Mat-Su's tourism assets among local retailers and hospitality-related establishments. This will help to ensure that local businesses are prepared to capture retail spending associated with specific tourism-related activities.
- Where possible, retail activities should be tailored to specific events or attractions, such as the Alaska State Fair. This may mean offering extended hours of operation to accommodate specific events or designing sales and marketing efforts around a related theme.

5C.3: Increase marketing efforts at reaching visitors prior to their arrival in Alaska. To reach potential visitors outside the state, the Alaska Travel Industry Association (ATIA) directs an \$11 million external marketing campaign on behalf of the State of Alaska. The Mat-Su CVB leverages this campaign by purchasing 50,000 visitor leads generated by ATIA and conducting its own direct mail campaign. A Mat-Su visitor's guide is mailed to people responding to ATIA's marketing efforts.



- The Mat-Su CVB should explore other marketing techniques for reaching potential visitors to the Borough, especially cost effective web-based strategies that involve social media such as Twitter and Facebook.
- 5C.4: Continue to ensure that Mat-Su’s tourism marketing efforts convey a consistent and sustained message.**
- The Mat-Su CVB Board of Directors has identified the need for initiating a Mat-Su branding process. A successful branding effort has the potential to benefit not only the Borough’s tourism sector, but also the MSB’s business and talent attraction efforts.
- 5C.5: Continue pursuit of a National Heritage Area (NHA) designation for Mat-Su.** The Cultural Resource Office of the MSB is presently conducting a study to assess the prospect of Mat-Su as an NHA. Funding for the study has been provided by the State of Alaska, Office of History and Archaeology and the MSB. The goals of the study as are to identify the prospective boundary for NHA designation, generate support for the initiative, and to determine if a feasibility study is warranted. NHA designation would make the Borough eligible to receive federal matching funds to support economic development conservation, and education programs (see text box).
- Complete study to determine suitability of Mat-Su for NHA designation and a potential boundary.
 - Identify significant natural and cultural heritage resources and the themes that link them
 - Describe potential projects.
 - Establish NHA Council of Stakeholders and interested parties.

National Heritage Area

Created by Congress, a National Heritage Area (NHA) is an assemblage of natural, historic, and cultural resources that together represent distinctive aspects of American heritage worthy of recognition. Currently, there are 49 NHAs, primarily in the eastern United States. Only 14 are located west of the Mississippi River. Alaska’s only NHA is the Kenai Mountains-Turnagain Arm National Heritage Area.

NHA designated areas are eligible for federal funds (up to \$10 million over 15 years with at least a 1:1 match requirement) to implement conservation, education, and economic development programs. NHA funds can be used for such purposes as developing tourism marketing programs, creating trails, and restoring historic buildings.



Strategy 5D: Leverage tourism marketing for talent attraction, entrepreneurship, and economic development. Mat-Su is already a popular tourist destination. However, the Borough has not leveraged existing tourism marketing for talent and business attraction. A major goal of this new marketing message is raising awareness among professionals and younger talent that the area is more than a tourism destination. It also offers opportunities for entrepreneurship, innovation, and business. This strategy can touch on a number of areas:

Actions:

5D.1: Identify a complementary theme. Finding a common theme between tourism marketing and talent attraction can be an effective strategy. For example, the 2009 leadership class in New Braunfels, Texas, developed a post card campaign to advertise the communities many amenities. Using the slogan “Never the Same Day Twice,” these cards will be used to guide tourists to specific attractions and events, as well as to promote the area to potential new residents.

5D.2: Tie to meetings and conventions. Focus a convention and meeting strategy on targeted occupations, groups, and industries. This brings people who fit talent needs to the region and exposes them to the area’s amenities. The types and size of these conventions and meetings would be dependent on meeting and hotel space. For Mat-Su, this strategy may also need to rely on targeting events in Anchorage and other boroughs.

- In the absence of a dedicated conference center, the Talkeetna Lodge is an example of a facility that offers first class location and space for conferences and conventions Greater integration of the borough’s economic development efforts with the lodge represents a significant opportunity.



5D.3: Develop an online gateway to increase awareness of business opportunities to visitors and residents.

While the CVB has a well-established online presence, its website focuses on tourism. To truly leverage the brand, these efforts should be expanded to encompass the whole of Mat-Su and include more than tourism-related information. Offering information about business opportunities at the same site as tourism options exposes potential tourists to business activities in the county. This highlights professional opportunities in Mat-Su to an audience that might not otherwise know about these activities. Similarly, it exposes a business audience to the social, recreational, and cultural offerings in the Borough.

- Local chambers should partner to develop a central Borough-wide website to increase awareness of business opportunities to visitors and residents. Such a site would serve as a central hub for business development opportunities throughout Mat-Su. Chambers and other similar organizations would be able to post information about their organizations and communities, as well as provide links to their own websites.
- Compile and post a list of mentoring, training, employment, and business development opportunities in Mat-Su.
- Include professional and continuing education courses offered in Mat-Su for licensed professionals or particular professions that either exist in the Borough or the MSB is seeking to attract to Mat-Su.
- List or link to higher education and continuing education classes offered in the Borough.
- Provide information about area business organizations and their regular meetings, as well as any one-off or special events they have.



- Include the site's address or URL on all marketing materials.

Strategy 5E: Focus on quality development to improve the appearance of the Borough's built environment. The rapid suburbanization of Mat-Su has been the result of rapid population growth, especially from Borough residents who now commute into Anchorage. The Borough's haphazard development patterns have placed its natural beauty at risk. There is a direct and measurable correlation between the quality of commercial development and the vitality of economic development. This vitality can be measured by job growth and wage growth. Many focus group participants expressed concern about how the negative appearance of much of the Borough's built environment impacts its appeal to new professionals, entrepreneurs, and executives. Poor quality development affects worker recruitment, business attraction, lifestyle, tourism, and recreational options.

Ma-Su's opportunity is enormous. It can build a new reputation in the greater Anchorage region as a place where higher wage businesses can grow. This growth will emphasize a respect for the astonishing physical attributes of the Borough. Quality development is planned, long term, and integrates with the needs of all citizens. It is not "fly-by-night" or random. While Alaska is known for an abundance of open space, unplanned development is rapidly diminishing the opportunity this represents. View corridors, easy traffic access, and managed growth may seem like unnecessary guidelines, but a growing number of Mat-Su residents know that these are becoming more important by the day. A strategy that encourages and rewards quality development pays off not only in quality job growth.

Actions:

5E.1: Continue to update MSB planning code. MSB leadership and planning staff should continue working with citizen groups, community councils, and incorporated cities to ensure that the borough's land and resources are efficiently used for the benefit of Mat-Su's economy and population as well as to protect its natural beauty.

What is Quality Development?

It is, first and foremost, a commitment to higher standards of building and site improvements. Specifically, it entails conformity with codes and standards appropriate to Class A office buildings, industrial parks that meet zoning codes that protect against environmental degradation, and residential developments that meet aesthetic norms. In short, quality development builds for the future. It goes beyond the "what works now" and creates a built-environment that attracts companies and individuals who want to invest in the future of the region.



5E.2: Enhance the visual appearance along major corridors running through Mat-Su.

- Leverage the proposed U-Med district and other planned developments to promote examples of quality development within the Borough.
- Work with active gravel mining operations, property owners of former mines, and others to establish a standard for screening facilities and sites from passers-by, and for mitigating traffic impacts.

5E.3: Protect and promote Mat-Su Borough's green spaces and natural amenities. Mat-Su business owners and professionals repeatedly stated their interest in preserving green space and protection of the area's natural amenities. Not only is this a strong value held within the Borough, it also makes economic development sense. Communities across the country clearly recognize the importance of recreation, parks, and preserved natural resources in their ability to make themselves more attractive to talented workers and new businesses.

- Explore funding options for parks and green space programs with assistance from area taxing entities, state and federal agencies, and area non-profits.
- Support the expansion of the existing parks systems throughout the Borough and its constituent municipalities, including hike and bike paths that create greenbelts connecting different parts of the Borough.
- Support ongoing tourism infrastructure and recreational development programs to develop Mat-Su's outstanding trails and trailheads.



- Support efforts to preserve the Borough's still water fishing lakes and other recreational bodies of water.



IMPLEMENTATION MATRIX

The following guide combines all the goals, strategies, and actions in a single table. It also includes potential partners and allies as well as a recommended time horizon for implementation. The purpose of the implementation matrix is to provide a graphic representation when the actions should realistically be implemented and the most appropriate organizations to carry them out. A quarterly work plan will also be developed by the borough manager and economic development director.

STRATEGY / ACTION ITEMS			TIMELINE				
Description	Regional Partner(s)		0-6 mos	6-12 mos	2-3 yrs	4-5 yrs	On-going
MSB – Mat-Su Borough; Chambers – local chambers of commerce; MSC – Mat-Su College; UAA – University of Alaska Anchorage; UAF – University of Alaska Fairbanks; MSBSD – Mat-Su Borough School District; MSRMC – Mat-Su Regional Medical Center; AEDC – Anchorage Economic Development Corporation, ACC – Alaska Chamber of Commerce; MSCVB – Mat-Su Convention and Visitors Bureau; MSRAC – Mat-Su Regional Advisory Council, AWIB – Alaska Workforce Investment Board; AJC – Alaska Job Corp; SBDC – Mat-Su Small Business Development Center; ACAP – Army Career and Alumni Program; AFRG – Airman Flight Readiness Group							
GOAL ONE: POSITION MAT-SU FOR SUSTAINABLE ECONOMIC GROWTH AND VITALITY.							
1A Develop professional & technical services sector.							
1A.1	Identify targets.	MSB		X			X
1A.2	Implement direct recruitment strategy.	MSB			X		
1A.3	Build the sector from within.	MSB, MSC, UAF, Chambers					X
1A.4	Ensure appropriate space is available.	MSB			X		
1A.5	Target incentives to this sector.	MSB			X		
1A.6	Provide general support.	MSB	X				X
1B Support the local expansion of the healthcare and education sectors.							
1B.1	Create a “University-Medical” district.	MSB, MSC, UAF, UAA, MSRMC				X	
1B.2	Encourage local healthcare providers to collaborate and partner in healthcare education, workforce training, and talent attraction and recruitment efforts.	MSRMC, other local healthcare providers, AJC, AWIB, MSRAC			X		



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1B.3	Grow healthcare workforce locally.	State of AK, MSRMC, other local healthcare providers, AJC, AWIB, MSRAC					X
1B.4	Support and strengthen the mission of Mat-Su College.	MSC, MSB, local businesses, Cities					X
1B.5	Support capital and educational program expansion at MSC.	MSC, MSB, Cities					X
1C Support the retention and expansion of existing businesses in the Borough.							
1C.1	Maintain an inventory of existing businesses and available properties.	MSB		X			
1C.2	Administer a regularly scheduled survey of employers.	MSB, Chambers			X		
1C.3	Conduct business visitations.	MSB	X				X
1C.4	Create business forums.	MSB, Chambers			X		
1C.5	Provide networking opportunities.	MSB, Chambers		X			
1C.6	Have an intervention strategy.	MSB, Cities, State of AK, AWIB, AJC, MSRAC			X		
1D Pursue developing opportunity sectors.							
1D.1	Build awareness among private employers in Anchorage.	MSB, Chambers	X				X
1D.2	Conduct lead generation activities.	MSB, Chambers		X			X
1D.3	Establish a prospect management system.	MSB			X		
1D.4	Provide relocation assistance.	MSB, Chambers,	X				X



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	Cities						
1E Promote entrepreneurship and small business development.							
1E.1	Reassess the existing entrepreneurial programs and services available in Mat-Su.	MSB, SBDC, UAA			X		
1E.2	Work with partners to enhance services for entrepreneurs.	MSB, SBDC, MSC			X		
1E.3	Celebrate and support entrepreneurship in the region.	MSB, Chambers, SBDC	X			X	
1E.4	Encourage local entrepreneurs to submit entries in the Alaska Business Plan Competition.	MSB, Chambers, SBDC		X			
1F Support the preservation and expansion of the agricultural sector in the Borough.							
1F.1	Continue generating funding support from the State of Alaska for the Vegetable Processing and Product Development Center.	MSB				X	
1F.2	Continue supporting farmland protection efforts.	MSB, State of Alaska				X	
1F.3	Encourage community support and patronage of local agricultural businesses and farmers markets.	MSB				X	
1F.4	Support and promote the export of certified seed potatoes from Mat-Su to China and Taiwan.	MSB, UAF				X	
1F.5	Develop an Agricultural Economic Development Plan for the Borough.	MSB			X		
1G Promote the sustainable development of Mat-Su's natural resources for economic development.							
1G.1	Ensure infrastructure access for coal mining operations.	MSB, coal	X			X	



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	companies						
1G.2	Support the sustainable development of forest resources through the Timber Management Plan.	MSB, timber companies				X	
1G.3	Work with the gravel mining industry to balance the need for the sector’s growth with other economic development considerations, as well as environmental and resource protection.	MSB, gravel companies				X	
GOAL TWO: BUILD CAPACITY TO CONDUCT ECONOMIC DEVELOPMENT WITHIN THE BOROUGH.							
2A Expand internal resources for economic development.							
2A.1	Increase staffing.	MSB		X			
2A.2	Increase marketing and outreach budget.	MSB		X			
2B Establish a Borough-wide business partnership to support economic development.							
2B.1	Form a business advisory council.	MSB	X				
2C Expand regional economic development cooperation.							
2C.1	Hold regular meetings with Anchorage economic development officials.	MSB, AEDC, Chambers, Businesses, Others	X			X	
2C.2	Jointly pursue federal grants.	MSB, City of Anchorage			X	X	
2C.3	Jointly attend trade events and business recruitment trips.	MSB, AEDC				X	
2D Link sub-regional economic plans to the MSB Economic Development Plan.							



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2D.1	Provide personal briefings on the plan to local representatives.	MSB, Chambers, Cities	X			X	
2D.2	Pursue a sub-regional economic development planning initiative.	MSB, Chambers, Cities		X		X	
GOAL THREE: EXPAND MAT-SU'S ECONOMIC DEVELOPMENT INFRASTRUCTURE.							
3A Continue developing multimodal transportation and industrial infrastructure at Port Mackenzie.							
3A.1	Secure approval and funding for the construction of the rail extension.	MSB, State of Alaska, Federal				X	
3A.2	Complete current and planned infrastructure improvements, including road improvements, paving, and marine facility expansions.	MSB, State of Alaska				X	
3A.3	Complete development plan for Port that appropriately maximizes use of land and dock space for water dependent and rail dependent uses.	MSB, area land owners			X		
3A.4	Market the port district for new private investment and employment opportunities.	MSB, UA	X			X	
3B Increase the availability of commercial and industrial land.							
3B.1	Update information on preferred sites.	MSB			X		
3B.2	Determine if public sector support is required for development.	MSB			X		
3B.3	Engage development community.	MSB		X			
3C Continue expanding basic tourism infrastructure.							
3C.1	Invest in high priority infrastructure needs.	MSB				X	



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3C.2	Promote the development of larger anchor projects.	MSB, MSCVB, State of Alaska				X	
3C.3	Identify funding sources.	MSB, MSCVB, State of Alaska				X	
3D Continue improving and expanding Mat-Su’s transportation system.							
3D.1	Work with state and local partners to address critical transportation needs in the Borough.	MSB, Cities, State of Alaska				X	
3E Support the extension and improvement of broadband connectivity to various areas of the Borough.							
3E.1	Work with state and local telecommunications and other technology providers to improve and extend technology infrastructure and service throughout the Borough.	MSB, Telcom companies, State of Alaska				X	
3E.2	Convene Borough users to discuss and identify needed improvement and share such observations with broadband providers.	MSB, Telcom companies		X			
3E.3	Consider the creation of a Technology Advisory Board consisting of local businesses, technology professionals, and other interested parties to identify emerging technology needs and possible solutions.	MSB, businesses, Telcom companies					
3E.4	Pursue federal grants.	MSB, State of Alaska	X				
GOAL FOUR: ATTRACT, RETAIN, AND ENGAGE TALENT.							
4A Expand business and education partnerships.							
4A.1	Continue supporting educational excellence.	MSBSD, MSB				X	



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4A.2	Align economic development, workforce, and education programs.	MSB, MSBSD, MSC, MSRAC, AJC, AWIB			X	X	
4B Retain and engage military veterans and retirees.							
4B.1	Post and forward employment opportunities to installations.	MSB, Cities, Chambers, Key Employers, Businesses, ACAP, AFRG	X			X	
4B.2	Continue to meet with installation commanders.	MSB				X	
4C Leverage post-secondary instruction and research activities.							
4C.1	Support additional four-year degree programs at Mat-Su College.	MSB, MSC, UAA, Cities, Chambers				X	
GOAL FIVE: RAISE AWARENESS OF ECONOMIC DEVELOPMENT OPPORTUNITIES.							
5A Initiate a local campaign to promote a more positive image of Mat-Su.							
5A.1	Build consensus for a primary theme and message to market Mat-Su.	MSB, Chambers, Cities, MSCVB, MSRMC, Businesses		X		X	
5A.2	Build awareness among Mat-Su's leadership and local residents.	MSB, Chambers, Cities, MSCVB, MSRMC, Businesses	X			X	



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5B Enhance the image of Mat-Su throughout Southcentral Alaska.						
5B.1	Focus Mat-Su's primary external marketing efforts on the region's real estate development community.	MSB, Chambers		X		
5B.2	Employ word-of-mouth marketing techniques.	All Partners			X	X
5B.3	Influence the image of Mat-Su portrayed on the Web.	All Partnes	X			X
5B.4	Implement a traditional public relations campaign targeted at regional publications.	MSB, Cities, Chambers, Businesses		X		X
5B.5	Employ other regional awareness initiatives.	MSB, Chambers, AEDC, State of Alaska			X	X
5C Increase tourism marketing efforts.						
5C.1	Increase resources devoted toward marketing tourism amenities and recreational options throughout the Borough.	MSB, MSCVB, Chambers			X	
5C.2	Broaden awareness of retail options and tourism amenities to increase spending by visitors in the Borough.	Chambers, Businesses				X
5C.3	Increase marketing efforts at reaching visitors prior to their arrival in Alaska.	MSCVB, MSB			X	
5C.4	Continue to ensure that Mat-Su's tourism marketing efforts convey a consistent and sustained message.	MSCVB		X		
5C.5	Continue pursuit of a National Heritage Area (NHA) designation for Mat-Su.	MSB				X
5D Leverage tourism marketing for talent attraction, entrepreneurship, and economic development.						



STRATEGY / ACTION ITEMS			TIMELINE				
Description	Regional Partner(s)	0-6 mos	6-12 mos	2-3 yrs	4-5 yrs	On-going	
MSB – Mat-Su Borough; Chambers – local chambers of commerce; MSC – Mat-Su College; UAA – University of Alaska Anchorage; UAF – University of Alaska Fairbanks; MSBSD – Mat-Su Borough School District; MSRMC – Mat-Su Regional Medical Center; AEDC – Anchorage Economic Development Corporation, ACC – Alaska Chamber of Commerce; MSCVB – Mat-Su Convention and Visitors Bureau; MSRAC – Mat-Su Regional Advisory Council, AWIB – Alaska Workforce Investment Board; AJC – Alaska Job Corp; SBDC – Mat-Su Small Business Development Center; ACAP – Army Career and Alumni Program; AFRG – Airman Flight Readiness Group							
5D.1	Identify a complementary theme.	MSCVB, Chambers, MSB			X		
5D.2	Tie to meetings and conventions.	MSCVB, Chambers, MSB				X	
5D.3	Develop an online gateway to increase awareness of business opportunities to visitors and residents.	MSCVB, Chambers, MSB			X		
5E Focus on quality development to improve the appearance of the Borough's built environment.							
5E.1	Continue to update MSB planning code.	MSB				X	
5E.2	Enhance the visual appearance along major corridors running through Mat-Su.	MSB, gravel companies		X			
5E.3	Protect and promote Mat-Su Borough's green spaces and natural amenities.	MSC, Cities				X	



ECONOMIC VITALITY MEASURES

In addition to the timeline provided in the previous section for implementing the goals, strategies, and actions contained in the plan, various economic indicators should be tracked to measure the overall economic success of the Borough. While it is difficult to directly connect the success of the economic development plan to certain economic statistics at the local level (e.g., median household income), tracking these indicators will provide a general understanding of the relative economic vitality of Mat-Su. In addition, some of these indicators, especially those sourced from the Census Bureau's American Community Survey (ACS), should be analyzed in the context of long term trends. Due to ACS error margins, year-to-year changes may be misleading.

Indicator	Source
Number of Private Establishments	U.S. Bureau of Labor Statistics (Data Source: Quarterly Census of Employment & Wages)
Private Non-Farm Employment	U.S. Bureau of Labor Statistics (Data Source: Quarterly Census of Employment & Wages)
Unemployment Rate	Alaska Department of Labor and Workforce Development
Professional and Technical Services Employment	U.S. Bureau of Economic Analysis
Average Annual Pay	U.S. Bureau of Labor Statistics (Data Source: Quarterly Census of Employment & Wages)
Median Household Income	U.S. Census Bureau American Community Survey
Young Adults: Age 20-34	U.S. Census Bureau American Community Survey
Total Population	Alaska Department of Labor and Workforce Development
Population over 25 with a Bachelor's degree or Higher	U.S. Census Bureau American Community Survey
Population over 25 with an Associate's Degree	U.S. Census Bureau American Community Survey



OVERVIEW OF THE MAT-SU BOROUGH ECONOMY

Methodology & Background

The primary goal for the Economic Overview is to arrive at a common understanding of the Matanuska-Susitna (Mat-Su) Borough's existing economic strengths and weaknesses. This analysis is expressed in the context of the metropolitan, regional, and national economies as a means understanding the Mat-Su Valley's relative position in a national context and highlighting its latent and potential competitive advantages.

TIP has drawn upon our recent experience analyzing the economy of South Central Alaska, as well as our deeper knowledge working in areas throughout the United States. We have applied this knowledge and experience to both qualitative and quantitative analysis methods for developing a full understanding of the Mat-Su economy, including specific barriers to growth and development.

We based our findings on the following elements:

- A review of relevant studies, plans, and other material provided by the Mat-Su Borough, including the 2008 Comprehensive Economic Development Strategy (CEDS) Update
- A review of economic and demographic data from various federal, state, and private sources, including the Alaska Department of Labor and Workforce Development, the U.S. Bureau of the Census, the U.S. Department of Labor, the U.S. Bureau of Economic Analysis, Moody's Analytics, and Economic Modeling Specialists Inc.

Economic Overview Indicators

- Population Trends
- Components of Population Growth
- Age Distribution
- In-Migration and Out-migration
- Commuting Patterns
- Housing Patterns
- Housing Affordability
- Unemployment
- Job Growth
- Existing Industries
- Retail Sales
- Educational Attainment

Physical Description

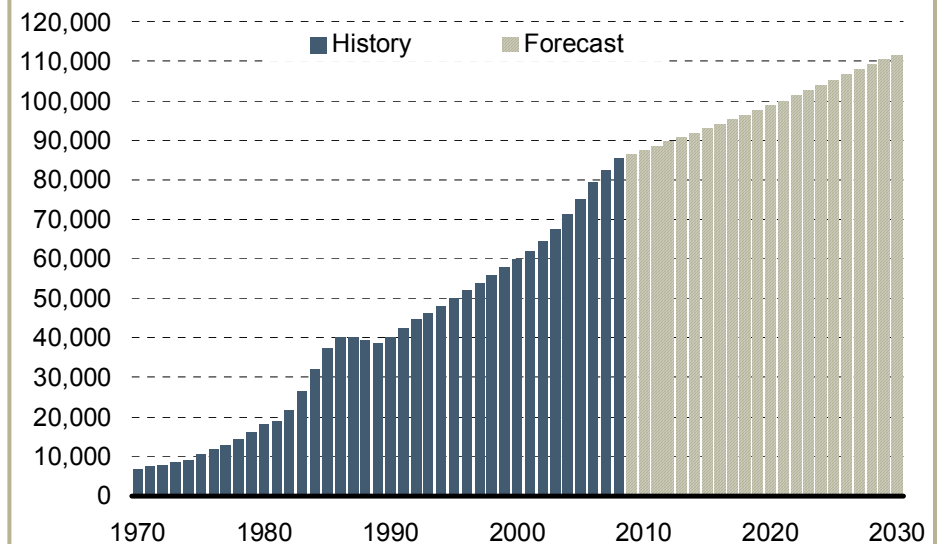
Situated in South Central Alaska, Mat-Su Borough covers an expansive area totaling nearly 25,000 square miles. Its geographic diversity includes mountain ranges, rolling lowlands, river valleys, forests, and wetlands. To the north, Mat-Su serves as a gateway to Denali National Park and Preserve, as well as the interior region of Alaska. To the south, the borough borders the Knik Arm and Anchorage’s northern suburbs. About 90 percent of the borough’s population resides in its core area, which encompasses the road system between Willow and Sutton. This network binds the Valley’s three incorporated communities – Palmer, Wasilla, and Houston – and links them with Anchorage via the Glenn Highway and Alaska’s interior via the Parks Highway.

Demographics

Since 1970, the Mat-Su Borough has experienced explosive population growth. The borough’s population first reached 10,000 residents in 1975 and grew to 50,000 in 1996. By 2000, the Census counted nearly 60,000 local residents. Since the beginning of the decade, Census estimates show the borough’s population surging approximately 43 percent in eight years. This rate indicates that the borough added, on average, approximately 3,200 residents each year this decade. As of the end of 2008, the Census Bureau estimates the Mat-Su Borough now has more than 85,000 residents and is the third most populous borough in the state.

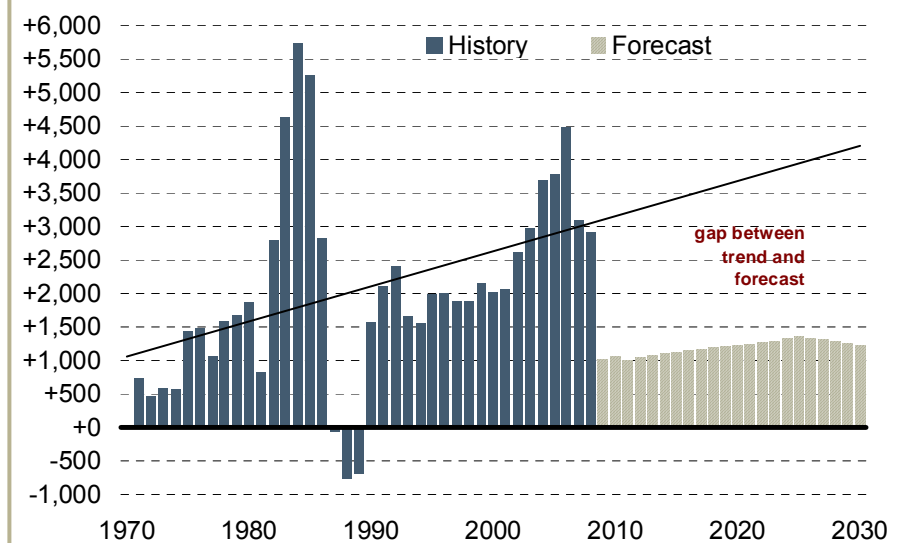
The population forecast was developed by Moody’s Analytics, a leading independent provider of economic analysis, data, forecasting, and credit risk services. Moody’s forecasts healthy – yet slower – population growth for the borough continuing over the next two decades. Moody’s forecast, as seen in both **Figure 1** and **Figure 2**, calls for net population gains in the range of 1,000-1,500 annually. This represents a sharp slowdown from the trend experienced over the past three decades. Moody’s forecast is top-down, meaning it looks first at the prospects for Alaska’s economy and then the Anchorage MSA, before allocating anticipated growth at the borough level.

Figure 1: Population and Growth



SOURCE: U.S. Bureau of the Census (history) and Moody’s Analytics (forecast)

Figure 2: Net Annual Population Growth



SOURCE: U.S. Bureau of the Census (history) and Moody’s Analytics (forecast)

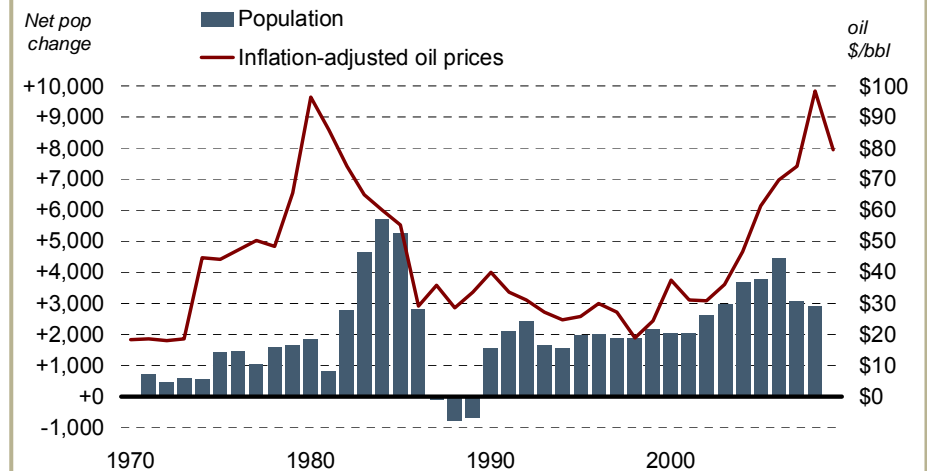
Overall, Alaska faces the prospect of declining oil production, falling federal spending, and slower national economic growth.

Figure 3 reveals a strong correlation between the energy sector and population growth in the borough. The graph displays inflation-adjusted, average annual oil prices over the borough’s historical population growth. Although the energy sector is not a direct driver of Mat-Su’s economy, its pace of growth is strongly influenced by Anchorage’s economic success, the energy sector’s health, and the economy of the state as a whole.

The U.S. Census Bureau tracks three factors that drive population growth: natural increase, international migration, and domestic migration. The first two – natural increase (net difference in births and deaths) and international migration – typically change gradually over time. **Figure 4** reveals this to be the case for Mat-Su Borough. With the exception of negative international migration patterns in the early 1990s, these two components have remained relatively stable since the Census Bureau began tracking these records in 1991.

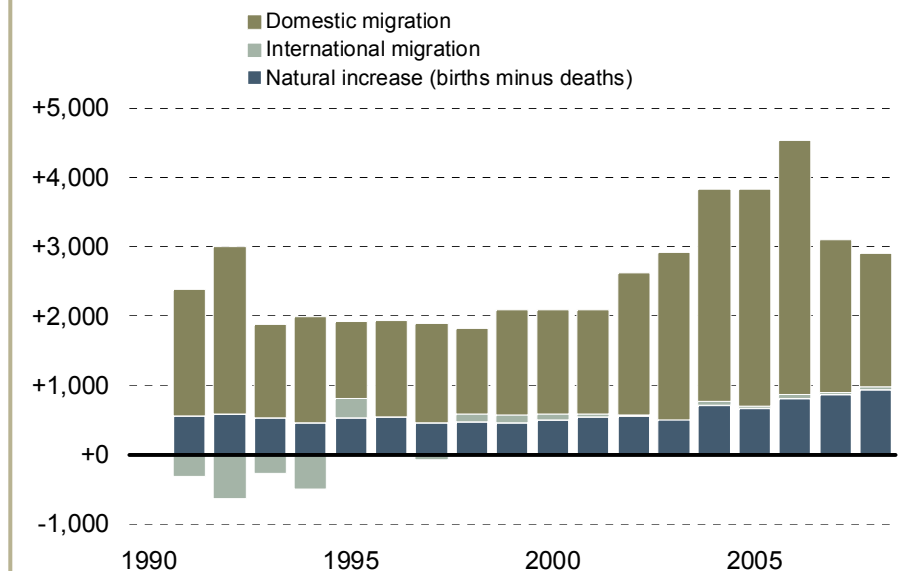
The third and most volatile component of growth is domestic migration. This component is made up of U.S. residents moving between Mat-Su and other parts of the nation. Domestic migration into Mat-Su has been positive since the early 1990s. However, the annual level of net in-migration has varied widely over the 18-year period, ranging from 1,100 to 3,700. The height occurred in 2006, when the borough gained 3,676 U.S. residents.

Figure 3: Key Driver of Population Growth



NOTE: Oil prices shown here are expressed in average annual prices (including 2009 year-to-date) adjusted to the 2009 consumer price index.
 SOURCE: U.S. Bureau of the Census; TIP Strategies; Federal Reserve Bank of St. Louis; U.S. Bureau of Labor Statistics

Figure 4: Components of Population Growth



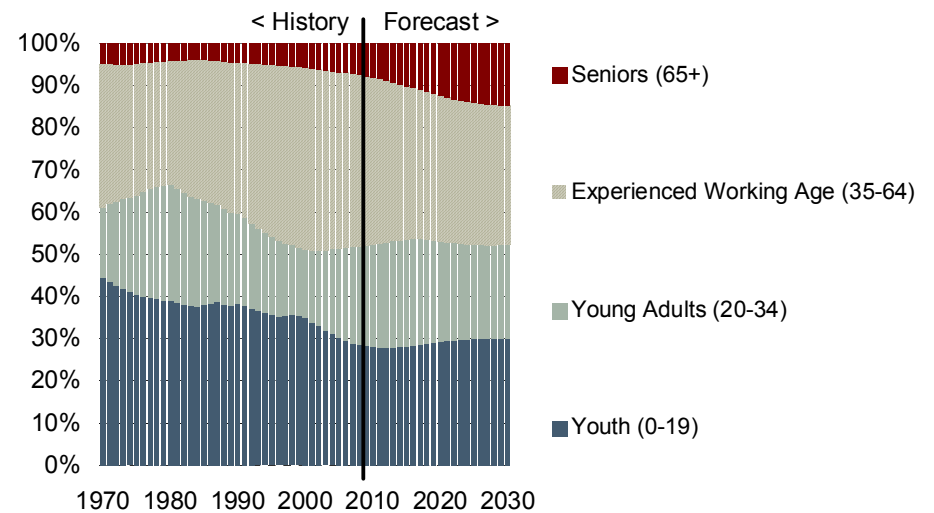
SOURCE: U.S. Bureau of the Census (accessed via Moody’s Analytics)

Figure 5 shows Mat-Su's evolving age distribution projected over a 60-year time period, from 1970 to 2030. Seniors currently make up about 8 percent of the borough's population. Their share of the overall population, however, is projected to nearly double over the next two decades to 15 percent. This trend is not unique to Ma-Su, as similar demographic trends are occurring nationwide.

The figure also shows the long-term decline in the share of young people living in Mat-Su. The Census Bureau estimates the percentage of borough residents under the age of 20 has fallen from a high of 44 percent in 1970 to a low of 28 percent in 2008. Moody's Analytics projects this share to remain flat through 2030.

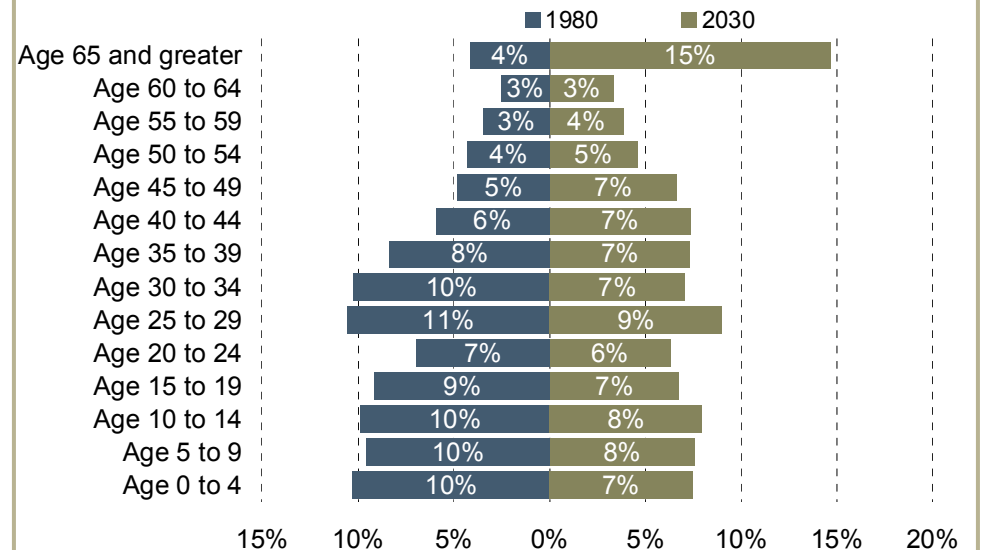
Much of the change in Mat-Su's demographic structure has occurred over the past three decades. Nearly two-thirds of Mat-Su's population was under the age of 35 in 1980. Today, barely 50 percent of the population is under 35. Over the next two decades, most of the changes in the borough's age distribution will occur in the senior cohort, as baby boomers (i.e., those born between 1946 and 1964) pass age 65.

Figure 5: Population Distribution by Age



SOURCE: U.S. Bureau of the Census (history) and Moody's Analytics (forecast)

Figure 6: Population Distribution by Age, 1980 vs 2030



SOURCE: U.S. Bureau of the Census (accessed via Moody's Analytics)

Migration and Mobility

U.S. Census estimates of domestic migration represent a measurement of net change, but with Internal Revenue Service (IRS) data it is possible to measure the gross flows of residents (as represented by the number of exemptions claimed on tax filings).

An analysis of IRS filings corroborates the pattern observed in U.S. Census estimates of domestic migration. IRS data shows the net number of U.S. income tax filers moving into and out of Mat-Su rising steadily since 2001, peaking in 2006, and then declining slightly. This trend closely parallels the Census estimates shown in Figure 4.

Figure 8 illustrates that more than half of those moving into Mat-Su arrive from another borough in Alaska. The opposite is true for those moving out of Mat-Su. As of 2007, 60 percent of residents leaving the borough were destined for states outside of Alaska. International migration accounted a very small percentage of new or former residents.

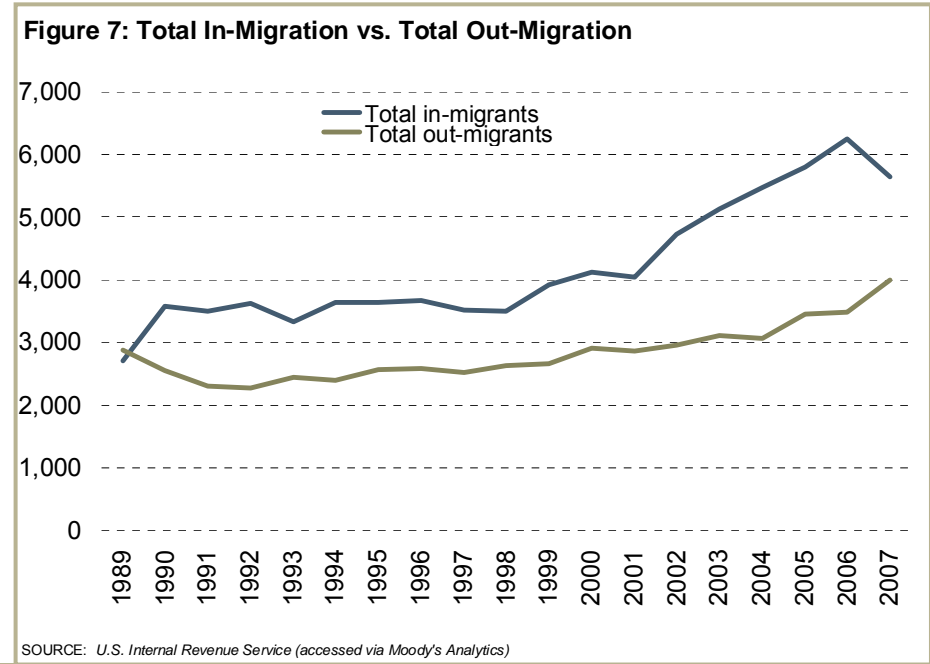


Figure 8: Geographic Distribution of the Mat-Su's In- and Out-Migration...

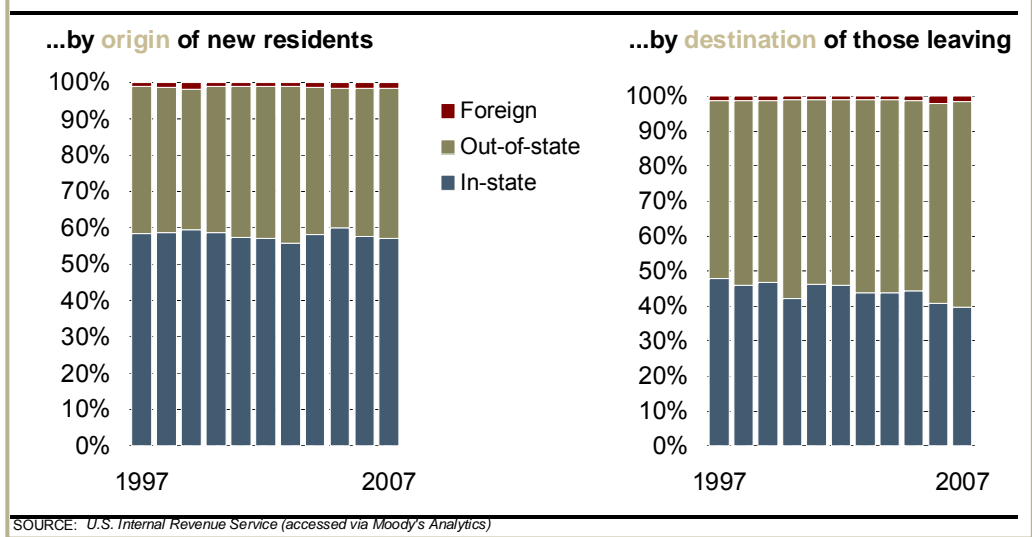


Figure 9 illustrates the gross IRS-based migration numbers parceled by geographic grouping: in-state, out-of-state, and foreign flows. Two trends are immediately clear. First, international immigration is a marginal contributor to Mat-Su's population growth. Second, Mat-Su nets significantly more new residents from in-state than from out-of-state. This result suggests the Anchorage area contributes heavily to the borough's population growth.

Figure 10 demonstrates just how tightly Anchorage is tied to Mat-Su's population growth. The Anchorage Municipality is the leading origin of new residents to Mat-Su as well as the leading destination of former residents. According to IRS figures, Mat-Su enjoyed a net gain of 1,381 residents from Anchorage in 2007.

It is also evident that Mat-Su's migration patterns outside of Alaska are linked to large cities in the Western U.S. (as based on their central counties). These include Phoenix (Maricopa), Tacoma (Pierce), Las Vegas (Clark), Hilo (Hawaii), San Diego, Spokane, and Seattle (King).

Figure 9: Net Migraton Flows to/from Mat-Su by Geography

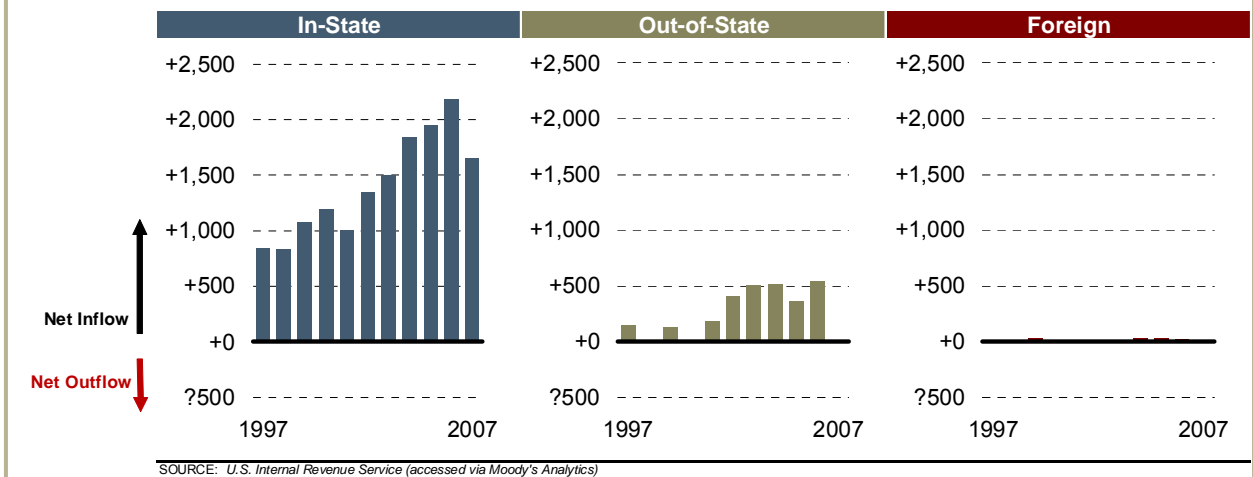


Figure 10: County Equivalents with Major Annual Migration Flows to and from Mat-Su

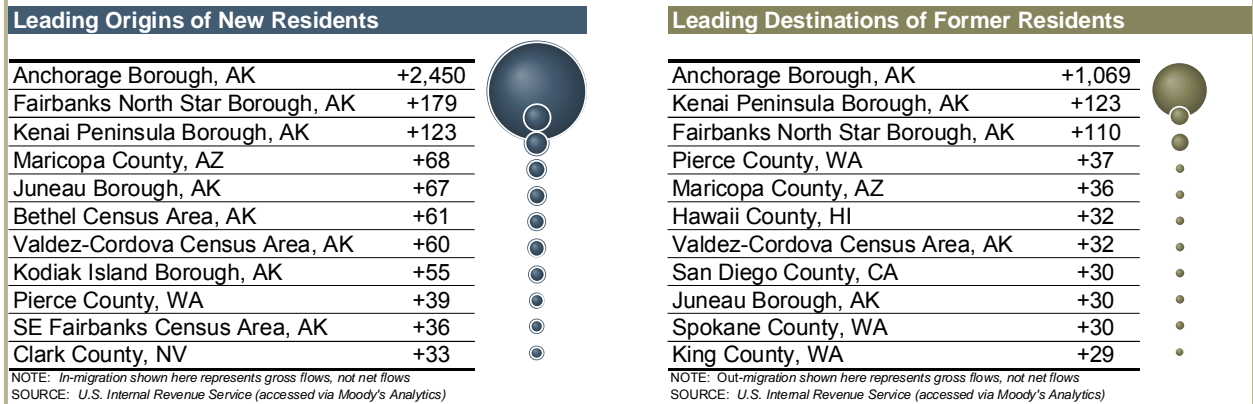


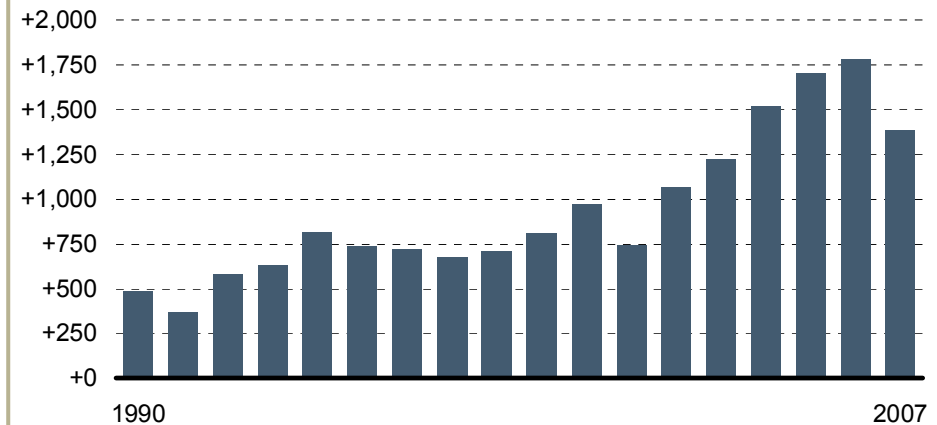
Figure 11 illustrates that net in-migration from Anchorage has historically been the key driver to Mat-Su’s population growth. The accelerating pace of transplants from Anchorage appears to be the primary contributor to the increased rate of local population growth since 2000. For example, from the mid-1990s through 2000, approximately 750 residents a year relocated from Anchorage to the Mat-Su Borough. By 2006, that number peaked at 1,750. In 2007, the number of in-migrants decreased significantly. This drop is explained in part by the end of a construction boom in the Valley between 2004 and 2006.

Migration patterns show one aspect of mobility, commuting patterns show another. Often these patterns of migration and commuting are intertwined. For example, suburban counties that receive strong migration inflows from a central county often exhibit strong commuter outflows back to that same central, urban county. We might expect a similar relationship between Mat-Su and Anchorage.

According to the decennial Census data (left-hand graphic in **Figure 12**), commuting flows increased dramatically in Mat-Su from 1970 to 2000, with outbound commuting significantly outpacing inbound. Such figures are typical of metropolitan development patterns, as urban residents migrate outward in search of more affordable housing options. Because the suburban employment opportunities are usually limited, many new residents will commute to higher paying jobs in the urban center. Indeed, according to the Alaska Department of Labor and Workforce Development (ADLWD), people who own a home in Mat-Su and work in Anchorage have the most affordable housing situation in the state.

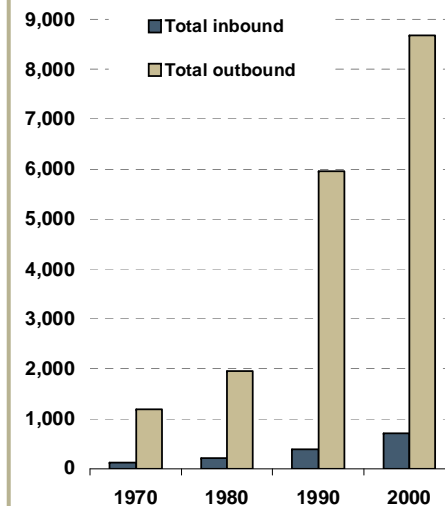
More recent place-of-work and place-of-residence data provided by the ADLWD indicate, however, that the rate of growth in the number of commuters from Mat-Su to Anchorage is slowing. For example, the increase in the number of Mat-Su residents working in Anchorage slowed from 37 percent between 1997 and 2002 to 18 percent between 2002 and 2007. At the same time, the number of local residents employed in Mat-Su continued to increase at a constant rate.

Figure 11: Annual Net Migration Inflow from Anchorage Borough to Mat-Su



SOURCE: U.S. Internal Revenue Service (accessed via Moody's Analytics)

Figure 12: Historical Commuting Patterns
In- & Out-Bound Commuting by Decade



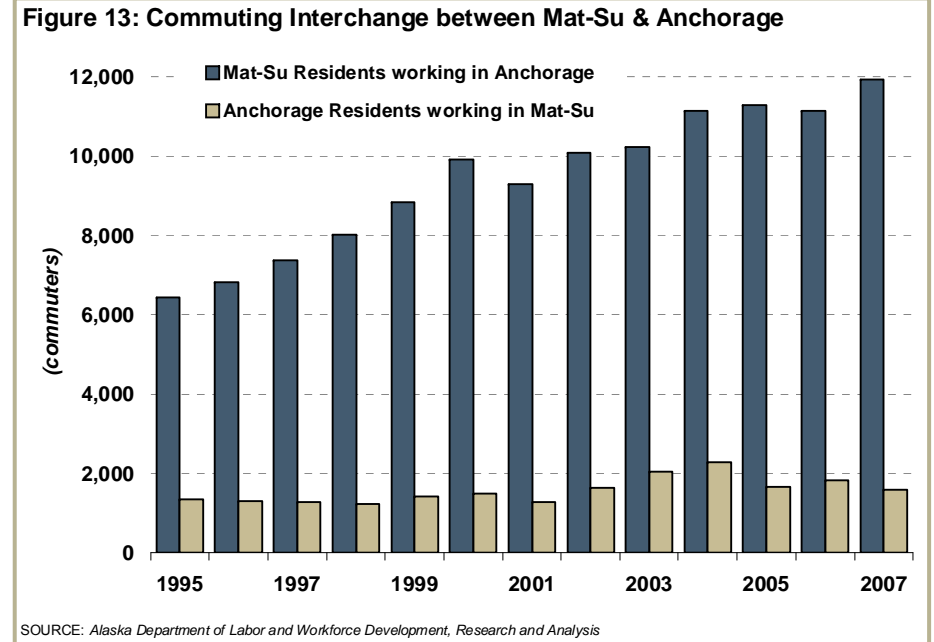
Place of Work for Mat-Su Residents



SOURCE: U.S. Bureau of the Census; Alaska Department of Labor and Workforce Development, Research and Analysis

These figures suggest the Valley is moving beyond its status as simply a bedroom community to Anchorage. Instead, it is evolving into a regional employment center in its own right, as more businesses move to the Valley to serve the growing population.

Figure 13 shows a breakdown of the commuting interchange between the Mat-Su Borough and Anchorage from 1995 to 2007 (the last date for which data are available). In 2007, the total number of commuters between the two boroughs totaled approximately 13,500 – an increase of 74 percent over 1995. Mat-Su residents working in Anchorage comprised the bulk (96 percent) of this increase. In fact, the number of Mat-Su residents working in Anchorage almost doubled between 1995 and 2007. Over the same period, the number of Anchorage residents working in Mat-Su increased by 237.



Housing and Income

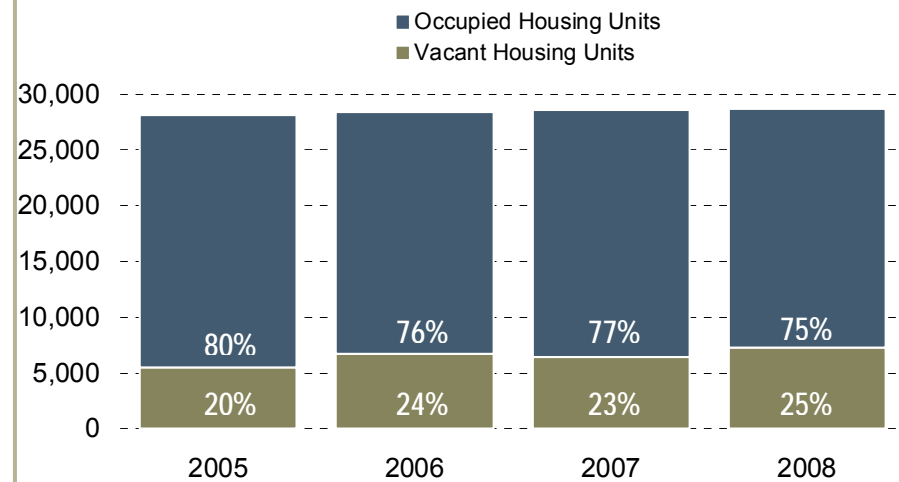
Figure 14 shows a significant number of housing units in the Mat-Su Borough are vacant. According to the U.S. Census Bureau’s American Community Survey (ACS), one-quarter of housing structures in the borough in 2008 were vacant. In comparison, the Census Bureau estimates vacant housing rates of 7 percent for Anchorage and 12 percent for U.S. as a whole. Mat-Su’s high percentage is typical for areas with high numbers of second homes or vacation homes. It also reinforces the growing importance of the visitor economy to Mat-Su.

In addition, the percentage of vacant housing units in the borough has been on the rise in recent years, increasing by 25 percent since 2005. The surge in residential development in the Valley earlier in the decade is a likely contributor, resulting in a substantial local inventory of \$250,000-plus homes just as the national housing market crashed.

Residential building permits tracked nationwide by the U.S. Census Bureau can be a useful indicator of growth patterns. In a limited regulation environment like Alaska, however, official building permits may capture only a fraction of actual construction activity. This is especially true for Mat-Su, where building permits are not required outside of the three incorporated cities. As a consequence, the building permit data displayed in **Figure 15** only reflects new single-family and multi-family housing construction in areas accounting for about 18 percent of the borough’s population.

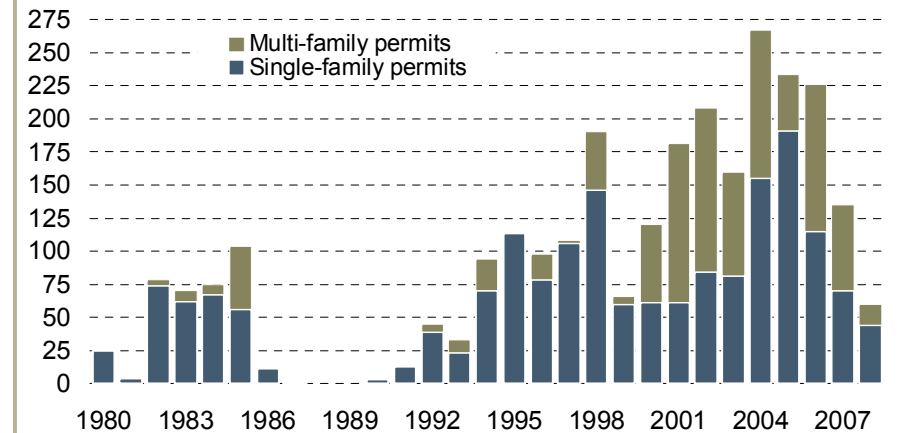
Nevertheless, these numbers provide a useful sample of construction activity, and the shape of the mid-2000s construction boom corresponds strongly to the recent peak in Mat-Su’s population growth.

Figure 14: Occupied and Vacant Housing Units



SOURCE: U.S. Bureau of the Census (American Community Survey)

Figure 15: Housing Units Permitted Annually



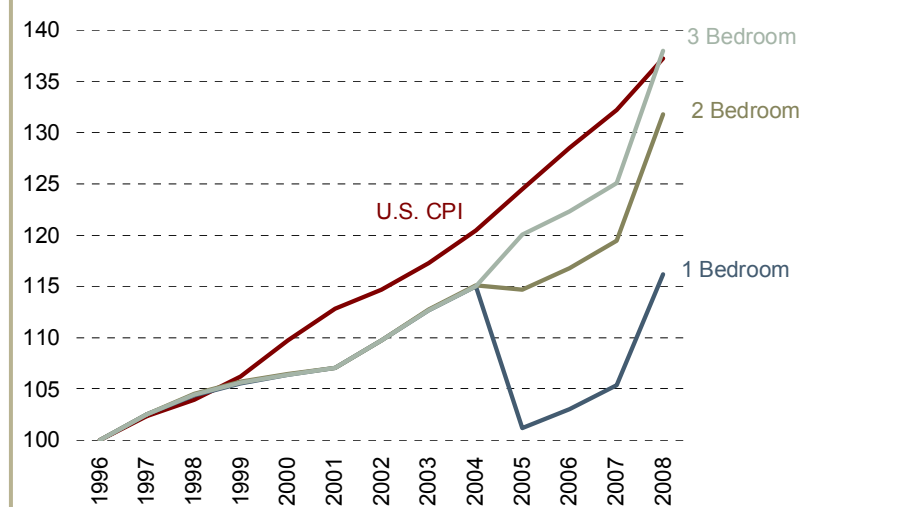
SOURCE: U.S. Bureau of the Census (accessed via Moody's Analytics)

The U.S. Department of Housing and Urban Development publishes annual data for "fair market rents" for all county-equivalent areas in the nation. An analysis of this data series over recent years (**Figure 16**) shows that residential rents in Mat-Su have increased at or below inflationary rates for more than a decade. This may be partially explained by the relatively affordable housing in the borough, which tends to curb demand for rental housing.

A simple indicator of housing affordability is to divide the median sales price of an existing single family home by the median household income for the same area. This crude indicator expresses how many years it would take a household to pay for a house if it contributed 100 percent of its income toward the sale price. The national rate has historically been just over 3 years, but the U.S. housing bubble of recent years sent this ratio up to an unprecedented peak of 4.5 (**Figure 17**).

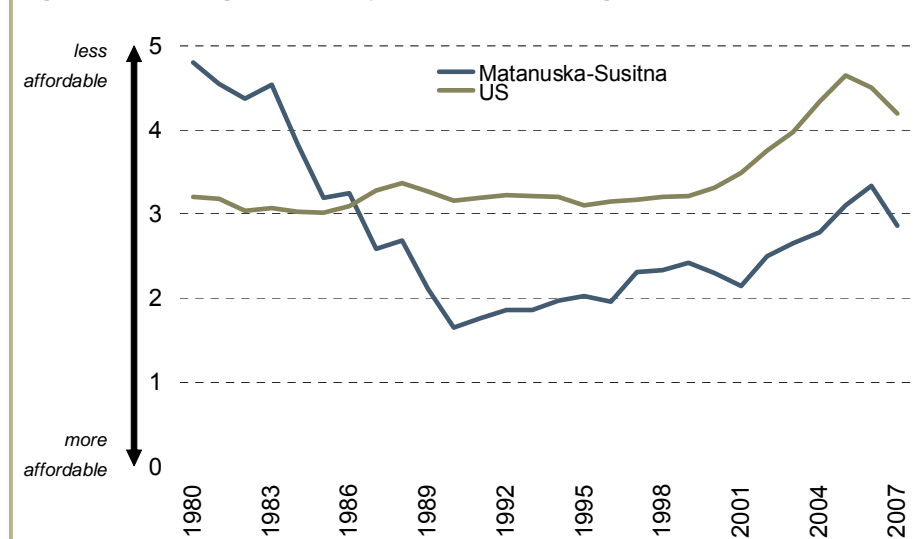
In Mat-Su, local housing was much less affordable at the beginning of the 1980s, but the collapse of oil prices contributed to making Mat-Su's housing more affordable than the national average. Indeed, Mat-Su's affordability index rate fell from a high of 4.8 in 1980 to a low of 1.7 in 1990. Since the mid-1980s and throughout the recent housing crisis, Mat-Su has maintained an affordability advantage over the national average. In 2007, the most recent year data is available, Mat-Su's rate stood at 2.9, compared to 4.2 for the U.S.

Figure 16: Rents* in Mat-Su Relative to the Consumer Price Index, 1996 = 100



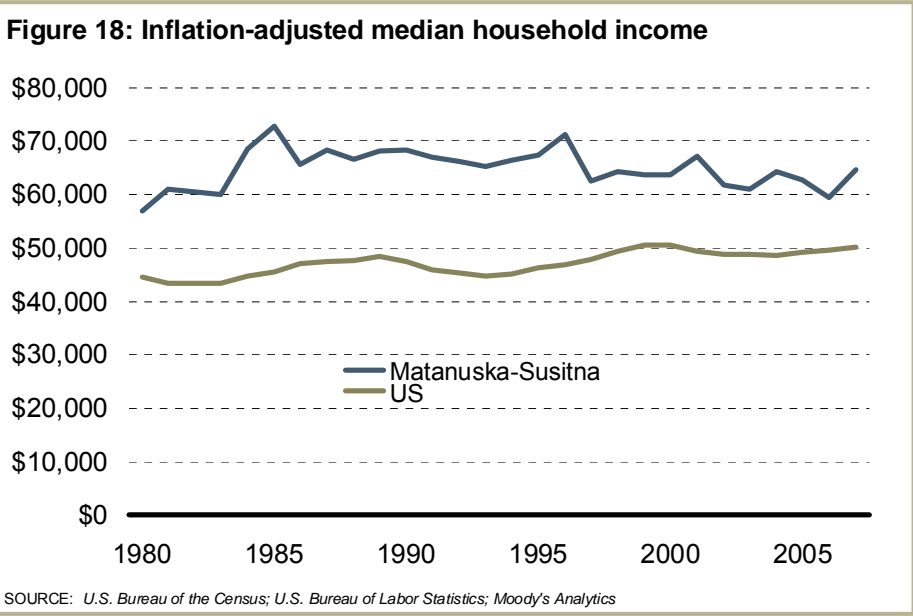
*NOTE: Rents in Matanuska-Susitna Borough are annual "fair market rents" as defined by the U.S. Department of Housing and Urban Development
 SOURCE: U.S. Department of Housing and Urban Development (accessed via Moody's Analytics)

Figure 17: Housing Affordability* vs. the U.S. Average



*NOTE: The housing affordability index shown here is defined as median single-family home price divided by median household income.
 SOURCE: U.S. Bureau of the Census; National Association of Realtors; Moody's Analytics

When adjusted for inflation, the median U.S. household has seen its income grow only marginally over the past quarter century. This is also the case for Mat-Su. Although local incomes have consistently exceeded the national average, they have remained stagnant for nearly three decades in inflation-adjusted terms (**Figure 18**).

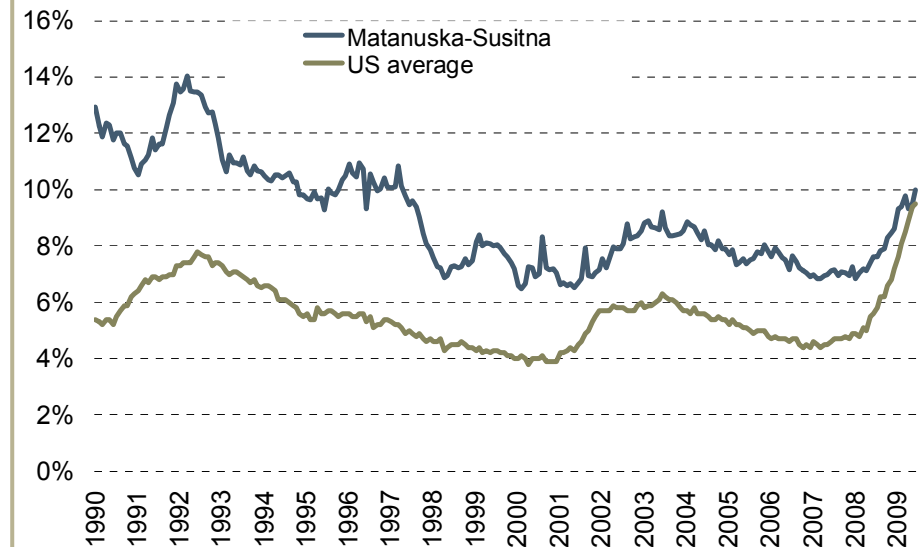


Economy and Workforce

While Mat-Su Borough's unemployment rate has historically exceeded the national average, the gap between the local area and the nation has been slowly narrowing since 1990. **Figure 19** also shows that the state of the nation's economy affects the local labor market. In each of the last three recessions, Mat-Su's unemployment rate has risen. The current "Great Recession" has had an enormously negative impact on the nation's workforce, pushing the U.S. unemployment rate to approximately 10 percent. Currently, both Mat-Su and the U.S. have almost identical employment rates, a first for this data series.

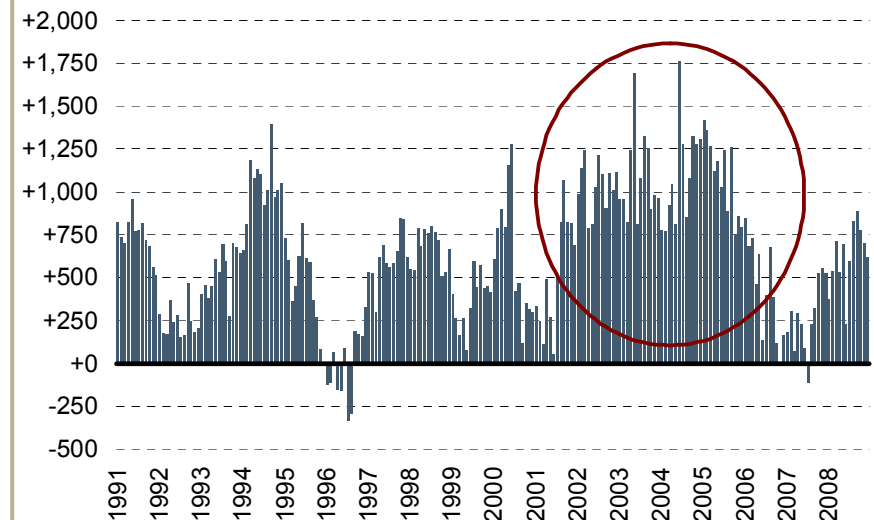
Figure 20 illustrates the net change in the number of jobs from the same month in the previous year for the Mat-Su Borough from 1991 through 2008. This chart reveals the boom in job growth in the Mat-Su Valley during the first half of the decade. This surge in job growth corresponds to a boom in residential construction between 2002 and 2005. As of December 2008, the borough was still enjoying year-over-the-year job gains in spite of the national recession. In fact, between December 2007 and December 2008, total employment in Mat-Su increased by 4 percent.

Figure 19: Unemployment



SOURCE: U.S. Bureau of Labor Statistics (accessed via Moody's Analytics)

Figure 20: Annualized net job change (change over same month in previous year)



SOURCE: U.S. Bureau of Labor Statistics (accessed via Moody's Analytics)

Mat-Su's employment by industry reflects what would be expected given trends cited previously in this analysis. Most fast-growing exurban areas often see elevated employment levels in industries that serve a growing population base (illustrated in **Figure 21**). For example, Mat-Su's high employment totals for construction and real estate indicate fast growth. In a less dynamic county, these job totals would be lower.

Abundant numbers of jobs in accommodation and food services, retail trade, and personal services are also indicative of suburban areas and may also underscore the growing importance of tourism to the borough.

Figure 21: Leading Industries

Industry	2007 Employment
Retail trade	4,647
Construction	3,508
Healthcare & social assistance	3,489
Accommodation & food services	2,496
Local government	2,461
Personal & other services	1,988
Real estate	1,969
Professional & technical services	1,531
Transportation & warehousing	1,237
State government	1,007
Arts, entertainment, & recreation	848
Information	789
Finance & insurance	720
Educational services	658
Federal government (military)	589
Forestry & fishing	564
Manufacturing	537
Farms & agriculture	494
Federal government (civilian)	200
Oil, gas, & mining	157
Miscellaneous industries*	934
Total	30,823

*NOTE: Small industries with data suppressed by the BEA (e.g., administrative services, utilities, wholesale trade, and corporate headquarters) have been rolled into a miscellaneous category

SOURCE: U.S. Bureau of Economic Analysis (accessed via Moody's Analytics)

Recent job growth patterns shown in **Figure 22** reinforce what is already known about the Mat-Su economy. Most jobs were added in industries that support a rising population (real estate, retail trade, healthcare, construction). However, job growth in real estate and retail has likely slowed in recent years due to declines in housing and construction as well as tighter credit.

Industries that one might expect to be dynamic in Alaska have added few jobs in recent years, at least in Mat-Su. These include extractive industries (oil and gas, forestry and fishing), including their associated processing activities which are typically classified under manufacturing (e.g., fisheries, lumber mills, refineries). Slow job growth in natural resource dependent industries is not surprising, given the limited opportunities for mineral and timber production in Mat-Su compared to other parts of the state.

Figure 22: Net Job Growth by Industry

Industry	2004-2007 Net Chg.	
Real estate	+818	
Retail trade	+422	
Healthcare & social assistance	+362	
Accommodation & food services	+333	
Transportation & warehousing	+308	
Construction	+187	
Local government	+185	
Information	+173	
Professional & technical services	+153	
Educational services	+142	
Arts, entertainment, & recreation	+116	
Personal & other services	+99	
Federal government (military)	+75	
Finance & insurance	+56	
Forestry & fishing	+47	
State government	+33	
Oil, gas, & mining	+13	
Federal government (civilian)	+7	
Farms & agriculture	+4	
Manufacturing	-5	
Miscellaneous industries*	-21	
Total	+3,507	

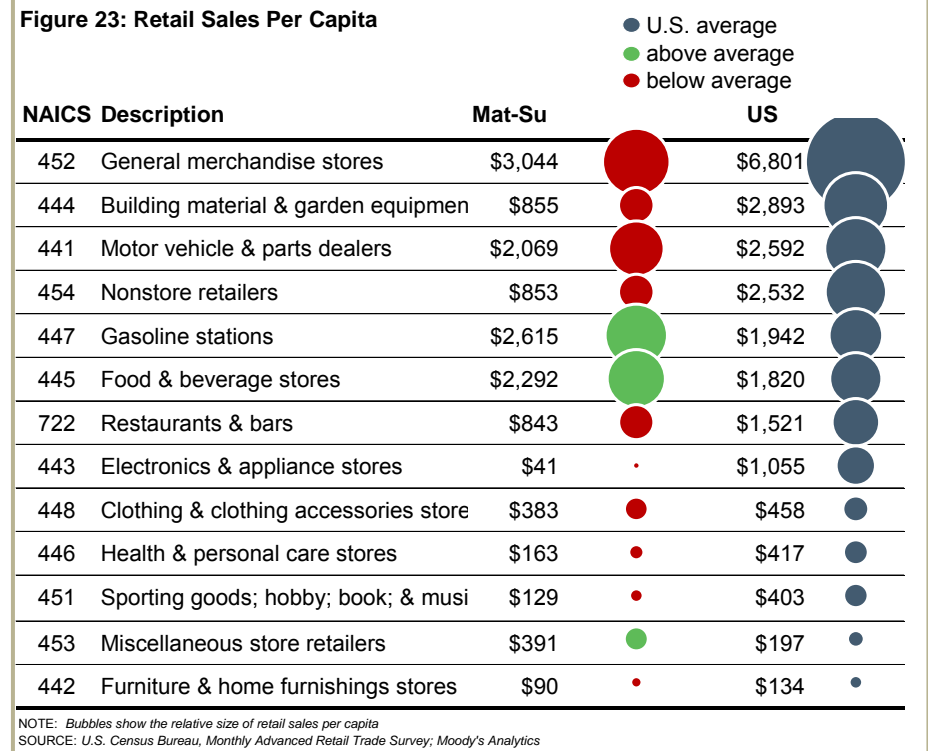
*NOTE: Small industries with data suppressed by the BEA (e.g., administrative services, utilities, wholesale trade, and corporate headquarters) have been rolled into a miscellaneous category
 SOURCE: U.S. Bureau of Economic Analysis (accessed via Moody's Analytics)

Figure 23 compares U.S. retail sales per capita to the local average in Mat-Su. This assessment is typically useful in identifying possible underserved retail formats at the local level. The data here correspond to retail sales in 2008, a recession year, and should therefore be read with some caution. The current recession, for example, has driven motor vehicle sales far below normal levels, and the collapse of the U.S. housing market has pulled down national sales of associated big-ticket items such as appliances and furniture well below normal levels. There has also been an uptick in general merchandise sales per capita as the recession drives consumer spending away from specialty stores and toward mass discount chains.

Still, other local patterns are evident. Fast-growing suburban and exurban areas like Mat-Su tend to have growing families and drive relatively long distances to work. As a consequence, above-average local retail sales for gas stations and grocery stores are expected.

Mat-Su, however, lagged the U.S. average in many other categories, indicating local retail leakage to Anchorage for some higher end or specialty purchases. In some cases, the Valley may lack specialty stores in certain retail sectors, such as electronics/appliances and furniture/home furnishing stores. Local shoppers must either travel to Anchorage retailers or buy such goods in general merchandise stores, including Wal-Mart and Target.

As Mat-Su develops a larger critical mass of population, more diverse retail outlets should be attracted to the Valley. National retailers often require a threshold population (e.g., 100,000) before entering a new market. In addition, the recent strong openings of new stores in the Valley will only increase its visibility among national retailers.



Mat-Su's educational attainment profile is notable as seen in **Figure 24**. The share of the borough's adult population lacking high school equivalency is below the national average. In addition, the percent with a four-year degree is also below the national level.

This means that most Mat-Su residents fall in between these two educational bookends. In other words, they finished high school but never got as far in college as a four-year degree. Two-thirds (66 percent) of Mat-Su's adult population fits this profile, compared to 57 percent nationwide.

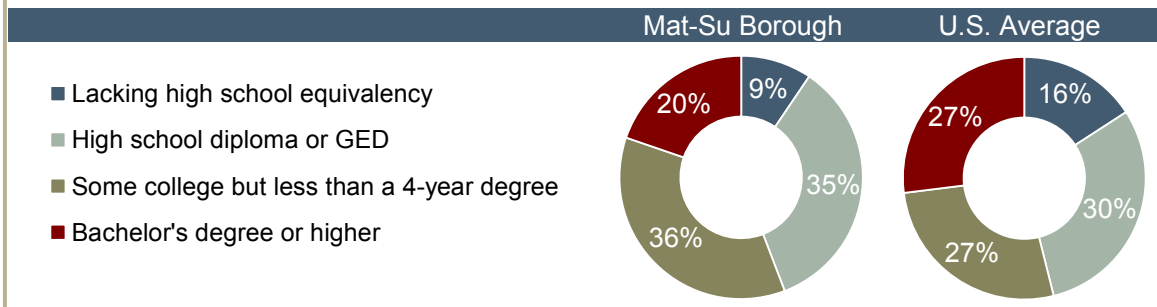
Mat-Su's higher percentage of middle-educated adults offers employers a solid workforce well-suited for moderately skilled jobs, both blue- and white-collar. By comparison, some locations in the lower 48 states have workforces that skew toward the highly educated or lower educated categories, but lack a critical base of middle-skill workers.

Of note, Mat-Su College is presently a two-year institution and is beginning to offer four-year courses. Additional four-year degree opportunities would support efforts to develop higher skill and higher wage employment opportunities in the borough.

Figure 24: Educational Attainment (2005-2007 average)

	Mat-Su Borough	U.S. Average
Lacking high school equivalency	9.3%	16.0%
High school diploma or GED	34.8%	30.0%
Some college but less than a 4-year degree	36.2%	27.0%
Bachelor's degree or higher	19.6%	27.0%
Total	100.0%	100.0%

SOURCE: U.S. Census Bureau, American Community Survey (accessed via Moody's Analytics)



SOURCE: U.S. Census Bureau, American Community Survey (accessed via Moody's Analytics)

ASSESSMENT OF LOCAL ECONOMY AND ECONOMIC DATA

Methodology & Background

The purpose for the Economic Assessment is to determine the underlying structure of Mat-Su Borough's economy and labor market. Included within this assessment are discussions of potential strengths and challenges facing the borough economy. Given the Valley's increasing integration with Anchorage's economy — as evidenced through its addition to the Anchorage Metropolitan Statistical Area (MSA) by the U.S. Office of Management and Budget in 2003 — TIP conducted much of this assessment from a regional perspective. Economic and labor market data specific to Mat-Su were also included within this assessment to provide a more detailed focus on local conditions.

The assessment provides a detailed analysis of historical, present, and projected employment trends, as well as a snapshot of local and regional economic specialization. To better understand the borough's economic challenges and opportunities, TIP also assessed the region's labor market conditions through analyses of occupations, skills, and earnings.

This assessment was performed using *Strategic Advantage*, a suite of web-based analysis tools created by Economic Modeling Specialists Inc. (EMSI). EMSI integrates economic, labor market, demographic, and education from over 80 government and private-sector sources, creating a database that is comprehensive, accurate, and timely.

Except as otherwise noted, figures represent "complete" employment, rather than the "covered" employment typically produced by state and federal workforce agencies. Unlike covered employment, which includes only those industries covered by unemployment insurance, complete employment includes estimates of all industries.

Economic Assessment Indicators

- National & Regional Employment Distribution Comparison
- Regional Employment Projections
- Regional Location Quotients by Industry
- Local Location Quotients by Industry
- Regional Occupational Distribution
- Regional Occupational Demand
- Regional Location Quotients by Occupation
- Local Location Quotients by Occupation
- National & Regional Wage Comparison by Occupation
- Regional Occupational Projections & Training Needs
- National Skills & Earnings
- Regional Skills & Earnings
- Household Income Comparison
- Regional Occupational Projections & Earnings

Employment Distribution

Figure 25 presents the distribution of jobs by industry sector in Mat-Su, the larger Anchorage/Mat-Su region, and the U.S. average. While local, regional, and national distributions are structured similarly as a whole, some notable differences exist:

- 1) The share of employment in the retail trade, construction, and real estate sectors is higher in Mat-Su than either the larger region or the U.S.
- 2) The manufacturing sector comprises a small share of total employment in Mat-Su (1.5 percent) and the region (1.3 percent) compared to the national average of 7.5 percent.
- 3) The share of Anchorage/Mat-Su jobs in transportation and warehousing is double the national average (6.3 percent regionally vs. 3.6 percent nationwide).
- 4) The percentage of professional & technical jobs in Mat-Su trails both the larger region and the U.S.

Figure 25: Distribution of Jobs by Major Industry Sector: Mat-Su Borough vs Anchorage/Mat-Su Region vs U.S. Average

Sector	U.S. Average	Anchorage & Mat-Su	Mat-Su Borough
Health care & social assistance	10.8%	11.6%	11.3%
Retail trade	10.4%	11.2%	16.3%
Local government (including public schools)	8.2%	5.9%	8.5%
Manufacturing	7.5%	1.3%	1.5%
Accommodation & food services	6.9%	7.0%	7.4%
Professional & technical services	6.9%	7.3%	5.1%
Construction	5.9%	6.0%	10.1%
Administrative services	5.8%	4.4%	3.3%
Personal & other services	5.2%	4.8%	5.6%
Finance & insurance	4.7%	3.3%	2.3%
Real estate	4.4%	4.7%	5.4%
Wholesale trade	3.7%	2.1%	0.7%
Transportation & warehousing	3.6%	6.3%	4.0%
State government	3.0%	5.0%	3.6%
Private educational services	2.3%	1.4%	2.2%
Agriculture, forestry, fishing & hunting	2.2%	0.9%	3.6%
Arts, entertainment, & recreation	2.1%	2.1%	3.0%
Information	2.0%	2.5%	2.6%
Federal government (civilian)	1.2%	3.9%	0.4%
Federal government (military)	1.2%	6.2%	2.0%
Corporate headquarters & regional offices	1.1%	0.4%	0.1%
Oil, gas, & mining	0.6%	1.4%	0.5%
Utilities	0.3%	0.3%	0.4%

SOURCE: EMSI Complete Employment - 2nd Quarter 2009 v. 2; TIP Strategies, Inc.

Regional Employment Projections

Employment projections provided by EMSI indicate that healthcare — presently the largest sector in the two-borough region — will also be its biggest job gainer over the next 10 years. Between 2009 and 2019, this industry is expected to add an average of nearly 400 new jobs per year.

Significant population growth and a recovering national economy would also bring expansion in the real estate sector, which EMSI estimates could add up to 3,600 jobs over 10 years. Other sectors which are projected to add 1,000 jobs or more over the decade include retail trade; accommodation and food service; professional and technical services; construction; personal services; and transportation and warehousing.

The region overall is set to gain nearly 23,000 jobs according to EMSI's analysis, a 10 percent increase over current employment level. This represents approximately 2,300 jobs annually over 10 years within the two-borough region. However, a prolonged economic national recession or a sluggish recovery would clearly hinder new job growth in the region.

Figure 26: Anchorage/Mat-Su Projected Job Growth by Major Industry Sector, 2009-2019

NAICS Sector	2009 Jobs	+ Net Change to 2019	
Health care & social assistance	26,058	+3,929	
Retail trade	25,343	+2,609	
Professional & technical services	16,373	+2,100	
Accommodation & food services	15,802	+2,156	
Transportation & warehousing	14,297	+1,399	
Federal government (military)	14,029	-356	
Construction	13,474	+1,783	
Local government	13,342	+875	
State government	11,280	+666	
Personal & other services	10,828	+1,420	
Real estate	10,555	+3,656	
Administrative services	9,887	+829	
Federal government (civilian)	8,724	-83	
Finance & insurance	7,543	+810	
Information	5,563	+464	
Arts, entertainment, & recreation	4,818	+617	
Wholesale trade	4,733	+217	
Oil, gas, & mining	3,168	-372	
Private educational services	3,130	+192	
Manufacturing	2,838	+339	
Agriculture, forestry, fishing & hunting	2,073	-538	
Corporate headquarters & regional offices	943	+139	
Utilities	615	+95	
Two-Borough Total	225,413	+22,951	

SOURCE: EMSI Complete Employment - 2nd Quarter 2009 v. 2; TIP Strategies, Inc.

Regional Location Quotients by Industry

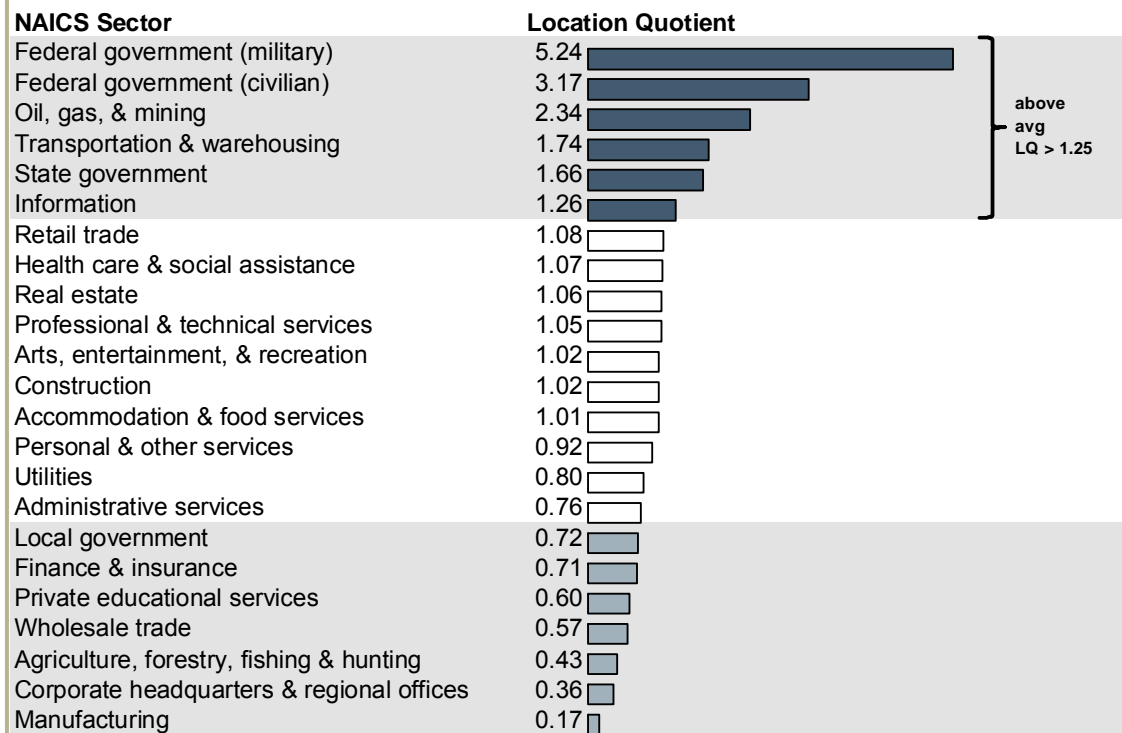
Location quotients (LQs) indicate strengths and weaknesses in the employment base relative to the U.S. overall. Theoretically, higher LQs imply specialization in a local economy and are often viewed by economists as export industries. In other words, the surplus goods and services produced by high LQ sectors are greater than the capacity for consumption at the local economy; therefore, they are assumed to be exported outside the region.

Notably, three of the six sectors with high LQs in the two-borough region represent government-supported employment: federal government (military): 5.24; federal government (civilian): 3.17; and state government: 1.66. This means that the local region employs more than three times as many civilian federal employees than would be expected, given national averages.

The three private sector industries with high LQs include are: oil, gas, and mining (2.34); transportation and warehousing (1.74); and information (1.26). These industries with high LQs include activities related to energy, air cargo, and telecommunications services. Regional economic development opportunities might be uncovered due to Anchorage/Mat-Su’s apparent competitive advantage in these sectors.

The region's below-average LQs include relatively high-paying sectors such as manufacturing, corporate headquarters, wholesale trade, and finance/insurance. Just as high LQ industries are considered export sectors for the region, low LQ industries are often import sectors for a region (i.e., local demand must be met by importing goods and services). Economic development strategies focused toward filling in these gaps should be considered to “round out” the regional economy.

Figure 27: Anchorage/Mat-Su Job Concentration by Major Industry Sector, 2009



SOURCE: EMSI Complete Employment - 2nd Quarter 2009 v. 2; TIP Strategies, Inc.

UNDERSTANDING LQs

A location quotient (LQ) is calculated as a local industry’s share of total local employment divided by the same industry’s share of employment at the national level:

$$LQ = \frac{\text{Local jobs in industry} / \text{Total local jobs}}{\text{U.S. jobs in industry} / \text{Total U.S. jobs}}$$

If the local industry and national industry are perfectly proportional, the LQ will be 1.00. If an industry is heavily concentrated at the local level (e.g., automotive industry in Detroit, technology in Silicon Valley, gambling in Las Vegas), then the location quotient will be higher than 1.00. Conversely, if the industry is sparsely concentrated at the local level (e.g., farming in New York City, convention tourism in North Dakota), the LQ will be lower than 1.00.

Mat-Su Location Quotients by Industry

Six sectors in the Mat-Su Borough register higher than average location quotients. Of these, two are generally associated with fast-growth suburbanizing areas: construction (1.73) and retail trade (1.57).

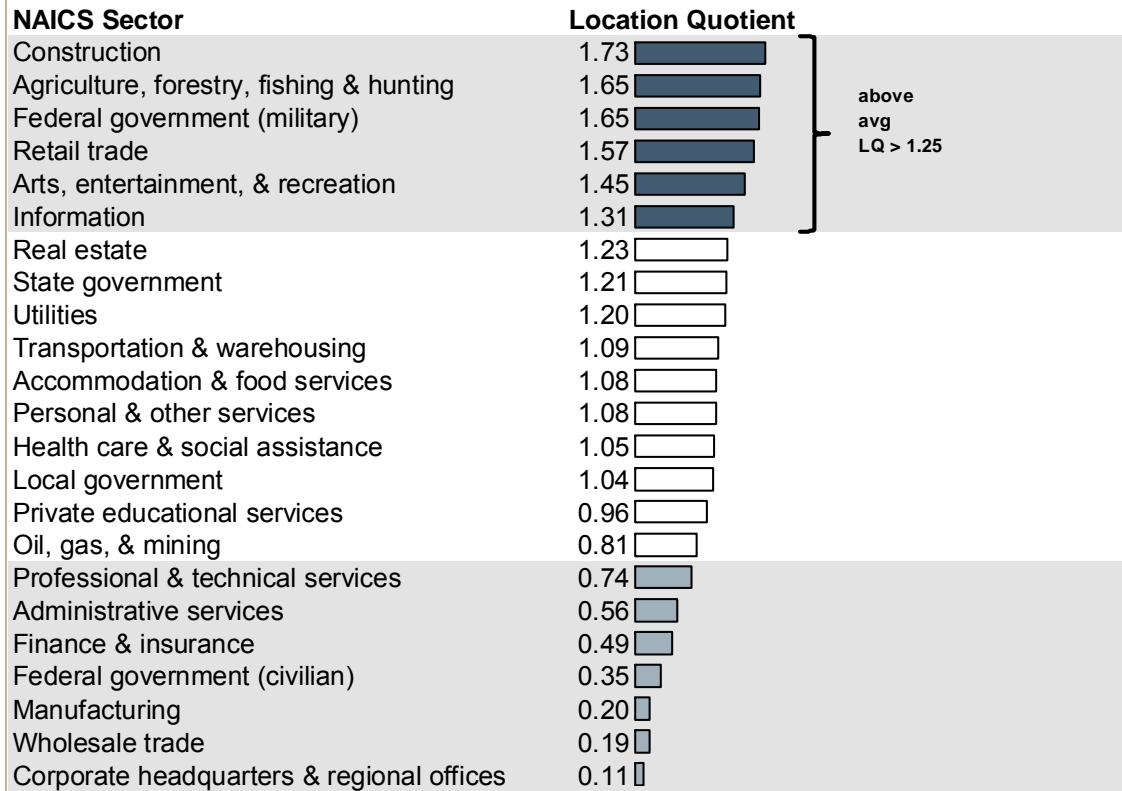
The high concentration of military jobs is related to the Mat-Su's proximity to Elmendorf Air Force Base and Fort Richardson. Other industries with high LQs include activities related to telecommunications, recreation (fishing and hunting), and the arts.

The borough's below-average LQs include relatively high-paying "white collar" sectors such as corporate headquarters; professional and technical services; and finance and insurance. In many cases, suburban areas will lag the core urban city in the attraction of these jobs, which are typically present in larger metropolitan regions. However, despite its position as the business and commercial center for the state, Anchorage does not itself possess strong employment concentrations in corporate headquarters or finance and insurance. This further explains Mat-Su's relatively weak LQs in these sectors.

For the past several years, healthcare and business and professional services (inclusive of these individual industries) have led the nation's employment growth. The fact that the region has a relatively low concentration of jobs in these sectors may explain its overall slow employment growth since 2000.

An economic development strategy for targeting investment in these industries (healthcare and business and professional services) will require close collaboration and cooperation among entities throughout the region.

Figure 28: Mat-Su Borough Job Concentration by Major Industry Sector, 2009



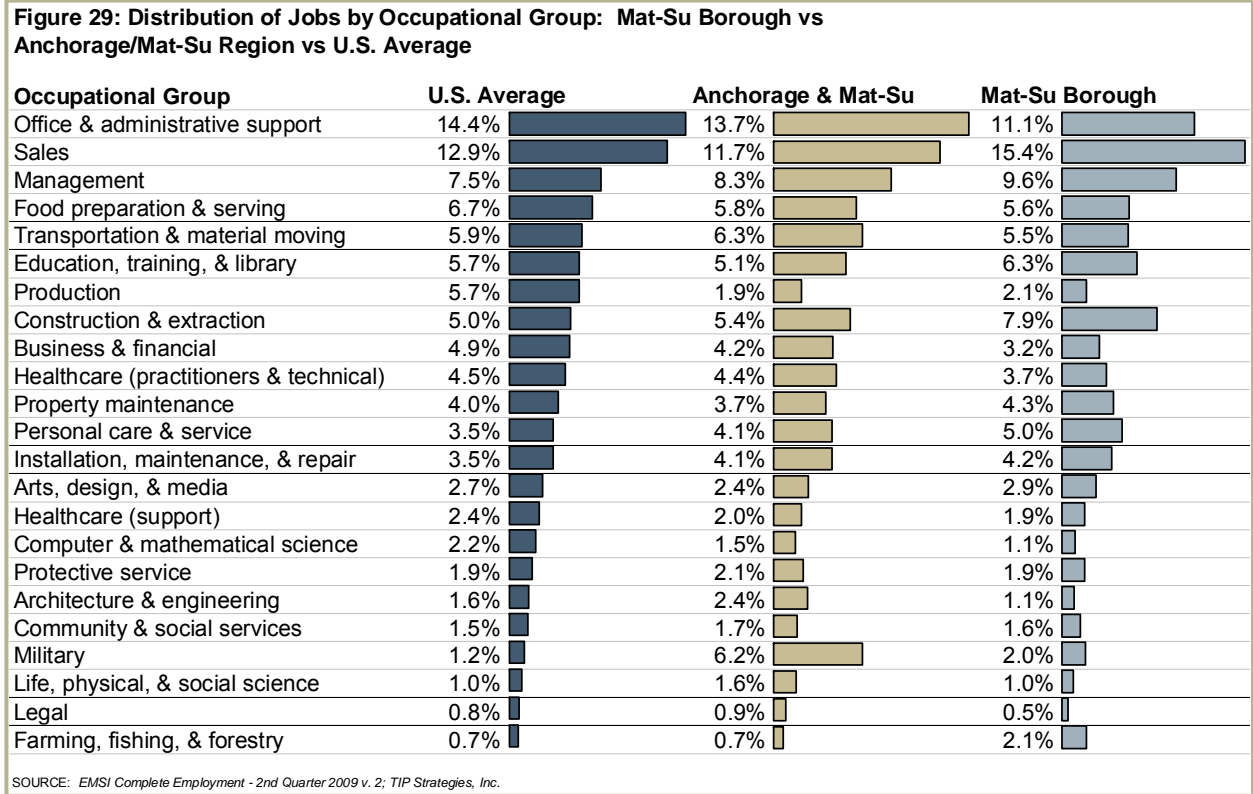
SOURCE: EMSI Complete Employment - 2nd Quarter 2009 v. 2; TIP Strategies, Inc.

Occupational Distribution

Figure 29 displays a comparison of the distribution of jobs by occupational group between the Mat-Su Borough, the Anchorage/Mat-Su region, and the U.S. as a whole. In contrast to looking at jobs by industry, analyzing jobs by occupation offers a better understanding what work functions individuals — regardless of industry — are actually performing. For example, a person working in a management occupation could also be working in a manufacturing industry.

Employment by occupational group in Mat-Su and the two-borough region differs from the U.S. in three key areas:

- 1) Mat-Su has large percentages of workers engaged in sales and construction occupations, reflecting the related importance of residential and retail growth in the Valley.
- 2) The small size of the manufacturing sector in the area means there is a relatively small group of trained workers in the region with production-related skills and experience (1.9 percent for the two-borough region and 2.1 percent in Mat-Su).
- 3) The broad presence of the U.S. military in the two-borough region significantly alters the occupational and skills composition of the overall workforce. For example, 6.2 percent of Anchorage/Mat-Su workers are employed in military-related occupations, compared to 1.2 nationally. Of course, the training of military personnel provides them with a broad set of skills that are transferable across several categories. If the region were able to retain soldiers upon completion of their military commitments, it could provide the region with a unique class of broadly skilled workers to area employers.

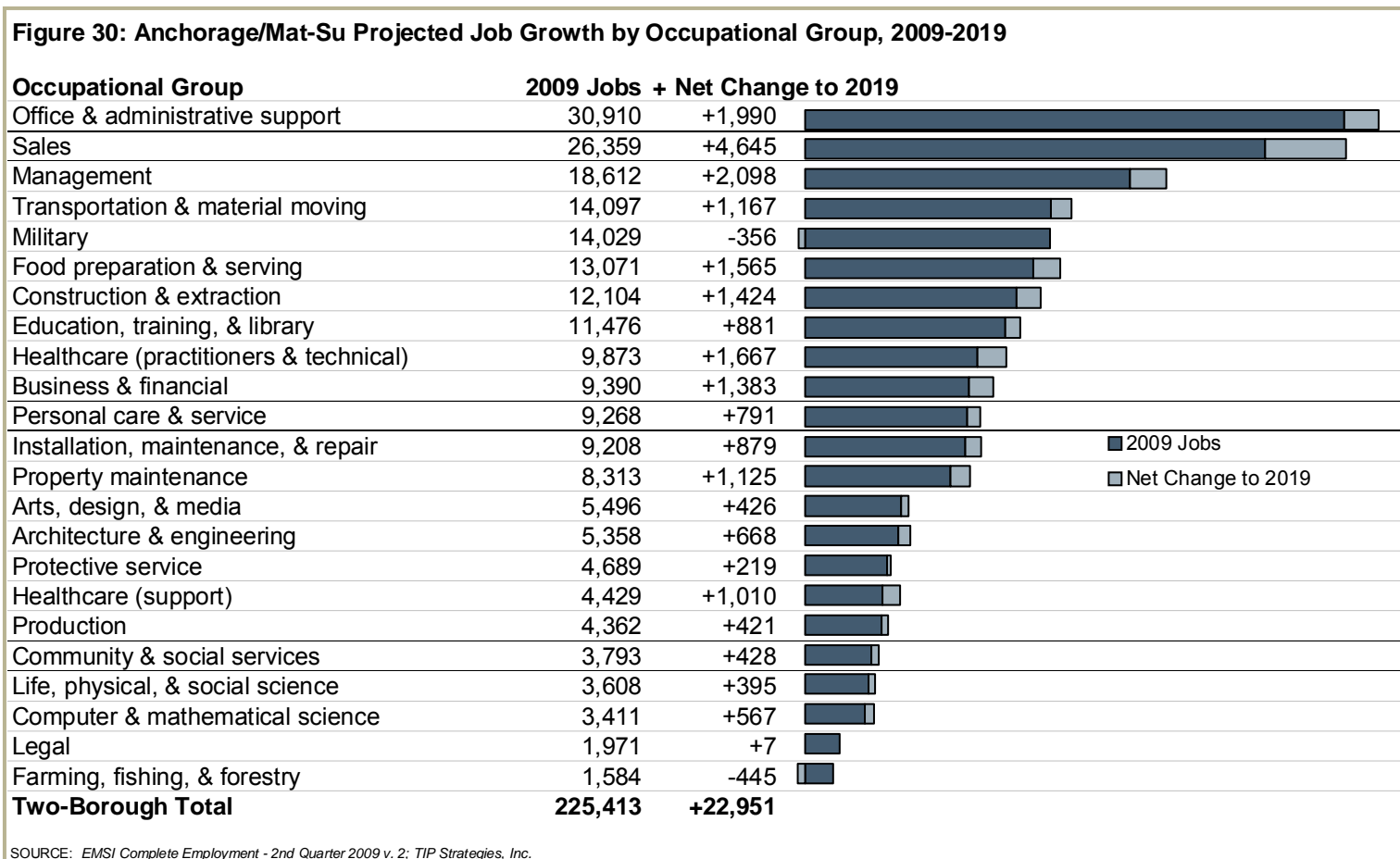


Regional Occupational Demand

Figure 30 displays the current number of jobs by occupation as well as the anticipated net change over the next 10 years, according to projections supplied by EMSI. These data provide a greater understanding of the potential demand for various skill sets over the coming decade.

During this timeframe, the two-borough region is anticipated to see a net change of approximately 4,600 sales-related jobs, more than any other occupational group. Other occupations projected to add more than 1,500 jobs include: management; office and administrative support; healthcare (practitioners and technical); and food preparation and serving. A net of only about 400 production occupations — typically manufacturing-related — are expected to be added in the regional economy by 2019.

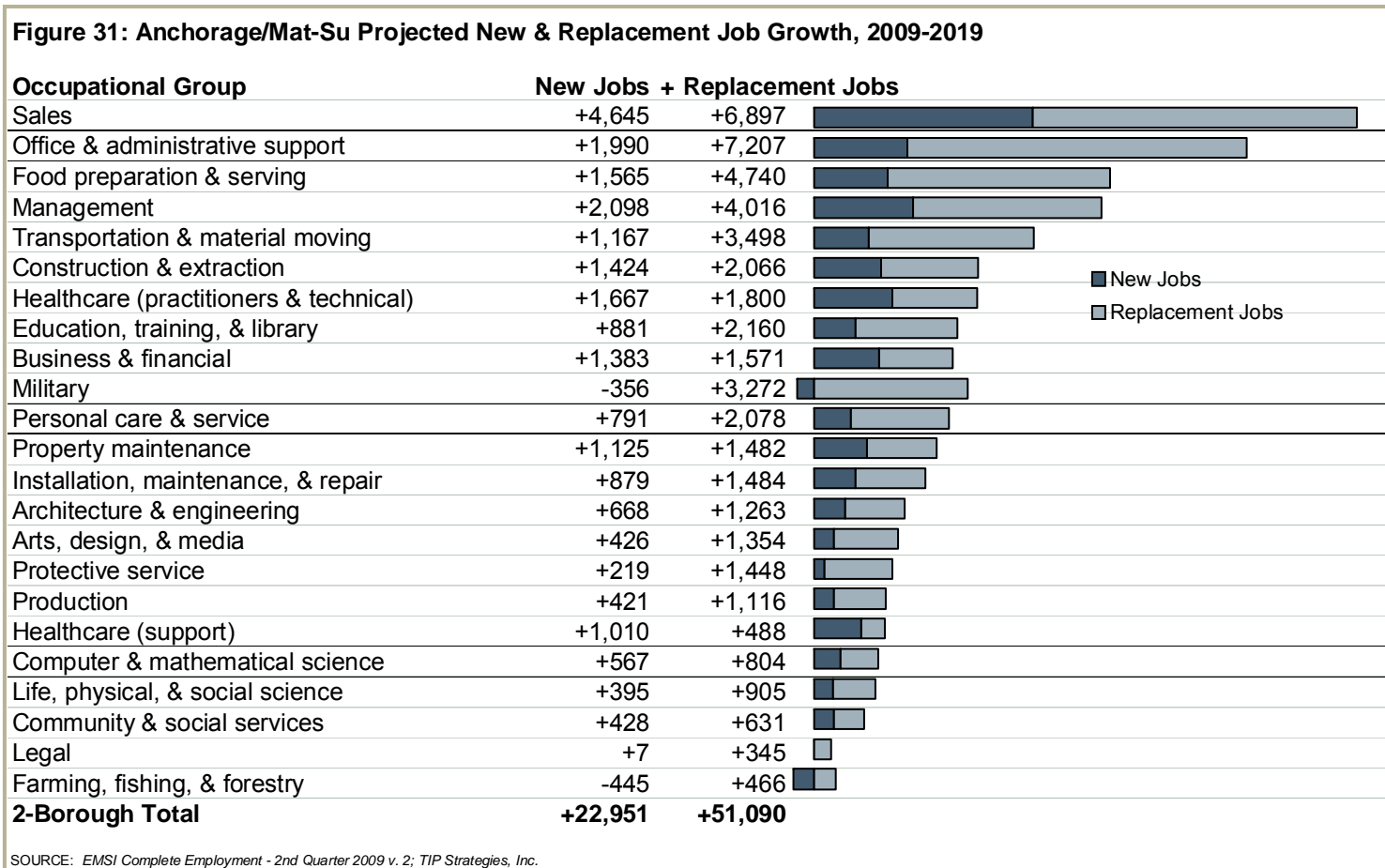
Only two occupational categories are projected by EMSI to lose jobs: farming, fishing, & forestry and military.



Occupational Demand (cont'd)

While the previous exhibit indicates the projected net change in jobs by occupation over the next decade, **Figure 31** below provides a better understanding of the total demand for workers by occupation. For example, while the net change in sales positions is expected to be an increase of 4,645 jobs by 2019, an additional 6,897 jobs (replacement jobs) will also be needed during this time period to make up for sales workers either retiring or changing careers. In other words, this last figure represents the total turnover — or churn — within this occupational category.

According to this analysis, healthcare-related and business and financial occupations are projected to have the lowest turnover rates over the next 10 years. Office and administrative support, food preparation, transportation and material moving, protective service, and legal occupations are expected to have the greatest degree of turnover within the region. Finding replacement workers for these occupations may present challenges for employers in the coming decade.

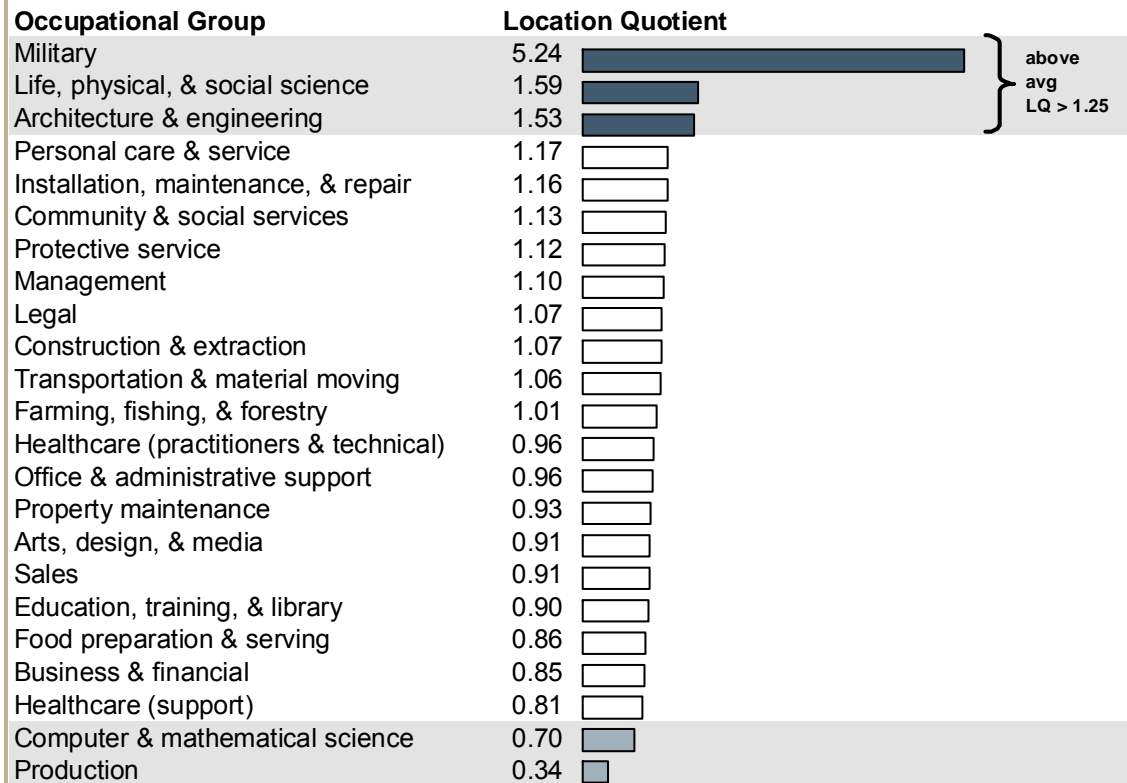


Regional Location Quotients by Occupation

Reinforcing the importance of the armed forces to the Anchorage/Mat-Su metropolitan area, the highest concentration of occupations in region is in military-related jobs. LQ analysis also indicates highly technical occupations in the sciences and architecture/engineering are more concentrated in the two-borough area than the nation as whole. Interestingly, the two-borough region employs a relatively large number of scientists and engineers, yet it lags behind national workforce patterns in computer-related occupations.

Overall, the concentration of occupations within South Central Alaska is fairly balanced. Although healthcare support (0.81) business and financial (0.85) do not fall within the “low LQ” category, they may represent future workforce shortage challenges if regional employers needing these types of skills seek to expand.

Figure 32: Anchorage/Mat-Su Job Concentration by Occupational Group, 2009



SOURCE: EMSI Complete Employment - 2nd Quarter 2009 v. 2; TIP Strategies, Inc.

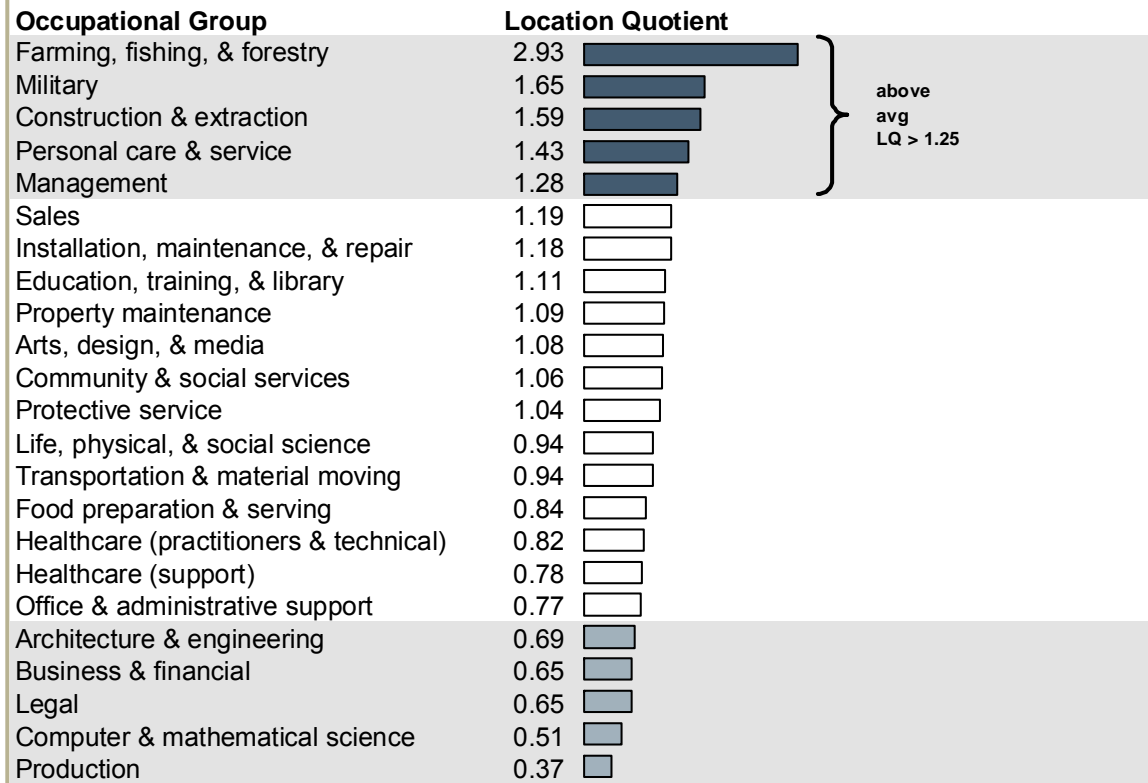
Mat-Su Location Quotients by Occupation

LQ analysis reveals that the Mat-Su Borough has a higher concentration of occupations in farming/fishing (2.93) and construction/extraction (1.59) than the nation. Military (1.59) and management (1.28) positions are also in abundance. These findings correspond with the structure of the local economy — one that is largely based on population growth, small business, proximity to major military installations, and the extraction of natural resources.

Conversely, the borough lags far behind the nation in a number of computer and mathematical (0.51), legal (0.65), business and financial (0.65), and architecture and engineering (0.69) occupations. These occupations are typically found in greater abundance in the core city of a metropolitan area. They also tend to pay higher than average wages and, therefore, are greatly sought after by economic development organizations. The greater Anchorage/Mat-Su region does not appear to have a shortage in any of these occupations except for one: computer and mathematical. This should be of concern to regional leaders, as research and innovation — one of the leading drivers of the nation’s economy — is the typically the primary concern of these workers. If it continues to see a shortage in this occupational category, the region as a whole may see its overall competitive advantage slip.

The lowest occupational concentration in the Mat-Su Borough is represented by production workers (0.37), who typically work in manufacturing industries. In other words, the local area has 63 percent fewer production workers than would be expected in relation to national employment rates. Given the overall absence of manufacturing-related businesses in the borough, this low figure is not surprising.

Figure 33: Mat-Su Borough Job Concentration by Occupational Group, 2009



SOURCE: EMSI Complete Employment - 2nd Quarter 2009 v. 2; TIP Strategies, Inc.

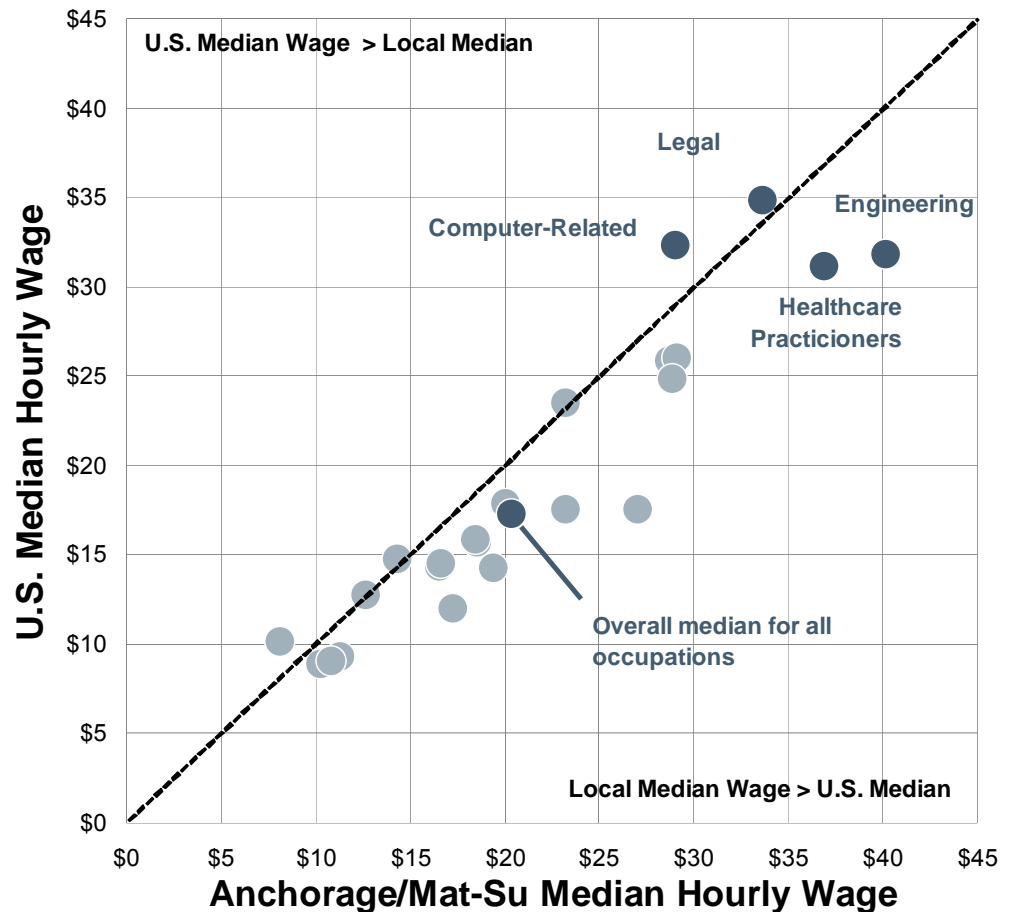
National & Regional Wage Comparison by Occupation

Figure 34 provides a comparison between the average wages paid at the national level versus those paid within the Anchorage/Mat-Su region. The plotted points to the right of the diagonal line represent occupations for which regional workers are paid higher wages than their national peers. For example, the overall median wage for all occupations within the two-borough region is \$23.32 compared to a national median of \$17.31.

Both nationally and regionally, the four highest paid categories are engineering, healthcare practitioners, legal, and computer-related occupations. Median wages for engineering and healthcare occupational groups are much higher within the local region than the nation as a whole. Wages for legal occupations nationally and regionally are comparable.

Notably, regional workers in computer-related occupations receive much lower wages than their national peers. A relatively small number of these occupations are present in the region (See **Figure 32**). This circumstance can be viewed in two ways: 1) low regional wages for these workers could be used to entice employers to tap into the local labor force or 2) local regional wages make Alaska an unattractive place to work for these highly skilled workers.

Figure 34: Regional Median Wages vs. the U.S. Median for 23 Occupational Groups



Occupational Projections and Training

Thirty-eight individual occupations are projected to add at least 150 new jobs over the next decade in the Anchorage/Mat-Su region. Of these, nine will require a bachelor's degree or higher. Most will be office-oriented professions, such as engineering, finance, and management.

Several occupations expected to be in high-demand, however, require low levels of training, including: retail salesperson, home healthcare aides, maids, and food preparation workers.

NOTE: This 2009 forecast comes at a low point in the national economy when the U.S. residential and commercial real estate sectors have been battered. Because EMSI's forecast is built on past growth trends, the outlook for the recovery of the real estate sector may be overly optimistic. Therefore, TIP advises particular caution in reading the forecast for real estate-related employment.

LEGEND: Minimum Training or Education

- ■ ■ ■ ■ ■ ■ ■ ■ ■ First professional degree
- ■ ■ ■ ■ ■ ■ ■ □ Doctoral degree
- ■ ■ ■ ■ ■ ■ □ □ Master's degree
- ■ ■ ■ ■ ■ □ □ □ Degree plus work experience
- ■ ■ ■ ■ □ □ □ □ Bachelor's degree
- ■ ■ ■ □ □ □ □ □ Associate's degree
- ■ ■ □ □ □ □ □ □ Postsecondary vocational award
- ■ □ □ □ □ □ □ □ Work experience in a related field
- □ □ □ □ □ □ □ □ Long-term on-the-job training
- □ □ □ □ □ □ □ □ Moderate-term on-the-job training
- □ □ □ □ □ □ □ □ Short-term on-the-job training

Figure 35: Specific Occupations Forecast to Gain at Least 100 Jobs Between 2009 and 2019 in the Combined Two-Borough Region

SOC Occupation	Net Job Change	Training/Skill Level Low ← → High
41-2031 Retail salespersons	+1,474	■ □ □ □ □ □ □ □ □ □
41-9022 Real estate sales agents	+1,098	■ ■ ■ ■ ■ □ □ □ □ □
41-9021 Real estate brokers	+1,096	■ ■ ■ ■ ■ □ □ □ □ □
39-9021 Personal and home care aides	+970	■ □ □ □ □ □ □ □ □ □
29-1111 Registered nurses	+858	■ ■ ■ ■ ■ □ □ □ □ □
37-2012 Maids and housekeeping cleaners	+658	■ □ □ □ □ □ □ □ □ □
11-9141 Property, real estate, and community association managers	+652	■ ■ ■ ■ ■ □ □ □ □ □
25-1099 Postsecondary teachers	+559	■ ■ ■ ■ ■ ■ ■ ■ ■ ■
35-3021 Combined food preparation and serving workers, including	+549	■ □ □ □ □ □ □ □ □ □
43-4051 Customer service representatives	+511	■ ■ □ □ □ □ □ □ □ □
43-9061 Office clerks, general	+462	■ □ □ □ □ □ □ □ □ □
31-1011 Home health aides	+429	■ □ □ □ □ □ □ □ □ □
47-2061 Construction laborers	+372	■ ■ □ □ □ □ □ □ □ □
43-3031 Bookkeeping, accounting, and auditing clerks	+295	■ ■ □ □ □ □ □ □ □ □
43-6011 Executive secretaries and administrative assistants	+294	■ ■ □ □ □ □ □ □ □ □
47-2031 Carpenters	+289	■ ■ ■ □ □ □ □ □ □ □
13-1199 Business operation specialists, all other	+285	■ ■ ■ ■ ■ □ □ □ □ □
43-4171 Receptionists and information clerks	+266	■ □ □ □ □ □ □ □ □ □
11-9199 Managers, all other	+251	■ ■ ■ □ □ □ □ □ □ □
41-1011 First-line supervisors/managers of retail sales workers	+241	■ ■ ■ □ □ □ □ □ □ □
35-3031 Waiters and waitresses	+233	■ □ □ □ □ □ □ □ □ □
13-2021 Appraisers and assessors of real estate	+229	■ ■ ■ ■ ■ □ □ □ □ □
31-1012 Nursing aides, orderlies, and attendants	+215	■ ■ ■ □ □ □ □ □ □ □
31-9092 Medical assistants	+203	■ ■ □ □ □ □ □ □ □ □
41-3099 Sales representatives, services, all other	+200	■ ■ □ □ □ □ □ □ □ □
37-2019 Building cleaning workers, all other	+195	■ □ □ □ □ □ □ □ □ □
53-3033 Truck drivers, light or delivery services	+190	■ □ □ □ □ □ □ □ □ □
17-2051 Civil engineers	+188	■ ■ ■ ■ ■ □ □ □ □ □
35-2021 Food preparation workers	+186	■ □ □ □ □ □ □ □ □ □
47-2073 Operating engineers and other construction equipment ope	+182	■ ■ □ □ □ □ □ □ □ □
11-9021 Construction managers	+168	■ ■ ■ ■ ■ □ □ □ □ □
53-7062 Laborers and freight, stock, and material movers, hand	+166	■ □ □ □ □ □ □ □ □ □
13-2011 Accountants and auditors	+163	■ ■ ■ ■ ■ □ □ □ □ □
53-2011 Airline pilots, copilots, and flight engineers	+161	■ ■ ■ ■ ■ □ □ □ □ □
13-2052 Personal financial advisors	+160	■ ■ ■ ■ ■ □ □ □ □ □
49-9042 Maintenance and repair workers, general	+160	■ ■ □ □ □ □ □ □ □ □
11-1011 Chief executives	+156	■ ■ ■ ■ ■ □ □ □ □ □
53-3032 Truck drivers, heavy and tractor-trailer	+152	■ ■ □ □ □ □ □ □ □ □

SOURCE: EMSI Complete Employment - 2nd Quarter 2009 v. 2; TIP Strategies, Inc.

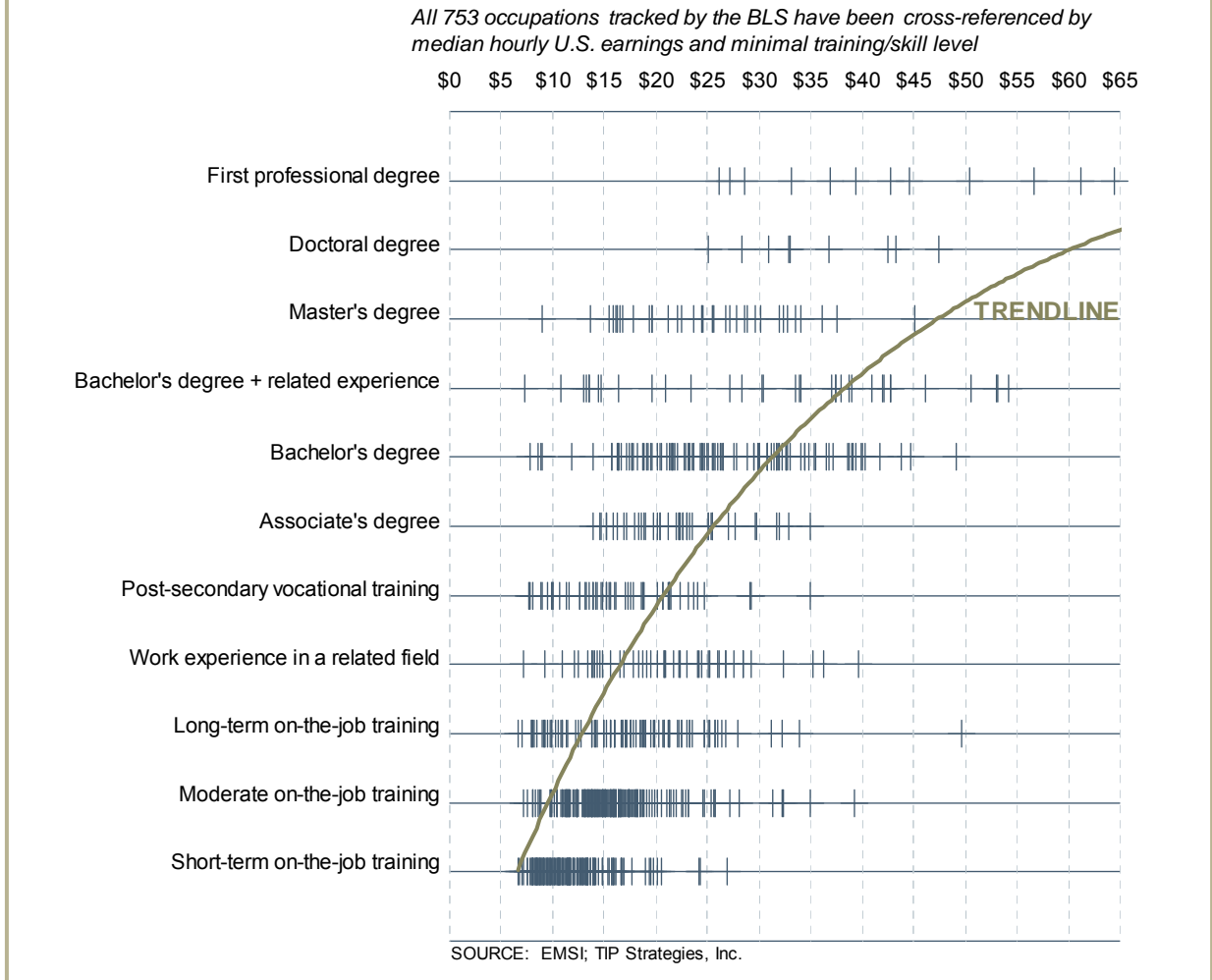
National Skills and Earnings

Generally, earnings rise as the level of training or education of a population increases. The U.S. Bureau of Labor Statistics defines, categorizes, and collects data for more than 750 standardized occupations. By plotting median earnings for each of these occupations against the minimal educational requirement for each, it is possible to show graphically just how strong this correlation is between education and earnings.

If leaders in the Mat-Su Borough wish to increase the earnings of area residents, it will be necessary to continue focusing on strengthening regional higher education and workforce development programs.

The expansion of higher education offerings presents the Mat-Su Valley with the greatest opportunity to raise local wages and attract higher quality jobs.

Figure 36: The Link Between Skills, Earnings, & the Educational Preparation across the U.S.



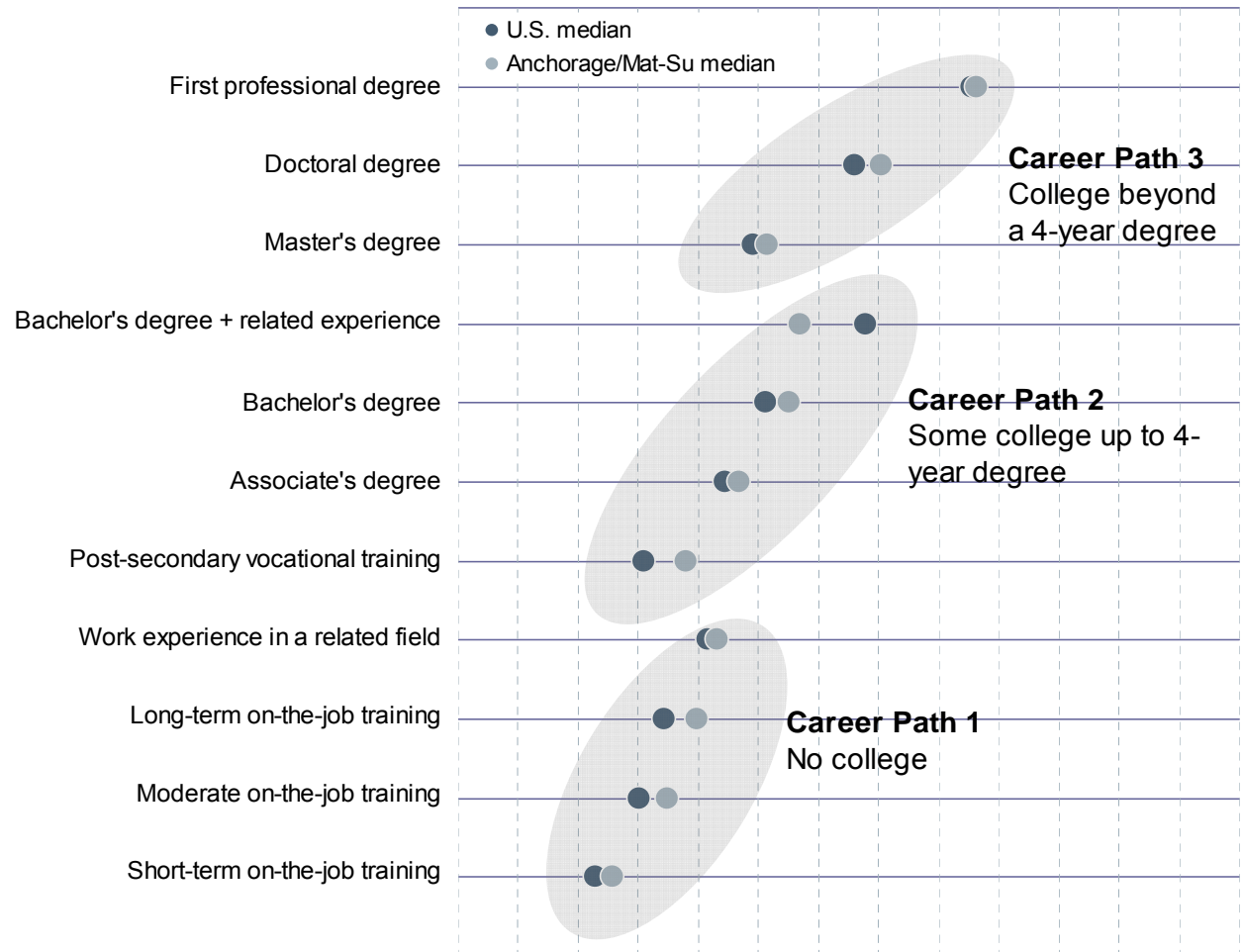
Regional Skills and Earnings

Figure 37 streamlines the statistical "noise" shown in the previous chart. Instead of showing the median pay for each individual occupation, this chart illustrates the median pay of all occupations at each training and educational level.

The graph shows the national median hourly pay as well as the local median for the two-borough region. The Anchorage/Mat-Su area matches or exceeds national pay levels in most categories, with the exception of jobs requiring a bachelor's degree plus related experience. In this one educational category, the Anchorage/Mat-Su area lags the national median by a moderate margin.

Figure 37: The Link between Skills, Earnings, & the Educational Preparation in the Anchorage/Mat-Su Region

Median hourly earnings by minimal training/skill level in the 2-borough region and in the U.S. overall
 \$0 \$5 \$10 \$15 \$20 \$25 \$30 \$35 \$40 \$45 \$50 \$55 \$60 \$65



SOURCE: EMSI; TIP Strategies, Inc.

Household Income Comparison

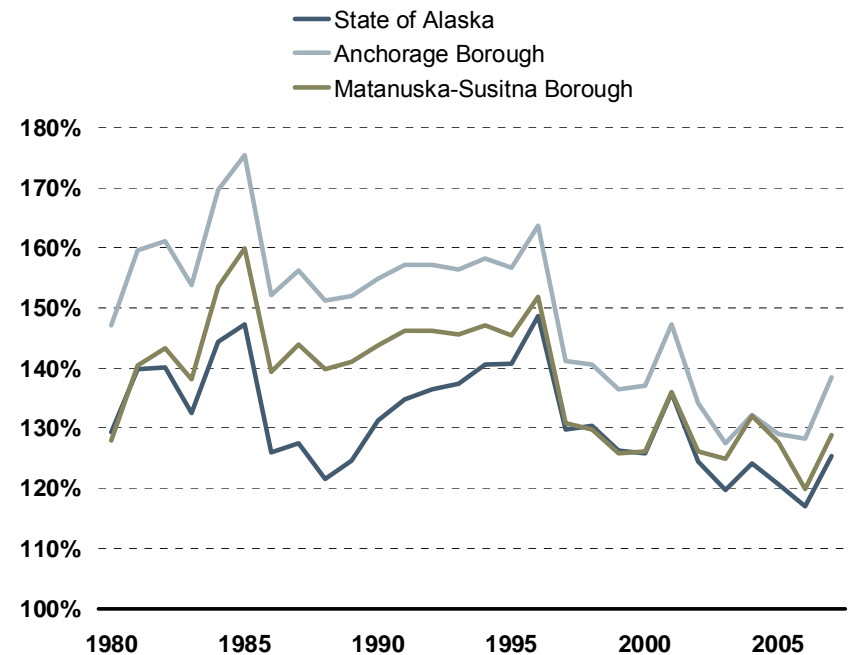
As with median wages, median household incomes in Alaska exceed the national level. In recent years, the statewide median, as well as the median household income in both Anchorage and Mat-Su Borough has held 20-40 percent above the national level.

Median incomes in the Anchorage area exceed the statewide level, but during the 1990s, this gap narrowed considerably as the two boroughs converged more with statewide income levels. The local lead over the rest of the state (and the nation) remains; however, it is narrower than in the past. This decline in relative income vis-à-vis the nation appears to coincide with the beginning of the boom in the tech sectors as productivity increases contributed substantially to the nation's wealth. This may indicate that the state and the regional economies failed to capitalize on this opportunity as it emerged.

More recently, households in the Mat-Su Borough, Anchorage, and the state experienced a sharp up-tick in their relative wealth compared to the nation as a whole. This jump in median household income came at the same time as the recent surge in oil prices. Even so, the state's income advantage remains far below what it had been as recently as 1995.¹

While oil prices may rebound again when the national economy finally emerges from the recession, the long-term trend clearly points toward the need to discover other opportunities for wealth creation in Alaska.

Figure 38: Median Household Income Relative to the US (US = 100%)



SOURCE: U.S. Census Bureau's Current Population Survey (CPS); Moody's Analytics

¹ The most recent income figure in the figure is from 2007. Therefore, it does not take into account the plummeting international oil prices as a result of the current recession.

Input-Output Analysis

Figures 39 and 40 display the results of an input-output (I/O) analysis on selected industries in Mat-Su Borough. Both tables list the sectors which would cause the greatest impact on the borough's economy as the result of a theoretical increase in 100 jobs or \$100 in new earnings. The first table is sorted by the total number of new jobs that would be created, while the second ranks the amount in new earnings gained throughout the economy. The cumulative impact for these changes is measured through the industry's *multiplier* on the local economy.

According to I/O analysis, a 100-job increase in the natural gas pipeline industry would stimulate the creation of an additional 273 jobs throughout the borough's economy. This additional increase is calculated through the industry's local job multiplier of 3.73 (See Figure 39 on the following page). Other industries with very high multipliers include: deep sea freight transportation; federal (civilian) government; construction, sand and gravel mining; and state government. Overall, this grid is dominated by niche sectors from the construction, manufacturing, transportation, and healthcare industries.

Notably, the sectors with high multipliers in Mat-Su tend to also already have a strong presence within the regional economy and, therefore, have durable linkages with other existing industries. Consequently, the results of I/O analysis will typically favor pre-existing driver industries.

While Figure 39 is sorted by job creation, the industry rankings in Figure 40 reflect economy-wide gains in earnings. For example, NAICS 531210 Real Estate Offices offers Mat-Su with its highest earnings multiplier (2.28). In other words, a \$100 gain in earnings in this industry would theoretically result in \$128 in additional earnings throughout the local economy. This is, by far, the highest earnings multiplier among all industries present in the borough. Crop and animal production also registers a very high earnings multiplier, relative to other sectors in Mat-Su. Much like the previous table, Figure 40 is dominated primarily by industries representing manufacturing, construction, agriculture, transportation, and healthcare.

UNDERSTANDING INPUT-OUTPUT

Input-output analysis depicts how one part of an economy is affected by change in another part. Specifically, it shows how different industries are linked together through supplying *inputs* for the *output* of the economy. In other words, how the output of one industry is an input to another. The model uses a matrix representation of a region's economy to predict the effect of changes in one industry on others. For example, an increase in automotive assembly jobs in a region may also lead to an increase in automotive engine and parts manufacturing jobs in the same region. Likewise, an increase in employment and/or wages in a sector would probably lead to an increase in retail jobs within an area as a result of increased expenditures.

While the utility of I/O analysis in assisting local leaders to choose target industries is somewhat constrained due to its inherent bias toward existing sectors, this analytical tool provides a straightforward methodology for measuring the hypothetical impacts of potential new investments. Moreover, I/O analysis is most useful when viewed through a prism filtering both employment and earnings impacts.

Given the results of both Figures 39 and 40, it is clear that growth in the manufacturing, construction, agriculture, transportation, and healthcare sectors would likely have the greatest overall positive impacts on Mat-Su Borough's economy as a whole.

Figure 39: Selected Economic Impacts in Mat-Su - Sorted by Jobs

The theoretical benefits of 100 new jobs or \$100 in new earnings in selected industries
Sorted by job multiplier

Sector	NAICS	Industry	Jobs		Earnings	
			Job Multiplier	Total additional jobs gained economywide for every 100 new jobs in this sector	Earnings Multiplier	Total additional earnings economywide for every additional \$100 earned in this sector
Transportation & warehousing	486210	Natural gas pipeline	3.73	273	1.57	\$57
Transportation & warehousing	483111	Deep sea freight transportation	3.48	248	1.44	\$44
Government	911	Federal (civilian)	2.22	122	1.40	\$40
Oil, gas, & mining	212321	Construction, sand, & gravel mining	2.09	109	1.55	\$55
Government	92	State	2.03	103	1.57	\$57
Healthcare	622110	General medical & surgical centers	1.99	99	1.39	\$39
Agriculture, forestry, fishing & hunting	11A	Crop & animal production	1.94	94	1.92	\$92
Professional & technical services	5413	Architectural & engineering	1.84	84	1.43	\$43
Transportation & warehousing	4883	Support activities for water transport	1.82	82	1.33	\$33
Retail	443	Electronics & appliances	1.81	81	1.46	\$46
Construction	237	Heavy & civil engineering construction	1.79	79	1.41	\$41
Construction	236	Construction of buildings	1.73	73	1.42	\$42
Transportation & warehousing	487	Scenic siteseeing transportation	1.70	70	1.35	\$35
Professional & technical services	5417	Scientific research & development services	1.70	70	1.49	\$49
Retail	442	Furniture & home furnishings	1.69	69	1.46	\$46
Oil, gas, & mining	212112	Underground coal mining	1.65	65	1.24	\$24
Government	912	Federal (military)	1.64	64	1.58	\$58
Manufacturing	333132	Oil & gas field machinery	1.61	61	1.21	\$21
Healthcare	621111	Office of physicians	1.61	61	1.38	\$38
Construction	237120	Oil & gas pipeline	1.59	59	1.25	\$25
Healthcare	621	Ambulatory healthcare services	1.58	58	1.39	\$39
Construction	238	Specialty trade contractors	1.50	50	1.40	\$40
Retail	444	Building materials	1.50	50	1.44	\$44
Transportation & warehousing	484	Trucking/transportation	1.49	49	1.54	\$54
Retail	448	Clothing & accessories	1.47	47	1.46	\$46
Accommodation & food services	721	Accommodations	1.44	44	1.58	\$58
Professional & technical services	5416	Management & technical	1.41	41	1.39	\$39
Manufacturing	333131	Mining machinery	1.41	41	1.21	\$21
Real estate	531210	Real estate offices	1.37	37	2.28	\$128
Healthcare	623	Nursing & residential care facilities	1.35	35	1.37	\$37
Transportation & warehousing	488210	Support activities for rail transport	1.35	35	1.18	\$18
Transportation & warehousing	493130	Farm product warehousing & storage	1.30	30	1.19	\$19
Agriculture, forestry, fishing & hunting	114	Fishing, hunting & trapping	1.25	25	1.45	\$45
Accommodation & food services	722	Food services & drinking places	1.25	25	1.51	\$51
Professional & technical services	541990	All other professional, scientific, & technical services	1.24	24	1.38	\$38
Arts, entertainment, & recreation	7139	Other amusement and recreation industries	1.23	23	1.55	\$55
Arts, entertainment, & recreation	712190	Nature parks & other similar institutions	1.20	20	1.24	\$24
Arts, entertainment, & recreation	7115	Independent artists, writers, & performers	1.06	6	1.36	\$36

Figure 40: Selected Economic Impacts in Mat-Su - Sorted by Earnings

The theoretical benefits of 100 new jobs or \$100 in new earnings in selected industries
Sorted by earnings multiplier

Sector	NAICS Industry	Earnings		Jobs	
		Earnings Multiplier	Total additional earnings economywide for every additional \$100 earned in this sector	Job Multiplier	Total additional jobs gained economywide for every 100 new jobs in this sector
Real estate	531210 Real estate offices	2.28	\$128	1.37	37
Agriculture, forestry, fishing & hunting	11A Crop & animal production	1.92	\$92	1.94	94
Government	912 Federal (military)	1.58	\$58	1.64	64
Accommodation & food services	721 Accommodations	1.58	\$58	1.44	44
Transportation & warehousing	486210 Natural gas pipeline	1.57	\$57	3.73	273
Government	92 State	1.57	\$57	2.03	103
Oil, gas, & mining	212321 Construction, sand, & gravel mining	1.55	\$55	2.09	109
Arts, entertainment, & recreation	7139 Other amusement and recreation industries	1.55	\$55	1.23	23
Transportation & warehousing	484 Trucking/transportation	1.54	\$54	1.49	49
Accommodation & food services	722 Food services & drinking places	1.51	\$51	1.25	25
Professional & technical services	5417 Scientific research & development services	1.49	\$49	1.70	70
Retail	443 Electronics & appliances	1.46	\$46	1.81	81
Retail	442 Furniture & home furnishings	1.46	\$46	1.69	69
Retail	448 Clothing & accessories	1.46	\$46	1.47	47
Agriculture, forestry, fishing & hunting	114 Fishing, hunting & trapping	1.45	\$45	1.25	25
Transportation & warehousing	483111 Deep sea freight transportation	1.44	\$44	3.48	248
Retail	444 Building materials	1.44	\$44	1.50	50
Professional & technical services	5413 Architectural & engineering	1.43	\$43	1.84	84
Construction	236 Construction of buildings	1.42	\$42	1.73	73
Construction	237 Heavy & civil engineering construction	1.41	\$41	1.79	79
Government	911 Federal (civilian)	1.40	\$40	2.22	122
Construction	238 Specialty trade contractors	1.40	\$40	1.50	50
Healthcare	622110 General medical & surgical centers	1.39	\$39	1.99	99
Healthcare	621 Ambulatory healthcare services	1.39	\$39	1.58	58
Professional & technical services	5416 Management & technical	1.39	\$39	1.41	41
Healthcare	621111 Office of physicians	1.38	\$38	1.61	61
Professional & technical services	541990 All other professional, scientific, & technical services	1.38	\$38	1.24	24
Healthcare	623 Nursing & residential care facilities	1.37	\$37	1.35	35
Arts, entertainment, & recreation	7115 Independent artists, writers, & performers	1.36	\$36	1.06	6
Transportation & warehousing	487 Scenic siteseeing transportation	1.35	\$35	1.70	70
Transportation & warehousing	4883 Support activities for water transport	1.33	\$33	1.82	82
Construction	237120 Oil & gas pipeline	1.25	\$25	1.59	59
Oil, gas, & mining	212112 Underground coal mining	1.24	\$24	1.65	65
Arts, entertainment, & recreation	712190 Nature parks & other similar institutions	1.24	\$24	1.20	20
Manufacturing	333132 Oil & gas field machinery	1.21	\$21	1.61	61
Manufacturing	333131 Mining machinery	1.21	\$21	1.41	41
Transportation & warehousing	493130 Farm product warehousing & storage	1.19	\$19	1.30	30
Transportation & warehousing	488210 Support activities for rail transport	1.18	\$18	1.35	35

STRENGTHS, WEAKNESSES, OPPORTUNITIES, AND THREATS (SWOT) ANALYSIS

TIP conducted a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis for Mat-Su to create a framework for understanding the Borough’s economic development issues. This assessment was based on interviews, site visits, data analysis, our experience, as well as SWOT exercises conducted with each of the project standing committees. The table on the following pages captures the major findings of this analysis.

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Growing population due to positive net migration (only region in Alaska) ▪ Faster rates of annual job growth than Anchorage ▪ Available professional workforce that currently commutes to Anchorage and would rather work in the Valley ▪ Skilled labor pool (based on employer interviews) ▪ “Export-oriented” employers prospering & growing (e.g., Terrasond, New Horizons, Triverus) ▪ Influx of businesses relocating/expanding from Anchorage ▪ Growing healthcare sector ▪ Port Mackenzie ▪ Available developable land ▪ Natural beauty (mountains, glaciers, rivers, etc.) ▪ Southern gateway to Denali Park and Mt. McKinley ▪ Outdoor recreation: hiking, snow machining, skiing, fishing (lake and river), hunting, rafting, etc. ▪ Agricultural sector, famers markets, state fair ▪ Growth of Mat-Su College ▪ Proximity to military installations ▪ More affordable housing than other areas of state ▪ Natural resources 	<ul style="list-style-type: none"> ▪ Lack of common vision for growth ▪ Image of the Valley internally and regionally ▪ Seasonality of economy ▪ Lower wages ▪ Few major private sector employers ▪ Small professional and business services sector ▪ Lack of long-term land use planning ▪ Tourists passing through the Valley without spending any money ▪ Road infrastructure is stressed ▪ Visibility of gravel pits located along highways ▪ Freight transportation costs ▪ Lack of building code enforcement in unincorporated areas ▪ Broadband infrastructure ▪ Cost and availability of energy

THREATS	OPPORTUNITIES
<ul style="list-style-type: none">▪ Unmanaged growth (conflicting land use)▪ Declining federal funding▪ State and regional economic stagnation▪ Declining statewide oil & gas production▪ Failing fisheries protection▪ Long-term natural gas supply▪ Lack of regional cooperation▪ Growing internal polarization▪ Failure to develop new leadership	<ul style="list-style-type: none">▪ Expansion of professional & technical services sector▪ Improving infrastructure and connectivity▪ Continue developing industrial/transportation facilities at port▪ Borough-wide business & economic development partnership▪ Internal and regional image campaign▪ Increased efforts in tourism marketing & expanded infrastructure▪ Expanding healthcare and education sectors▪ Attracting entrepreneurs & executives seeking Mat-Su's quality of life▪ Dedicated commercial (and industrial) space▪ Developing a new generation of leaders▪ Expanding business and education partnerships▪ Engaging young professionals▪ Retain and engage military veterans and retirees▪ Leverage specific education and research activities at colleges

PUBLIC NOTICING

From: [Peggy Horton](#)
To: [Lacie Olivieri](#)
Cc: [Kayla Kinneen](#); [Rick Benedict](#)
Subject: Mailing: Mass Excavation CUP #10301
Date: Wednesday, October 16, 2024 11:17:00 AM
Attachments: [Vicinity Map.pdf](#)
[Public Notice Mailing.DOCX](#)

Hello,

Please prepare and send the attached mailing on or before Wednesday, October 23, 2024. The notice area is 1/2 mile. Please also mail this to the Gateway Community Council.

Gateway Community Council
PO Box 578
Palmer AK 99645

Thank you,

Peggy Horton
Current Planner
907-861-7862



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13411 GRAYWOLF PL NE
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WASILLA, AK 99654-8455

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1711 S ABBY BLVD
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69 REASNER MIYAH L & WARREN S
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2128 S PADDOCK DR
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2135 S PADDOCK DR
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2141 S WITHERS RD
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2180 S YUKON CIR
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MILLER MARTY M
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THOME RICHARD & OPAL
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AYAY-DEHART AUDREY J
2341 CASEY CUSACK LOOP
ANCHORAGE, AK 99515-2801

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% DAVID HODGDON PERS REP
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2356 S PADDOCK DR
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105 SANTANGELO MICHAEL TODD
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ROCKWALL, TX 75087

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2431 S SNOW PEAK RD
WASILLA, AK 99654-8776

108 SCHOESSLER ALLIE M
2505 S GALLOP CIR
WASILLA, AK 99654-8416

109 PROPERTY PROS 907 LLC
2681 E MCNEESE PKY
WASILLA, AK 99654

110 MCKISSICK JARED & REBECCA Z
2815 S BARNYARD CIR
WASILLA, AK 99654

111 ASPLUND LTD PRTRNSHP
ASPLUND DAVID R HOMAN C L PIONEER
PLAZA
28925 SE 416TH ST
% DAVID ASPLUND
ENUMCLAW, WA 98022
114 BRU-NETTE LLC
3275 E TAMARAK AVE
WASILLA, AK 99654

112 WASILLA CITY OF
290 E HERNING AVE
WASILLA, AK 99654-7030

113 SHAW ISRAEL I
3223 W 31ST AVE
ANCHORAGE, AK 99517-1628

115 HOBSON CHRISTOPHER
3350 E BEECH WAY
1
WASILLA, AK 99654-7417

116 BLACK LAKE LLC
3438 S BARN GABLE LOOP
WASILLA, AK 99654

117 COOK INLET HOUSING AUTHORITY
3510 SPENARD RD
100
ANCHORAGE, AK 99503

118 PATRAW ROBERT W & SHAROL D
3601 E CAREFREE DR
WASILLA, AK 99654-8358

119 GANN TYLER A & KELSEY C
3680 W CHESTNUT LN
WASILLA, AK 99654

120 DELGADO JESUS & RITA
3700 E CAREFREE DR
WASILLA, AK 99654

121 LAWSON DAVID A
LAWSON MICHELE D
3760 E CAREFREE DR
WASILLA, AK 99654

122 TRACY ROBERT A
3760 E MARK DR
UNIT 2
WASILLA, AK 99654

123 LUPINE MOB LLC
3765 E BLUE LUPINE DR
STE D
WASILLA, AK 99654

124 YOUNG DARRYN J
3780 E MARK DR
WASILLA, AK 99654

125 WELLBORN CHARLOTTE REV LVG TR
3790 E CAREFREE DR
WASILLA, AK 99654

126 GISLASON JOYCE E
3800 E FAIRVIEW LOOP
WASILLA, AK 99654

127 KING JOSEPH W & PAMELA D
383 PEPPERTREE LOOP
ANCHORAGE, AK 99504-4845

128 ANCORA HOLDINGS LLC
3831 E BLUE LUPINE DR
STE B
WASILLA, AK 99654

129 SMITH RANDAL A & ANNA M
3837 E CAREFREE DR
WASILLA, AK 99654-8360

130 BALDWIN RALPH W
GUNTHER SUSAN P
3850 WICKERSHAM WAY
WASILLA, AK 99654

131 GRINNELL JEREMIAH T & REBECCA
M
3861 E CAREFREE DR
WASILLA, AK 99654

132 MONEAR SHANNON L & CRITINA
3900 E CAREFREE DR
WASILLA, AK 99654

133 CONWAY LANCE J & DONNA M
3900 W WICKERSHAM WAY
WASILLA, AK 99654

134 SCHMITT ROBERT E
3901 E CAREFREE DR
WASILLA, AK 99654

135 CHAPMAN EDW E
3939 WESTWOOD DR
ANCHORAGE, AK 99517-1033

136 LITTLE WILDFLOWERS LLC
3950 E CAREFREE DR
WASILLA, AK 99654

137 CARSON JAMES HILARY
CARSON C C & SHOUP C C
4000 E FAIRVIEW LOOP
WASILLA, AK 99654

138 SWAN-ARMITSTEAD THERESA
ARMITSTEAD JAMES EST
4011 E LINLU LN
WASILLA, AK 99654-0709

139 I & J INVESTMENT LLC
4037 BIRCH LN
FAIRBANKS, AK 99709

140 VAN DORT DAVID
VAN DORT RICHARD
4050 E LINLU LN
3
WASILLA, AK 99654-0709

141 BECKER JERMEY
TAYLOR AMANDA J
4050 E WICKERSHAM WAY
WASILLA, AK 99654

142 COOK STERLING S & REGINA A
4051 E BRENDA AVE
WASILLA, AK 99654

143 KRAMER KYLE WAYNE & KIDRON E
4065 N SIERRA ST
WASILLA, AK 99654

144 DANIELS STACEY
DANIELS ROBIN
4080 E DEWAN CT
WASILLA, AK 99654

145 GARRISON BILLY JOE
4085 E DEWAN CT
WASILLA, AK 99654-7575

146 GARRISON STEVEN
4085 E DEWAN CT
WASILLA, AK 99654

147 IGLESIAS LATICKA C
4100 E CAREFREE DR
WASILLA, AK 99623

148 RAISANEN FAM TR
4160 E LINLU LN
WASILLA, AK 99654

149 KAMILOS PETER A & MICHELE
4180 E LINLU LN
WASILLA, AK 99654

150 DESAW LANCE
4181 E DIMOND WAY
WASILLA, AK 99654

151 PETRO CHRISTOPHER J & JENNIFER
M
4181 E LINLU LN
WASILLA, AK 99654-0709

152 AVILA ERNESTO & AMANDA
4191 E CAREFREE DR
WASILLA, AK 99654

153 BRENNAN MICHAEL A & C
4200 E WICKERSHAM WAY
WASILLA, AK 99654-7637

154 MOON RICHARD E & LYNDA J
4241 E CRANE RD
WASILLA, AK 99654-0517

155 RATH JEREMY L
4250 E WICKERSHAM WAY
WASILLA, AK 99654-7637

156 KOECHER JAMES G & DONNA C
4300 E DIMOND WAY
WASILLA, AK 99654-8630

157 FOXGLOVE CHANDLER A
4301 E MERRILL CIR
WASILLA, AK 99654-8643

158 SHACKLETT GARY C & SANDY K
4311 E CRANE RD
WASILLA, AK 99654

159 TUCKER DANIEL J & CONNIE M
4330 WICKERSHAM WAY
WASILLA, AK 99654

160 ROGERS SANDRA J
MAY JEFFREY ALLEN
4350 E DIMOND WAY
% SANDRA J ROGERS-MAY
WASILLA, AK 99654

161 MILLER BRENDAN SHANE
4360 N BULL MOOSE DR
WASILLA, AK 99654-1517

162 ANDERSON ELIZABETH C
4375 DIMOND WAY
WASILLA, AK 99654

163 THOMAS STEVEN MARK
4400 E MERRILL CIR
WASILLA, AK 99654

164 ROHRER ROBERT
4401 E MERRILL CIR
WASILLA, AK 99654

165 MATNEY PETINA C
JENSEN LEIF M
4460 E DIMOND WAY
WASILLA, AK 99654-8633

166 DANIELS BILLY E
DANIELS RENEE M
4460 E MERRILL CIR
WASILLA, AK 99654

167 HUEY J D & PILAR FAM TR
4471 E CRANE RD
WASILLA, AK 99654

168 P INC
4492 E FAIRVIEW LOOP
WASILLA, AK 99654-8484

169 MURR RAYLENE A K
4501 E MERRILL CIR
WASILLA, AK 99654-8648

170 LOBOSAK LLC
4505 E GREENSTREET CIR
% EVAN WOLF
WASILLA, AK 99654

171 GILPIN JOE M
WOODS MONICA A
4520 E MERRILL CIR
WASILLA, AK 99654

172 YANG THAE
4531 E MERRILL CIR
WASILLA, AK 99654

173 BUSHEY DOUGLAS P&ROCHELLE
4550 E DIMOND WAY
WASILLA, AK 99654

174 MAZZELLA SILVIO & RUTH
4555 E DIMOND WAY
WASILLA, AK 99654

175 PARKS HIGHWAY COMM PROP LLC
45573 S FOUST LN
CHARLO, MT 59824-9201

176 LOFSTROM CALEB JOHN & ASHLEY
NICOLE
4561 E MERRILL CIR
WASILLA, AK 99654

177 OLDAY WILLIAM J
4601 E MERRILL CIR
WASILLA, AK 99654

178 JILWAN ASSIA Y & DAAD A
4640 KENT ST
ANCHORAGE, AK 99503

179 RUDOLPH DANIEL J
4700 E DIMOND WAY
WASILLA, AK 99654

180 WESTERN JOHN D & RUTH V
4701 E MERRILL CIR
WASILLA, AK 99654

181 HUMPHREYS CHAS L & PAMELA
4725 E DIMOND WAY
WASILLA, AK 99654-8640

182 CROWLEY JOY M
RUDOLPH DARREN M
4750 E DIMOND WAY
WASILLA, AK 99654

183 RUDOLPH DARREN M & JOY M
4750 E DIMOND WAY
WASILLA, AK 99654-8639

184 KELLY STEPHEN H
4775 DIMOND WAY
WASILLA, AK 99654

185 YANG PAZONG
FANG JAMES
4811 E CORRAL CIR
WASILLA, AK 99654

186 STUKEY TODD D & JENNIFER M
4838 E CORRAL CIR
WASILLA, AK 99654

187 LOGAN REID J & CALIN M
4838 E TIMOTHY LN
WASILLA, AK 99654-8453

188 ADAMS STEPHANIE L
4860 E RHUBARB CIR
WASILLA, AK 99654-8456

189 INGLE MANOJ & VANDANA
4860 E TIMOTHY LN
WASILLA, AK 99654

190 HOLTE JUSTIN
4865 E RHUBARB CIR
WASILLA, AK 99654-8456

191 LOFGREN AMANDA
4881 E RHUBARB CIR
WASILLA, AK 99654

192 NEUHARTH MARK R & RITA M
4882 E TIMOTHY LN
WASILLA, AK 99654

193 BUTLER RASHAUN DANUL
4885 E ROOSTER CIR
WASILLA, AK 99654-8477

194 MELENDEZ JEFFREY
SINGH SHARON E
4888 E ROOSTER CIR
WASILLA, AK 99654-8477

195 ROCK NATHAN L
EDMONDS KATHRYN M
4895 E RHUBARB CIR
WASILLA, AK 99654-8456

196 NELSON MARK T & HEATHER R
4901 BARLEY AVE
WASILLA, AK 99654

197 FERNLUND LEROY A
4901 E FAIRVIEW LOOP
WASILLA, AK 99654-8424

198 HENDERSON CHRISTOPHER &
DIANNA
4904 E ROOSTER CIR
WASILLA, AK 99654

199 CLAUSEN SEAN ALLEN
4904 E TIMOTHY LN
WASILLA, AK 99654

200 COMPTON DANNY L & DEBRA A
4911 E RHUBARB CIR
WASILLA, AK 99654

201 DOLECHEK ALVIN
DANIELS SHARON
4920 W KIANNA AVE
WASILLA, AK 99623

202 HUMPHREY CANDICE HOPE
4922 E ROOSTER CIR
WASILLA, AK 99654

203 CHAPMAN CHARLES & ELIZABETH
4925 E RHUBARB CIR
WASILLA, AK 99654-8459

204 KUESER DEVIN M & CHELSEA A
4925 E TIMOTHY LN
WASILLA, AK 99654-8457

205 WALTON TIMOTHY C & THERESA
4926 E RHUBARD CIR
WASILLA, AK 99654

206 ARCTIC STAR ALH LLC
4930 E ROOSTER CIR
WASILLA, AK 99654

207 MALUPO MAKAHOKOVALU
BUNTING SHANTEL MAY
4930 E ROOSTER CIR
WASILLA, AK 99654

208 HICKLIN GENANNE L
4941 E RHUBARB CIR
WASILLA, AK 99654-8459

209 ENTWISTLE ANTHONY C & BLAIR M
4941 E ROOSTER CIR
WASILLA, AK 99654

210 MCWHERTER DANIEL & SUSAN
4946 E ROOSTER CIR
WASILLA, AK 99654

211 MOORE MICHAEL
4948 E TIMOTHY LN
WASILLA, AK 99654-8457

212 COWAN ROBT L & DAWN M
4949 E TIMOTHY LN
WASILLA, AK 99654

213 SUMMERS DEAN E JR & JENNIFER M
4950 E BRUMAGE DR
WASILLA, AK 99654

214 LINDEMER JESSE G & DANIELLE Y
4953 E ROOSTER CIR
WASILLA, AK 99654

215 STEPP SCOTTIE L & BRITTANY A
4955 E BRUMAGE DR
WASILLA, AK 99654-8619

216 DELANEY JERRY
4955 E RHUBARB CIR
WASILLA, AK 99654

217 FRAZIER JOHN P
4956 E RHUBARB CIR
WASILLA, AK 99654

218 MCMANUS RICHARD T & MELODY J
4958 E ROOSTER CIR
WASILLA, AK 99654

219 TOTTY MATTHEW
JOHNSTON JESSICA L
4971 E RHUBARB CIR
WASILLA, AK 99654

220 JOHANSSON ROSS HENRY
5020 E LUPINE WAY
WASILLA, AK 99654-8458

221 MALAY KERRY L & RENEE A
5031 E LUPINE WAY
WASILLA, AK 99654

222 MPJ FAM TR
504 E HAYWARD AVE
PHOENIX, AZ 85020

223 METLICKA SCOTT A & JENNIFER A
5042 E BROOME AVE
WASILLA, AK 99654-8450

224 BROSSARD STEPHEN ANTHONY
BROSSARD ELENA GIBBS
5055 E BROME AVE
WASILLA, AK 99654-8450

225 IHRKE AMANDA
5061 E LUPINE WAY
WASILLA, AK 99654-8458

226 HEDGE DEBBIE M
5072 E BROME AVE
WASILLA, AK 99654-8450

227 CONSTEEL CONCRETE CO INC
5077 E BARLEY AVE
WASILLA, AK 99654-8430

228 DENRYTER KRISTIN ANNE
5080 E LUPINE WAY
WASILLA, AK 99654

229 FERRERAS JULIAN K
5081 E LUPINE WAY
WASILLA, AK 99654

230 PETERS GREGG A & DONNA J H
5091 E LUPINE WAY
WASILLA, AK 99654

231 WOLVERINE SUPPLY INC
5099 E BLUE LUPINE DR
STE 201
WASILLA, AK 99654

232 HILLSTROM VICTOR F & SHARON R
5102 E BROME AVE
WASILLA, AK 99654-8450

233 DEUSTER MATTHEW M & BRITTANY A
5115 E BROME AVE
WASILLA, AK 99654

234 HAMILTON GARY L & CHRISTINE L
5122 E BLACKSTONE CIR
WASILLA, AK 99654

235 WEGLIN DEREK L & AMANDA K
5143 E BLACKSTONE CIR
WASILLA, AK 99654

236 MCCARTNEY MICHAEL R
5145 E BROME AVE
WASILLA, AK 99654-8450

237 KNOBF JOSHUA E
5150 E BROME AVE
WASILLA, AK 99654

238 KIM TONY S
5620 S TAHITI LOOP
SPC F 17
ANCHORAGE, AK 99507-1839

239 ROADMAN STEVEN
6122 GREENFIELD RD
FORT WORTH, TX 76135-1307

240 OGUNTADE AZEEZ & MARIAM
625 GALAXY CT
WARNER ROBINS, GA 31098-1305

241 ALLEN MARCUS J & JOYCE T
66 E CRYSTAL CANYON CIR
SPRING, TX 77389-5312

242 HARBUCK GWENDOLYN D
COUSINEAU DARRICK D
660 S BETTINA WAY
WASILLA, AK 99623

243 MOUNTAIN MEADOWS LLC
681 N SHENANDOAH DR
PALMER, AK 99645

244 ALASKA ROYAL HOLDINGS LLC
699 W CHARLOTTE CIR
WASILLA, AK 99654-2257

245 AXBERG RYAN R
7362 W PARKS HWY
#335
WASILLA, AK 99623

246 WILLIAMS MORGAN A
7362 W PARKS HWY
PMB 223
WASILLA, AK 99623

247 SEIBER WILLIAM JOSEPH
741 S REEVE CIR
WASILLA, AK 99654-8628

248 WARDROPE SHANE M & GINA J
7806 E TRIBUTARY AVE
PALMER, AK 99645

249 HENKEL THOS A & JANET K
7870 E FIREWEED RD
PALMER, AK 99645

250 WING FRED L JR & EDWARDS
CRYSTAL M
CRAWFORD CRYSTAL M
800 S HASSLER DR
WASILLA, AK 99654

251 HERSRUD JOHN D
850 S HASSLER DR
WASILLA, AK 99654-8612

252 GUEST NANCY V
855 HASSLER DR
WASILLA, AK 99654

253 PEREA ARNOLD
900 S HASSLER DR
WASILLA, AK 99654-8614

254 ORLOFF & HUDSPETH-ORLOFF REV
TR
ORLOFF ERNEST R & HUDSPETH
SHARON L TRES
900 W 5TH AVE
% OFFICE OF PUBLIC ADVOCA
257 KRESEK STEVEN
950 S VICKI WAY
WASILLA, AK 99654-7567

255 ARMSTRONG CHAS D & RAQUEL
905 S VICKI WAY
WASILLA, AK 99654-7570

256 KENNEDY PATRICIA J
950 S HASSLER DR
WASILLA, AK 99654

258 BJORK SCOTT D & KACEA J
951 S HAY ST
WASILLA, AK 99654

259 LONEWOLF ALAN M & DAKOTA S
990 W SUNRISE MOUNTAIN CI
WASILLA, AK 99654

260 PFILE JEFFREY C & MELODY J
PO BOX 1066
KENAI, AK 99611-1066

261 ALASKA RAILROAD CORP
PO BOX 107500
ANCHORAGE, AK 99501-7500

262 WILTON FAM PARTNERSHIP LP
PO BOX 116
N LAKEWOOD, WA 98259

263 SMITH MARIA DARCI V REV TR
PO BOX 141453
ANCHORAGE, AK 99514

264 LEE CAMILLA JOY
PO BOX 1483
PALMER, AK 99645

265 LOTS OF IDEAS LLC
PO BOX 150
WILLOW, AK 99688

266 GORUP MICHAEL R & TERESA A
PO BOX 186
PALMER, AK 99645-0186

267 ALASKA STATE OF
DEPT OF TRANS & PUB FAC DOT/PF
PO BOX 196900
ANCHORAGE, AK 99519-6900

268 SUMMERS LIAM & CHRISTINA
PO BOX 205
GUSTAVUS, AK 99826

269 THOMPSON MICHELLE
PO BOX 2090
THOMPSON FLS, MT 59873-2090

270 DIVELBISS LLC
PO BOX 220567
ANCHORAGE, AK 99522-0567

271 KLOEBER-CRESS FAMILY TR
PO BOX 2262
%MARGARITA KLOEBER FROHN
PALMER, AK 99645

272 MEYER TIMOTHY E & ANITA C
PO BOX 24
WILLOW, AK 99688-0024

273 BARKSDALE DAVID A
PO BOX 244894
% SOCKEYE ASPHALT
ANCHORAGE, AK 99524-4894

274 MATANUSKA ELECTRIC ASSN
PO BOX 2929
PALMER, AK 99645-2929

275 WALSH NORMA L
PO BOX 3252
PALMER, AK 99645-3252

276 WITHERS CHARLES S JR & ALENA N
PO BOX 334
SUMNER, WA 98390-0060

277 MATANUSKA TELEPHONE ASSN
PO BOX 3550
PALMER, AK 99645-3550

278 KING DAVID L
PO BOX 3832
PALMER, AK 99645-3832

279 VAN EVERY ALLEN & DANA L
PO BOX 4026
PALMER, AK 99645

280 LAWN TECH OF ALASKA LLC
PO BOX 4675
PALMER, AK 99645-4675

281 FENNER COURTNEY
PO BOX 5213
JBER, AK 99505

282 TAMPLIN GEOFFREY
ADLER BEATRICE
PO BOX 545
PALMER, AK 99645-0545

283 ARCTIC OHANA LLC
PO BOX 56300
NORTH POLE, AK 99705

284 GRANITE HOLDINGS LLC
PO BOX 56300
NORTH POLE, AK 99705

285 SIEGEL PROPERTIES LLC
PO BOX 671169
CHUGIAK, AK 99567

286 IMHOF PETER F & DEBBIE L
PO BOX 671993
CHUGIAK, AK 99567

287 O'CONNOR BRETT ALLYN
O'CONNOR ANGEL
PO BOX 672213
CHUGIAK, AK 99567-2213

288 PRIMERA STEPHEN
MACBETH DAWN E
PO BOX 672213
CHUGIAK, AK 99567-2213

289 KUMPULA JASON E
PO BOX 672554
CHUGIAK, AK 99567-2554

290 KLOSTER PAUL D & KAREN L
PO BOX 87
PALMER, AK 99645

291 KATZMAREK CLAY
PO BOX 870177
WASILLA, AK 99687

292 BOYLE KEITH
PO BOX 870295
WASILLA, AK 99687

293 LHAD INVESTMENTS LLC
PO BOX 870469
WASILLA, AK 99687

294 KERNODLE DONALD R & UNA M
PO BOX 870608
WASILLA, AK 99687-0608

295 RAY KIM C
PO BOX 870771
WASILLA, AK 99687

296 BIG DIPPER CONSTRUCTION INC
PO BOX 871274
WASILLA, AK 99687

297 WORRELL RYEN
PO BOX 871381
WASILLA, AK 99687

298 KONST MERRY L
MARCHIONE ANDREW
PO BOX 871423
WASILLA, AK 99687

299 KEDROWSKI JAS L&LAURINE A
PO BOX 871647
WASILLA, AK 99687-1647

300 THORNOCK FAMILY INV LLC
PO BOX 872034
WASILLA, AK 99687-2034

301 WELLMAN MICHAEL E SR
WELLMAN JACQUELYN L
PO BOX 872812
WASILLA, AK 99687-2812

302 MATSU FOOD BANK
PO BOX 873280
WASILLA, AK 99687

303 SHERRILL PAMELA J
SHERRILL NANCY LYNN
PO BOX 873975
WASILLA, AK 99687-3975

304 ROCKEL PATRICK J & MARY
PO BOX 874293
WASILLA, AK 99687-4293

305 MILLHOUSE TROUT D
PO BOX 874574
WASILLA, AK 99687

306 CAVANAUGH DARREL & V
PO BOX 874805
WASILLA, AK 99687-4805

307 SOCZKA JACOB
FOX PAMELA
PO BOX 875266
WASILLA, AK 99687

308 KATKUS THOMAS
KALMBACH KIM
PO BOX 875297
WASILLA, AK 99687

309 CASTAGNO JOHN M & CONNIE M
PO BOX 875535
WASILLA, AK 99687-5535

310 HAHN RANDAL N
PO BOX 876206
WASILLA, AK 99687-6206

311 RAMICK MATTHEW J & LAYDEE I
PO BOX 876298
WASILLA, AK 99687-6298

312 ROCK IN MOTION LLC
PO BOX 876391
WASILLA, AK 99687-6391

313 TRESNER DENNIS L
TRESNER MARY
PO BOX 876405
WASILLA, AK 99687-6405

314 WALLSTRUM CHRISTOPHER
WALLSTRUM MIRANDA
PO BOX 876415
WASILLA, AK 99687-6415

315 REIMANN-GIEGERL BETTIANN A
PO BOX 876544
WASILLA, AK 99687

316 HONNER MICHAEL R & C T
PO BOX 876693
WASILLA, AK 99687-6693

317 MACH RONALD L & SHARON K
PO BOX 876707
WASILLA, AK 99687-6707

318 BLOOMQUIST ERIC M & VICKI
PO BOX 877034
WASILLA, AK 99687-7034

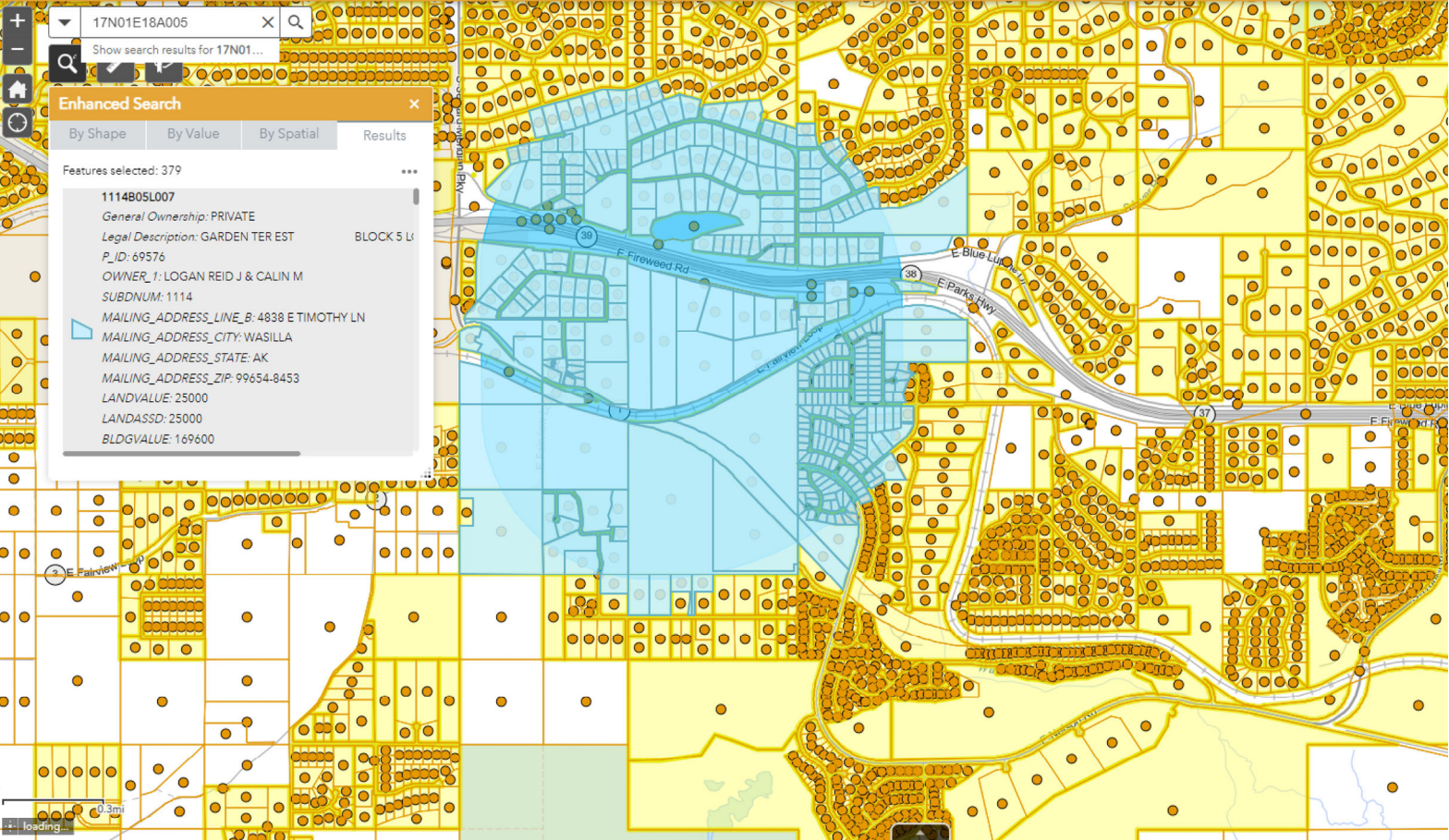
319 GREEN LYDA NELL RESTATED REV TR
LUPINE TRUST
PO BOX 910
KENAI, AK 99611-0910

320 FAIRVIEW PARK INV LTD
PO BOX 92225
ANCHORAGE, AK 99509-2225

321 LEBAHN TIMOTHY E & PATIENCE L
PO BOX 96
SEYMOUR, MO 65746

MSB Mailing List Application

Instructions



Enhanced Search

By Shape By Value By Spatial Results

Features selected: 379

1114B05L007

General Ownership: PRIVATE

Legal Description: GARDEN TER EST

BLOCK 5 L...

P_ID: 69576

OWNER_1: LOGAN REID J & CALIN M

SUBDNUM: 1114

MAILING_ADDRESS_LINE_B: 4838 E TIMOTHY LN

MAILING_ADDRESS_CITY: WASILLA

MAILING_ADDRESS_STATE: AK

MAILING_ADDRESS_ZIP: 99654-8453

LANDVALUE: 25000

LANDASSD: 25000

BLDGVALUE: 169600

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

«NAME»
«ADDRESS_1»
«ADDRESS_2»
«ADDRESS_3»

Mass Excavation Inc. applied for an Administrative Permit under MSB 17.30 – Earth Materials Extraction Activities. The Administrative Permit would allow for the removal of approximately 350,000 cubic yards of sand, gravel, and rock for two years starting in April 2025. The site is located between East Fireweed Road and East Fairview Loop, Tax ID #s 17N01E18A004, 17N01E18A012, 17N01E18A013, & 17N01E18A014.

The Matanuska-Susitna Borough Planning Director will conduct a public hearing concerning the application on **Thursday, November 21, 2024**, at 9:00 a.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Director, and you are invited to attend.

Application materials may be viewed online at www.matsugov.us by clicking on “All Public Notices & Announcements.” For additional information, you may contact Peggy Horton, Current Planner, by phone at 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us, or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

The public may provide verbal testimony at the meeting or telephonically by calling 1-855-290-3803. In order to be eligible to file an appeal from a decision of the Planning Director, a person must be designated an interested party. See MSB 15.39.010 for the definition of an interested party. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk’s office, and at various libraries within the borough.

Comments are due on or before **November 8, 2024**, and will be included in the Planning Director packet. Please be advised that comments received from the public after that date will not be included in the staff report, but will be provided to the Director at the meeting.

Name: _____ **Mailing Address:** _____

Location/Legal Description of your property: _____

Comments: _____

Note: Vicinity Map Located on Reverse Side

ADVERTISEMENT ORDER
MATANUSKA-SUSITNA BOROUGH

350 East Dahlia Avenue
 Palmer, Alaska 99645

PUBLISHER	MANDATORY PUBLICATION DATES {By MSB Code}	PREFERRED PUB. DATES	DATES FOR FILLER ADS (space permitting)
FRONTIERSMAN (contract)	October 23, 2024		
Anchorage Daily News			
Talkeetna Good Times {publishes once a month}			

Borough Page
 Classified/Legal
 Display Ad Acct #(100.120.113.422.000)

**THE ATTACHED MATERIAL MUST BE PRINTED IN ITS ENTIRETY ON THE DATES SHOWN ABOVE.
 AN AFFIDAVIT OF PUBLICATION IS REQUIRED PRIOR TO PAYMENT.**

A PROOF IS REQUESTED ON DISPLAY ADS FOR APPROVAL, PRIOR TO PUBLICATION.

Please email display ad proof to Attn: Peggy Horton Email: peggy.horton@matsugov.us
 and Lacie Olivieri Email: lolivieri@matsugov.us
 and Kayla Kinneen Email: kkinneen@matsugov.us

See attached Advertisement

Requested by: _____
 Emailed: _____ Diskette: _____

Approved by: _____
 Date: _____

From: [Peggy Horton](#)
To: [Ben Borg](#)
Cc: [Petra Albecker \(petra.albecker@frontiersman.com\)](mailto:petra.albecker@frontiersman.com); [Lacie Olivieri](#); [Kayla Kinneen](#)
Subject: MSB Page Ad: Mass Excavation CUP
Date: Wednesday, October 16, 2024 11:17:00 AM
Attachments: [Newspaper Ad.DOCX](#)
[Ad Layout.pdf](#)
[Ad Request Form.pdf](#)

Greetings,

Please see the attached ad request, ad, and map for publication on October 23, 2024.

Thank you,

Peggy Horton

Current Planner

Matanuska-Susitna Borough

350 E. Dahlia Avenue

Palmer AK 99645

907-861-7862



Matanuska-Susitna Borough

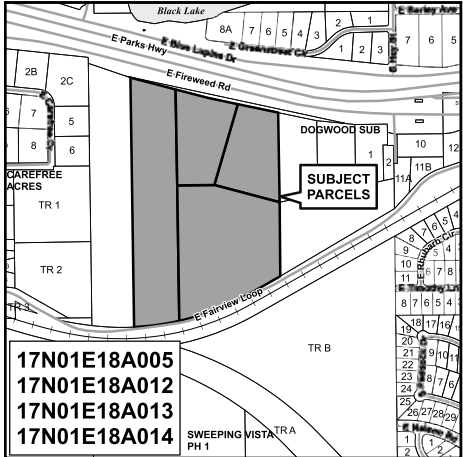
www.matsugov.us

PUBLIC HEARING

Mass Excavation Inc. applied for an Administrative Permit under MSB 17.30 – Earth Materials Extraction. The Administrative Permit would allow for the removal of approximately 350,000 cubic yards of sand, gravel, and rock for two years starting in April 2025. The site is located between East Fireweed Road and East Fairview Loop, Tax ID#s 17N01E18A004, 17N01E18A012, 17N01E18A013, & 17N01E18A014.

The Matanuska-Susitna Borough Planning Director will conduct a public hearing concerning the application on **Thursday, November 21, 2024**, at 9:00 a.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Director, and you are invited to attend.

Application materials may be viewed online at www.matsugov.us by clicking on "All Public Notices & Announcements." For additional information, you may contact Peggy Horton, Current Planner, by



phone at 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us, or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

The public may provide verbal testimony at the meeting or telephonically by calling 1-855-290-3803. In order to be eligible to file an appeal from a decision of the Planning Director, a person must be designated an interested party. See MSB 15.39.010 for the definition of an interested party. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before **November 8, 2024**, and will be included in the Planning Director packet. Please be advised that comments received from the public after that date will not be included in the staff report, but will be provided to the Director at the meeting.

Publish Date: October 23, 2024

1024-27

ABBREVIATED PLAT AGENDA

CONFERENCE ROOM 110
350 EAST DAHLIA AVENUE, PALMER

REGULAR MEETING

8:30 A.M.

October 30, 2024

- A. **LAZY SLUMBER:** The request is to create two lots from Parcel I-1, MSB Waiver 83-108-PWm, to be known as **LAZY SLUMBER**, containing 12.08 acres +/- . The parcel is located directly north and directly east of N. Slumber Drive, east of the Matanuska River, and west of N. Wolverine Road (Tax ID# 18N02E22D010); within the SE 1/4 of Section 22, Township 18 North, Range 02 East, Seward Meridian, Alaska. The subject property is in the Lazy Mountain Community Council and Assembly District #1. **Advertising for the case scheduled for October 9, 2024 did not appear in the local newspaper as required by state statute and borough code.** (Petitioner/Owner: Eron Singleton, Staff: Natasha Heindel, Case #2024-108)
- B. **FISHHOOK AIRSTREAM:** The request is to create two lots from Tax Parcel B6 (MSB Waiver 75-72), (Tax ID 18N02E29B006) to be known as **FISHHOOK AIRSTREAM**, containing 11.90 acres +/- . The property is located directly south of N. Palmer-Fishhook Road, west of N. Glenn Highway, and east of N. Moffit Road; within the NW 1/4 Section 29, Township 18 North, Range 02 East, Seward Meridian, Alaska. In the Farm Loop Community Council and Assembly District 2. **Advertising for the case scheduled for October 9, 2024 did not appear in the local newspaper as required by state statute and borough code.** (Petitioner/Owner: Clyde & Peggy Lee, Staff: Chris Curlin, Case #2024-109)
- C. **KERTTULA SUBDIVISION:** The request is to create four tracts from Parcel B, MSB Waiver #83-97, Recorded as 83-210w excepting that portion deeded to the State of Alaska Department of Transportation and Public Facilities July 21, 2017, recorded as 2017-011841-0, to be known as **KERTTULA SUBDIVISION**, containing 47.342 acres +/- . The property is located east of S. Felton Street, south of E. Palmer Wasilla Highway, and directly west of S. Glenn Highway (Tax ID #17N02E05D012); within the SE 1/4 Section 05, Township 17 North, Range 02 East, Seward Meridian, Alaska. In the City of Palmer and in Assembly District #2. (Petitioner/Owner: Kerttula Joint Revocable Trust, Staff: Matthew Goddard, Case #2024-117)
- D. **TEELING:** The request is to create three lots from Tract #1 and #2, MSB Waiver 86-62-PWm, to be known as **TEELING**, containing 8.5 acres +/- . The subject property is located directly west of N. Wolverine Road, and directly north of E. Teeling Circle (Tax ID#s 18N02E22A009/A010); within Section 22, Township 18 North, Range 02 East, Seward Meridian, Alaska. In the Lazy Mountain Community Council and Assembly District #1. (Petitioner/Owner: Joseph & Tilaundia Hale, Staff: Natasha Heindel, Case #2024-118)

Publish Date: October 23, 2024

1024-28



Edna DeVries, Mayor
(907) 861-8682 - Work
(907) 795-8133 - Cell
Edna.DeVries@matsugov.us

Tim Hale, #1
(907) 590-8243
TimHaleDistrict1@gmail.com

Stephanie Nowers, #2
(907) 831-6299
StephanieNowersDistrict2@gmail.com

Dee McKee, #3
(907) 373-3630
Dee.McKee@matsugov.us

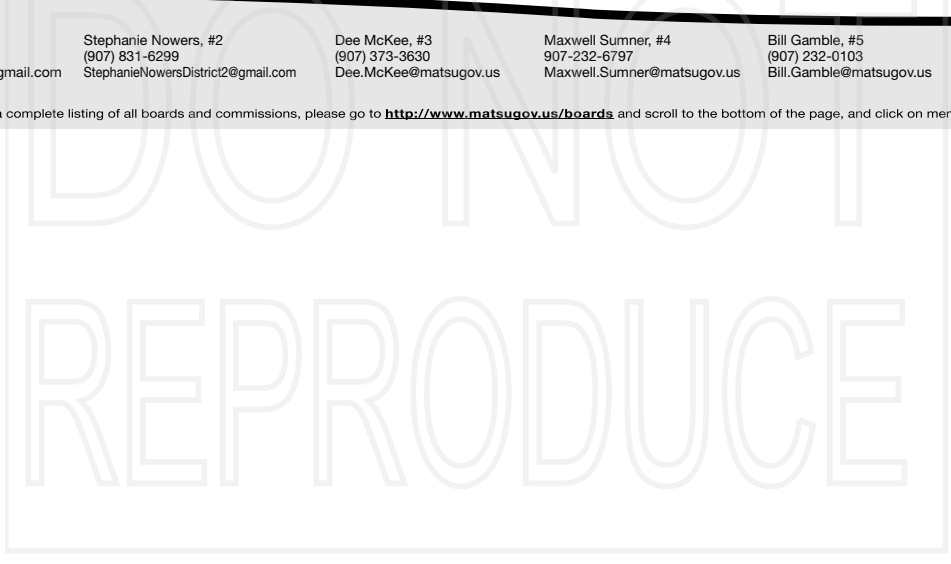
Maxwell Sumner, #4
907-232-6797
Maxwell.Sumner@matsugov.us

Bill Gamble, #5
(907) 232-0103
Bill.Gamble@matsugov.us

Dmitri Fonov, #6
(907)861-8546
fonov@matsugov.us

Ron Bernier, #7
(907) 354-7877
Ron.Bernier@matsugov.us

To see a complete listing of all boards and commissions, please go to <http://www.matsugov.us/boards> and scroll to the bottom of the page, and click on membership.



Public Notice > MSB 17.30 Administrative Permit for Earth Materials Extraction Activities

Notice Type Public Notice




Mass Excavation Inc. applied for an Administrative Permit under MSB 17.30 – Earth Materials Extraction Activities. The Administrative Permit would allow for the removal of approximately 350,000 cubic yards of sand, gravel, and rock for two years starting in April 2025. The site is located between East Fireweed Road and East Fairview Loop, Tax ID#s 17N01E18A004, 17N01E18A012, 17N01E18A013, & 17N01E18A014.

The Matanuska-Susitna Borough Planning Director will conduct a public hearing concerning the application on **Thursday, November 21, 2024**, at 9:00 a.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Director, and you are invited to attend.

Application materials may be viewed online at www.matsugov.us by clicking on “All Public Notices & Announcements.” For additional information, you may contact Peggy Horton, Current Planner, by phone at 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us, or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

The public may provide verbal testimony at the meeting or telephonically by calling 1-855-290-3803. In order to be eligible to file an appeal from a decision of the Planning Director, a person must be designated an interested party. See MSB 15.39.010 for the definition of an interested party. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk's office, and at various libraries within the borough.

Comments are due on or before **November 8, 2024**, and will be included in the Planning Director packet. Please be advised that comments received from the public after that date will not be included in the staff report, but will be provided to the Director at the meeting.

Effective Date
Oct 21, 2024
Tax IDs
17N01E18A014
Documents
Mass X CUP Application 
Vicinity Map 
Administrative Hearing Agenda 

From: [Peggy Horton](#)
To: [White, Ben M \(DOT\)](#); [Huling, Kristina N \(DOT\)](#); [Tyler Hylton \(kyler.hylton@alaska.gov\)](#); [dnr.scro@alaska.gov](#); [colton.percy@alaska.gov](#); [Sarah Myers \(sarah.myers@alaska.gov\)](#); [roderj@akrr.com](#); [dueberk@akrr.com](#); [msb.hpc@gmail.com](#); [MEA ROW - MEA \(mearow@mea.coop\)](#); [Enstar ROW \(row@enstarnaturalgas.com\)](#); [Right of Way Dept.](#); [GCI ROW \(ospdesign@gci.com\)](#); [Fire Code](#); [Land Management](#); [regpagemaster@usace.army.mil](#); [Tom Adams](#); [Brad Sworts](#); [Daniel Dahms](#); [Tammy Simmons](#); [Jamie Taylor](#); [Katrina Kline](#); [Alex Strawn](#); [Planning](#); [Fred Wagner](#); [Permit Center](#); [Jason Ortiz](#); [Michelle Olsen](#); [Taunnie Boothby](#); [John Aschenbrenner](#); [Dolores McKee](#); [council@gatewaycommunitycouncil.org](#); [mdemp1776ctzn@gmail.com](#); [Gateway Community Council](#); [Tim Alley \(talley@tbca.com\)](#); [sandytraini@hotmail.com](#); [Dan Tucker](#); [lisahak@duck.com](#)
Cc: [Rick Benedict](#)
Subject: Request for Comments for Mass Excavation Fairview Loop Earth Material Excavation CUP
Date: Monday, October 21, 2024 9:02:00 AM

Good Morning,

Mass Excavation Inc. applied for an Administrative Permit under MSB 17.30 – Earth Materials Extraction Activities. The Administrative Permit would allow for the removal of approximately 350,000 cubic yards of sand, gravel, and rock for two years starting in May 2025. The site is located between East Fireweed Road and East Fairview Loop, Tax ID#s 17N01E18A004, 17N01E18A012, 17N01E18A013, & 17N01E18A014. **RSA: 9**

The Planning Director will conduct a public hearing on this request on November 21, 2024, at 9 a.m. in the Assembly Chambers.

Application materials may be viewed online at www.matsugov.us by clicking on ‘All Public Notices & Announcements’. A direct link to the application material is here:

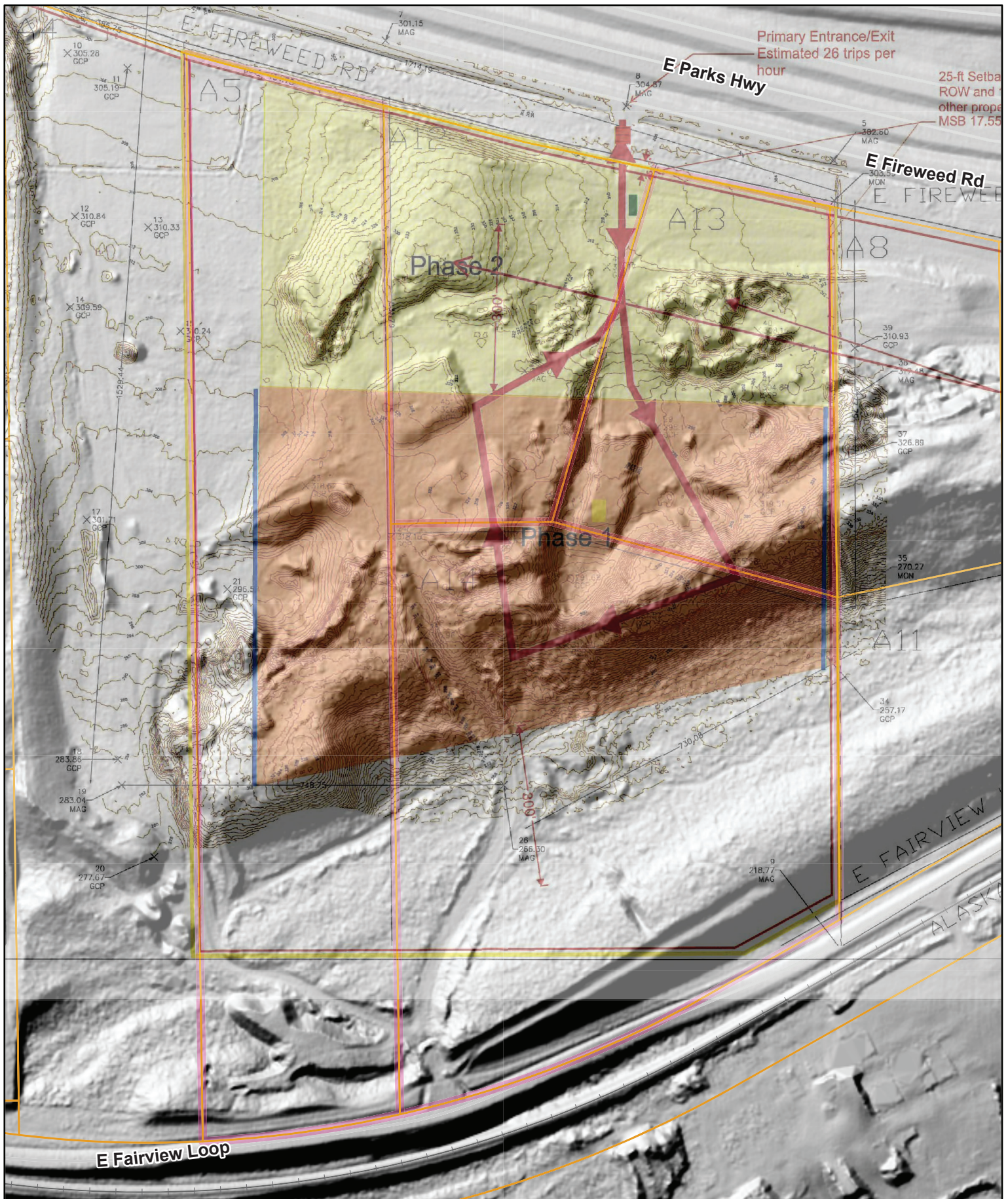
[Matanuska-Susitna Borough - MSB 17.30 Administrative Permit for Earth Materials Extraction Activities](#)

We are requesting comments at this time. Comments are due on or before **November 8, 2024**, and will be included in the packet for the Planning Director’s review and information. Please be advised that comments received after that date will not be included in the staff report but will be given to the Planning Director on the day of the hearing. Thank you for your review.

Regards,

Peggy Horton
Matanuska-Susitna Borough
Development Services Division
Current Planner
907-861-7862

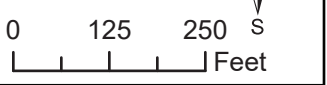
MAPS



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2019 Hillshade w/ Site Plan Mass Excavation Fireweed Road



Legend

DEC - Drinking Water Program

Alaska DEC Public Water System Sources

- Community Water System (CWS)
- Transient Non-Community (TNC)
- Non-Transient/Non-Community (NTNC)

Number of features

- > 2
- 2
- 2
- 2
- < 2

Alaska DEC Public Water System Source Minimum Required Separation Distances

PWS Separation Distance 100 ft



PWS Separation Distance 200 ft



Alaska DEC Drinking Water Protection Areas

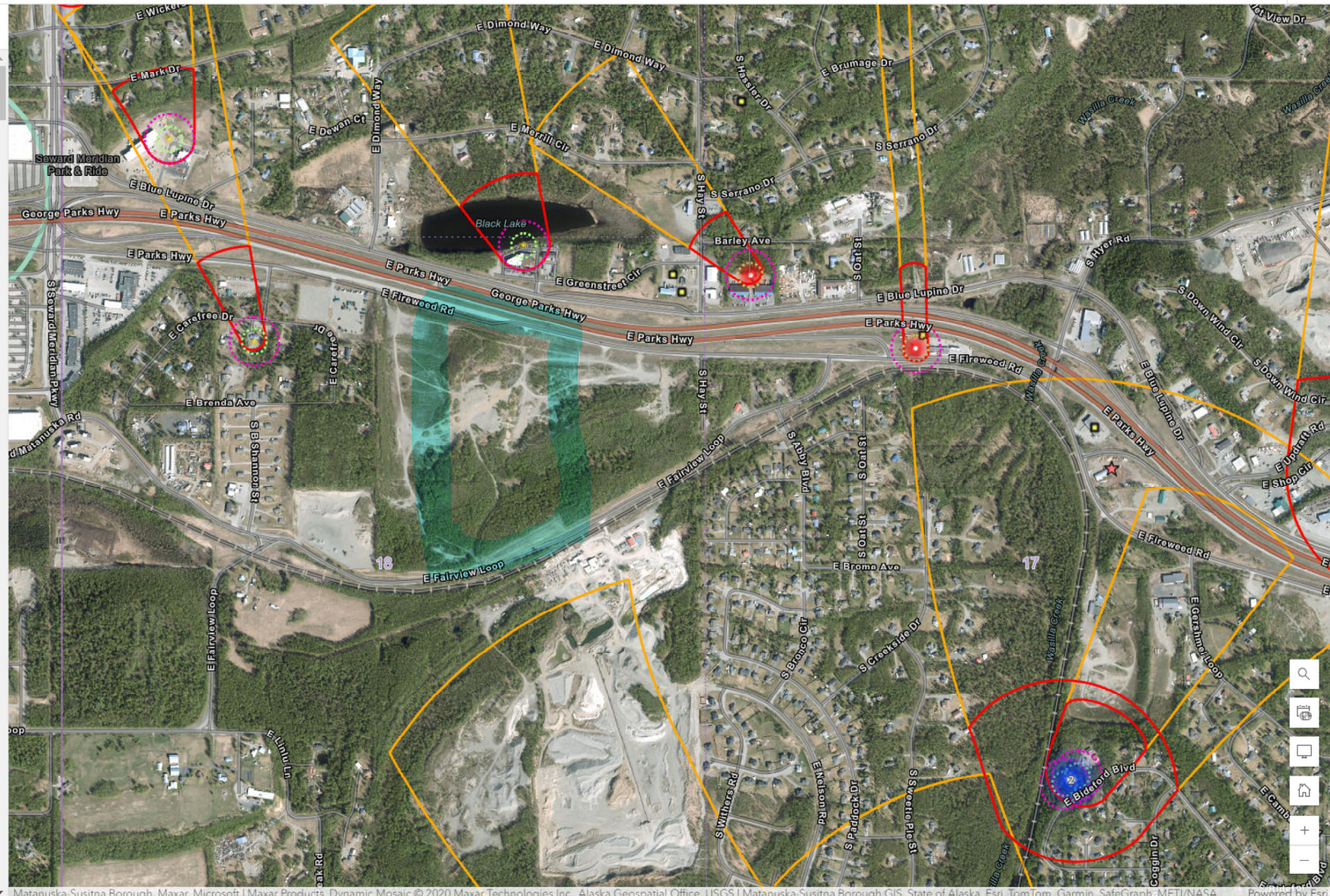
Zone A (GW-Several Months Time of Travel or SW 1000 ft buffer)

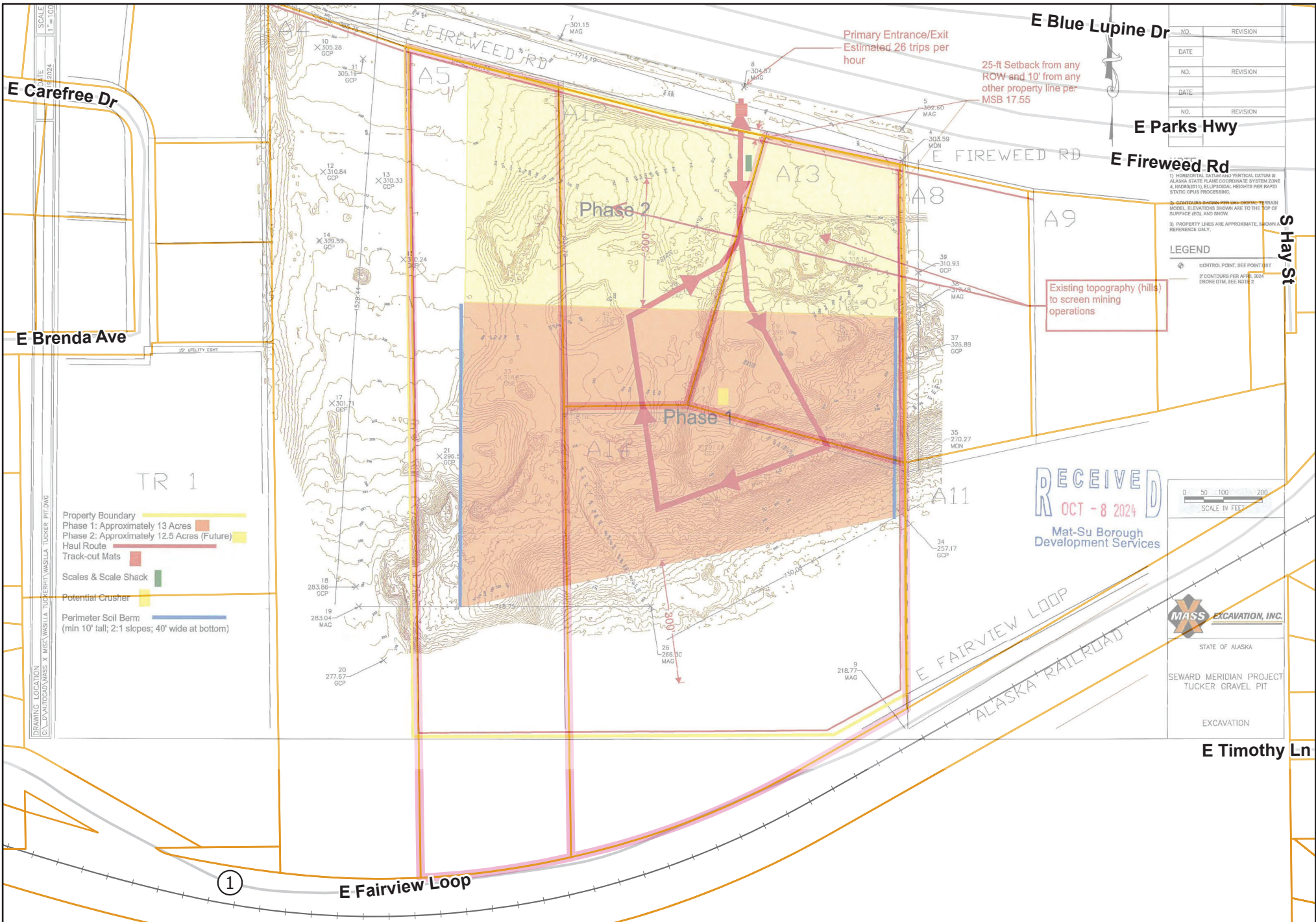


Zone B (GW-2 Yr Time of Travel or SW-1 mile buffer)



Zone C Surface Water (Watershed Boundary)





NO.	REVISION

1) HORIZONTAL DATUM AND VERTICAL DATUM IS ALASKA STATE PLANE COORDINATE SYSTEM ZONE 4 (NAD83/11) ELLIPSOID HEIGHTS PER RAMPD STATIC GPS PROCESSING.

2) ELEVATIONS SHOWN PER HAY DRIFT TERRAIN MODEL ELEVATIONS SHOWN ARE TO THE TOP OF SURFACE (EGS) AND SNOW.

3) PROPERTY LINES ARE APPROXIMATE, SHOWN A REFERENCE ONLY.

LEGEND

- CONTROL POINT, SEE POINT LIST
- 7' CONTOURS PER APRIL 2024 DRONE DTM, SEE NOTE 2

Existing topography (hills) to screen mining operations

RECEIVED
OCT - 8 2024
Mat-Su Borough
Development Services



MASS EXCAVATION, INC.

STATE OF ALASKA

SEWARD MERIDIAN PROJECT
TUCKER GRAVEL PIT

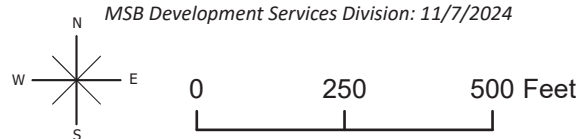
EXCAVATION

- Property Boundary
- Phase 1: Approximately 13 Acres
- Phase 2: Approximately 12.5 Acres (Future)
- Haul Route
- Track-out Mats
- Scales & Scale Shack
- Potential Crusher
- Perimeter Soil Berm (min 10' tall; 2:1 slopes; 40' wide at bottom)

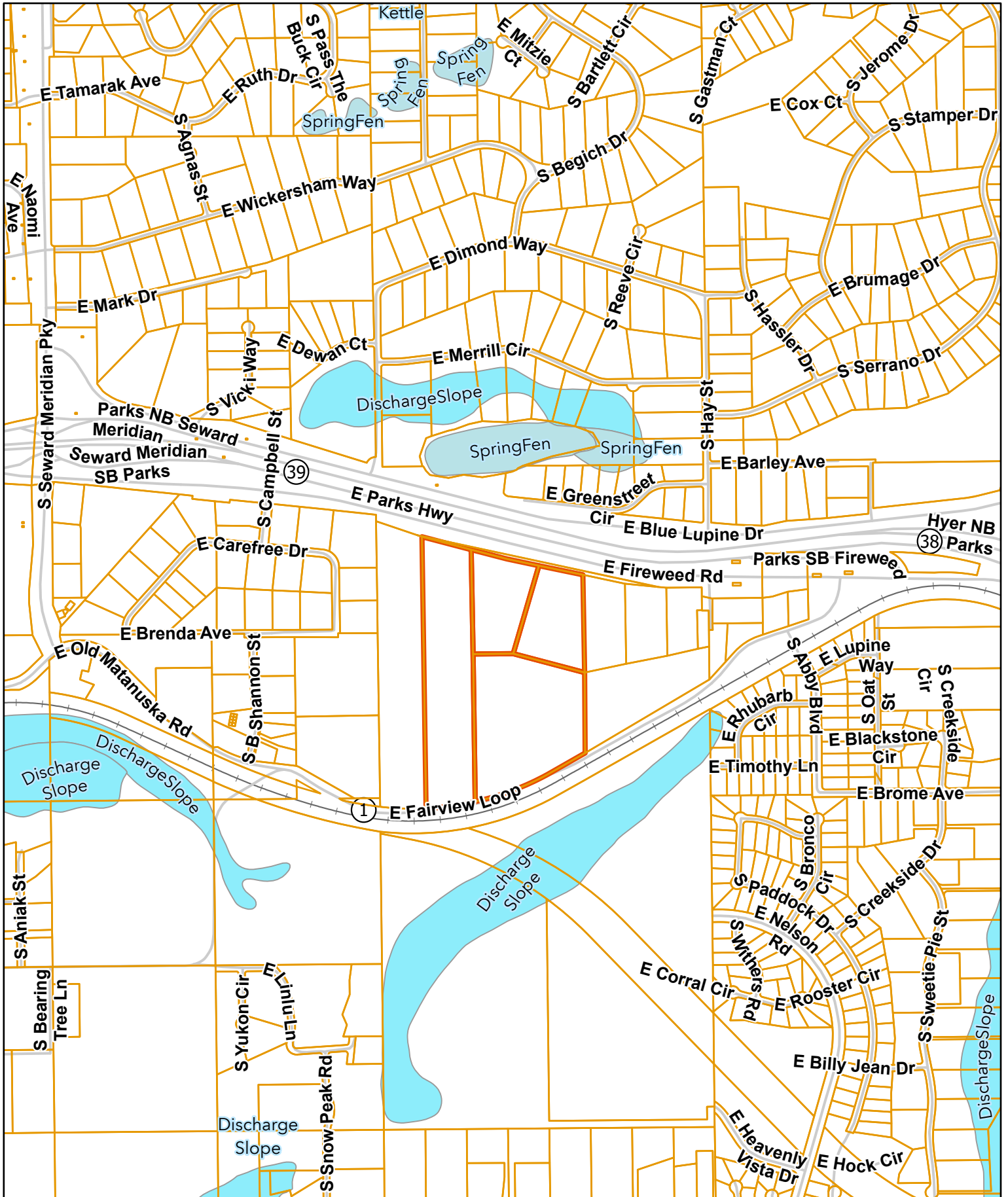
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Site Plan Overlay for Mass Excavation Fireweed Road



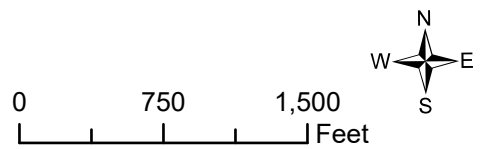
MSB Development Services Division: 11/7/2024



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Cook Inlet Wetlands surrounding Mass Excavation CUP



Site Visit Photos

**Photographs taken during the
November 15, 2024
site visit**

November 15, 2024 Site Visit Photos Mass Excavation Fireweed Road Earth Material Extraction



Looking south at the Parks Hwy



Looking north to the lower elevation where the extraction will take place.



Within the extraction area, looking south



Within the extraction area, looking west



Looking south within the extraction area at the berms along the west and south sides



Berm along the west side of the extraction site leading up to the next picture



Sandy material along the west side of the property



Sandy material along the west side of the property



Material site further west of the property, still within the extraction area



Material site further west of the property, still within the extraction area



Material site further west of the property, still within the extraction area



Looking west into a former material site further west of the property, still within the extraction area



Looking west into a former material site further west of the property, still within the extraction area



Looking at the Parks Highway from the southern edge of the extraction area. The access road will contain the scale house and scales.



The blue arrow indicates the marker of the southern edge of the extraction area on the west side of the access to the extraction area.



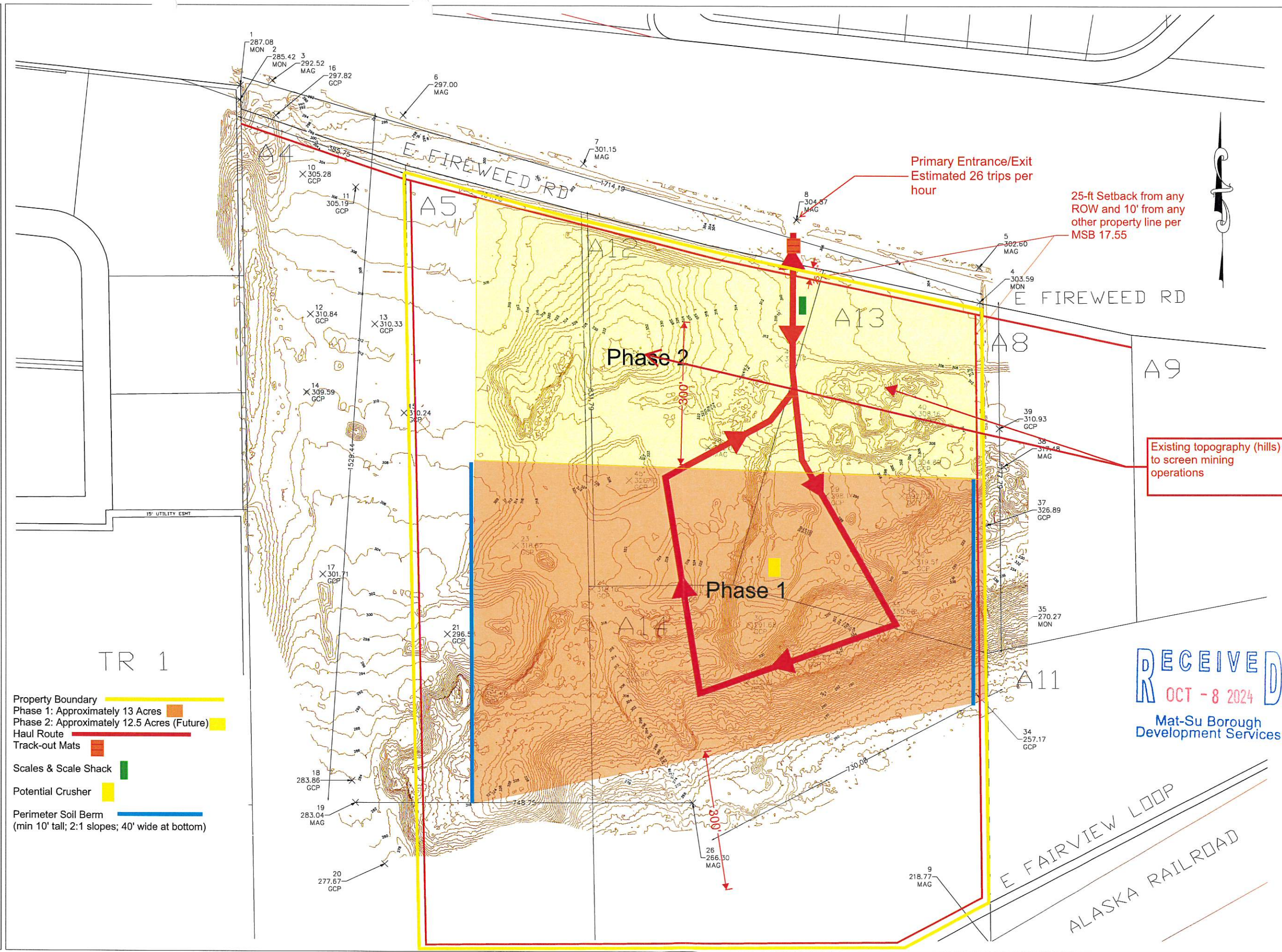
Looking south into the extraction area



The blue arrow points to the marker for the southern edge of the extraction area on the west side of the access to the extraction area.

SITE PLAN

DRAWING LOCATION: C:\D\AUTOCAD\MASS X MISC\WASILLA TUCKERPIT\WASILLA TUCKER PIT.DWG
 DESIGNED BY: TAL M
 DRAFTED BY:
 SCALE: 1" = 100'
 DATE: 4.19.2024



- TR 1
- Property Boundary
 - Phase 1: Approximately 13 Acres
 - Phase 2: Approximately 12.5 Acres (Future)
 - Haul Route
 - Track-out Mats
 - Scales & Scale Shack
 - Potential Crusher
 - Perimeter Soil Berm (min 10' tall; 2:1 slopes; 40' wide at bottom)

SHEET NO.	TOTAL SHEETS
1	—
STATE	YEAR
ALASKA	2024
PROJECT DESIGNATION	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

NOTES

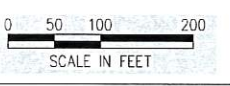
- HORIZONTAL DATUM AND VERTICAL DATUM IS ALASKA STATE PLANE COORDINATE SYSTEM ZONE 4, NAD83(2011), ELLIPSOIDAL HEIGHTS PER RAPID STATIC OPUS PROCESSING.
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- PROPERTY LINES ARE APPROXIMATE, SHOWN AS REFERENCE ONLY.

- LEGEND**
- CONTROL POINT, SEE POINT LIST
 - Z CONTOURS PER APRIL, 2024 DRONE DTM, SEE NOTE 2

RECEIVED

OCT - 8 2024

Mat-Su Borough
Development Services



STATE OF ALASKA

SEWARD MERIDIAN PROJECT
TUCKER GRAVEL PIT

EXCAVATION

CORRESPONDENCE



MATANUSKA-SUSITNA BOROUGH
Planning and Land Use Department
Development Services Division
350 East Dahlia Avenue • Palmer, AK 99645
Phone (907) 861-7822
www.matsugov.us

July 22, 2024

Mass Excavation Inc.
Attn: Cody Troseth
PO Box 241093
Anchorage AK 99524

SUBJECT: Administrative Permit Application – Request for Additional Information
LOCATION: 4290, 4370, & 4480 E. Fireweed Road and 4401 E. Fairview Loop,
Tax ID #s 17N01E18A005, A012, A013, & A014

Dear Mr. Troseth,

Borough staff has reviewed the application material submitted on June 28, 2024, for an earth material extraction administrative permit under MSB 17.30 on the above-referenced property. It has been determined that the following information needs to be provided or clarified to process this request:

1. Item 2 on page 2 of the application asks for the total acreage of all parcels.
 - a. According to our information, the acreage is 53.92 for the four parcels included in the application.
2. The narrative suggests that the season concludes on November 15. Yet, it also notes that final extraction activities will conclude in December, during a period when operations are typically paused, which may lead to some confusion. The paragraph also states reclamation will be complete in December of the same year.
 - a. Review this paragraph to remove confusion.
 - b. Review MSB 17.28.067 for reclamation standards. Most gravel operations take longer than one month to complete the borough's reclamation requirements.
3. The item under site plan requirements on page 2 of the application asks for the identification of past and future phases of mining on the property. This is asking you to depict on the site plan, the location of the first area you will extract from, the second area, the third, and so on. This information is relevant to the reclamation plan. MSB 17.28.067(A)—Reclamation Standards requires all extraction operations to reclaim each phase of operation within four growing seasons of the phase being complete.
 - a. MSB 17.28.067(B) allows reclamation to be put off if the phases overlap. However, this does not prevent you from showing the phases on the site plan and describing them in the narrative.

- b. The application materials do not include Figures SD01 and SD02, proposed to show details for the phasing plan.
4. The site plan provided does not contain all the items listed on page 2 of the application. Multiple sheets can be used for the site plans to display the necessary items without overloading each sheet. Sample site plans are attached to this letter.
 - a. Provide a to-scale site plan showing those items listed on page 2 of the application form.
 - b. According to Page 3 of the narrative, the 25-foot setback will be observed. This setback applies to semi-permanent structures, such as scales, scale houses, processing equipment, crushers, office trailers, etc. These types of structures must meet the setbacks: 25' from all property lines. There are four separate properties within the excavation area.
 - i. Acknowledging the setbacks by showing them on the site plan would be helpful to the application.
 - ii. Whether setbacks are shown or not, indicate on the plan where the structures will be placed. This could be a general area outside of the setbacks or a specific location shown on the site plan.
 - c. According to Page 4, paragraph 4 of the narrative, the only area from which gravel and rock will be extracted is Area 1.
 - i. Suggest removing the black box surrounding the words Area 1 Mined Gravel. This boxed area on the site plan is about 2 acres, not the 13 acres described in the narrative.
5. The Other Uses On-Site section of the narrative states, “No conflicting uses are planned within or adjacent to the proposed gravel materials operation.”
 - a. This application item asks if there will be any other uses, conflicting or not, within the properties’ boundaries (see the definition of “site” in MSB 17.125).
6. Well logs provide information from a previous point in time and do not allow monitoring during the excavation operation.
 - a. Discuss how the operation will monitor the seasonal high water table to maintain a four-foot vertical separation as required by MSB 17.28.060(A)(7)(b). There are various ways to monitor the water table, such as installing monitoring wells or excavating test pits.
7. Cross-section drawings were not provided. See sample site plans with cross-sections attached.
 - a. Provide quantity estimates and current topographical information, such as cross-section drawings depicting the depth of excavation, slopes, and estimated final grade as required on page 2 of the application.
8. The Road and Access Plan on page 3 of the narrative indicates two approved access points for the operation from Fireweed Road.
 - a. The site plan shows one access point. However, the narrative states both accesses may be used.
 - b. Provide copies of ADOT-approved driveway permits for each access point because, according to the narrative, both may be used for this operation.

- c. Figure SD02 was missing from the application materials. This is important because it supposedly shows the haul routes, which are necessary for the application to be complete.
 - d. Convert tons to cubic yards for consistency within the application and because the code is written using that measurement.
- 9. Per MSB 17.28.060(A)(4), Visual Screening measures are required if operations are conducted within 300 feet of the property line.
 - a. Provide the distance from the mining area to the property boundaries.
 - b. Show the visual screening measures on the site plan as required on page 2 of the application.
 - c. Describe the type of visual screening measures, be it berms, natural vegetation, solid fences, walls, evergreen hedges, or other means. Visual screening can be provided by the existing topography occurring on the entire property, as long as it screens the operation from the existing uses of adjacent property.
 - d. Provide the dimensions of the berms, such as 10 feet tall and 40 feet wide at the base, with a slope of 1:2.
- 10. MSB 17.28.060(A)(5) requires erecting berms a minimum of ten feet in height between noise-generating equipment and adjacent uses.
 - a. Show the noise mitigation berms on the site plan as required on page 2 of the application.
 - b. Provide the berm's full dimensions.
- 11. The sixth paragraph of page 4 of the narrative describes the process for obtaining a case number from ADNR.
 - a. The paragraph includes a reference to email correspondence that was not provided.
 - b. Since the case number and ADNR's letter of acceptance are part of the application material, this paragraph is unnecessary.
- 12. The Reclamation Plan on pages 4 and 5 does not contain all the necessary information to address MSB Code provisions 17.28.063 & 17.28.067.
 - a. Explain what is meant by sequential reclamation of the lots?
 - b. Provide an updated reclamation plan addressing:
 - i. covering the disturbed areas with topsoil.
 - ii. Stabilizing and protecting surface areas against erosion.
 - iii. Reseeding of reclaimed areas.
- 13. Page 5 of the narrative, first paragraph, states, "The scope of the proposed mining activities on the subject property is exempt from the requirement for Reclamation Financial Assurance, specifically an Alaska Mining License does not apply."
 - a. An acceptance letter from DNR for your reclamation plan states that financial assurance is required, which conflicts with the narrative.
 - b. The requirement for providing Reclamation Financial Assurance is not tied to whether an Alaska Mining License is required.

14. To comply with MSB 17.30.055(A)(4), provide NOI for construction general permit or multi-sector general permit and stormwater pollution prevention plan.
 - a. At a minimum, provide a signed statement from a CESCL-certified individual providing information as to why either permit is not required.
15. Where will the water trucks fill their tanks? If this is in a creek, stream, or other waterbody, provide evidence of water use authorization from the State of Alaska.

When providing new or corrected information, please update the narrative and site plan(s) accordingly. Providing separate answers can lead to conflicting information within the packet for the Planning Commission members to sift through.

Once the required information has been submitted and determined to be complete, staff will continue processing the application. Staff will schedule the Planning Commission hearing approximately 30 days from the date a complete application is accepted. Thank you for your time and consideration on this matter.

Respectfully,

Peggy Horton

Peggy Horton,
Current Planner
Development Services Division
Matanuska-Susitna Borough
907-861-7862

Attachments:
Sample Site Plans

From: [Cody Troseth](#)
To: [Peggy Horton](#)
Subject: RE: Mass Excavation Application for Admin Earth Materials Excavation Permit
Date: Wednesday, July 24, 2024 11:30:29 AM
Attachments: [image001.png](#)
[Earth Materials Extraction Permit Application 7.24.2024.pdf](#)
[Mass X Fairview Park Property M&R Plan Rev.1.pdf](#)

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Peggy,

See attached and the shared folder below hopefully addressing all of your needs for this application. The shared folder contains site maps and other relevant permits, information.

<https://davisconstructors.sharefile.com/d-s867533df787d42a0ba4954522f600223>

Thanks,

Cody Troseth

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Tuesday, July 23, 2024 2:33 PM
To: Cody Troseth <codyt@massexcavation.com>
Subject: Mass Excavation Application for Admin Earth Materials Excavation Permit

Please see the attached Request for Additional Information.

Thank you for your time and patience,

Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862





MATANUSKA-SUSITNA BOROUGH
Planning and Land Use Department
Development Services Division
350 East Dahlia Avenue • Palmer, AK 99645
Phone (907) 861-7822
www.matsugov.us

~~July 22, 2024~~

8/15/2024 PH

Mass Excavation Inc.
Attn: Cody Troseth
PO Box 241093
Anchorage AK 99524

SUBJECT: Administrative Permit Application – Request for Additional Information
LOCATION: 4290, 4370, & 4480 E. Fireweed Road and 4401 E. Fairview Loop,
Tax ID #s 17N01E18A005, A012, A013, & A014

Dear Mr. Troseth,

Borough staff has reviewed the application material submitted on June 28, 2024, and July 24, 2024, for an earth material extraction administrative permit under MSB 17.30 on the above-referenced property. It has been determined that the following information needs to be provided or clarified to process this request:

1. I apologize for providing incorrect information earlier. The 25' setback mentioned in MSB 17.28.070 does not apply to earth material extraction administrative permits. The setbacks that do apply are specified in MSB 17.55 and are intended for permanent or semi-permanent structures, such as scales, scale houses, mobile or immobile screening plants, crushers, etc. According to the applicable regulation, the setbacks are 25 feet from any public right-of-way and 10 feet from any other property line. Please update your site plan.
2. You can choose to have the permit start date next year. Please indicate a date you would like to start the permit in the updated narrative. The permit length is a maximum of two years.
3. In the section about trips per peak hour. All trips are planned as in and out, so therefore, planned trips need to be an even number. The narrative states 25 trips during peak hours; please change this to an even number in your updated narrative.
4. The site plan and your narrative do not match. The site plan states 25 trucks per hour, and the narrative states 25 trips per hour.
5. On the site plan, you indicate track-out mats will be used at the entrance/exit point. Please explain what these are used for in your narrative.
6. Fix the lighting standards sentence #3 to read "...20 feet or 150 watts..." in your updated narrative.
7. MSB Code allows for the use of either existing topographic areas (working below the surrounding grade) or the construction of berms to provide for noise mitigation and to visually screen the operation from adjacent uses. I would advise you not to place a berm on your site

plan that you do not intend to construct. If you want to use existing topography to screen the operational activity from the adjoining parcels, then please state this in your narrative and show the locations on the site plan where that applies, providing topographic contours and elevations as evidence. If not using existing topography, then show on the site plan where berms will be placed and describe the height, width, and slope of these berms.

8. Provide clear and legible cross-section information. Provide a legible drawing of where the cross-section is taken and orient the drawing appropriately so the reader can understand what is being shown. I've included samples of cross-sections from other permit applications.
9. According to our phone conversation, Phase 2 is being used to contain the scales, scale house, and haul route to East Fireweed Road from Phase 1. You stated that gravel may also be stored or stockpiled within Phase 2. Storing and stockpiling are part of an earth material extraction activity because earth material moving equipment is involved, and that is a noisy operation. Therefore, noise mitigation and visual screening measures (as described above) are needed where these activities will take place.
10. Provide copies of the ADOT-approved driveway permit for the access point. If received prior to the public hearing, we can remove the condition that this needs to be obtained before operating.
11. According to our phone conversation, the owner does have some plans for the property, but they may still be up in the air. I suggested you add that the owner has plans for either residential or commercial development of this land in the future, and you agreed. Please place this in your updated narrative.
12. The application form states you will modify NOI AKR10H0K2 once the permit is approved. Updating the NOI to include this property and providing Planning Staff with a copy will be a condition of approval prior to operating from this site.

Once the required information has been submitted and determined to be complete, staff will continue processing the application. Staff will schedule the Planning Commission hearing approximately 30 days from the date a complete application is accepted. Thank you for your time and consideration on this matter.

Respectfully,

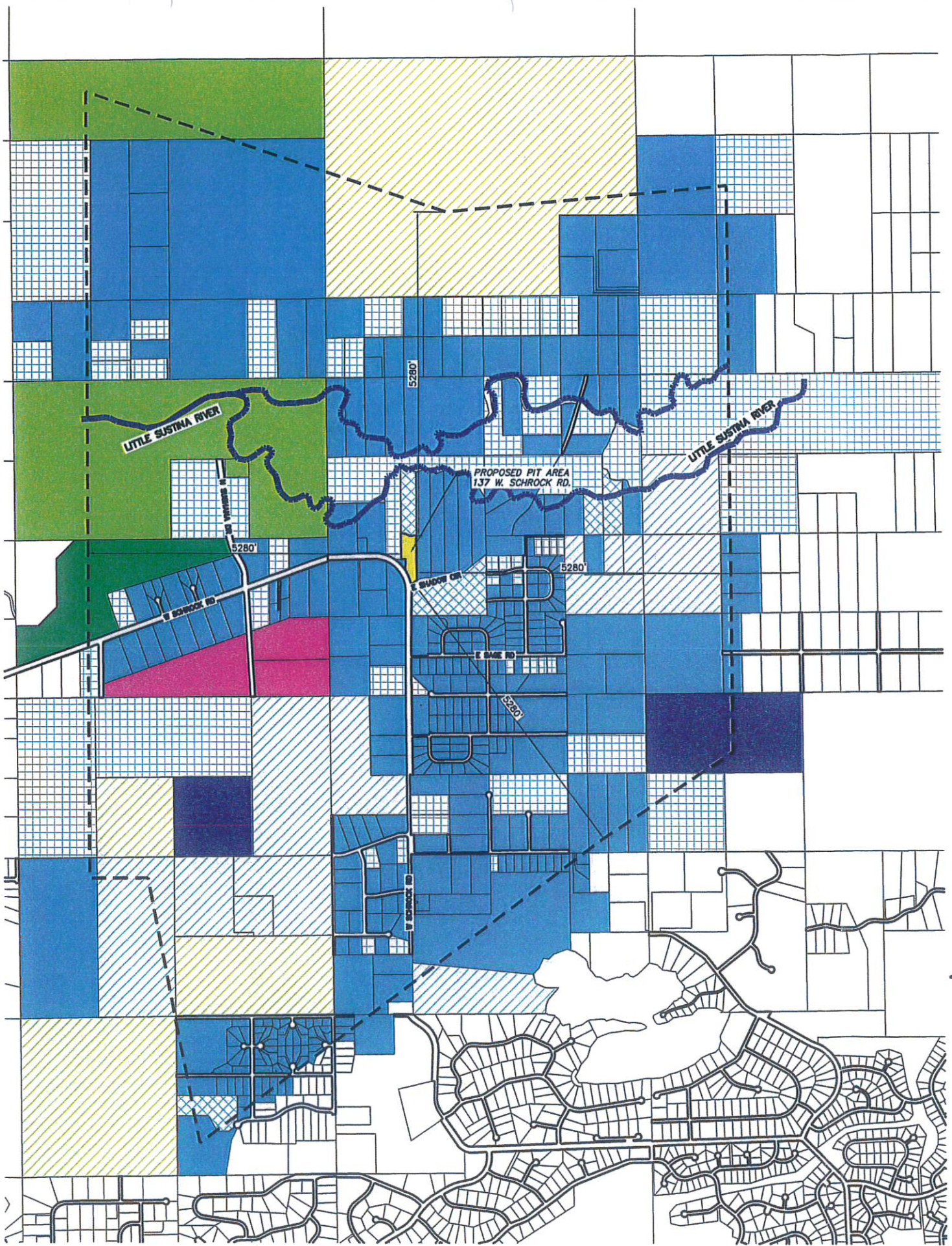
Peggy Horton

Peggy Horton,
Current Planner
Development Services Division
Matanuska-Susitna Borough
907-861-7862

Attachments:

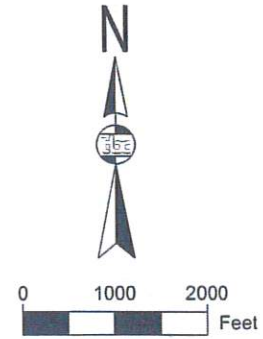
Sample Site Plans with cross-sections

FILE: W:\WASILLA\FILES\HARMON_GRAVEL_EXTRACTION\TBC_ACAD\SCHROCK_PARCELS.DWG DATE/TIME: 03/18/2021 LAYOUT: CBW CHECKED: TJA DRAFTED: CBW




PROPERTY USE/OWNERSHIP LEGEND

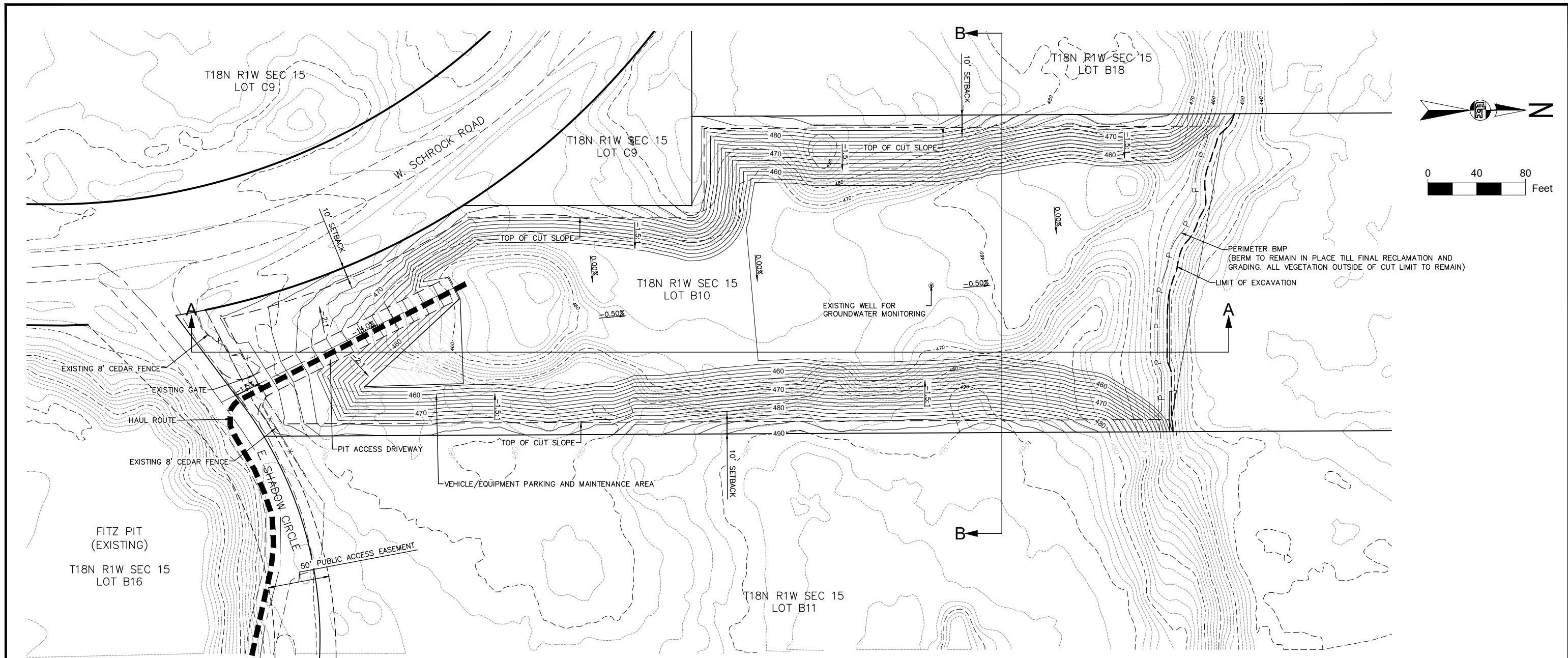
-  PRIVATE PROPERTY - SINGLE FAMILY RESIDENCE
-  PRIVATE PROPERTY - UNDEVELOPED
-  PRIVATE PROPERTY - AGRICULTURAL
-  PRIVATE PROPERTY - COMMERCIAL
-  PRIVATE PROPERTY - MAT-SU HEALTH FOUNDATION (UNDEVELOPED)
-  PRIVATE PROPERTY - ALASKA NATIVE CORPORATION (UNDEVELOPED)
-  PRIVATE/PUBLIC PROPERTY - PRIVATE OWNER WITH MAT-SU BOROUGH
-  PUBLIC PROPERTY - (UNDEVELOPED)
-  PUBLIC PROPERTY - UNIVERSITY OF ALASKA (UNDEVELOPED)
-  PUBLIC RIGHT-OF-WAY



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 JUL 13 2022
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 DEVELOPMENT SERVICES

 The Boutel Company, Inc. 601 E. 57th Place #102 Anchorage, AK, 99518 Ph. 907-522-6776 License No. AECC957 CONSULTANT	FITZ GRAVEL PIT WASILLA, ALASKA	
	137 W. SCHROCK RD. GRAVEL EXTRACTION VICINITY MAP, PROPERTY OWNERSHIP AND USES EXHIBIT	
HORIZ SCALE: 1"=2,000' VERT SCALE: N/A	DATE: 04/25/2022	SHEET 1 / 4




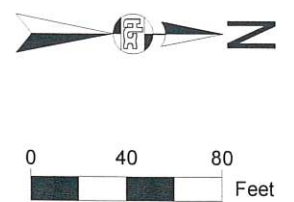
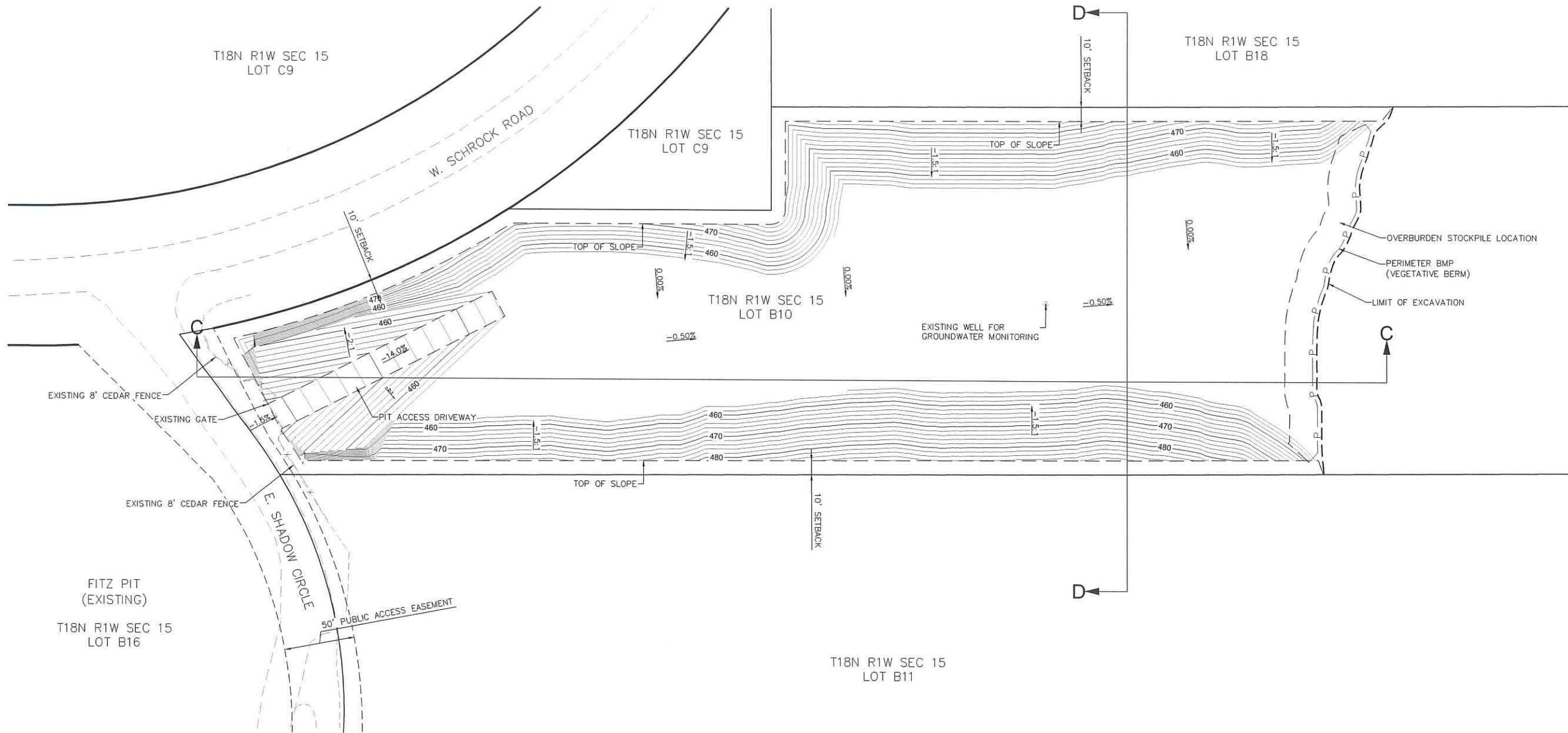
GRAVEL EXTRACTION NOTES:

1. FITZ GRAVEL PIT LOCATED WITHIN T18N R1W SEC 15 LOT B16 (524 SHADOW CIRCLE) OPERATES YEARLY BETWEEN APPROXIMATELY APRIL 1 TO NOVEMBER 30 DEPENDING ON SEASON WEIGHT RESTRICTIONS. HOURS OF OPERATION ARE TYPICALLY MONDAY THROUGH SATURDAY 7:00 AM TO 5:00 PM
2. THE PROPOSED EXTRACTION ON T18N R1W SEC 15 LOT B10 (137 W. SCHROCK ROAD) WILL BE UTILIZED AS A GRAVEL MATERIAL SOURCE ONLY. ALL EXCAVATED MATERIAL WILL BE HAULED TO THE EXISTING PIT (APPROXIMATELY 70 LOADS/1400 CY PER DAY MAX) FOR PROCESSING, SCALING AND SALES.
3. USE OF EQUIPMENT FOR EXTRACTION WILL BE LIMITED TO LOADERS AND/OR EXCAVATOR TO LOAD MATERIAL INTO TRUCKS TO BE HAULED TO THE EXISTING PIT. THE EXISTING TOPOGRAPHY IS MUCH LOWER THAN THE SURROUNDING PROPERTY ELEVATION WHICH WILL PROVIDE AMPLE SOUND BARRIER TO ADJACENT PROPERTIES.
4. THE PROPOSED EXTRACTION WILL PROVIDE APPROXIMATELY 50,000 CY OF GRAVEL MATERIAL. NO MORE THAN 7,000 CY OF MATERIAL WILL BE EXTRACTED YEARLY FOR ABOUT 10 YEARS.
5. A 10' SETBACK TO THE TOP OF SLOPE IS PROVIDED TO PROTECT NEIGHBORING PROPERTIES FROM SLOPE EROSION.

- 480 --- MAJOR CONTOUR (EXISTING)
- MINOR CONTOUR (EXISTING)
- 480 —— MAJOR CONTOUR (PROPOSED)
- MINOR CONTOUR (PROPOSED)
- LIMIT OF EXCAVATION
- TOP OF SLOPE (BREAKLINE)
- x — x — PROPOSED FENCE
- EDGE OF EXISTING PAVEMENT
- EDGE OF EXISTING GRAVEL ROAD
- PROPERTY LINE
- EASEMENT LINE
- P — P — PERIMETER BMP
- HAUL ROUTE

Rcvd 9-18-23 PH

 <p>The Boutet Company, Inc. 601 E. 57th Place #102 Anchorage, AK, 99518 Ph. 907-522-6776 License No. AECC957</p>	<p>FITZ GRAVEL PIT WASILLA, ALASKA</p>	
	<p>137 W. SCHROCK RD. GRAVEL EXTRACTION PIT EXCAVATION PLAN</p>	
<p>HORIZ SCALE: 1"=80' VERT SCALE: N/A</p>	<p>DATE: 09/18/2023</p>	<p>SHEET 2 / 4</p>



SITE RECLAMATION NOTES:


1. ALL SLOPES SHALL BE GRADED TO 1.5:1 MINIMUM (2:1 DESIRABLE) NOT TO EXCEED THE STABILITY OF THE SOIL TYPE.
2. SLOPES SHALL BE COVERED WITH 4" MINIMUM THICKNESS OF TOPSOIL AND HYDRAULICALLY SEEDED.
3. ALL SITE RECLAMATION SHALL BE COMPLETED WITHIN 4 GROWING SEASONS AFTER COMPLETION OF GRAVEL EXTRACTION.
4. ALL AREAS OF DISTURBANCE WILL BE COVERED WITH 4" OF TOPSOIL AND HYDROSEEDED.

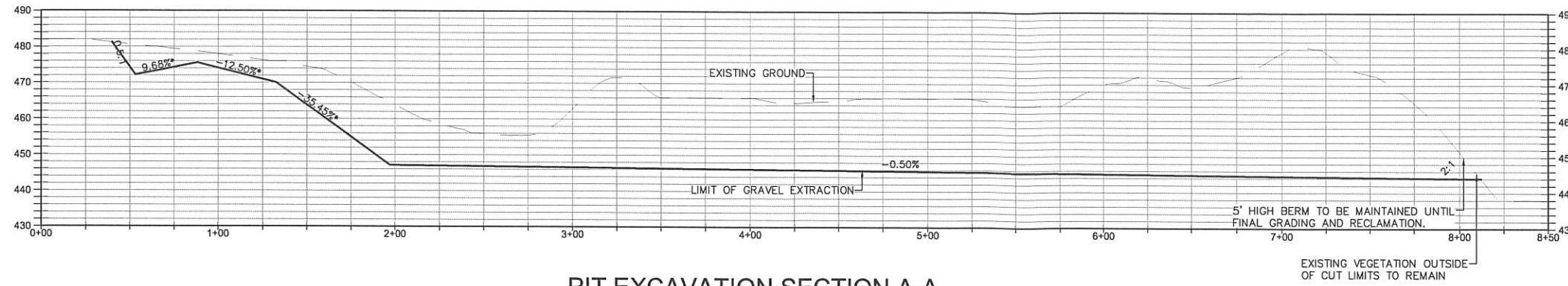
- 480 --- MAJOR CONTOUR (EXISTING)
- MINOR CONTOUR (EXISTING)
- 480 --- MAJOR CONTOUR (PROPOSED)
- MINOR CONTOUR (PROPOSED)
- LIMIT OF EXCAVATION
- TOP OF SLOPE (BREAKLINE)
- x --- x --- PROPOSED FENCE
- EDGE OF EXISTING PAVEMENT
- EDGE OF EXISTING GRAVEL ROAD
- PROPERTY LINE
- EASEMENT LINE
- P --- P --- PERIMETER BMP

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SEP 15 2023

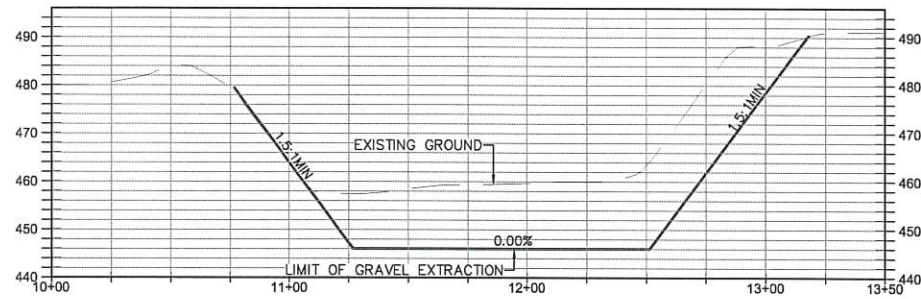
Mat-Su Borough
Development Services

 <small>The Boutet Company, Inc. 601 E. 57th Place #102 Anchorage, AK, 99518 Ph. 907-522-6776 License No. AECC957</small>	<small>FITZ GRAVEL PIT WASILLA, ALASKA</small>	
	137 W. SCHROCK RD. GRAVEL EXTRACTION PIT RECLAMATION PLAN	
<small>CONSULTANT</small>	<small>HORIZ SCALE: 1"=80' VERT SCALE: N/A</small>	<small>DATE: 09/15/2023</small>
		<small>SHEET 3 / 4</small>

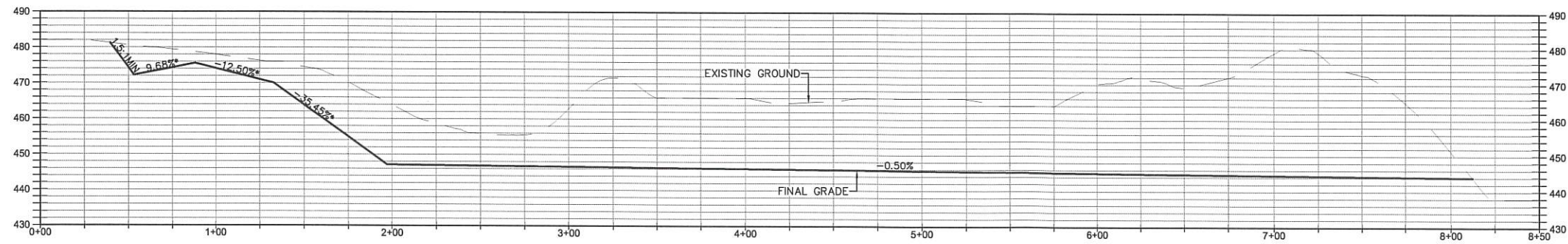


PIT EXCAVATION SECTION A-A

* CROSS SECTION GRADES SHOWN ARE BASED ON ORIENTATION OF THE CROSS SECTION.
ACCESS ROAD FORESLOPES WILL BE 2:1. ROAD CENTERLINE GRADE 14.0%.

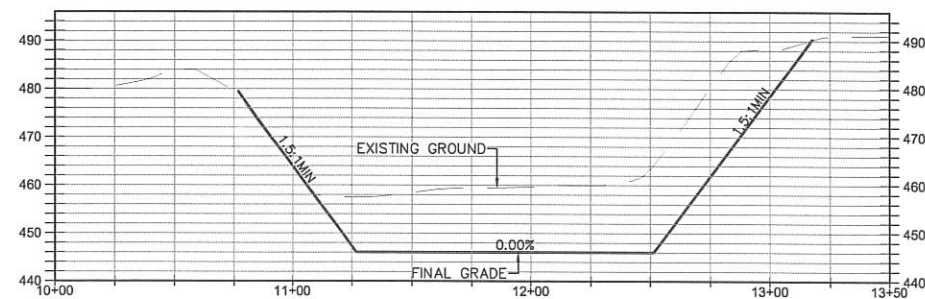


PIT EXCAVATION SECTION B-B




PIT RECLAMATION SECTION C-C

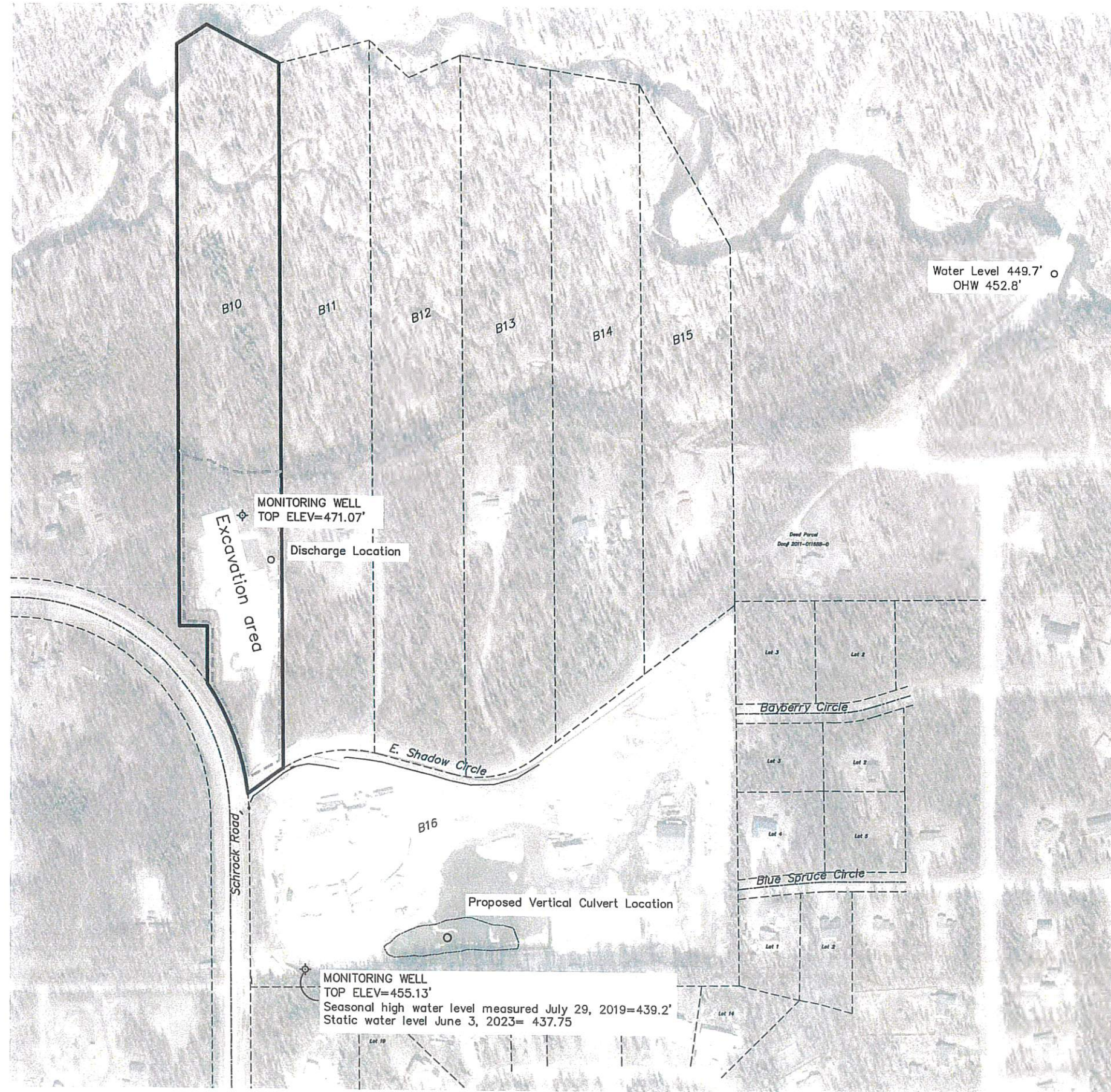
* CROSS SECTION GRADES SHOWN ARE BASED ON ORIENTATION OF THE CROSS SECTION.
ACCESS ROAD FORESLOPES WILL BE 2:1. ROAD CENTERLINE GRADE 14.0%.



PIT RECLAMATION SECTION D-D

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 The Boutet Company, Inc. 601 E. 57th Place #102 Anchorage, AK. 99518 Ph. 907-522-6776 License No. AECC957	FITZ GRAVEL PIT WASILLA, ALASKA	
	137 W. SCHROCK RD. GRAVEL EXTRACTION PIT CROSS SECTIONS	
CONSULTANT	HORZ SCALE: 1"=80' VERT SCALE: 1"=20'	DATE: 09/12/2023
		SHEET 4 / 4



Surrounding Area Detail

Scale 1"=300'

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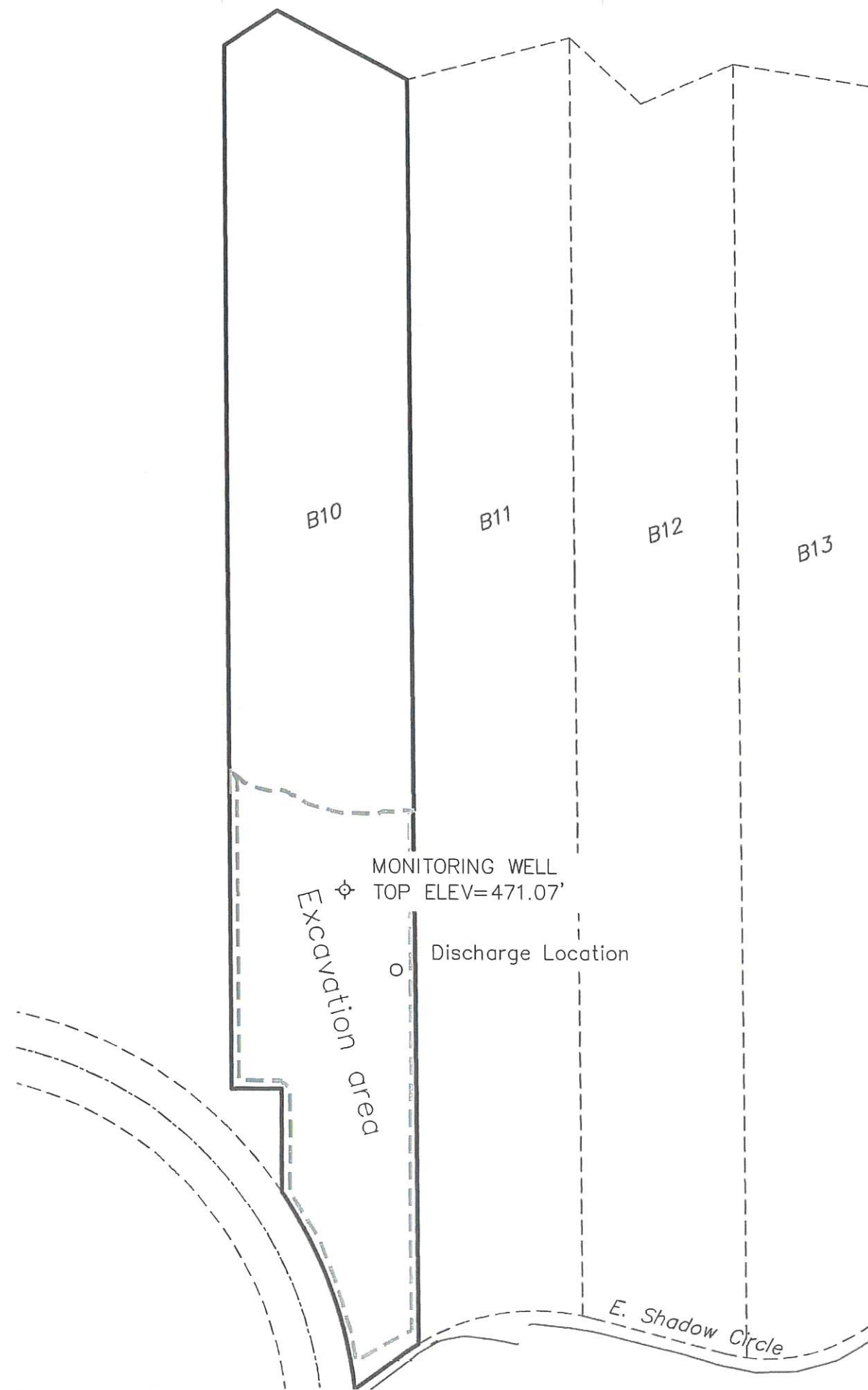
Mat-Su Borough Development Services Mat-Su Borough Development Services

Lot B10



Flood Zone Detail

Scale 1" = 200'

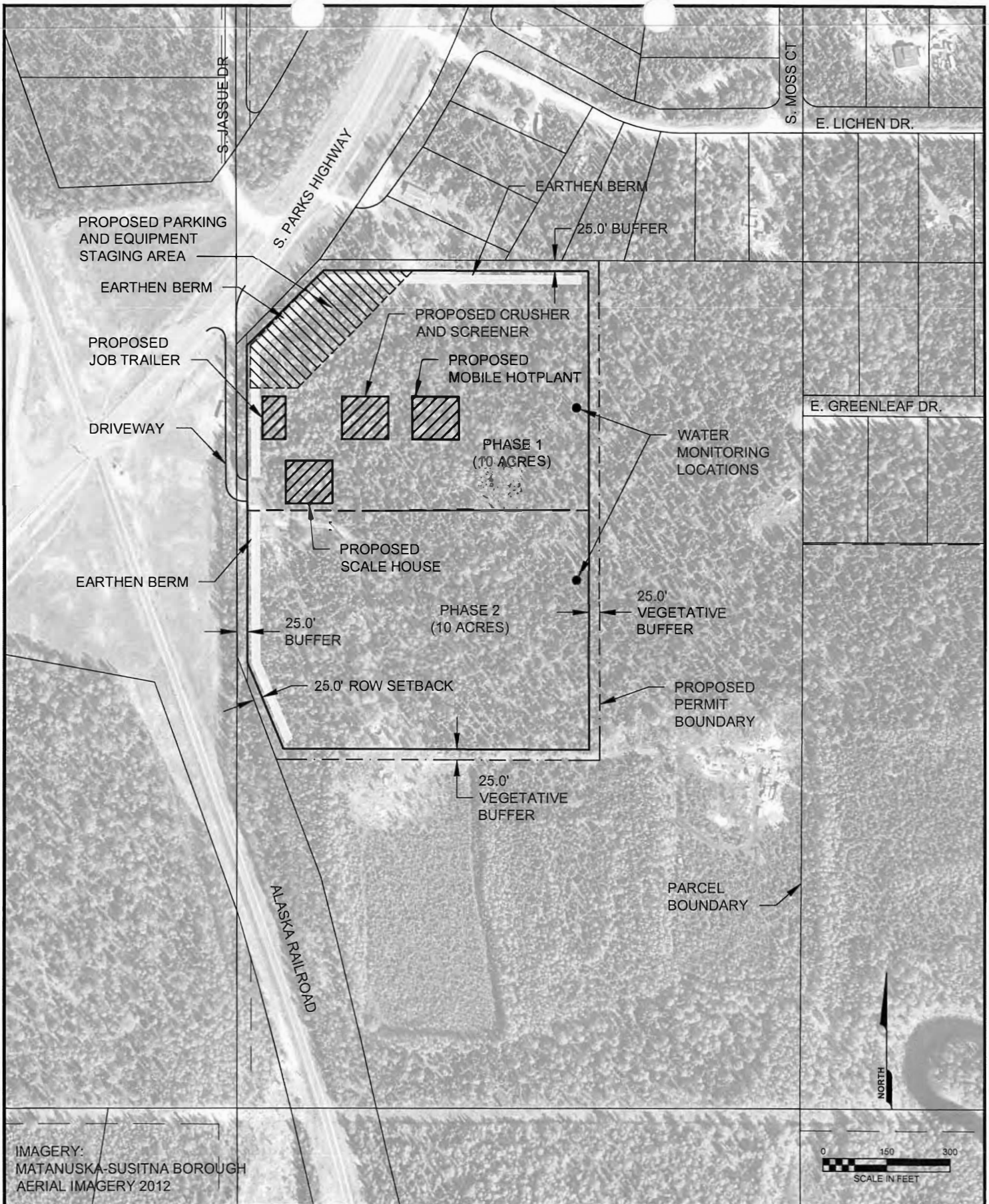


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AUG 16 2023
Mat-Su Borough
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JUL 5 2023
Mat-Su Borough
Development Services

Lot B10

FILE: M:\Environmental\Projects\30001.15 QAP Misc. Projects\Task 2 - Montana Creek\DRAWINGS\30001-02 Figure 2.dwg
 XREFS: 30001-02 BASE.DWG IMAGES: (DIESEL evaluation failed)
 PRINTED: 11/28/2016 15:44 sue.cross LAYOUT: Layout 1



IMAGERY:
 MATANUSKA-SUSITNA BOROUGH
 AERIAL IMAGERY 2012



8700 Arctic Spur Road • Anchorage, AK 99518 • (907) 877-8220

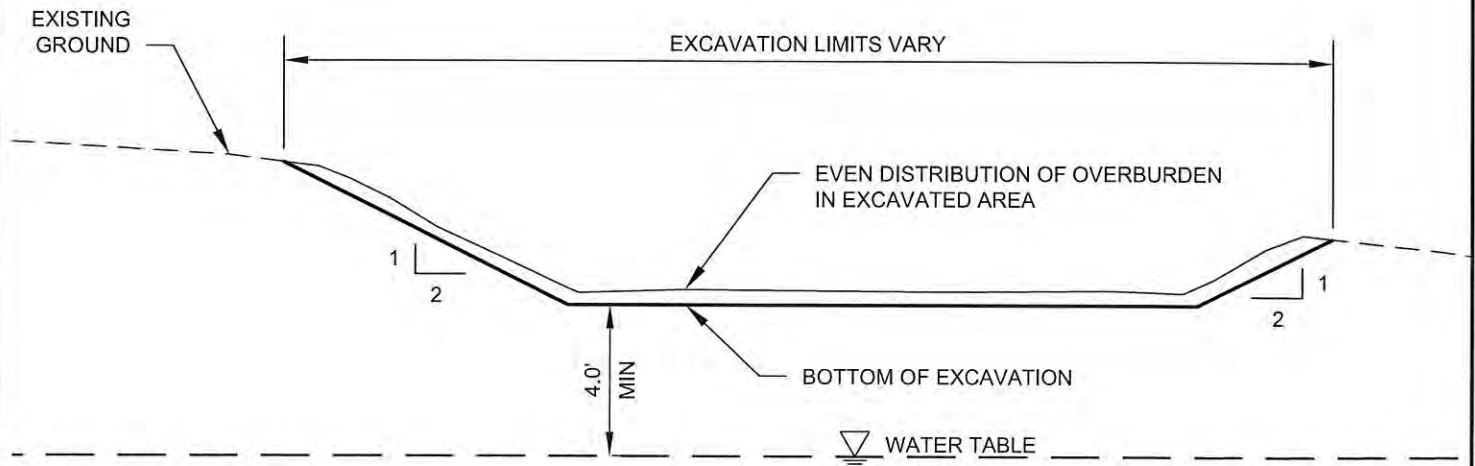
QAP MONTANA CREEK PIT CONDITIONAL USE PERMIT

SITE PLAN

MONTANA CREEK, ALASKA

DATE:	11/23/2016	DRAWN BY:	MMHN	SHEET:	FIGURE 2
SCALE:	AS SHOWN	CHECKED BY:	WM	JOB No:	30001.15

FILE: M:\Environmental\Projects\30001.15 QAP Misc. Projects\Task 2 - Montana Creek\DRAWINGS\30001-02 Figure 3.dwg
 PRINTED: 09/12/2016 16:58 margaret.hinz-neason LAYOUT: Layout 1 XREFS: None IMAGES: None



1
FIG 3

TYPICAL RECLAMATION SECTION

SCALE: N.T.S.



UMIAQ

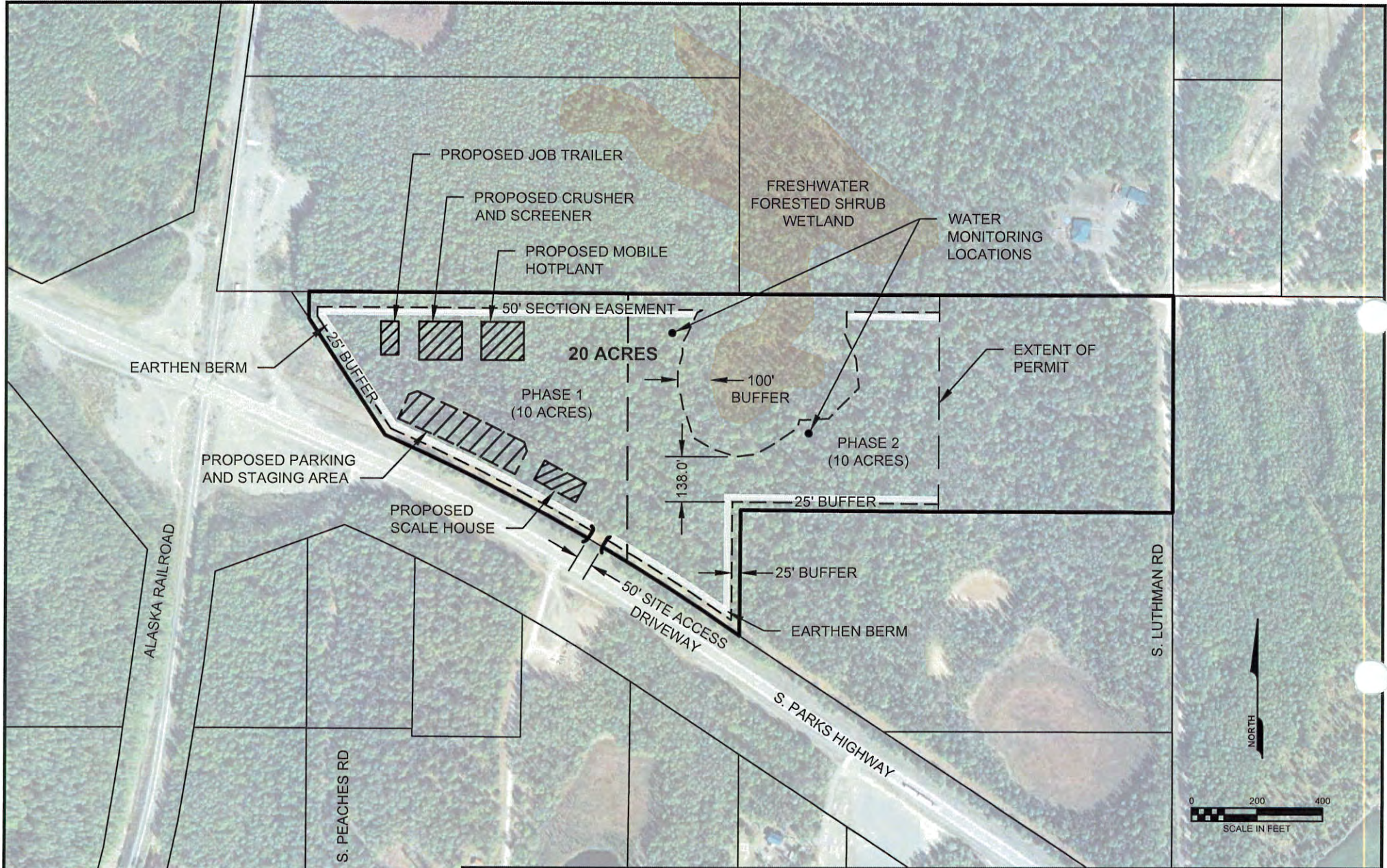
8700 Arctio Spur Road · Anchorage, AK 99518 · (907)877-8220

QAP MONTANA CREEK PIT CONDITIONAL USE PERMIT

RECLAMATION SECTION

MONTANA CREEK, ALASKA

DATE:	09/12/2016	DRAWN BY:	MMHN	SHEET:	FIGURE 3
SCALE:	N.T.S.	CHECKED BY:	WM	JOB No:	30001.15



QAP SUNSHINE PIT CONDITIONAL USE PERMIT

SITE PLAN

MONTANA, ALASKA

DATE: 11/23/2016	DRAWN BY: WDW	SHEET: FIGURE 2
SCALE: AS SHOWN	CHECKED BY: WM	JOB No: 30001.15

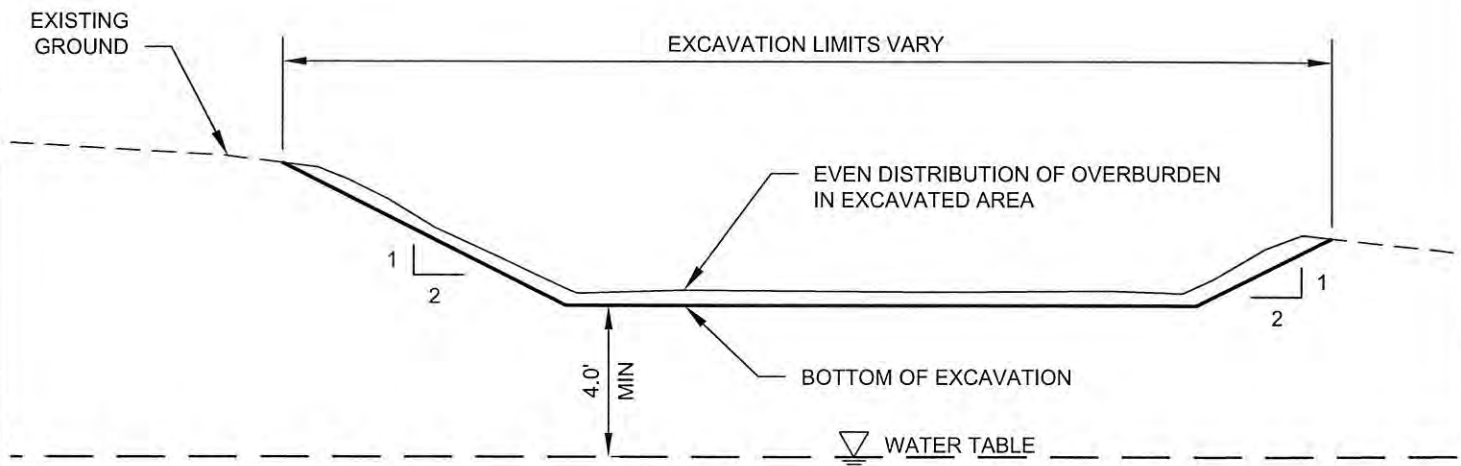


UMIAQ

6700 Arctic Spur Road - Anchorage, AK 99518 - (907) 877-8220

IMAGERY:
 MATANUSKA-SUSITNA BOROUGH
 AERIAL IMAGERY 2012

FILE: C:\Users\wes.williams\appdata\local\temp\AcPublish_7624\30001-03 Figure 3.dwg
 PRINTED: 09/12/2016 14:38 wes.williams LAYOUT: Layout 1 XREFS: None IMAGES: None



1 **TYPICAL RECLAMATION SECTION**
 FIG 3 SCALE: N.T.S.



8700 Arctic Spur Road - Anchorage, AK 99518 - (907)877-8220

QAP SUNSHINE PIT CONDITIONAL USE PERMIT
RECLAMATION SECTION
 MONTANA, ALASKA

DATE: 09/12/2016	DRAWN BY: WDW	SHEET: FIGURE 3
SCALE: N.T.S.	CHECKED BY: WM	JOB No: 30001.15

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JUL 25 2011

MATANUSKA-SUSITNA BOROUGH
DEVELOPMENT SERVICES



SDCS, LLC
STEINER DESIGN & CONSTRUCTION SERVICES, LLC
5900 W. DEWBERRY DR. PH: (907) 357-5609
WASILLA, AK 99623 FAX: (907) 357-5608

FOREMOST CONSTRUCTION
GRAVEL PIT DEVELOPMENT

TRACT A, XXXXX SUBDIVISION
WASILLA, ALASKA

BY	DATE	REVISIONS

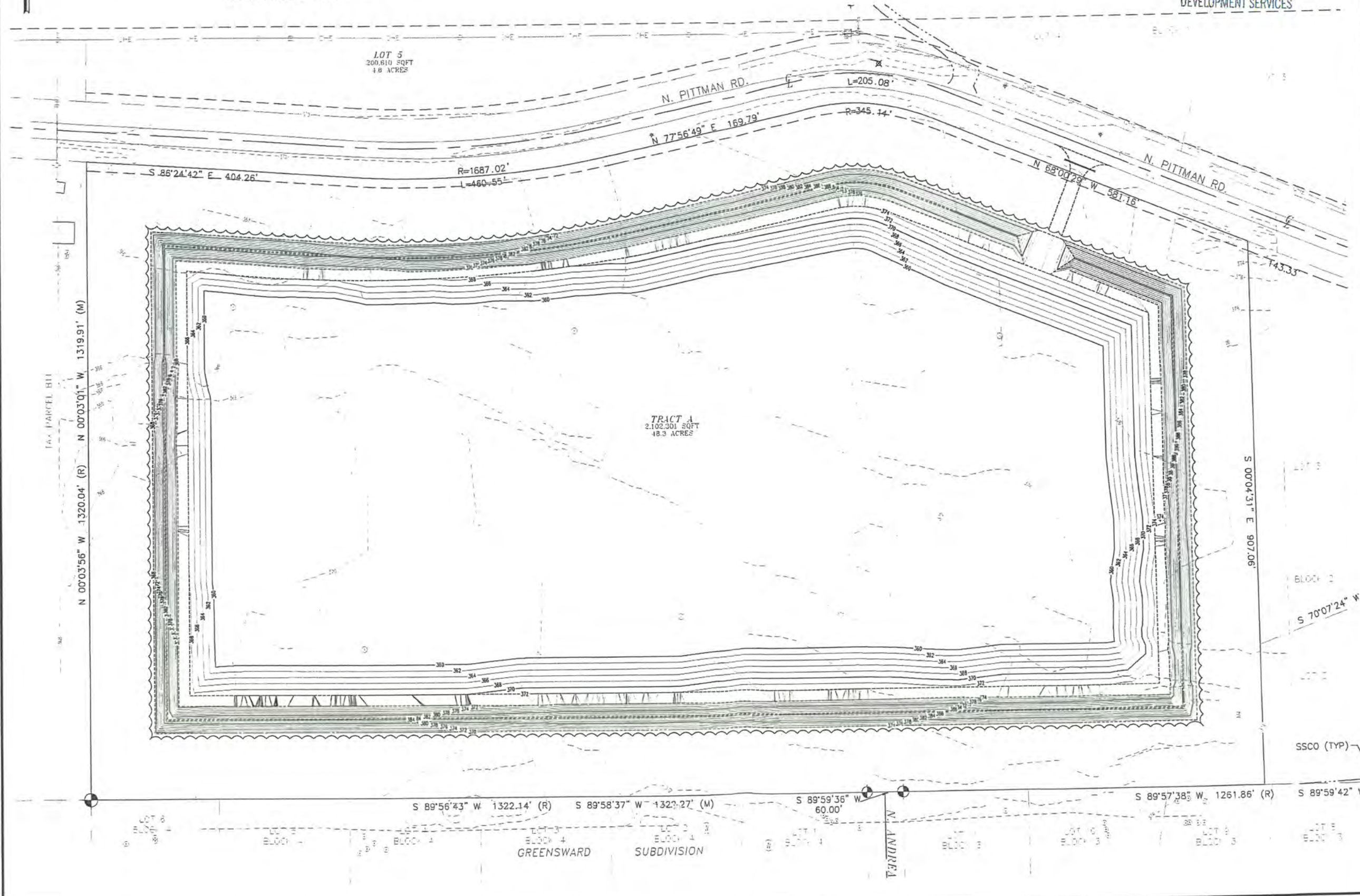
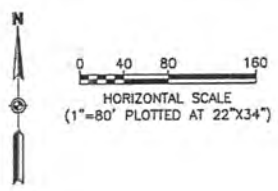
JOB NO.: 17-009
DATE: 6/25/2019
DRAWN: DES
REVIEWED: DES

SHEET TITLE
RECLAMATION PLAN

SHEET
C3.0

NOTES

1. FINISH GRADE IS SHOWN WITH FINAL CONTOURS. FINAL FINISH GRADE MAY CHANGE DEPENDING ON WHAT SOILS ARE ENCOUNTERED AS SOIL IS EXTRACTED FROM THE SITE.
2. FINISH SLOPES WILL BE TRACK WALKED WITH TRACK EQUIPMENT AND/OR COVERED WITH TOPSOIL AND SEEDED.
3. ROOT/ORGANIC DEBRIS WILL EITHER BE BURNED, BURIED, OR LEVELED AND COVERED WITH TOPSOIL.
4. RECLAMATION PLAN MAY CHANGE AS OTHER DEVELOPMENT OPPORTUNITIES BECOME AVAILABLE. THE OWNER WILL UPDATE THE RECLAMATION PLAN AS NEEDED TO REPRESENT ANY FUTURE CHANGES TO THE PLAN.

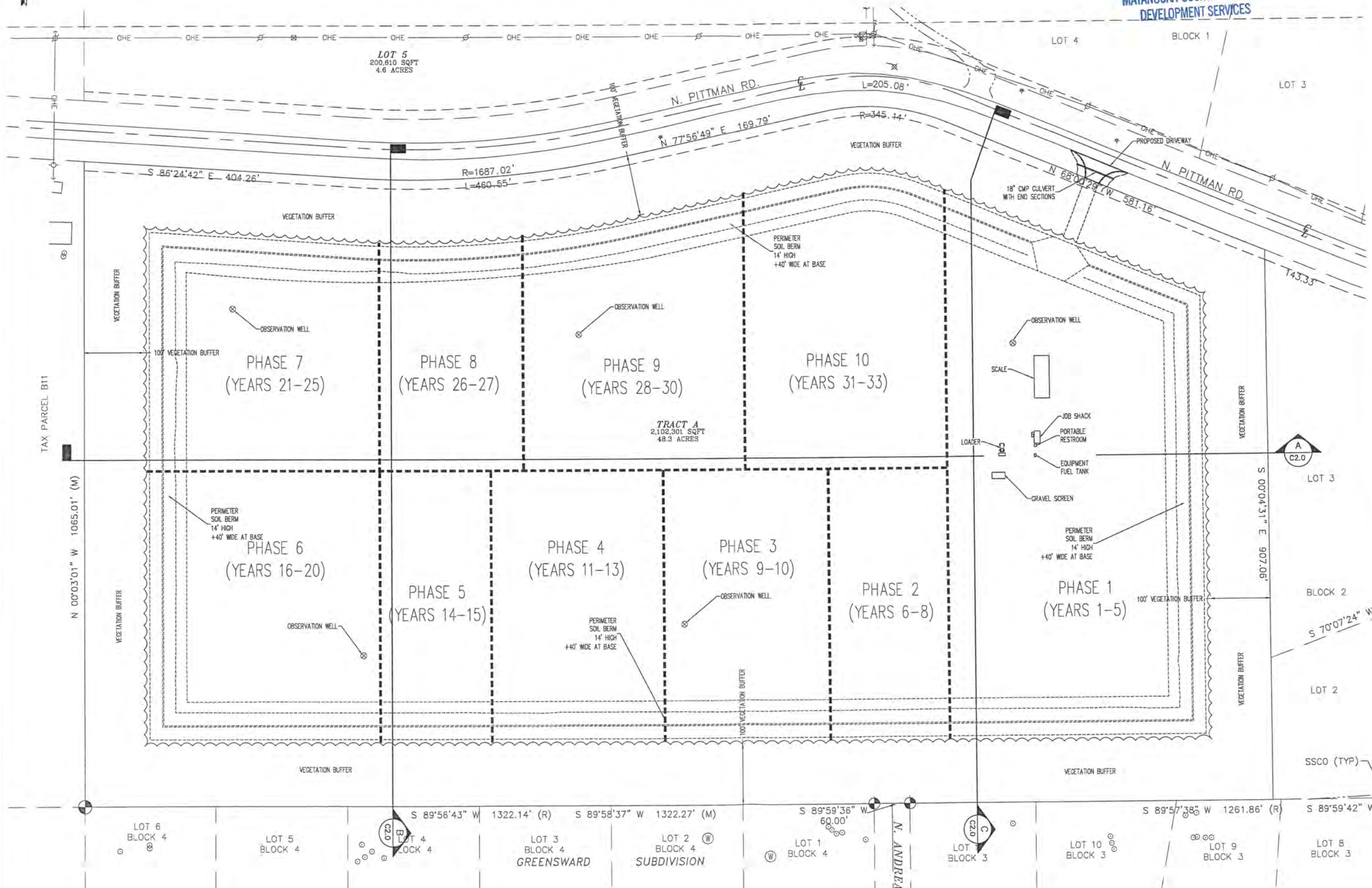


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 JAN 21 2020

MATANUSKA-SUSITNA BOROUGH
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HORIZONTAL SCALE
 (1"=80' PLOTTED AT 22"x34")



SDCS, LLC
 STEINER DESIGN & CONSTRUCTION SERVICES, LLC
 5900 W. DEWBERRY DR. PH: (907) 357-5609
 WASILLA, AK 99623 FAX: (907) 357-5608

FOREMOST CONSTRUCTION
GRAVEL PIT DEVELOPMENT
 TRACT A, PITTMAN FLATS SUBDIVISION
 WASILLA, ALASKA

BY	DATE	REVISIONS

JOB NO.: 17-009
 DATE: 1/22/2020
 DRAWN: DES
 REVIEWED: DES

SHEET TITLE
 SITE PLAN

SHEET
 C1.0



SDCS, LLC
 STEINER DESIGN & CONSTRUCTION SERVICES, LLC
 5900 W. DEWBERRY DR. PH: (907) 357-5609
 WASILLA, AK 99623 FAX: (907) 357-5608

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 DEVELOPMENT SERVICES

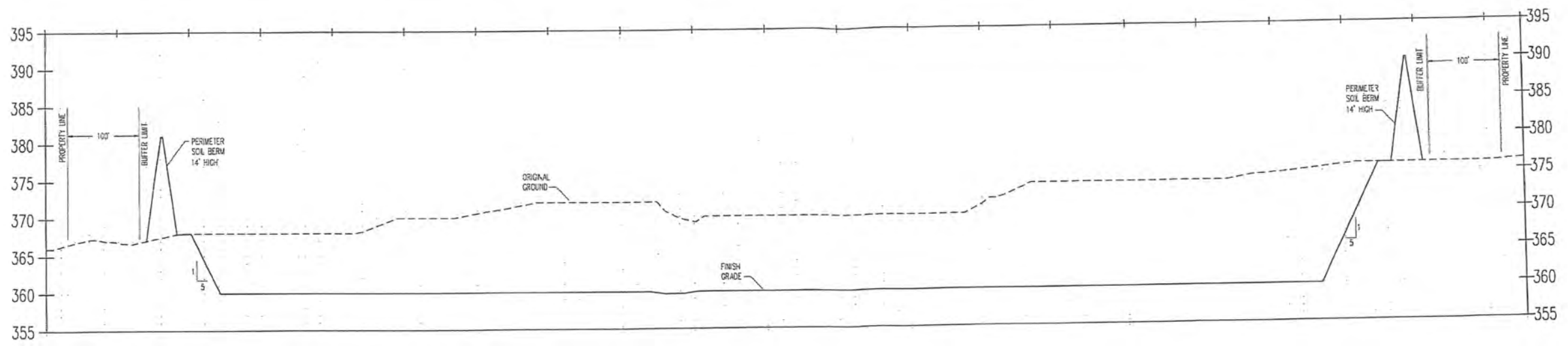
FOREMOST CONSTRUCTION
 GRAVEL PIT DEVELOPMENT
 TRACT A, XXXXX SUBDIVISION
 WASILLA, ALASKA

BY	DATE	REVISIONS

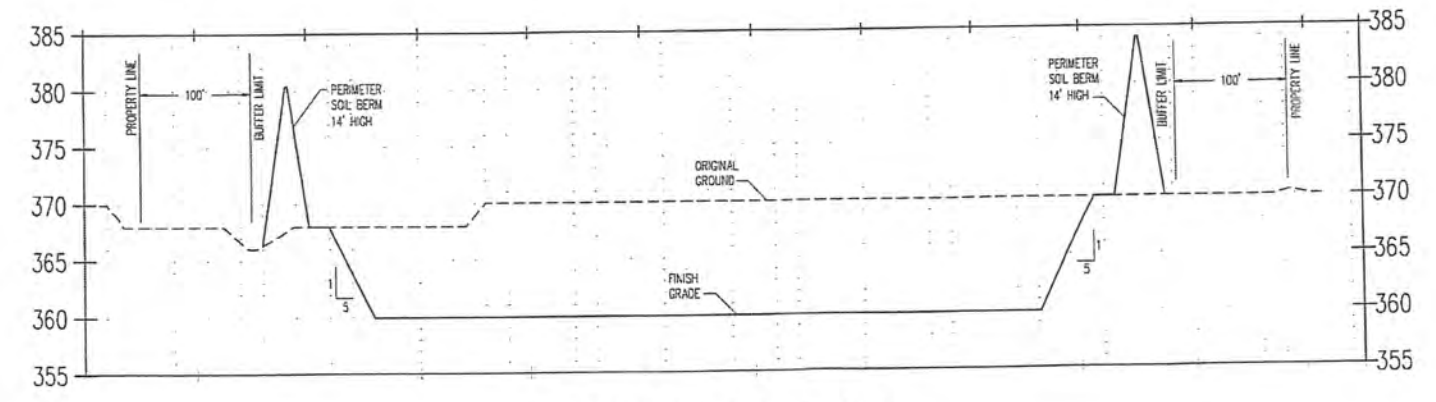
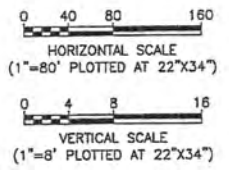
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SHEET TITLE
 SITE SECTIONS

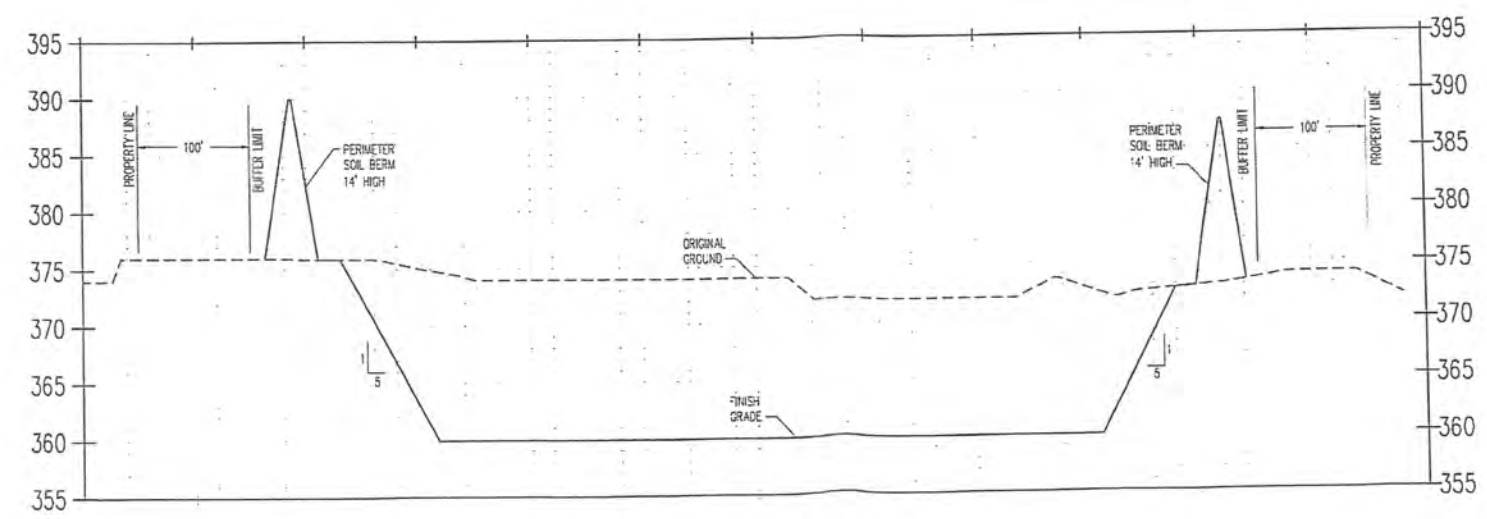
SHEET
 C2.0



SECTION A PROFILE



SECTION B PROFILE



SECTION C PROFILE

From: [Peggy Horton](#)
To: [Cody Troseth](#)
Cc: [Joan Vanucci](#)
Subject: RE: Mass Excavation Application for Admin Earth Materials Excavation Permit
Date: Friday, August 30, 2024 4:02:00 PM
Attachments: [image001.png](#)
[Site Plan Examples.pdf](#)
[Scan_20240830_155151.pdf](#)

Hello Cody,

I reviewed the items received on August 16. The narrative has a contradiction that needs to be addressed. In the visual screening measures section, the operation will haul off the bermed gravel when site work is completed. In the reclamation section, the operation will leave slopes at the perimeter at a 1:2 slope. Please make it clear where the bermed gravel will be removed and where the slopes will remain. It would be easier if you could provide a reclamation plan drawing showing the elevations around the extraction area once the operation is done. With that, you could show which slopes will remain (to be reclaimed) and which berms will be removed.

The cross-sections still need to be fixed. The top half is illegible on all of them, and they don't indicate the limits of the excavation or the property lines. I showed these to my boss, and he said they are not useful the way they are.

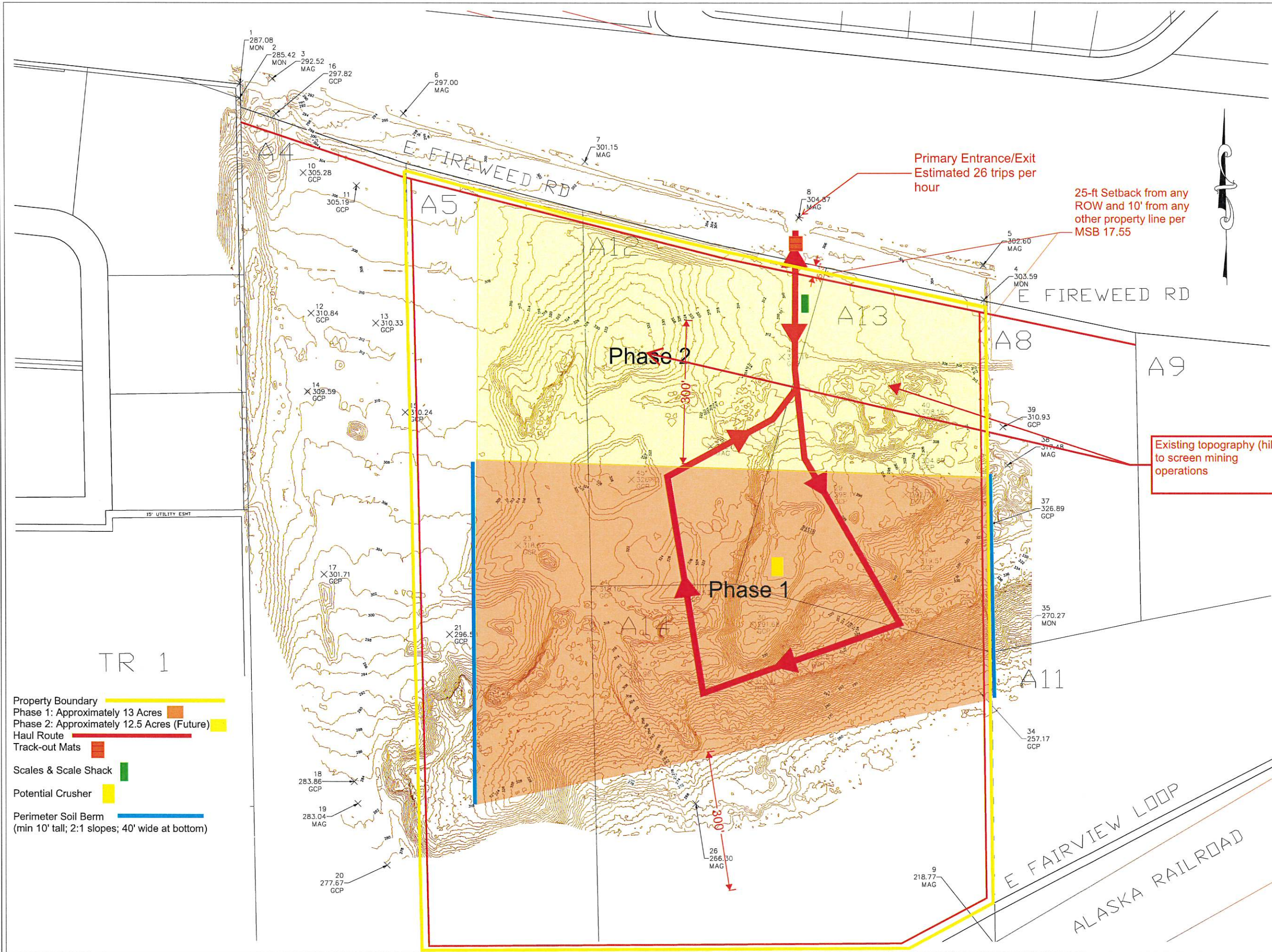
The very thin brown topographic lines on top of brown aerial imagery are very difficult to read, and the elevation numbers in a tiny font are also difficult to read. Black-and-white usually provides the best contrast between the contour lines and the property. Please take a look at the sample site plans I've attached. I also fiddled with your site plan PDF file, turned off the imagery and hillshade, and attached the file to this email. This is much better because you can see the contour lines. I wish you could make the elevation numbers a bit larger.

The site plan shows the perimeter soil berm (in blue) lying outside of the eastern property line. Is this where you intend to provide a berm? This area is higher in elevation. Will the excavation operation occur below the surrounding ground? If so, you don't need a berm here.

If you'd like to discuss these things in person, let me know. I'm available to meet you wherever is best for you.

Peggy Horton
Current Planner
907-861-7862

DRAWING LOCATION: C:\D\AUTOCAD\MASS X MISC\WASILLA TUCKER\PIT.DWG
 DESIGNED BY: TAL M
 CHECKED BY:
 DRAFTED BY:
 SCALE: 1" = 100'
 DATE: 4.19.2024



- Property Boundary —
- Phase 1: Approximately 13 Acres ■
- Phase 2: Approximately 12.5 Acres (Future) ■
- Haul Route —
- Track-out Mats ■
- Scales & Scale Shack ■
- Potential Crusher ■
- Perimeter Soil Berm (min 10' tall; 2:1 slopes; 40' wide at bottom) —

TR 1

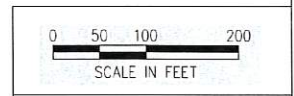
SHEET NO.	TOTAL SHEETS
1	—
STATE	YEAR
ALASKA	2024
PROJECT DESIGNATION	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

NOTES

- HORIZONTAL DATUM AND VERTICAL DATUM IS ALASKA STATE PLANE COORDINATE SYSTEM ZONE 4, NAD83(2011). ELLIPSOIDAL HEIGHTS PER RAPID STATIC OPUS PROCESSING.
- CONTOURS SHOWN PER UAV DIGITAL TERRAIN MODEL. ELEVATIONS SHOWN ARE TO THE TOP OF SURFACE (EG, AND SNOW).
- PROPERTY LINES ARE APPROXIMATE. SHOWN AS REFERENCE ONLY.

LEGEND

- CONTROL POINT, SEE POINT LIST
- 2' CONTOURS PER APRIL 2024 DRONE DTM, SEE NOTE 2



STATE OF ALASKA
 SEWARD MERIDIAN PROJECT
 TUCKER GRAVEL PIT
 EXCAVATION

Primary Entrance/Exit
 Estimated 26 trips per hour

25-ft Setback from any
 ROW and 10' from any
 other property line per
 MSB 17.55

Existing topography (hills)
 to screen mining
 operations

From: [Peggy Horton](#)
To: [Chad Duguid](#)
Subject: FW: Mass Excavation Application for Admin Earth Materials Excavation Permit
Date: Monday, September 9, 2024 1:38:00 PM
Attachments: [image001.png](#)
[Cross-Sections on 11 X 17 paper.pdf](#)

Chad, I received a message that Cody is out of the office. Could you please review the attached sheets and let me know if you can scale these cross-sections, so they are more readable when printed out on 11" X 17" paper?

Thank you,
Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: Peggy Horton
Sent: Monday, September 9, 2024 1:35 PM
To: 'Cody Troseth' <codyt@massexcavation.com>
Subject: RE: Mass Excavation Application for Admin Earth Materials Excavation Permit

Cody,
The sheets showing the property with contours are easy to read, thank you.

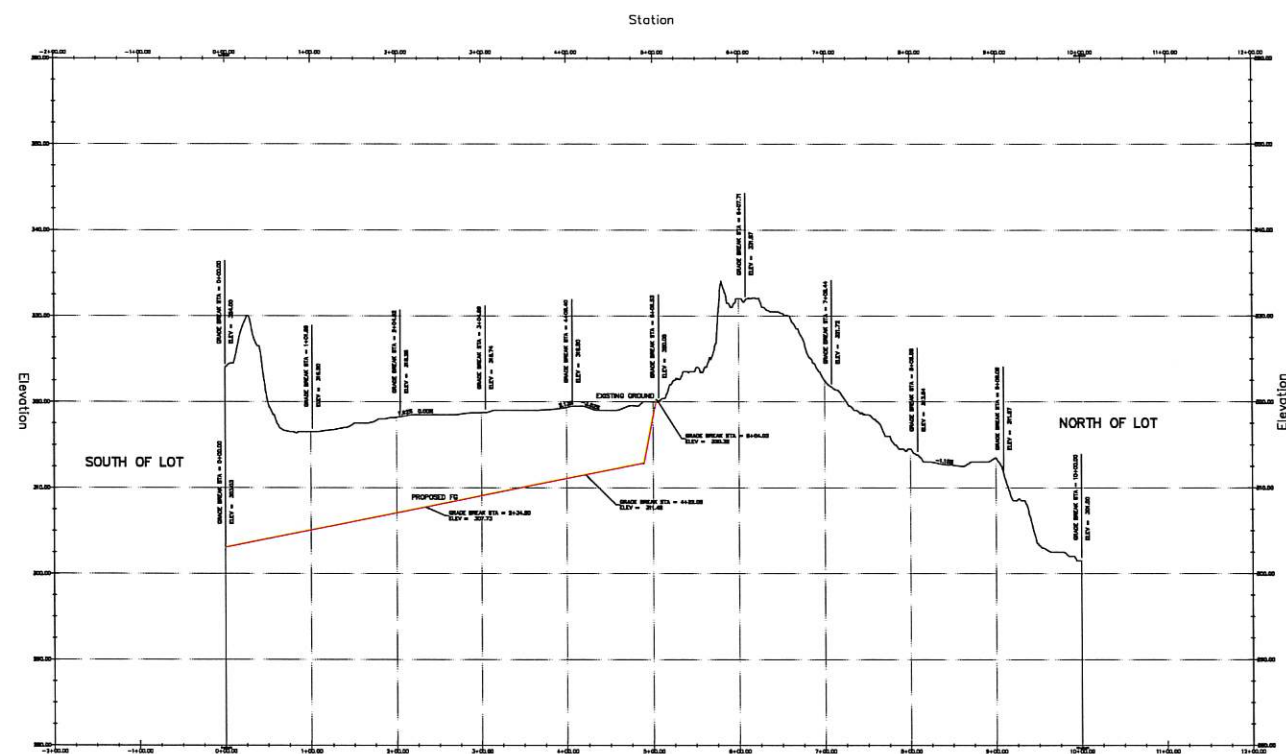
The cross-section sheets are not so easy to read because they are created at a very large scale: 1" equals 200'. When I print them out to 11" X 17" sheets of paper, the text is so tiny that it's unreadable, even when you zoom in. My director wants the packet to be printed out. I've attached what I printed out so you can see the problem. Is it possible to create these cross-sections at a scale that is readable when printed out on 11" X 17" sheets of paper? Perhaps at 1" equals 100', it might be readable.

If this isn't possible, let me know.

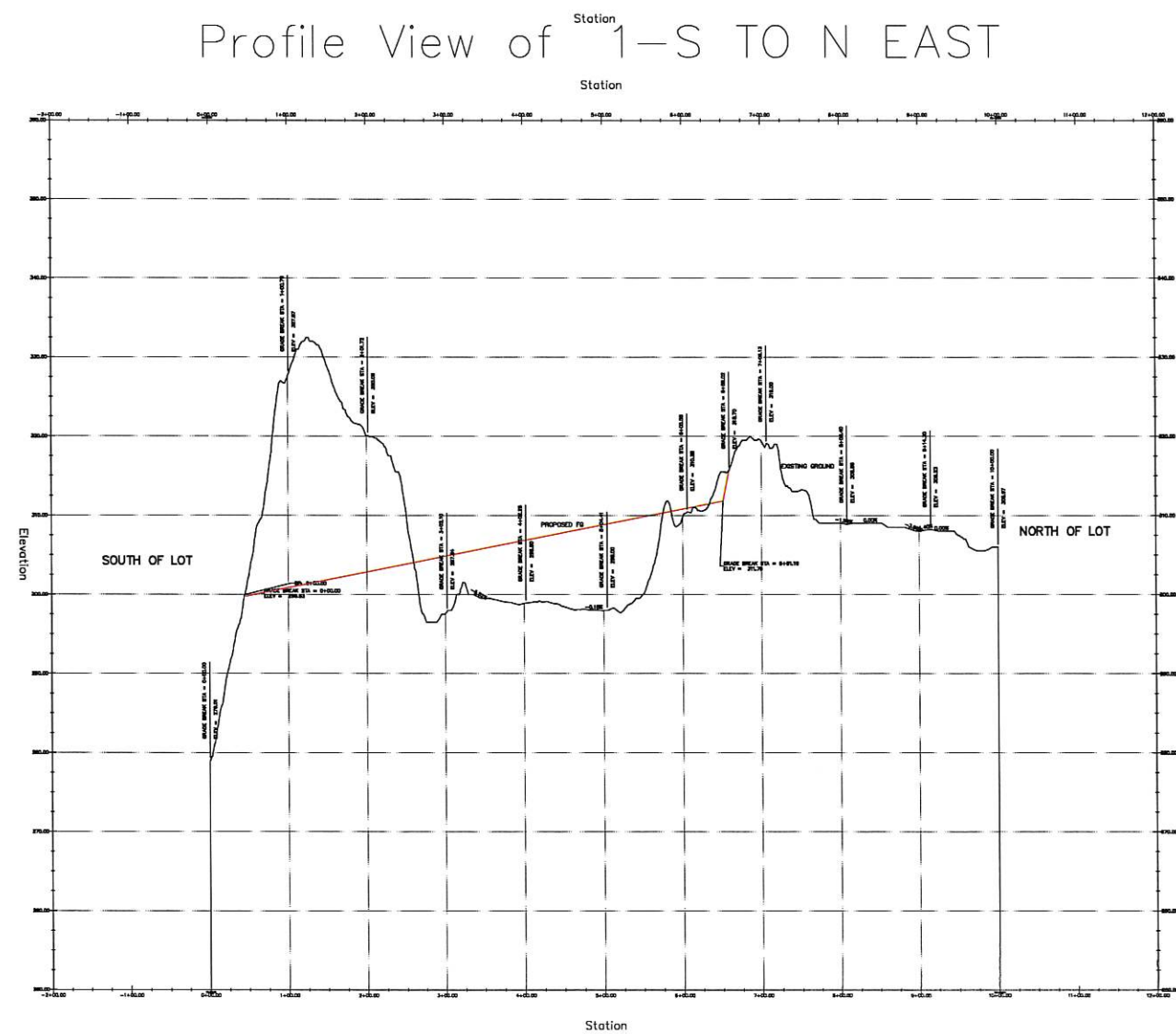
Thank you,
Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

DRAWING LOCATION: D:_D\AUTOCAD\MASS X MISC\WASILLA TUCKER\PTV2.DWG
 DATE: 9.4.2024
 SCALE: 1"=0'
 DESIGNED BY: TAL M
 DRAFTED BY:

Profile View of 1-S TO N WEST



Profile View of 1-S TO N EAST



SHEET NO.	TOTAL SHEETS
1	—
STATE	YEAR
ALASKA	2024
PROJECT DESIGNATION	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

NOTES

- 1) HORIZONTAL DATUM AND VERTICAL DATUM IS ALASKA STATE PLANE COORDINATE SYSTEM ZONE 4, NAD83(2011), ELLIPSOIDAL HEIGHTS.
- 2) CONTOURS SHOWN PER UAV DIGITAL TERRAIN MODEL, ELEVATIONS SHOWN ARE TO THE TOP OF SURFACE (EG), AND SNOW.
- 3) PROPERTY LINES ARE APPROXIMATE, SHOWN AS REFERENCE ONLY.
- 4) BLACK CONTOURS ARE EXISTING GRADE ON 4.16.2024.
- 5) RED CONTOURS ARE PROPOSED GRADING PLAN.

LEGEND

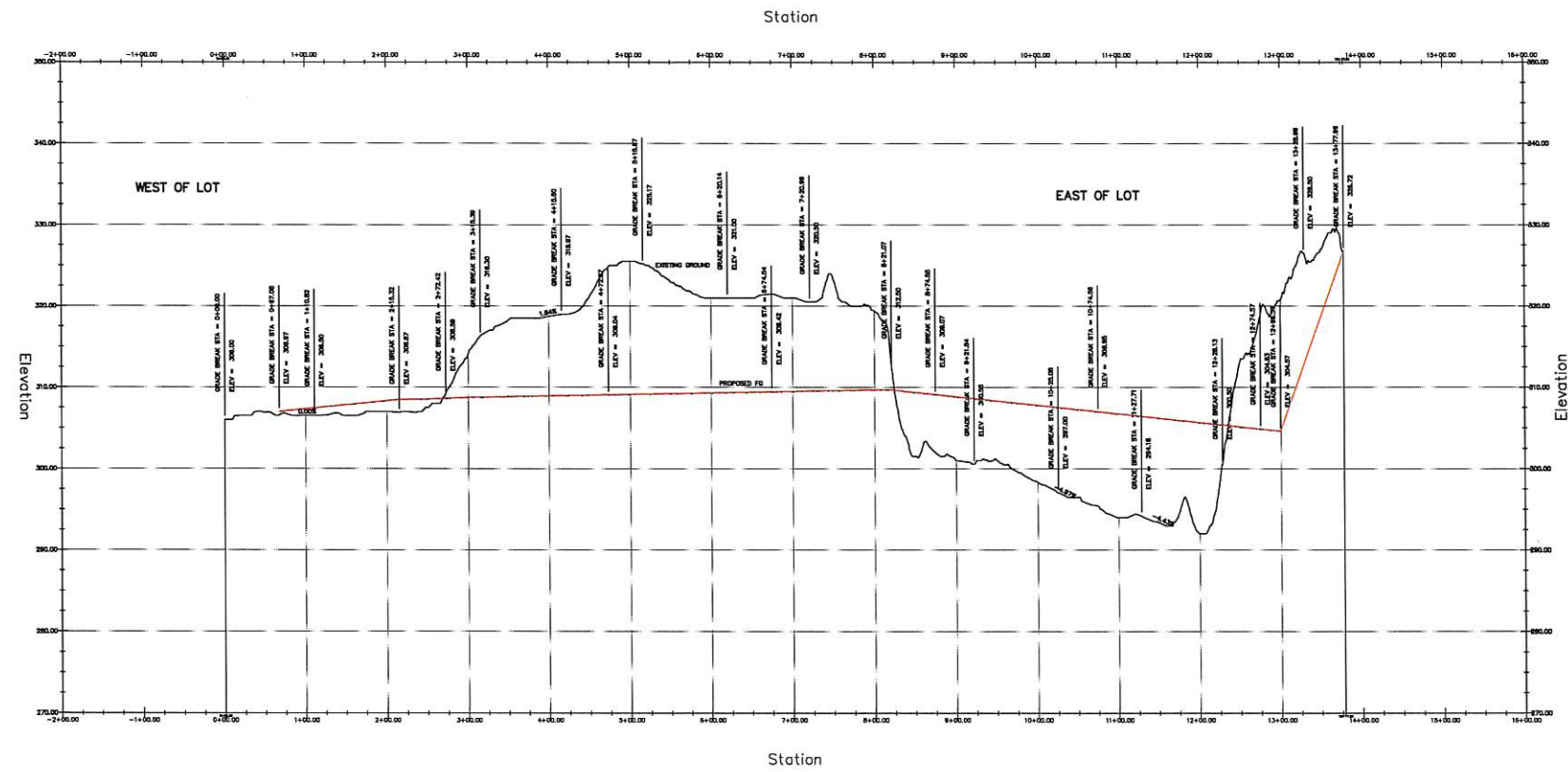
- CONTROL POINT. SEE POINT LIST
- 5' CONTOURS PROPOSED FINISH GRADE
- 5' CONTOURS EXISTING GRADE PER DRONE DTM, APRIL 2024, SEE NOTE 2



STATE OF ALASKA
 SEWARD MERIDIAN PROJECT
 TUCKER GRAVEL PIT
 EXCAVATION

DRAWING LOCATION: D:_D\AUTOCAD\MASS X MISC\WASILLA TUCKER\PIT\WASILLA TUCKER PITV2.DWG
 DATE: 9.4.2024
 SCALE: 1"=0'
 DESIGNED BY: TAL M
 DRAFTED BY:

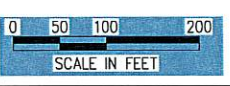
Profile View of PIT W TO E



SHEET NO.	TOTAL SHEETS
1	—
STATE	YEAR
ALASKA	2024
PROJECT DESIGNATION	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

- NOTES**
- HORIZONTAL DATUM AND VERTICAL DATUM IS ALASKA STATE PLANE COORDINATE SYSTEM ZONE 4, NAD83(2011), ELLIPSOIDAL HEIGHTS.
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 - BLACK CONTOURS ARE EXISTING GRADE ON 4.16.2024.
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- LEGEND**
- CONTROL POINT, SEE POINT LIST
 - 5' CONTOURS PROPOSED FINISH GRADE
 - 5' CONTOURS EXISTING GRADE PER DRONE DTM, APRIL 2024. SEE NOTE 2



STATE OF ALASKA
 SEWARD MERIDIAN PROJECT
 TUCKER GRAVEL PIT
 EXCAVATION

From: [Cody Troseth](#)
To: [Peggy Horton](#)
Cc: [Chad Duguid](#)
Subject: FW: Mass Excavation Application for Admin Earth Materials Excavation Permit
Date: Tuesday, October 8, 2024 8:39:52 AM

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Peggy,

Sharefile link is listed below:

<https://davisconstructors.sharefile.com/d-sfc5b43fdc8c9418498c05c66c40c4c39>

Per your comments below, I have revised and attached the following:

- Amended NOI to include subject properties
- ADNR acceptance and copy of bond
- 2 each revised site plans (one is very large 20 mb)
- Revised written plan

I believe that is all you have requested and we should be complete. Please let me know if you need anything further.

Thanks,

Cody Troseth

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Wednesday, September 11, 2024 3:24 PM
To: Cody Troseth <codyt@massexcavation.com>
Cc: Brenda Tapani <BrendaT@massexcavation.com>; Chad Duguid <chadd@massexcavation.com>
Subject: RE: Mass Excavation Application for Admin Earth Materials Excavation Permit

Cody,

I've got just a few more items to discuss with you,

1. I have planned two different conditions of approval that must be completed prior to beginning operations. I want your understanding and acceptance of these proposed conditions:

- A. Prior to operating, revise the current Notice of Intent (NOI) to add the subject properties for coverage under the APDES General Permit for Stormwater Discharges for Construction General Permit Activity and provide the Planning Staff with the ADEC authorization for this modification. Completing this task will satisfy the requirement of

MSB 17.30.055(A)(4).

- B. Prior to operating, provide a copy of the ADNR approval and acceptance of the Land Use Performance Guaranty as evidence that the reclamation financial assurance requirements, as set forth by the State of Alaska, have been fulfilled. Completing this task will satisfy the requirement of MSB 17.30.055(A)(5).

2. The application now has two site plans, which is fine. I've attached both to this email. The one received on 8-16-24 shows the blue line outside of the property boundary on the east side. Please move this into the property. The narrative stated that berms will be established at the limits of excavation for each affected lot. If a berm is necessary, then it should be within the property boundaries and shown on the site plan.

3. Please make sure to edit the legend on the site plan received on 9-4-24 to reflect only the items shown on that plan. I noticed that the first item on the legend indicates the orange line as the property boundary, which is not accurate.

4. In my opinion, the last two sentences of the Visual Screening Measures paragraph are unnecessary. Correct me if I'm wrong, but here's why. Since you will be working below the surrounding topography or will erect berms to obscure the operation from the neighboring uses, there is no need for a fence, so there's no need to discuss a fence.

I have to focus on some other projects for the next two days. I will be away from the office from September 16 and will return on September 30. Once I get back and the comments above are addressed, I believe we'll be able to schedule a public hearing.

Respectfully,
Peggy Horton
Current Planner
907-861-7862

From: Cody Troseth <codyt@massexcavation.com>

Sent: Monday, September 9, 2024 6:52 PM

To: Peggy Horton <Peggy.Horton@matsugov.us>

Cc: Brenda Tapani <BrendaT@massexcavation.com>; Chad Duguid <chadd@massexcavation.com>

Subject: Fwd: Mass Excavation Application for Admin Earth Materials Excavation Permit

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Peggy,

See attached, sorry I'm out remote right now.

Thanks,

Cody Troseth

Begin forwarded message:

From: Tal M <talsworkmail@gmail.com>
Date: September 9, 2024 at 6:48:28 PM AKDT
To: Cody Troseth <codyt@massexcavation.com>
Cc: Chad Duguid <chadd@massexcavation.com>, Brenda Tapani <BrendaT@massexcavation.com>
Subject: Re: Mass Excavation Application for Admin Earth Materials Excavation Permit

On Mon, Sep 9, 2024 at 5:42 PM Cody Troseth <codyt@massexcavation.com> wrote:

Tal,

See below. Can you adjust and send back to Brenda for submission?

Thanks,

Cody Troseth

Begin forwarded message:

From: Peggy Horton <Peggy.Horton@matsugov.us>
Date: September 9, 2024 at 1:35:13 PM AKDT
To: Cody Troseth <codyt@massexcavation.com>
Subject: RE: Mass Excavation Application for Admin Earth Materials Excavation Permit

Cody,

The sheets showing the property with contours are easy to read, thank you.

The cross-section sheets are not so easy to read because they are

created at a very large scale: 1" equals 200'. When I print them out to 11" X 17" sheets of paper, the text is so tiny that it's unreadable, even when you zoom in. My director wants the packet to be printed out. I've attached what I printed out so you can see the problem. Is it possible to create these cross-sections at a scale that is readable when printed out on 11" X 17" sheets of paper? Perhaps at 1" equals 100', it might be readable.

If this isn't possible, let me know.

Thank you,
Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: Cody Troseth <codyt@massexcavation.com>
Sent: Wednesday, September 4, 2024 2:20 PM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Cc: Chad Duguid <chadd@massexcavation.com>
Subject: RE: Mass Excavation Application for Admin Earth Materials Excavation Permit

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Peggy,

See below responses in red and the attached. Please let me know if this looks better.

Thanks,

Cody Troseth

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Friday, August 30, 2024 4:02 PM
To: Cody Troseth <codyt@massexcavation.com>
Cc: Joan Vanucci <joanv@massexcavation.com>

Subject: RE: Mass Excavation Application for Admin Earth
Materials Excavation Permit

Hello Cody,

I reviewed the items received on August 16. The narrative has a contradiction that needs to be addressed. In the visual screening measures section, the operation will haul off the bermed gravel when site work is completed. In the reclamation section, the operation will leave slopes at the perimeter at a 1:2 slope. Please make it clear where the bermed gravel will be removed and where the slopes will remain. It would be easier if you could provide a reclamation plan drawing showing the elevations around the extraction area once the operation is done. With that, you could show which slopes will remain (to be reclaimed) and which berms will be removed. **We will leave the slopes at the perimeter 1:2 slope, removed from visual screening section.**

The cross-sections still need to be fixed. The top half is illegible on all of them, and they don't indicate the limits of the excavation or the property lines. I showed these to my boss, and he said they are not useful the way they are. **See attached revised plan and revised cross sections.**

The very thin brown topographic lines on top of brown aerial imagery are very difficult to read, and the elevation numbers in a tiny font are also difficult to read. Black-and-white usually provides the best contrast between the contour lines and the property. Please take a look at the sample site plans I've attached. I also fiddled with your site plan PDF file, turned off the imagery and hillshade, and attached the file to this email. This is much better because you can see the contour lines. I wish you could make the elevation numbers a bit larger. **Revised with red proposed grades vs black existing grades, elevations in bigger font.**

The site plan shows the perimeter soil berm (in blue) lying outside of the eastern property line. Is this where you intend to provide a berm? This area is higher in elevation. Will the excavation operation occur below the surrounding ground? If so, you don't need a berm here. **Removed berms**

If you'd like to discuss these things in person, let me know. I'm available to meet you wherever is best for you.

From: [Peggy Horton](#)
To: [Cody Troseth](#)
Subject: Mass Excavation public hearing
Date: Monday, October 21, 2024 10:50:00 AM

Good Morning,

You now have a complete application associated with your request for an Administrative for the operation of an Earth Material Extraction Activity. I have scheduled a public hearing before the Planning and Land Use Department Director for **November 21, 2024, at 9:00 a.m., in the Assembly Chambers of the Dorothy Swanda Jones Building at 350 E. Dahlia Avenue, Palmer,** and have already begun the public notification process.

Please note: At the public hearing, you will have 15 minutes available to you. You can use this time if you'd like. Some applicants choose to have a presentation to clarify any topics of concern, but most use it just to be available for questions the Planning Director may have. In any event, it is available to you.

Public Notice Process: I will keep you posted on any public or agency comments we receive. After receiving the costs for public notice mailing and advertising, I will email you to request payment for these expenses. You can expect to receive this request within three weeks.

Please let me know if you have any questions. Thank you for your time.

Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: [Peggy Horton](#)
To: [Cody Troseth](#); [Chad Duguid](#)
Subject: FW: DOT&PF Permit 1031 & 10248 Comment Letter - Mass Excavation (Fireweed Road, Fairview Loop), Ark @ Denali (Parks Highway MP 136)
Date: Friday, November 8, 2024 2:34:00 PM
Attachments: [11-8-24 DOT&PF Permit 10301 & 10248 Comment Letter - Mass Ex, Ark@Denali.pdf](#)

Cody & Chad,

Thank you for the site visit today. It was very informative. This afternoon I received ADOT's comments for this Admin permit and included them in this email.

Have a nice weekend,

Peggy Horton
Current Planner
Matanuska-Susitna Borough
350 E. Dahlia Avenue
Palmer AK 99645
907-861-7862

From: Huling, Kristina N (DOT) <kristina.huling@alaska.gov>
Sent: Friday, November 8, 2024 2:26 PM
To: Peggy Horton <Peggy.Horton@matsugov.us>
Cc: Baski, Sean M (DOT) <sean.baski@alaska.gov>; Beckwith, Morris R (DOT) <morris.beckwith@alaska.gov>; Bosin, Anna D (DOT) <anna.bosin@alaska.gov>; Brad Sworts <Brad.Sworts@matsugov.us>; Rearden, Devki (DOT) <devki.rearden@alaska.gov>; Walsh, Matthew H (DOT) <matthew.walsh@alaska.gov>
Subject: DOT&PF Permit 1031 & 10248 Comment Letter - Mass Excavation (Fireweed Road, Fairview Loop), Ark @ Denali (Parks Highway MP 136)

[EXTERNAL EMAIL - CAUTION: Do not open unexpected attachments or links.]

Hi Peggy,

Attached are DOT&PF agency comments for the Mass Excavation earth materials extraction permit on Fireweed Road and Fairview Loop Road, and the Ark @ Denali RV Campground permit on the Parks Highway.

Thank you,

Kristina Huling
Mat-Su Area Planner | 907.269.0509

APPLICATION MATERIAL



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

Development Services Division

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822

Email: permitcenter@matsugov.us

APPLICATION FOR A CONDITIONAL USE PERMIT FOR EARTH MATERIALS EXTRACTION – MSB 17.30

NOTE: Carefully read instructions and applicable borough code. Fill out forms completely. Attach information as needed. Borough staff will not process incomplete applications.

Application fee must be attached, check one:

\$1000 for Administrative Permit (Less than two years **or** less than 7,000cy annually)

\$1,500 for Conditional Use Permit (More than two years **and** more than 7,000cy annually)

Required Attachments:

Site plan as detailed on Page 2

Narrative with operational details and all information required on Page 2

Reclamation Plan

Subject Property:

MSB Tax Account ID#(s): 117N01E18A012, 117N01E18A014, 117N01E18A013, 117N01E18A005

Street Address: 4290, 4370 & 4480 E Fireweed Rd, & 4401 E Fairview Loop

Facility/Business Name: Fairview Park Inv Ltd.

Name of Property Owner

Fairview Park Inv LTD

Mailing: PO Box 92225 Anchorage,
AK 99509-2225

Phone: Cell

Wk Hm

E-mail:

Name of Agent / Contact for application

Mass Excavation, Inc. / Cody Troseth

Mailing: PO Box 241093, Anchorage
AK 99524

Phone: Cell 907-354-2055

Wk Hm

E-mail: codyt@massexcavation.com

Attach a narrative describing the proposed extraction activities.	Attached
Describe the types of material being extracted.	X
Provide total acreage of all parcels on which the activity will occur.	X
Provide total acreage of earth material extraction activity.	X
Provide total cubic yards to be extracted.	X
Provide the estimated final year extraction will occur.	X
Provide seasonal start and end dates.	X
Provide hours of operation.	X
Provide days of the week operations will take place.	X
Provide proposed peak hour and traffic volume at the peak hour	X
Provide estimated end date of extraction.	X
Provide estimated end date of reclamation.	X
Describe all other uses occurring on the site.	X
Describe methods used to prevent problems on adjacent properties, such as lateral support (steep slopes), water quality, drainage, flooding, dust control, and maintenance of roads.	X
Describe how the operation will monitor the seasonal high water table.	X
Provide quantity estimates and topographical information such as cross section drawings depicting depth of excavation, slopes, and estimated final grade.	X
Provide Reclamation Plan in accordance with MSB 17.28.063 and 17.28.067.	X

Submit a detailed site plan, <i>drawn to scale</i>. Drawings under the seal of an engineer or surveyor are recommended but not required.	Attached
Identify location of permanent and semi-permanent structures on the site for verification of setback requirements. Include wells and septic systems.	X
Depict buffer areas, driveways, dedicated public access easements, noise buffers (such as fences, berms or retained vegetated areas), and drainage control such as ditches, settling ponds, etc.	X
Identify the entire area intended for gravel/material extraction activity.	X
Identify the property boundary containing the operation.	X
Identify ADEC Drinking Water Protection Areas wherever proposed project area boundaries fall within drinking water protection area buffer zones.	X
Identify areas used for past and future phases of the activity.	X
Provide road and access plan that includes anticipated vehicle routes and traffic volumes. If the level of activity exceeds the minimum levels specified in MSB 17.61.090, Traffic Standards, a traffic control plan consistent with state regulations may be required.	X
Provide detailed description of the proposed visual screening.	X
Provide measures to mitigate or lessen noise impacts on surrounding properties.	X
Provide proposed lighting plan.	X

Submit documentation showing compliance with borough, state, and federal laws.	Applied for (list file #)	Attached (list file #) or N/A
Submit mining permit as required by the Alaska State Department of Natural Resources (ADNR) if extraction activities are to take place on state land.	N/A	LAS 35130
Provide reclamation plan as required by ADNR, pursuant to AS 27.19. Provide copy of reclamation financial assurance filed with the State of Alaska (If exempt, provide qualifying documents for exemption).	>>>	LAS 35130
Provide Notice of Intent (NOI) for construction general permit or multi-sector general permit and storm water pollution prevention plan, and other associated permits or plans required by the Environmental Protection Agency (EPA) pursuant to the National Pollutant Discharge Elimination System (NPDES) requirements.	N/A	AKR10H0K2 to be modified once permit approved
Provide United States Army Corps of Engineers permit pursuant to Section 404 of the Clean Water Act, 33 U.S.C. 1344, if material extraction activity is to take place within wetlands, lakes, and streams.	N/A	N/A
Provide any other applicable permits, such as driveway/access permits; list as appropriate.	(See App)	()

Prior to the public hearing, the applicant must also pay the mailing and advertising fees associated with the application. Staff will provide applicant with a statement of advertising and mailing charges. Payment must be made **prior** to the application presentation at the public hearing.

OWNER'S STATEMENT: I am owner or authorized agent of the following property:
117N01E18A012, 117N01E18A014, 117N01E18A013,
MSB Tax Account ID #(s) 117N01E18A005 and, I hereby
apply for approval of conditional use permit for earth material extraction activities on the property as
described in this application.

I understand all activity must be conducted in compliance with all applicable standards of MSB 17.28, MSB 17.30, and with all other applicable borough, state, and federal laws, including but not limited to, air quality, water quality, and use and storage of hazardous materials, waste and explosives, per MSB 17.30.055.

I understand that other rules such as local, state, and federal regulations, covenants, plat notes, and deed restrictions may be applicable and other permits or authorizations may be required. I understand that the borough may also impose conditions and safeguards designed to protect the public's health, safety, and welfare, and ensure the compatibility of the use with other adjacent uses.

I understand that this permit may transfer to subsequent owners of this land and that it is my responsibility to disclose the requirements of this status to operators on this property, and to the buyer when I sell the land. Additionally, I agree to comply with MSB 17.30.120, Transfer of Conditional Use Permit, in the event this permit is transferred to a subsequent property owner.

I grant permission for borough staff members to enter onto the property as needed to process this application and monitor compliance. Such access will at a minimum, be allowed when the activity is occurring and, with prior notice, and at other times necessary to monitor compliance.

The information submitted in this application is accurate and complete to the best of my knowledge.

Signature: Property Owner

Printed Name

Date

William R. Tucker

William R. Tucker

6-21-24

Signature: Agent

Printed Name

Date

General Partner



**ADMINISTRATIVE PERMIT: FAIRVIEW PARK
EARTH MATERIALS EXTRACTION
PLAN OF OPERATION / SITE DEVELOPMENT PLAN**

LEGAL DESCRIPTION & PROPERTY SUMMARY:

This property is privately owned by Fairview Park Inv LTD between East Fireweed Road and East Fairview Loop. Mass Excavation (Mass X) proposes to extract sand, gravel and rock for use on the ADOT Seward Meridian Pkwy Rd Improvements Project (Project No. 0001(417) / Z512210000) from the subject properties. Pursuant to the MSB Application for Administrative Permit (MSB 17.30), we hereby submit our Mining Plan.

MSB Tax ID No.:	Legal:	Street Address No.:	Total Area (acre):	Disturbance Area (acre):
117N01E18A005	Township 17N Range 1E Section 18 Lot A5	4290 E Fireweed Road	18.7	~ 2.5
117N01E18A012	Township 17N Range 1E Section 18 Lot A12	4370 E Fireweed Road	7.71	~ 2
117N01E18A013	Township 17N Range 1E Section 18 Lot A13	4480 E Fireweed Road	8.01	~ 3
117N01E18A014	Township 17N Range 1E Section 18 Lot A14	4401 E Fairview Loop	19.5	~ 5.5

Seasonal and daily anticipated dates of site activity related to material extraction are provided below. Actual operations for material extraction work would likely be intermittent through the year and scheduled to meet demands of the project(s) being supplied.

EXTRACTION SEASON, GENERAL WORK SCHEDULING:

Start of Extraction (Est.): April 2025	End Date of Extraction (Est.): September 2027
Seasonal Start Date: April 1 st	Seasonal End Date: November 15 th
Work Week: Monday – Sunday	Workday (Hrs): 24 Hrs
End Date of Reclamation (Est.): November 2027	

The operating contractor for gravel material extraction under this proposed Administrative Permit is Mass Excavation, Inc. (Mass X). Generally, the work can be designated in two phases for the purpose of this permit.

Phase 1: will consist of extracting and preparing gravel from Phase 1 highlighted and labeled on the attached map. Phase 2 on the map will not be mined but used for scales, scale house, driveway to extraction operation and stockpiling of product. Stockpiling will be behind perimeter berms.

Phase 2: will consist of sale and haul out of stockpiled gravel as needed.

OTHER USES ON-SITE:

Gravel and rock will be sourced from the Area 1. Material will be screened with the option to crush and stockpiled within the same area that is being mined. No other uses are planned within the property boundaries.

METHODS TO PREVENT PROBLEMS ON ADJACENT PROPERTIES:

Site Drainage (Subject Property): During mining-related activities on the affected lots, ground conditions on site will consist of a permeable gravel surface that will allow for infiltration of storm water. Per the Rational Equation, the runoff coefficient for an undeveloped gravel lot is low (<0.30). Temporary berms will be established using clearing and grubbing or gravel at the limits of excavation / stockpiling for each affected lot. Additional shallow trenching will be constructed adjacent to the berms as needed should storm water need additional time for infiltration within the project boundaries.

Site Drainage (Right-of-Way): No changes will be done within the ROW accessing the subject site.

Water Table: No wetlands or water bodies intersect the lots subject to mining. No additional wetlands surround the property that could receive storm water runoff from the mining areas. Groundwater disposition within the surrounding parcels/lots is documented per nearby well logs (see table below). Gravel extraction on the subject property would extend less than 25 feet below ground surface (BGS). At this depth, excavation will still remain significantly above static water level, estimated to be at minimum an additional 45 feet below the planned floor of excavation.

WELL LOG DATA – GROUNDWATER CONDITIONS OF NEARBY WELLS FOR REFERENCE

Nearby Property:	Well Log No.:	Well Dist. (ft)/Dir.:	Water Depth (ft) (BGS):
4100 E Carefree Dr	22264	~ 1,500 / NW	78
4051 E Brenda Ave	29870	~ 1,500 / W	120
3950 E Carefree Dr	59560	~ 2,000 / NW	96
4001 E Brenda Ave	62675	~ 2,000 / W	97

The operation will monitor the seasonal high water table to maintain a four-foot vertical separation as required by MSB 17.28.060(A)(7)(b) by excavating test pits.

Water Quality: Mass X’s heavy equipment operations will handle petroleum, oil and lubricants (POLs) according to a Hazardous Material Control Plan (HMCP) standard to their construction projects. This plan addresses proper containment of fuels and oils as well as response procedures for spills due to equipment failure. In the event of a spill, spill reporting is addressed according to ADEC reporting requirements under AS 46.03.755 and 18 AAC 75.300.

There are no *Provisional*, or *Temporary Drinking Water Protection Areas* intersecting the subject properties where mining will take place. See attached ADEC Drinking Water Protection Areas map.

Dust Control: Exposed soil that is actively being worked will be wetted by water truck to reduce nuisance level dust conditions caused by dry soils and high winds. Water will be withdrawn from Cottonwood Creek per Mass X DNR TWUA Permit #A2024-49 attached.

Maintenance of Roads: Street sweeping will be performed on E Fireweed Road commensurate with gravel hauling activities to remove sediment track out from paved road surfaces.

QUANTITY ESTIMATES AND TOPOGRAPHICAL INFORMATION:

Material exported is expected to be **around 350,000 cubic yards (CY)** over the course of this permit with the majority exported within the 2025 season. Topographically, the remaining site will slope from north

to south at a very minimal slope. Phase 2 will not be mined but is shown for future mining of a finished plan per the owner.

SITE PLAN REQUIREMENTS

Site plan is discussed briefly below and also included in maps attached at the end of this document.

VERIFICATION OF SETBACK REQUIREMENTS:

No permanent or semi-permanent structures are currently located on site. The 25-ft setback, required per MSB 17.28.070, will be observed with regard to the lots identified for mining/material extraction for scales, trailers, screens, crushers, etc.

ROAD AND ACCESS PLAN:

Gravel mined from Phase 1 will be processed within Phase 1. Gravel will be hauled out from the access on 4370 E Fireweed Road via a permitted approach, travel east onto E Fireweed Road, north on Hyer Road and finally exit onto the Parks Highway.

See **Figure SD02** for haul routes. Peak daily haul activity is estimated at 1,700 cubic yards exported. Based on this estimate, haul traffic would account for 240 trips per day (120 round trips). Vehicle traffic in support of mining activity could be up to an additional 30 trips per day (i.e. for fueling, supervision, maintenance, etc.). The “peak hour” of traffic entering or exiting the site is estimated to be between 10:00 AM and 11:00 AM. Trips during “peak hour” are therefore estimated at 26 trips per hour. Mass X will have sufficient off-street (gravel lot area) available for company personnel vehicles and all heavy civil mining equipment parking to prevent the use of public Rights-of-Way. Track-out mats will be placed at the entrance/exit point to mitigate track out from the property. A water truck and sweeper will also be utilized to clean the roads given any track out is apparent.

DRIVEWAY PERMIT STATUS:

Subdivision Lot:	Street Address:	Permit No.:
Lot A12	4370 E Fireweed Rd	33634

NOISE MITIGATION MEASURES:

Excavation and gravel processing work (crushing/screening and stockpiling) will consist of utilizing a combination of excavator, dozer, loader and dump trucks. Mass X also anticipates the use of a crusher on site for material production. Heavy equipment is routinely checked and serviced as needed so that their backup alarms and white noise alarms remain operational. Exhaust mufflers are appropriately maintained to ensure that they are effective according to the manufacturers design. The required perimeter berm would also reduce the impacts from noise to surrounding properties. Existing topography on the north side of the property has a height of approximately 332' compared to the mining location of approximately 320' and will be used for screening (see site plan for locations on north side). In areas on each lot actively being worked for gravel extraction where the natural relief does not provide sufficient noise barrier, Mass X will build a berm from clearing and grubbing or gravel with a minimum 10-foot height where it can be safely constructed. Berms to be constructed 10 feet high and 40' wide at the base, with a slope of 1:2.

LIGHTING STANDARDS:

Use of additional trailer-mounted lighting during seasonal low light conditions (when need to comply with safety requirements) would be restricted to the working hours listed under *General Work Scheduling*, above. When in use, exterior lighting will be located and shielded to direct the light towards the ground, in order to minimize light spillage onto adjacent properties and upward into the night sky. When illumination or other fixtures are mounted higher than 20 feet or 150 watts or more will have downward direction shielding.

VISUAL SCREENING MEASURES:

Mass X will maintain at minimum a 100-foot buffer between the proposed excavation and road traffic along E Fireweed Road. Ditches and easements are maintained between the adjacent roadways and the subject property.

As noted under, Methods to Prevent Problems on Adjacent Properties (pg 2), berms will be constructed at the perimeter of the lots to be mined/stockpiled. Berms to be constructed 10 feet high and 40' wide at the base, with a slope of 1:2. Existing topography on the north side of the property has a height of approximately 332' compared to the mining location of approximately 320' and will be used for visual screening (see site plan for locations on north side). Also, as excavation progresses, screening equipment can be nestled into a lower position, temporarily allowing surrounding gravel berms to act as a visual/auditory buffer.

WETLANDS AND WATERBODIES:

On Site: No wetlands or waterbodies are present on subject property. See attached MSB Wetland Map

Within One Mile: Black Lake (north ~ 1,500 feet); Wasilla Creek (east ~ 3,800 feet)

Wetlands Within One Mile: Discharge Slope (southwest ~ 3,500 feet); Discharge Slope (south ~ 1,600 feet)

All wetlands and waterbodies are sufficiently outside the influence of material extraction operation to take place within the property. They're separated geographically by roadways, residential housing and wooded areas.

SURROUNDING LAND USES:

Land uses extending outward from the subject property perimeter are summarized below:

Surrounding Property Uses: Existing property use nearby lots considered here for materials extraction include:

To the North: E Fireweed Road, E Parks Hwy, E Blue Lupine Drive, commercial/residential property, Black Lake

To the Northeast: Commercial property (Better Built Buildings) and residential

To the East: Residential housing

To the Southeast: Gravel pit (Big Dipper Construction)

To the South: E Fairview Loop, Alaska Railroad, Gravel pit (P Inc.)

To the West: Residential housing

AREA INTENDED FOR GRAVEL/MATERIAL EXTRACTION ACTIVITY:

Extraction of gravel and rock is specifically to be sourced from Phase 1 as outlined on the map. Gravel screening would be set up in Phase 1 as well.

RECLAMATION PLAN

TIMELINE FOR RECLAMATION AT PARTICULAR LOCATIONS (PER MSB 17.28.067):

Reclamation of the proposed mining lots within the subject property will be accomplished at the conclusion of mining activities. Slopes will be left at the perimeter at a 1:2 slope, covered with grubbing/topsoil from the site and hydroseeded for grass growth to stabilize and protect surface areas against erosion. The end use of the proposed properties is intended for residential or commercial use. Ground surface elevations will be lowered, as discussed in the *Site Development Plan*. Final slopes will be graded such that they attain a maximum 50 percent slope of the natural stabilized angle of repose and will be blended with the surrounding undisturbed topography wherever conditions and future development allow.

On conclusion of mining activities, Mass X will ensure that no junk vehicles, junk vehicle parts, or trash remain on the lots.

COPY OF RECLAMATION FINANCIAL ASSURANCE (UNLESS EXEMPT, THEN QUALIFYING DOCUMENTS):

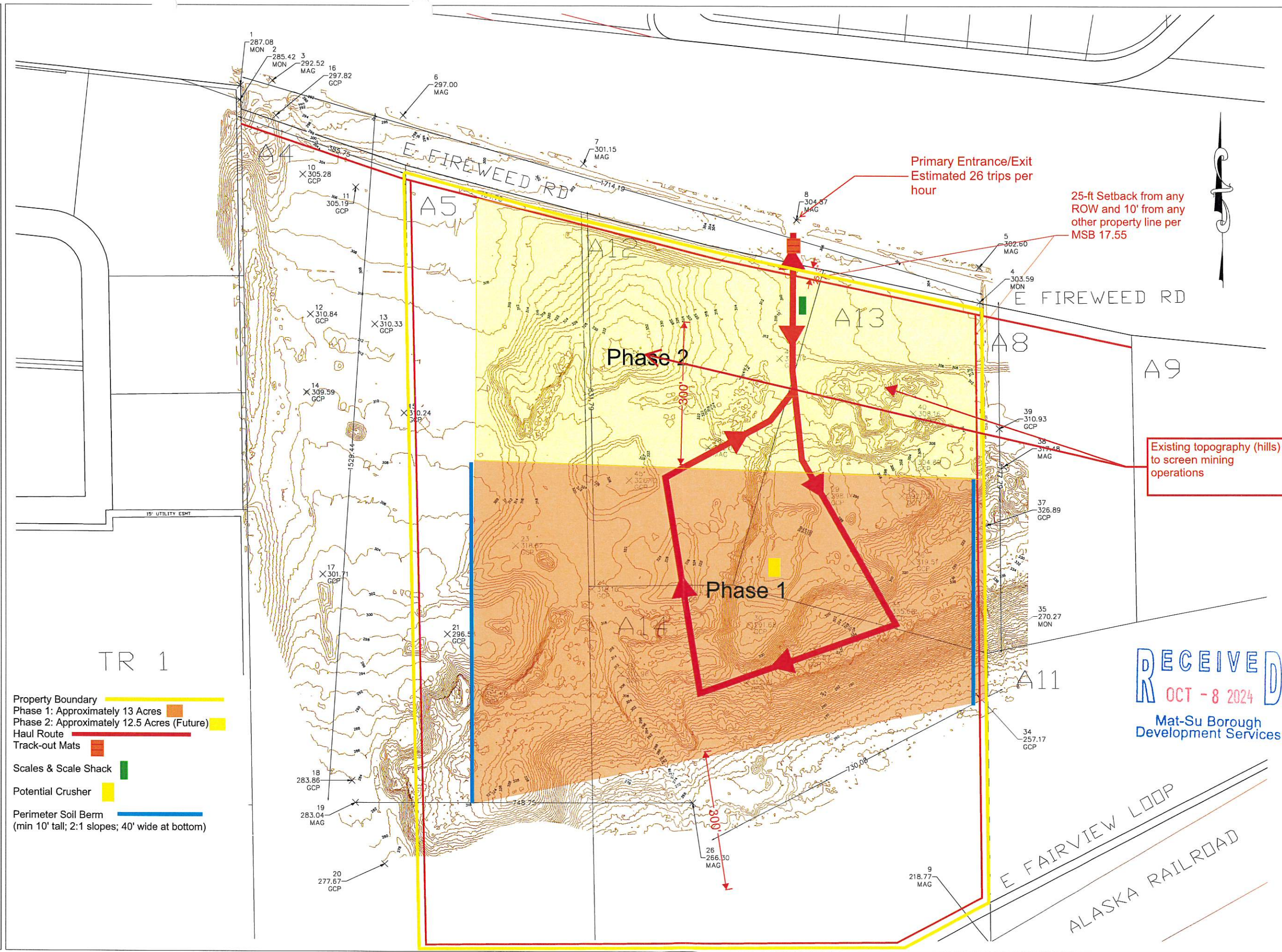
See attached reclamation bond.

COMPLIANCE WITH BOROUGH, STATE AND FEDERAL LAWS

MINING LICENSE:

Mass X's proposed mining operations on the subject property are not subject to an Alaska Mining License as the materials to be extracted are included within the exclusion of "quarry rock, sand and gravel and/or marketable earth exclusively" (ADNR, Instructions for the Alaska Mining Application, 0405-661i, 03-01-15).

DRAWING LOCATION C:\D\AUTOCAD\MASS X MISC\WASILLA TUCKERPIT\WASILLA TUCKER PIT.DWG
 DESIGNED BY T.A.M.
 DRAFTED BY
 SCALE 1" = 100'
 DATE 4.19.2024



- TR 1
- Property Boundary
 - Phase 1: Approximately 13 Acres
 - Phase 2: Approximately 12.5 Acres (Future)
 - Haul Route
 - Track-out Mats
 - Scales & Scale Shack
 - Potential Crusher
 - Perimeter Soil Berm (min 10' tall; 2:1 slopes; 40' wide at bottom)

SHEET NO.	TOTAL SHEETS
1	—
STATE	YEAR
ALASKA	2024
PROJECT DESIGNATION	
NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

NOTES

- 1) HORIZONTAL DATUM AND VERTICAL DATUM IS ALASKA STATE PLANE COORDINATE SYSTEM ZONE 4, NAD83(2011). ELLIPSOIDAL HEIGHTS PER RAPID STATIC OPUS PROCESSING.
- 2) CONTOURS SHOWN PER UAV DIGITAL TERRAIN MODEL. ELEVATIONS SHOWN ARE TO THE TOP OF SURFACE (EGL) AND SNOW.
- 3) PROPERTY LINES ARE APPROXIMATE, SHOWN AS REFERENCE ONLY.

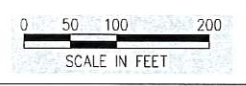
LEGEND

- x CONTROL POINT, SEE POINT LIST
- z CONTOURS PER APRIL 2024 DRONE DTM, SEE NOTE 2

RECEIVED

OCT - 8 2024

Mat-Su Borough
Development Services

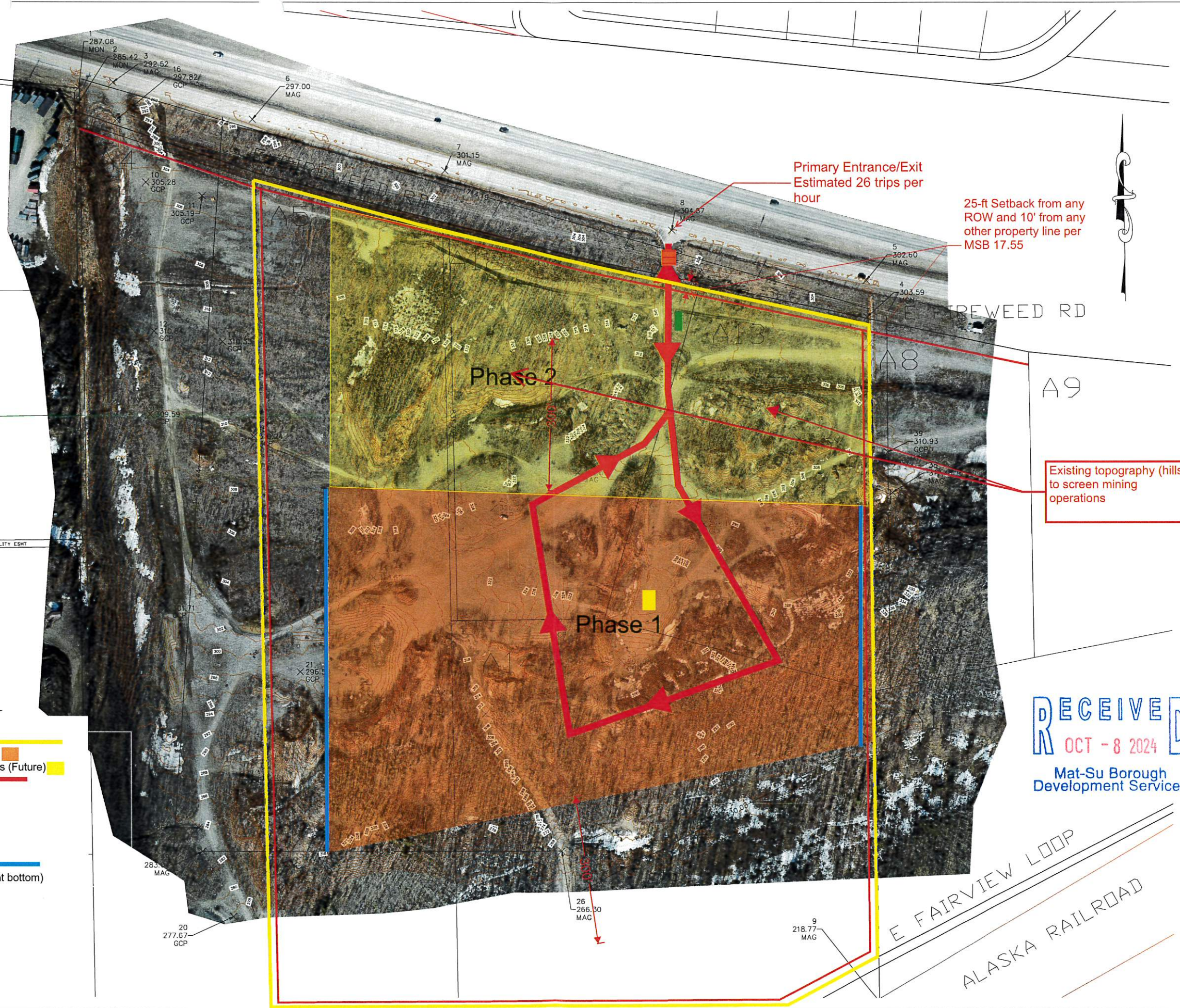


STATE OF ALASKA

SEWARD MERIDIAN PROJECT
TUCKER GRAVEL PIT

EXCAVATION

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 DESIGNED BY TAL M
 DRAFTED BY
 SCALE 1" = 100'
 DATE 4.19.2024



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- Perimeter Soil Berm (min 10' tall; 2:1 slopes; 40' wide at bottom)

TR 1

Primary Entrance/Exit
Estimated 26 trips per hour

25-ft Setback from any
ROW and 10' from any
other property line per
MSB 17.55

Existing topography (hills)
to screen mining
operations

SHEET NO.	TOTAL SHEETS
1	—
STATE	YEAR
ALASKA	2024
PROJECT DESIGNATION	
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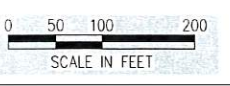
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OCT - 8 2024

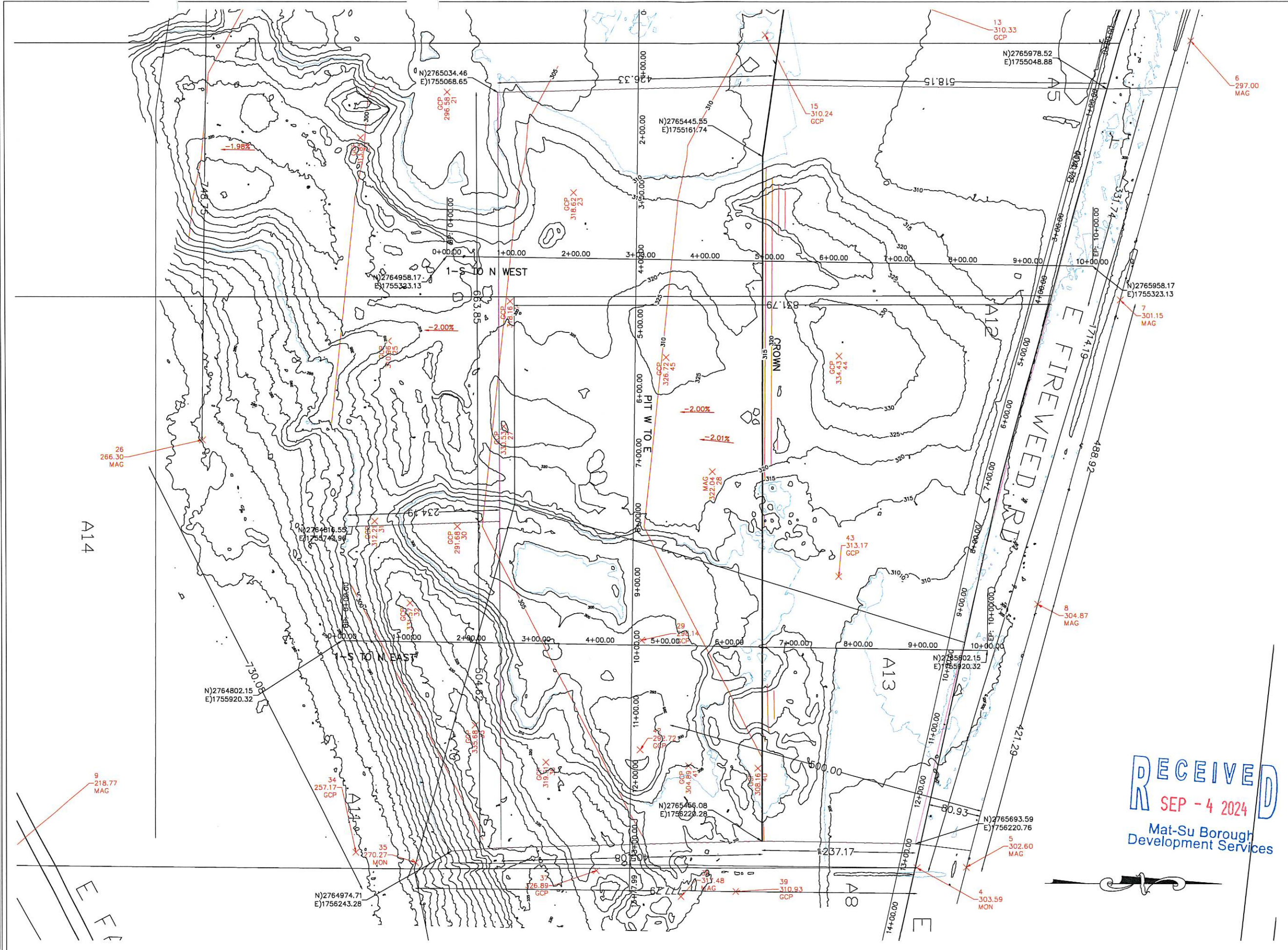
Mat-Su Borough
Development Services



STATE OF ALASKA
SEWARD MERIDIAN PROJECT
TUCKER GRAVEL PIT
EXCAVATION

E FAIRVIEW LOOP
ALASKA RAILROAD

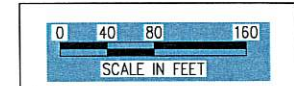
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SHEET NO.	TOTAL SHEETS
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STATE	YEAR
ALASKA	2024
PROJECT DESIGNATION	
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 - RED CONTOURS ARE PROPOSED GRADING PLAN.

- LEGEND**
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 - 5' CONTOURS PROPOSED FINISH GRADE
 - 5' CONTOURS EXISTING GRADE PER DRONE DTM, APRIL 2024, SEE NOTE 2

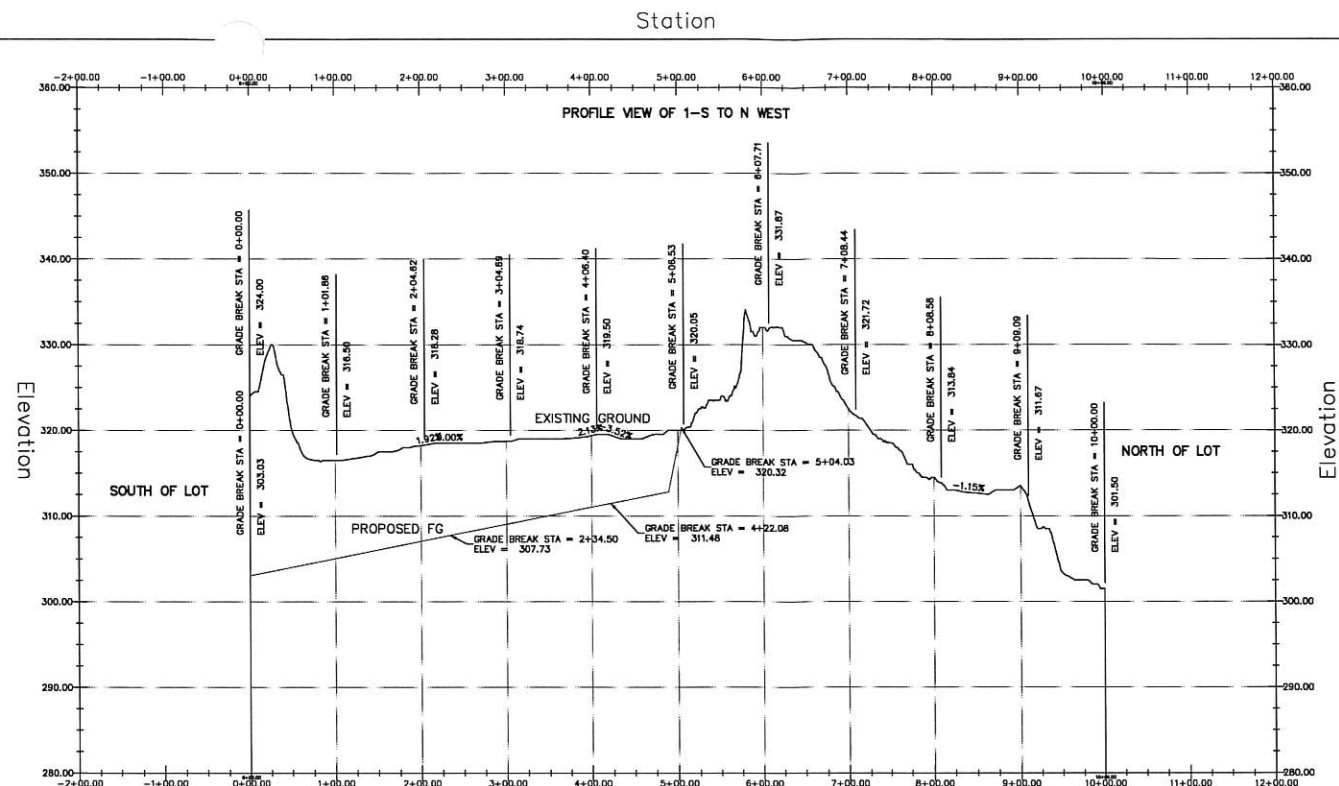


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 SEP - 4 2024
 Mat-Su Borough
 Development Services

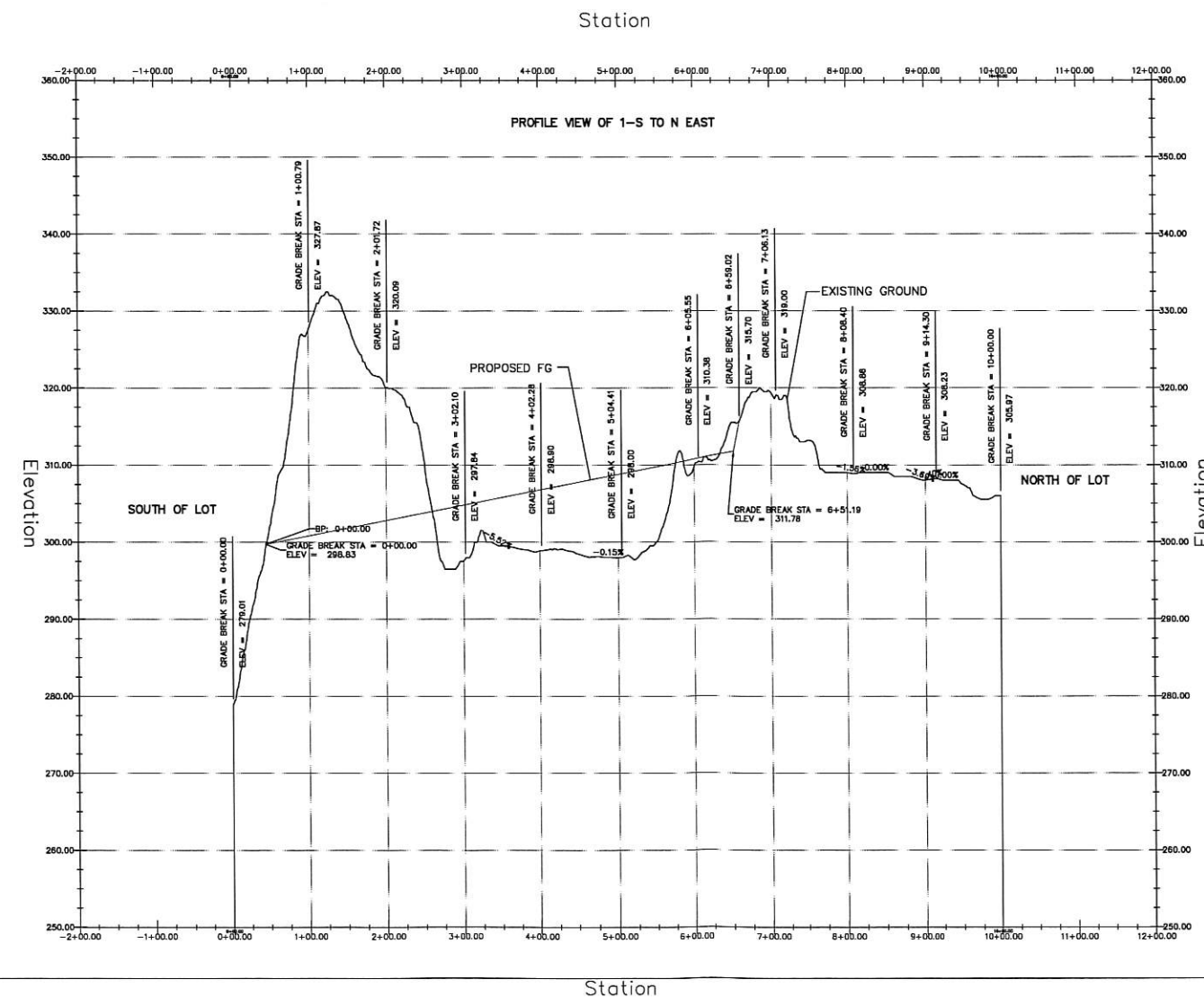


STATE OF ALASKA
 SEWARD MERIDIAN PROJECT
 TUCKER GRAVEL PIT
 EXCAVATION

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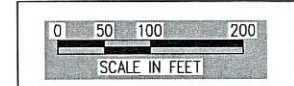
Profile View of Station 1-S TO N EAST



SHEET NO.	TOTAL SHEETS
1	—
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ALASKA	2024
PROJECT DESIGNATION	
NO.	REVISION
DATE	
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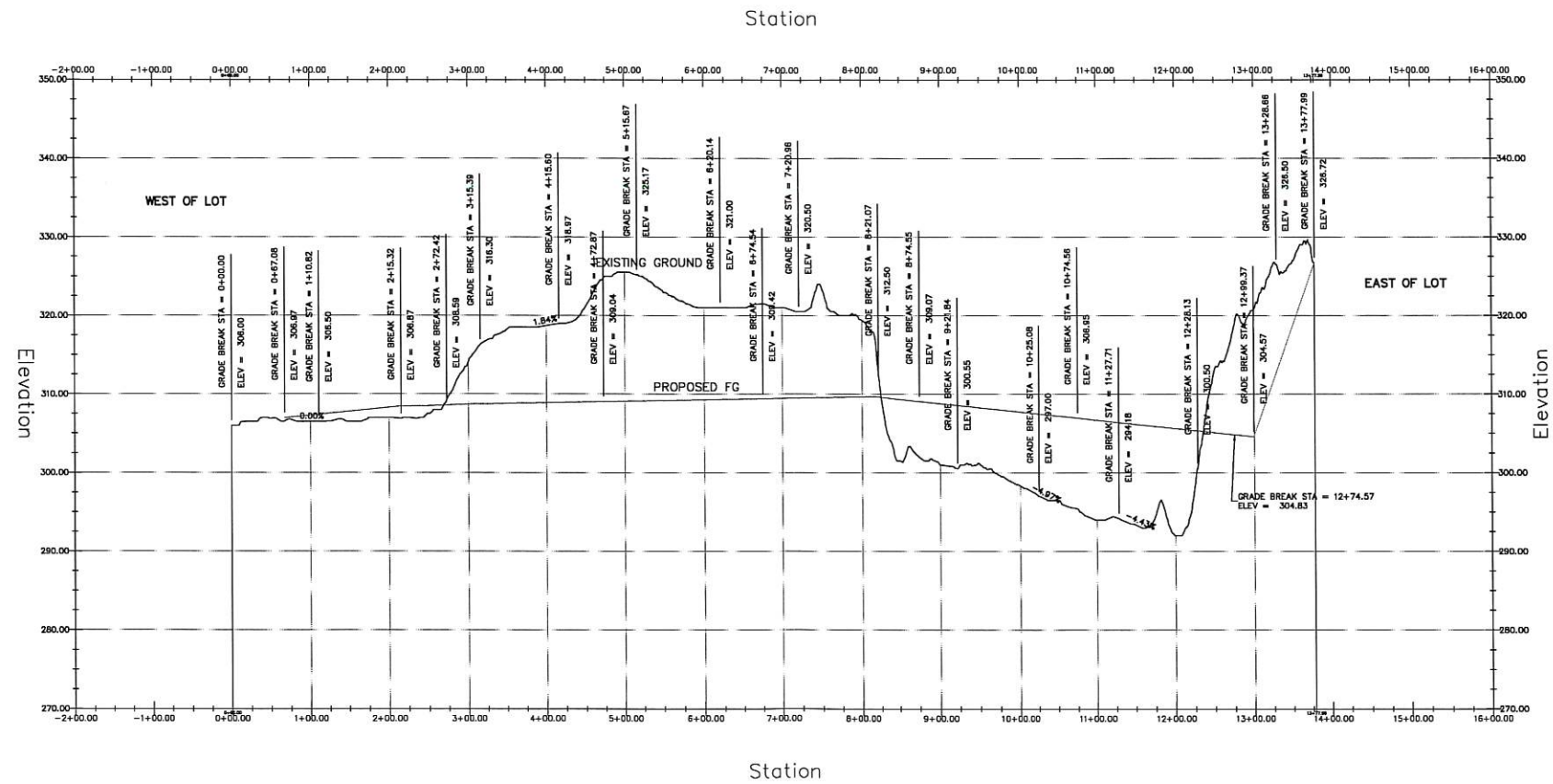
SEP 10 2024

Mat-Su Borough
Development Services

STATE OF ALASKA
 SEWARD MERIDIAN PROJECT
 TUCKER GRAVEL PIT
 EXCAVATION

DESIGNED BY: T.A.M.
 DRAFTED BY:
 SCALE: 1"=0'
 DATE: 9.9.2024
 DRAWING LOCATION: D:\AUTOCAD\MASS X MISC\WASILLA TUCKER\PIT\WASILLA TUCKER PITV2.DWG

Profile View of PIT W TO E



SHEET NO.	TOTAL SHEETS
1	—
STATE	YEAR
ALASKA	2024
PROJECT DESIGNATION	
NO.	REVISION
DATE	
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 SEP 10 2024
 Mat-Su Borough
 Development Services

MASS EXCAVATION, INC.
 STATE OF ALASKA
 SEWARD MERIDIAN PROJECT
 TUCKER GRAVEL PIT
 EXCAVATION



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

Department of Natural Resources

DIVISION OF MINING, LAND & WATER
Southcentral Regional Land Office

550 West 7th Avenue, Suite 900C
Anchorage, Alaska 99501-3577
Main: 907.269.8503
TTY: 711 or 800-770-8973
Fax: 907.269.8913

RECEIVED
JUN 28 2024

Mat-Su Borough
Development Services

June 27, 2024

Mass Excavation, Inc.
P.O. Box 241093
Anchorage, AK 99524

Re: LAS 35130 – Non-State Land Reclamation Plan Approval

Dear Mass Excavation, Inc.,

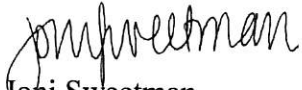
The Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW), Southcentral Regional Office (SCRO), received your Non-State Reclamation Plan (NSRP) for the reclamation of 13 acres after extracting 350,000 cubic yards of material. According to the application, the subject site is located on the private lands of Fairview Park Inv Ltd. within Section 18 of Township 17 North, Range 1 East, Seward Meridian.

Thank you for submitting a NSRP for extraction activities taking place from 2024 through 2026. After reviewing the reclamation plan we have determined that the plan is complete as submitted. The proposed reclamation measures are appropriate provided that the operation is conducted in a manner that will prevent unnecessary and undue degradation of land and water resources, and the operation shall be reclaimed using current reclamation methods so that the site is left in a stable and safe condition.

Per Alaska Statute (AS) 27.19.040(a) financial assurance is required. Development of the proposed 13-acre material site requires \$750 of financial assurance per acre of mined area. 11 AAC 97.420 (b) states *“(b) If a miner shows to the commissioner's satisfaction that the reasonable and probable costs of reclamation under an approved reclamation plan are less than \$750 per acre, the commissioner will reduce the bond to those costs. The miner's showing must be submitted along with the proposed reclamation plan and must include an estimate of the labor and equipment costs that would be incurred to hire a third-party contractor to perform the reclamation in accordance with the plan. In evaluating a miner's proposal for reduction of the bond amount, the commissioner will consider the nature of the surface, its uses, improvements in the vicinity of the land, the degree of risk involved in the mining operation, and all other relevant factors. The commissioner will make a determination on this request of bond reduction in the time schedules set out in 11 AAC 97.300.”*

This acceptance letter does not alleviate the necessity to obtain authorizations required by other agencies and entities for this activity. If you have any questions, please feel free to contact Grace Newcomb at (907) 269-8560 or at grace.newcomb@alaska.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Joni Sweetman". The signature is written in a cursive, flowing style.

Joni Sweetman

Natural Resource Manager 2 Southcentral Regional Land Office

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND AND WATER

Northern Region
3700 Airport Way
Fairbanks, AK 99709
(907) 451-2705

Southcentral Region
550 W 7th Avenue, Ste 900
Anchorage, AK 99501-3577
(907) 269-8552

Southeast Region
P.O. Box 111020
400 Willoughby, #400
Juneau, AK 99801
(907) 465-3400

LAND USE PERFORMANCE GUARANTY
(CORPORATE SURETY)

Contract, Permit, or Lease – State File # LAS 35130
Surety Bond No. 023231770

Know all people by these presents, that the undersigned

Mass Excavation, Inc., a corporation partnership / sole proprietor / LLC /
Joint Venture – *circle one*), organized and existing under the laws of the State of Alaska, as Principal, and
Liberty Mutual Insurance Company organized and existing under the laws of the State of
Massachusetts and licensed to do business in the State of Alaska, as Surety, are held and firmly bound unto the
State of Alaska, Department of Natural Resources, in the sum of Nine Thousand Seven Hundred Fifty and 00/100ths DOLLARS,
(\$9,750.00) for the payment of which sum we hereby jointly and severally bind ourselves, our successors, and assigns.

THE OBLIGATIONS of this bond are as follows:

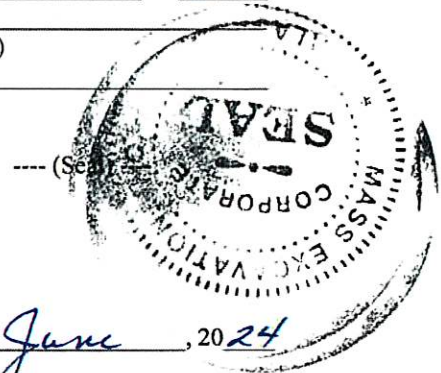
1. The Principal is by written agreement entering into a contract, permit, or lease with the State of Alaska (“the State”) involving State land, which agreement is identified as LAS 35130 (*State file # and agreement type*), hereinafter “the agreement,” and is, by reference, incorporated fully herein in all its terms and made a part of this bond.
2. In accordance with State regulations at 11 AAC 96.060, the Alaska Department of Natural Resources (“the department”) has determined that the Principal is required to furnish the State of Alaska a corporate surety bond, acceptable to the department and conditioned upon compliance with all terms of the agreement.
3. The Principal has chosen to post this corporate surety bond with the department as a guarantee that the obligations, terms, and conditions of the agreement will be completed as required by the Alaska Land Act, AS 38.05, and attendant regulations at 11 AAC 96.
4. The coverage of this bond extends to the Principal’s obligations under the agreement and under applicable laws and regulations, to assure that all of the activities on and uses of the land subject to the agreement are conducted by the Principal in compliance with the obligations, terms, and conditions of the agreement.
5. Upon a determination by the State that the Principal has satisfactorily complied with the obligations, terms and conditions of the agreement pertaining to activities on and uses of the land, and the applicable laws and regulations, then the obligations of this bond shall be released; otherwise, this bond shall remain in full force and effect until released in writing by the State.
6. The Principal and Surety agree that:
 - (a) unless the Principal has replaced this bond with other guaranty acceptable to the department conditioned upon compliance with all terms of the agreement, coverage under this bond shall extend to and include any extension(s) in time of the agreement, such coverage to continue irrespective of the expiration of the obligations, terms, and conditions originally set forth in the agreement; the Surety shall not cancel this bond unless released in writing by the State;
 - (b) notwithstanding any modifications of the agreement approved by the department, this bond remains in full force and the Surety waives, as a defense against the State, any right to notice of any such modifications;
 - (c) The department shall review this bond from time to time and may require an adjustment in the amount of the bond. No increase in bond amount shall bind the surety without the surety’s written consent;
 - (d) the neglect or forbearance of the State in enforcing against the Principal performance by the Principal of any obligation, term, or condition of the agreement shall not in any way release the Principal or Surety from liability under this bond;
 - (e) whenever the Principal shall be, and is declared by the State to be, in default under the obligations, terms, and conditions of the agreement, the State shall notify the Principal and Surety. Upon receipt of a notice of the Principal’s default from the State and demand by the State for performance or payment, the Surety shall promptly pay the face value of this bond to the State, or in lieu of paying the face amount, the director may approve the Surety’s remedy of the default by the Surety fully completing the performance of the Principal’s obligations under the agreement. The Surety’s completion of the performance of the Principal’s obligations under the agreement does not relieve the Principal of its obligations under the agreement;

- (f) the Principal or the Surety must promptly notify the department and the principal of any action filed alleging the insolvency or bankruptcy of the Surety or the Principal or alleging any violations which could result in suspension or revocation of the surety's right to do business in the State of Alaska; and
- (g) upon the incapacity of the Surety by reason of bankruptcy, insolvency, or suspension or revocation of its license, the Principal shall be deemed to be without bond coverage in violation of 11 AAC 96.060 and AS 38.05 and subject to enforcement actions described therein.

[Copy, fill-out, and attach the below if more signatures are necessary]

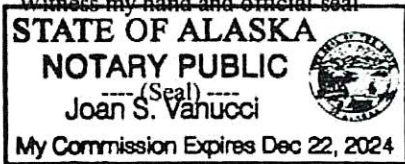
PRINCIPAL

Signed and executed this 18th day of June, 20 24
 BY: Jed Shandy President
(Print name) (Title)
6591 Ast Anchorage, Ak 99518
(Address of Principal)
 By: Jed Shandy
(Signature of Officer/owner/partners/members/managing member)



ACKNOWLEDGEMENT OF PRINCIPAL

The foregoing instrument was acknowledged before me by
JED SHANDY this 18th day of June, 20 24
(Name of Individual)
 Witness my hand and official seal
Joan S. Vanucci
(Signature of Notary Public)
 My Commission Expires: 12/22/2024



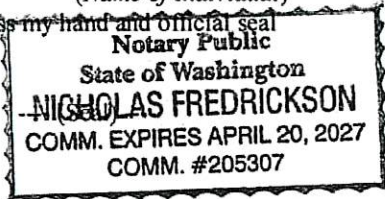
SURETY

Signed and executed this 14th day of June, 2024
 BY: Roger Kaltenbach Attorney-in-Fact
(Print name) (Title)
2233 112th Avenue NE, Bellevue, WA 98004
(Address of Surety)
 By: [Signature]
(Signature of Officer)



ACKNOWLEDGEMENT OF SURETY

The foregoing instrument was acknowledged before me by
Nicholas Fredrickson this 14th day of June, 20 24
(Name of Individual)
 Witness my hand and official seal
Nicholas Fredrickson
(Signature of Notary Public)
 My Commission Expires: 04/20/2027



**APPROVAL AND ACCEPTANCE BY THE STATE OF ALASKA
 DEPARTMENT OF NATURAL RESOURCES**

By: _____
Signature of Authorized State Representative Title Date

INSTRUCTIONS PERFORMANCE GUARANTY

RECEIVED
JUN 28 2024
Mat-Su Borough
Development Services

LAND USE BOND (Corporate Surety)

1. The performance guaranty requirement of 11 AAC 96.060(a)(1)(B) may be satisfied by the posting of a Surety Bond. The Surety on a bond may be any corporation authorized to issue performance and reclamation bond in the State of Alaska. This form may be used in conjunction with material sale contracts, rights-of-way, land use permits, industrial leases, and any similar contracts, permits, and leases involving the use of State land administered by the Division of Mining, Land and Water.
2. If the Principal is a sole proprietor, partnership, or limited liability corporation, the individual owner, partner, or member names shall appear in the space provided or by securely attached addendum, with the recital that they are the owner, partners, or members comprising the firm by name, and all shall execute the performance guaranty as individuals. Where a limited liability corporation is managed by a manager or managing member, the manager or managing member may execute the performance guaranty provided they submit certified evidence in writing of his/her authority to act for the corporation, which shall be attached to the bond.
3. If the Principal or Surety is a corporation, the bond must be executed by a duly authorized officer of the corporation acting as Surety or as Principal, and the individual who signs must submit certified evidence in writing of his/her authority to act for the corporation, which shall be attached to the bond.
4. When any of the parties execute this bond through an agent, a power of attorney or other evidence of authority must accompany the bond.
5. This form is to be used in accordance with the regulations of the Department of Natural Resources regarding bonds and bonding requirements.
6. AS 38.05.035(a) authorized the director to decide what information is needed to process an application for the sale or use of State land and resources. This information is made a part of the State public land records and becomes public information under AS 40.25.110 and AS 40.25.120 (unless the information qualifies for confidentiality under AS 38.05.035(a)(9)) and confidentiality is requested). Public information is open to inspection by you or any member of the public. A person who is the subject of the information may challenge its accuracy or completeness under AS 44.99.310, by giving a written description of the challenged information, the changes needed to correct it, and a name and address where the person can be reached. False statements made in an application for a benefit are punishable under AS 11.56.210.



This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: 8210462-023001

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Alec Gumpfer, Andrew Kerslake, Andrew P. Larsen, Deanna M French, Derek Sabo, Elizabeth R. Hahn, Guy Armfield, Jana M. Roy, John Claeys, Katelyn Cooper, Mindee L. Rankin, Nicholas Fredrickson, Roger Kaltenbach, Scott Fisher, Scott Garcia, Scott McGilvray, Susan B. Larson of Bellevue, WA; Ronald J. Lange, Charla M. Boadle, Jennifer Barret of Spokane, WA; Charles W. Floberg, Drew D. Neessen, James Hamlin, John M. Miller, Mason M. Marks, Michael S. Cranston, Nicholas Warren, William M. Smith, Gregory C. Ryerson of Portland, OR; Abbie A. Bonney, Sandy L. Boswell, Janie Ma, Marie I. Matetich, Sharon Pope, Brenda S. Nolin all of the city of Anchorage state of AK each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 20th day of July, 2023.



Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, currency rate, interest rate or residual value guarantees.

For bond and/or Power of Attorney (POA) verification inquiries, please call 610-832-8240 or email HOSUR@libertymutual.com.

State of PENNSYLVANIA ss
County of MONTGOMERY

On this 20th day of July, 2023 before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2025
Commission number 1128044
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 14th day of June, 2024.



By: Renee C. Llewellyn
Renee C. Llewellyn, Assistant Secretary



State of Alaska
 Department of Transportation and Public Facilities

RECEIVED
 AUG - 8 2024
 Mat-Su Borough
 Development Services

Driveway Permit 33634

This permit allows the owner to construct and maintain a driveway within a State owned highway Right of Way.

Owner:	Fairview Park Inv Ltd
Mailing Address:	P.O. Box 92225, Anchorage, AK 99509
Contact:	Cody Troseth
Driveway location (highway, address, subdivision, legal description milepost, etc.) Wasilla DW - 4370 E Fireweed Road, Wasilla. DW constructed under DOT Project 53989. MSB Parcel ID: 50460	

Design Criteria

A.	Driveway width	32	Feet
B.	Left edge clearance	150	Feet
C.	Right edge clearance	200	Feet
D.	Left return radius	40	Feet
E.	Right return radius	40	Feet
F.	Shoulder width	2	Feet
G.	Approach angle	90	Degrees
H.	Curb type	N/A	
I.	Curb to sidewalk distance	N/A	
J.	Left driveway foreslope	4:1	Or match existing
K.	Right driveway foreslope	4:1	Or match existing
L.	Culvert length	68	Feet (field fit)
M.	Landing grade	2	Percent
N.	Landing length	40	Feet
O.	Culvert size	18	Inches
P.	Culvert type	CMP	
Q.	Ditch depth	2	Feet
R.	Shoulder type	Paved	
S.	Road surface type	Paved	
T.	Driveway surface type	Asphalt	

This permit applies only to the State right of way.

This permit grants permission for a driveway allowing access to and from your property onto a State maintained highway. It does not permit the following within the right of way or within that portion of a driveway that is within the right of way: (1) Parking of vehicles "for sale"; (2) Obstructions of any kind (i.e. logs, cables, fencing, etc.); (3) Advertising signs or banners/flags; (4) Parking vehicles with signs/advertising on the side.

A driveway constructed under permit within a highway right-of-way is the property of the State, but all cost and liability arising from the construction, operation, or maintenance of a driveway is at the sole expense of those lands served.

The Department is not obligated to change its maintenance practices to accommodate a driveway constructed under a permit, or to incur any additional expense removing snow berms or other obstructions from a driveway within a right of way resulting from the Department's activities, or activities under a permit issued under 17 AAC 15.

Owner is responsible for adjusting, relocating or removing the driveway without cost or liability to the Department if the use or safety of the highway requires.

This permit is not a property right but a temporary authorization, revocable by the State upon violation of any permit terms or conditions, or for other reasons. All reasonable attorney's fees and costs associated with legal or enforcement actions related to the terms and conditions of this permit will be borne by the Owner.

Any survey monument or monument accessory that is disturbed or destroyed during construction or maintenance of the driveway will be restored or replaced by a Land Surveyor licensed in the State of Alaska.

The Owner will be responsible for all necessary Federal, State, and Municipal permits and licenses required by law, pay all taxes and special assessments lawfully imposed upon the permitted area, and pay other fees and charges assessed under applicable law.

Placement of fill material in waters of the U.S., including wetlands and streams, requires prior authorization from the U.S. Army Corps of Engineers. It is the responsibility of the owner to contact the Corps before filling activities take place.

The Owner shall construct and maintain a driveway in such a manner that the highway, and all of the highway's appurtenances or facilities, including drainage facilities, pipes, culverts, ditches, traffic control devices, street lights, pathways, and sidewalks are not impaired or endangered in any way by the construction or maintenance. If you damage any improvements within the State owned right of way, you will be responsible for returning them to their previous condition. The Department will inspect and approve the restored improvements.

Owner will indemnify, defend, and hold harmless the State, and its officers, employees, and contractors, from any and all claims or actions resulting from injury, death, loss, or damage sustained by any person or personal property resulting directly or indirectly from Owner's use of or activities in the permitted area.

Landings from all paved roads must be paved and maintained from edge of the road to the length of the landing as stipulated in this permit.

If a culvert is required by this driveway permit, culvert ends must be installed at the time of installation and maintained continuously by the owner.

No person shall place, leave, or deposit upon any street, avenue, alley, sidewalk, or other public right of way any snow or ice which has been removed from a private driveway, private parking area, or the adjacent property. Owner is responsible for contractor's actions concerning placement of snow from Owner's property.

If driveway construction or maintenance interferes with the public's safety and/or use of facilities within State owned right of way, you will be directed to stop work until adjustments are made.

While doing construction or maintenance activities do not park equipment or stockpile material on the shoulder during non-working hours.

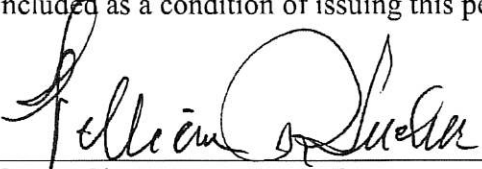
Owner is responsible for sight distance clearing of brush and obstructions adjacent to their property

Contact the Department for information about acceptable driveway markers (i.e., size, materials, distance, etc.) for placement within the right of way.

Attachments included as part of this permit are:

- Site Plan

I, Bill Tucker, acknowledge and accept that, Fairview Park Investments Ltd., will comply with all the provisions and conditions that the Department of Transportation and Public Facilities has included as a condition of issuing this permit.


 Owner Signature Gen. MGR

8-20-24
 Date

DocuSigned by:
Melanie Arnolds
 0B18FAB5B16B4B9...
 DOT&PF Signature ^{DS} MW

8/29/2024
 Date

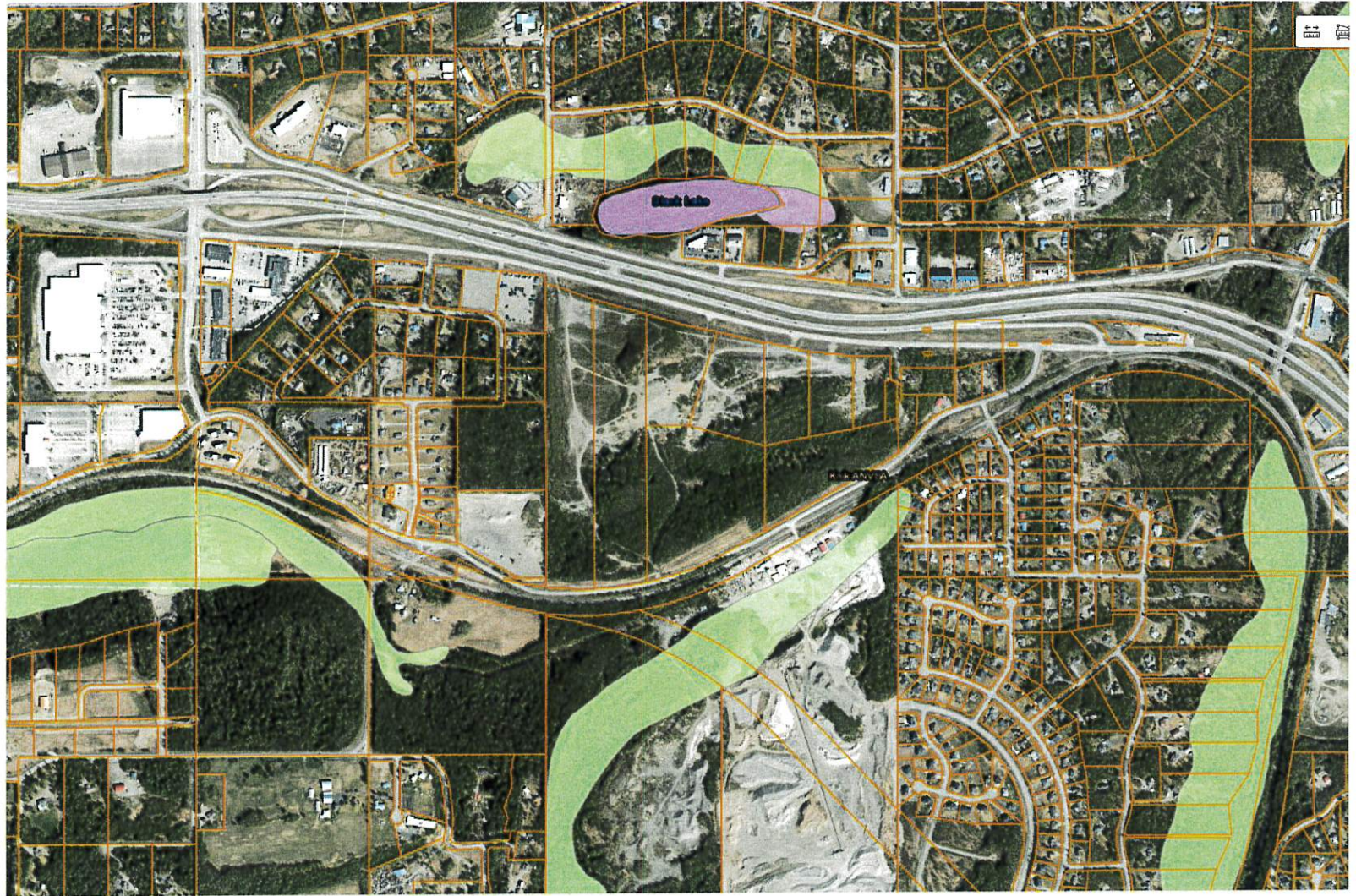
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Mat-Su Borough Parcels



Cookinlet Wetlands

- Depression
- Discharge Slope
- DISTURB
- Drainageway
- Drainageway / Tidal
- Headwater Fen
- Kettle
- LAKE
- Lakebed
- Riverine
- Spring Fen
- Tidal
- Tidal / Drainageway
- VLD Trough
- Wetland / Upland Complex



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Development Services

Legend

DEC - Drinking Water Program

Alaska DEC Public Water System Sources

- Community Water System (CWS)
- Transient Non Community (TNC)
- Non Transient/Non Community (NTNC)

Number of features

- > 2
- 2
- 2
- 2
- < 2

Alaska DEC Public Water System Source Minimum Required Separation Distances

PWS Separation Distance 100 ft



PWS Separation Distance 200 ft

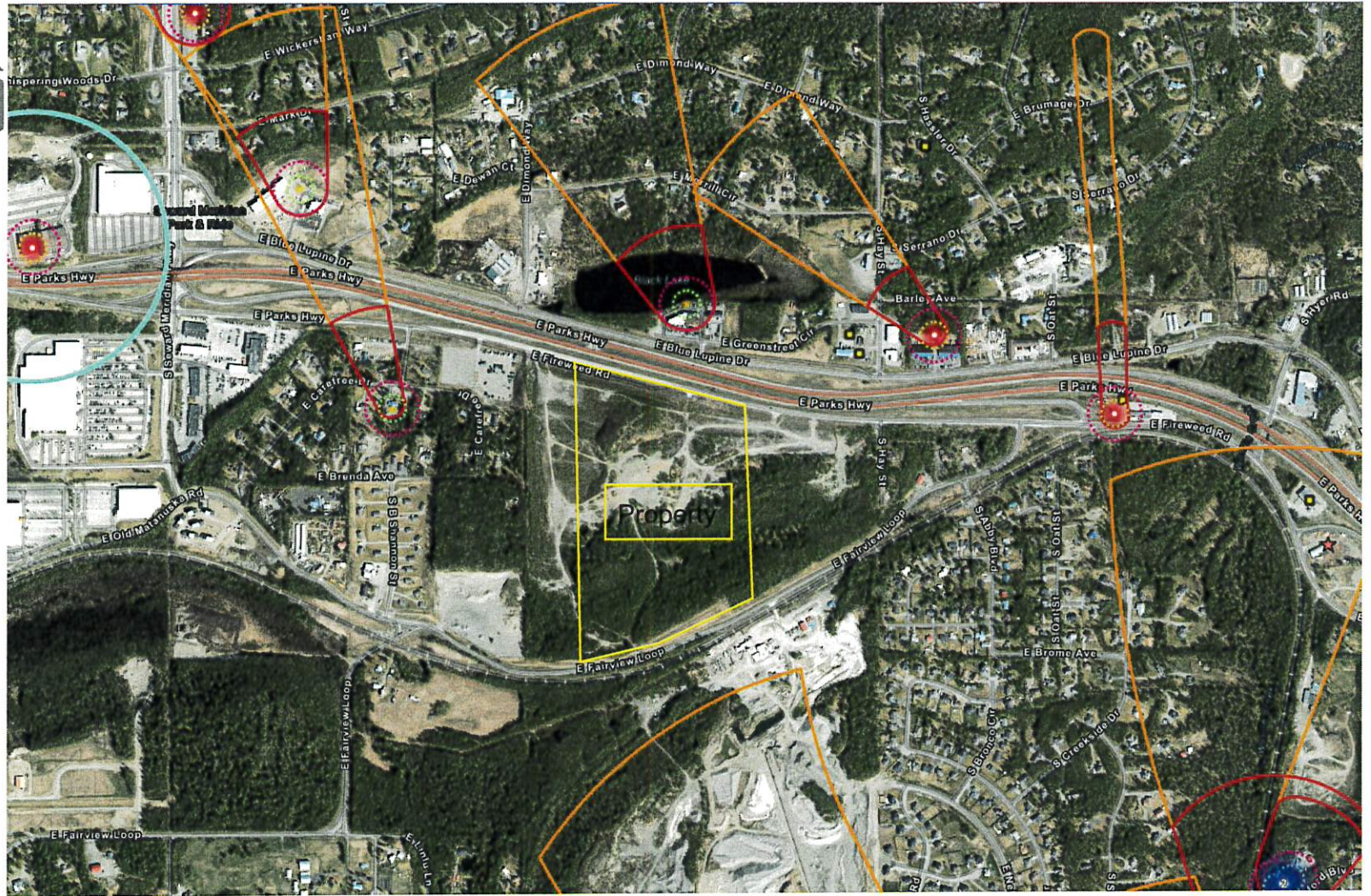


Alaska DEC Drinking Water Protection Areas

Zone A (GW-Several Months Time of Travel or SW 1000 ft buffer)



Zone B (GW-2 Yr Time of Travel or SW-1 mile buffer)



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Development Services



Road and Access Plan rcvd 8-20-24



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Mat-Su Borough
Development Services

ALASKA DEPARTMENT OF NATURAL RESOURCES
Division of Mining, Land, and Water
Water Resources Section

550 West 7th Avenue, Suite 1020, Anchorage, AK 99501-3562

TEMPORARY WATER USE AUTHORIZATION
TWUA A2024-49

Pursuant to AS 46.15, as amended and the rules and regulations promulgated thereunder, permission is hereby granted to Mass Excavation, Inc. (hereinafter authorization holder), 6591 A Street, Anchorage, AK 99518, and their contractors, **to use water from the sources described below**. Water withdrawals are associated with the Seward Meridian Parkway Road Improvement Project Phase II: Palmer-Wasilla Hwy to Seldon Road. The season of use is April 1 through November 1 for three years.

SOURCES & AMOUNT OF WATER

1. Cottonwood Creek:
Lat: 61.5958°N Long: 149.3600°W
Seward Meridian, T 17N, R 1W, Section 1.
Requesting 50,000-gpd with a seasonal amount of 2,000,000-gallons.
2. Cottonwood Creek:
Lat: 61.5958°N Long: 149.3600°W
Seward Meridian, T 17N, R 1E, Section 6 and T 17N, R 1W, Section 1.
Requesting a full diversion using a ditch and culvert.

ADVISORY

The water withdrawal and water use areas are near active registered public water system sources. Please see **Condition 29**.

STRUCTURES TO BE CONSTRUCTED AND USED

Changes in the natural state of water are to be made as stated herein and for the purposes indicated. As described in the application materials: screened water intake, pump(s) with up to a 6" intake and an output up to 200 gallons per minute, pipe/hose and 4,000-gallon water truck(s).

CONDITIONS

During the effective period of this authorization, the authorization holder shall comply with the following conditions:

1. This authorization does not authorize the authorization holder to enter upon any lands until proper rights-of-way, easements or permission documents from the appropriate landowner have been obtained.
2. The authorization holder is responsible for obtaining and complying with other permits/approvals (state, federal or local) that may be required prior to beginning water withdrawal pursuant to this authorization.
3. Follow acceptable engineering standards in exercising the privilege granted herein.

4. Comply with all applicable laws, and any rules and/or regulations issued thereunder.
5. Except for claims or losses arising solely from the negligence of the State, defend and indemnify the State, the State's agents, and the State's employees against and hold each of them harmless from any and all claims, demands, suits, loss, liability and expense (including attorney fees) for injury to or death of persons and damages to or loss of property arising out of or connected with the exercise of the privileges covered by this authorization.
6. Notify the Water Resources Section upon change of address.
7. Failure to respond to a request for additional information during the term of the authorization may result in the termination of this authorization.
8. The authorization holder shall allow an authorized representative of the Water Resources Section to inspect, at reasonable times, any facilities, equipment, practices or operations regulated or required under this authorization.
9. This authorization, or a copy thereof, shall be kept at the site of the authorized project described herein. The authorization holder is responsible for the actions of contractors, subcontractors, agents or other persons who perform work to accomplish the approved project and shall ensure that workers are familiar with the requirements of this authorization.
10. The Water Resources Section may modify this authorization to include different limitations, expand monitoring requirements, evaluate impacts, or require restoration at the site.
11. Pursuant to AS 46.15.155(f), the Department may impose conditions or limitations on an authorization to protect the water rights of other persons or to protect fish and wildlife habitat, human health, or other public interests.
12. Pursuant to AS 46.15.155(i), 11 AAC 93.210(b) and 11 AAC 93.220(f), temporary authorizations are subject to amendment, modification, suspension, or revocation to supply water to lawful appropriators of record, protect the water rights of other persons or the public interest.
13. Any false statements or representations in any application, record, report, plan or other document filed or required to be maintained under this authorization may result in the termination of this authorization.
14. Monitor water withdrawals and/or diversions for each day of actual use for each authorized water source and when withdrawals and/or diversions for each authorized water source reached 90% of the authorized limit for that water source submit this information to this office prior to the initiation of any further withdrawals and/or diversions of the respective water source.
15. Operations shall be conducted in such a way as to prevent any petroleum products or hazardous substances from contaminating surface or ground water. Pumps will not be fueled or serviced within 100 feet of a pond, lake, stream, river, or other water body unless the pumps are situated within a catch basin designed to contain any spills. Vehicles will not be fueled or serviced within 100 feet of a pond, lake, stream, river, or other water body. Equipment shall not be stored or serviced within 100 feet of any water body. Vehicles leaking fuel, hydraulic fluids, or other pollutants shall not be operated below the ordinary high-water elevation of a surface source. In case of accidental spills, absorbent pads and spill response kits shall be readily available. Appropriate disposal methods for waste products shall be followed.

16. Operations shall not cause or contribute to the spread of preexisting or authorization holder caused contaminant plumes. All spills and contamination known or encountered must be immediately reported to the Alaska Department of Environmental Conservation (ADEC) and the Alaska Department of Natural Resources (DNR). Authorization holder shall cooperate with lawful prohibitions, restrictions, instructions, stop work orders or work plan requirements issued by ADEC for authorization holder's projects.
17. All equipment used at or adjacent to water bodies and water sources must always be clean and free from contamination and invasive species (terrestrial and aquatic) to prevent the introduction of contamination and invasive species to the water body.
18. Water bodies shall not be altered to facilitate water withdrawal or disturbed in any way. If banks, shores or beds are inadvertently disturbed, excavated, compacted or filled by activities attributable to this project, they shall be immediately stabilized to prevent erosion and resultant sedimentation of the water body which could occur both during and after operations. The Water Resources Section is to be notified immediately if the above occurs. Additional corrective action may be required by ADNR and the land manager/owner.
19. The placement of equipment shall not unnecessarily hinder public access.
20. Water discharge (including runoff) shall not create erosion, sedimentation, or other hazards within adjacent or nearby properties, road rights-of-way, stormwater drainage systems, sanitary sewer systems or water bodies.
21. Adequate flow and water levels must remain in the river to support indigenous aquatic life and provide for the efficient passage and movement of fish.
22. Any water intake structure in fish bearing waters (including a screened enclosure, well-point, sump or infiltration gallery) shall be designed to prevent the entrainment, impingement and/or entrapment of fish and shall be installed and maintained at each intake location. The effective screen openings may not exceed 0.125 inches (1/8 inch). The water velocity at the screen/water interface may not exceed 0.5 feet per second when the pump is operating.
23. The authorization holder shall inspect the intake screen for damage (torn screen, crushed screen, screen separated from intake ends, etc.) after each use and prior to each deployment. Any damage or blockage observed must be repaired prior to use of the structure. The structure must always conform to the original design specifications while in use.
24. Silt fencing, silt sock, sorbent booms or other suitable containment techniques must be used, as necessary, to minimize the introduction of suspended solids into flowing waters and storm drain systems.
25. Issuance of this authorization does not give the authorization holder the right to block or dam a water course.
26. There shall be no wheeled, tracked, excavating, or other machinery or equipment operated below the ordinary highwater line to facilitate water withdrawal or diversion pursuant to this authorization.
27. If any adjacent well owner or appropriator of record notes interference during any pumping associated with this authorization, work is to immediately cease and DNR-Water contacted. Pumping is not to resume until authorized by DNR-Water.

28. Record and immediately report to this office all complaints relating to pumping activities and discharge, including requests for information from residents, should the situation occur.
29. Adhere to the ADEC, Division of Environmental Health-Drinking Water Program Recommendations for General Project Activities Associated with, or near, a Public Water System Source, where applicable.
30. Deviations from the project description submitted with the application which affects water amounts, season of use, capacity, flow, operation or point of discharge/diversion must be approved by the Water Resources Section in writing prior to implementation.
31. Only water use is being authorized with this authorization. No ground disturbance, clearing, mulching, mowing, removal of the vegetative mat, rutting or other land use can occur in conjunction with the activities in this authorization without the express approval of the land manager/owner.
32. Per 11 AAC 05.260(e), an annual administrative service fee shall be assessed on this authorization.

This Temporary Water Use Authorization is issued pursuant to 11 AAC 93.220. No water right or priority is established by a temporary water use authorization issued pursuant to AS 46.15.155(c). Water so used is subject to appropriation by others.

This authorization shall expire on November 1, 2026.

Date issued: May 22, 2024

Approved: 

Jessie Zimmerman, Manager
Water Resources Section

Storm Water Pollution Prevention Plan (SWPPP)

Project Name: Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Road Improvements, Ph II. Date: 5/23/2024

**Storm Water Pollution Prevention Plan
For**

Dedicated Contractor-Provided Sites
for
Seward Meridian Pkwy Road Improvements, Ph II
Wasilla, AK 99654



**Site Construction Operator and
24-Hour Emergency Contact**

Robert Cornell, Superintendent, Mass Excavation, Inc.
6591 A St. Suite 300, Anchorage, AK 99515
Telephone: (907) 711-9272; FAX: (907) 770-7752; Cell telephone: (907) 229-7931

Brenda Tapani, SWPPP Manager/Storm Water Lead, Mass Excavation, Inc.
6591 A St. Suite 300, Anchorage, AK 99518
Telephone: (907) 711-9272; FAX: (907) 770-7752; Cell telephone: (509) 859-7497

(Contact either of these persons for construction information and to schedule a SWPPP viewing time.)

SWPPP Preparation Date

5/23/2024

Estimated Project Dates

Start of Construction	Completion of Construction
5/28/2024	10/31/2026
	12-31-2029 Amendment 3, EKN 9-20-24

**APDES Project or Permit Authorization Numbers:
Mass Excavation, Inc. _AKR10H0K2**

Storm Water Pollution Prevention Plan (SWPPP)

Project Name: Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Road Improvements, Ph II. Date: 5/23/2024

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Storm Water Pollution Prevention Plan (SWPPP)

Project Name: Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Road Improvements, Ph II. Date: 5/23/2024

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APPENDICES

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 - Numbered SWPPP Maps
- B. BMP Details
- C. Project Schedule
- D. Supporting Documentation (Climate, Soils, Environmental, Permitting)
- E. Delegation of Authority, SWPPP Certification
 - Delegation of Authority and SWPPP Certification
 - SWPPP Personnel Certifications
- F. Permit Conditions:
 - Cover Letters (when issued)
 - NOI's (when issued) and NOI Modifications (if filed)
 - Notices of Termination (NOTs) (when filed)
 - Copy of 2021 Construction General Permit
- G. Grading and Stabilization Records
- H. Monitoring Plan and Reports (not applicable, appendix not used)
- I. Training Records
- J. Corrective Action Log
- K. Inspection Records
- L. Spill Reporting and Reference Documents
- M. Amendment Log
- N. Daily Record of Rainfall
- O. Not used.
- P. Treatment Chemicals/Active Treatment Systems (not applicable, appendix not used)
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 - Anti-Degradation Analysis (Not Required)
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 - Drinking Water Protection Area Notifications

Storm Water Pollution Prevention Plan (SWPPP)

Project Name: Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Road Improvements, Ph II. Date: 5/23/2024

1.0 PERMITTEE (5.3.1)

1.1 Operator(s)/Contractor(s)

Operator Information					
Organization:	Mass Excavation, Inc. (MassEx)	Name:	Justin Shields	Title:	General Manager
Phone:	(907) 771-9272	Fax (optional):	(907) 770-7752	Email:	justins@massexcavation.com
Mailing Address:	Street (PO Box):			6591 A St. Suite 300	
	City:		State:	Zip:	
Anchorage		AK	99515		
Area of Control	Day-to-day operational control of those activities at the sites which are necessary to ensure compliance with a SWPPP or other permit conditions.				

Owner Information					
Organization:	See Table Page 8	Name:		Title:	
Phone:		Fax (optional):		Email:	
Mailing Address:	Street (PO Box):				
	City:		State:	Zip:	
Area of Control	There are no engineering plans or specifications for the use of the sites addressed in this SWPPP. The owners are not involved in the material disposal activity and will not obtain NOIs unless the size and location of their property work area requires Alaska Construction General Permit coverage.				

1.2 Subcontractors

Subcontractor Information					
Organization:		Name:		Title:	
Phone:		Fax (optional):		Email:	
Mailing Address:	Street (PO Box):				
	City:		State:	Zip:	
Area of Control					

Subcontractor Information					
Organization:		Name:		Title:	
Phone:		Fax (optional):		Email:	
Mailing Address:	Street (PO Box):				
	City:		State:	Zip:	
Area of Control					

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Subcontractor Information			
Organization:		Name:	Title:
Phone:		Fax (optional):	Email:
Mailing Address:	Street (PO Box):		
	City:	State:	Zip:
Area of Control			

Subcontractor Information			
Organization:		Name:	Title:
Phone:		Fax (optional):	Email:
Mailing Address:	Street (PO Box):		
	City:	State:	Zip:
Area of Control			

Subcontractor Information			
Organization:		Name:	Title:
Phone:		Fax (optional):	Email:
Mailing Address:	Street (PO Box):		
	City:	State:	Zip:
Area of Control			

Subcontractor Information			
Organization:		Name:	Title:
Phone:		Fax (optional):	Email:
Mailing Address:	Street (PO Box):		
	City:	State:	Zip:
Area of Control			

Subcontractors (if any work on site) are required to inform the Mass Excavation, Inc. (MassEx) Superintendent or SWPPP Manager/Storm Water Lead within 24 hours of discovering a storm water issue or condition that may adversely affect water quality or the environment, including but not limited to damage to BMPs and discharge of polluted storm water. No subcontractor will have Operational Control of the site.

MassEx is required to inform subcontractors of any site change or SWPPP Corrective Action that will affect them within 3 days of initiating implementation of the change/corrective action and train subcontractors regarding the requirements of this SWPPP and site practices required by them for compliance.

Storm Water Pollution Prevention Plan (SWPPP)

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2.0 STORM WATER CONTACTS (5.3.2)

<u>Qualified Personnel</u>	<u>Responsibility</u>
Superintendent (Mass Excavation, Inc.) Robert Cornell AK-CESCL AGC-24-0202 exp. date: 4-11-27 6591 A St. Suite 300, Anchorage, AK 99518 Telephone: (907) 771-9272, Cell: (907) 229-7931 Email: bobc@massexcavation.com	Authority to stop and/or modify on-site activities as necessary to comply with the SWPPP and the terms and conditions of the Alaska Construction General Permit (ACGP). The Superintendent is the “duly authorized representative” and will review and sign SWPPP inspection reports and all other SWPPP-related documents and reports that require certification, Responsible to direct the work performed by the subcontractors. The Superintendent can fulfill the duties of the SWPPP Manager/Storm Water Lead.
SWPPP Manager/Storm Water Lead (Mass Excavation, Inc.) Brenda Tapani AK-CESCL ASA-24-0076 exp. date: 5-15-27 6591 A St. Suite 300, Anchorage, AK 99518 Telephone: (907) 771-9272, Cell: (907) 229-7931 Email: brendat@massexcavation.com	Authority to stop and/or modify on-site activities as necessary to comply with the SWPPP and the terms and conditions of the Alaska Construction General Permit (ACGP). A person knowledgeable in the principles and practice of erosion and sediment control who possesses the skills to assess conditions at the construction site that could impact storm water quality. Assesses the effectiveness of any erosion and sediment control measures installed to control the quality of storm water discharge, conducts inspections, completes inspection reports, and is familiar with Part 6 as a means to ensure compliance with the permit. Updates SWPPP documents, reports the need for follow-up corrective action to the Superintendent, and can supervise or initiate corrective actions.
SWPPP Preparer and SWPPP Inspector (Nefzger Consulting) Elaine Nefzger, AK-CESCL ASA-24-0004 (exp. Date: 3-1-2027) 3303 W. 82nd Avenue, Anchorage, AK 99502 Telephone: (907) 244-1880 Email: alasekn@outlook.com	Possesses the skills to assess conditions at the construction site that could impact storm water quality. Familiar with Part 5 as a means to implement the permit. As directed by the Superintendent, the SWPPP Inspector can fulfill the duties of the SWPPP Manager/Storm Water Lead.
Monitoring Person (If Applicable)	None on this site.
Active Treatment System Operator (If Applicable)	None on this site.

Mass Excavation, Inc (MassEx) is responsible for performing all work required for compliance with this SWPPP and the Alaska Construction General Permit (ACGP) including establishing measures to prevent water pollution, performing inspections, completing required reports including Inspection Reports and maintaining the SWPPP Grading and Stabilization Log, Training Log, Corrective Action Log, Rainfall Log, and preparing and processing all SWPPP Amendments as needed to keep the SWPPP current using the Amendment Log.

Personnel Qualifications and Certifications for Superintendent, SWPPP Manager/Storm Water Lead, and SWPPP Preparer and SWPPP Inspector comply with ACGP Appendix C, Table 4, on page C12. Certifications are in and will be maintained in Appendix E.

Storm Water Pollution Prevention Plan (SWPPP)

Project Name: Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Road Improvements, Ph II. Date: 5/23/2024

3.2 Project Site Specific Conditions (5.3.3)

Mean annual precipitation based on nearest weather stations (inches): Mean annual precipitation based on nearest weather stations (inches): The nearest National Weather Service weather station is Palmer Job Corps (506870). The mean annual precipitation is 15.73 inches. The anticipated date of spring thaw is May 22 and fall freeze is September 29. The data is from the Western Regional Climate Center online:

<http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ak6870> . The average 2-year, 24-hour storm for the site is 1.30 inches. This determination was made using data for the Palmer Job Corps Station ID: 50-6870 from http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_ak.html Refer to the climate and weather data tables in Appendix D-1.

Soil Type(s): The existing sites are natural glacial till covered with a thin organic layer in areas not previously disturbed or filled. Past import of waste earthen material from other projects has been spread over the native soils. Import and grading work continues under this and other projects. Mass Excavation, Inc. will dispose of (uncontaminated) waste earthen materials or otherwise use the sites for project purposes as described in subsection 4.5.

Drainage Patterns, Landscape Topography and Slopes: Existing topography is relatively flat with no or poorly defined drainage patterns. The work performed by MassEx will not significantly change drainage patterns.

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:

https://www.researchgate.net/publication/271909812_Regional_Supplement_to_the_Corps_of_Engineers_Wetland_Delineation_Manual_Alaska_Region_Version_20

Type of Existing Vegetation: The areas are privately owned sites that are undisturbed or have had imported fill spread over select areas in the past. Existing vegetation includes grasses and flowering plants. Native brush, fern, and bog types of plants thrive in low areas. Spruce, hemlock, birch, aspen, cottonwood, and poplar mixed forest grow along upland terrain. Previously disturbed areas may be barren.

Historic site contamination evident from existing site features and known past usage of the site: The Alaska Department of Environmental Conservation (ADEC) Contaminated Sites Database was searched on May 23, 2024 to determine if any known contaminated sites categorized as Active or Closed with Institutional Controls exist within 1500 feet of any of the sites included in this SWPPP. Those found are listed below.

Hazard ID	Name	Location	Status	ADEC Staff Contact
26295	Tesoro Northstore #76	3600 E. Palmer-Wasilla Highway Wasilla, AK 99654	Active	Peter Campbell (907) 262-3412 Peter.campbell@alaska.gov

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4.0 NATURE OF CONSTRUCTION ACTIVITY (5.3.4)

4.1 Scope of Work

The sites included in this SWPPP are dedicated material source and/or disposal, staging yards, and other project uses subject to the Alaska Construction General Permit for the Seward Meridian Pkwy Road Improvements, Ph II project

4.2 Project Function (5.3.4.1)

The work will dispose of excess/waste soils in a manner that will "recycle" and reuse the material in a beneficial manner for the respective property owners. Other potential uses include obtaining earthen material or staging.

4.3 Support Activities (As Applicable)

There are no support Activities or locations for these sites and the work covered by this SWPPP.

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

The table in subsection 3.1 will be maintained to document when different dedicated sites are added to this SWPPP for use and when the use of each site ends.

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

The following are estimates for each site. The Area to be disturbed is the area Mass Excavation, Inc. anticipates they will for project purposes. They have no control over the area the respective property owners may subsequently disturb. Each table includes the location, type of use by MassEx, and responsibility for stabilization.

Jason & Melissa Mogan Residence (earthen material disposal). Owner is responsible for stabilization.			
Total Project Area (Parcel size)	1.49	acres	Remarks
Area to be disturbed for earthen material disposal:.....	0.5	acres	
Percentage impervious area (disposal area) ...	0	%	
Runoff coefficient BEFORE construction:.....	0.4		
Percentage impervious area AFTER construction:	0	%	
Runoff coefficient AFTER construction:.....	0.4		

Kurt & Anne Anderson Private Property (earthen material disposal). Owner is responsible for stabilization.			
Total Project Area (2 parcels)	9.24	acres	Remarks
Area to be disturbed for earthen material disposal:.....	0.5	acres	
Percentage impervious area (disposal area) ...	0	%	
Runoff coefficient BEFORE construction:.....	0.4		
Percentage impervious area AFTER construction:	0	%	
Runoff coefficient AFTER construction:.....	0.4		

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Snowbird Investment Properties, LLC (PerkUp Coffee) (earthen material disposal).

Owner is responsible for stabilization.

Total Project Area (2 parcels)	4.59	acres	Remarks
Area to be disturbed for earthen material disposal:.....	0.5	acres	
Percentage impervious area (disposal area) ...	0	%	
Runoff coefficient BEFORE construction:	0.4		
Percentage impervious area AFTER construction:	0	%	
Runoff coefficient AFTER construction:.....	0.4		

Fairview Park Investments, Ltd. Section 18, Lot A4 (earthen material staging, material mining)

Mass Excavation, Inc. is responsible for stabilization

Total Project Area (Parcel size)	19	acres	Remarks
Area to be disturbed for earthen material disposal:.....	6	acres	
Percentage impervious area (disposal area) ...	0	%	
Runoff coefficient BEFORE construction:	0.4		
Percentage impervious area AFTER construction:	0	%	
Runoff coefficient AFTER construction:.....	0.4		

Fairview Park Investments, Ltd. Section 18, Lots A12, A13, A14, and A18 (earthen material staging, material mining) Mass Excavation, Inc. is responsible for operation and stabilization according to Matanuska-Susitna Borough permitting and the Construction General Permit

Total Project Area (4 Parcels)	53.92	acres	Remarks
Area to be disturbed.....	45	acres	Added via Amendment 2 and NOI Modification Submission HQ3-ZKF0-J55PV Dated 9-18-24
Percentage impervious area	0	%	
Runoff coefficient BEFORE construction:	0.4		Parts of the lots have been disturbed in the past during on-going site use by the property owner.
Percentage impervious area AFTER construction:	0	%	
Runoff coefficient AFTER construction:.....	0.4		

Total Project Area (Parcel size)		acres	Remarks
Area to be disturbed.....		acres	
Percentage impervious area (disposal area) ..		%	
Runoff coefficient BEFORE construction:			
Percentage impervious area AFTER construction:		%	
Runoff coefficient AFTER construction:.....			

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4.6 Identification of All Potential Pollutant Sources (5.3.4.5)

Potential sources of sediment to storm water runoff:

Potential sources of soil fines in storm water runoff are ground surface-disturbing activities including excavation of soil, placing fill, and grading. Staged soil piles that are not covered or stabilized may also be a source of sediment in storm water runoff. Additional sources are rainwater wash-off of soils from equipment tires, tracks, buckets, and blades; vehicle tracking of soils from the site onto adjacent driving surfaces. Dust generated by construction activities and by wind from un-stabilized soil areas can also contribute to soil fines in water bodies.

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

Trade Name Material	Storm Water Pollutants	Location
Petroleum-based fuels, fluids, and lubricants	Petroleum liquids Petroleum hydrocarbon lubricants and hydraulic fluids	All site areas where equipment is working, fueled, maintained, parked, and transported.
Vehicle equipment and maintenance products including engine coolant, 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. In the Mechanic's truck and in the site tool van.
Acid from vehicle and equipment batteries	Lead acid/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 and ethyl alcohol	In portable toilets.
Various cleaners and solvents	Detergents, ammonia, alcohols	Site locations where the products are used.

5.0 SITE MAPS (5.3.5)

Site SWPPP Maps are provided in Appendix A. They include or will be maintained up to date during the project by noting the following site-specific information:

- North arrow and graphic scale.
- Property boundaries;
- Locations where earth-disturbing activities will occur;
- Location of areas that will not be disturbed and natural features to be preserved;
- Location of all storm water conveyances including ditches, pipes, and swales;
- Locations of storm water inlets and outfalls, with a unique identification code for each outfall;
- Locations where storm water and/or authorized non-storm water discharges to waters of the U.S. (including wetlands) or a Municipal Separate Storm Sewer System (MS4)
- Direction(s) of storm water flow and approximate slopes anticipated after grading activities
- Locations where control measures will be or have been installed including: dumpster/waste receptacles, porta-potties, concrete, paint, or stucco washout areas and stabilized construction exits.
- On-site staging and material storage areas (construction materials, hazardous materials, fuels, etc.) (None for these sites.)

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- Locations where exposed soils will be stabilized or have been stabilized (noted on the drawings as it is accomplished) Note that stabilization is the responsibility of each property owner.
- Locations where post-construction storm water controls are planned to be or have been installed (None for these sites);
- Locations of support activities (none are dedicated to this project);
- Locations where authorized non-storm water will be used, including the types that will be used on-site. These may be dust control watering only.
- Locations of all waters of the U.S. (including significant wetland areas 10,000 square feet or greater) on the site and those located within 2,500 feet of the site boundary; (see SWPPP Map A in Appendix A and the U.S. ARMY CORPS OF ENGINEERS (COE) Jurisdictional Determination Letter in Appendix D).
- Location of existing public water system (PWS) drinking water protection areas (DWPA) for PWS sources (e.g. springs, wells, or surface water intakes) that intersect the boundary of the proposed project/permit area. See the list in subsection 9.3, and notifications in Appendix Q.
- Sampling Point(s) (not applicable); and
- Areas where final stabilization has been accomplished and no further construction phase permit requirements apply. (Noted on the drawings as it is accomplished.)

6.0 DISCHARGES

6.1 Locations of Other Industrial Storm Water Discharges (5.3.8)

There are no industrial discharges from support activities dedicated to these sites. There are no dedicated concrete, asphalt, material source, waste disposal, or other processing sites.

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 and states if each is expected at this site.

- Discharges from fire-fighting activity will only occur if necessary to protect property and human life.
- Water line/fire hydrant flushing is not planned for these sites.
- Washing vehicles/equipment on site is not allowed at these sites by Mass Excavation, Inc.
- Dust Control watering may be necessary.
- Building wash down will not take place on these sites.
- Pavement washing is not planned.
- Uncontaminated discharges from air conditioning or compressor units are not planned.
- Uncontaminated foundation or footing drains will not occur.
- Uncontaminated, non-turbid discharges of ground water are not expected.
- Uncontaminated ground water dewatering and excavation dewatering are not a factor.
- Landscaping and vegetation watering are not planned.

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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:

Site Name	Street/City/State/Zip	Water Body Name	Remarks
Jason & Melissa Mogan Residence	Site Address 851 S Begich Dr. Wasilla, AK 99654	None	
Kurt & Anne Anderson Private Property	3900 E Brianna Lane Wasilla, AK 99654	Non-jurisdictional wetland	May be filled per COE, discharges are allowed
Snowbird Investment Properties, LLC (PerkUp Coffee)	3700 E Palmer Wasilla Hwy. Wasilla, AK 99654	Non-jurisdictional wetland	
Fairview Park Investments, Ltd. Section 18, Lot A4	4202 E Fireweed Rd., Wasilla, AK 99654	None	Amendment 1, 5-28-24
Fairview Park Investments, Ltd. Section 18, Lots A5, A12, A13, A14,	4202 E Fireweed Rd., Wasilla, AK 99654	None. Flow is blocked by the highway on the north and the road and railroad on the south	Amendment 2, 9-18-24

Description of storm sewer and/or drainage systems: The sites do not discharge to any Municipal Separate Storm Sewer System (MS4). Existing paved ditches along the properties drain to lower terrain. Storm water is expected to infiltrate the ground on each site. If any flows to roadside ditches, it is expected to infiltrate the bottom of the ditch. Potential discharge to a Water of the U.S. (if any) is noted in the table above for each site.

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.

This determination was made by reviewing the "Most Recently EPA Approved List of Impaired Waters (as of 2022)" list online on May 23, 2024 at <https://dec.alaska.gov/water/water-quality/integrated-report/>

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

8.1 Information on Endangered or Threatened Species or Critical Habitat (5.7.1)

Are endangered or threatened species and critical habitats on or near the project area? Yes No.

Endangered and Threatened Species:

The work areas are previously developed private land parcels. Part of each site is undeveloped with natural vegetation. These parcels are not designated as Critical Habitat for any protected species.

No Endangered or Threatened species are likely to be found in or near the work areas. This determination was made by reviewing the Federal and Alaska state endangered and threatened species lists online including the National Marine Fisheries Service (NMFS), United States Fish and Wildlife Service (USFWS), and Alaska Department of Fish and Game (ADF&G) on May 23, 2024. The USF&WS online Critical Habitat mapper at <https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77> and the NOAA [Alaska Protected Resources Division \(noaa.gov\)](https://www.noaa.gov) mapper were also reviewed on that date. The USF&WS IPaC system at <https://ipac.ecosphere.fws.gov/location/index> was reviewed on May 24, 2024.

Although Bald Eagles and Golden Eagles are not considered endangered or threatened, they still benefit from the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act (MBTA). Both species range throughout Alaska and may be to be found near the work areas.

If active Eagle nests are found within 660 feet of a work area, construction activities must stop and the USFWS must be notified immediately by calling (907) 786-3503. A Primary Zone of 330 feet radius buffer around nesting eagles is required. Between 330 feet and 660 feet, no major habitat modifications shall occur. If blasting or other high-noise work will take place within ½ mile of an active nest, the USFWS must be notified before that work begins. High noise work is not planned for these sites.

Nests for any migratory species, including songbirds, may not be disturbed, damaged, or destroyed. Destruction of active nests, eggs, or nestlings is a violation of the MBTA. Ground nesting birds (ducks, geese, etc.) may nest and rear young in boggy areas. Other species of concern listed in the iPac system include Lesser Yellowlegs and Olive-sided Flycatcher. It is the responsibility of the Operators to examine each site area prior to beginning vegetation clearing work to determine if nests are present. Active nests are to be protected until the young birds have fledged. The USFWS Anchorage office can be contacted at (907) 786-3309 if questions arise during construction.

Will species or habitat be adversely affected by storm water discharge? Yes No.

Control of hazardous substances and limiting work to previously disturbed areas within the private property boundaries at each site will protect sensitive areas and wildlife from adverse impact due to site work activity.

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

9.1 Historic Properties and Cultural Resources

There will be no adverse effect on cultural, archaeological, or historical sites due to the activity at these work areas. The National Park Service website listings for Alaska's National Historic Landmarks and National Register of Historic Places were reviewed on May 25, 2024 to confirm there are no Historic Properties or sites near the work areas. If any previously unknown cultural, archeological, or historical sites are discovered during construction, MassEx will inform the State Historic Preservation Officer (SHPO) at (907) 269-8700. Any work activity that might impact the site will be halted. The area will be segregated with flagging or barriers. Work will not resume in the area without approval from the agencies of jurisdiction. A copy of all documentation (publicly available) will be added to Appendix D.

9.2 Environmental Permits

Permits and permit supplemental information, amendments, modifications, or revisions obtained after the initial SWPPP preparation will be added via amendment to Appendix D. If they contain requirements that result in a need for modification to BMPs or other parameters in the SWPPP, those will be addressed in the amendment.

A Jurisdictional Determination Letter POA-2019-00055 from the Corps of Engineers for the Anderson property is in Appendix D.

9.3 Drinking Water Protection Areas

The following Drinking Water Protection Areas intersect these work sites.

Site Name	Public Drinking Water Protection Area	Public Water System Contact Name	Public Water System Contact Phone/email
Jason & Melissa Mogan Residence	None	None	None
Kurt & Anne Anderson Private Property	None	None	None
Snowbird Investment Properties, LLC (PerkUp Coffee)	MSB Cottonwood Public Safety Building	Jesse Ripley	(907) 861-8347 Jesse.ripley@matsugov.us
Snowbird Investment Properties, LLC (PerkUp Coffee)	Tesoro Store 76, Well 2	Carol Young	253-896-8749 carol.young@7-11.com
Fairview Park Investments, Ltd. Section 18, Lot 4	None	None	None
Fairview Park Investments, Ltd. Section 18, Lots A5, A12, A13, A14, Added per Amendment 2, 9-18-24	4202 E Fireweed Rd., Wasilla, AK 99654	None	None

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The work included in this SWPPP will follow the requirements of the 2021 ACGP Part 4.10. Each Public Water System (PWS) contact will be notified by whatever method is most expedient: email or telephone.

Within the identified Drinking Water Protection Area(s) (DWPA), activities that could significantly change the natural surface water drainage or groundwater gradient will be restricted.

The PWS contact will be notified of any identified potential contamination, such as spills or excess erosion within the identified DWPA. See subsection 10.17.

Control Measures

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

All BMPs will be installed, maintained, and removed by Mass Excavation, Inc. employees or subcontractors working under the direction of the site Superintendent, SWPPP Manager/Storm Water Lead or their representative. All BMPs will be inspected as defined in subsection 11. BMP details are provided in Appendix B. Considerations for selecting and timing BMP installation include:

- Site and Public safety,
- Site conditions and the type of work activity in progress,
- Schedule,
- Current and predicted weather, and
- Suitability of the BMP for the specific application.

The BMPs listed in this section were selected based on the site activity and the location. They may be utilized as Temporary or Post-Construction BMPs. They should be considered a 'toolbox' of options for the site. For this reason, they are not all shown on the SWPPP Site Maps in Appendix A. They may or may not be used, as the field situation demands. Installation of BMPs under this SWPPP is limited to activities performed at each site by Mass Excavation, Inc.

Installing and maintaining BMPs that may be necessary for site activities performed by others, including the owners, are the responsibility of the owner.

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

Existing vegetation and existing drainage ways outside the work areas will be preserved. Only the area required to accomplish the work will be disturbed. The work limits will be identified by the property owner as needed to ensure equipment operators can readily see the work boundary.

BMP Description: Preservation of Existing Vegetation

The purpose of preserving existing vegetation and topsoil is to limit site activity and minimize soil erosion by identifying and protecting pre-existing vegetation on the site. Preserving vegetation includes preserving the native topsoil beneath it. Vegetation must be preserved in all areas where no active work takes place. All work must be inside the property boundary for each site. Preserving topsoil is not a factor for these sites unless noted on the numbered SWPPP Maps in Appendix A.

BMP Manual/Publication: No BMP Detail was used for this design.

Installation Schedule: This BMP is not installed. It is identified as work proceeds and prior to vegetation clearing in a work area. See subsection 10.9 for soil management and stockpile BMPs.

Maintenance and Inspection: Inspect markings to ensure they remain in place. Replace missing markings within 7 days or as needed to delineate areas where active work is in progress. Inspect according to the schedule in subsection 11.1. Implement corrective actions according to subsection 11.3.

Responsible Staff: The Mass Excavation, Inc. Superintendent is responsible for marking the work limits with guidance from each property owner and informing equipment operators where work is allowed. The SWPPP Manager/Storm Water Lead is responsible for inspecting work limit markings.

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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? Yes No.

Vegetative buffers may be used for perimeter control where at least 25 feet of existing vegetation is retained inside the property boundary.

BMP Description: Vegetation Buffer

The buffer consists of vegetation judiciously preserved across the path of surface runoff in a way that promotes sheet flow that can reduce the velocity of flow, increase the likelihood of infiltration, and promote trapping and settling of suspended matter. It may be used in combination with other control measures in a “treatment train” approach to promote erosion and sediment control. The buffer must be a minimum of twenty-five (25) feet wide between disturbed ground and down-slope storm water conveyances (ditches or swales) wetlands, or water bodies unless infeasible based on site dimensions.

The buffer will be identified as a BMP on the SWPPP Maps when it is defined for use as the work progresses.

Wetland vegetation cannot be used as a vegetation buffer unless permitted for fill. Consult the COE correspondence in Appendix D.

BMP Manual/Publication: The BMP detail (BMP 38.00) in Appendix B was copied from the Alaska DOT&PF Alaska SWPPP Guide, dated 12/2015.

Installation Schedule: This BMP is not installed, it is identified prior to work in an area. Flagging and marking of work limits ensure buffers are delineated and protected.

Maintenance and Inspection: Inspect vegetation buffers according to the schedule in subsection 11.1. Implement corrective actions according to subsection 11.3.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for inspecting vegetation buffers and work limits. The Superintendent is responsible for defining work limits according to the approved design, and for ensuring protective and corrective measures are implemented.

10.3 Control Storm Water Discharges and Flow Rates (4.2.5)

BMP Description: Linear/Perimeter Barrier

A perimeter barrier (berm) will be constructed as a perimeter control at locations that need it, as determined by the Superintendent. Earthen material from site grading activity or imported material may be used to form the barrier provided it will not erode or discharge sediment. Sand or gravel bags and wattles are also acceptable. No additional perimeter control is required unless inspections detect evidence of erosion and sediment discharge.

Barriers need only be installed at areas where discharge of polluted storm water run-off is deemed likely to occur based on site topography, along the location of activities that have a potential for release of pollutants (e.g. fueling, maintenance, and outdoor staging areas) and where the existing vegetative buffer is not continuous or adequate along property boundaries, wetlands, water bodies, or storm water conveyance ditches, swales, and channels. The height of the barrier must be in consideration of vehicle safety if traffic will drive over it. Barriers may also be used to direct clean storm water run-on away from disturbed soils to an appropriate discharge point and to block flow over unstabilized areas so that it is forced to discharge through an adjacent culvert or other suitable flow route. Where berms block flow and retain water, provide a stabilized over-flow discharge point similar to that of a sediment trap BMP.

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BMP Manual/Publication: The BMP detail in Appendix B was obtained from the Washington State Department of Transportation Regional Road Maintenance Best Management Practices manual, Part 2 at <https://wsdot.wa.gov/sites/default/files/2021-10/part2-bestmanagementpractices-regionalroadmaintenance.pdf> (no publication date) and modified by this SWPPP Preparer.

Installation Schedule: Install prior to or in conjunction with soil disturbance or placing of an erodible material stockpile. Barriers may be installed prior to using an area for staging material and/or equipment on site.

Maintenance and Inspection: Look for evidence of discharge of sediment-laden water outside of the area to be protected. Inspect according to the schedule in subsection 11.1. Implement corrective actions according to subsection 11.3. Remove sediment before it reaches ½ the height of the berm or increase the height of the BMP to provide effective containment of sediment.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for BMP inspections. The Superintendent is responsible for ensuring initial installation and corrective measures are implemented.

BMP Description: Sediment Traps and Basins

A sediment basin or trap is designed to allow storm water runoff to pool and sediment to settle from it before it is discharged from the site. In many cases, the sediment basin or trap may retain water such that it infiltrates the ground. This BMP must be located down-slope from disturbed areas or where surface water run-on from outside the site may enter the work area. Where the site is subject to active work and the grades change dynamically, it is preferable to install a few smaller sediment traps that are easily relocated to respond to grading changes, than to install one or two larger traps that may not be effective as the drainage patterns fluctuate. For these sites, sediment traps should be used at points where storm water discharges from staged soil piles at natural low points. Plastic liners are not allowed except as needed to stabilize the discharge/overflow channel. Planned overflow discharge points must be stable and constructed according to the detail in Appendix B with rock or gravel (containing less than 6% fines passing a #200 sieve) or covered with plastic or other sheeting to prevent erosion. Water must never discharge to flow over disturbed ground/erodible soils.

BMP Manual/Publication: The BMP detail provided in Appendix B was copied from the Kentucky Construction Site BMP Planning and Technical Specifications Manual dated October 2009 and modified by this SWPPP Preparer.

Installation Schedule: Install prior to or in conjunction with ground-disturbing work, concurrently with perimeter control installation, or as the need for this control is identified. Relocate as needed to maintain effectiveness as grading work changes and re-shapes the ground surface.

Maintenance and Inspection: Inspect according to the schedule in subsection 11.1. Look for evidence that water is overflowing or flowing around the trap. Relocate, enlarge, or add more sediment traps as needed to retain sediment on site and prevent discharge of sediment laden water to wetlands or surface waters. Inspect overflow/ discharge points for erosion and install or enlarge energy dissipation rock outlet or covering as needed. Implement corrective actions according to subsection 11.3. Maintain sediment accumulation to less than 1/2 of the BMP design capacity.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for inspecting sediment traps and all overflow/discharge points. The Superintendent is responsible for implementing protective and corrective measures.

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10.3.1 Protect Steep Slopes (4.2.6)

Will steep slopes be present at the site during construction? Yes No.

Permanent steep slopes will not result from activities at these work sites.

10.4 Storm Water Inlet Protection Measures (4.3.1)

There is no piped storm drain system on or adjacent to these sites. Existing culverts inlets adjacent to the work sites that may receive sediment laden runoff from site disturbed areas will be protected.

BMP Description: Culvert Inlet Protection

Culvert inlet protection must be installed where the ground is disturbed and not stabilized up-slope from the inlet end of existing culverts. If the culvert inlet is segregated from disturbed areas with a structural perimeter control BMP (berm, silt fence, fiber roll, etc.) or an adequate vegetative buffer, inlet protection is not required.

BMP Manual/Publication: The BMP detail in Appendix B was copied from the Palmer-Wasilla Highway Eastern Terminus Phase 1 project dated 4-25-2017. Sediment Trap Type C (fiber roll) is preferred for these sites and has been annotated by this SWPPP Preparer.

Installation Schedule: Apply the BMP prior to disturbing ground up-slope (within 25 feet) of an existing culvert or when a new (temporary or permanent) culvert is installed.

Maintenance and Inspection: Inspect for proper installation of the BMP with good ground contact and no gaps where storm water may flow through. Look for evidence of erosion under and around the BMP and for discharge of sediment into the culvert. Inspect according to the schedule in subsection 11.1. Implement corrective actions according to subsection 11.3. Remove sediment so that it does not accumulate to ½ or more of the above-ground height or 50% of the storage capacity of the installed control measure.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for inspecting culvert inlets and all discharge points. The Superintendent is responsible for implementing protective and corrective measures.

10.5 Water Body Protection Measures (4.3.2)

Water bodies (where they exist and are subject to discharge from a work site) will be protected with appropriate BMPs described in other subsections of this SWPPP. The SWPPP Maps in Appendix A will be annotated with installed BMPs when they are identified as necessary in the field.

10.6 Down-Slope Sediment Controls (4.3.3)

BMP Description: Silt Fence

A silt fence is a perimeter control geotextile fence installed to prevent sediment-laden sheet flow from exiting the site or entering receiving waters. Common failures are due to posts being installed on the uphill side of trench (instead of downhill side), fabric being attached to the downhill side of posts (rather than uphill side), or soil not being tamped next to the fence after backfilling the trench (allowing water to flow underneath). Silt fence installed in standing water conditions should be pocketed. Wire-backed silt fence and a horizontal support along the top of the fabric offers additional durability and should be used where field conditions indicate these features are necessary.

BMP Manual/Publication: The BMP details in Appendix B (BMP-20.00) were copied from the Alaska DOT&PF Alaska SWPPP Guide, dated 12/2015 and modified by this SWPPP Preparer. The detail showing how to splice silt fence is SF-1 by Elaine Nefzger, Nefzger Consulting, 6-15-16.

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Installation Schedule: Install prior to beginning ground disturbance in an area or when changing conditions result in a need for this control measure.

Maintenance and Inspection: Inspect for evidence of damage and wear. Re-secure to posts and re-attach fabric as required to maintain a taut fence line. If there is evidence of damage due to traffic, place safety cones or replace silt fence with a lower-profile perimeter control such as fiber roll. Sediment must be removed as needed to ensure it does not exceed one-third the installed (exposed) height of the silt fence. For in-water work, stabilize soils within the silt fence perimeter (work side) and below the water line with preserved or in-situ sod (wetland) or gravel/rock (pond or creek) before or in conjunction with removing the silt fence.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for inspecting BMPs. The Superintendent is responsible for initial installation and implementing corrective measures.

BMP Description: Fiber Rolls

A fiber roll, wattle, or compost sock is a perimeter BMP used to prevent sediment in silt-laden sheet flow from exiting the site or entering receiving waters. They may also be used to direct clean storm water run-on away from disturbed soils to an appropriate discharge point. Common failures occur due to inadequate trenching and staking, when soil is not tamped next to the wattle in the trench allowing water to flow underneath, or when soil erosion occurs below the fiber roll line due to drainage that bypasses the end, passes between improperly joined sections, or water build-up over-runs the fiber roll. Fiber rolls are not suitable for use in rocky soils where adequate ground contact is impractical. Where the ground is hard and resistant to staking, sand or gravel bags may be used to hold the wattle firmly to the ground surface. For these sites, fiber rolls may be installed in locations similar to where berms would be required for perimeter control (see subsection 10.3).

Structural perimeter control is not required where a vegetative buffer of at least 25 feet remains between down-slope disturbed soils and storm water conveyances (ditches, swales, channels) wetlands, or water bodies unless the buffer proves inadequate to control sediment discharge. Perimeter control NEED NOT be installed where disturbed areas are down-slope from areas to be protected unless the purpose is to re-route clean storm water run-on. Areas that are temporarily or permanently stabilized need not be protected with perimeter control BMPs.

BMP Manual/Publication: The Fiber Roll BMP detail in Appendix B is SC-5 from the Caltrans Storm Water Quality Handbooks Construction Site Best Management Practices Manual dated March 1, 2003 and modified by this SWPPP Preparer.

Installation Schedule: Install prior to earth disturbance upslope from the fiber roll/compost sock line. Where the BMP is used as a perimeter control for staged erodible material piles, install immediately after the pile is placed.

Maintenance and Inspection: Look for evidence of damage and wear and verify the roll/sock has good ground contact, with no gaps, by running your fingers along the base. If there is evidence of damage due to traffic, place safety cones along the BMP. Sediment must be removed as needed to ensure it does not exceed 1/2 the height of the roll/sock (the exposed height immediately following installation). Inspect according to the schedule in subsection 11.1 and implement corrective actions in accordance with subsection 11.3.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for inspecting BMPs. The Superintendent is responsible for ensuring protective and corrective measures are implemented.

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10.7 Stabilized Construction Vehicle Access and Exit Points (4.3.4)

Where tracking soils onto adjacent paving from disturbed areas cannot be satisfactorily controlled with sweeping, or where traffic transitions from disturbed to undisturbed gravel road surfaces and sediment tracking is discovered, a Construction Exit BMP is to be installed. For this these sites, the exit should be made of crushed rock, clean gravel, coarse wood chips, or RAP. Large rock may pose a safety concern for small vehicles. A wheel wash is NOT to be installed. Alternately, a purchased “Mud-Mat” or “FODS” track out BMP may be used.

Traffic control planning should include designating site entrance/exit locations so that track-out from haul trucks and equipment is confined to one location.

BMP Description: Vehicle Tracking Entrance/Exit

A vehicle tracking entrance/exit provides a stabilized pad where traffic enters or exits the site or where traffic transitions from non-paved to paved surfaces. For these sites, a tire wash will not be installed. A Vehicle Tracking Entrance/Exit BMP as described herein is ONLY required when traffic tracks sediment that cannot be adequately controlled with sweeping. Metal Grate Exits are acceptable.

BMP Manual/Publication: The BMP details (BMP 23.00 & 24.00) in Appendix B were copied from the Alaska DOT&PF Alaska SWPPP Guide, dated 12/2015.

Installation Schedule: Install prior to or in conjunction with earth disturbance where there will be public or Mass Excavation, Inc. hauling traffic from disturbed areas onto impervious or existing gravel driving surfaces.

Maintenance and Inspection: Informally inspect pads and adjacent paved road surfaces daily for sediment accumulation and material displacement. Hand or mechanically sweep paving where track-out is evident to the extent it would cause the discharge of sediment in storm water run-off. Sediment from these sites tracked onto impervious surfaces must be removed by the end of the same business day in which it occurs or the end of the following business day if it occurs on a non-business day. Perform a formal inspection during SWPPP inspections according to the schedule in subsection 11.1. Implement corrective actions in according to subsection 11.3.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for inspecting BMPs and monitoring site non-paved to paved exit locations. The Superintendent is responsible for ensuring protective and corrective measures are implemented.

BMP Description: “Mud Mat” or “FODS” track out BMP

Mud Mats are manufactured products, usually made from a tough woven cloth with pockets containing wood rods. Actual materials and assembly may vary among manufacturers. FODS track out control BMPs are semi-rigid plastic mats shaped like an egg carton so that sediment will fall from tires and accumulate in the voids.

Both BMPs may be used where the need for a track-out BMP is short-term or installing a Vehicle Tracking Entrance/Exit BMP would damage the existing driving surface to be preserved. These types of BMPs may be cleaned and reused as long as they perform adequately and are not contaminated.

BMP Manual/Publication: The BMP details in Appendix B were copied from the supplier’s websites. No other BMP manual or publication was used for this design.

Installation Schedule: Install prior to or in conjunction with earth disturbance where traffic travels from disturbed areas onto impervious surfaces.

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Maintenance and Inspection: Look for evidence of tracked-out soils on the adjacent paved road/area and for BMP damage during SWPPP inspections. Clean, replace, or extend the mat as needed. Sediment from these sites tracked onto impervious surfaces must be removed by the end of the same business day in which it occurs or the end of the following business day if it occurs on a non-business day. Inspect according to the schedule in subsection 11.1. Implement corrective actions according to subsection 11.3.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for inspecting site entry/exit areas and BMPs. The Superintendent is responsible for ensuring corrective measures are implemented.

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

BMP Description: Dust Control

Dust Control is an essential BMP during periods of dry weather. Dust that settles on exposed surfaces may be introduced into storm water during inclement weather. Dust will be controlled by minimizing traffic speed and by sprinkling with a water truck to increase soil moisture levels and thereby reduce dust.

Dust Control watering/sprinkling equipment and rate of flow will be adjusted to ensure the application does not result in runoff, washout, or mud formation on driving surfaces.

Other acceptable forms of dust control are also stabilization BMPs that include:

- Retaining or establishing vegetative cover (temporary or permanent) or retaining vegetation root mass (See subsections 10.1 and 10.13)
- Applying hydro-mulch with or without a tackifier component (See subsection 10.13)
- Covering soils with plastic tarps, rolled erosion control fabric, or other covering (See subsections 10.9 and 10.13)
- Applying dry mulch (wood chip or other) gravel, crushed rock, stone, or Recycled Asphalt Paving (RAP) temporary stabilization (See subsection 10.13)

BMP Manual/Publication: No BMP manual or publication was used for this design.

Maintenance and Inspection: Monitor the site daily for evidence of excessive dust generation. Adjust traffic routing if needed to address dust generation during dry weather. Haul trucks are to be examined prior to leaving the site to ensure loads are stable.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for inspecting BMPs, informally monitoring air quality, and selecting the best dust control methods for the situation at the time. The Superintendent is responsible for ensuring corrective measures are implemented.

BMP Description: Street Sweeping and Vacuuming

Street sweeping and vacuuming include use of self-propelled and walk-behind equipment to remove sediment from paved streets and roadways. Sweeping and vacuuming prevent sediment from the site from entering storm water conveyances and receiving waters.

Diligent hand sweeping should be used to remove soil spills before subsequent traffic can disperse those soils over adjacent paved areas. Wet sweeping methods may NOT be used during freezing weather conditions.

Kick brooms may be used for cleaning small areas but sediment must then be removed with shovels or other methods. Sediment may not be allowed to accumulate along the edge of the roadway and storm water conveyances. The surface should be dampened as needed to ensure the broom does not generate excessive dust during operation.

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BMP Manual/Publication: The BMP detail provided in Appendix B is SE-7 copied from the California Stormwater BMP Handbook, January 2003 as published by the California Stormwater Quality Association (CASQA) and modified by this SWPPP Preparer.

Installation Schedule: The SWPPP Manager is responsible for monitoring work site-to-paved area ingress/egress areas daily and direct sweeping on an as-needed basis when site tracked or spilled erodible soils are observed on those surfaces.

Maintenance and Inspection: Inspect paved areas adjacent to the work sites at ingress/egress points according to the schedule in subsection 11.1. Sediment must be removed from pavement by the end of the same business day that the track-out occurs or the end of the next business day if the track-out occurs on a non-business day. Sediment tracked onto gravel surfaces must be removed to maintain effective track-out control at a frequency sufficient to minimize off-site impacts. Implement corrective actions in accordance with subsection 11.3. Maintain equipment for satisfactory performance.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for daily monitoring of site conditions and inspecting paved areas adjacent to the work sites for evidence of track-out. The Superintendent is responsible for ensuring corrective measures are implemented, for selecting the proper sweeping method/equipment for the task, and for employing traffic control strategies that will reduce the potential for track out during active grading work.

10.9 Soil Management (4.3.7)

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

BMP Description: Plastic Covering and Stockpile Cover

Plastic sheets, tarps, or other covering are placed over exposed soils to control both sediment in storm water runoff and wind-blown dust generation. When possible, use covering in one piece over the area/pile. When several pieces are used, lap to the down-slope direction. Secure as needed to prevent the covering from being blown away during windy weather. Protect against damage by equipment. Covering may be relocated and reused if not damaged or contaminated. Soil stockpiles that are located within the excavation where storm water runoff will be effectively contained require no covering unless they are intended to remain in place without further disturbance (adding to, taking from, or grading) for 14 days or longer. Erodible material stockpiles will be located away from storm drain inlets, water bodies and conveyance channels, where practicable. Where perimeter controls are required along the down-gradient perimeter, a Perimeter Berm BMP will be installed as described in subsection 10.3 or fiber rolls will be installed as described in subsection 10.6. Silty fence perimeter control is also acceptable.

BMP Manual/Publication: The BMP detail provided in Appendix B was copied from the Municipality of Anchorage Storm water Treatment Plan Review Guidance Manual, Third Edition, September 2010. Stockpile Cover Detail – SC-1 is by Nefzger Consulting date 7-28-22.

Installation Schedule: Install covering by the end of the following working day after soil pile placement is complete or any other time when the pile will not be disturbed again for 14 days or longer.

Maintenance and Inspection: Look for evidence of damage and wear. Re-secure loose edges and replace torn plastic that is no longer effective. Inspect according to the schedule in subsection 11.1. Implement corrective actions according to subsection 11.3.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for inspection of soil piles and their BMPs. The Superintendent is responsible for ensuring initial installation and corrective measures are implemented.

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10.10 Authorized Non-Storm Water Discharges (4.3.8)

No BMP Manuals or details were used for activities listed below.

- Discharges from fire-fighting activity: In the unlikely event of a fire on the site, these discharges are allowed. To the extent feasible, contain and clean up discharges resulting from fire-fighting. See Appendix L.
- Water line/fire hydrant flushing is not a factor for these sites.
- Waters used to wash vehicles/equipment are not planned for these sites.
- Dust Control watering equipment rate of water flow will be adjusted to prevent mud formation on driving surfaces and washout from the perimeter of the target area to adjacent water bodies and storm water conveyances and off-site.
- Building wash down will not take place on the site.
- Pavement washing may be required but detergents are not allowed. If spills or leaks of toxic or hazardous materials have occurred on the pavement, they must be removed according to applicable regulations.
- Discharge from air conditioning is not anticipated for these sites.
- Discharges from small portable compressor units are not anticipated for these sites.
- Foundation footing drains are not a factor on these sites.
- Uncontaminated, non-turbid discharges of ground water are not expected
- Uncontaminated ground water dewatering and excavation dewatering are not planned
- Landscaping and vegetation watering are not planned.

10.11 Sediment Basins (4.3.9)

Will a sediment basin be required during construction? Yes, No.

There are no common drainage areas of 10 acres or more to be disturbed at one time on this project. A sediment basin is not required. A Sediment Trap BMP is included in subsection 10.3.

10.12 Dewatering (4.4)

Will dewatering be conducted during construction? Yes, No.

Will excavation dewatering be conducted within 1,500 feet of a DEC mapped contaminated site found on the following website? Yes, No

10.13 Soil Stabilization (4.5, 5.3.6.3)

Temporary and Final Stabilization:

For any portion of the site where fill, grading, excavating or other earth-disturbing activities have temporarily or permanently ceased and will not resume again within fourteen (14) calendar days, stabilization measures must be initiated immediately (by the end of the next working day after activities cease). For these sites, active work is expected to continue by others after Mass Excavation, Inc, has completed work at each site. Stabilization is not a factor for this SWPPP.

Work performed by others and/or each site owner, including stabilization will be accomplished according to their site SWPPP if they are required to file an NOI and prepare a SWPPP according to the requirements of the Alaska Construction General Permit.

10.14 Treatment Chemicals (4.6; 5.3.6.4)

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

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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? Yes, 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.

Equipment and vehicle washing will not be performed on site.

10.16.2 Fueling and Maintenance Areas (4.8.2)

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

BMP Description: Portable Berm 'Duck Pond'

Portable containment is an essential measure to be used for containing leaks, spills, or to guard against spills when transferring substances that may be harmful or considered hazardous. An example of a purchased 'knock-down' portable berm is shown in Appendix B, however, containment may be a plastic bucket, garbage can, barrel, or even as simple as a depression in the ground lined with a plastic garbage bag as an emergency measure until a better container can be deployed. This BMP is provided for use in the event MassEx equipment or haul trucks malfunction or require repair at any work site.

BMP Manual/Publication: The BMP detail in Appendix B is an example copied from a vendor's website. No BMP manual or publication was used for this design.

Installation Schedule: Install prior to performing equipment maintenance or immediately after detecting a leak from equipment (any substance other than water with no chemical additive).

Maintenance and Inspection: Inspect containment to detect leaks and overflow. Clean the containment device after use or dispose of it as contaminated waste in compliance with all applicable regulations.

Responsible Staff: The equipment operators are responsible for inspecting equipment for leaks prior to use each day. The Superintendent is responsible for ensuring corrective measures are implemented.

BMP Description: Spill Kit and Cleanup Supplies

Spill Kits may be purchased, pre-packaged barrels that contain absorbent pads, containment boom, and other spill response products. Contractors may pack their own Spill Kit with items selected based on the nature of the work and the environment. Supplies should be replaced within 7 days or as soon as possible after use to ensure adequate quantities are maintained on site. Employees should be informed of the location of these materials and kits and trained in the use of any specialty products.

For these sites, a Spill Kit is not required unless Mass Excavation, Inc. equipment is working, parked, fueled, and maintained on a work site. Equipment on-board absorbent pads and cleanup supplies are an acceptable alternative. Additional cleanup supplies will be available from the Mass Excavation, Inc. project office.

BMP Manual/Publication: The BMP detail in Appendix B is example information gathered online by this SWPPP preparer. No BMP manual or publication was used for this design.

Installation Schedule: Spill cleanup supplies must be on-site before any fueling, maintenance, equipment staging, or use of petroleum or other hazardous chemicals begins or absorbent pads must be on board working equipment.

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Maintenance and Inspection: Verify cleanup supplies are available at each required location. Replenish used supplies within 7 days. Inspect according to the schedule in subsection 11.1 and implement corrective actions according to subsection 11.3.

Responsible Staff: The SWPPP Manager/Storm Water Lead is responsible for ensuring cleanup supplies are at required locations and supplies/contents are maintained.

10.16.3 Staging and Material Storage Areas (4.8.3)

Areas to be used for staging and material storage are not a factor for these sites. The scope of work is as noted in Section 4. Tools and supplies will be stored at the Mass Excavation, Inc. project and corporate offices and brought to each work site only as needed.

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? Yes, No.

10.16.5 Fertilizer or Pesticide Use (4.8.5)

Will pesticides be used at the site? Yes, No.

Will herbicides be used at the site? Yes, No.

Will fertilizers be used at the site? Yes, No.

10.17 Hazardous Material Control Plan and Spill Notification (4.9)

All employees, subcontractors, and utility personnel (if on-site) will be instructed to immediately report any spill to the MassEx Superintendent or SWPPP Manager/Storm Water Lead. Subcontractors may work on the site at various times and durations. The most senior person of their crew present at the time will be responsible for their spill response actions. MassEx will develop a response plan and proceed accordingly. Notification will be made to the ADEC, EPA, and other agencies who may be affected.

All construction-related discharges of petroleum fuels, oils, dry chemicals, and other substances which may be hazardous to land, water, or people shall be reported in compliance with 33 U.S.C. 1251-1387 and 42 U.S.C. 9601-9675 of the Federal Code, 40 CFR 300 of the Federal Regulations, Chapter 75 of Title 18 of the Alaska Administrative Code, and Title 46 of the Alaska Statutes. A list of substances and reportable quantities is in Appendix L.

Emergency Response numbers are:

Robert Cornell, Superintendent	(907) 229-7931
Brenda Tapani, SWPPP Manager/Storm Water Lead	(509) 859-7497
Mass Excavation, Inc. main office	(907) 771-9272
ADEC	(907) 269-0667 or (800) 478-9300
National Response Center	(800) 424-8802
Emergency	911

Immediately notify the nearby PWS of any identified potential contamination. See subsection 9.3.

Online Spill Reporting is preferred using Alaska DEC's Environmental Data Management System (EDMS). Electronic forms can be found by logging into EDMS and finding the project NOI folder. Select "Start a New Form" on the left side menu, then select "I have reporting obligation to fulfill".

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A list of reporting forms pertinent to your NOI will appear. Select either the Noncompliance Notification Form or Spill Notification Form, as appropriate, and follow the instructions to complete and submit the report (in some cases, both may be needed).

Additional reporting forms may be filled out and submitted to the Alaska Department of Environmental Conservation via the Internet at <https://dec.alaska.gov/spar/ppr/spill-information/reporting/>. Sample forms are in Appendix L. A complete copy of the regulations is not included in this SWPPP. It is the responsibility of MassEx to ensure their staff are familiar with the requirements and able to work in compliance with the applicable regulations.

For ANY non-petroleum hazardous substance release less than the Reportable Quantity listed on the tables in Appendix L, call ADEC at (907) 269-0667 and record the cleanup on the Corrective Action Log in Appendix J. Submitting spill reporting forms online is not required unless directed to do so by ADEC staff.

For releases equal to or greater than the Reportable Quantity contact both ADEC and the National Response Center. Complete and submit required reporting forms and work with the agencies of jurisdiction to clean up the release. List the cleanup on the Corrective Action Log in Appendix J. Append all agency correspondence to the Corrective Action Log and dispose of all waste according to applicable regulations.

10.17.1 Construction and Waste Materials (4.8.6, 5.3.7)

Refer to subsection 4.6 for a list of hazardous/toxic materials expected to be on site. They will be stored in sealed containers or at the MassEx project office until needed for use. To the extent practicable, all hazardous or toxic materials, erodible soil stockpiles, and waste will be located away from storm drain inlets, storm water conveyance channels, wetlands, and water bodies. All federal, state, and local requirements for waste disposal will be followed.

Waste materials that include chemical pollutants will not be exposed to rainfall. They must be placed in containers or covered with plastic for staging. Waste receptacles cannot be allowed to overflow, and final disposal must comply with applicable regulations.

Waste and other materials stored at each site by others and/or the site owners are not subject to the requirements of this SWPPP. MassEx is not responsible for management, protection, or cleanup for those materials.

10.17.2 Hazardous Products/Good Housekeeping

Good housekeeping practices will be followed on site:

- An effort will be made to store only the amount of product required to do the job.
- Products will be kept sealed in original containers.
- Opened products will be kept in their original containers with the original manufacturer's label unless they are not re-sealable.
- Original labels and material safety data will be retained; they contain important product information.
- Safety Data Sheets (SDS) will be kept on file by MassEx in either electronic or paper format.
- Replacement containers will be clearly marked with the contents.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all the product will be used up before disposing of the container.
- Manufacturers' recommendations for proper use and disposal will be followed.

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Waste materials that include chemical pollutants will not be exposed to rainfall. They must be placed in containers or covered with plastic for staging. The Superintendent/Storm Water Lead will designate staging locations as the work progresses.

General litter and wastes such as product packaging, paper products, food wrappers, used consumables, and removed/used BMP materials (by MassEx) will be removed from these sites daily and disposed of off-site.

10.17.3 Spill Response Procedures

The following outlines MassEx's response procedures if hazardous materials are encountered or spilled to soil or water (including storm water) during construction. MassEx shall do everything possible to control and contain the material until appropriate clean-up measures can be taken.

A. Initial Assessment

The first person to witness a spill must assess the incident. The witness must quickly determine if they are qualified to respond to the incident based on information available at the time.

If not qualified to respond, the witness must immediately contact the Superintendent, SWPPP Manager/Storm Water Lead or their site supervisor and provide them with basic information to facilitate response. If the incident is potentially hazardous or dangerous, this information should be inferred from a safe distance from the spill.

Information needed includes:

- Time and date of discovery of the spill
- The material and approximate amount that spilled
- Where the spill occurred
- If and how the material is being conveyed, and where it is being conveyed to
- Health and safety risks
- Response options

B. Initial Response and Reporting

Releases of Petroleum hydrocarbons shall be reported to the Alaska Department of Environmental Conservation (ADEC) by the MassEx Superintendent, SWPPP Manager/Storm Water Lead or management as required under the Oil and Hazardous Substances Pollution Control Regulations (18 AAC 75). See subsection 10.17 for additional information.

This section presents the procedures for responding to and reporting a release (leak, overflow, or spill). Persons who have not received 24-hour hazardous waste operations training should avoid exposure to released fuel and associated vapors.

In case of a release, initiate the following spill response measures:

Stop or contain the spill without endangering human life. The actions may include the following:

- Identify source of the spill;
- Consult and follow recommendations from the relevant SDS sheets for the material discharged;
- Provide first aid to any injured personnel;
- Call for medical assistance if required.
- Evacuate if necessary and/or make the spill scene off limits to unauthorized personnel and the public.
- Shut off electrical power/generators if disconnect spark is not a hazard.
- Eliminate ignition sources.
- Restrict and contain the flow or migration of the released substance by closing valves and using appropriate spill controls and/or cleanup materials.

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- Immediately report the spill to the MassEx Superintendent, SWPPP Manager/Storm Water Lead.
- Start cleanup operations. If the spill exceeds cleanup capability, immediately dispatch necessary equipment and personnel.
- MassEx will notify ADEC and, if required, the National Response Center, and provide ADEC with a written report documenting the nature of the spill and cleanup activities.
- Continue cleanup of the spill in accordance with 18 AAC 75, Article 3. Cleanup activities shall be coordinated with the ADEC.

When reporting a spill, the following information shall be provided:

- Name and telephone number of the person reporting the spill;
- Date, time, and location of the spill;
- Estimated quantity of the spill;
- Type of material spilled;
- Cause and source of spill;
- Potential damage and impacts to environmentally sensitive areas, such as surface water, or wildlife;
- Corrective action conducted;
- Initial response actions taken.

In accordance with 18 AAC 75, releases exceeding 55 gallons, or any discharge of oil into water, shall be reported to ADEC immediately upon discovery. Any discharge of oil into water shall be reported to the U.S. Environmental Protection Agency's National Response Center immediately upon discovery. Releases that exceed 10 gallons but are 55 gallons or less, or releases that exceed 55 gallons within a secondary containment, shall be reported to the ADEC within 48 hours of discovery. An individual release of less than 10 gallons shall be reported to the ADEC in a monthly report if the cumulative release within a month is between 1 and 10 gallons.

A record of all releases shall be maintained by MassEx in accordance with 40 CFR 112.2 and 18 AAC 75.

C. Control and contain the spill

To prevent spilled material from migrating, identify and stop the source of the spill and contain the spilled material will be as soon as practicable.

Source control methods typically used by MassEx include, but are not limited to, the following:

Duck ponds (drip pans) – In the event that equipment is leaking, a drip pan can be placed under the leak to prevent further release.

Plugging/Patching – In the event that a hole or leak in a drum or container is the source of the spill, the hole can be plugged or patched as appropriate. The plug or patching material must be compatible with the stored chemical.

Over-packing – In the event that a hole or leak in a drum or container is the source of the spill, the drum or container can be packed into a larger drum or container (over-packing), or placed in secondary containment.

Containment methods typically used by MassEx include, but are not limited to, the following:

Absorption – absorbent materials such as dirt, sand, saw dust, mulch, absorbent pad can be positioned so that spill is intercepted. The absorbent material used must be compatible with the spilled material.

Dikes – dikes built around the perimeter of the spill can slow or stop materials from migrating. Dikes can be built out of materials such as sand, earth, or snow, but the material used must be compatible with the spilled material. Plastic sheeting can be used as an additional barrier, if appropriate.

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Oil Boom/Skimbers – in the event that a spill reaches a waterbody, an oil boom or similar structure can be placed around the spill in order to prevent it from migrating farther.

D. Clean-up spill

If the spill is reportable to ADEC, clean-up of the discharge or release and disposal of the contaminated material must be done according to the ADEC-approved plan as required by 18 AAC 75.310. In the case that a spill is not reportable to ADEC, the guidelines typically used by MassEx include, but are not limited to, the following:

- SDS and the manufacturer's recommendations regarding accidental release measures and clean-up procedures will be followed.
- Clean up of spills, particularly small spills and spills on pavement or other impermeable surfaces, will use as little water as possible to prevent transport of contaminants.
- Dry material spills will never be buried or cleaned using water.
- Contaminated materials will be disposed of in compliance with applicable regulations.

E. Vandalism Control Measures

Vandalism prevention measures include storing toxic and hazardous materials off site at the MassEx project office or corporate off. These and all working equipment, vehicles, and large tool storage boxes will be locked during non-working hours when employees are not at the site or will be removed from the work site.

10.17.4 Minimum required HMCP and Spill Response training

Employees and subcontractors working on these sites are the same as those working on the Seward Meridian Pkwy Road Improvements, Ph II Project. The training logs from that project will be copied and placed in Appendix I of this SWPPP.

At a minimum, the following will be included:

Rule #1. Follow all established procedures and perform job duties as you've been trained.

Rule #2. Be cautious and plan ahead. Think about what could go wrong and pay close attention to what you're doing while you work.

Rule #3. Always use required PPE—and inspect it carefully before each use to make sure it's safe to use. Replace worn out or damage PPE; it won't provide adequate protection.

Rule #4. Make sure all containers are properly labeled and that the material is contained in an appropriate container. Don't use any material not contained or labeled properly. Report any damaged containers or illegible labels to the Superintendent/Storm Water Lead right away.

Rule #5. Read labels and the material safety data sheet (SDS) before using any hazardous or toxic material to make sure you understand hazards and precautions.

Rule #6. Use all materials solely for their intended purpose. Don't, for example, use solvents to clean your hands, or gasoline to wipe down equipment.

Rule #7. Never eat or drink while handling any hazardous or toxic materials, and if your hands are contaminated, don't use personal care products or handle contact lenses.

Rule #8. Read the labels and refer to SDSs to identify properties and hazards of chemical products and materials.

Rule #9. Store all materials properly, separate incompatibles, and store in ventilated, dry, cool areas. If you aren't certain or how to store materials properly, contact the Superintendent/Storm Water Lead.

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Rule #10. Keep you and your work area clean. After handling any material, wash thoroughly with soap and water. Clean work surfaces at least once a shift so that contamination risks are minimized.

Rule #11. Learn about emergency procedures and equipment. Understanding emergency procedures means knowing evacuation procedures, emergency reporting procedures, and procedures for dealing with fires and spills. It also means knowing what to do in a medical emergency if a co-worker is injured or overcome by chemicals.

11.0 INSPECTIONS (5.4; 6.0)

11.1 Inspection Schedules (5.4.1.2; 6.1; 6.2)

Inspections will be performed by the MassEx SWPPP Manager/Storm Water Lead. If the SWPPP Manager/Storm Water Lead is not available, the Superintendent or his representative will conduct the inspection.

Authorized representatives of ADEC, EPA, and other agencies are allowed to conduct a site inspection at any time in accordance with CGP Part 6.6. They will use their own forms and checklists.

Inspection frequency: During earth-disturbing work, inspections are to be conducted once every 7 days. The table in subsection 3.2 will be maintained to document when work at each site is begins and ends. Inspections are not required after work by Mass Excavation, Inc. ends at a specific work site.

All changes in inspection frequency and site status must be documented as a SWPPP Amendment.

Estimated date of winter shutdown: Winter shutdown (by MassEx) is not planned for these sites. Ongoing work by each site owner is not subject to the Mass Excavation, Inc. NOI or this SWPPP.

11.2 Inspection Form or Checklist (5.4.1.3; 6.7)

The Inspection Report Form in Appendix K will be used for inspections. Changes or revisions to the form are not permitted except for adding or deleting data fields that list location of discharge points and site-specific BMPs. All fields on the inspection report form must be completed; none may be left blank. Inspections will include visual examination for the parameters listed for each BMP. Copies of the SWPPP Maps will be updated with annotations as needed.

The following will be inspected:

- All areas that have been disturbed and continue to be worked by MassEx,
- On-site areas where construction or waste materials are staged/stored,
- Areas where equipment is staged, fueled, or maintained,
- Locations where vehicles enter/exit the site,
- All points where storm water discharges from the site at the site perimeter, and
- All BMPs.

The Superintendent and Project Engineer must review and sign/certify the 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)

The Corrective Action Log in Appendix J will be used for this project. MassEx will maintain the Log. The Superintendent and SWPPP Manager/Storm Water Lead are the only persons authorized to make entries on the SWPPP Corrective Action Log.

The need for corrective action will be documented within 24 hours of discovery; whether it is discovered during an inspection or any other time by observation. Subcontractors are required to inform MassEx within 24 hours of becoming aware of any of condition that may require a corrective action. Corrective Actions discovered during and inspection will be recorded on the inspection report and the corrective action log.

Modification or replacement of a BMP, installation of a new BMP not provided in the original SWPPP, or overdue maintenance (e.g., after a sediment trap exceeds 50% of design capacity) are corrective actions and must be documented on the Corrective Action Log. Removal of BMPs is not to be recorded on the Corrective Action Log unless that removal is required to protect water quality. Dates of regular maintenance of BMPs must also be recorded on the Corrective Action Log.

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Control measures will be reviewed and modified whenever:

- An incident of non-compliance with the SWPPP or the ACGP is identified;
- Inspections by regulatory inspectors (including ADEC or EPA) reveal that control measures are not effective to meet the ACGP requirements or that the SWPPP requirements are inadequate to prevent erosion, sedimentation, or the discharge of pollutants;
- Control measures do not comply with the design, installation, or maintenance parameters in Section 10 of this SWPPP or ACGP Part 4.0;
- Control measures do not perform as intended, are not maintained in effective operating condition, or are unable to effectively perform the intended function;
- An unauthorized release or prohibited discharge is occurring or is likely to occur if control measures are not modified or corrected, and when BMP maintenance is overdue;
- Excess tracking is observed on roadways adjacent to the site; and
- Pollutants (including sediment) have accumulated near storm water conveyances, discharge points, in the immediate vicinity of control measures, or on roadways adjacent to the site.

Corrective actions must meet the following requirements:

- Easily remedied corrective actions will be initiated within 24 hours of discovery and completed as soon as practicable;
- Corrective actions must be completed within 7 calendar days, unless infeasible;
- Corrective Actions must be completed no later than the complete-by date written on the inspection report;
- Corrective actions in response to discharges resulting from a 2-year, 24-hour storm event must be initiated within 24-hours of discovery. The 2-year, 24-hour storm event for this project area is 1.30 inches; and
- Corrective Actions must be completed in time to protect water quality.

If these completion requirements cannot be met, the situation must be documented in the SWPPP.

11.4 Inspection recordkeeping (5.4.2)

During construction, MassEx will maintain the site SWPPP and related records in their project office. They will be made available to EPA, federal, state, tribal and local agencies, and other inspectors upon request. During winter shutdown or other times when maintaining a project office is not practicable, the SWPPP may be moved to the MassEx Anchorage, Alaska office. Records will be maintained for a minimum period of at least three (3) years after the project is complete. See Section 15 for additional requirements and long-term records maintenance locations.

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 any receiving water listed in subsection 7.1? Yes, No.

Is the receiving water listed as impaired for turbidity and/or sediment? Yes, No.

13.0 POST-AUTHORIZATION RECORDS (5.8)

Copy of Permit Requirements (5.8.1) The SWPPP must contain the following documents:

- Copy of 2021 ACGP (5.8.1.1; Appendix F)
- Copies of Notices of Intent and Authorization Letters from ADEC (Appendix F)
- Copies of all subsequent Modifications to the original Notices of Intent (Appendix F)

13.1 Additional Documentation Requirements (5.8.2)

- Dates when and locations where grading activities occur (5.8.2.1; Grading and Stabilization Log in Appendix G and SWPPP Maps in Appendix A).
- Description of Grading Activity (5.8.2.2; Grading and Stabilization Log in Appendix G)
- Dates when construction activities temporarily or permanently cease on a portion of the site (5.8.2.1.3; Grading and Stabilization Log in Appendix G and SWPPP Maps in Appendix A).
- Dates when stabilization measures are initiated (5.8.2.1.4; Grading and Stabilization Log in Appendix G and SWPPP Maps in Appendix A).
- Description of Stabilization Measure (5.8.2.2; Grading and Stabilization Log in Appendix G)
- Date of beginning/ending period for winter shutdown (5.8.2.2; Amendment Log Form in Appendix M).
- Copies of inspection reports Form (5.4.2; 5.8.2.3; Appendix K).
- Copies of monitoring reports, if applicable (5.8.2.4; Appendix H). Not applicable.
- Log of SWPPP modifications (5.8.2.5; Amendment Log in Appendix M).
- Documentation in support of chemical treatment processes (4.6; 5.8.2.6; Appendix P). Not Applicable.
- Records of employee training (5.8.2.7; Training Log Form in Appendix I)
- Documentation of maintenance and repairs of control measures (5.8.2.8; 8.1; 8.2; Corrective Action Log Form in Appendix J).
- Documentation of rainfall monitoring records (6.7.1.3 Record of Rainfall Form in Appendix N). For this project, there will be 2 rain logs.

Rainfall data will be obtained using an on-site rain gauge or from an online National Weather Service data source for a weather station within 20 miles of the project. The University of Alaska Matanuska Experimental Farm is approximately 4 miles from the project and The Palmer Municipal Airport is approximately 9 miles from the site. They may be used by obtaining daily data online at: <https://xmacis-rc-acis.org/> Copies of rain logs from the Seward Meridian Pkwy Road Improvements, Ph II Project may be used for these sites and placed in Appendix N.

13.1.1 Records of Employee Training (4.14; 5.8.2.7)

SWPPP-related training will be provided by MassEx. Training may be conducted by MassEx personnel, subcontractors, consultants, or vendors as authorized by the Superintendent. Copies of Training Logs from the Seward Meridian Pkwy Road Improvements, Ph II Project may be used for these sites and placed in Appendix I.

MassEx will confirm that employees and subcontractors receive adequate training to ensure proper installation, maintenance, and removal of the control measures described in the SWPPP for the project. Specific training must be provided to each subcontractor who engages in soil disturbing activities prior to the subcontractor conducting any soil disturbing activity.

Training for storm water specific positions will be completed prior to employee/subcontractor work on the project and will comply with Table 4 in ACGP Appendix C, page 13 as noted in Section 2.0.

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, the monitoring plan (if applicable), or other activities at the site that are no longer accurately reflected in SWPPP;
- If inspections or site investigations by staff or by local, state (including ADEC), tribal, or federal officials (including EPA) determine SWPPP modifications are necessary for permit compliance, or revisions to applicable federal, state, tribal, or local laws or site permits affect control measures implemented or planned at the construction site.;
- To incorporate changes to State, Tribal, and local erosion plans and storm water management plans;
- To ensure included State, Tribal, and local regulations are maintained current and updated with changes to those regulations;
- If inspections determine that SWPPP requirements are inadequate to prevent erosion, sedimentation, or the discharge of pollutants;
- When an inspection identifies a problem that requires additional or modified BMPs not included in the SWPPP: when a BMP's design is modified, or a new BMP not in the current version of the SWPPP is added; and
- When there is a change in personnel who are named in the SWPPP.

14.1 Log of SWPPP Modifications (5.9.2)

MassEx must keep a log showing dates, the name of the person authorizing the change, and a brief summary of changes for all significant SWPPP modifications (e.g., adding new control measures, changes in site design, or significant storm events that cause replacement of control measures). The SWPPP Amendment Log is in Appendix M and will be used to document all revisions. The Superintendent and the SWPPP Manager/Storm Water Lead are the only persons authorized to amend the SWPPP and update the Amendment Log. The Superintendent or the SWPPP Manager/Storm Water Lead must initial and date amendments to the SWPPP and sign and date updates to the Amendment Log.

14.2 Deadlines for SWPPP Modifications (5.9.3)

Revisions/amendments 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 ACGP) must be retained at the construction site or another location as stipulated in subsection 11.4. The SWPPP for this project will be kept in the MassEx Project Office at 1638 N Chet Cir, Palmer, AK 99645 during construction and at their Anchorage, Alaska office during winter shutdown and other times when maintaining a project office is not practicable.

It will be retained on file at the MassEx corporate office for a minimum of 3 years after construction is complete. If there are any on-going investigations or citizen suits related to the SWPPP, it will be retained a minimum of 3 years after all issues are resolved.

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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 24-hour emergency contact information for the Superintendent. At a minimum, the sign or other notice must contain the following information:

- Permit authorization numbers assigned to the NOIs,
- Operator contact name and phone number for obtaining additional construction site information, and
- The location of the SWPPP or the name and telephone number of the contact person for scheduling SWPPP viewing times.
- The cover page from this SWPPP (and any subsequent changes via Amendment) can be posted or both Operator NOIs and any subsequent NOI Modifications can be posted to fulfill the signage requirement.

15.3 Availability of SWPPP (5.10.3)

The SWPPP must be made available to subcontractors, government, and tribal agencies upon request.

15.4 Signature and Certification (5.10.4)

The SWPPP must be signed and certified in accordance with the requirements of the 2021 ACGP Appendix A, Part 1.12.2. The SWPPP Delegation/Certification form is in Appendix E.

15.5 Submittal of a Modification to NOI (2.7)

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.

15.6 Termination of Permit Authorization (10.0)

A permittee must submit a NOT form to DEC within 30 calendar days after one or more of the following conditions have been met:

- Final stabilization has been achieved on all areas of the site for which the permittee is responsible; or
- A new permittee has assumed control over all areas of the site that have not been permanently stabilized.










A permittee subject to pending state or federal enforcement actions, including citizen suits brought under state or federal law, may not submit a NOT. The permittee must certify that it is not subject to any pending state or federal enforcement actions, including citizen suits brought under state or federal law.

APPENDIX A









SWPPP Map B General Location Map with Wetlands and Water Bodies within 1 Mile and 2500 Feet of the Project
 Amendment 2, 9-18-24

SWPPP BMP MAP LEGEND

	DIRECTION OF SURFACE FLOW
	PERIMETER CONTROL (NOTE TYPE WHEN INSTALLED)
	BERM (NOTE TYPE WHEN INSTALLED)
	VEGETATIVE BUFFER
	SEDIMENT TRAP
	STABILIZED CONSTRUCTION EXIT
	SPILL KIT
	ERODIBLE MATERIAL STOCKPILE (NOTE BMPs (PLASTIC COVER/PERIMETER CONTROL)
	MASSEX EQUIPMENT PARKING/FUELING / EMPLOYEE PARKING

SWPPP GRADING AND STABILIZATION LEGEND

	DIRECTION OF SURFACE FLOW
	AREA DISTURBED (MARK AS WORK PROCEEDS)
	ERODIBLE MATERIAL STOCKPILE
	AREA TEMPORARILY STABILIZED (MULCH, GRAVEL, SURFACE COURSE OR OTHER)
	PERMANENT STABILIZATION PAVING OR CONCRETE)
	PERMANENT STABILIZATION VEGETATION

NOTES:

1. THE BOUNDARIES FOR THIS PROJECT ARE THE LOT PROPERTY BOUNDARIES SHOWN IN YELLOW ON THE MAPS. ALL WORK WILL BE CONFINED TO THOSE AREAS. MATERIAL, EQUIPMENT, AND WASTE STAGING WILL BE SHOWN ON THE SWPPP MAPS AS THEY ARE IDENTIFIED AND USED.
2. THE ACTUAL WORK AREA AND AREA OF DISTURBANCE WILL BE LIMITED TO ONLY THAT REQUIRED TO ACCOMPLISH THE WORK. ALL OTHER AREAS WILL BE PRESERVED AND PROTECTED.
3. DISCHARGE FROM EACH SITE TO A WATER BODY OR WETLAND ARE NOTED ON THE SWPPP MAPS WHERE THEY EXIST. PUBLIC DRINKING WATER PROTECTION AREAS THAT INTERSECT A SITE IN THIS SWPPP ARE LISTED IN SWPPP SUBSECTION 9.3.
4. STORM WATER CONVEYANCES INCLUDE ROADSIDE DITCHES ADJACENT TO THE SITES.
5. EACH STORM DRAIN SYSTEM INLET IS A DISCHARGE POINT POINT.
6. THE SWPPP MAPS AND SWPPP TABLE IN SUBSECTION 3.1 WILL BE UPDATED AS THE PROJECT PROCEEDS TO DOCUMENT WHEN HAULING ACTIVITY CEASES TO EACH SITE OR A NEW SITE IS ADDED. THE OWNERS ARE RESPONSIBLE FOR GRADING THE SOIL AND SUBSEQUENT STABILIZATION. IF THEIR SITE DISTURBED AREA IS GREATER THAN 1 ACRE AND DISCHARGES TO A WATER OF THE UNITED STATES, THEY WILL OBTAIN AN NOI AND PREPARE A SWPPP TO OBTAIN ACGP COVERAGE FOR THAT WORK.
7. THERE ARE NO POST CONSTRUCTION CONTROL MEASURES FOR THESE SITES.



SWPPP Map 1 (MOGAN RESIDENCE)

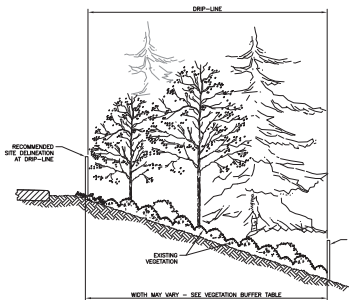


Amendment 1 **SWPPP Map 3 (Fairview Park Investments, Ltd. Section 18, Lot 4)**



SWPPP Map 4 - Amendment 2, 9-18-24
(Township 17N, Range 1E Seward Meridian Section 18, Lots A5, A12, A13, AND A14)

APPENDIX B



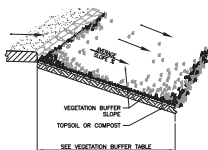
SECTION

EXISTING VEGETATION BUFFER

NOT TO SCALE

EXISTING VEGETATION BUFFER AREA NOTES:
INSTALLATION

1. DELINEATE UNDISTURBED NATURAL AREAS OF VEGETATION IDENTIFIED IN THE PLANS WITH METHODS CONSISTENT WITH THE SITE DELINEATION SPECIFICATION PRIOR TO COMMENCEMENT OF CLEARING AND DRIBBLING OPERATIONS OR OTHER SOIL DISTURBING ACTIVITIES.
2. ENSURE ALL OTHER SEDIMENT CONTROL MEASURES USED IN CONJUNCTION WITH THE VEGETATION BUFFER AREAS ARE IN PLACE AND FUNCTIONING PROPERLY.
3. DO NOT ALLOW CONSTRUCTION MATERIALS, EQUIPMENT, OR PARKING ON THE VEGETATION BUFFER AREAS OR WHERE THE ROOT-ZONE OF THE VEGETATION MAY BE DAMAGED.



PERSPECTIVE

NEW VEGETATION BUFFER

NOT TO SCALE

NEW VEGETATION BUFFER AREA NOTES:
THIS BMP IS NOT APPROPRIATE FOR PROJECTS LASTING LESS THAN 30 DAYS. THIS BMP IS NOT APPROPRIATE FOR ALL CLIMATE ZONES IN ALASKA.

MATERIAL:
TOPSOIL OR COMPOST
SEED, FERTILIZER, MULCH

INSTALLATION

1. ENSURE ALL SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SWPPP (SUCH AS SILT FENCE AND OVERBANKS) ARE IN PLACE TO PROTECT WATERS OF THE U.S. UNTIL THE VEGETATION BUFFER AREA IS ESTABLISHED.
2. ESTABLISH VEGETATION USING SPECIFIED SEED, FERTILIZER, AND MULCH. IF SEED MIX IS NOT SPECIFIED, USE PERMANENT SEED MIX FOR PERMANENT, POST-CONSTRUCTION BUFFERS AND FAST-GROWING ANNUAL RYE FOR TEMPORARY BUFFERS.
3. MAINTAIN VEGETATION AND PROVIDE IRRIGATION AS NECESSARY TO ENSURE VIGOROUS GROWTH AND TO PREVENT DIEBACK.
4. DELINEATE VEGETATION BUFFER AREAS WITH METHODS CONSISTENT WITH THE SITE DELINEATION SPECIFICATION AT THE EDGE OF THE NEW VEGETATION BUFFER.
5. AVOID DAMAGE TO THE VEGETATION BUFFER OR ROOT-ZONE BY NOT ALLOWING CONSTRUCTION MATERIALS, EQUIPMENT OR PARKING ON THEM.

VEGETATION BUFFER NOTES:

MATERIAL:
SITE DELINEATION MATERIAL: SEE SPECIFICATION SECTION 405 SITE DELINEATION.

INSPECTION

1. INSPECT NATURAL EXISTING VEGETATION BUFFER AREAS TO ENSURE THAT THE SITE DELINEATION TO MARK THE NON-DISTURBANCE AREAS IS IN PLACE.
2. CHECK FOR DAMAGE BY EQUIPMENT AND VEHICLES.
3. INSPECT NEW VEGETATION BUFFER AREAS FOR THE PROGRESS OF GERMINATION AND PLANT GROWTH.
4. ENSURE STORMWATER FLOWING THROUGH THE AREA IS NOT FORMING PONDS, RILLS, OR GULLIES.
5. INSPECT FOR SEDIMENT DEPOSITION THROUGHOUT THE BUFFER.

MAINTENANCE

1. REPLACE OR REPAIR SITE DELINEATION (SUCH AS FENCING, STAKING, OR FLAGGING) AS NECESSARY TO DELINEATE THE VEGETATION BUFFER AREAS.
2. REPAIR ANY DAMAGE BY EQUIPMENT OR VEHICLES.
3. PROVIDE ADDITIONAL SEED, FERTILIZER, AND WATER TO REPAIR SEEDED AREAS DAMAGED BY EROSION OR FLOODING OF WATER.
4. IF SEDIMENT IS DEPOSITING IN THE BUFFER, INSTALL IMPROVED EROSION CONTROL MEASURES UP-SLOPE OF THE BUFFER.

REMOVAL

1. PROVIDE THE NECESSARY PERMANENT STABILIZATION TO AREAS WITH TEMPORARY VEGETATION BUFFER AS REQUIRED BY PLANS.
2. REMOVE SITE DELINEATION MATERIAL AFTER FINAL STABILIZATION OF WORK AREAS. WORK TO REMOVE THE SITE DELINEATION MATERIAL SHALL NOT DAMAGE THE EXISTING VEGETATION OR ANY STABILIZATION MEASURES.

VEGETATION BUFFER TABLE

AVERAGE SLOPE	BUFFER WIDTH (MIN.)
0%-2%	25 FEET
3%-5%	29-37 FEET
6%-10%	37-57 FEET
10%-20%	57-100 FEET
20% MAXIMUM	100 FEET

VEGETATION BUFFER TABLE NOTES:

1. THE MINIMUM WIDTH FOR ANY VEGETATION BUFFER IS 25 FEET. FOR EVERY 1% INCREASE OF THE SLOPE, ADD 4 FEET TO THE VEGETATION BUFFER WIDTH.
2. INSTALL VEGETATION BUFFERS ENTIRELY WITHIN THE RIGHT-OF-WAY.
3. FOR VEGETATION BUFFERS THAT ARE USED AS PERIMETER CONTROL (TYPE 1):
 - a. THE MINIMUM WIDTH FOR ANY VEGETATION BUFFER IS 25 FEET WHEN BUFFER WIDTHS LISTED IN THE TABLE ABOVE ARE NOT FEASIBLE.
 - b. USE ADDITIONAL BMPs WHEN THE MINIMUM BUFFER WIDTH CANNOT BE ACHIEVED.
4. THE WIDTH OF VEGETATION BUFFERS THAT ARE NATURAL BUFFER AREAS AS REQUIRED BY THE COP (TYPE II) MUST ALSO COMPLY WITH THE WIDTH REQUIRED BY LOCAL ORDINANCES, IF GREATER THAN 25 FEET.

Date	REVISIONS	
	Description	By

State of Alaska DOT&PF
**VEGETATION
BUFFER**

APPROVED 12/2015 [Signature]	

Linear/Perimeter Barrier
annotated by Elaine Nefzger,
AK-CESCL ASA-24-0004



BMP: DIVERSION BERM (continued)

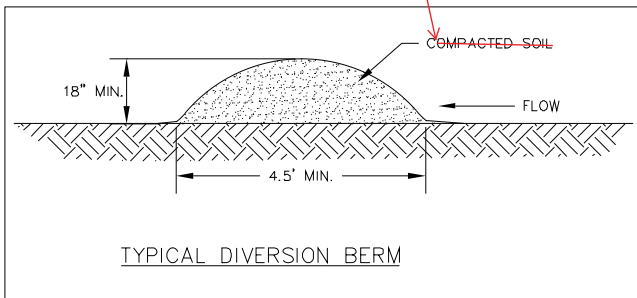
- ~~Schedule additional inspections during storm events. Make any required repairs.~~
- ~~During long term implementation inspect once every two weeks, whether a storm has occurred or not.~~

Inspect and maintain as described in the SWPPP annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

BMP REMOVAL

- Evaluate site to determine BMP is no longer needed (the area has stabilized—potential of sediment laden water exiting the area has passed).
- Remove sediment buildup.
- Remove BMP (recycle and/or re-use if applicable).
- Re-vegetate area disturbed by BMP removal (if applicable).

COMPACTED MATERIAL
annotated by Elaine Nefzger,
AK-CESCL ASA-24-0004



Diversion berm detail

<https://wsdot.wa.gov/sites/default/files/2021-10/part2-bestmanagementpractices-regionalroadmaintenance.pdf>

4.7 Sediment Traps and Basins

General Information

The purpose of a temporary trap or basin is to provide an area where muddy runoff is allowed to pond, so sediment will settle out. Sediment traps and basins should be installed in selected drainage areas before excavation or fill work begins. **Do not depend on sediment traps and basins alone to control sediment loss from your construction site.** Sediment basins and traps should fill with muddy runoff during and immediately after a rain storm and drain down slowly over the next 1–2 days.

Containment for the ponding area can be provided by an excavation or a dike made of earth or stone. Low-lying sites on the downhill side of bare soil areas are ideal places to install temporary sediment traps and basins. In general, sediment traps are designed to treat runoff from about 1 to 5 acres. Sediment basins are larger, and serve areas larger than 5 acres. **Basins draining areas larger than 10 acres require an engineered design and are often designed to function as a permanent stormwater treatment pond after construction is complete.** annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

If feasible, do not put sediment traps or basins in or next to flowing streams or other waterways. Make sure pooled water does not flood buildings, roadways, utilities, or other structures. Construction of a permanent, stable outlet is key to long-term performance.

Temporary Sediment Traps

Any depression, swale, or low-lying place that receives muddy flows from exposed soil areas can serve as a sediment trap site. Installing several small traps at strategic locations is often better than building one large basin. The simplest approach is to dig a hole or build a dike (berm) of earth or stone where concentrated flows are present. This will help to detain runoff so sediment can settle out. The outlet can be a rock-lined depression in the containment berm.

Sediment Basins

sod, plastic sheeting, or other, annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

Sediment basins are somewhat larger than traps, but the construction approach is similar. Sediment basins usually have more spillway protection because of their larger flows. Most have risers and outlet pipes rather than rock spillways to handle the larger flows. Sediment basins are often designed to serve later as stormwater treatment ponds. If this is the case, agreements might be required assigning responsibility for long-term sediment removal and general maintenance.



Small, temporary sediment traps intercept and detain construction site runoff so soil particles can settle out. Note how the outlet riser for this trap has been wrapped with filter fabric to increase detention time and trap suspended sediment. Designing traps and basins with long flow paths between the inlet and outlet also helps to increase sediment removal efficiency by extending the detention time. Where space restrictions prevent long basin designs, barriers placed in the basin can lengthen detention times by creating a serpentine flow path between the inlet and outlet.

4.7 Sediment Traps and Basins

4.7.1 Temporary Sediment (Silt) Traps



Simple traps or "checks" with rock berm containment structures can be installed as needed by field personnel with or without specific notations on plan documents. Standard notes on plans should call for installation of temporary traps in concentrated flow areas subject to rutting on an as-needed basis. Make sure containment berms are designed for overflow in the center of the berm, to prevent sidecutting and bypasses. Install traps in a series to control sediment from large upland areas.

Definition

A temporary sediment or silt trap is formed by excavation or by constructing a small embankment of stone, stone-filled bags, or other material to retain sediment. Sediment traps are considered temporary structures and often placed at the site on an *as needed* basis by field personnel. They should not be placed in flowing streams.

Purpose

Sediment traps pond and settle sediment from muddy runoff. Traps are used where physical site conditions or other restrictions prevent other erosion control measures from adequately controlling erosion and sedimentation. Sediment traps can be used downslope from construction operations that expose areas to erosion.

Design Criteria

Bermed sediment traps confined by rock, rock-filled fiber bags, or other material are preferred over excavated traps or those with soil berms. Traps are placed in converging flow areas (i.e., where ruts or washouts can form) or in ditches, where they are often called ditch checks or check dams. All traps are sized according to a design volume of 3,600 cubic feet per disturbed acre in the upstream drainage area. Multiple sediment traps constructed in a series are needed when the storage volume of each cannot meet this design requirement.

~~Sediment traps are generally used to treat a drainage area of 5 acres or less. When the total drainage area exceeds 10 acres, an engineered sediment basin is usually necessary. Traps cannot be placed in blue-line streams or other regulated waters unless space limitations or design limitations provide no other feasible option. A USACE Clean Water Act (CWA) section 404 permit is required in these cases. Sediment traps must be cleaned out when they are one-third full of sediment.~~

~~KYTC Silt Trap Types A, B, and C~~

~~The KYTC specifies three types of temporary sediment or silt traps. Type A is an excavated basin with or without a soil berm constructed in a ditch or drainageway. Type B is one or more small berms of rock (KYTC No. 2 or shot rock) placed in a drainageway or ditch, with a geotextile underliner covered by 4 inches of KYTC No. 4 stone. A 12-inch overflow depression appears in the middle of the berm(s). Type C traps are berms constructed of porous fabric bags filled with crushed aggregate (e.g., KYTC No. 57), placed individually or in a series to create small ponding dams around drop inlets, curb inlets, or to form check dams in a drainageway or ditch.~~

~~annotated by Elaine Nefzger, AK-CESCL ASA-24-0004~~

General annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

- Construct traps of rock (KYTC No. 2 mixed with smaller stone); rock-filled fiber bags, or use approved commercial sediment trap products installed and spaced according to manufacturer's instructions.
- Site sediment traps in areas where they can be maintained (i.e., sediment removed).
- Set traps back from property lines or water bodies as much as possible.
- Do not site sediment traps at culvert or pipe outlets if possible.
- Minimum sediment storage capacity is 3600 cubic feet per acre of upland area drained by the trap. Where space restrictions exist, install multiple traps in a series at least 50 feet apart.
- Maximum drainage area is 5 acres.
- Basin flow length should be at least two times the flow width.
- Recommended trap depth for open areas is 2 feet at the inlet and 4 feet at the outlet.
- Trap height must be 1.5 feet minimum in ditches, 3–5 feet in open area drainageways.
- Trap berm width at base must be sufficient to support 2H:1V berm.
- Trap length must be sufficient to tie into upper banks in ditches or high enough to prevent side bypasses in drainageways. Overflows must be in the center of the berm.
- Construct the trap, seed and stabilize before clearing and grading work begins.

Embankment requirements

- Maximum height of 5 feet.
- Maximum inside and outside slopes of 2:1.
- Side slopes, containment berms, and inflowing ditches should be seeded and mulched or blanketed as soon as possible after construction.

Outlet requirements

- The outlet must consist of an overflow spillway wide made of stone (KYTC No. 2 minimum), sod, plastic sheeting, or other stable liner annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

Construction Specifications

- Construct initial series of sediment traps before general site clearing and grading.
- The area to be excavated or ponded must be cleared of all trees, stumps, roots, brush, boulders, and debris. All topsoil containing excessive amounts of organic matter must be removed.
- Seeding, fertilizing, and mulching of the material taken from the excavation must comply with the applicable soil stabilization sections of this manual.
- Any material excavated from the trap must be uniformly spread to a depth not exceeding 3 feet and graded to a continuous slope away from the trap.
- Field-approved installations should be noted on weekly or bi-weekly inspection reports and on plan documents within 7 days.

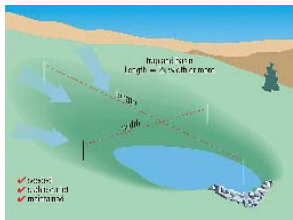
annotated by Elaine Nefzger,
AK-CESCL ASA-24-0004

Inspection and Maintenance

according to subsection 11.1 annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

The trap must be inspected ~~weekly or every 14 days~~ and after every rainfall greater than one-half inch. Sediment must be removed from the trap when it consumes ~~one-third~~ one-half of the design volume. Plans for the sediment trap must indicate the methods for disposing of the sediment removed.

Temporary sediment traps are removed upon stabilization or cover of the upland drainage area with vegetation, pavement, and so on. The trap area should be graded, seeded, and mulched or blanketed. Excess sediment should be spread and stabilized where it will not enter the drainage system.



Design sediment traps with long flow paths if possible. Make sure overflow area is protected with rock or other armoring. For best results, seed trap and upland areas immediately after construction.



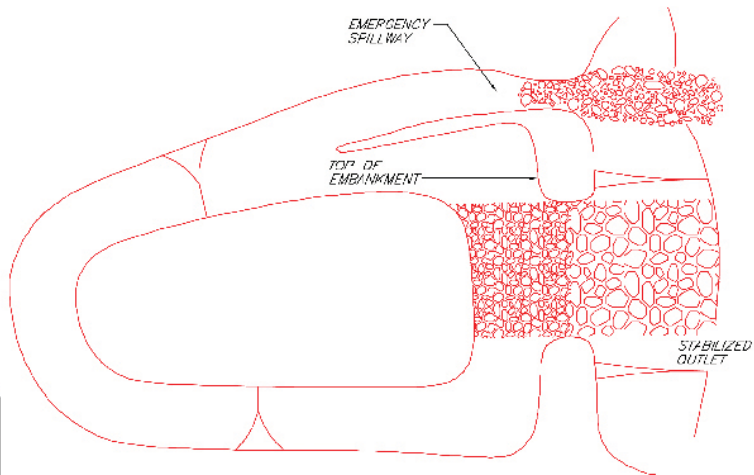
Make sure overflow outlet or riser is designed for maximum detention times. Note the rock berm around riser, which ensures maximum detention for muddy flows after small storms.



Good trap placement and performance; poor maintenance. Remove accumulated sediment before trap is half full. Spread material removed in a vegetated upland area or other site where it will not wash into nearby surface waters.



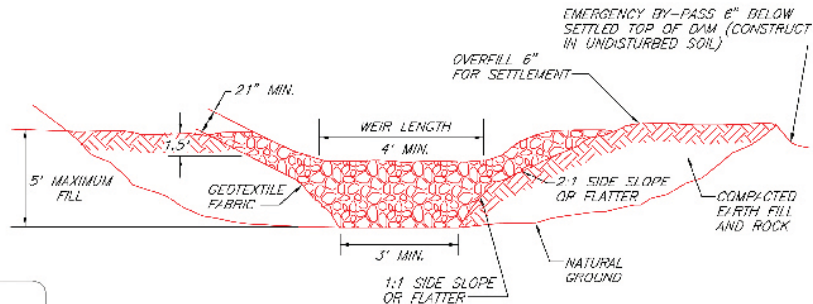
In areas where space is restricted, use multiple traps in a series to meet the design goal of 3600 cubic ft per acre of upland drainage. Get to final grade, seed and mulch as soon as possible to reduce trap maintenance and upkeep.

**SEDIMENT
TRAP**

NOTE:

A SEDIMENT TRAP CAN BE USED FOR DISTURBED AREAS LESS THAN 5 ACRES.

PLAN

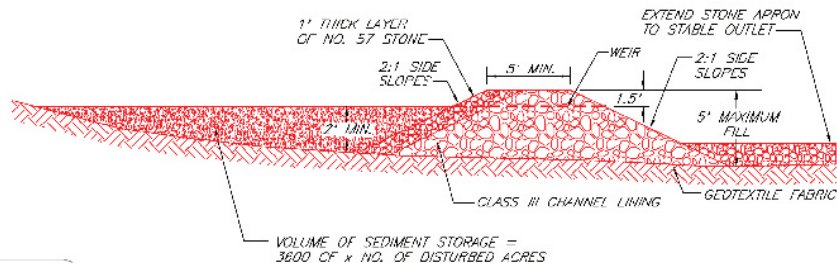


SEDIMENT TRAP

NOTE:

A SEDIMENT TRAP CAN BE USED FOR DISTURBED AREAS LESS THAN 5 ACRES.

EMBANKMENT AND SPILLWAY ELEVATION



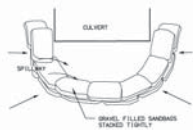
SEDIMENT
TRAP

NOTE:

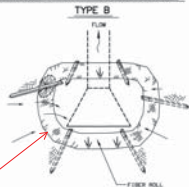
A SEDIMENT TRAP CAN BE USED FOR DISTURBED AREAS LESS THAN 5 ACRES.

STONE SECTION

REVISION			STATE	PROJECT IDENTIFICATION	YEAR	TEST	SHEETS
NO.	DATE	DESCRIPTION	ALASKA	Z513630000	2017	3	4

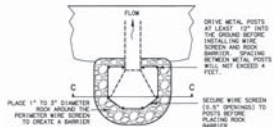


TEMPORARY INLET SEDIMENT TRAP, TYPE B



TEMPORARY INLET SEDIMENT TRAP, TYPE C

Silt fence may be used in place of fiber roll. Install the joint at the top of the culvert.
 Elaine Metzger,
 AK-CESCL
 ASA-24-0004



PLAN VIEW



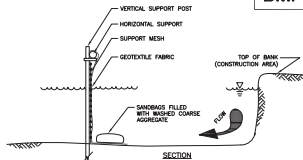
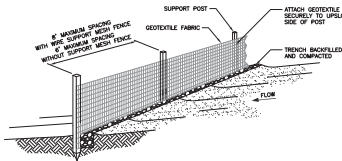
SECTION C-C

TEMPORARY SEDIMENT TRAP, TYPE A

4/25/2017

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
**PALMER-WASILLA HIGHWAY
 EASTERN TERMINUS
 PHASE I**

**EROSION AND SEDIMENTATION
 CONTROL PLAN DETAILS**



GENERAL INSTALLATION
NOT TO SCALE

SILT FENCE GENERAL NOTES:
MATERIALS
SILT FENCE: SEE SPECIFICATION SECTION 633, SILT FENCE.

INSTALLATION

1. INSTALL FENCELINE ALONG A LEVEL CONTOUR AND PERPENDICULAR TO ANTICIPATED SHEET FLOW DRAINAGE PATH(S).
2. ORIENT END SECTIONS UPWIND SLIGHTLY IN A J-HOOK TO PREVENT WATER FROM SOILING AROUND THE SILT FENCE.
3. DO NOT EXCEED 100 FEET FOR EACH 1/4-ACRE OF DRAINAGE AREA AND DO NOT EXCEED 500 FEET REGARDLESS OF DRAINAGE AREA.

4. THE DIFFERENCE IN ELEVATION BETWEEN THE HIGHEST AND LOWEST POINT ALONG THE TOP OF THE SEGMENT FENCE SHALL NOT EXCEED ONE-THIRD THE FENCE HEIGHT.
5. WHERE GROUND SURFACES ARE UNLEVEL, INSTALL SHORTER SECTIONS FOLLOWING CONTOURS (WATHER THAN INSTALLING ONE LONG, CONTOUR-CROSSING FENCE THAT DIRECTS DRAINAGE TO ACCUMULATE IN LOW SPOTS).

6. LOCATE FENCE 3 TO 10 FEET BEYOND TOE OF FILL TO LEAVE ROOM FOR A BROAD SPILLER SEDIMENTATION POOL, AND FOR EQUIPMENT ACCESS DURING FENCE MAINTENANCE AND REMOVAL.
7. IF FEASIBLE, LEAVE A MINIMUM OF 3.5-FOOT BUFFER BETWEEN FENCING AND SENSITIVE RECEIVING AREAS.

8. PLACE GEOTEXTILE ON THE UPSLOPE SIDE OF POSTS OR, WHEN USING SILT FENCE WITH SEW-IN POCKETS, PLACE POCKETS ON THE UPSLOPE SIDE OF THE FENCE.
9. EXCAVATE TRENCHES NOT WIDER OR DEEPER THAN SUPPORT AT SUPPORT POST SUCH THAT THE JOINT PREVENTS SILT-LOADED WATER FROM ESCAPING THROUGH THE FENCE.

11. IF USING THE FRONT WHEEL OF A TRACTOR OR ROLLER, COMPACT THE UPSLOPE SIDE FIRST, THEN EACH SIDE TWICE (A TOTAL OF FOUR TRIPS).

12. KEEP FENCE FABRIC TAUT.

13. WHEN USING SUPPORT MESH, ATTACH GEOTEXTILE TO THE SUPPORT MESH WITH FASTENERS SPACED EVERY 24 INCHES AT THE TOP AND MIDDLE.

MACHINE SLICE INSTALLATION (NOT IN PERMAYOST)

1. USE A SILT FENCE INSTALLATION MACHINE OR ATTACHMENT TO FLOW OR SLICE THE FABRIC DIRECTLY INTO THE SOIL.
2. BACKFILL SOIL LOOSENED BY THE BLADE INTO THE SLICE AND USE THE TRACTOR TO MECHANICALLY COMPACT THE SOIL.
3. TUCK FABRIC DEEPER INTO THE GROUND WHERE NECESSARY.
4. INSTALL SUPPORT POSTS ALONG THE LENGTH OF THE FENCE FOLLOWING SIMILAR PROCEDURES FOR THE TRENCH METHOD.

RENTEL INSTALLATION (NOT IN PERMAYOST)

1. DIG A TRENCH.
2. BACKFILL TRENCH WITH THE LOOSENED SOIL, AND COMPACT SOIL PRIOR TO POST INSTALLATION.
3. WEDGENTHE BACKFILLED SOIL SO IT WILL FREEZE UP AND GRIP THE SILT FENCE FABRIC IN PLACE.
4. DO NOT LEAVE LARGE POST CHUNKS AS THE BACKFILL.

INSPECTION

1. INSPECT FENCELINE FOR CONTINUITY, COLLAPSE, UNIFORMED AREAS, AND DAMAGE. DO NOT EXCAVATE TRENCHES IN PERMAYOST.
2. INSPECT FABRIC FOR TEARS, PUNCTURES, FRAYING, WEATHERING, AND COMPROMISED INTEGRITY.
3. CONFIRM THAT THE FENCE POSTS ARE SECURE.
4. ENSURE THE FENCE IS KEVED IN AND THAT THERE IS NO UNDERCUTTING.
5. LOOK FOR EVIDENCE OF SEDIMENT OR EROSION FLOW LEAVING OFF THE DOWNWIND EDGE OF THE FENCE. (THIS MAY BE AN INDICATOR OF DRAINAGE BYPASS OR FENCE UNDERMINE.)

6. NOTE DEPTH OF SEDIMENT BUILD UP AT THE FENCE.
7. LOOK FOR SIGNS OF INADEQUATE PROTECTION OF OFF-SITE SENSITIVE AREAS.
8. CHECK FOR SEDIMENT FLOWING THROUGH THE FENCE.
9. CHECK FOR HOLES IN FENCE WHERE WIRE TIES ARE USED TO SECURE GEOTEXTILE FABRIC TO THE SUPPORT POST.

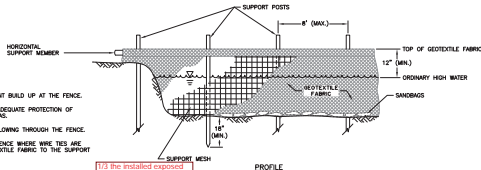
MAINTENANCE

1. INSTALL ALTERNATE OR ADDITIONAL BMPs AS NEEDED TO PREVENT UNDESIRABLE SEDIMENTATION OF SENSITIVE AREAS.
2. REPLACE DAMAGED FABRIC.
3. REMEDY FENCE SAGS AS NEEDED.
4. REMOVE ACCUMULATED SEDIMENT BEFORE IT ACCUMULATES TO OVERSHOULDER THE CAPACITY OR ONE-THIRD OF THE AVAILABLE STORAGE IF PROTECTING A WATER-BODY OR STREAM-DRAINAGE.

5. DISPOSE OF SILT WASTE IN APPROVED MANNER/LOCATION (TYPICALLY IN A NON-EROSION AREA).
6. IF THERE IS EVIDENCE OF EXCESSIVE SEDIMENTATION AGAINST THE SILT FENCE, PROVIDE INCREASED EROSION CONTROL SOLUTIONS.

REMOVAL

1. WHEN DISTURBED AREAS ARE PERMANENTLY STABILIZED OR SEDIMENT PROTECTION IS NO LONGER NEEDED, COLLECT AND PROPERLY DISPOSE OF ACCUMULATED SEDIMENT OR SEED IN PLACE.
2. CUT FABRIC AT GROUND LEVEL AND REMOVE SUPPORTS.
3. DISCARD FILTER FABRIC AS APPROVED. AVOID DAMAGE TO SENSITIVE AREAS (E.G. WETLAND OR SURFACE WATER).



STANDING WATER INSTALLATION
NOT TO SCALE

1/3 the installed exposed height of the silt fence. Annotated by Elaine Neltzer, AK-CESCL ASA-24-0004

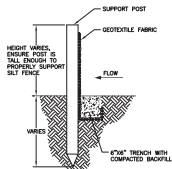
STANDING WATER NOTES:

- INSTALLATION**
1. DIG SUPPORT POSTS INTO THE GROUND AND ATTACH A HORIZONTAL SUPPORT MEMBER.
 2. ATTACH SUPPORT MESH AND GEOTEXTILE ON THE UPSLOPE SIDE OF THE STAKES. EXTEND GEOTEXTILE ON THE GROUND UPSLOPE OF THE FENCE, AND AROUND THE GEOTEXTILE WITH SANDBAGS OR EQUIVALENT TO PREVENT GAPS.
 3. SPACE SUPPORT POSTS A MINIMUM OF 8 FEET APART.
 4. KEEP FENCE FABRIC TAUT.

REVISIONS		
Date	Descriptions	By

State of Alaska DOT&P
SILT FENCE
(NOTES: GENERAL
INSTALLATION, & STANDING
WATER INSTALLATION)

Date 12/2015 *XXXXXXXX*

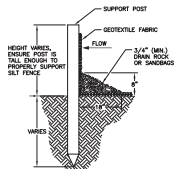


TRENCH DETAIL
NOT TO SCALE

TRENCH NOTES:

INSTALLATION

1. DRIVE SUPPORT POSTS INTO THE GROUND.
2. FOLLOW MANUFACTURER'S SPECIFICATIONS FOR POST BURIAL DEPTH.
3. EXCAVATE A TRENCH ON THE UPWILL SIDE ALONG THE LINE OF THE STAKES.
4. ATTACH GEOTEXTILE TO STAKES AND BURY GEOTEXTILE BOTTOM.
5. BACKFILL TRENCH AND COMPACT TO SECURE FENCE BOTTOM.



TRENCHLESS DETAIL
NOT TO SCALE

TRENCHLESS NOTES:

MATERIALS

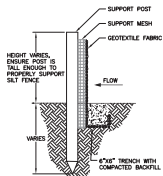
CLEAN ROCK OR SANDBAGS.

INSTALLATION

1. DRIVE SUPPORT POSTS INTO THE GROUND.
2. ATTACH GEOTEXTILE ON THE UPWILL SIDE ALONG THE LINE OF THE STAKES.
3. EXTEND GEOTEXTILE ON THE GROUND UPWILL OF THE FENCE.
4. PLACE DRAIN ROCK ON GEOTEXTILE.

REMOVAL

1. WHEN SILT FENCE IS LOCATED IN WETLANDS OR SENSITIVE AREAS, REMOVE CLEAN ROCK OR SANDBAGS WHEN THE SILT FENCE IS REMOVED.

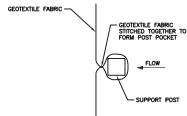


**SUPPORT MESH REINFORCED
FABRIC DETAIL**
NOT TO SCALE

SUPPORT MESH REINFORCED FABRIC NOTES:

INSTALLATION

1. DRIVE SUPPORT POSTS INTO THE GROUND.
2. EXCAVATE A TRENCH ON THE UPWILL SIDE ALONG THE LINE OF THE STAKES. DO NOT EXCAVATE TRENCHES IN PERMANENT.
3. EXTEND SUPPORT MESH A MINIMUM OF 3 INCHES INTO THE TRENCH.
4. ATTACH GEOTEXTILE TO STAKES AND BURY GEOTEXTILE BOTTOM.
5. BACKFILL TRENCH AND COMPACT TO SECURE FENCE BOTTOM.



SEWN-IN POCKET DETAIL
NOT TO SCALE

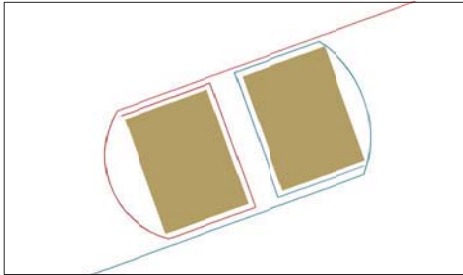
REVISIONS		
Date	Description	By

State of Alaska DOT&PF

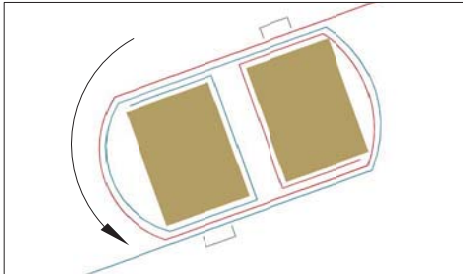
**SILT FENCE
(DETAILS)**

A
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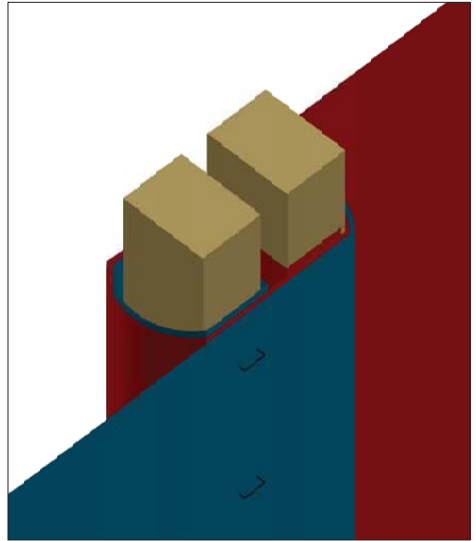
Date: *XXXXXXXX*



Step 1, Nest end posts together



Step 2, Turn 180 degrees to secure



Step 3, Hold stakes firmly or staple fabric if needed to keep assembly from separating during installation.

Silt Fence End Splice Detail - SF-1

No Scale, By Elaine Nefzger, Nefzger Consulting 6-15-16

Note: Colors are for illustration purposes only.



BMP Objectives

- Soil Stabilization
- Sediment Control
- Tracking Control
- Wind Erosion Control
- Non-Storm Water Management
- Materials and Waste Management

Definition and Purpose

A fiber roll consists of wood excelsior, rice or wheat straw, or coconut fibers that is rolled or bound into a tight tubular roll and placed on the toe and face of slopes to intercept runoff, reduce its flow velocity, release the runoff as sheet flow and provide removal of sediment from the runoff. Fiber rolls may also be used for inlet protection and as check dams under certain situations.

Appropriate Applications

- This BMP may be implemented on a project-by-project basis with other BMPs when determined necessary and feasible by the RE.
- Along the toe, top, face, and at grade breaks of exposed and erodible slopes to shorten slope length and spread runoff as sheet flow.
- Below the toe of exposed and erodible slopes.
- Fiber rolls may be used as check dams in unlined ditches if approved by the Resident Engineer (RE) or the District Construction Storm Water Coordinator (refer to SC-4 "Check Dams").
- Fiber rolls may be used for drain inlet protection if approved by the RE or the District Construction Storm Water Coordinator (refer to SC-10 "Storm Drain Inlet Protection").
- Down-slope of exposed soil areas.
- Around temporary stockpiles.
- Along the perimeter of a project.

Storm Water Lead, Superintendent, or Project Engineer, annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

- Limitations**
- Runoff and erosion may occur if fiber roll is not adequately trenched in.
 - Fiber rolls at the toe of slopes greater than 1:5 may require the use of 500 mm (20" diameter) or installations achieving the same protection (i.e., stacked smaller diameter fiber rolls, etc.).
 - Fiber rolls may be used for drainage inlet protection if they can be properly anchored.
 - Difficult to move once saturated.
 - Fiber rolls could be transported by high flows if not properly staked and trenched in.
 - Fiber rolls have limited sediment capture zone.
 - Do not use fiber rolls on slopes subject to creep, slumping, or landslide.

Standards and Specifications

Fiber Roll Materials

- Fiber rolls shall be either:
 - (1) Prefabricated rolls.
 - (2) Rolled tubes of erosion control blanket.

Assembly of Field Rolled Fiber Roll

- Roll length of erosion control blanket into a tube of minimum 200 mm (8 in) diameter.
- Bind roll at each end and every 1.2 m (4 ft) along length of roll with jute-type twine.

Installation

- Slope inclination of 1:4 or flatter: fiber rolls shall be placed on slopes 6.0 m apart.
- Slope inclination of 1:4 to 1:2: fiber rolls shall be placed on slopes 4.5 m apart.
- Slope inclination 1:2 or greater: fiber rolls shall be placed on slopes 3.0 m apart.
- Stake fiber rolls into a 50 to 100 mm (2 to 4 in) trench.

- Drive stakes at the end of each fiber roll and spaced 600 mm (2 ft) apart if Type 2 installation is used (refer to Page 4). Otherwise, space stakes 1.2 m (4 ft) maximum on center if installed as shown on Pages 5 and 6.
- Use wood stakes with a nominal classification of 19 by 19 mm (3/4 by 3/4 in), and minimum length of 600 mm (24 in).
- If more than one fiber roll is placed in a row, the rolls shall be overlapped; not abutted.

Removal

- Fiber rolls are typically left in place.
- If fiber rolls are removed, collect and dispose of sediment accumulation, and fill and compact holes, trenches, depressions or any other ground disturbance to blend with adjacent ground.

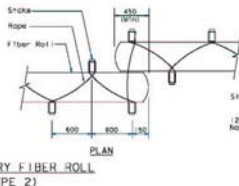
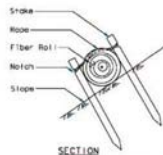
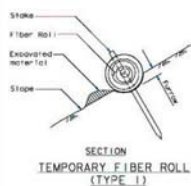
Maintenance and Inspection

- Repair or replace split, torn, unraveling, or slumping fiber rolls.
- ~~Inspect fiber rolls when rain is forecast.~~ Perform maintenance as needed or as required by the RE.
- ~~Inspect fiber rolls following rainfall events and at least daily during prolonged rainfall.~~ Perform maintenance as needed or as required by the RE.
- Maintain fiber rolls to provide an adequate sediment holding capacity. Sediment shall be removed when the sediment accumulation reaches ~~three quarters (3/4)~~ **three quarters (3/4)** of the barrier height. Removed sediment shall be incorporated in the project at locations designated by the RE or disposed of outside the highway right-of-way in conformance with the Standard Specifications.

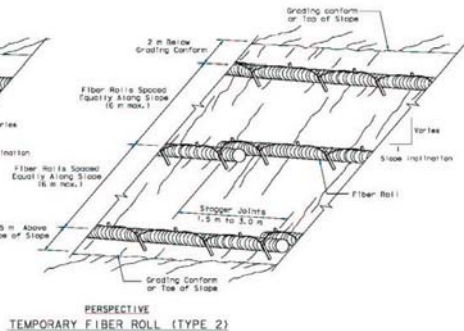
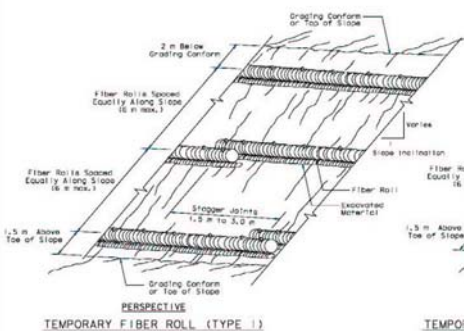
Inspect according to the requirements described in the SWPPP subsection 10.6 annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

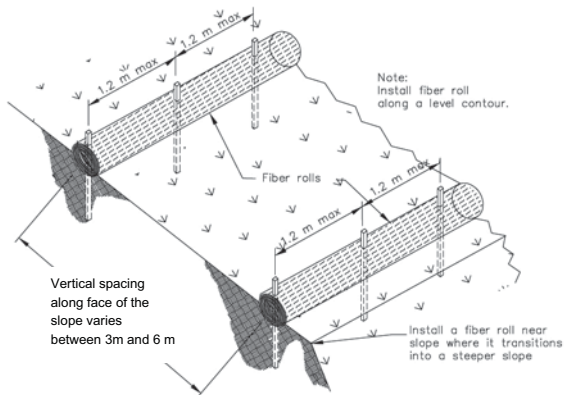
one-half (1/2) annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

Storm Water Lead, Superintendent or Project Engineer, annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

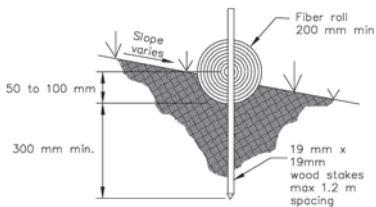


NOTE
1. Temporary fiber roll spacing varies depending upon slope inclination.



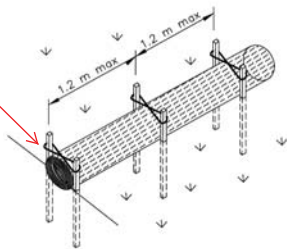


TYPICAL FIBER ROLL INSTALLATION
N.T.S.

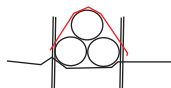


ENTRENCHMENT DETAIL
N.T.S.

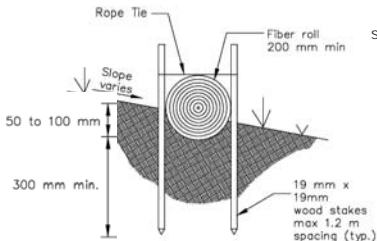
Notch stakes if required to prevent rope from slipping. annotated by Elaine Nefzger, AK-CESCL ASA-24-0004



Fiber rolls may be stacked where additional height is required. Stagger end joints to avoid a weak area in the assembly where water may flow through. annotated by Elaine Nefzger, AK-CESCL ASA-24-0004

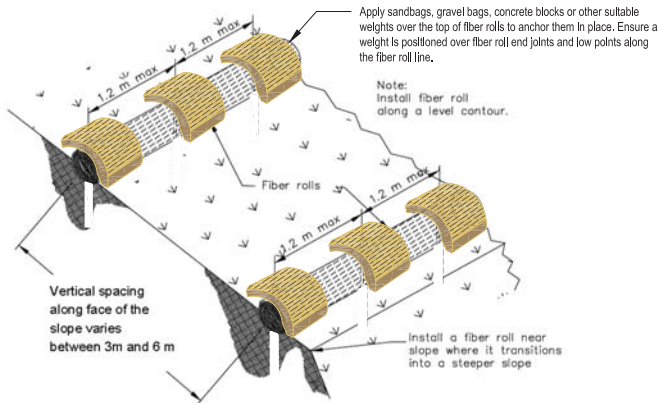


STACKED FIBER ROLL DETAIL (NTS)



OPTIONAL ENTRENCHMENT DETAIL

N.T.S.

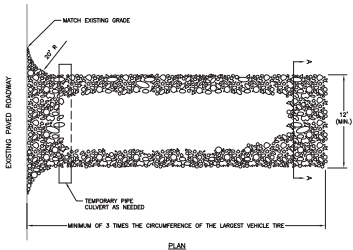


ALTERNATE FIBER ROLL INSTALLATION DETAIL WITH WEIGHTS

This detail was modified by Elaine Neftzger,
AK-CESCL ASA-21-0006



SECTION A-A



PLAN

ROCK CONSTRUCTION EXIT

NOT TO SCALE

ROCK CONSTRUCTION EXIT NOTES:**MATERIALS**

ROCK: 3- to 3-inch coarse aggregate or 3- to 6-inch quarry spall or angular rock, whichever is appropriate to the project fleet.

INSTALLATION

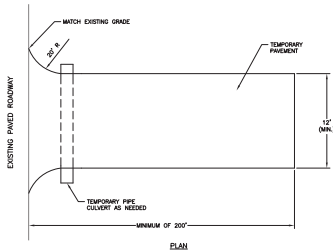
1. PLACE THE FILTER FABRIC AND ROCK TO THE SPECIFIC GRADE SHOWN ON THE PLANS.

MAINTENANCE

1. REMOVE ACCUMULATED SEDIMENT OR MUD.
2. REPLACE ROCK MATERIAL WHEN SURFACE VOIDS ARE FILLED WITH SEDIMENT. REPLACE FABRIC AS NEEDED.
3. TOP DRESS WITH 2 TO 3 INCHES OF COARSE AGGREGATE OR 3- to 6-INCH COARSE ROCK WHEN THE PAD BECOMES LOADED WITH SEDIMENT.

INSPECTION

1. INSPECT FOR ROCK THAT HAS BEEN DISPLACED FROM THE PAD.



PLAN

TEMPORARY PAVEMENT CONSTRUCTION EXIT

NOT TO SCALE

TEMPORARY PAVEMENT CONSTRUCTION EXIT NOTES:**INSPECTION**

1. INSPECT TEMPORARY PAVEMENT FOR DAMAGE.

MAINTENANCE

1. SWEEP DESIGNATED PAVED EXIT TO PREVENT SEDIMENT TRACK-OUT.
2. REPAIR DAMAGED TEMPORARY PAVEMENT.

STABILIZED CONSTRUCTION EXIT GENERAL NOTES:**INSTALLATION**

1. INSTALL STABILIZED CONSTRUCTION EXIT PRIOR TO EARTH WORK.
2. CLEAR THE EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER MATERIAL.
3. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP, VEGETATIVE SEDIMENT FILTER OR OTHER PROTECTED OUTLET.
4. EXCAVATE AND GRADE THE AREA FOR ROCK PLACEMENT.
5. INSTALL SIGNS, FENCING OR BARRICADES TO CHANNEL OUTGOING TRAFFIC TO THE STABILIZED CONSTRUCTION EXIT.

INSPECTION

1. INSPECT STABILIZED CONSTRUCTION EXIT FOR SEDIMENT ACCUMULATION AND MATERIAL DISPLACEMENT.
2. INSPECT ROADWAY FOR SEDIMENT TRACK-OUT.
3. INSPECT GRASSES TO ENSURE NO SEDIMENT ACCUMULATION.

MAINTENANCE

1. MAINTAIN EACH EXIT IN A CONDITION THAT WILL PREVENT TRACKING OF MUD OR SEDIMENT ONTO PUBLIC RIGHT-OF-WAY.
2. REPAIR AND/OR CLEAN OUT ANY STRUCTURES USED TO TRAP SEDIMENT.
3. REMOVE ALL MUD AND SEDIMENT DEPOSITED ON PAVED ROADWAYS.
4. ADD MORE SIGNS, FENCING OR BARRICADES WHEN VEHICLES ARE EXITING THE PROJECT WITHOUT USING THE STABILIZED CONSTRUCTION EXIT. IF NECESSARY, ADDITIONAL STABILIZED CONSTRUCTION EXITS. IF NECESSARY, SET THE SIGNS AND BARRICADES TO MINIMIZE THE NUMBER OF STABILIZED CONSTRUCTION EXITS.
5. PREVENT TRACK-OUT BY USING ADDITIONAL BMPs, SUCH AS A TIRE WASH.

REMOVAL

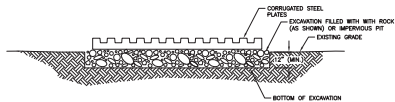
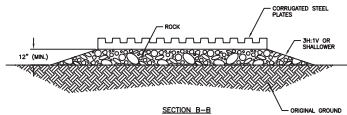
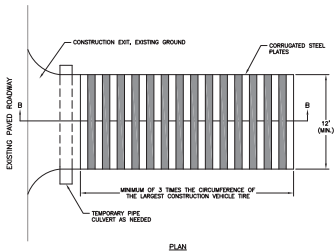
1. REMOVE THE STABILIZED CONSTRUCTION EXIT AND ANY SEDIMENT TRAPPING STRUCTURES AFTER THEY ARE NO LONGER NEEDED, OR WITH FINAL SITE STABILIZATION.
2. REGRADE AND PERMANENTLY STABILIZE THE REMAINING DISTURBED AREAS ACCORDING TO THE PLANS.

REVISIONS

Date	Description	By

State of Alaska DOT&P
**STABILIZED
 CONSTRUCTION EXIT
 (NOTES, ROCK &
 TEMPORARY PAVEMENT)**

Date 12/2015 *XC200000*

SECTION B-B
OPTION 1SECTION B-B
OPTION 2

PLAN

METAL PLATE CONSTRUCTION EXIT
NOT TO SCALE**METAL PLATE CONSTRUCTION EXIT NOTES:****MATERIALS**

CORRUGATED STEEL PLATES, SHAKER/RUMBLE PLATES,
CORRUGATED STEEL PLATES, OR EQUIVALENT DESIGNED FOR
ANTICIPATED TRAFFIC LOADS.

EDGE: 2- TO 3-INCH COARSE AGGREGATE.**INSTALLATION**

1. IF CORRUGATED STEEL PLATES ARE OPEN TO THE
SURFACE BELOW, INSTALL GRAVEL OR IMPERVIOUS PIT.

2. PLACE CORRUGATED STEEL PLATES.

INSPECTION

1. INSPECT CORRUGATED STEEL PLATES FOR DAMAGE.

MAINTENANCE

1. REPLACE DAMAGED CORRUGATED STEEL PLATES AS
NECESSARY.

2. LIFT PLATE AND REMOVE ACCUMULATED SEDIMENT.

3. WHEN SURFACE VOIDS FILL WITH SEDIMENT, REPLACE
ROCK MATERIAL.

ADDITIONAL NOTES:

SEE STABILIZED CONSTRUCTION EXIT GENERAL NOTES ON
BMP 23.00 STABILIZED CONSTRUCTION EXIT (NOTES,
ROCK & TEMPORARY PAVEMENT).

REVISIONS		
Date	Description	By

State of Alaska DOT&PF
**STABILIZED
CONSTRUCTION EXIT
(METAL PLATE)**

A
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Date 12/2015 *AC/00000*

Introducing Mud Mats

A NEW revolutionary product to keep you out of the mud!



SITE ACCESS



**CROSSING
SENSITIVE AREAS**



**ALTERNATIVE TO
ROCK ENTRANCES**



**RESIDENTIAL
CONSTRUCTION ENTRANCE**

Polar Supply Company

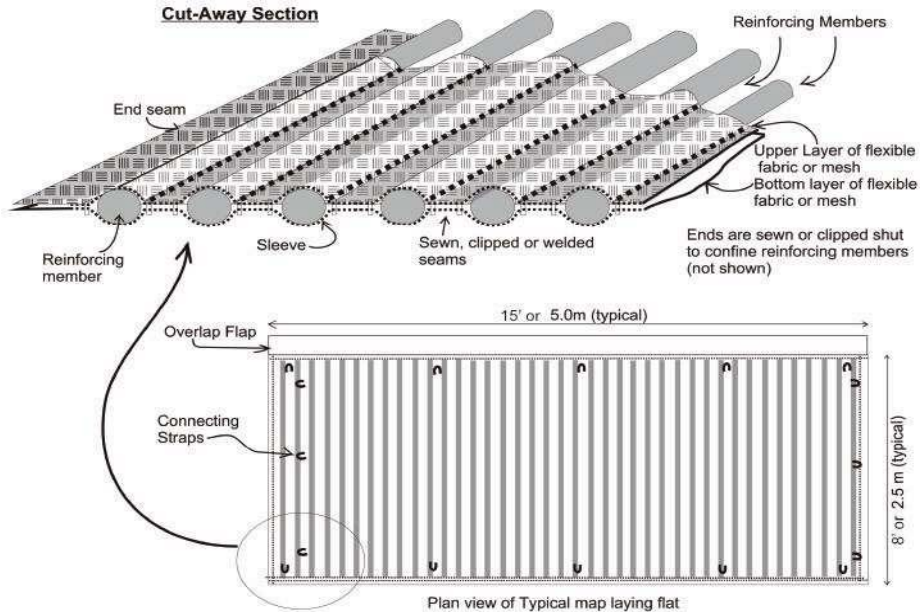
A Division of Spenard Builders Supply



Anchorage
Phone: (907) 563-5000
Fax: (907) 561-1850
polarsales@polarsupply.com

Kenai
Phone: (907) 335-2600
Fax: (907) 335-2601
kenaisales@polarsupply.com

Fairbanks
Phone: (907) 452-4748
Fax: (907) 451-6887
ravensales@polarsupply.com



Polar Supply Company

A Division of Spenard Builders Supply

FODS TRACKOUT CONTROL



FODS MAT

- Mat size is 12' wide by 7' long and pyramids are 3" tall.
- It will take 10 mats to make a system for a standard 12' x 70' entrance used on most construction sites. Various jurisdictions require different lengths so this may be less or more depending where they will be used.
- Mats weigh approx. 430lbs.
- Mats can be anchored to the ground and fastened together.
- Mats are made out of HMWPE (High Molecular Weight Polyethylene).
- Mats are FODS yellow in color.

STABILIZED CONSTRUCTION ENTRANCE (SCE)

12' wide by 70' long of appropriate aggregate. Location where SCE is to be located needs to be excavated 6" down in depth, a geotextile erosion control fabric placed down, with aggregate placed on top.

Individual jurisdictions have specifications that they require which can increase or decrease depth, width, length, size of aggregate, and similar. After SCE removal, topsoil must be added back to disturbed area, graded, and re-seeded.



THE MUD STOPS HERE
YOUR ENVIRONMENTAL TRACKOUT SOLUTION



WWW.GETFODS.COM
(303) 995-1069
INFO@GETFODS.COM

TOLL FREE

1-844-200-3637



98 Inverness Dr E #350
Englewood, CO 80112

ABOUT FODS

FODS are an innovative and convenient new product, solves a major problem associated with our environment, and has a great economical benefit to the customer! FODS effectively removes mud and sediment from vehicle tires. Whenever a vehicle needs to enter a paved road from an unpaved site, FODS is your answer! Learn more about FODS at

www.GetFODS.com

FODS IS YOUR ENVIRONMENTAL SOLUTION

Ideal for construction, airports, government, military, mining, agriculture, forestry, renewable energy, oil and gas, telecommunications, national parks, storm water, roads and bridges.



FODS MATS OFFER SUPERIOR BENEFITS:

- Creates an instant construction entrance over virtually any type of surface including asphalt, concrete, turf, marshy area, sand, mud, even ground, uneven ground, and similar
- Will not get clogged, be an eyesore, become embedded in soft ground
- Protects ground when placed on top of surface unlike conventional SCE's (Stabilized Construction Entrance)
- Easily transported from site to site in minutes
- Creates an easily recognizable entrance for vehicles to see day or night

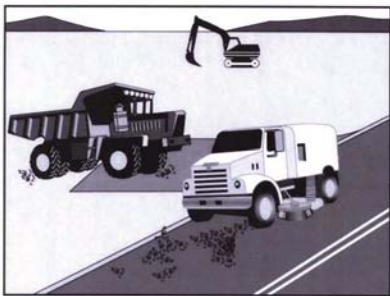
- Mats will not warp, even when installed over uneven terrain
- Superior alternative to rocks, shakers, steel plates
- Supports weights up to 80 tons
- Chemically resistant to acids, oils, break fluid, etc
- Easily cleaned and put back in service within minutes
- Made in the USA creating American manufacturing jobs
- Easily stored when not being used
- 3 year warranty
- 15 times more abrasion resistant than steel
- Years of reusable performance
- 100% recyclable

	FODS	ROCKS
Becomes Clogged	No	Yes
100% Solid and uniform construction	Yes	No
Recyclable	Yes	No
Easily Cleaned	Yes	No
Reusable/transportable	Yes	No
Absorbs chemicals and oils	No	Yes
Protects ground underneath	Yes	No
Supports 60,000 PSF	Yes	Yes
Easily seen from street	Yes	No
Made in USA	Yes	Yes
Reuseable	Yes	No
Spans over uneven ground	Yes	Yes
Disturbs ground when installed	No	Yes
Shakes vehicles when crossing over	Yes	No



FODS mats are 100% recyclable, made in the USA, and can be reused for many years. Once cleaned off they do not transport contaminants to other sites. Mountainsides and hillsides are saved from being blasted from rock. FODS mats at end of use will not end up in landfills like rocks and similar methods. The ground is undisturbed while mats are being used, keeping soils in place from erosion. Each entrance installed with FODS will save 3 dump trucks worth of rock on initial install.

Ideal for construction, airports, government, military, oil and gas, roads and bridges, renewable energy, telecommunications, national parks, storm water, pipeline, utilities, mining, agriculture and more.



Description and Purpose

Street sweeping and vacuuming includes use of self-propelled and walk-behind equipment to remove sediment from streets and roadways, and to clean paved surfaces in preparation for final paving. Sweeping and vacuuming prevents sediment from the project site from entering storm drains or receiving waters.

Suitable Applications

Sweeping and vacuuming are suitable anywhere sediment is tracked from the project site onto public or private paved streets and roads, typically at points of egress. Sweeping and vacuuming are also applicable during preparation of paved surfaces for final paving.

Limitations

Sweeping and vacuuming may not be effective when sediment is wet or when tracked soil is caked (caked soil may need to be scraped loose).

Implementation

- Controlling the number of points where vehicles can leave the site will allow sweeping and vacuuming efforts to be focused, and perhaps save money.
- Inspect potential sediment tracking locations daily.
- Visible sediment tracking should be swept or vacuumed on a daily basis.

Objectives

EC	Erosion Control	
SE	Sediment Control	<input checked="" type="checkbox"/>
TR	Tracking Control	<input checked="" type="checkbox"/>
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	
WM	Waste Management and Materials Pollution Control	

Legend:

- Primary Objective
- Secondary Objective

Targeted Constituents

Sediment	<input checked="" type="checkbox"/>
Nutrients	
Trash	<input checked="" type="checkbox"/>
Metals	
Bacteria	
Oil and Grease	<input checked="" type="checkbox"/>
Organics	

Potential Alternatives

None

Wet sweeping methods may not be used during freezing weather, annotated by Elaine Nefzger, AK-CESCL ASA-24-0004



SE-7 **Street Sweeping and Vacuuming**

- Do not use kick brooms or sweeper attachments. These tend to spread the dirt rather than remove it.
- If not mixed with debris or trash, consider incorporating the removed sediment back into the project

Costs

Rental rates for self-propelled sweepers vary depending on hopper size and duration of rental. Expect rental rates from \$58/hour (3 yd³ hopper) to \$88/hour (9 yd³ hopper), plus operator costs. Hourly production rates vary with the amount of area to be swept and amount of sediment. Match the hopper size to the area and expect sediment load to minimize time spent dumping.

Inspection and Maintenance

- Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season.
- When actively in use, points of ingress and egress must be monitored and inspected daily.
- When tracked or spilled sediment is observed outside the construction limits, it must be removed at least daily. More frequent removal, even continuous removal, may be required in some jurisdictions.
- Be careful not to sweep up any unknown substance or any object that may be potentially hazardous.
- Adjust brooms frequently; maximize efficiency of sweeping operations.
- After sweeping is finished, properly dispose of sweeper wastes at an approved dumpsite.

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), November 2000.

Labor Surcharge and Equipment Rental Rates, State of California Department of Transportation (Caltrans), April 1, 2002 – March 31, 2003.

Plastic Covering

Plastic covering, shown in Figure 3A, is used on steep slopes and material stockpiles to reduce erosion. This temporary BMP is a very reliable way to protect from erosion.

Selection

Plastic covering works on many surfaces that require protection from erosion. Clear plastic can be used to promote seed germination. Do not use upslope of areas that might be adversely impacted by concentrated runoff, such as steep or unstable slopes.

Implementation

- Plastic sheeting should have a minimum thickness of 0.06 mm.
- The plastic covering should be secured at the top of slope and should be anchored with tires, sandbags, or other appropriate ballast material to prevent plastic from being blown apart by wind.
- Space weights at a maximum of every 10 feet in all directions.
- Once the sheeting is anchored, secure edging at the top and toe of slope by tucking them into shallow trenches and backfilling.
- The plastic covering should overlap a minimum of one foot between sheets, the overlaps should run perpendicular to the slope, and the seams should be weighted or taped. The plastic covering should extend past the bottom of the slope.

Maintenance

- Check whether anchors are working properly.
- Verify that plastic is secured at the top of slope.
- Look for and replace torn or deteriorated plastic.
- Assure that the seams are taped or weighted and one foot overlap exists.
- Verify that the plastic extends past the top and bottom of slope.
- Remove plastic when it is no longer needed.

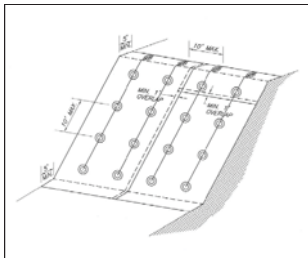


Figure 3A: Plastic Covering

Use cover in one piece where practical. Lap multiple pieces in the down-slope/down-wind direction and secure with weights.



Cover the entire pile past the base and secure with weights or landscaping staples.

Install perimeter control on down-slope sides where runoff will flow over erodible surfaces.

Stockpile Cover Detail - SC-1

No Scale, By Elaine Nefzger, Nefzger Consulting 7-28-22

Image obtained from: <https://www.alcocovers.com/stockpile-covers/stockpile-tarps/>

BMP: Portable Berm from <http://www.alaskatent.com/containments/berms.html>

Knock down portable berms are a complete containment system. These versatile berms were designed for quick and easy use in the field or in the shop. These will help you meet Alaska Department of Environmental Conservation (DEC) requirements for a spill free operation.

Liner materials are flexible, strong, and resistant to chemicals such as crude oil, diesel fuel, methanol, and glycol. The liner remains flexible even in arctic conditions and has been used in temperatures to 65°F below zero (-54°C).

Portable berms keep the oily stuff off the ground. The larger berms are made with closed cell foam making a 4" high unit. The foam retains its resiliency in extreme arctic conditions. The smaller 2" berms are filled with sand. Both sizes can be compactly folded for easy handling and storage.

Accessories can be added to the berms for safety purposes. An interior friction pad called "Ruftop" can be installed for stable footing and added puncture resistance, and cleats can be added to the bottom of the liner to prevent it from sliding around on icy surfaces.

- These are reliable and reusable means for keeping oil, hydraulic fluid, glycol, diesel, gasoline, aviation gas, and other fluids off the ground and out of the water.
- The berms are light weight and easy to carry around in a pickup truck or even a car trunk. They are easy to store.
- Suitable for extreme cold temperature applications. These products have been used to -65F
- The material is designed to resist petroleum and glycol spills. They can be cleaned and reused.



BMP EXAMPLE: 50 Gallon Spill Kit



Quick Response is Key

Spills happen no matter how hard you try to avoid them. Forklifts knock over drums, tanks are punctured and transporters leak and drip. It is important to have the right sorbents on-hand when these spills occur to eliminate the slip-and-fall hazard. A quick response is the first order of business and your best weapon in the fight against spills. SpillTech Spill Kits are packed with quality SpillTech Products to help you clean up fast and comply with regulations.

The Sorbents You Need Are All Inside

Includes a variety of sorbents to handle spills of oils, coolants, solvents or water; pre-packed in an X-rated DOT-approved 50-Gallon OverPack. Self-contained Kit stores sorbent products for easy access as needed for spill control; saves time when quick response is necessary. Twist-on, double-wall lid with closed-cell gasket provides sealed and secure closure to protect sorbents from moisture, dirt and damage. Rust- and corrosion-free 100% polyethylene is durable to withstand rough handling. All-in-one design for easy maneuvering; two attached wheels and built-in handle mean no dolly or material handling equipment is needed.

Customized for You

Don't see what you're looking for? We can customize a Spill Kit to your exact specifications, including the container, its contents and accessories. Contact your local Distributor for details.

APPENDIX C

APPENDIX D

NOAA Atlas 14, Volume 7, Version 2 PALMER JOB

CORPS

Station ID: 50-6870

Location name: Palmer, Alaska, USA*
Latitude: 61.5926°, Longitude: -149.1014°

Elevation:

Elevation (station metadata): 220 ft**

** source: ESRI Maps

** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Douglas Kane, Sarah Dietz, Kazungu Maltoria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Svetlana Stuefer, Amy Tidwell, Carl Traylor, Dale Unruh, Michael Yekta, Erica Betts, Geoffrey Bonnin, Sarah Heim, Lillian Hiner, Elizabeth Lilly, Jayashree Narayanan, Fenglin Yan, Tan Zhao

NOAA, National Weather Service, Silver Spring, Maryland

and

University of Alaska Fairbanks, Water and Environmental Research Center

[PF tabular](#) | [PF graphical](#) | [Maps & aeriels](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.108 (0.083-0.144)	0.133 (0.100-0.180)	0.166 (0.121-0.232)	0.194 (0.139-0.277)	0.231 (0.160-0.341)	0.260 (0.176-0.393)	0.289 (0.191-0.447)	0.320 (0.208-0.507)	0.361 (0.229-0.589)	0.391 (0.244-0.652)
10-min	0.145 (0.111-0.193)	0.179 (0.135-0.243)	0.223 (0.163-0.311)	0.260 (0.186-0.372)	0.310 (0.215-0.457)	0.349 (0.236-0.527)	0.388 (0.256-0.600)	0.429 (0.278-0.679)	0.484 (0.307-0.790)	0.525 (0.328-0.875)
15-min	0.170 (0.130-0.226)	0.210 (0.158-0.285)	0.264 (0.191-0.361)	0.304 (0.217-0.434)	0.363 (0.251-0.536)	0.408 (0.276-0.617)	0.454 (0.300-0.702)	0.502 (0.326-0.795)	0.567 (0.360-0.925)	0.615 (0.384-1.03)
30-min	0.226 (0.173-0.301)	0.278 (0.209-0.377)	0.347 (0.254-0.447)	0.404 (0.289-0.577)	0.482 (0.334-0.711)	0.542 (0.366-0.819)	0.602 (0.398-0.931)	0.666 (0.432-1.06)	0.752 (0.477-1.23)	0.816 (0.510-1.36)
60-min	0.309 (0.237-0.411)	0.381 (0.287-0.516)	0.475 (0.348-0.663)	0.553 (0.395-0.790)	0.660 (0.457-0.974)	0.742 (0.502-1.12)	0.825 (0.545-1.28)	0.913 (0.593-1.45)	1.03 (0.654-1.68)	1.12 (0.698-1.86)
2-hr	0.366 (0.281-0.487)	0.452 (0.341-0.612)	0.563 (0.412-0.786)	0.656 (0.469-0.938)	0.783 (0.542-1.16)	0.881 (0.596-1.33)	0.979 (0.647-1.52)	1.08 (0.703-1.72)	1.22 (0.776-1.99)	1.33 (0.828-2.21)
3-hr	0.423 (0.325-0.563)	0.523 (0.394-0.709)	0.651 (0.476-0.908)	0.757 (0.541-1.08)	0.905 (0.627-1.34)	1.02 (0.688-1.54)	1.13 (0.747-1.75)	1.25 (0.813-1.98)	1.41 (0.896-2.30)	1.53 (0.957-2.56)
6-hr	0.568 (0.436-0.755)	0.701 (0.528-0.950)	0.874 (0.640-1.22)	1.02 (0.727-1.45)	1.21 (0.841-1.79)	1.36 (0.923-2.06)	1.52 (1.00-2.35)	1.68 (1.09-2.66)	1.89 (1.20-3.09)	2.06 (1.28-3.43)
12-hr	0.775 (0.595-1.03)	0.958 (0.722-1.30)	1.20 (0.877-1.67)	1.39 (0.996-1.99)	1.66 (1.15-2.45)	1.86 (1.26-2.82)	2.07 (1.37-3.21)	2.30 (1.49-3.63)	2.59 (1.64-4.22)	2.81 (1.75-4.88)
24-hr	1.05 (0.856-1.16)	1.30 (1.16-1.48)	1.63 (1.44-1.87)	1.89 (1.64-2.21)	2.24 (1.90-2.68)	2.52 (2.09-3.07)	2.80 (2.29-3.47)	3.10 (2.49-3.91)	3.50 (2.74-4.51)	3.80 (2.93-4.98)
2-day	1.31 (1.19-1.45)	1.60 (1.44-1.80)	2.01 (1.77-2.31)	2.33 (2.01-2.72)	2.76 (2.33-3.30)	3.10 (2.58-3.78)	3.45 (2.81-4.27)	3.82 (3.07-4.82)	4.32 (3.39-5.56)	4.69 (3.62-6.14)
3-day	1.48 (1.34-1.64)	1.80 (1.62-2.03)	2.25 (1.98-2.59)	2.60 (2.25-3.04)	3.09 (2.61-3.69)	3.47 (2.88-4.22)	3.86 (3.15-4.78)	4.28 (3.43-5.39)	4.84 (3.80-6.23)	5.26 (4.06-6.89)
4-day	1.64 (1.46-1.78)	1.95 (1.76-2.20)	2.43 (2.14-2.79)	2.81 (2.43-3.28)	3.33 (2.81-3.98)	3.73 (3.10-4.54)	4.15 (3.39-5.14)	4.50 (3.69-5.80)	5.20 (4.08-7.07)	5.69 (4.36-7.41)
7-day	1.91 (1.74-2.12)	2.31 (2.07-2.59)	2.85 (2.51-3.28)	3.28 (2.84-3.83)	3.87 (3.27-4.62)	4.33 (3.59-5.27)	4.80 (3.92-5.94)	5.31 (4.26-6.69)	5.99 (4.70-7.71)	6.50 (5.01-8.51)
10-day	2.14 (1.95-2.38)	2.58 (2.32-2.90)	3.17 (2.79-3.64)	3.64 (3.15-4.25)	4.27 (3.61-5.11)	4.77 (3.96-5.80)	5.27 (4.30-6.53)	5.81 (4.66-7.32)	6.53 (5.12-8.41)	7.07 (5.45-9.26)
20-day	2.92 (2.66-3.24)	3.50 (3.14-3.93)	4.26 (3.74-4.89)	4.84 (4.19-5.65)	5.61 (4.74-6.71)	6.20 (5.15-7.55)	6.80 (5.54-8.41)	7.41 (5.94-9.33)	8.22 (6.44-10.6)	8.83 (6.81-11.6)
30-day	3.46 (3.34-3.66)	4.37 (3.92-4.91)	5.29 (4.65-6.07)	5.97 (5.10-6.98)	6.88 (5.61-8.22)	7.55 (6.27-9.19)	8.22 (6.71-10.2)	8.89 (7.13-11.2)	9.78 (7.67-12.6)	10.4 (8.06-13.7)
45-day	4.66 (4.24-5.17)	5.55 (4.99-6.24)	6.68 (5.88-7.67)	7.50 (6.48-8.76)	8.54 (7.22-10.2)	9.31 (7.73-11.3)	10.0 (8.20-12.4)	10.8 (8.62-13.5)	11.7 (9.16-15.1)	12.4 (9.56-16.2)
60-day	5.45 (4.97-6.05)	6.52 (5.86-7.32)	7.81 (6.87-8.97)	8.72 (7.54-10.2)	9.83 (8.30-11.8)	10.6 (8.80-12.9)	11.3 (9.24-14.0)	12.0 (9.59-15.1)	12.8 (10.0-16.5)	13.4 (10.4-17.6)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical

PALMER JOB CORPS, ALASKA (506870)

Period of Record Monthly Climate Summary

Period of Record : 11/20/1948 to 12/31/2015

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Avg. Max. Temp. (F)	20.6	27.0	34.7	46.7	58.3	65.0	67.1	64.7	56.6	41.9	27.5	22.5	44.4
Avg. Min. Temp. (F)	5.5	10.4	16.2	28.4	38.0	45.7	49.2	47.2	40.0	27.0	13.1	8.1	27.4
Avg. Total Precip. (in.)	0.91	0.83	0.72	0.47	0.67	1.31	2.06	2.36	2.45	1.52	1.26	1.15	15.73
Avg. Total SnowFall (in.)	8.7	9.5	7.4	2.9	0.1	0.0	0.0	0.0	0.0	5.3	9.5	12.8	56.1
Avg. Snow Depth (in.)	6	6	4	1	0	0	0	0	0	1	3	5	2

Spring 'Freeze' Probabilities (Jan 1 - Jul 31)

PALMER JOB CORPS, st (506870)

Temp F	Earliest	90%	80%	70%	60%	50%	40%	30%	20%	10%	Latest
36.5	04/25	05/14	05/21	05/25	05/27	05/29	05/31	06/04	06/13	06/20	07/21
32.5	04/16	04/22	05/02	05/09	05/11	05/14	05/17	05/21	05/22	05/26	07/14
28.5	04/10	04/13	04/19	04/22	04/25	04/28	05/04	05/07	05/11	05/15	05/23
24.5	03/28	04/02	04/05	04/09	04/14	04/18	04/19	04/22	04/22	04/30	05/11
20.5	03/18	03/21	03/26	03/31	04/02	04/08	04/11	04/17	04/20	04/23	05/10

Fall 'Freeze' Probabilities (Jul. 31 - Dec. 31)

PALMER JOB CORPS, st (506870)

Temp F	Earliest	10%	20%	30%	40%	50%	60%	70%	80%	90%	Latest
36.5	08/08	08/23	08/27	09/01	09/05	09/07	09/13	09/17	09/23	09/28	10/10
32.5	08/14	08/27	09/05	09/08	09/15	09/20	09/24	09/27	09/29	10/09	10/14
28.5	08/14	09/07	09/20	09/24	09/28	09/30	10/02	10/05	10/08	10/15	10/25
24.5	09/17	09/26	09/30	10/05	10/08	10/10	10/13	10/14	10/18	10/22	11/01
20.5	09/23	10/03	10/06	10/11	10/13	10/17	10/18	10/20	10/25	10/30	11/15

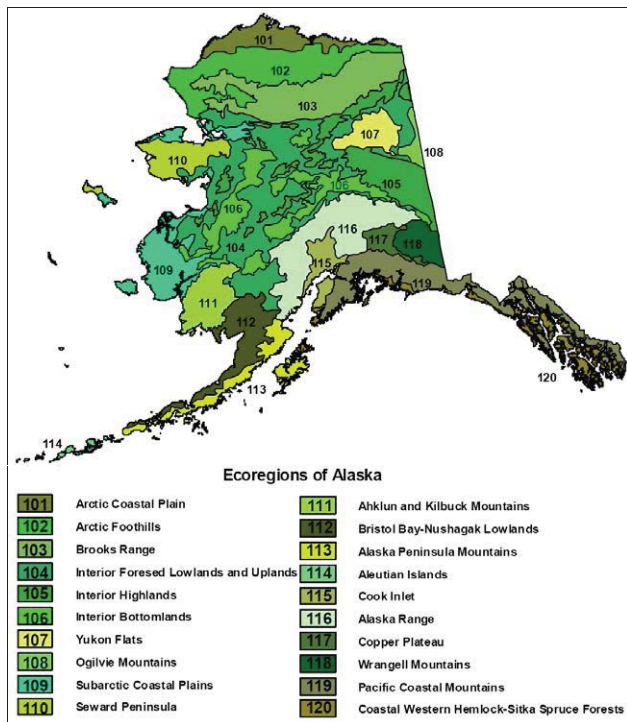


Figure 21. Ecoregions of Alaska, from Markon (2001).

Table 5. Median beginning and ending dates of the growing season for ecoregions in Alaska, derived from Markon (2001).

Ecoregion ¹	Beginning of Growing Season ('Minday')		End of Growing Season ('Lastday')	
	Julian Date	Calendar Date ²	Julian Date	Calendar Date ²
101 Arctic Coastal Plain	171	Jun 20	261	Sep 18
102 Arctic Foothills	158	Jun 7	264	Sep 21
103 Brooks Range	150	May 30	267	Sep 24
104 Interior Forested Lowlands and Uplands	123	May 3	276	Oct 3
105 Interior Highlands	124	May 4	275	Oct 2
106 Interior Bottomlands	122	May 2	277	Oct 4
107 Yukon Flats	110	Apr 20	276	Oct 3
108 Ogilvie Mountains	110	Apr 20	276	Oct 3
109 Subarctic Coastal Plains	143	May 23	276	Oct 3
110 Seward Peninsula	153	Jun 2	274	Oct 1
111 Ahklun and Kilbuck Mountains	136	May 16	275	Oct 2
112 Bristol Bay - Nushagak Lowlands	115	Apr 25	277	Oct 4
113 Alaska Peninsula Mountains	135	May 15	274	Oct 1
114 Aleutian Islands	...3	...3	...3	...3
115 Cook Inlet	128	May 8	278	Oct 5
116 Alaska Range	144	May 24	276	Oct 3
117 Copper Plateau	122	May 2	276	Oct 3
118 Wrangell Mountains	131	May 11	272	Sep 29
119 Pacific Coastal Mountains ⁴	149	May 29	270	Sep 27
120 Coastal Western Hemlock - Sitka Spruce Forests ⁴	119	Apr 29	271	Sep 28

¹ See Figure 21.

² Calendar dates shown are for non-leap years. For a leap year, subtract one day (e.g., for Ecoregion 101, the growing season would begin on June 19 in a leap year).

³ There were no data available for Ecoregion 114 - Aleutian Islands. Growing season dates for Ecoregion 112 may be substituted when onsite data are lacking.

⁴ Ecoregions 119 and 120 are intermingled in Southeast Alaska. Generally, 1,600 ft (500 m) in elevation separates the two ecoregions. Use growing season dates for Ecoregion 119 above 1,600 ft elevation and dates for Ecoregion 120 below 1,600 ft elevation. Annual variability may occur as the snow recedes from lower elevations at different rates.



DEPARTMENT OF THE ARMY
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS
REGULATORY DIVISION
P. O. BOX 6898
JBER, AK 99506-0898

July 8, 2020

Regulatory Division
POA-2019-00055

Mr. Kurt Anderson
2200 West Eagles Nest Circle
Wasilla, AK 99645

Dear Mr. Anderson:

This is in response to your April 24, 2020, request for an Approved Jurisdictional Determination (AJD) for two parcels of land located at Latitude 61.5821° N., Longitude 149.3496° W.; in Wasilla, Alaska.

Based on our review of the information available to us, and an on-site delineation and assessment on June 23, 2020, we have determined that the subject parcels contain non-jurisdictional wetlands. The wetlands on your property are isolated. Therefore, a Department of the Army (DA) permit is not required. A copy of the AJD form is available at: www.poa.usace.army.mil/Missions/Regulatory/JurisdictionalDeterminations under the above file number.

This jurisdictional determination does not establish any precedent with respect to any other jurisdictional determination under Section 404 of the Clean Water Act.

For regulatory purposes, the Corps of Engineers defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

This approved jurisdictional determination is valid for a period of five years from the date of this letter, unless new information supporting a revision is provided to us before the expiration date. Also, enclosed is a Notification of Administrative Appeals Options and Process and Request for Appeal form regarding this approved jurisdictional determination (see section labeled "Approved Jurisdictional Determination").

Nothing in this letter excuses you from compliance with other Federal, State, or local statutes, ordinances, or regulations.

Please contact me via email at: Emily.N.Vullo@usace.army.mil, by mail at the address above, by phone at (907) 753-2704, or toll free from within Alaska at (800) 478-2712, if you have questions. For more information about the Regulatory Program, please visit our website at: www.poa.usace.army.mil/Missions/Regulatory.

Sincerely,


Emily Vullo
Regulatory Specialist

Enclosures



LEGEND

- Cook Inlet Wetlands**
- DISTURB
 - Depression
 - Discharge Slope
 - Drainageway
 - Drainageway / Tidal
 - Floating Island
 - Headwater Fen
 - Kettle
 - LAKE
 - Lakebed
 - Late Snow Plateau
 - Riverine
 - Spring Fen
 - Tidal
 - Tidal / Drainageway
 - VLD Trough
 - Wetland / Upland Complex
- Matanuska Susitna Borough**



AJD Map
For planning purposes only

APPENDIX E

Storm Water Pollution Prevention Plan (SWPPP)

PROJECT: Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Road Improvements, Ph II

OPERATOR PLAN AUTHORIZATION/CERTIFICATION/DELEGATION

(To be signed by Justin Sheilds)

I state that based on my review this SWPPP meets the minimum requirements of the Construction General Permit and that the **Mass Excavation, Inc. Superintendent/Storm Water Lead** has day-to-day operational control of the project site. **Mass Excavation, Inc.** is responsible for the maintenance and implementation of the SWPPP including inspections, documentation, and application of the Best Management Practices at the site. **Mass Excavation, Inc.** will notify all subcontractors of the requirement of this SWPPP.

I hereby designate the **Mass Excavation, Inc. Superintendent** to be the SWPPP Administrator as my authorized representative. This designee is responsible for the overall operations of the site and will be responsible for the implementation of the Storm Water Pollution Prevention Plan, 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 **Mass Excavation, Inc.** 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.

Mass Excavation, Inc.

Signature

Justin Sheilds

Printed Name

Date

General Manager

Title



Certificate #
ASA-24-0004

Elaine Nefzger

Has successfully completed training for
Alaska Certified Erosion & Sediment Control Lead



Shawn Trasky

Approved AK-CESCL Instructor

Course Date: 02/29/2024

Expiration Date: 03/01/2027

Location: in-house | Sponsor ASA



ASSOCIATED GENERAL CONTRACTORS of ALASKA

8005 Schoon Street • Anchorage, Alaska 99518
Telephone (907) 561-5354 • Fax (907) 562-6118

3750 Bonita Street • Fairbanks, Alaska 99701
Telephone (907) 452-1809 • Fax (907) 456-8599

Thank you for choosing AGC as your training sponsor. We hope that you found our efforts a positive experience. We look forward to seeing you for CESCL training again in 3 years!

Congratulations on earning your
AK-CESCL Certification!

Ruby Oatman
AGC Training & Workforce
Development Director

ruby@agcak.org
Direct | (907) 865-0547
Office | (907) 561-5354

8005 Schoon St.
Anchorage, AK 99518



Certificate #
AGC-24-0202

Robert Cornell

Has successfully completed training for
Alaska Certified Erosion & Sediment Control Lead

T. Coon

Approved AK-CESCL Instructor

Course Date: 4/11/2024
Expiration Date: 4/11/2027
Location: Virtual | Sponsor: AGC





Certificate #
ASA-24-0076

Brenda Tapani

Has successfully completed training for
Alaska Certified Erosion & Sediment Control Lead



S. Trasky

Approved AK-CESCL Instructor

Course Date: 5/14/2024

Expiration Date: 5/15/2027

Location: Virtual | Sponsor ASA

Amend 8 RC 5-20-24



Amendment 3 EKN 9-20-24

September 20, 2024

Operator Info:

Mass Excavation, Inc.
Attn: Justin Shields
6591 A St. Suite 300
Anchorage AK 99518
(907) 771-9272 3201
justins@massexcavation.com

Project Info:

**Dedicated Contractor-
Provided Sites for Seward Meridian Pkwy Ph II**
See table in project description
Wasilla AK 99654

Latitude, Longitude: 61.570000, -149.30000
Est. Project Start Date: 5/28/2024
Est. Project End Date: 12/31/2029
Estimated Area Disturbed: 52.5 acres

General Permit Authorization Number: **AKR10H0K2 v1.2**

This email/letter acknowledges that you have submitted a modification Notice of Intent (NOI) form to be covered under the APDES General Permit for Stormwater Discharges for Construction General Permit Activity (Construction General Permit) and is assigned the permit authorization number: **AKR10H0K2 v1.2**. Please reference your permit authorization number in all future correspondence. The permittee is authorized to discharge storm water under the terms and conditions of this permit effective 09/19/2024 and expires January 31, 2026 or as per Permit Part 2.6. Permit documents will be posted to the Alaska DEC EDMS Map Explorer at <https://dec.alaska.gov/Applications/Water/EDMS/nsite>.

According to the NOI information provided (ref: HQ6-R3H3-YCSKT, recd: 09/19/2024), the location of the SWPPP or the name and telephone number of the contact person for scheduling SWPPP viewing times is as follows:

- **SWPPP Location:** 1638 N Chet Cir, Palmer, 99645
- **SWPPP Contact:** Cody Troseth, Project Manager, (907) 771-9272 3203,
codyt@massexcavation.com, 6591 A Street, Suite 300, Anchorage, AK 99518;

Note, as per Permit Part 2.7 the permittee is required to submit a modification NOI within 30 calendar days if any of the following change: Owner/Operator address and contact information, site information, estimated start or end dates, acres disturbed, or SWPPP location and contact information.

Coverage is not transferable. The permittee must submit a Notice of Termination (NOT) instead of an NOI modification to DEC within 30 calendar days when the operator has changed. A change of operator in this case means when an organization changes control of the project. It does not mean when a corporate officer of the organization changes while the organization continues with the project. The new owner/operator must file a new NOI to obtain coverage under the CGP.

A permittee must submit an NOT within 30 calendar days when final stabilization has been achieved on all portions of the site, in accordance with Permit Part 4.5.2 for which the permittee is responsible, all ground disturbing construction activity or use of support activities has been completed, and all temporary Best Management Practices (BMP's) have been removed; or a new permittee has assumed control over all areas of the site that have not been finally stabilized.

As stated above, this letter acknowledges receipt of a Notice of Intent. However, it is not an ADEC determination of the validity of the information you provided. Your eligibility for coverage under the

Amendment 3 EKN 9-20-24

Permit is based on the validity of the certification you provided. Your signature on the Notice of Intent certifies that you have read, understood, and are implementing all of the applicable requirements. An important aspect of this certification requires that you correctly determine whether you are eligible for coverage under this permit.

As you know, the Construction General Permit requires you to have developed and begun implementing a Stormwater Pollution Prevention Plan (SWPPP) and outlines important inspection and record keeping requirements. You must also comply with any additional location-specific requirements applicable to Alaska. A copy of the Construction General Permit must be kept with your SWPPP. An electronic copy of the Permit and additional guidance materials can be viewed and downloaded at <https://dec.alaska.gov/water/wastewater/stormwater/construction>.

Prior to discharge, please review your authorization and general permit AKR100000 to ensure that you understand the requirements contained within them. If you have general questions regarding the storm water program or your responsibilities under the Construction General Permit, please call 907-269-6285. Thank you for using the EDMS system.

Re: EDMS CGP MOD Submission: HQ6-R3H3-YCSKT, Received: 9/19/2024 4:09:37 PM

Construction General Permit (CGP) Authorization - Modification

version 1.48

(Submission #: HQ6-R3H3-YCSKT, version 1)

Digitally signed by:
dec.alaska.gov
Date: 2024.09.20 09:38:01 -08:00
Reason: Submission Data
Location: State of Alaska

ALASKA

Details

Amendment 3 EKN 9-20-24

Project: Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Ph II

Submission ID: HQ6-R3H3-YCSKT

Form Input

Form Instructions

Please see:

[instructions for completing the NOI modification form for Storm Water discharges associated with activity under the APDES CGP.](#)

Modification Reason

Permit Number

AKR10H0K2

Modification Description

Enter brief note explaining what information is being modified.

When modifying contact information, please include the contact name(s) of who should no longer be associated with the permit or application.

Modification Description

Add new area of work, update project description, increase area to be disturbed, extend project end date. Upload amended SWPPP

Section Changes

Please select which Section(s) will be modified.

Modifications such as project start/end dates or project acreage, are found under the Project Information Section. Modifications such as SWPPP location or adding an electronic copy of the SWPPP, are found under the SWPPP Information Section.

Modified Section(s)

Project Information

Attachments

SWPPP Information

Facility Name Change or Transfer of Ownership

If you are requesting a project/facility name change or transfer of ownership, please return to EDMS home page for the permit, select Start a New Form, select Facility Name Change or Transfer of Ownership.

Contact Information (1 of 1)

Contacts

Amendment 3 EKN 9-20-24

Please select role to be modified. Multiple roles may be selected per contact.
If adding a new contact, scroll to the bottom and select "Add New Contact Information".

To remove a contact, select "Inactivate", below.

NOTE: Applicant is the Permittee

Contact Role(s)
NONE PROVIDED

To remove a contact, select "Inactivate".
NONE PROVIDED



Contact

First Name	Last Name
NONE PROVIDED	NONE PROVIDED
Title	
NONE PROVIDED	
Organization Name	
NONE PROVIDED	
Phone Type	Number Extension
NONE PROVIDED	
Email	
NONE PROVIDED	
Address	
[NO STREET ADDRESS SPECIFIED]	
[NO CITY SPECIFIED], AK [NO ZIP CODE SPECIFIED]	

Contact Change Comments
NONE PROVIDED

Single or Multiple NOI Project

Does this project have a single NOI?
NONE PROVIDED

For the purposes of this permit, an  operator  is any party associated with a construction project that meets either of the following two criteria (please select one)

Operator Responsibility
NONE PROVIDED

Project Information

Project Name
Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Ph II

Estimated Project Start Date
05/28/2024

Estimated Project End Date
12/31/2029

Please give physical address if no street address is available. Please type in MTRS (PLSS) information in Address 1 space if

needed. Do not include P.O. Boxes.

Project Address

See table in project description
Wasilla, AK 99654

[Alaska Region Map](#)

Borough or Similar Government Subdivision

Matanuska-Susitna Borough

Visit the link below to help with conversion between DMS and Latitude/Longitude

[DMS - Lat/Long converter](#)

Project Coordinates

61.57000000000000,-149.30000000000000

See table in project description, Wasilla, AK

Provide select the method used to determine geographic coordinates:

NONE PROVIDED

Estimated area to be disturbed to the nearest tenth of an acre (Ex: 2.2)

52.5

How many acres of land disturbance at any given interval that is not stabilized of project acreage? (nearest .1 acre)

30.000

Brief Description of Project

61.56748 -149.33586 Jason & Melissa Mogan Residence 851 S Begich Dr.
Wasilla, AK 99654 5-28-24
61.58242 -149.35089 Kurt & Anne Anderson Private Property 3900 E Brianne Lane
Wasilla, AK 99654 5-28-24
61.58393 -149.3573 Snowbird Investment Properties, LLC (PerkUp Coffee) 3700 E Palmer Wasilla Hwy.
Wasilla, AK 99654 5-28-24
61.56601 -149.34436 Fairview Park Investments, Ltd.
Section 18, Lot A4,
4202 E Fireweed Rd.,
Wasilla, AK 99654 5-29-24
61.567151 -149.34010 Fairview Park Investments, Ltd.
Section 18, Lots A5, A12, A13, & A14
4202 E Fireweed Rd.,
Wasilla, AK 99654

Amendment 3 EKN 9-20-24

Link to NAICS Search Website

[NAICS Search Website](#)

The industry codes below are most commonly used with this application.

NAICS:

236220-Commercial and Institutional Building Construction (236220)

SIC:

1522- Residential Construction, Nec
1531- Operative Builders
1541- Industrial Buildings and Warehouses
1542- Nonresidential Construction, Nec
1799- Special Trade Contractors, Nec
8741- Management Services

Primary NAICS code

237310-Highway, Street, and Bridge Construction

Primary SIC Code

1611-Highway and Street Construction, Except Elevated Highways

Have storm water discharges from your project been covered previously under a DEC issued permit?

NONE PROVIDED

Is your project less than one acre, but part of a common plan of development?

NONE PROVIDED

SWPPP Information

Below you can find the SWPPP template for the Construction General Permit:

[CGP SWPPP Template](#)

Has the SWPPP been prepared in advance of filing this eNOI?

Yes

Location of SWPPP for Viewing (Must be in Alaska)

NONE PROVIDED

SWPPP Address Comments

NONE PROVIDED

Will you construct a permanent storm water management control measure at the project site?

NONE PROVIDED

Does your project discharge into a Municipal Separate Storm Sewer System (MS4)?

NONE PROVIDED

Discharge Information (1 of 1)

NOTE: if you have a receiving water that is Wetlands, just enter generic Wetlands. Do not enter Wetlands of Tanana River, for example.

Waterbody/Wetlands Name

NONE PROVIDED

Is this receiving water on the 303(d) List of Impaired Waterbodies?

NONE PROVIDED

[Impaired Waterbody List](#)

Attachments

Document Attachments

[Justin Shields signed.pdf - 09/19/2024 04:06 PM](#)

[Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Ph II-Amend2.pdf - 09/19/2024 04:08 PM](#)

Comment



NONE PROVIDED

IX. Certification Information

An Alaska Pollutant Discharge Elimination System (APDES) permit application or report must be signed by an individual with the appropriate authority per 18 AAC 83.385. For additional information, please refer to 18 AAC 83.385 at the following link: http://www.legis.state.ak.us/basin/aac/aac18_83_385

Corporate Executive Officer 18 AAC 83.385 (a)(1)(A)	For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation.
Corporate Operations Manager 18 AAC 83.385 (a)(1)(B)	For a corporation, the manager of one or more manufacturing, production, or operating facilities, if (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations; (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
Sole Proprietor or General Partner 18 AAC 83.385 (a)(2)	For a partnership or sole proprietorship, the general partner or the proprietor respectively.
Public Agency, Chief Executive Officer 18 AAC 83.385 (a)(3)(A)	For a municipality, state, or other public agency, the chief executive officer of the agency.
Public Agency, Senior Executive Officer 18 AAC 83.385 (a)(3)(B)	For a municipality, state, or other public agency, a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
<i>*For Delegated Authority: the delegation must be made in writing and submitted to the DEC. An Example of written authorization delegating authority can be found at http://dec.alaska.gov/media/13316/Delegation-of-signatory-authority.pdf</i>	
Operations Manager (Delegated Authority)* 18 AAC 83.385 (b)(2)(A)	For a duly authorized representative, an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent or position of equivalent responsibility.
Environmental Manager (Delegated Authority)* 18 AAC 83.385 (b)(2)(B)	For a duly authorized representative, an individual or position having overall responsibility for environmental matters for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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.

Organization: Mass Excavation, Inc.	Name: Justin Shields	Title: General Manager
Phone: (907) 771-9272 ext. 3201	Fax (optional):	Email: justins@massexcavation.com
Mailing Address: Street (PO Box): 6591 A Street, Suite 300	City: Anchorage	State: AK
<input checked="" type="checkbox"/> Check if same as Operator Information	Zip: 99518	
Signature: 		Date: 

X. Document Attachments and Supplemental Information

Documents attached with this application:

- Copy of SWPPP if ≥ 5 acres of disturbance,
 Delegation of Signatory Authority.
 Other:



May 29, 2024

Operator Info:

Amendment 2, EKN, 5-29-24

Mass Excavation, Inc.
Attn: Justin Shields
6591 A St. Suite 300
Anchorage AK 99518
(907) 771-9272 3201
justins@massexcavation.com

Project Info:

Dedicated Contractor-Provided Sites for Seward M
See table in project description
Wasilla AK 99654

Latitude, Longitude: 61.570000, -149.30000
Est. Project Start Date: 5/28/2024
Est. Project End Date: 10/31/2026
Estimated Area Disturbed: 7.5 acres

General Permit Authorization Number: **AKR10H0K2 v1.1**

This email/letter acknowledges that you have submitted a modification Notice of Intent (NOI) form to be covered under the APDES General Permit for Stormwater Discharges for Construction General Permit Activity (Construction General Permit) and is assigned the permit authorization number: **AKR10H0K2 v1.1**. Please reference your permit authorization number in all future correspondence. The permittee is authorized to discharge storm water under the terms and conditions of this permit effective 05/28/2024 and expires January 31, 2026 or as per Permit Part 2.6. Permit documents will be posted to the Alaska DEC EDMS Map Explorer at <https://dec.alaska.gov/Applications/Water/EDMS/nsite>.

According to the NOI information provided (ref: HQ3-ZKF0-J55PV, recd: 05/28/2024), the location of the SWPPP or the name and telephone number of the contact person for scheduling SWPPP viewing times is as follows:

- **SWPPP Location:** 1638 N Chet Cir, Palmer, 99645
- **SWPPP Contact: Cody Troseth**, Project Manager, (907) 771-9272 3203,
codyt@massexcavation.com, 6591 A Street, Suite 300, Anchorage, AK 99518;

Note, as per Permit Part 2.7 the permittee is required to submit a modification NOI within 30 calendar days if any of the following change: Owner/Operator address and contact information, site information, estimated start or end dates, acres disturbed, or SWPPP location and contact information.

Coverage is not transferable. The permittee must submit a Notice of Termination (NOT) instead of an NOI modification to DEC within 30 calendar days when the operator has changed. A change of operator in this case means when an organization changes control of the project. It does not mean when a corporate officer of the organization changes while the organization continues with the project. The new owner/operator must file a new NOI to obtain coverage under the CGP.

A permittee must submit an NOT within 30 calendar days when final stabilization has been achieved on all portions of the site, in accordance with Permit Part 4.5.2 for which the permittee is responsible, all ground disturbing construction activity or use of support activities has been completed, and all temporary Best Management Practices (BMP's) have been removed; or a new permittee has assumed control over all areas of the site that have not been finally stabilized.

As stated above, this letter acknowledges receipt of a Notice of Intent. However, it is not an ADEC determination of the validity of the information you provided. Your eligibility for coverage under the

Amendment 2, EKN, 5-29-24

Permit is based on the validity of the certification you provided. Your signature on the Notice of Intent certifies that you have read, understood, and are implementing all of the applicable requirements. An important aspect of this certification requires that you correctly determine whether you are eligible for coverage under this permit.

As you know, the Construction General Permit requires you to have developed and begun implementing a Stormwater Pollution Prevention Plan (SWPPP) and outlines important inspection and record keeping requirements. You must also comply with any additional location-specific requirements applicable to Alaska. A copy of the Construction General Permit must be kept with your SWPPP. An electronic copy of the Permit and additional guidance materials can be viewed and downloaded at <https://dec.alaska.gov/water/wastewater/stormwater/construction>.

Prior to discharge, please review your authorization and general permit AKR100000 to ensure that you understand the requirements contained within them. If you have general questions regarding the storm water program or your responsibilities under the Construction General Permit, please call 907-269-6285. Thank you for using the EDMS system.

Construction General Permit (CGP) Authorization - Modification

version 1.47

(Submission #: HQ3-ZKF0-J55PV, version 1)

Amendment 2, EKN, 5-29-24

Digitally signed by:
dec.alaska.gov
Date: 2024.05.29 09:08:01 -08:00
Reason: Submission Data
Location: State of Alaska

Details

Project: Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Ph II

Submission ID HQ3-ZKF0-J55PV

Form Input

Form Instructions

Please see:

[instructions for completing the NOI modification form for Storm Water discharges associated with activity under the APDES CGP.](#)

Modification Reason

Permit Number

AKR10H0K2

Modification Description

Enter brief note explaining what information is being modified.

When modifying contact information, please include the contact name(s) of who should no longer be associated with the permit or application.

Modification Description

To update the Project Description and area to be disturbed.

Section Changes

Please select which Section(s) will be modified.

Modifications such as project start/end dates or project acreage, are found under the Project Information Section. Modifications such as SWPPP location or adding an electronic copy of the SWPPP, are found under the SWPPP Information Section.

Modified Section(s)

Project Information

Attachments

SWPPP Information

Facility Name Change or Transfer of Ownership

If you are requesting a project/facility name change or transfer of ownership, please return to EDMS home page for the permit, select Start a New Form, select Facility Name Change or Transfer of Ownership.

Contact Information (1 of 4)

Contacts

Please select role to be modified. Multiple roles may be selected per contact.
If adding a new contact, scroll to the bottom and select "Add New Contact Information".
To remove a contact, select "Inactivate", below.

Contact Role(s)

Responsible Party
Operator

To remove a contact, select "Inactivate".

NONE PROVIDED

Contact

First Name **Last Name**
Justin *Sheilds*

Title
General Manager

Organization Name
Mass Excavation, Inc.

Phone Type	Number	Extension
Business	907-771-9272	3201

Email
justins@massexcavation.com

Address
6591 A St. Suite 300
Anchorage, AK 99518

Contact Change Comments

NONE PROVIDED

Contact Information (2 of 4)**Contacts**

Please select role to be modified. Multiple roles may be selected per contact.
If adding a new contact, scroll to the bottom and select "Add New Contact Information".
To remove a contact, select "Inactivate", below.

Contact Role(s)

SWPPP Contact

To remove a contact, select "Inactivate".

NONE PROVIDED

Contact**Amendment 2, EKN, 5-29-24****First Name** Last Name
Cody Troseth**Title**
*Project Manager***Organization Name**
*Mass Excavation, Inc.***Phone Type** **Number** **Extension**
Business 907-771-9272 3203**Email**
codyt@massexcavation.com**Address**
6591 A Street, Suite 300
Anchorage, AK 99518**Contact Change Comments**
NONE PROVIDED**Contact Information (3 of 4)****Contacts**

Please select role to be modified. Multiple roles may be selected per contact.
If adding a new contact, scroll to the bottom and select "Add New Contact Information".
To remove a contact, select "Inactivate", below.

Contact Role(s)
Billing Contact**To remove a contact, select "Inactivate".**
NONE PROVIDED**Contact****First Name** **Last Name**
Joan Vanucci**Title**
*Office Manager***Organization Name**
*Mass Excavation, Inc.***Phone Type** **Number** **Extension**
Business 9077719272 3210**Email**
joanv@massexcavation.com**Address**
6591 A Street, Suite 300
Anchorage, AK 99518**Contact Change Comments**
NONE PROVIDED**Contact Information (4 of 4)****Contacts**

Please select role to be modified. Multiple roles may be selected per contact.

If adding a new contact, scroll to the bottom and select "Add New Contact Information".
To remove a contact, select "Inactivate", below.

Contact Role(s)

Amendment 2, EKN, 5-29-24

Application Preparer

To remove a contact, select "Inactivate".

NONE PROVIDED

Contact

First Name **Last Name**

Elaine Nefzger

Title

SWPPP Preparer

Organization Name

Nefzger Consulting

Phone Type **Number** **Extension**

Mobile 9072441880

Email

alasekn@outlook.com

Address

3303 W 82nd Ave.

Anchorage, Alaska, AK 99507

Contact Change Comments

NONE PROVIDED

Single or Multiple NOI Project

Does this project have a single NOI?

Yes

For the purposes of this permit, an **operator** is any party associated with a construction project that meets either of the following two criteria (please select one)

Operator Responsibility

Day-to-day operational control of on-site activities

Project Information

Project Name

Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Ph II

Estimated Project Start Date

05/28/2024

Estimated Project End Date

10/31/2026

Please give physical address if no street address is available. Please type in MTRS (PLSS) information in Address 1 space if needed. Do not include P.O. Boxes.

Project Address

See table in project description

Wasilla, AK 99654

[Alaska Region Map](#)

Visit the link below to help with conversion between DMS and Latitude/Longitude
[DMS - Lat/Long converter](#)

Project Coordinates

61.57,-149.3

Provide select the method used to determine geographic coordinates:

Internet-Google Maps

Estimated area to be disturbed to the nearest tenth of an acre (Ex: 2.2)

7.5

Brief Description of Project

61.56748 -149.33586 Jason & Melissa Mogan Residence 851 S Begich Dr.
Wasilla, AK 99654 5-28-24
61.58242 -149.35089 Kurt & Anne Anderson Private Property 3900 E Brianne Lane
Wasilla, AK 99654 5-28-24
61.58393 -149.3573 Snowbird Investment Properties, LLC (PerkUp Coffee) 3700 E Palmer Wasilla Hwy.
Wasilla, AK 99654 5-28-24
61.56601 -149.34436 Fairview Park Investments, Ltd.
Section 18, Lot 4,
4202 E Fireweed Rd.,
Wasilla, AK 99654 5-29-24

Dedicated material source and/or disposal, staging yards, and other project uses subject to the Alaska Construction General Permit for the Seward Meridian Pkwy Road Improvements, Ph II project

Link to NAICS Search Website

[NAICS Search Website](#)

The industry codes below are most commonly used with this application.

NAICS:

236220-Commercial and Institutional Building Construction (236220)

SIC:

1522- Residential Construction, Nec
1531- Operative Builders
1541- Industrial Buildings and Warehouses
1542- Nonresidential Construction, Nec
1799- Special Trade Contractors, Nec
8741- Management Services

Primary NAICS code

237310-Highway, Street, and Bridge Construction

Primary SIC Code

1611

Have storm water discharges from your project been covered previously under a DEC issued permit?

No

Is your project less than one acre, but part of a common plan of development?

No

SWPPP Information

Below you can find the SWPPP template for the Construction General Permit:

Has the SWPPP been prepared in advance of filing this eNOI?

Yes

Amendment 2, EKN, 5-29-24

SWPPP Attachment

Dedicated_Contractor-Provided_Sites_for_Seward_Meridian_Pkwy_Ph II-Amend1.pdf - 05/28/2024 09:40 PM

Comment

NONE PROVIDED

Location of SWPPP for Viewing (Must be in Alaska)

Other

Location of SWPPP

1638 N Chet Cir
Palmer, AK 99645

SWPPP Address Comments

NONE PROVIDED

Will you construct a permanent storm water management control measure at the project site?

No

Does your project discharge into a Municipal Separate Storm Sewer System (MS4)?

No

Discharge Information (1 of 1)

None

NOTE: if you have a receiving water that is Wetlands, just enter generic Wetlands. Do not enter Wetlands of Tanana River, for example.

Waterbody/Wetlands Name

None

Is this receiving water on the 303(d) List of Impaired Waterbodies?

No

[Impaired Waterbody List](#)

Attachments

Document Attachments

NOI Mod - Contractor Provided Sites -JS signed.pdf - 05/28/2024 09:03 PM

Comment


NONE PROVIDED

IX. Certification Information

An Alaska Pollutant Discharge Elimination System (APDES) permit application or report must be signed by an individual with the appropriate authority per 18 AAC 83.385. For additional information, please refer to 18 AAC 83.385 at the following link: <http://www.legis.state.ak.us/basis/aac.asp#18.83.385>.

Corporate Executive Officer 18 AAC 83.385 (a)(1)(A)	For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation.
Corporate Operations Manager 18 AAC 83.385 (a)(1)(B)	For a corporation, the manager of one or more manufacturing, production, or operating facilities, if (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations; (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
Sole Proprietor or General Partner 18 AAC 83.385 (a)(2)	For a partnership or sole proprietorship, the general partner or the proprietor respectively.
Public Agency, Chief Executive Officer 18 AAC 83.385 (a)(3)(A)	For a municipality, state, or other public agency, the chief executive officer of the agency.
Public Agency, Senior Executive Officer 18 AAC 83.385 (a)(3)(B)	For a municipality, state, or other public agency, a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
*For Delegated Authority: the delegation must be made in writing and submitted to the DEC. An Example of written authorization delegating authority can be found at http://dec.alaska.gov/media/13316/delegation-of-signatory-authority.pdf	
Operations Manager (Delegated Authority)* 18 AAC 83.385 (b)(2)(A)	For a duly authorized representative, an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent or position of equivalent responsibility.
Environmental Manager (Delegated Authority)* 18 AAC 83.385 (b)(2)(B)	For a duly authorized representative, an individual or position having overall responsibility for environmental matters for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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.

Organization: Mass Excavation, Inc.	Name: Justin Shields	Title: General Manager
Phone: (907) 771-9272 ext. 3201	Fax (optional):	Email: justins@massexcavation.com
Mailing Address: <input checked="" type="checkbox"/> Check if same as Operator Information	Street (PO Box): 6591 A Street, Suite 300	
City: Anchorage	State: AK	Zip: 99518
 Signature	5-28-24 Date	

X. Document Attachments and Supplemental Information

Documents attached with this application:

- Copy of SWPPP if ≥ 5 acres of disturbance.
- Delegation of Signatory Authority.
- Other:






NOI - Contractor Provided Sites

Final Audit Report

2024-05-27

Created:	2024-05-27
By:	Joan Vanucci (joanv@massexcavation.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAQqu_bpa7-pC-XmuiyPDRJigLYY0UwFs5

"NOI - Contractor Provided Sites" History

-  Document created by Joan Vanucci (joanv@massexcavation.com)
2024-05-27 - 8:48:23 PM GMT
-  Document emailed to Justin Shields (justins@massexcavation.com) for signature
2024-05-27 - 8:48:26 PM GMT
-  Email viewed by Justin Shields (justins@massexcavation.com)
2024-05-27 - 8:48:39 PM GMT
-  Document e-signed by Justin Shields (justins@massexcavation.com)
Signature Date: 2024-05-27 - 8:49:36 PM GMT - Time Source: server
-  Agreement completed.
2024-05-27 - 8:49:36 PM GMT



May 28, 2024

Operator Info

Mass Excavation, Inc.

Attn: Justin Shields
6591 A St. Suite 300
Anchorage AK 99518

Project Info

**Dedicated Contractor-Provided Sites for
Seward Meridian Pkwy Ph II**

See table in project description
Wasilla, AK 99654

Est. Start – End: **05/28/2024 - 10/31/2026**

Est. Area Disturbed: **1.5 acres**

Latitude, Longitude: **61.570000, -149.30000**

General Permit Authorization Number: **AKR10H0K2 v1.0**

This email/letter acknowledges that you have submitted a Notice of Intent (NOI) form to be covered under the APDES General Permit for Stormwater Discharges for Construction General Permit Activity (Construction General Permit) and is assigned the permit authorization number: AKR10H0K2 v1.0. Please reference your permit authorization number in all future correspondence. The permittee is authorized to discharge storm water under the terms and conditions of this permit upon the issuance date of this letter and expires January 31, 2026 or as per Permit Part 2.6. Permit documents will be posted to the Alaska DEC EDMS Map Explorer at <https://dec.alaska.gov/Applications/Water/EDMS/nsite>.

According to the NOI information provided (ref: HQ3-YGP6-ZK0A5, recd: 05/28/2024), the location of the SWPPP or the name and telephone number of the contact person for scheduling SWPPP viewing times is as follows:

- **SWPPP Location:** 1638 N Chet Cir, Palmer, 99645
- **SWPPP Contact:** Cody Troseth, Project Manager, (907) 771-9272 3203,
codyt@massexcavation.com, 6591 A Street, Suite 300, Anchorage, AK 99518

Note, as per Permit Part 2.7 the permittee is required to **submit a modification NOI within 30 calendar days if any of the following change:** Owner/Operator address and contact information, site information, estimated start or end dates, acres disturbed, or SWPPP location and contact information.

Coverage is not transferable. The permittee must **submit a Notice of Termination (NOT) instead of an NOI modification to DEC within 30 calendar days when the operator has changed.** A change of operator in this case means when an organization changes control of the project. It does not mean when a corporate officer of the organization changes while the organization continues with the project. The new owner/operator must file a new NOI to obtain coverage under the CGP.

A permittee must **submit an NOT within 30 calendar days when final stabilization has been achieved on all portions of the site**, in accordance with Permit Part 4.5.2 for which the permittee is responsible, all ground disturbing construction activity or use of support activities has been completed, and all temporary Best Management Practices (BMP's) have been removed; or a new permittee has assumed control over all areas of the site that have not been finally stabilized.

As stated above, this letter acknowledges receipt of a Notice of Intent. However, it is not an ADEC determination of the validity of the information you provided. Your eligibility for coverage under the Permit is based on the validity of the certification you provided. Your signature on the Notice of Intent certifies that you have read, understood, and are implementing all of the applicable requirements. An important aspect of this certification requires that you correctly determine whether you are eligible for coverage under this permit.

As you know, the Construction General Permit requires you to have developed and begun implementing a Stormwater Pollution Prevention Plan (SWPPP) and outlines important inspection and record keeping requirements. You must also comply with any additional location-specific requirements applicable to Alaska. A copy of the Construction General Permit must be kept with your SWPPP. An electronic copy of the Permit and additional guidance materials can be viewed and downloaded at <https://dec.alaska.gov/water/wastewater/stormwater/construction>.

Prior to discharge, please review your authorization and general permit AKR100000 to ensure that you understand the requirements contained within them. If you have general questions regarding the storm water program or your responsibilities under the Construction General Permit, please call 907-269-6285.

Re: EDMS CGP NOI Submission: HQ3-YGP6-ZK0A5, Received: 5/28/2024 2:28:51 PM

Construction General Permit (CGP) Notice of Intent (NOI)

version 1.31

(Submission #: HQ3-YGP6-ZK0A5, version 1)

Digitally signed by:
dec.alaska.gov
Date: 2024.05.28 14:30:03 -08:00
Reason: Submission Data
Location: State of Alaska

ALASKA

Details

Project: Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Ph II

Submission ID HQ3-YGP6-ZK0A5

Form Input

Form Instructions

Please see:

[instructions for completing the NOI for Storm Water discharges associated with activity under the APDES CGP.](#)

Contact Information (1 of 4)

Required Contacts

The following contact roles are required for this application. Multiple roles may be selected per contact.

- Responsible Party
- SWPPP Contact
- Billing Contact
- Application Preparer
- Onsite or Operator Contact

Contact Role(s)

Responsible Party
Operator
Contractor

Contact

Prefix

NONE PROVIDED

First Name Last Name

Justin Sheilds

Title

General Manager

Organization Name

Mass Excavation, Inc.

Phone Type Number Extension

Business 907-771-9272 3201

Email

justins@massexcavation.com

Mailing Address

6591 A St. Suite 300

Anchorage, AK 99518

Contact Information (2 of 4)

Required Contacts

The following contact roles are required for this application. Multiple roles may be selected per contact.

- Responsible Party
- SWPPP Contact
- Billing Contact
- Application Preparer
- Onsite or Operator Contact

Contact Role(s)

SWPPP Contact

Contact

Prefix

NONE PROVIDED

First Name Last Name

Cody Troseth

Title

Project Manager

Organization Name

Mass Excavation, Inc.

Phone Type Number Extension

Business 907-771-9272 3203

Email

codyt@massexcavation.com

Mailing Address

6591 A Street, Suite 300

Anchorage, AK 99518

Contact Information (3 of 4)

Required Contacts

The following contact roles are required for this application. Multiple roles may be selected per contact.

- Responsible Party
- SWPPP Contact
- Billing Contact
- Application Preparer
- Onsite or Operator Contact

Contact Role(s)

Billing Contact

Contact

Prefix

NONE PROVIDED

First Name Last Name

Joan Vanucci

Title

Office Manager

Organization Name

Mass Excavation, Inc.

Phone Type Number Extension

Business 9077719272 3210

Email

joanv@massexcavation.com

Mailing Address

6591 A Street, Suite 300

Anchorage, AK 99518

Contact Information (4 of 4)

Required Contacts

The following contact roles are required for this application. Multiple roles may be selected per contact.

- Responsible Party
- SWPPP Contact
- Billing Contact
- Application Preparer
- Onsite or Operator Contact

Contact Role(s)

Application Preparer

Contact

Prefix

NONE PROVIDED

First Name Last Name

Elaine Nefzger

Title

SWPPP Preparer

Organization Name

Nefzger Consulting

Phone Type Number Extension

Mobile 9072441880

Email

alasekn@outlook.com

Mailing Address

3303 W 82nd Ave.

Anchorage, Alaska, AK 99507

Single or Multiple NOI Project

Does this project have a single NOI?

Yes

Fee

580

For the purposes of this permit, an ♦operator♦ is any party associated with a construction project that meets either of the following two criteria (select one)

Operator Responsibility

Day-to-day operational control of on-site activities

Project Information

Project Name

Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Ph II

Estimated Project Start Date

05/28/2024

Estimated Project End Date

10/31/2026

Please give physical address if no street address is available. Please type in MTRS (PLSS) information in Address 1 space if needed. Do not include P.O. Boxes.

Project Address

See table in project description

Wasilla, AK 99654

[Alaska Region Map](#)

Borough or Similar Government Subdivision

Matanuska-Susitna Borough

Visit the link below to help with conversion between DMS and Latitude/Longitude
[DMS - Lat/Long converter](#)

Project Coordinates

61.57,-149.3

Select the method used to determine geographic coordinates

Internet-Google Maps

Estimated area to be disturbed to the nearest tenth of an acre (Ex: 2.2)

1.5

Brief Description of Project

61.56748 -149.33586 Jason & Melissa Mogan Residence Site Address 851 S Begich Dr. Wasilla, AK 99654 5-28-24
61.56242 -149.35089 Kurt & Anne Anderson Private Property 3900 E Brienne Lane
Wasilla, AK 99654 5-28-24
61.58393 -149.3573 Snowbird Investment Properties, LLC (PerkUp Coffee) 3700 E Palmer Wasilla Hwy.
Wasilla, AK 99654 5-28-24

Dedicated material source and/or disposal, staging yards, and other project uses subject to the Alaska Construction General Permit for the Seward Meridian Pkwy Road Improvements, Ph II project

Link to NAICS Search Website

[NAICS Search Website](#)

The industry codes below are most commonly used with this application.

NAICS:

236220-Commercial and Institutional Building Construction (236220)

SIC:

1522- Residential Construction, Nec

1531- Operative Builders

1541- Industrial Buildings and Warehouses

1542- Nonresidential Construction, Nec

1799- Special Trade Contractors, Nec

8741- Management Services

Primary NAICS code

237310-Highway, Street, and Bridge Construction

Primary SIC Code

1611

Have storm water discharges from your project been covered previously under a DEC issued permit?

No

Is your project less than one acre, but part of a common plan of development?

No

SWPPP Information

Below you can find the SWPPP template for the Construction General Permit.

[CGP SWPPP Template](#)

Has the SWPPP been prepared in advance of filing this eNOI?

Yes

SWPPP Attachment

Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Ph II.pdf - 05/27/2024 12:00 PM

Comment

NONE PROVIDED

Location of SWPPP for Viewing (Must be in Alaska)

Other

Location of SWPPP (Must be in Alaska)

1638 N Chet Cir
Palmer, AK 99645

SWPPP Address Comments

NONE PROVIDED

Will you construct a permanent storm water management control measure at the project site?

No

Does your project discharge into a Municipal Separate Storm Sewer System (MS4)?

No

Discharge Information (1 of 1)

None

NOTE: if you have a receiving water that is Wetlands, just enter generic Wetlands. Do not enter Wetlands of Tanana River, for example.

Waterbody/Wetlands Name

None

Is this receiving water on the 303(d) List of Impaired Waterbodies?

No

[Impaired Waterbody List](#)

Attachments

Document Attachments

[NOL- Contractor Provided Sites - signed.pdf - 05/28/2024 02:12 PM](#)

Comment


NONE PROVIDED

IX. Certification Information

An Alaska Pollutant Discharge Elimination System (APDES) permit application or report must be signed by an individual with the appropriate authority per 18 AAC 83.385. For additional information, please refer to 18 AAC 83.385 at the following link: http://www.legis.state.ak.us/basis/aac.asp#18_83_385.

Corporate Executive Officer 18 AAC 83.385 (a)(1)(A)	For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation.
Corporate Operations Manager 18 AAC 83.385 (a)(1)(B)	For a corporation, the manager of one or more manufacturing, production, or operating facilities, if (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations; (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
Sole Proprietor or General Partner 18 AAC 83.385 (a)(2)	For a partnership or sole proprietorship, the general partner or the proprietor respectively.
Public Agency, Chief Executive Officer 18 AAC 83.385 (a)(3)(A)	For a municipality, state, or other public agency, the chief executive officer of the agency.
Public Agency, Senior Executive Officer 18 AAC 83.385 (a)(3)(B)	For a municipality, state, or other public agency, a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
<i>*For Delegated Authority: the delegation must be made in writing and submitted to the DEC. An Example of written authorization delegating authority can be found at http://dec.alaska.gov/media/13316/delegation-of-signatory-authority.pdf</i>	
Operations Manager (Delegated Authority)* 18 AAC 83.385 (b)(2)(A)	For a duly authorized representative, an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent or position of equivalent responsibility.
Environmental Manager (Delegated Authority)* 18 AAC 83.385 (b)(2)(B)	For a duly authorized representative, an individual or position having overall responsibility for environmental matters for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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.

Organization: Mass Excavation, Inc.	Name: Justin Shields	Title: General Manager
Phone: (907) 771-9272 ext. 3201	Fax (optional):	Email: justins@massexcavation.com
Mailing Address: <input checked="" type="checkbox"/> Check if same as Operator Information	Street (PO Box): 6591 A Street, Suite 300	
	City: Anchorage	State: AK
		Zip: 99518
 Signature	05/27/2024 Date	

X. Document Attachments and Supplemental Information

Documents attached with this application:

- Copy of SWPPP if \geq 5 acres of disturbance.
- Delegation of Signatory Authority.
- Other:

NOI - Contractor Provided Sites

Final Audit Report

2024-05-27

Created:	2024-05-27
By:	Joan Vanucci (joanv@massexcavation.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAQqu_bpa7-pC-XmulyPDRJtjLYY0UwFis5

"NOI - Contractor Provided Sites" History

-  Document created by Joan Vanucci (joanv@massexcavation.com)
2024-05-27 - 8:48:23 PM GMT
-  Document emailed to Justin Shields (justins@massexcavation.com) for signature
2024-05-27 - 8:48:28 PM GMT
-  Email viewed by Justin Shields (justins@massexcavation.com)
2024-05-27 - 8:48:39 PM GMT
-  Document e-signed by Justin Shields (justins@massexcavation.com)
Signature Date: 2024-05-27 - 8:49:36 PM GMT - Time Source: server
-  Agreement completed.
2024-05-27 - 8:49:36 PM GMT

APPENDIX F



**ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM
GENERAL PERMIT FOR DISCHARGES FROM LARGE AND
SMALL CONSTRUCTION ACTIVITIES
(Construction General Permit) – Final**

Permit Number: **AKR100000**

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501

In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. §1251 et. seq., as amended by the Water Quality Act of 1987, P.L. 100-4, this permit is issued under provisions of Alaska Statutes 46.03, the Alaska Administrative Code (AAC) as amended, and other applicable State laws and regulations.

Operators of large and small construction activities described in Part 1.4 of this Alaska Pollutant Discharge Elimination System (APDES) general permit, except for those activities excluded from authorization to discharge in Part 1.4.4 of this permit, are authorized to discharge storm water associated with construction activity to waters of the U.S., in accordance with the conditions and requirements set forth herein. Permit authorization is required from the “commencement of construction activities” until “final stabilization” as defined in Appendix C.

This permit shall become effective on 2/1/2021.

This permit and the authorization to discharge shall expire at midnight, 1/31/2026.

Signature

Gene McCabe

December 17, 2020

Date

Program Manager

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SCHEDULE OF SUBMISSIONS

The Schedule of Submissions (Table 1) summarizes the required submissions and activities the permittee must complete and/or submit to the Alaska Department of Environmental Conservation (DEC or the Department) during the terms of this permit. The operator is responsible for all submissions and activities even if they are not summarized below.

Table 1: Schedule of Submissions

Permit Part	Type of Project	Submittal Requirement	Frequency	Due Date	Submit to ¹
Prior to Construction					
1.4.4.7, 2.1.1, 2.1.2, and 4.11	Projects that will construct Permanent Storm Water Management Controls	Engineering Plans	Once	At least 30 calendar days before the start of construction or as required by the MS4 Operator	Permitting Program or MS4 Operator
1.5	Small construction activities that use a waiver in lieu of CGP authorization	Waiver Certification	Once	At least five business days before proposed start of construction	Permitting Program
2.1.3	Projects that disturb greater than or equal to 5 acres of land and are outside an MS4 area	SWPPP ²	Once	With NOI	Permitting Program
2.1.4	Projects inside an MS4 area	SWPPP	Once	Depends on requirements of MS4 operator	MS4 Operator
2.1.5 and 4.6.7	Project that use Cationic Treatment Chemicals	Engineering Plans and Project Details	Once	At least 14 calendar days before use of the system	Permitting Program
2.1.6	Projects that discharge to an Outstanding Natural Resource Water	Site-Specific Antidegradation Analysis	Once	At least 14 calendar days before filing NOI	Permitting Program
2.3	Projects that disturb greater than or equal to 1 acre of land	Notice of Intent	Once	At least five business days before the start of construction	Permitting Program

Table 1: Schedule of Submissions

Permit Part	Type of Project	Submittal Requirement	Frequency	Due Date	Submit to ¹
During Construction					
2.4.2 2.6	For an authorized permittee if the permittee intends to continue operations and discharges beyond the term of this permit	Submit a complete and accurate new NOI according to Part 2.3	Once	Within 90 calendar days of the effective date of this permit	Permitting Program
2.7	To update or correct information on the original NOI	NOI Modification	As needed	As needed	Permitting Program
3.2, 8.4, and 9.2	If the difference between upstream and downstream samples exceed WQS for turbidity	Corrective Action Report	As necessary	At least 14 calendar days after receiving monitoring results	Compliance Program
9.1	Projects that disturb greater than or equal to 20 acres of land	Annual Report	As needed for sites meeting Part 3.2	By December 31st or with NOT	Compliance Program
9.5	All projects with an active NOI	Request for Submittal of Records	As requested by DEC	At least 30 calendar days after receipt of request	As requested by DEC
Post Construction					
10.2	All projects with an active NOI	Notice of Termination (NOT)	Once	Within 30 calendar days of completion of the project	Permitting Program
Note:					
1 See Appendix A, Part 1.1 for Permitting and Compliance Program contact information and addresses					
2 All projects that require an NOI must prepare a SWPPP. However, only operators who are developing projects that disturb greater than or equal to five (5) acres of land and are outside an MS4 area are required to submit a SWPPP to DEC.					

REQUIRED ON-SITE DOCUMENTATION

The Summary of Required On-Site Documentation (Table 2) lists the documents the permittee must have available at the project site or the project management office. The permittee is responsible for all documentation even if they are not summarized below.

Table 2: Summary of Permit Required On-Site Documentation

Permit Part	Document	Frequency	Purpose of Document
2.3	NOI	Once at start of project	Applicant request for authorization to discharge under permit coverage
2.5	DEC NOI Reply Letter	Once at start of project	To provide permittee with DEC project tracking number indicating project is covered by CGP
2.7	NOI Modification	As needed	To modify the original NOI if project conditions, personnel, or SWPPP location change
5.0	SWPPP	Developed prior to submitting the NOI. Updated as necessary.	To describe the project and the control measures to minimize the discharge of pollutants into waters of the U.S.
5.4; 6.7	Inspection Reports	Conducted at frequency specified in SWPPP	To monitor compliance with SWPPP and CGP
5.5; 7.0	Monitoring Plan (if required)	As needed	To describe monitoring of storm water discharge for those projects that disturb more than threshold requirement
5.6	Permit Eligibility related to Total Maximum Daily Load (TMDL)	Once at start of project	To document compliance with TMDL requirements
5.7	Permit Eligibility related to Endangered Species Act (ESA)	Once at start of project	To document compliance with ESA requirements
5.8.1	Copy of this permit	Once at start of project	To include in SWPPP
5.8.2	Additional Documentation in the SWPPP	Updated as necessary	To maintain summaries of various specific activities at the site to document they were accomplished.
8.3	Corrective Action Log (if necessary)	Updated as necessary	To list the corrective actions taken at a site
8.4; 9.2	Corrective Action Report (if necessary)	As needed	To report exceeding the turbidity requirement and describe
9.1	Annual Report (if required)	Annually or at NOT	To report result of discharge monitoring
9.4	Records	As needed	To maintain project records
10.2	NOT	Once at completion of project	To notify DEC that the permittee is terminating permit coverage

1.0 COVERAGE UNDER THIS PERMIT

1.1 Introduction

The Alaska Construction General Permit (CGP) authorizes storm water discharges from large and small construction-related activities that result in a total land disturbance of equal to or greater than one acre and where those discharges enter waters of the U.S. (directly or through a storm water conveyance system) or a municipal separate storm sewer system (MS4) leading to waters of the U.S. subject to the conditions set forth in this permit. This permit also authorizes storm water discharges from certain construction support activities and some non-storm water discharges commonly associated with construction sites.

The goal of this permit is to minimize erosion and reduce or eliminate the discharge of pollutants, such as sediment carried in storm water runoff from construction sites through implementation of appropriate control measures. Polluted storm water runoff can adversely affect fish, animals, plants, and humans. In order to ensure protection of water quality and human health, this permit describes control measures that must be used to manage storm water runoff during construction activities. This permit replaces the CGP that became effective February 1, 2016 and expired on January 31, 2021.

1.2 Person(s) Responsible for Obtaining Authorization under this Permit

- 1.2.1 All operators of large or small construction activities that meet the conditions in Part 1.4 must obtain authorization under this permit. For the purposes of this permit, an “operator” is any party associated with a construction project that meets either of the following two criteria:
 - 1.2.1.1 The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications, or
 - 1.2.1.2 The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit)

Note: Subcontractors generally are not considered operators for the purposes of this permit.

Note: Where there are multiple operators associated with the same project, all operators are required to obtain permit authorization. The following applies in these situations:

- *If one operator has control over plans and specifications and a different operator has control over activities at the project site, they may divide responsibility for compliance with the terms of this permit as long as they develop a group storm water pollution prevention plan (SWPPP) (see Part 5.1), which documents which operator has responsibility for each requirement of the permit.*
- *If an operator only has operational control over a portion of a larger project (e.g., one of four homebuilders in a subdivision), the operator is responsible for compliance with all applicable effluent limits, terms, and conditions of this permit as it relates to the activities on their portion of the construction site, including protection of endangered species, critical habitat, and historic properties, and implementation of control measures described in the SWPPP in the areas under their control.*
- *An operator must ensure either directly or through coordination with other permittees, that their activities do not render another permittee's pollutant discharge controls ineffective.*

1.3 Permit Area

This general permit covers the State of Alaska, except lands within the Metlakatla Indian Reservation and the Denali National Park and Preserve.

1.4 Eligibility

1.4.1 **Eligibility Requirements.** To be authorized under this permit, the project must meet the following conditions or be notified by DEC that the site is eligible for permit coverage.

- 1.4.1.1 The project will disturb one or more acres of land, or will disturb less than one acre of land but is part of a common plan of development or sale that will ultimately disturb one or more acres of land;
- 1.4.1.2 The site will discharge storm water to waters of the U.S. (directly or through a storm water conveyance system) or a MS4 leading to a waters of the U.S.;
- 1.4.1.3 The project area is located in an area where DEC is the permitting authority;
- 1.4.1.4 The project is not already covered under a different APDES permit;
- 1.4.1.5 The project does not discharge to an impaired waterway with an EPA-approved or established Total Maximum Daily Load (TMDL) that specifically precludes such discharges; and
- 1.4.1.6 The project is not likely to jeopardize the continued existence or cause a take of any threatened or endangered species protected under the Endangered Species Act (ESA) or their designated critical habitat.

1.4.2 **Authorized Storm Water Discharges.** Subject to compliance with the terms and conditions of this permit, the following discharges are authorized under this permit:

- 1.4.2.1 Storm water discharges associated with large and small construction activities, including those that are part of a common plan of development or sale that will ultimately disturb one or more acres of land.
- 1.4.2.2 Storm water discharges designated by DEC as needing a storm water permit under 40 CFR §122.26(a)(1)(v) or §122.26(b)(15)(ii).
- 1.4.2.3 Storm water discharges from support activities (such as concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) (as defined in Appendix C), whether on-site, adjacent to, or off-site, provided:
 - 1.4.2.3.1 The support activity is directly related to the construction site required to have permit authorization for discharges of storm water associated with construction activity under this permit;
 - 1.4.2.3.2 The support activity is not a commercial operation serving multiple unrelated construction projects by different permittees;
 - 1.4.2.3.3 The support activity does not operate beyond the completion of the construction activity at the project it supports; and
 - 1.4.2.3.4 Appropriate control measures are identified in the Storm Water Pollution Prevention Plan (SWPPP) and pollutant discharges are minimized in compliance with Parts 3.0 and 4.0 of the permit.
- 1.4.2.4 Discharges composed of allowable discharges listed in Parts 1.4.2 and 1.4.3 commingled with a discharge authorized by a different APDES permit and/or a discharge that does not require APDES permit authorization.

- 1.4.3 Authorized Non-Storm Water Discharges.** Subject to compliance with the terms and conditions of this permit, the following non-storm water discharges are authorized under this general permit, provided the non-storm water component of that the discharge is in compliance with the SWPPP requirements in Part 5.3.9:
- 1.4.3.1 Discharges from fire-fighting activities;
 - 1.4.3.2 Fire hydrant flushings;
 - 1.4.3.3 Waters used to wash vehicles where detergents are not used;
 - 1.4.3.4 Water used to control dust;
 - 1.4.3.5 Potable water including uncontaminated water line flushings;
 - 1.4.3.6 Routine external building wash down where detergents are not used;
 - 1.4.3.7 Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used;
 - 1.4.3.8 Uncontaminated air conditioning or compressor condensate;
 - 1.4.3.9 Uncontaminated, non-turbid discharges of ground water or spring water;
 - 1.4.3.10 Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated groundwater;
 - 1.4.3.11 Uncontaminated construction dewatering waters that are treated by an appropriate control measure in compliance with Part 4.4.2, or have been treated with treatment chemicals in compliance with Part 4.6; and
 - 1.4.3.12 Landscape irrigation.
- 1.4.4 Limitations on Coverage.** The following discharges are not authorized under this permit:
- 1.4.4.1 **Post-Construction Discharges.** Discharges that originate from the project after construction activities have ceased and a Notice of Termination (NOT) has been submitted in accordance to Part 10.0, including any temporary support activity.
 - 1.4.4.2 **Discharges that May Exceed Water Quality Standards.** Discharges that DEC, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard (WQS). Where such a determination is made prior to authorization, DEC may notify the applicant that an individual permit application is necessary in accordance with Part 2.8. However, DEC may provide permit authorization after the applicant has included appropriate controls and implementation procedures designed to bring the discharge into compliance with WQS's in accordance with Part 3.1.
 - 1.4.4.3 **Discharges to Water Quality Impaired Waters.** Discharges into receiving waters that are listed as impaired waters in the report *Alaska's Final 2018 Integrated Water Quality Monitoring and Assessment Report*, dated March 26, 2020 (or the most current EPA-approved version), or with an approved or established TMDL analysis, unless the discharges are in accordance with Part 3.2.
 - 1.4.4.4 **Comingled Discharges.** Discharges that are mixed with non-storm water, unless they are listed as allowable non-storm water discharges in Part 1.4.3.
 - 1.4.4.5 **Discharges Currently or Previously Covered by another Permit.** Unless the permittee received written notification from DEC specifically allowing these discharges to be authorized under this permit, the permittee is not eligible for coverage under this permit for any of the following:

- 1.4.4.5.1 Storm water discharges associated with construction activity that have been covered under an individual permit, an alternative APDES general permit, or are required to obtain authorization under an alternative general permit in accordance with Part 2.8.
- 1.4.4.5.2 Discharges from sites where any APDES permit has been or is in the process of being denied, terminated, or revoked by DEC (*this does not apply to the routine reissuance of permits every five years*).
- 1.4.4.6 **Discharges of Dredged or Fill Material.** Discharges of dredged or fill material into waters of the U.S. requiring federal authorization through the U.S Army Corps of Engineers CWA Section 404 Regulatory Program.
- 1.4.4.7 **Discharges from Nondomestic Treatment Works.** Discharges of storm water to the land or groundwater from a nondomestic wastewater treatment works (as defined in 18 AAC 72) using permanent storm water management controls unless they are in compliance with 18 AAC 72.600 and EPA Underground Injection Control regulations¹.

1.4.5 Emergency Repairs or Reconstruction of a Facility

- 1.4.5.1 Discharges from construction activities conducted in response to a disaster (as defined in Alaska Statute 26.23.900) are conditionally authorized, provided that the operator does the following:
 - 1.4.5.1.1 Submits a Notice of Intent (NOI) and SWPPP (if project disturbs five or more acres in accordance with Part 2.1) to the Department in accordance with Part 2.3 and 2.4 within 30 calendar days of initiating construction activities.
 - 1.4.5.1.2 Implements appropriate control measures as soon as possible after initiating construction activities. For discharges occurring during the initial 30 day period, the permittee must demonstrate compliance with the terms and conditions of this permit to the extent practicable depending on the disaster.

1.5 Waivers for Certain Small Construction Activities

- 1.5.1 **Waiver Criteria.** An operator of a small construction activity may qualify for a waiver in lieu of obtaining authorization under this permit if one of the following three criteria are met. Details of the three waiver options and procedures for requesting a waiver are provided in Appendix D:
 - 1.5.1.1 The project has a low rainfall erosivity factor;
 - 1.5.1.2 DEC or EPA has established or approved a TMDL that addresses the pollutant(s) of concern and has determined storm water control measures are not needed to protect water quality;
 - 1.5.1.3 The operator develops an equivalent analysis that determined allocations for pollutant(s) of concern are not needed to protect water quality. This waiver is only available for non-impaired waters.

¹ For additional information refer to DEC's Engineered Wastewater Disposal System web page at <http://dec.alaska.gov/water/wastewater/engineering/engineered-systems> and EPA's Underground Injection Control web page at <http://www.epa.gov/uic/underground-injection-control-region-10-ak-id-or-and-wa>

2.0 AUTHORIZATION UNDER THIS GENERAL PERMIT

- 2.1 Submittal Requirements Prior to Construction** Depending on the type and location of the project, the operator may be required to submit information to the DEC and/or an MS4 operator for review prior to filing the NOI and commencement of construction activities. The following is a summary of the information to be submitted to each agency by project type and area of jurisdiction.
- 2.1.1 Permanent Storm Water Management Controls (Outside MS4).** An operator installing permanent storm water management controls in accordance with Part 4.11 and where the project is located outside of an APDES permitted MS4, must submit information required by the DEC in Part 4.11 at least thirty (30) calendar days prior to filing the NOI for the project. The operator must receive the DEC's written reply prior to the commencement of construction activities.
- 2.1.2 Permanent Storm Water Management Controls (Inside MS4).** An operator installing permanent storm water management controls in accordance with Part 4.11 and where the project is located inside the area of an APDES permitted MS4 must submit information required by the MS4 operator for the project and must receive the MS4 operator's approval prior to the commencement of construction activities. Check with the respective MS4 operator for their particular submittal requirements. (See <http://dec.alaska.gov/water/wastewater/stormwater/swppp-submittal-rqmts> for further MS4 operator contact information.)
- 2.1.2.1** Operators of construction activity within the Municipality of Anchorage (with the exception of ADOT&PF, see 2.1.2.2) shall submit information to:
- Municipality of Anchorage
Public Works Department
4700 South Elmore Rd.
P.O. Box 196650
Anchorage, AK 99519-6650
- 2.1.2.2** Operators of construction activities for Alaska Department of Transportation & Public Facilities (ADOT&PF) construction projects within the Municipality of Anchorage shall submit information to:
- ADOT&PF
Construction and Operations, Central Region
4111 Aviation Ave.
P.O. Box 196900
Anchorage, AK 99519
- 2.1.2.3** Operators of construction activity within the Fairbanks North Star Borough shall submit information to:
- Fairbanks North Star Borough
Department of Public Works
P.O. Box 71267
Fairbanks, AK 99707

- 2.1.2.4 Operators of construction activity within the City of Fairbanks shall submit information to:
City of Fairbanks
Engineering Division
800 Cushman St.
Fairbanks, AK 99701
- 2.1.2.5 Operators of construction activity within the City of North Pole shall submit information to:
City of North Pole
Department of Public Works
125 Snowman Lane
North Pole, AK 99705
- 2.1.2.6 Operators of construction activity within the Joint Base Elmendorf-Richardson shall submit information to:
Storm Water Lead
673rd CES/CEIEC
724 Quartermaster Drive
Joint Base Elmendorf-Richardson
- 2.1.2.7 Operators of construction activity within the Port of Anchorage shall submit information to:
Port of Anchorage
Operations and Maintenance
2000 Anchorage Port Road
Anchorage, AK 99501
- 2.1.2.8 Operators of construction activity within Fort Wainwright shall submit information to:
Water Quality Program
US Army Garrison, Alaska DPW, Environmental Division
3023 Engineer Place
Fort Wainwright, AK 99703
- 2.1.3 **SWPPP Submittal to DEC.** An operator developing a project that disturbs five or more acres of land must submit a copy of the SWPPP to the DEC (Appendix A, Part 1.1.1) at the time the NOI is filed (electronic attachments to the eNOI are preferred).
- 2.1.4 **SWPPP Submittal to MS4.** An operator developing a project that is located inside the area of an APDES permitted MS4 must submit a copy of the SWPPP to the respective MS4 operator. Check with the respective MS4 operator for their particular submittal requirements. (<http://dec.alaska.gov/water/wastewater/stormwater/swPPP-submittal-rqmts> for further MS4 operator contact information.)
- 2.1.4.1 Within the Municipality of Anchorage
- 2.1.4.1.1 An operator of construction projects disturbing one or more acres of land shall submit a copy of the SWPPP to either DEC or the Municipality based on the project type and operator as shown in the following table.

Table 3: SWPPP Submittal within Municipality of Anchorage MS4 area.

Project Type	Submit SWPPP to
Government (Federal, state, or Port of Anchorage) road projects and other government sponsored transportation projects such as ports, railroads, or airports	DEC
Government (municipal) road projects and other government transportation projects	Municipality
Public or private utility projects when the utility is initiating the work	Municipality
Work that requires a building permit	Municipality
Non-publicly funded transportation projects	Municipality

- 2.1.4.1.2 Submittal of the SWPPP to the Municipality shall be made according to the most recent Municipality requirements and be submitted to the address given in Part 2.1.2.1
- 2.1.4.1.3 Submittal of the SWPPP to the DEC shall be to the address in Appendix A, Part 1.1.1.
- 2.1.4.2 Within the road service areas of the Fairbanks North Star Borough, check with the Borough for the latest SWPPP submittal requirements at the address given in Part 2.1.2.3. An operator of a publicly-funded project disturbing one or more acres of land shall submit a copy of the SWPPP to the DEC for review at the address in Appendix A, Part 1.1.1.
- 2.1.4.3 Within the City of Fairbanks, check with the City for the latest SWPPP submittal requirements at the address given in Part 2.1.2.4. An operator of a public-funded project disturbing one or more acres of land shall submit a copy of the SWPPP to the DEC for review at the address in Appendix A, Part 1.1.1.
- 2.1.4.4 Within the City of North Pole, check with the City for the latest SWPPP submittal requirements at the address given in Part 2.1.2.5. An operator of a public-funded project disturbing one or more acres of land shall submit a copy of the SWPPP to the DEC for review at the address in Appendix A, Part 1.1.1.
- 2.1.4.5 Within the Joint Base Elmendorf-Richardson, check with the latest SWPPP submittal requirements at the address given in Part 2.1.2.6.
- 2.1.4.6 Within the Port of Anchorage, check with the latest SWPPP submittal requirements at the address given in Part 2.1.2.7.
- 2.1.4.7 Within the Fort Wainwright installation boundary, check with the latest SWPPP submittal requirements at the address given in Part 2.1.2.8.
- 2.1.5 **Projects Using Cationic Treatment Chemicals or an Active Treatment System.** Submit engineering plans and projects details listed in Part 4.6.7 to DEC (Appendix A, Part 1.1.1) at least 14 calendar days prior to use at the construction site.
- 2.1.6 **Projects that Discharge to an Outstanding Natural Resource Water.** Contact DEC at least 30 calendar days prior to commencement of construction activities that may discharge to a high quality water that constitutes an outstanding national resource, such as a water of a national or state park or wildlife refuge or a water of “exceptional recreational or ecological significance” (as described in Appendix C), to discuss the need to conduct a site-specific antidegradation analysis. If an antidegradation analysis is required, it must be submitted at least 14 calendar days prior to filing the NOI. Before beginning construction activities, operators must receive a written approval of the analysis from the DEC.

Note: No Outstanding Natural Resource Waters are designated in Alaska as of the date of this permit issuance.

2.2 How to Obtain Authorization

- 2.2.1 To obtain authorization under this permit, an operator must:
- 2.2.1.1 Be responsible for a project located in the area where DEC is the permitting authority;
 - 2.2.1.2 Meet the eligibility requirements of Part 1.4;
 - 2.2.1.3 Develop a SWPPP according to the requirements in Part 5.0 prior to filing for an NOI and submit a copy of the SWPPP as specified in Part 2.1;
 - 2.2.1.4 Select, design, install, and implement control measures in accordance with Part 4.0 to meet non-numeric effluent limits;
 - 2.2.1.5 Submit a complete and accurate NOI either using DEC's electronic system or using a paper form in accordance with Part 2.3 prior to commencing construction activities;
 - 2.2.1.6 Pay the general permit authorization fees in accordance with 18 AAC 72.956;
 - 2.2.1.7 Submit any additional information requested by the DEC or MS4 Operator (if applicable); and
 - 2.2.1.8 Be granted authorization to discharge by the DEC.
- 2.2.2 Submission of the NOI demonstrates the operator's intent to be covered by this permit; it is not a determination by DEC that the operator meets the eligibility requirements for the permit. A discharge is **not authorized** if:
- 2.2.2.1 The operator's NOI is incomplete or inaccurate;
 - 2.2.2.2 DEC requires the operator to obtain authorization under an individual permit or an alternative general permit; or
 - 2.2.2.3 The discharge does not meet the eligibility requirements under Part 1.4.
- 2.2.3 If the information on the NOI is incorrect or is missing, the NOI will be deemed incomplete and permit authorization will not be granted. A complete NOI shall include the following information:
- 2.2.3.1 **Operator:** organization name, contact person and title, complete mailing address, telephone number, fax number (optional), and email address;
 - 2.2.3.2 **Billing Contact:** organization name, contact person and title, complete mailing address, telephone number and fax number and email address. If the billing contact information is the same as the operator information, check the box on the NOI indicating that it is the same;
 - 2.2.3.3 **Project/site:** project/site name, a physical location, the nearest city and zip code, the borough, latitude and longitude, how the latitude and longitude were determined, and estimated project start date and completion date, and an estimate of the area to be disturbed;
 - 2.2.3.4 **SWPPP:** acknowledgement of whether a SWPPP has been prepared in advance of filing the NOI, the location of the SWPPP – either with the operator, the project/site, or other location, SWPPP contact if different than the operator contact;
 - 2.2.3.5 **Discharge:** the name(s) of the waterbody to which the project discharges, identification if the project/site discharges to a waterbody that is impaired or has a TMDL, if so, confirmation that the discharge is consistent with the assumptions and requirements of the TMDL;

2.2.3.6 Signatory information in compliance with Appendix A, Part 1.12.

2.3 How to Submit a Notice of Intent (NOI)

- 2.3.1 **Submittal Options.** Each operator must submit an NOI to be authorized to discharge under this permit at least five business days prior to commencement of construction activities. DEC may need additional time for manual processing of NOIs. The complete and accurate NOI can be submitted either:
- 2.3.1.1 **Electronically (*strongly encouraged*):** Go to DEC's Water Online Application System (OPA) web page at <http://dec.alaska.gov/water/oasys/index.html> to prepare and submit electronic NOI (eNOI). *Note the eNOI will likely be processed more quickly and result in faster receipt of an authorization to discharge.*
- 2.3.1.2 **Paper NOI Form:** Complete the CGP NOI form on DEC's APDES Storm Water Forms web page at <http://dec.alaska.gov/water/wnpspc/stormwater/2016CGPForms.htm>. Once the form is complete, scan and email the entire form (5 pages) to the permitting email address in Appendix A, Section 1.1.1 or submit a paper copy to DEC at the address listed in Appendix A, Section 1.1.1.
- 2.3.1.3 Applicants must pay the general permit authorization fee (in accordance with 18 AAC 72.956) before their NOI is considered complete.

2.4 Submission Deadlines

- 2.4.1 **New Projects.** The operator must submit a complete and accurate NOI and SWPPP (if project disturbs five or more acres in accordance with Part 2.1) prior to commencement of construction activities consistent with Parts 2.2.1 and 2.3 to obtain authorization under this permit.
- 2.4.2 **Permitted Ongoing Projects.**
- 2.4.2.1 An ongoing permitted project is one that commenced construction activities prior to the effective date of this permit and where the discharges from that project were authorized under the 2016 CGP (AKR100000). To continue coverage, a permittee must:
- 2.4.2.1.1 Continue to comply with the terms and conditions of the 2016 CGP until the permittee has been granted authorization under this permit or an alternative APDES permit, or submits a NOT;
- 2.4.2.1.2 Update the existing SWPPP as necessary to comply with the requirements of Part 3.0, Part 4.0 and Part 5.0 before submitting a new NOI, as described in Part 2.4.2.1.3; and
- 2.4.2.1.3 Submit a complete and accurate new NOI within 90 calendar days of the effective date of this permit according to Part 2.3. A copy of the updated SWPPP and permit fee is not required to be submitted with the NOI to DEC for permitted ongoing projects.
- 2.4.2.2 If the permittee is eligible to submit a NOT (e.g., construction is finished and final stabilization has been achieved) before the 90th day, a new NOI is not required to be submitted provided a NOT is submitted within 90 calendar days after the effective date of this permit.

2.4.3 Change of Permittee for an Authorized Ongoing Project.

- 2.4.3.1 A permittee of an ongoing project who transfers ownership of the project, or a portion thereof, to a different operator, the new operator will be required to submit a complete and accurate new NOI for a new project in accordance with Part 2.3.1 and the original permittee must file a NOT in accordance with Part 2.7.5.

2.4.4 Unpermitted Ongoing Project/Late Notification.

An operator who commences construction activities without authorization to discharge for a project that requires submission of a NOI consistent with Part 2.2 must develop and/or update a project-specific SWPPP and submit a complete and accurate NOI consistent with Part 2.3 as soon as practicable. The applicant is authorized to discharge in accordance with Part 2.5. The DEC reserves the right to take enforcement action for any unpermitted discharges or permit non-compliance that occurs between the commencement of construction and discharge authorization.

2.5 Date of Authorization to Begin Discharge

Authorization to discharge under this general permit requires the operator seeking authorization to submit to DEC a complete and accurate NOI and payment of fee. If the project disturbs five or more acres, a copy of the SWPPP must be submitted in accordance with Part 2.1 prior to commencement of construction activities consistent with Parts 2.2.1 and 2.3.. The operator must receive written notification of authorization from DEC that coverage has been granted, and that a specific authorization number has been assigned prior to construction activities.

A permittee is authorized to discharge storm water from construction activities under the terms and conditions of this general permit upon the date specified in the issuance of the DEC authorization letter, which is posted on DEC's water permit search website (<http://dec.alaska.gov/Applications/Water/WaterPermitSearch/Search.aspx>).

2.6 Continuation of Expired General Permit

If this permit is not reissued prior to the expiration date, it will be administratively continued in accordance with 18 AAC 83.155(c) and remain in force and effect for discharges that were covered prior to expiration.

- 2.6.1 The permittee is required to abide by all limitations, monitoring, and reporting included herein if the permit enters administrative extension until such time a permit is reissued authorizing the discharge or an NOT is submitted by the permittee.
- 2.6.2 A permittee who is authorized to discharge under this permit prior to the expiration date, any discharges authorized will automatically remain covered by this permit until the earliest of:
- 2.6.2.1 Authorization for coverage under a reissued permit or replacement of this permit following a permittee's timely and appropriate submittal of a complete NOI requesting authorization to discharge under the new permit and compliance with the requirements of the new permit;
- 2.6.2.1.1 If a permittee fails to submit a timely NOI for coverage under the reissued or replacement permit, the permittee's coverage will expire at midnight on the date that the NOI is due.
- 2.6.2.2 Submittal of a NOT;
- 2.6.2.3 Issuance of an individual permit for the project's discharges; or

- 2.6.2.4 A formal permit decision by DEC to not reissue this general permit or not cover a particular discharger previously covered by the general permit, at which time DEC will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.

2.7 Submittal of a Modification to Original NOI

- 2.7.1 **Modification.** A permittee must file an NOI modification form to DEC (see Part 2.3) to update or correct the following information on the original NOI within 30 calendar days of the change:
- 2.7.1.1 Owner/Operator address and contact information;
 - 2.7.1.2 Site information;
 - 2.7.1.3 Estimated start or end dates;
 - 2.7.1.4 Number of acres to be disturbed; or
 - 2.7.1.5 SWPPP location and contact information.
- 2.7.2 Continuation of expired permit in accordance with Part 2.6.
- 2.7.3 If the original project disturbance was between one and less than five acres, and will now disturb five acres or more, a SWPPP must be submitted with the NOI modification.
- 2.7.4 No general permit authorization fee is required when submitting an NOI modification.
- 2.7.5 **NOT Instead of Modification.** The permittee must submit a NOT instead of an NOI modification form to DEC within 30 calendar days when the operator has changed. A change of operator in this case means when an organization changes control of the project. It does not mean when a corporate officer of the organization changes while the organization continues with the project. The new owner/operator must file a new NOI to obtain coverage under the CGP. Coverage is not transferrable.

2.8 Alternative Permits

2.8.1 DEC Requiring Authorization under an Alternative Permit

DEC may terminate or revoke a permittee's authorization under this permit and may require a permittee to apply for and/or obtain authorization to discharge under an alternative permit (i.e., an APDES individual permit or an alternative APDES general permit in accordance with 40 CFR §122.64 and §124.5). If DEC requires a permittee to apply for an alternative permit, DEC will notify the permittee in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision, alternative permit application requirements, and an application form. In addition, the notice will set a deadline to file the application, and will include a statement that on the effective date of issuance or denial of the APDES individual permit, or the effective date of authorization or denial of authorization under the alternative general permit as it applies to the permittee, authorization under this general permit will automatically terminate. An application must be submitted to DEC at the address in Appendix A, Section 1.1.1. DEC may grant additional time to submit the application upon a written request by the permittee provided the request is received prior to expiration of the deadline. If the permittee is covered under this permit and fails to submit an alternative permit application in a timely manner as required by DEC, then the authorization under this permit will automatically terminate at the end of the day specified by DEC as the deadline for application submittal. The DEC may take appropriate enforcement action for any unpermitted discharge.

2.8.2 Operator Requesting Authorization under an Alternative Permit

An operator may request to be excluded from coverage under this general permit by applying for an individual permit. The operator must submit an individual permit application in accordance with 18 AAC 83.305 – 83.385 to DEC no later than ninety (90) days after publication of the general permit to the address in Appendix A, Part 1.1.1. DEC may grant the request by issuing an individual permit or authorization under an alternative general permit if DEC deems that the reasons cited are adequate to support the request.

- 2.8.3 When a permittee is issued an APDES individual permit or is authorized to discharge under an alternative APDES general permit, the authorization under this permit is automatically terminated on the effective date of the individual permit or the date of authorization under the alternative general permit, whichever the case may be. If the permittee is denied an APDES individual permit or an alternative APDES general permit, the authorization under this permit is automatically terminated on the date of such denial, unless otherwise specified by DEC.

3.0 COMPLIANCE WITH STANDARDS AND LIMITS

3.1 Requirements for all Projects

- 3.1.1 A permittee must select, install, implement, and maintain control measures (described in Part 4.0) at the construction site to minimize the discharge of pollutants as necessary to meet WQS's (18 AAC 70). A permittee must comply with all permit conditions with respect to installation and maintenance of control measures, inspections, monitoring (if necessary), corrective actions, reporting and recordkeeping.
- 3.1.2 In general, except in situations explained in Part 3.1.3, the storm water controls planned, developed, implemented, maintained, and updated by the permittee that are consistent with the provisions of Parts 3.0 through 9.0 are considered to meet the stringent requirements of this permit to ensure that the discharges do not cause or contribute to an excursion above any WQS (18 AAC 70).
- 3.1.3 At any time after authorization, DEC may determine that the permittee's storm water discharges will cause, have reasonable potential to cause, or contribute to an excursion above any applicable WQS. If such a determination is made, DEC may require the permittee to:
- 3.1.3.1 Take corrective actions and modify storm water controls in accordance with Part 8.0 to adequately address the identified water quality concerns;
 - 3.1.3.2 Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining WQSs; or
 - 3.1.3.3 Minimize discharges of storm water from the construction project and submit an individual permit application in accordance with Part 2.8.
- 3.1.4 All written responses required under this part must include a signed certification consistent with Appendix A, Part 1.12.

3.2 Discharge to Impaired Water Body

If the permittee is discharging into a water body with an EPA-established or approved TMDL, the permittee must implement measures to ensure that the discharge of pollutants from the site is consistent with the assumptions and requirements of the EPA-established or approved TMDL, including ensuring that the discharge does not exceed specific wasteload or load allocation that has been established that would apply to the discharge. The permittee

must also evaluate the recommendation in the Implementation Section of the TMDL and incorporate applicable measures into the operation.

3.2.1 Discharging to an Impaired Water Body for Turbidity or Sediment (Category 5)

3.2.1.1 Permittees who (1) discharge into a water body that is listed on Alaska's 303(d) List of Impaired Waters (Category 5) for turbidity or sediment (<http://dec.alaska.gov/water/water-quality/impaired-waters>) and (2) disturbs 20 or more acres of land at one time (including non-contiguous land disturbances that take place at the same time and are part of a larger common plan of development or sale) that drains to an impaired water must:

3.2.1.1.1 Develop, implement, and modify as necessary a written site-specific monitoring plan consistent with Part 7.0 that specifies the sampling frequency and location.

3.2.1.1.2 Conduct turbidity sampling at the following locations to evaluate compliance with the WQS for turbidity;

3.2.1.1.2.1 Upstream turbidity in the impaired water at a representative location (upgradient) from the point of storm water discharge into the impaired water or outside the area of influence of the storm water discharge; and

3.2.1.1.2.2 Downstream turbidity at a representative location downstream from the point of discharge into the impaired water, inside the area of influence of the storm water discharge. Alternatively, the discharge turbidity may be measured at the point where the storm water discharge leaves the construction site, rather than when it is in the receiving water body.

3.2.1.1.3 Based on the sampling (as described in Part 3.2.1.1.2), the resulting water quality must meet the state WQS for turbidity, as follows:

3.2.1.1.3.1 The downstream sample may not exceed 5 nephelometric turbidity units (NTU) above the upstream sample when the upstream turbidity is 50 NTU or less; and

3.2.1.1.3.2 The downstream sample may not have more than 10% increase in turbidity when the upstream turbidity is more than 50 NTU, not to exceed a maximum increase of 25 NTU.

3.2.1.1.4 If the difference between the upstream and downstream sample exceeds the WQS for turbidity, the permittee must:

3.2.1.1.4.1 Review the SWPPP and the control measures selected for the project and make appropriate improvements and corrections to the control measures within seven calendar days of the date the discharge exceeds the WQS;

3.2.1.1.4.2 Update the SWPPP with the improvements and changes to the control measures;

3.2.1.1.4.3 Submit a corrective action report consistent with Part 9.2; and

3.2.1.1.4.4 Continue to sample daily until the discharged storm water is less than the WQS for turbidity for the receiving water.

3.2.2 Discharging to an Impaired Water Body with an Approved or Established TMDL for Turbidity or Sediment (Category 4a or 4b)

3.2.2.1 Operators are not eligible for authorization under this permit if:

3.2.2.1.1 An EPA-approved or established TMDL specifically precludes such discharges; or

- 3.2.2.1.2 The project involves a discharge of pollutants of concern (e.g. turbidity, sediment, debris, etc.) to waters with an EPA-approved or established TMDL for turbidity or sediment, unless control measures are implemented as necessary for consistency with the assumptions and requirements of the TMDL.
- 3.2.2.2 If a specific wasteload or 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. The permittee must also evaluate the implementation measures recommended in the TMDL and incorporate them as appropriate.
- 3.2.2.3 In a situation where an EPA-approved or established TMDL for turbidity or sediment has specified a general wasteload or load allocation for a pollutant of concern (e.g. turbidity, sediment, debris, etc.) that is applicable to construction storm water discharges, but no specific requirements for construction sites have been identified in the TMDL, the permittee should consult with DEC to confirm that meeting the standards in Parts 3.0 and 4.0 will be consistent with the approved TMDL.
- 3.2.2.4 Where an EPA-approved or established TMDL has not specified a wasteload or load allocation applicable to construction storm water discharges, but has not specifically excluded these discharges, compliance with the requirements in Parts 3.0 and 4.0 of this permit will generally be assumed to be consistent with the approved TMDL.

3.3 Protection of Endangered Species

A permittee must protect federally-listed endangered or threatened species, or federally-designated critical habitat.

- 3.3.1 An applicant is not eligible to discharge if the storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities (as defined in Appendix C) are likely to jeopardize the continued existence of any species that are federally-listed as endangered or threatened (listed) under the ESA or result in the adverse modification or destruction of federally-designated critical habitat under the ESA.
- 3.3.2 An applicant is not eligible to discharge if the storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities (as defined in Appendix C) would cause a prohibited take of federally-listed endangered or threatened species (as defined under Section 3 of the ESA and 50 CFR §17.3), unless such takes are authorized under Sections 7 or 10 of the ESA.

4.0 CONTROL MEASURES

4.1 Control Measure Selection and Design Considerations

- 4.1.1 Permittees must select, design, install, and implement the control measures in this Part to the extent practicable. The specific control measures are based on the requirements of the national effluent limitation guidelines (ELG) that apply to the construction and development industry (40 CFR §450).

- 4.1.2 The selection, design, installation, maintenance, and removal of control measures must be in accordance with good engineering practices manufacturer specifications and address site-specific conditions such as precipitation, site topography, soil characteristics, and growing season. Permittees may deviate from such manufacturer's specifications where the permittee provides justification for such deviation and includes documentation of their rationale in the SWPPP. If a permittee finds that their control measures are not achieving their intended effect of minimizing pollutant discharges, the permittee must modify these control measures in accordance with the corrective action requirements set forth in Part 8.0.
- 4.1.3 Erosion and Sediment Controls. A permittee must design, install, and maintain effective erosion and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed, and maintained to:
- 4.1.3.1 Control storm water volume and velocity to minimize soil erosion and pollutant discharges;
 - 4.1.3.2 Control storm water discharges, including both peak flowrates and total storm water volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
 - 4.1.3.3 Minimize the amount of soil exposed during construction activity;
 - 4.1.3.4 Minimize the disturbance of steep slopes;
 - 4.1.3.5 Minimize sediment discharges from the site. The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity, duration of precipitation; the nature of resulting storm water runoff; and soil characteristics, including the range of soil particle sizes expected to be present on the site;
 - 4.1.3.6 Provide and maintain natural buffers around waters of the U.S., direct storm water to vegetated areas and maximize storm water infiltration to reduce pollutant discharges, unless infeasible;
 - 4.1.3.7 Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates it be compacted.
 - 4.1.3.8 Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.
- 4.1.4 Additional Erosion and Sediment Controls Selection and Design Considerations:
- 4.1.4.1 Preventing storm water from coming into contact with polluting materials is generally more effective, and less costly, than removing pollutants from storm water;
 - 4.1.4.2 Using a combination of control measures is more effective than using control measures in isolation for minimizing pollutants in the storm water discharge;
 - 4.1.4.3 Using technologically available, economically practicable, and achievable methods in light of best industry practices;
 - 4.1.4.4 Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;

- 4.1.4.5 Minimizing impervious areas at the permittees facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care must be taken to avoid ground water contamination;
- 4.1.4.6 Dissipate storm water runoff into open vegetated swales and natural depressions to reduce in stream impacts of erosive flows;
- 4.1.4.7 Conserving and/or restoring of riparian buffers will help protect streams from storm water runoff and improve water quality; and
- 4.1.4.8 Using treatment interceptors (e.g., sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

4.2 Erosion Control Measures

A permittee must comply with the erosion control measures in this Part to minimize soil exposure on the site during construction.

4.2.1 Delineation of Site

A permittee must generally delineate (e.g., with flags, stakes, signs, silt fence, etc.) the location of any of the following that apply to the site:

- 4.2.1.1 All areas where soil disturbing construction activities will occur; and
- 4.2.1.2 Specific areas that will be left undisturbed such as trees, boundaries of sensitive areas, or buffers established under Part 4.2.3.

4.2.2 Minimize the Amount of Soil Exposed during Construction Activity

A permittee must include the following in the selection of control measures and the sequence of project construction as they apply to the project site:

- 4.2.2.1 Preserve native topsoil for later use with on-site stockpiles, unless deemed infeasible by space constraints or site design creates impervious surfaces; and
- 4.2.2.2 Sequence or phase construction activities to minimize the extent and duration of exposed soils.

4.2.3 Maintain Natural Buffer Areas

A permittee must maintain natural buffer areas at stream crossings and around the edge of any waters of the U.S. that are located within or immediately adjacent to the construction activity in accordance with the following:

- 4.2.3.1 The buffer must be a minimum of 25 feet wide, or the width as required by local ordinance, unless infeasible based on site dimensions;
- 4.2.3.2 Exceptions are allowed for water dependent activities, specific water access activities, or necessary water crossings;
- 4.2.3.3 A permittee should, to the extent practicable, use perimeter controls adjacent to buffers and direct storm water sheet flow to buffer areas to increase sediment removal and maximize storm water infiltration.

4.2.4 Clearing Vegetation

- 4.2.4.1 Clearing of vegetation that disturbs the vegetative mat and exposes soil is **prohibited** prior to obtaining authorization under this permit.

4.2.4.2 Cutting of trees and brush while the ground is frozen without disturbing the vegetative mat early in the springtime to avoid adversely affecting migratory birds or their nests in accordance with the U.S. Fish & Wildlife Service's "Nesting Birds: Timing Recommendations to Avoid Land Disturbance & Vegetation Clearing"² is allowed prior to the submittal of a project NOI. If vegetation clearing that disturbs the vegetative mat and occurs after the onset of spring thaw (as defined in Appendix C) or conditions that consist of above freezing temperatures that cause melting of snow, the permittee must develop a SWPPP and file an NOI. Operators must receive authorization under this permit and otherwise comply with the terms of this permit prior to such clearing.

4.2.5 Control Storm Water Discharges and Flow Rates

A permittee must include the following control measures to handle storm water and total storm water volume discharges as they apply to the site:

- 4.2.5.1 Divert storm water around the site so that it does not flow onto the project site and cause erosion of exposed soils (diverting storm water around the site can be effective measure as long as it does not cause flooding and/or erosion offsite);
- 4.2.5.2 Slow down or contain storm water that may collect and concentrate within a site and cause erosion of exposed soils;
- 4.2.5.3 Avoid placement of structural control measures in active floodplains to the degree technologically and economically practicable and achievable;
- 4.2.5.4 Place velocity dissipation devices (e.g., check dams, sediment traps, or riprap) along the length of any conveyance channel (of erodible materials) to provide a non-erosive flow velocity. Also place velocity dissipation devices where discharges from the conveyance channel or structure join a water course to prevent erosion and to protect the channel embankment, outlet, adjacent stream bank slopes, and downstream waters; and
- 4.2.5.5 Install permanent storm water management controls, where practical, so that they are functional prior to construction of site improvements (e.g., impervious surfaces).

4.2.6 Protect Steep Slopes

A permittee must consider the following in the selection of control measures as they apply to the project site:

- 4.2.6.1 Design and construct cut-and-fill slopes in a manner that will minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (e.g., track walking);
- 4.2.6.2 Divert concentrated flows of storm water away from and around the disturbed portion of the slope. Applicable practices include, but are not limited to interceptor dikes and swales, grass-lined channels, pipe slope drains, subsurface drains, check dams; and
- 4.2.6.3 Stabilize exposed areas of the slope in accordance with Part 4.5.

4.3 Sediment Control Measures

Sediment control measures (e.g. sediment ponds, traps, filters, etc.) must be constructed as one of the first steps in grading. These control measures must be functional before other land

² <https://www.fws.gov/alaska/pages/nesting-birds-timing-recommendations-avoid-land-disturbance-vegetation-clearing>

disturbing activities take place. A permittee must install, establish, and use any of the following control measures that apply to the project site.

4.3.1 Storm Water Inlet Protection

A permittee must install appropriate protection measures (e.g. filter berms, perimeter controls, temporary diversion dikes, etc.) to minimize the discharge of sediment prior to entry into storm water inlets located on site or immediately downstream of the site.

4.3.2 Water Body Protection

A permittee must install appropriate protection measures (e.g. velocity dissipation devices in accordance with Part 4.2.5.4) to minimize the discharge of sediment prior to entry into the water body for water bodies located on site or immediately downstream of the site.

4.3.3 Down-Slope Sediment Controls

A permittee must establish and use down-slope sediment controls (e.g., silt fence or temporary diversion dike) for any portion of the down-slope and side-slope perimeter where storm water will be discharged from disturbed areas of the site.

4.3.4 Stabilized Construction Vehicle Access and Exit Points

A permittee must establish construction vehicle access and exit points. Access and exit points should be limited to one route, if possible. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

4.3.5 Vehicle Track-Out

A permittee must provide an effective way of minimizing off-site vehicle tracking of sediment from wheels to prevent track-out onto paved surfaces. Where sediment has been tracked-out from a site onto paved roads, sidewalks, or other paved areas outside of the site, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day. Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal.

4.3.6 Dust Generation

A permittee must minimize the generation of dust through the application of water or other dust suppression techniques and prior to vehicle exit.

4.3.7 Stockpile Management

In accordance with Part 4.5.1, a permittee must stabilize or cover stockpiles, protect with sediment control measures. Locate soil stockpiles away from storm water inlets, water bodies, and conveyance channels, if possible. Install a sediment control measure along all downgradient perimeter areas.

4.3.8 Authorized Non-Storm Water Discharges

A permittee must minimize any non-storm water authorized by this permit.

4.3.9 Sediment Basins, where applicable:

- 4.3.9.1 For common drainage locations that serve an area with 10 or more acres disturbed at one time, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from the drainage area from a 2-year, 24-hour storm, or equivalent sediment control measures, must be installed, maintained, and used where practicable until final stabilization of the site.

- 4.3.9.1.1 Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent sediment control measures, must be installed and used where practicable until final stabilization of the site. When computing the number of acres draining into a common location, it is not necessary to include flows from offsite areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin.
- 4.3.9.1.2 In determining whether installing a sediment basin is practicable, the permittee may consider factors such as site soils, slope, available area on-site, etc. In any event, the permittee must consider public safety, especially as it relates to children, as a design factor for the sediment basin, and alternative sediment control measures must be used where site limitations would preclude a safe design.
- 4.3.9.2 For drainage locations which serve 10 or more disturbed acres at one time and where a temporary sediment basin or equivalent controls is not practicable, smaller sediment basins and/or sediment traps should be used. Silt fences, vegetative buffer strips, or equivalent sediment control measures are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions).
- 4.3.9.3 For drainage locations serving less than 10 acres, sediment traps should be used. Silt fences, vegetative buffer strips, or equivalent sediment control measures are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment trap providing storage for a calculated volume of runoff from a 2-year, 24-hour storm event or 3,600 cubic feet of storage per acre drained is provided.
- 4.3.9.4 Surface outlets. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

Note: No installation of sediment basins should be installed in permafrost areas. Installing sediment basins in the presence of permafrost is challenging and might not be practicable in some instances because permafrost creates poor surface drainage that hinders the infiltration of runoff. Also, the excavation of permafrost in summer can trigger thawing and instability.

4.4 Dewatering

- 4.4.1 If a construction activity includes excavation dewatering that may adversely impact a local drinking water well, a DEC-identified contaminated site or groundwater plume, or waters of the U.S., the permittee may be required to obtain authorization under the DEC General Permit for Excavation Dewatering (AKG002000 or most current version) in addition to this permit.
- 4.4.2 A discharge from eligible dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless treated by appropriate control measures. Appropriate control measures include, but are not limited to, sediment basins or traps, dewatering tanks, weir tanks, or filtration systems designed to remove sediment. To the extent feasible, use vegetated, upland areas of the site to infiltrate dewatering water before discharge.

4.5 Soil Stabilization

A permittee must stabilize all disturbed areas of the site to minimize erosion and sedimentation and the resulting discharge of pollutants according to the requirements of this Part. A permittee must ensure that existing vegetation is preserved and a natural buffer is maintained wherever possible, and disturbed portions of the site are stabilized (Part 4.2.3). A permittee should avoid using impervious surfaces for stabilization. Applicable stabilization control measures include, but are not limited to:

- Temporary and permanent seeding;
- Sodding;
- Mulching;
- Rolled erosion control product;
- Compost blanket;
- Soil application of Polyacrylamide (PAM);
- Early application of gravel base on areas to be paved; and
- Dust control.

4.5.1 **Minimum Requirements for Soil Stabilization.** A permittee must consider the selection and implementation of control measures and the sequence of project construction as they apply to the project site.

4.5.1.1 **Deadline to Initiate Stabilization.** Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site or temporarily ceased on any portion of the site and will not resume for a period exceeding:

4.5.1.1.1 Seven (7) calendar days for those areas of the state with a mean annual precipitation of forty (40) inches or greater; or

4.5.1.1.2 Fourteen (14) calendar days for those areas of the state with a mean annual precipitation less than forty (40) inches.

Note: In the context of this provision, “immediately” means no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

Note: Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of seven or 14 or more calendar days (dependent on mean annual precipitation from above), but such activities will resume in the future.

The timeframe above begins counting as soon as you know that construction work on a portion of your site will be temporarily ceased. In circumstances where you experience unplanned or unanticipated delays in construction due to circumstances beyond your control (e.g., sudden work stoppage due to unanticipated problems associated with construction labor, transportation difficulties delays due to weather and site or soil conditions, funding, or other issues related to the ability to work on the site; weather conditions rendering the site unsuitable for the continuation of construction work) and you do not know at first how long the work stoppage will continue, your requirement to immediately initiate stabilization is triggered as soon as you know with reasonable certainty that work will be stopped for the time period above. At that point, you must comply with Parts 4.5.1.1 and 4.5.1.2.

- 4.5.1.1.3 Types of activities considered to constitute initiation of stabilization, but is not limited to:
- 4.5.1.1.3.1 Prepping the soil for vegetative stabilization by performing all activities necessary to initially seed or plant the area to be stabilized or for non-vegetative stabilization by installing or application of physical, structural, or mechanical measures;
 - 4.5.1.1.3.2 Applying mulch or other non-vegetative product to the exposed area;
 - 4.5.1.1.3.3 Seeding or planting the exposed area;
 - 4.5.1.1.3.4 Starting any of the activities in Part 4.5.1.1.3.1 - 4.5.1.1.3.3 on a portion of the area to be stabilized, but not on the entire area; or
 - 4.5.1.1.3.5 Finalizing arrangements (e.g., delivery of stabilization products, scheduling the installation of the products) to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization in Parts 4.5.1.1 and 4.5.1.2.
- 4.5.1.2 **Deadline to Complete Temporary Stabilization Activities.** As soon as practicable, but no later than 14 calendar days after the initiation of soil stabilization measures consistent with Part 4.5.1.1, the following are required to be completed:
- 4.5.1.2.1 For vegetative stabilization, all activities necessary to initially seed or plant the area to be stabilized; and/or
 - 4.5.1.2.2 For non-vegetative stabilization, the installation or application of all such non-vegetative measures.
Note: DEC may determine, based on an inspection carried out under Part 6.6 and corrective actions required under Part 8.1.1.4 Corrective Action Required by DEC, that the level of sediment discharge on the site makes it necessary to require a faster schedule for completing stabilization. For instance, if sediment discharges from an area of exposed soil that is required to be stabilized are compromising the performance of existing storm water controls, DEC may require stabilization to correct this problem and may take appropriate enforcement action.
- 4.5.1.3 **Exceptions to the Deadlines for Initiating and Completing Stabilization.**
- 4.5.1.3.1 *Projects in Arid or Semi-Arid, or Drought-Stricken Areas.* For those areas of the state with a mean annual precipitation is less than or equal to 20 inches and where initiating perennial vegetative stabilization measures is infeasible within 14 calendar days after construction activity has temporarily ceased, vegetative or non-vegetative stabilization measures must be initiated immediately.
Note: In the context of this provision, "immediately" means no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.
 - 4.5.1.3.1.1 Immediately initiate, and within 14 calendar days complete, the installation of non-vegetative stabilization measures to prevent erosion.
 - 4.5.1.3.1.2 If construction is occurring during a drought-stricken period, indicate in the SWPPP the beginning and ending dates of the drought-stricken period and your site conditions. Include the schedule for initiating and completing vegetative stabilization.

- 4.5.1.3.2 *Deadlines for projects that are affected by circumstances beyond the control of the permittee that delay the initiation and/or completion of vegetative stabilization as required in Parts 4.5.1.1 and/or 4.5.1.2. If the permittee is unable to meet the deadlines in Parts 4.5.1.1 and/or 4.5.1.2 due to circumstances beyond the permittee's control³, and is using vegetative cover for temporary stabilization, the permittee may comply with the following stabilization deadlines instead:*
- 4.5.1.3.2.1 Immediately initiate, and within 14 calendar days complete, the installation of temporary non-vegetative stabilization measures to prevent erosion;
- 4.5.1.3.2.2 Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on the site; and
- 4.5.1.3.2.3 Document the circumstances in the SWPPP that prevent meeting the deadlines required in Parts 4.5.1.1 and/or 4.5.1.2 and the proposed schedule for initiating and completing stabilization.
- 4.5.1.3.3 Winter Considerations, see Part 4.12.
- 4.5.1.3.4 In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.
- 4.5.1.4 **Deadline to Complete Final Stabilization Activities.** A permittee must consider the selection and implementation of control measures and the sequence of project construction as they apply to the project site.
- 4.5.1.5 The permittee must within seven (7) calendar days of initiating final stabilization complete or continue maintenance for the following on any portion of the site that has reached final grading and for areas where clearing, grading, excavating, or other earth disturbing activities have permanently ceased:
- 4.5.1.5.1 All soil conditioning, seeding, watering, mulching, and any other required activities for the establishment of vegetative cover;
- 4.5.1.5.2 The installation or application of all such measures for vegetative cover; and/or
- 4.5.1.5.3 The placement of non-vegetative final stabilization measures.
- 4.5.2 **Stabilization Requirements for Terminating Permit Authorization**

To terminate authorization under this permit, final stabilization (as defined in Appendix C), must be achieved on all portions of the site for which a permittee is responsible and all ground disturbing construction activity or use of related support activities must be completed, in accordance with Part 10.2.1.1.

4.6 Treatment Chemicals

- 4.6.1 The use of treatment chemicals to reduce sediment in a storm water discharge is allowed provided that all the requirements of this Part are met. Use conventional sediment controls before and after the application of treatment chemicals. Chemicals may only be applied where storm water is treated upstream and is directed to a sediment control (e.g., sediment trap, sediment basin) before discharge.

³ Examples include problems with the supply of seed stock or with the availability of specialized equipment, unsuitability of soil conditions due to excessive precipitation and/or flooding.

- 4.6.2 Select appropriate treatment chemicals. Chemicals must be appropriately suited to the types of soils likely to be exposed during construction and present in the discharges being treated (i.e., the expected turbidity, pH, and flow rate of storm water flowing into the chemical treatment system or area, etc.)
- 4.6.3 Minimize discharge risk from stored chemicals. Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), with adequate spill kits available on-site to respond in the event of a discharge of treatment chemicals.
- 4.6.4 Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document in your SWPPP specific departures from these specifications and how they reflect good engineering practice.
- 4.6.5 Application of treatment chemicals through the use of manufactured products (e.g., gel bars, gel logs, floc blocks, etc.) must be used in combination with adequate ditch check dams, sediment traps, sediment basins, or physical control measure designed to settle out chemically treated storm water and minimize the presence of treatment chemicals before discharges reach waters of the U.S. At a minimum there must be adequate ditch length downstream of the last manufactured product prior to reaching the discharge point into a water of the U.S. to provide a place for sedimentation to occur.
- 4.6.6 Ensure proper training. Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate product-specific training, including but not limited to proper dosing requirements, handling, storage, and disposal.
 - 4.6.6.1 Document the following in the SWPPP:
 - 4.6.6.1.1 Specific chemicals and chemical treatment systems used;
 - 4.6.6.1.2 Names and titles of person(s) who handle and apply treatment chemicals;
 - 4.6.6.1.3 Title of training conducted, date, instructor name, and attendees.
- 4.6.7 If the permittee plans to use cationic treatment chemicals or an active treatment system (as defined in Appendix C) they must submit a request to the Department (Permitting Program, Appendix A part 1.1.1) fourteen (14) calendar days in advance of proposed usage. The request must include the following:
 - 4.6.7.1 Operator Name, mailing address, phone number, and email address;
 - 4.6.7.2 Project/Site name, physical address, contact name, phone number, email address and permit authorization number;
 - 4.6.7.3 Site Map with all receiving waterbodies, proposed location of chemical treatment system, and proposed point of discharge into receiving waterbodies;
 - 4.6.7.4 Schematic drawing of the proposed treatment system; and
 - 4.6.7.5 Description of the proposed treatment system including; type of system being used, chemicals being used, estimated start and finish date, sampling and recordkeeping schedule and reporting, and name of treatment system operator or company.
- 4.6.8 The permittee must perform all additional measures as conditioned by the Department authorization to ensure that the use of such chemicals will not cause an exceedance of water quality standards.

4.7 Prohibited Discharge

4.7.1 A permittee is prohibited from discharging the following from the site:

- 4.7.1.1 Wastewater from concrete washout, unless managed by an appropriate control measure;
- 4.7.1.2 Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other hazardous construction materials;
- 4.7.1.3 Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
- 4.7.1.4 Soaps or solvents used in vehicle and equipment washing.

4.8 Good Housekeeping Measures

A permittee must design, install, implement, and maintain effective good housekeeping measures to prevent and/or minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:

- Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to storm water. Minimization of exposure is not required in cases where the exposure to precipitation and to storm water will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of storm water contamination (such as final products and materials intended for outdoor use); and
- Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

A permittee must include appropriate measures for any of the following activities that are used at the site.

- 4.8.1 **Washing of Equipment and Vehicles and Wheel Wash-Down.** If a permittee conducts washing of equipment or vehicles and/or wheel wash-down at the site the permittee must comply with the following requirements:
 - 4.8.1.1 Designate areas to be used for washing of equipment and vehicles and/or wheel wash-down and conduct such activities only in these areas;
 - 4.8.1.2 Locate such activities, to the extent practicable, away from storm water conveyance channels, storm water inlets, and waters of the U.S.;
 - 4.8.1.3 Treat all wash water in a sediment basin or use alternative control measures that provide equivalent or better treatment prior to discharge; and
 - 4.8.1.4 To comply with the prohibition in Part 4.7.1.4, the discharge of soaps and solvents used in equipment and vehicle washing and/or wheel wash-down is strictly prohibited.
- 4.8.2 **Fueling and Maintenance Areas.** If a permittee conducts fueling and/or maintenance activities for equipment and vehicles at the site the permittee must comply with the following requirements:
 - 4.8.2.1 Designate areas to be used for fueling and/or maintenance of equipment and vehicles and conduct such activities only in these areas (the designated area may move from one location to another on linear projects);

- 4.8.2.2 Locate such activities, to the extent practicable, away from storm water conveyance channels, storm water inlets, and waters of the U.S.;
- 4.8.2.3 Minimize the exposure to precipitation and storm water or use secondary containment structures designed to eliminate the potential for spills or leaked chemicals; and
- 4.8.2.4 To comply with the prohibition in Part 4.7.1.3, a permittee must:
 - 4.8.2.4.1 Clean up spills or contaminated surfaces immediately;
 - 4.8.2.4.2 Ensure adequate clean up supplies are available at all times to handle spills, leaks, and disposal of used liquids;
 - 4.8.2.4.3 Use drip pans or absorbents under or around leaky equipment and vehicles; and
 - 4.8.2.4.4 Dispose of liquid wastes or materials used for fueling and maintenance in accordance with Part 4.8.6.
- 4.8.3 **Staging and Material Storage Areas.** If a permittee maintains staging and material storage areas at the site the permittee must comply with the following requirements:
 - 4.8.3.1 Designate areas to be used for staging and material storage areas;
 - 4.8.3.2 Locate such activities, to the extent practicable, away from storm water conveyance channels, storm water inlets, and waters of the U.S.; and
 - 4.8.3.3 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.
- 4.8.4 **Washout of Applicators/Containers used for Paint, Concrete, and Other Materials.** If a permittee conducts washing of applicators and/or containers used for paint, concrete, and other materials at the site, the permittee must comply with the following requirements:
 - 4.8.4.1 Designate areas to be used for washout;
 - 4.8.4.2 Locate such activities, to the extent practicable, away from storm water conveyance channels, storm water inlets, and waters of the U.S.;
 - 4.8.4.3 Direct all concrete, paint, and other material washout activities into a lined, water-tight container or pit to ensure there is no discharge into the underlying soil and onto the surrounding areas;
 - 4.8.4.4 Dispose of liquid wastes in accordance with Part 4.8.6; and
 - 4.8.4.5 For concrete washout areas, remove hardened concrete waste when it has reached one-half (½) the height of the container or pit and dispose of in accordance with Part 4.8.6.
- 4.8.5 **Fertilizer or Pesticide Use.** If a permittee uses fertilizers or pesticides the permittee must comply with the following requirements:
 - 4.8.5.1 Application of fertilizers and pesticides in a manner and at application rates that will minimize the loss of chemical to storm water runoff. Manufacturers' label requirements for application rates and disposal requirements must be followed; and
 - 4.8.5.2 Use pesticides in compliance with federal, state, and local requirements.
- 4.8.6 **Storage, Handling, and Disposal of Construction Waste.** If a permittee stores, handles and/or disposes of construction waste at the site, the permittee must comply with the following requirements:
 - 4.8.6.1 Locate areas dedicated for management of construction waste, to the extent practicable, away from storm water conveyance channels, storm water inlets, and waters of the U.S.;

- 4.8.6.2 Dispose of all collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other domestic wastes according to federal, state and local requirements;
- 4.8.6.3 Store hazardous or toxic waste in appropriate sealed containers and dispose of these wastes in accordance with manufacture's recommended method of disposal or federal, state or local requirements; and
- 4.8.6.4 Provide containment of sanitation facilities (e.g., use of portable toilets) to prevent discharges of pollutants to the storm water drainage system or receiving water. Clean or replace sanitation facilities and inspect them regularly for leaks and spills.

4.9 Spill Notification

- 4.9.1 A permittee is prohibited from discharging hazardous substance or oil from a spill or other release. Upon discovery of a spill of a reportable quantity, a permittee must report the spill in accordance with Part 9.3.

4.10 Projects near a Public Water System (PWS)

- 4.10.1 Where the project intersects a PWS drinking water protection area (DWPA) (see Part 5.3.5.15), notify the PWS contact. PWS contact information can be obtained using the online application, Drinking Water Watch, <http://dec.alaska.gov:8080/DWW> by entering the appropriate 6-digit PWS ID (e.g., 225025).
- 4.10.2 Within the identified DWPA, restrict project activities that could significantly change the natural surface water drainage or groundwater gradient.
- 4.10.3 Immediately notify the nearby PWS of any identified potential contamination, such as spills or excess erosion.

4.11 Permanent Storm Water Management Control

A permittee must comply with applicable APDES MS4 permit requirements, local requirements, and the applicable requirements under 18 AAC 72.600 (i.e., Nondomestic Wastewater System Plan Review) regarding the design and installation of permanent storm water management controls. Structural measures should be placed on upland soils to the degree practicable and achievable.

- 4.11.1 A permittee who constructs, alters, installs, modifies, or operates any part of a permanent storm water management control at a site and is located outside a municipality operating under an APDES MS4 permit must submit a copy of the engineering plans in accordance with 18 AAC 72.600 to DEC for review to the Permitting Program in Appendix A Part 1.1.1 at least 30 calendar days before the commencement of construction.
- 4.11.2 A permittee who constructs, alters, installs, modifies, or operates any part of a permanent storm water management control measure at a site and is located inside a municipality operating under an APDES MS4 permit must submit a copy of the required submittal information to the respective MS4 operator for review. Permittees must contact the MS4 Operator for submittal deadlines. See <http://dec.alaska.gov/water/wastewater/stormwater/sw-municipal> for a list of MS4 Operators and their contact information

4.12 Winter Considerations

- 4.12.1 **Winter Shutdown.** A permittee who plans to cease construction during the winter and resume construction the next summer must plan for winter shutdown and prepare their site to manage storm water flows until construction activities resume. The permittee must identify the anticipated dates of fall freeze-up and spring thaw (see Appendix C) for their site and use these dates to plan for winter shutdown. **Frozen ground by itself is not considered an acceptable control measure for stabilization.**
- 4.12.1.1 A permittee must ensure the following measures are complete prior to fall freeze-up until construction activities resume:
- 4.12.1.1.1 Temporary or final stabilization for conveyance channels;
 - 4.12.1.1.2 Temporary or final stabilization for disturbed slopes, disturbed soils, and soil stockpiles; and
 - 4.12.1.1.3 Proper installation of erosion and sediment control measures in anticipation of spring thaw.
- 4.12.1.2 Where temporary stabilization is precluded by snow cover or frozen ground conditions prior to the anticipated date of Fall Freeze-up, stabilization measures must be initiated as soon as practicable following the actual spring thaw.
- 4.12.2 **Winter Construction.** A permittee conducting winter construction activities that may extend beyond spring thaw must install appropriate control measures to minimize erosion and sediment runoff during spring thaw and summer rainfall⁴.
- Permit authorization is not required for the construction of ice roads or the placement of sand or gravel on frozen tundra with no excavation or potential to pollute waters of the U.S.

4.13 Maintenance of Control Measures

- 4.13.1 A permittee must maintain all control measures, good housekeeping measures, and other protective measures in effective operating condition. If site inspections required by Part 6.0 identify control measures, good housekeeping measures, or other protective measures that are not operating effectively, the permittee must implement corrective actions in accordance with Part 8.0.
- 4.13.2 If existing control measures need to be modified or if additional control measures are necessary for any reason, the permittee must complete any corrective action in accordance with the deadlines stated in Part 8.2.
- 4.13.3 A permittee must remove sediment from silt fences, check dams, berms or other controls before the accumulated sediment reaches:
- 4.13.3.1 One-third ($\frac{1}{3}$) the distance up the above-ground height (or it reaches a lower height based on manufacturer's specifications) for silt fences;
 - 4.13.3.2 One-half ($\frac{1}{2}$) the distance up the above-ground height (or it reaches a lower height based on manufacturer's specifications or BMP guidance manuals) for storm water inlets, check dams, berms, or other control measure; or
 - 4.13.3.3 For sediment traps or sediment ponds, the permittee must remove accumulated sediment when the design capacity has been reduced by fifty (50%) percent.

⁴ The Alaska Storm Water Guide, Chapters 3 and 4, provide guidance on the selection, design, and installation of winter construction practices and controls.

4.14 Storm Water Lead and Training of Employees

A permittee must identify one “qualified person” (as defined in Appendix C) as the storm water lead/SWPPP Manager to ensure the control measures described in the SWPPP are implemented as written, or modified as necessary, during construction. The qualifications and training for the storm water lead/SWPPP Manager, SWPPP preparer, storm water inspector, and monitoring person for a site varies with the size of the project. A permittee must ensure that employees and subcontractors receive adequate training to ensure proper installation, maintenance, and removal of the control measures described in the SWPPP for the project.

4.15 Applicable Federal, State, Tribal, or Local Requirements

A permittee must ensure that the storm water control measures implemented at the site are consistent with all applicable federal, state, tribal, or local requirements for soil and erosion control and storm water management.

5.0 STORM WATER POLLUTION PREVENTION PLAN

5.1 Storm Water Pollution Prevention Plan (SWPPP)

- 5.1.1 A permittee must prepare a SWPPP for each site before submitting their NOI for permit coverage and document the control measures implemented at the site. The SWPPP is intended to document the selection, design, installation, and implementation of control measures that are being used to comply with the requirements set forth in Parts 3.0 and 4.0.
- 5.1.2 The SWPPP must, at a minimum:
 - 5.1.2.1 Include the information described in Part 5.3.
 - 5.1.2.2 Be implemented as written, including any modifications for changes in design or field conditions, until the submittal of the NOT.
 - 5.1.2.3 Be developed by a “qualified person” (as defined in Appendix C).
 - 5.1.2.4 Be signed, dated, and certified in accordance with Appendix A, Part 1.12.

5.2 Deadlines for SWPPP Preparation

- 5.2.1 An operator must prepare a SWPPP before submitting the NOI for authorization under this permit.
- 5.2.2 A permittee with an ongoing project with authorization under a previous construction general permit and a SWPPP that was developed based on that permit must review and update the SWPPP prior to submitting the NOI for authorization under this permit (see Part 2.4.2.1.2).
- 5.2.3 A permittee must provide a copy of the applicable portions of the SWPPP, or site-specific training to each subcontractor who engages in soil disturbing activities prior to the subcontractor conducting any soil disturbing activity. Revisions to the SWPPP that affect the subcontractor’s soil disturbing activities must be provided to the subcontractor in a timely manner.

5.3 SWPPP Contents

At a minimum, the SWPPP must include the following:

5.3.1 Permittee(s)

Identify the permittee(s) for the site and any subcontractors that may work on the site, including the areas where the subcontractors may be or are expected to conduct activities covered by this permit.

5.3.2 Storm Water Contact(s)

Identify the following qualified person(s) responsible for the following (Note: A small project may have all these responsibilities carried out by one person):

- 5.3.2.1 Storm Water Lead;
- 5.3.2.2 Updating the SWPPP according to Part 5.9;
- 5.3.2.3 Conducting inspections according to Part 6.0;
- 5.3.2.4 Conducting monitoring (if applicable) according to Part 7.0; and
- 5.3.2.5 Operating an Active Treatment System (if applicable) according to 4.6.7.

5.3.3 Project Site-Specific Conditions. Briefly describe the existing site-specific conditions, including:

- 5.3.3.1 The mean annual precipitation based on the nearest weather station;
- 5.3.3.2 Site conditions such as soils, topography, drainage patterns, approximate growing season, and vegetation; and
- 5.3.3.3 Receiving waters such as impaired waters or waters listed in the Alaska Department of Fish & Game (ADF&G) Anadromous Waters Catalog.

5.3.4 Nature of Construction Activity. Briefly describe the nature of the construction activity, including:

- 5.3.4.1 The function of the project (e.g., low density residential, shopping mall, subdivision, airport, highway, etc.);
- 5.3.4.2 The intended sequence and timing of activities that disturb soils at the site;
- 5.3.4.3 Size of the property including support activities described in Part 1.4.2.3 (in acres) and the total area expected to be disturbed by excavation, grading, or other construction activities (in acres);
- 5.3.4.4 A general location map (e.g., USGS quadrangle map, a portion of a city or county map, or other map) with enough detail to identify the location of the construction site and waters of the U.S. within one mile of the site; and
- 5.3.4.5 Identification of all potential sources of pollutants that may reasonably be expected to affect the quality of the storm water discharges from the site.

5.3.5 Site Map(s). The SWPPP must contain a legible site map (or set of maps for large projects) showing the entire site and identifying the following site-specific information:

- 5.3.5.1 North Arrow and bar scale;
- 5.3.5.2 Boundaries of the property where construction activities will occur;
- 5.3.5.3 Locations where earth-disturbing activities will occur, noting any phasing of construction activities;
- 5.3.5.4 Location of areas that will not be disturbed and natural features to be preserved;
- 5.3.5.5 Location of all storm water conveyances including ditches, pipes, and swales;
- 5.3.5.6 Locations of storm water inlets and outfalls, with a unique identification code for each outfall;

- 5.3.5.7 Municipal separate storm sewer systems, if present;
 - 5.3.5.8 Direction(s) of storm water flow and approximate slopes anticipated after grading activities;
 - 5.3.5.9 Locations where control measures will be or have been installed;
 - 5.3.5.10 Locations where exposed soils will be stabilized or have been stabilized;
 - 5.3.5.11 Locations where post-construction storm water controls will be or have been installed;
 - 5.3.5.12 Locations of support activities described in Part 1.4.2.3;
 - 5.3.5.13 Locations where authorized non-storm water will be used, including the types that will be used on-site;
 - 5.3.5.14 Locations of all waters of the U.S. (including significant wetland areas 10,000 square feet or greater) on the site and those located within 2,500 feet of the site boundary that may be affected by storm water discharges from the site;
 - 5.3.5.15 Location of existing public water system (PWS) drinking water protection areas (DWPA) for PWS sources (e.g. springs, wells, or surface water intakes) that intersect the boundary of the proposed project/permit area. The DWPA's can be found using the interactive web map application, "*Alaska DEC Drinking Water Protection Areas*", located at <http://dec.alaska.gov/das/GIS/apps.htm>.
 - 5.3.5.16 Locations where storm water and/or authorized non-storm water discharges to waters of the U.S. (including wetlands) or an MS4;
 - 5.3.5.17 Sampling Point(s) (if applicable): A permittee subject to the requirements of Parts 3.2 must include the location(s) of the storm water discharge sampling point(s). For a linear project, indicate which sampling points are considered substantially identical, in accordance with Part 7.3.5; and
 - 5.3.5.18 Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.
- 5.3.6 **Control Measures.** The SWPPP must describe and document the location of all control measures that will be installed and maintained to meet the requirements in Parts 3.6 and 4.0. For each major activity identified in the project description, the SWPPP must clearly document the following.
- 5.3.6.1 The type of control measure to be installed and maintained and the location on the site for installation.
 - 5.3.6.2 The general sequence during the construction process in which the control measures will be installed and made operational, as well as the manufacturer's or BMP manual specifications for installation.
 - 5.3.6.3 The general sequence of the stabilization practices that will be used to achieve temporary or final stabilization on exposed portions of the site as required in Part 4.5.
 - 5.3.6.4 The type of treatment chemicals used on the site and a description of the general location of their use at the site, in accordance with in Part 4.6.
 - 5.3.6.5 The information submitted to DEC for an active treatment system, in accordance with Part 4.6.7.
 - 5.3.6.6 The good housekeeping measures that will be used at the site, if any, in accordance with Part 4.8.

- 5.3.6.7 A description of spill prevention and response measures that will be used at the site, in accordance with Part 4.9. The permittee may reference the existence of other plans for Spill Prevention and Control and Countermeasure (SPCC) for the project, provided that a copy of the other plan(s) is kept with the SWPPP.
- 5.3.6.8 A description of all permanent storm water management controls that will be installed at the site, including their location, in accordance with Part 4.11.
- 5.3.6.9 For projects that expect a winter shutdown, the SWPPP must provide a description of the following:
 - 5.3.6.9.1 Anticipated dates of fall freeze-up and spring thaw (as defined in Appendix C); and
 - 5.3.6.9.2 The methods the permittee will use to address winter considerations in accordance with Part 4.12.
- 5.3.6.10 A description of maintenance procedures for the control measures in accordance with Part 4.13.
- 5.3.6.11 A description of the training relevant to the construction activity and control measures used at the site in accordance with Part 4.14.
- 5.3.7 **Construction and Waste Materials.** The SWPPP must describe in general terms the type of construction and waste materials expected to be stored at the site with updates as appropriate and describe the measures for the handling and disposal of all wastes generated at the site, including clearing and demolition debris or other waste soils removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.
- 5.3.8 **Locations of Other Industrial Storm Water Discharges.** The SWPPP must describe and identify the location of any storm water discharge associated with support activities described in Part 1.4.2.3. This includes storm water discharges from dedicated asphalt plants and dedicated concrete plants that are covered by this permit.
- 5.3.9 **Non-Storm Water Discharges.** The SWPPP must identify all authorized sources of non-storm water discharges listed in Part 1.4.3 of this permit, except for flows from fire-fighting activities that are combined with storm water discharges associated with construction activity at the site. The SWPPP must also describe the good housekeeping measures used to control or reduce non-storm water discharges.

5.4 Inspections

- 5.4.1 The SWPPP must document the procedures for performing site inspections specified by Part 6.0 of this permit, and where necessary, procedures for taking corrective actions in accordance with Part 8.0. At a minimum, the SWPPP must document the following:
 - 5.4.1.1 Person(s) or positions of person(s) responsible for conducting site inspections;
 - 5.4.1.2 Schedules to be followed for conducting inspections;
 - 5.4.1.3 Any inspection checklist or form that will be used to collect and summarize data and observations; and
 - 5.4.1.4 How conditions found that require corrective action will be addressed.
- 5.4.2 A record of each inspection and of any corrective actions taken in accordance with Part 8.0 must be retained with the SWPPP for at least three years from the date that permit authorization expires or is terminated.

5.5 Monitoring Plan (if applicable)

- 5.5.1 A permittee subject to the monitoring requirements in Part 3.2 must include a copy of the monitoring plan that complies with Part 7.0. At a minimum the SWPPP must document the following:
 - 5.5.1.1 Person(s) or positions of person(s) responsible for conducting monitoring;
 - 5.5.1.2 Schedules to be followed for conducting the monitoring;
 - 5.5.1.3 Any monitoring checklist or form that will be used to record monitoring results; and
 - 5.5.1.4 How conditions found that require corrective action will be addressed.
 - 5.5.1.5 A record of each monitoring event,
 - 5.5.1.6 The annual report submitted to DEC in accordance with Part 9.1, and
 - 5.5.1.7 Any corrective actions taken in accordance with Part 8.0.
- 5.5.2 A record of each monitoring event and of any corrective actions taken in accordance with Part 7.0 and 8.0 must be retained with the SWPPP for at least three years from the date permit authorization expires or is terminated.

5.6 Documentation of Permit Eligibility Related to a Total Maximum Daily Load

The SWPPP must include documentation supporting a determination of permit eligibility with regards to waters that have an EPA-established or approved TMDL. See Part 3.2 for additional information to determine eligibility related to a TMDL. The SWPPP must include the following:

- 5.6.1 Identification of whether the discharge is identified, either specifically or generally, in an EPA-established or approved TMDL and any associated allocations, requirements, and assumptions identified for the discharge;
- 5.6.2 Summaries of consultation with state or federal TMDL authorities on consistency of SWPPP conditions with the approved TMDL; and
- 5.6.3 Measures taken by the permittee to ensure that the discharge of pollutants from the site is consistent with the assumptions and requirements of the EPA-established or approved TMDL, including any specific wasteload or load allocation that has been established that would apply to the discharge.

5.7 Documentation of Permit Eligibility Related to Endangered Species

The SWPPP must include documentation supporting a determination of permit compliance with regard to the Endangered Species Act (ESA), including:

- 5.7.1 Information on whether federally-listed endangered or threatened species or designated critical habitat may be in the project area;
- 5.7.2 Whether such species or critical habitat may be adversely affected by storm water discharges or storm water discharge-related activities from the project;
- 5.7.3 Results of the listed species and critical habitat screening determinations;
- 5.7.4 Any correspondence between the U.S. Fish and Wildlife Service (USFWS), EPA, National Marine Fisheries Service (NMFS), or others and the permittee regarding listed species and critical habitat, including any notification that delays the permittee's authorization to discharge under this permit; and
- 5.7.5 A summary description of measures necessary to protect federally-listed endangered or threatened species or federally-designated critical habitat.

5.8 Post-Authorization Records

5.8.1 **Copy of Permit Requirements.** The SWPPP must contain the following documents:

- 5.8.1.1 A copy of this permit;
- 5.8.1.2 A copy of the signed and certified NOI form submitted to DEC; and
- 5.8.1.3 Upon receipt, a copy of the letter from DEC authorizing permit coverage and providing the permit tracking number.

5.8.2 **Additional Documentation Requirements.** Summaries of the following information, or copies of the reports, must be maintained with the SWPPP by the permittee following authorization under this permit:

5.8.2.1 Grading and Stabilization Activities Log

- 5.8.2.1.1 Date(s) when grading activities occur;
- 5.8.2.1.2 Description of Grading Activity and Location
- 5.8.2.1.3 Date(s) when construction activities temporarily or permanently cease on a portion of the site;
- 5.8.2.1.4 Date(s) when stabilization measures are initiated;
- 5.8.2.1.5 Description of Stabilization Measure.
- 5.8.2.2 Date of beginning and ending period for winter shutdown;
- 5.8.2.3 Copies of inspection reports as required in Part 5.4.2;
- 5.8.2.4 Copies of rainfall monitoring as required in Part 7.3.9.2;
- 5.8.2.5 Copies of monitoring reports or annual reports (if applicable) as required in Part 5.5.2 and 9.1.
- 5.8.2.6 Log of SWPPP modifications;
- 5.8.2.7 Documentation required in Part 4.6 (i.e. Material Safety Data Sheet, manufacturer and/or supplier test results, or employee training information)
- 5.8.2.8 Records of employee training, including the date(s) training was received;
- 5.8.2.9 Documentation of maintenance and repairs of control measures, including date(s) of regular maintenance, date(s) of discovery of areas in need of repair/maintenance, and date(s) that the control measure(s) returned to full function; and
- 5.8.2.10 Description of any corrective action taken at the site, including the Corrective Action Log (Required in Permit Part 8.3) that records event(s) that caused the need for corrective action and dates when problems were discovered and modifications occurred, in accordance with Part 8.0.

5.9 Maintaining an Updated SWPPP

5.9.1 **SWPPP Modifications.** A permittee must modify the SWPPP, including site map(s) in response to any of the following:

- 5.9.1.1 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 the SWPPP. This includes changes made in response to corrective actions triggered under Part 8.0 and notifications by the permittee(s);
- 5.9.1.2 If inspections or investigations by site staff or by local, state, tribal or federal officials determine that SWPPP modifications are necessary for compliance with this permit; or

- 5.9.1.3 To reflect any revisions to applicable federal, state, tribal, or local law that affect the control measure implemented at the construction site.
- 5.9.2 **SWPPP Amendment Log.** A permittee must keep a log showing dates, name of person authorizing the change, and a brief summary of changes for all SWPPP modifications (e.g., adding new control measures, changes in project design, or storm events that cause for the replacement of control measures).
- 5.9.3 **Deadlines for SWPPP Modifications.** 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.

5.10 Additional SWPPP Requirements

5.10.1 Retention of the SWPPP

- 5.10.1.1 A copy of the SWPPP (including a copy of the permit), NOI, and acknowledgement letter from DEC must be retained at the construction site or other location easily accessible during normal business hours. If the permittee has day-to-day operational control over SWPPP implementation, the permittee must have a copy of the SWPPP available at a central location at the site for the use of all those identified as having responsibilities under the SWPPP whenever they are on the construction site. If an on-site location is unavailable to store the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance at the site.

5.10.2 Main Entrance Signage

A sign or other notice must be posted conspicuously near the main entrance of the site. If there is insufficient space near the main entrance to post a sign or notice, the notice can be posted in a local public building such as the town hall or public library. For linear projects (e.g. highways or utilities) the sign or other notice must be posted at a location near the main entrance of the construction project (such as where a pipeline project crosses a public road) where the public may read it during non-business hours. At a minimum, the sign or other notice must contain the following information:

- 5.10.2.1 Permit authorization number assigned to the NOI,
 - 5.10.2.2 Operator contact name and phone number for obtaining additional construction site information, and
 - 5.10.2.3 The location of the SWPPP or the 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.
- ### **5.10.3 Availability of SWPPP**
- 5.10.3.1 A permittee is required to keep a current copy of the SWPPP at the site or other location easily accessible during normal business hours.
 - 5.10.3.2 A permittee may move the location where the SWPPP is available during the winter shut down for a site that is expected to have a winter shutdown provided that the winter SWPPP location conforms to the requirements of Part 5.10.2.

- 5.10.3.3 A permittee must ensure that each subcontractor who engages in soil disturbing activities is provided access to a copy of the SWPPP and is familiar with relevant portion(s) thereof that relate to the subcontractor's activities at the project.
- 5.10.3.4 The SWPPP must be made available upon request by: DEC; EPA; a state, tribal or local agency approving sediment and erosion plans, grading plans, or storm water management plans; local government officials; the operator of a MS4 receiving discharges from the site; and representatives of the ADF&G, USFWS or the NMFS. An electronic or hard copy of the SWPPP must be made available in its entirety to DEC staff for review and copying upon request.
- 5.10.3.5 DEC may provide access to portions of the SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public per Appendix A, Part 1.13, but may not be withheld from those staff cleared for CBI review within DEC, EPA, USFWS, or NMFS.

5.10.4 Signature and Certification

The SWPPP must be dated, signed, and certified in accordance with the requirements of Appendix A, Part 1.12.

5.11 Requirements for Different Types of Operators

The permittee may meet one or both of the operational control components in the definition of operator found in Appendix C. Part 5.11.3 applies to all permittees having control over only a portion of a construction site.

- 5.11.1 If the permittee has operational control over construction plans and specifications, the permittee must ensure that:
 - 5.11.1.1 The project specifications meet the minimum requirements of this Part and all other applicable permit conditions;
 - 5.11.1.2 The SWPPP indicates the areas of the project where the permittee has operational control over project specifications, including the ability to make modifications in specifications;
 - 5.11.1.3 All other permittees implementing portions of the SWPPP (or their own SWPPP) who may be impacted by a change to the construction plan are notified of such changes in a timely manner; and
 - 5.11.1.4 The SWPPP indicates the name of the party(ies) with day-to-day operational control of those activities necessary to ensure compliance with the SWPPP or other permit conditions.
- 5.11.2 If the permittee has operational control over day-to-day activities, the permittee must ensure that:
 - 5.11.2.1 The SWPPP meets the minimum requirements of this Part and identifies the parties responsible for implementation of control measures identified in the plan;
 - 5.11.2.2 The SWPPP indicates areas of the project where the permittee has operational control over day-to-day activities; and
 - 5.11.2.3 The SWPPP indicates the name of the parties with operational control over project specifications (including the ability to make modifications in specifications).
- 5.11.3 If the permittee has operational control over only a portion of a larger common plan of development (e.g., one of four homebuilders in a subdivision), the permittee must ensure that:

- 5.11.3.1 They comply with all applicable control measures, terms, and conditions of this permit as it relates to the activities on the permittee's portion of the construction site, including, but not limited to: monitoring (if applicable), inspections, and protection of endangered species, and critical habitat..
- 5.11.3.2 They implement a portion of a comprehensive SWPPP or develop and implement a separate SWPPP that covers only their portion of the project in compliance with Part 5.1.
- 5.11.3.3 Activities on their portion of the site do not render another party's control measures ineffective.

6.0 INSPECTIONS

6.1 Inspection Frequency

- 6.1.1 A permittee must conduct inspections at one of the following schedules:
 - 6.1.1.1 Once every seven calendar days; or
 - 6.1.1.2 Once every 14 calendar days and within 24 hours of the end of a storm event that resulted in a discharge from the site; or
 - 6.1.1.3 For areas of the state where the mean annual precipitation is forty (40) inches or greater, or relatively continuous precipitation or sequential storm events, inspect at least once every seven (7) calendar days.
- 6.1.2 A permittee must specify in the SWPPP which schedule will be followed.

6.2 Case-by-Case Reductions in Inspection Frequency

A permittee may reduce inspection frequency in the following situations:

- 6.2.1 If the entire site is stabilized in accordance with Part 4.5, a permittee may reduce the frequency of inspections to at least once every calendar month (minimum of 7 days separation 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;
- 6.2.2 If portions of the site have achieved final stabilization in accordance with Part 4.5 but construction activity remains on other portions of the site, a permittee may suspend inspections for those portions that have achieved final stabilization; however, the permittee must conduct subsequent inspections within two business days of the end of a storm event that results in a discharge from that portion of the site previously considered finally stabilized;
- 6.2.3 If the project is undergoing winter shutdown (as defined in Appendix C), implemented control measures with Part 4.12 Winter Considerations, and is documented in accordance with Part 5.3.6.9, a permittee may stop inspections 14 calendar days after the anticipated fall freeze-up and must resume inspections in accordance with Part 6.1 at least 21 calendar days prior to the anticipated spring thaw;
- 6.2.4 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 (3) months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain events) make discharges likely, the permittee must immediately resume a regular inspection frequency; or

- 6.2.5 If the entire site has achieved final stabilization (as defined in Appendix C) and a NOT has been submitted, no further inspection requirements apply to the site.

6.3 Qualified Person

An inspection must be conducted by a qualified person (as defined in the Appendix C) provided by a permittee.

6.4 Site Inspection

- 6.4.1 **Location of Inspections.** During a site inspection, a permittee must at a minimum inspect the following areas of the site:

- 6.4.1.1 Areas of the site disturbed by construction activity (e.g., areas cleared, graded, or excavated);
- 6.4.1.2 Areas used for storage of materials that are exposed to precipitation;
- 6.4.1.3 Areas where control measures are installed and maintained at the site;
- 6.4.1.4 Areas where sediment and other pollutants have accumulated or been deposited and may have the potential for or are entering the storm water conveyance system;
- 6.4.1.5 Locations where vehicles enter or exit the site;
- 6.4.1.6 Areas where storm water typically flows, including the storm water conveyance system;
- 6.4.1.7 Points of discharge from the site. Where such discharge locations are inaccessible, the nearest downstream location must be inspected to the extent that such inspections are practicable; and
- 6.4.1.8 Portions of the site where temporary or final stabilization measures have been initiated.

- 6.4.2 **Scope of Inspection.** At a minimum, the scope of the site inspection must include the following:

- 6.4.2.1 Check whether all control measures are installed and operating as intended and determine if any control measures need to be replaced, repaired, or maintained;
- 6.4.2.2 Check for the presence of accumulated sediment near the project area boundary that has a potential for being washed outside of the project boundary on locations such as roadways or parking lots, storm water conveyance systems, storm water inlets, and discharge points;
- 6.4.2.3 Check for the evidence of, or the potential for spills, leaks, or other accumulations of pollutants on the site entering the storm water conveyance system or waters of the U.S.;
- 6.4.2.4 Describe visible areas where erosion has occurred near the project area boundary that has a potential for being washed outside of the project boundary;
- 6.4.2.5 Identify any locations where new or modified control measures are necessary to meet the requirements in Part 4.0;
- 6.4.2.6 Identify all points where there is a discharge from the site and describe the conditions that are contributing to that discharge (e.g., recent storm event with failure of a control measure); and
- 6.4.2.7 Any incidents of noncompliance observed and corrective actions taken pursuant to Part 8.0.

6.5 Linear Project Inspections

- 6.5.1 Representative inspections may be performed at linear projects if the areas described in Part 6.4 are inaccessible, unsafe for personnel, would compromise stabilized areas, or would cause additional disturbance of soils.
- 6.5.2 Representative inspections must be performed by a qualified person (as defined in Appendix C).
- 6.5.3 To conduct representative inspections, a qualified person must inspect control measures along the site 0.25 mile above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the site and allows access to the areas described in Part 6.4. The conditions of the control measures along each inspected 0.25 mile segment may be considered as representative of the condition of control measures along that reach extending from the end of the 0.25 mile segment to either the end of the next 0.25 mile inspected segment, or to the end of the project, whichever occurs first.
- 6.5.4 If treatment chemicals are used then inspections must be conducted of all areas using the treatment chemicals.

6.6 Inspections by DEC or Applicable Government Authority

- 6.6.1 A permittee must allow an authorized representative of DEC, EPA, or the MS4 operator at any reasonable time to:
 - 6.6.1.1 Enter onto the site where a regulated construction activity is conducted or where records are kept under the conditions of this permit;
 - 6.6.1.2 Access and copy any records that must be kept under the conditions of this permit;
 - 6.6.1.3 Inspect any portion of the site, including any off-site staging areas or material storage areas and the erosion and/or sediment control measures; and
 - 6.6.1.4 Sample or monitor for the purpose of ensuring compliance.

6.7 Inspection Report

For each inspection required by this Part, the permittee must complete an inspection report.

- 6.7.1 At a minimum, the inspection report must include:
 - 6.7.1.1 The inspection date;
 - 6.7.1.2 Names, titles, and qualifications of personnel conducting the inspection;
 - 6.7.1.3 Weather information for the period since the last inspection (or since commencement of construction activity if the first inspection) including a general estimate of the beginning day of each storm event, duration of each storm event, and whether any discharges occurred (information from the nearest National Weather Service Station within 20 miles may be adequate provided it is representative of the actual site location if the permittee does not maintain a rain gauge on site);
 - 6.7.1.4 Weather information and a description of any discharges occurring at the time of the inspection;
 - 6.7.1.5 Location(s) of discharges of sediment or other pollutants from the site;
 - 6.7.1.6 Location(s) of control measures that need to be maintained;
 - 6.7.1.7 Location(s) of control measures that failed to operate as designed or proved inadequate for a particular location;

- 6.7.1.8 Location(s) where additional control measures are needed that did not exist at the time of inspection; and
- 6.7.1.9 Corrective action required, if any, including complete-by dates.
- 6.7.2 The inspection report must be signed in accordance with Appendix A, Part 1.12.

7.0 MONITORING

7.1 General Requirements

- 7.1.1 A permittee whose project is subject to Part 3.2 Discharge to Impaired Water Body is required to develop, implement, and modify a written site-specific plan for analytical monitoring that includes all the requirements of this Part and follows the applicable DEC Quality Assurance Guidance for a Water Quality Monitoring Plan⁵.
- 7.1.2 The DEC may notify the permittee of additional discharge monitoring requirements. Any such notice will briefly state the reasons for the monitoring, locations, and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements.

7.2 Qualified Person

Monitoring must be conducted by a qualified person (as defined in Appendix C) provided by a permittee.

7.3 Discharge Monitoring Requirements

7.3.1 Sampling Parameter

A permittee must sample for turbidity if the construction activity meets the requirements of Part 7.1.

7.3.2 Sampling Frequency

- 7.3.2.1 Sampling must be conducted during or immediately following any storm event (as defined in Appendix C) or snowmelt event that results in a discharge from the site. For areas of the state described in Part 6.1.1.3, sample once per week following any storm event that results in a discharge from the site.
- 7.3.2.2 A permittee must collect at least two representative samples of the discharge. In the monitoring plan the permittee must characterize the number and frequency of samples to be measured/collected per discharge so as to represent the water quality conditions in the discharge (at minimum two samples per day per storm event).
- 7.3.2.3 A permittee is only required to collect samples during normal business hours and when conditions are safe for sampling personnel. When unsafe conditions (i.e., those that are dangerous or create inaccessibility for personnel) prevent the collection of samples, the permittee must conduct sampling of the discharge from the site as soon as the conditions are safe for sampling.
- 7.3.2.4 If a permittee is unable to collect a sample of the discharge due to unsafe conditions, the reason must be documented and attached to all required reports and records of the sampling activity.

⁵ Detailed requirements can be accessed at the following web page: <http://dec.alaska.gov/water/water-quality/quality-assurance/>

7.3.3 Sampling Locations

- 7.3.3.1 The permittee is required to conduct sampling at all discharge points where storm water or authorized non-storm water is discharged to an impaired water body or as per Part 7.1.2.
- 7.3.3.2 Linear Projects are also subject to the visual monitoring requirements in Part 7.4.
- 7.3.3.3 All sampling locations must be identified on the SWPPP site map and be clearly marked in the field with a flag, tape, stake, or other visible marker.

7.3.4 Discharging to an Impaired Water body. If the project is subject to Part 3.2, the permittee is required to conduct sampling at the following locations:

- 7.3.4.1 At a representative location upstream from the point of discharge into receiving water body or outside the area of influence of the discharge; and
- 7.3.4.2 At a representative location downstream from the point of discharge into the receiving water body, inside the area of influence of the discharge. Alternatively, the sample may be taken at the point it leaves the construction site, rather than when it is in the receiving water body.

7.3.5 Representative Discharge Point for a Linear Project. If a linear project has two or more outfalls that discharge substantially identical effluents, based on similarities of the soil disturbance and construction activity occurring within the drainage areas of the discharge point, the permittee may collect a representative sample of the storm water discharge at one of the discharge points and report that the quantitative data also apply to the substantially identical discharge point(s). For this to be permissible, the permittee must describe the following in the monitoring plan:

- 7.3.5.1 Locations of the discharge points;
- 7.3.5.2 Why the discharge points are expected to discharge substantially identical pollutants; and
- 7.3.5.3 Estimates of the size of the drainage area (in square feet) for each of the discharge points.

7.3.6 Commingled Discharges. If, prior to discharging, storm water flow commingles with sources of storm water that originate outside of the construction site or on property that is not owned or operated by the permittee, the following applies:

- 7.3.6.1 A permittee is required to collect samples of discharges from the construction site that consist in part of storm water that originates outside of the construction site and discharges from the site; or
- 7.3.6.2 If storm water originates outside of the construction site then discharges from the permittee's property but does not come into contact with the site construction activities, the permittee is not required to sample this discharge.

7.3.7 Sample Type. All sampling performed by the permittee must be representative of the flow and characteristics of the discharge.

7.3.8 Sampling and Analysis Methods

- 7.3.8.1 Turbidity analysis must be performed with an EPA-approved field-calibrated nephelometer or turbidity meter (turbidimeter) for water quality measurements.
- 7.3.8.2 Samples required by this permit should be analyzed immediately.
- 7.3.8.3 Automatic sampling may be used; however, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated analysis is used and analyzed consistent with Part 7.3.8.2.

- 7.3.8.4 If the permittee cannot conduct field turbidity measurements, then all laboratory analysis must be conducted according to test procedures specified in 40 CFR §136, unless other test procedures have been specified in this permit. Samples must be preserved as required by the appropriate EPA-approved method of analysis and analyzed within specified holding times.

7.3.9 Rainfall Monitoring

- 7.3.9.1 A permittee must use a rain gauge on site or utilize the nearest National Weather Service (NWS) precipitation gauge station to determine the amount of rainfall during a storm event if the NWS gauge used is located within 20 miles of the site.
- 7.3.9.2 A permittee must maintain daily records of the rainfall amounts and dates of rainfall events as part of the SWPPP, in accordance with Part 9.4.

7.3.10 Recording Monitoring Data. A permittee must retain records of all sampling information and reports as part of the SWPPP, in accordance with Part 9.4. For each sample collected, the permittee must record the following:

- 7.3.10.1 The date, monitoring location, method, and time of sampling;
- 7.3.10.2 The name and title of the individual(s) who performed the sampling and analyses;
- 7.3.10.3 The date(s) analyses were performed;
- 7.3.10.4 The analytical techniques or methods used; and
- 7.3.10.5 The results of such analyses in nephelometric turbidity units (NTU) and all calibration and quality control information used to validate the measurement(s).

7.3.11 Reporting Monitoring Results

- 7.3.11.1 All monitoring data collected pursuant to Part 7.0 must be submitted to DEC, in accordance with Part 9.1, Annual Reports. (Note: The monitoring data collected under this Part does not need to conform to Appendix A Part 3.2.)
- 7.3.11.2 For each discharge point, a permittee must submit the following information:
- 7.3.11.2.1 Name of discharge point. If the discharge point is on a linear project and is representative of one or more substantially similar discharge points, include the names of the other discharge points;
- 7.3.11.2.2 Date sample(s) collected;
- 7.3.11.2.3 Result of each individual sample collected in NTUs, or, if no discharge occurred during the sampling period for that discharge point indicate no discharge;
- 7.3.11.2.4 The arithmetic mean of all samples collected for each day; and
- 7.3.11.2.5 If the sample result(s) are from a representative discharge point, indicate representative sample.
- 7.3.11.3 A permittee is required to report all sampling results, including those that reflect samples collected beyond the minimum frequency required in Part 7.3.2.

7.4 Visual Monitoring for a Linear Project

A permittee for a linear project subject to the monitoring requirements in Part 3.2 or Part 7.1 are also required to visually monitor drainage areas and discharge locations in portions of the site where temporary or final stabilization has been initiated and document monitoring activities with the procedures described in this Part.

- 7.4.1 **Visual Monitoring Frequency.** Visual monitoring must be conducted at least once every seven calendar days, and the permittee may choose to do it more frequently.

- 7.4.2 **Visual Monitoring Locations.** The inspector must visually observe discharge points in portions of the site where temporary or final stabilization has been initiated and each drainage area associated with the linear project for the presence of current (and indications of prior) discharges and their sources.
- 7.4.3 **Visual Monitoring Requirements.** During conditions at the project in which a discharge is occurring, the permittee must:
- 7.4.3.1 Observe and document the visual quality and characteristics of the discharge, including color, odor, floating, settled, or suspended solids, foam, oil sheen, and other obvious indicators of storm water pollutants; and
 - 7.4.3.2 Document whether control measures are operating effectively or are in need of maintenance.
- 7.4.4 **Recording Visual Monitoring Data.** A permittee must document the results of the visual monitoring and maintain this documentation with the SWPPP as required in Part 9.4. A permittee is not required to submit the visual monitoring findings to DEC, unless specifically requested to do so. At a minimum, the documentation of the visual monitoring must include:
- 7.4.4.1 The visual monitoring date;
 - 7.4.4.2 Name and title of personnel conducting the visual monitoring;
 - 7.4.4.3 Observations and documentation of the visual monitoring; and
 - 7.4.4.4 Any conditions requiring corrective action and a description of the corrective action.

8.0 CORRECTIVE ACTIONS

A permittee must take corrective actions as identified through the inspections conducted under Part 6.0 or as indicated by monitoring conducted under Part 7.0. This includes addressing the performance of control measures, including modifications to the selection, design, installation, and/or implementation of those control measures or to address permit violations.

8.1 Corrective Action Conditions

- 8.1.1 A permittee must review and revise the selection, design, installation, and implementation of their control measures whenever any of the following conditions are identified, discovered, or made aware of at the site:
- 8.1.1.1 An unauthorized release or prohibited discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another APDES permit);
 - 8.1.1.2 Control measures are not designed, installed, and/or maintained as required in Part 4.0;
 - 8.1.1.3 The permittee becomes aware, or DEC determines that the control measures are not operating as intended or are not effective enough to meet the requirements of Part 3.1.2;
 - 8.1.1.4 An inspection by DEC or EPA official determines that modification to the control measures are necessary to meet the requirements of this permit;
 - 8.1.1.5 The accumulation or tracking of sediment in or near any storm water conveyance channels, storm water inlet, on roadways or parking lots outside the project area and adjacent to the site, in the immediate vicinity of control measures, at discharge points or entry points into the storm sewer system, or in other areas of the site; or

- 8.1.1.6 Pollutants (other than sediment such as trash or litter) have accumulated in or near any storm water conveyance channels, on roadways or parking lots within and adjacent to the site, in the immediate vicinity of control measures, at discharge points or entry points into the storm sewer system, or in other areas of the site.

8.2 Deadlines for Corrective Actions

- 8.2.1 A permittee must review the design, installation, and maintenance of control measures upon detecting any condition in Part 8.1.1 and document any corrective action(s) to be taken to eliminate or further investigate the deficiency and comply with the following:
 - 8.2.1.1 For conditions that are easily remedied (i.e., removal of tracked sediment, maintenance of control measures, or spill clean-up), the permittee must initiate appropriate steps to correct the problem within 24 hours from the time of discovery and correct the problem as soon as practicable; or
 - 8.2.1.2 If installation of a new control measure is needed or an existing control measure requires redesign and reconstruction or replacement, the permittee must install the new or modified measure and make it operational within seven calendar days from the time of discovery of the need for the corrective action, unless infeasible;
 - 8.2.1.3 If a discharge occurs during a local 2-year, 24-hour storm event, a corrective action as described in Part 8.1.1 must be initiated within 24 hours from the time of discovery of a discharge from the storm event;
 - 8.2.1.4 Monitoring, if required, must continue while corrective actions are being carried out.
- 8.2.2 Where a permittee takes corrective actions that could affect a subcontractor, the permittee must provide notification to the subcontractor within three calendar days of taking the corrective action.
- 8.2.3 Subcontractors must notify the permittee within 24 hours of becoming aware of any of conditions listed in Part 8.1.1.

8.3 Corrective Action Log

- 8.3.1 A permittee must document the following information in the corrective action log, within 24 hours of discovery of any condition listed in Part 8.1 or upon notification from a subcontractor:
 - 8.3.1.1 Date the problem was identified;
 - 8.3.1.2 Summary of corrective action taken or to be taken (or, for conditions triggering corrective actions identified in Part 8.1, where the determination is made that action is not necessary, the basis for this determination);
 - 8.3.1.3 Notice of whether SWPPP modifications were required as a result of this discovery or corrective action; and
 - 8.3.1.4 Date corrective action completed.
- 8.3.2 A permittee must retain a copy of the corrective action log on-site with the SWPPP as required in Part 9.4.

8.4 Corrective Action Report

If monitoring pursuant to Part 3.2 Discharge to Impaired Water Body exceeds a WQS, the permittee must submit a corrective action report consistent with Part 9.2; except when there is a discharge that results from a storm event in that same day that is larger than the local 2-year, 24-hour storm.

8.5 Substantially Identical Outfalls

- 8.5.1 If the event triggering correction action is linked to an outfall that represents other substantially identical outfalls, the permittees review must assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls must also be made before the next storm event if possible, or as soon as practicable following that storm event.

9.0 REPORTING AND RECORDKEEPING

9.1 Annual Report

- 9.1.1 All water quality monitoring data collected by the permittee pursuant to Part 3.2 Discharge to Impaired Water Body or Part 7.0 Monitoring must be submitted to DEC in an annual report. The annual report form must be submitted to the appropriate address in Appendix A, Part 1.1.2 by December 31 of each year during construction and upon submittal of the NOT (see Part 10.0). (Note: The monitoring data reported under this part does not need to conform to Appendix A Part 3.2.)
- 9.1.2 Monitoring results must be presented in a clearly legible format in tabular form. Upon written notification, DEC may require the permittee to submit the monitoring results on a more frequent basis. Monitoring and analysis of any storm water discharge(s) or the receiving water(s) beyond the minimum frequency stated in this permit must be reported in a similar manner to DEC.
- 9.1.3 A permittee must sign and certify all annual reports in accordance with the requirements of Appendix A, Part 1.1.12, Signature Requirement and Penalties. All signed and certified legible original annual reports and all other reports and documents must be submitted to DEC Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

9.2 Corrective Action Report

If a corrective action report is required by Part 8.4 or Appendix A, Part 3.5, a permittee must submit a corrective action report to DEC Compliance and Enforcement Program address in Appendix A, Part 1.1.2 no later than 14 calendar days after receiving the monitoring results. The report must include the following:

- 9.2.1 APDES Permit Tracking Number;
- 9.2.2 Project name, physical address and location;
- 9.2.3 Name of receiving water;
- 9.2.4 Monitoring data from the event that exceeded a WQS;
- 9.2.5 An explanation of the conditions that caused the excursion;
- 9.2.6 Steps taken or planned (should corrective actions not yet be complete) to correct the violation; and
- 9.2.7 An appropriate contact name, telephone number and e-mail address.

9.3 Spill of Hazardous Substances Report

- 9.3.1 A permittee is prohibited from discharging hazardous substances or oil from a spill or other release. Alaska state law (18 AAC 75.300) and Part 4.9 requires all oil and hazardous substance release be reported to DEC Spill Prevention and Response program. Spill reporting placards can be found at the following webpage: <http://dec.alaska.gov/spar/ppr/spill-information/reporting>.

- 9.3.2 To report a spill, call the nearest DEC Area Response Team Office and follow their reporting requirements:
- Southeast (Juneau) – 465-5340
 - Central (Anchorage) – 269-3063
 - Northern (Fairbanks) – 451-2121
- 9.3.3 Outside of normal business hours, the permittee must call (800) 478-9300 to report the spill as soon as the permittee has knowledge of the discharge.

9.4 Retention of Records

A permittee must retain the following records at the site or the records must be readily available at a designated alternate location during the life of the construction activity and for a minimum of three years from the date that authorization under this permit expires or is terminated. This period may be extended by request of DEC at any time.

- 9.4.1 Records of all data used to complete the NOI to be covered by this permit;
- 9.4.2 A copy of the SWPPP (including any modifications made during the term of this permit);
- 9.4.3 A copy of all monitoring information (if applicable) and reports required by this permit;
- 9.4.4 A copy of all inspection reports generated in accordance with Part 6.0;
- 9.4.5 Documentation related to noncompliance and corrective actions taken pursuant to Part 8.0; and
- 9.4.6 Any other reports and certifications required by this permit.

9.5 Request for Submittal of Records

The DEC may request copies of all or a portion of the information collected and maintained in the SWPPP. A permittee must provide a response to written requests for records to the Department within 30 calendar days of receipt of a written request.

10.0 TERMINATION OF PERMIT AUTHORIZATION

10.1 Submitting a Notice of Termination (NOT)

- 10.1.1 To terminate permit coverage, a permittee must submit a complete and accurate NOT to DEC that certifies that one or more of the conditions in Part 10.2 have been met to terminate permit coverage. A permittee must comply with this permit until an NOT is submitted.

10.2 When to Submit a Notice of Termination

- 10.2.1 A permittee must submit an NOT within 30 calendar days after one or more of the following conditions have been met:
- 10.2.1.1 Final stabilization has been achieved on all portions of the site, in accordance with Part 4.5.2, for which a permittee is responsible, all ground disturbing construction activity or use of support activities has been completed, and all temporary BMP's have been removed;
- 10.2.1.2 A new permittee has assumed control according to Appendix A, Part 2.3, over all areas of the site that have not been finally stabilized;

- 10.2.1.3 Authorization under an individual permit or alternative APDES general permit has been obtained, unless DEC has required that a permittee obtain such coverage under authority of Part 2.8, in which case authorization under this permit will automatically terminate;
 - 10.2.1.4 For residential construction only, temporary stabilization has been completed and the residence has been transferred to the homeowner; or
 - 10.2.1.5 The planned construction activity identified on the original NOI was never initiated (e.g., no grading or earthwork was ever started) and plans for the construction have been permanently abandoned or indefinitely postponed.
- 10.2.2 A permittee subject to pending state or federal enforcement actions, including citizen suits brought under state or federal law, may not submit a NOT. The permittee must certify that it is not subject to any pending state or federal enforcement actions, including citizen suits brought under state or federal law⁶.

10.3 Submitting a Notice of Termination

- 10.3.1 A permittee must submit a NOT to terminate authorization under this permit. The complete and accurate NOT can be submitted either:
- 10.3.1.1 Electronically (strongly encouraged): Go to DEC's Water Online Application System (OASys) web page at <http://dec.alaska.gov/water/wastewater/stormwater/apdesenoi/> to prepare and submit electronic NOT (eNOT). Note: the eNOT will likely be processed more quickly.
 - 10.3.1.2 Paper NOT Form: Complete the form in Appendix E or access the form on DEC's APDES Storm Water Forms web page at <http://dec.alaska.gov/water/wastewater/stormwater/forms#CGP>. Once the form is complete, scan and email the entire form to DEC OPA. Submit a paper copy to DEC Permitting Program at the address listed in Appendix A, Section 1.1.1.
- 10.3.2 A permittee's authorization to discharge terminates at 11:59 pm of the day the NOT is signed.
- 10.3.3 If a permittee submits a NOT without meeting one or more of the conditions identified in Part 10.2, then the NOT is invalid and a permittee remains responsible for meeting the requirements of this permit until authorization is terminated pursuant to Part 10.3.2.

11.0 PERMIT REOPENER CLAUSE

11.1 Procedures for Modification or Revocation

Permit modification or revocation will be conducted according 18 AAC 83.130, 18 AAC 83.135, 18 AAC 83.140, or 18 AAC 83.145.

11.2 Water Quality Protection

If there is evidence indicating that the storm water discharges authorized by this permit cause, have the reasonable potential to cause or contribute to an excursion above any applicable WQS, the permittee may be required to obtain an individual permit in accordance with Part 2.8 of this permit, or the permit may be modified to include different limitations and/or requirements.

⁶ [18 AAC 83.130\(k\)](#).

11.3 Timing of Permit Modification

DEC may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements.

12.0 Electronic Reporting (E-Reporting) Rule (Phase II)

Phase II of the E-Reporting rule will integrate electronic reporting for all reports required by the Permit (e.g., Annual Reports and Certifications) and implementation is expected to begin December 2023. Permittees should monitor DEC's E-Reporting Information website (<http://dec.alaska.gov/water/compliance/electronic-reporting-rule/>) for updates on Phase II of the E-Reporting Rule and will be notified when they must begin submitting all other reports electronically. Until such time, other reports by the Permit may be submitted in accordance with Appendix A – Standard Conditions.

13.0 Standard Conditions Applicable to Recording and Reporting

The permittee must comply with the following recording and reporting requirements, as described in Appendix A, Standard Conditions unless specified in the body of the permit:

- Retention of Records, Part 1.11.2;
- Records Contents, Part 1.11.3
- Special Reporting Obligations, Part 2.0; and
- Monitoring, Recording, and Reporting Requirements, Part 3.0.

Appendix A Standard Permit Conditions

APDES PERMIT

NONDOMESTIC DISCHARGES

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Appendix A of the permit contains standard regulatory language that must be included in all APDES permits. These requirements are based on the regulations and cannot be challenged in the context of an individual APDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements. Appendix A, Standard Conditions is an integral and enforceable part of the permit. Failure to comply with a Standard Condition in this Appendix constitutes a violation of the permit and is subject to enforcement.

1.0 Standard Conditions Applicable to All Permits

1.1 Contact Information and Addresses

1.1.1 Permitting Program

Documents, reports, and plans required under the permit and Appendix A are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone (907) 269-6285
Fax (907) 269-3487
Email: DEC.Water.WQPermit@alaska.gov

1.1.2 Compliance and Enforcement Program

Documents and reports required under the permit and Appendix A relating to compliance are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Compliance and Enforcement Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone Nationwide (877) 569-4114
Anchorage Area / International (907) 269-4114
Fax (907) 269-4604
Email: dec-wqreporting@alaska.gov

1.2 Duty to Comply

A permittee shall comply with all conditions of the permittee's APDES permit. Any permit noncompliance constitutes a violation of 33 U.S.C 1251-1387 (Clean Water Act) and state law and is grounds for enforcement action including termination, revocation and reissuance, or modification of a permit, or denial of a permit renewal application. A permittee shall comply with effluent standards or prohibitions established under 33 U.S.C. 1317(a) for toxic pollutants within the time provided in the regulations that establish those effluent standards or prohibitions even if the permit has not yet been modified to incorporate the requirement.

1.3 Duty to Reapply

If a permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain a new permit. In accordance with 18 AAC 83.105(b), a permittee with a currently effective permit shall reapply by submitting a new application at least 180 days before the existing permit expires, unless the Department has granted the permittee permission to submit an application on a later date. However, the Department will not grant permission for an application to be submitted after the expiration date of the existing permit.

1.4 Need to Halt or Reduce Activity Not a Defense

In an enforcement action, a permittee may not assert as a defense that compliance with the conditions of the permit would have made it necessary for the permittee to halt or reduce the permitted activity.

1.5 Duty to Mitigate

A permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

1.6 Proper Operation and Maintenance

- 1.6.1 A permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances that the permittee installs or uses to achieve compliance with the conditions of the permit. The permittee's duty to operate and maintain properly includes using adequate laboratory controls and appropriate quality assurance procedures. However, a permittee is not required to operate back-up or auxiliary facilities or similar systems that a permittee installs unless operation of those facilities is necessary to achieve compliance with the conditions of the permit.
- 1.6.2 Operation and maintenance records shall be retained and made available at the site.

1.7 Permit Actions

A permit may be modified, revoked and reissued, or terminated for cause as provided in 18 AAC 83.130. If a permittee files a request to modify, revoke and reissue, or terminate a permit, or gives notice of planned changes or anticipated noncompliance, the filing or notice does not stay any permit condition.

1.8 Property Rights

A permit does not convey any property rights or exclusive privilege.

1.9 Duty to Provide Information

A permittee shall, within a reasonable time, provide to the Department any information that the Department requests to determine whether a permittee is in compliance with the permit, or whether cause exists to modify, revoke and reissue, or terminate the permit. A permittee shall also provide to the Department, upon request, copies of any records the permittee is required to keep under the permit.

1.10 Inspection and Entry

A permittee shall allow the Department, or an authorized representative, including a contractor acting as a representative of the Department, at reasonable times and on presentation of credentials establishing authority and any other documents required by law, to:

- 1.10.1 Enter the premises where a permittee's regulated facility or activity is located or conducted, or where permit conditions require records to be kept;
- 1.10.2 Have access to and copy any records that permit conditions require the permittee to keep;
- 1.10.3 Inspect any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under a permit; and
- 1.10.4 Sample or monitor any substances or parameters at any location for the purpose of assuring permit compliance or as otherwise authorized by 33 U.S.C. 1251-1387 (Clean Water Act).

1.11 Monitoring and Records

A permittee must comply with the following monitoring and recordkeeping conditions:

- 1.11.1 Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.
- 1.11.2 The permittee shall retain records in Alaska of all monitoring information for at least three years, or longer at the Department's request at any time, from the date of the sample, measurement, report, or application. Monitoring records required to be kept include:
 - 1.11.2.1 All calibration and maintenance records,
 - 1.11.2.2 All original strip chart recordings or other forms of data approved by the Department for continuous monitoring instrumentation,
 - 1.11.2.3 All reports required by a permit,
 - 1.11.2.4 Records of all data used to complete the application for a permit,
 - 1.11.2.5 Field logbooks or visual monitoring logbooks,
 - 1.11.2.6 Quality assurance chain of custody forms,
 - 1.11.2.7 Copies of discharge monitoring reports, and
 - 1.11.2.8 A copy of this APDES permit.
- 1.11.3 Records of monitoring information must include:
 - 1.11.3.1 The date, exact place, and time of any sampling or measurement;
 - 1.11.3.2 The name(s) of any individual(s) who performed the sampling or measurement(s);
 - 1.11.3.3 The date(s) and time any analysis was performed;
 - 1.11.3.4 The name(s) of any individual(s) who performed any analysis;
 - 1.11.3.5 Any analytical technique or method used; and
 - 1.11.3.6 The results of the analysis.
- 1.11.4 Monitoring Procedures

Analyses of pollutants must be conducted using test procedures approved under 40 CFR Part 136, adopted by reference at 18 AAC 83.010, for pollutants with approved test procedures, and using test procedures specified in the permit for pollutants without approved methods.

1.12 Signature Requirement and Penalties

- 1.12.1 Any application, report, or information submitted to the Department in compliance with a permit requirement must be signed and certified in accordance with 18 AAC 83.385. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document filed or required to be maintained under a permit, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be subject to penalties under 33 U.S.C. 1319(c)(4), AS 12.55.035(c)(1)(B), (c)(2) and (c)(3), and AS 46.03.790(g).
- 1.12.2 In accordance with 18 AAC 83.385, an APDES permit application must be signed as follows:
 - 1.12.2.1 For a corporation, a responsible corporate officer shall sign the application; in this subsection, a responsible corporate officer means:
 - 1.12.2.1.1 A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
 - 1.12.2.1.2 The manager of one of more manufacturing, production, or operating facilities, if
 - 1.12.2.1.2.1 The manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;
 - 1.12.2.1.2.2 The manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
 - 1.12.2.1.2.3 Authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - 1.12.2.2 For a partnership or sole proprietorship, by the general partner or the proprietor, respectively, shall sign the application.
 - 1.12.2.3 For a municipality, state, federal, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means:
 - 1.12.2.3.1 The chief executive officer of the agency; or
 - 1.12.2.3.2 A senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
 - 1.12.3 Any report required by an APDES permit, and a submittal with any other information requested by the Department, must be signed by a person described in Appendix A, Part 1.12.2, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 1.12.3.1 The authorization is made in writing by a person described in Appendix A, Part 1.12.2;

- 1.12.3.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility; or an individual or position having overall responsibility for environmental matters for the company; and
- 1.12.3.3 The written authorization is submitted to the Department to the Permitting Program address in Appendix A, Part 1.1.1.
- 1.12.4 If an authorization under Appendix A, Part 1.12.3 is no longer effective because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Appendix A, Part 1.12.3 must be submitted to the Department before or together with any report, information, or application to be signed by an authorized representative.
- 1.12.5 Any person signing a document under Appendix A, Part 1.12.2 or Part 1.12.3 shall certify as follows:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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."

1.13 Proprietary or Confidential Information

- 1.13.1 A permit applicant or permittee may assert a claim of confidentiality for proprietary or confidential business information by stamping the words "confidential business information" on each page of a submission containing proprietary or confidential business information. The Department will treat the stamped submissions as confidential if the information satisfies the test in 40 CFR §2.208, adopted by reference at 18 AAC 83.010, and is not otherwise required to be made public by state law.
- 1.13.2 A claim of confidentiality under Appendix A, Part 1.13.1 may not be asserted for the name and address of any permit applicant or permittee, a permit application, a permit, effluent data, sewage sludge data, and information required by APDES or NPDES application forms provided by the Department, whether submitted on the forms themselves or in any attachments used to supply information required by the forms.
- 1.13.3 A permittee's claim of confidentiality authorized under Appendix A, Part 1.13.1 is not waived if the Department provides the proprietary or confidential business information to the EPA or to other agencies participating in the permitting process. The Department will supply any information obtained or used in the administration of the state APDES program to the EPA upon request under 40 CFR §123.41, as revised as of July 1, 2005. When providing information submitted to the Department with a claim of confidentiality to the EPA, the Department will notify the EPA of the confidentiality claim. If the Department provides the EPA information that is not claimed to be confidential, the EPA may make the information available to the public without further notice.

1.14 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any action or relieve a permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under state laws addressing oil and hazardous substances.

1.15 Cultural and Paleontological Resources

If cultural or paleontological resources are discovered because of this disposal activity, work that would disturb such resources is to be stopped, and the Office of History and Archaeology, a Division of Parks and Outdoor Recreation of the Alaska Department of Natural Resources (<http://www.dnr.state.ak.us/parks/oha/>), is to be notified immediately at (907) 269-8721.

1.16 Fee

A permittee must pay the appropriate permit fee described in 18 AAC 72.

1.17 Other Legal Obligations

This permit does not relieve the permittee from the duty to obtain any other necessary permits from the Department or from other local, state, or federal agencies and to comply with the requirements contained in any such permits. All activities conducted and all plan approvals implemented by the permittee pursuant to the terms of this permit shall comply with all applicable local, state, and federal laws and regulations.

2.0 Special Reporting Obligations

2.1 Planned Changes

- 2.1.1 The permittee shall give notice to the Department as soon as possible of any planned physical alteration or addition to the permitted facility if:
 - 2.1.1.1 The alteration or addition may make the facility a “new source” under one or more of the criteria in 18 AAC 83.990(44); or
 - 2.1.1.2 The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged if those pollutants are not subject to effluent limitations in the permit or to notification requirements under 18 AAC 83.610.
- 2.1.2 If the proposed changes are subject to plan review, then the plans must be submitted at least 30 days before implementation of changes (see 18 AAC 15.020 and 18 AAC 72 for plan review requirements). Written approval is not required for an emergency repair or routine maintenance.
- 2.1.3 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.2 Anticipated Noncompliance

- 2.2.1 A permittee shall give seven days’ notice to the Department before commencing any planned change in the permitted facility or activity that may result in noncompliance with permit requirements.
- 2.2.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.3 Transfers

- 2.3.1 A permittee may not transfer a permit for a facility or activity to any person except after notice to the Department in accordance with 18 AAC 83.150. The Department may modify or revoke and reissue the permit to change the name of the permittee and incorporate such other requirements under 33 U.S.C. 1251-1387 (Clean Water Act) or state law.
- 2.3.2 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.4 Compliance Schedules

- 2.4.1 A permittee must submit progress or compliance reports on interim and final requirements in any compliance schedule of a permit no later than 14 days following the scheduled date of each requirement.
- 2.4.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.5 Corrective Information

- 2.5.1 If a permittee becomes aware that it failed to submit a relevant fact in a permit application or submitted incorrect information in a permit application or in any report to the Department, the permittee shall promptly submit the relevant fact or the correct information.
- 2.5.2 Information must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.6 Bypass of Treatment Facilities

2.6.1 Prohibition of Bypass

Bypass is prohibited. The Department may take enforcement action against a permittee for any bypass, unless:

- 2.6.1.1 The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- 2.6.1.2 There were no feasible alternatives to the bypass, including use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. However, this condition is not satisfied if the permittee, in the exercise of reasonable engineering judgment, should have installed adequate back-up equipment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
- 2.6.1.3 The permittee provides notice to the Department of a bypass event in the manner, as appropriate, under Appendix A, Part 2.6.2.

2.6.2 Notice of bypass

- 2.6.2.1 For an anticipated bypass, the permittee submits notice at least 10 days before the date of the bypass. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the conditions of Appendix A, Parts 2.6.1.1 and 2.6.1.2.
 - 2.6.2.2 For an unanticipated bypass, the permittee submits 24-hour notice, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting.
 - 2.6.2.3 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.
- 2.6.3 Notwithstanding Appendix A, Part 2.6.1, a permittee may allow a bypass that:

- 2.6.3.1 Does not cause an effluent limitation to be exceeded, and
- 2.6.3.2 Is for essential maintenance to assure efficient operation.

2.7 Upset Conditions

- 2.7.1 In any enforcement action for noncompliance with technology-based permit effluent limitations, a permittee may claim upset as an affirmative defense. A permittee seeking to establish the occurrence of an upset has the burden of proof to show that the requirements of Appendix A, Part 2.7.2 are met.
- 2.7.2 To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:
 - 2.7.2.1 An upset occurred and the permittee can identify the cause or causes of the upset;
 - 2.7.2.2 The permitted facility was at the time being properly operated;
 - 2.7.2.3 The permittee submitted 24-hour notice of the upset, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting; and
 - 2.7.2.4 The permittee complied with any mitigation measures required under 18 AAC 83.405(e) and Appendix A, Part 1.5, Duty to Mitigate.
- 2.7.3 Any determination made in administrative review of a claim that noncompliance was caused by upset, before an action for noncompliance is commenced, is not final administrative action subject to judicial review.

2.8 Existing Manufacturing, Commercial, Mining, and Silvicultural Discharges

- 2.8.1 In addition to the reporting requirements under 18 AAC 83.410, an existing manufacturing, commercial, mining, and silvicultural discharger shall notify the Department as soon as that discharger knows or has reason to believe that any activity has occurred or will occur that would result in:
 - 2.8.1.1 The discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - 2.8.1.1.1 One hundred micrograms per liter (100 µg/L);
 - 2.8.1.1.2 Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile, 500 micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol, and one milligram per liter (1 mg/L) for antimony;
 - 2.8.1.1.3 Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or
 - 2.8.1.1.4 The level established by the Department in accordance with 18 AAC 83.445.
 - 2.8.1.2 Any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - 2.8.1.2.1 Five hundred micrograms per liter (500 µg/L);
 - 2.8.1.2.2 One milligram per liter (1 mg/L) for antimony;
 - 2.8.1.2.3 Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or
 - 2.8.1.2.4 The level established by the Department in accordance with 18 AAC 83.445.

3.0 Monitoring, Recording, and Reporting Requirements

3.1 Representative Sampling

A permittee must collect effluent samples from the effluent stream after the last treatment unit before discharge into the receiving waters. Samples and measurements must be representative of the volume and nature of the monitored activity or discharge.

3.2 Reporting of Monitoring Results

The permittee shall summarize monitoring results on the annual report form or approved equivalent. The permittee shall submit its annual report at the interval specified in the permit. The permittee shall sign and certify all annual reports and other reports in accordance with the requirements of Appendix A, Part 1.12, Signature Requirement and Penalties. The permittee shall submit the legible originals of these documents to the ADEC Compliance and Enforcement Program at the address in Appendix A, Part 1.1.2.

3.3 Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than the permit requires using test procedures approved in 40 CFR Part 136, adopted by reference at 18 AAC 83.010, or as specified in this permit, the results of that additional monitoring must be included in the calculation and reporting of the data submitted in the DMR or annual report required by Appendix A, Part 3.2. All limitations that require averaging of measurements must be calculated using an arithmetic means unless the Department specifies another method in the permit. Upon request by the Department, the permittee must submit the results of any other sampling and monitoring regardless of the test method used.

3.4 Twenty-four Hour Reporting

A permittee shall report any noncompliance event that may endanger health or the environment as follows:

3.4.1 A report must be made:

- 3.4.1.1 Orally within 24 hours after the permittee becomes aware of the circumstances, and
- 3.4.1.2 In writing within five days after the permittee becomes aware of the circumstances.

3.4.2 A report must include the following information:

- 3.4.2.1 A description of the noncompliance and its causes, including the estimated volume or weight and specific details of the noncompliance;
- 3.4.2.2 The period of noncompliance, including exact dates and times;
- 3.4.2.3 If the noncompliance has not been corrected, a statement regarding the anticipated time the noncompliance is expected to continue; and
- 3.4.2.4 Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3.4.3 An event that must be reported within 24 hours includes:

- 3.4.3.1 An unanticipated bypass that exceeds any effluent limitation in the permit (see Appendix A, Part 2.6, Bypass of Treatment Facilities).
- 3.4.3.2 An upset that exceeds any effluent limitation in the permit (see Appendix A, Part 2.7, Upset Conditions).

- 3.4.3.3 A violation of a maximum daily discharge limitation for any of the pollutants listed in the permit as requiring 24-hour reporting.
- 3.4.4 The Department may waive the written report on a case-by-case basis for reports under Appendix A, Part 3.4 if the oral report has been received within 24 hours of the permittee becoming aware of the noncompliance event.
- 3.4.5 The permittee may satisfy the written reporting submission requirements of Appendix A, Part 3.4 by submitting the written report via e-mail, if the following conditions are met:
 - 3.4.5.1 The Noncompliance Notification Form or equivalent form is used to report the noncompliance;
 - 3.4.5.2 The written report includes all the information required under Appendix A, Part 3.4.2;
 - 3.4.5.3 The written report is properly certified and signed in accordance with Appendix A, Parts 1.12.3 and 1.12.5.;
 - 3.4.5.4 The written report is scanned as a PDF (portable document format) document and transmitted to the Department as an attachment to the e-mail; and
 - 3.4.5.5 The permittee retains in the facility file the original signed and certified written report and a printed copy of the conveying email.
- 3.4.6 The e-mail and PDF written report will satisfy the written report submission requirements of this permit provided the e-mail is received by the Department within five days after the time the permittee becomes aware of the noncompliance event and the e-mail and written report satisfy the criteria of Part 3.4.5. The e-mail address to report noncompliance is: dec-wqreporting@alaska.gov

3.5 Other Noncompliance Reporting

A permittee shall report all instances of noncompliance not required to be reported under Appendix A, Parts 2.4 (Compliance Schedules), 3.3 (Additional Monitoring by Permittee), and 3.4 (Twenty-four Hour Reporting) at the time the permittee submits monitoring reports under Appendix A, Part 3.2. (Reporting of Monitoring Results). A report of noncompliance under this part must contain the information listed in Appendix A, Part 3.4.2 and be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

4.0 Penalties for Violations of Permit Conditions

Alaska laws allow the State to pursue both civil and criminal actions concurrently. The following is a summary of Alaska law. Permittees should read the applicable statutes for further substantive and procedural details.

4.1 Civil Action

Under AS 46.03.760(e), a person who violates or causes or permits to be violated a regulation, a lawful order of the Department, or a permit, approval, or acceptance, or term or condition of a permit, approval or acceptance issued under the program authorized by AS 46.03.020 (12) is liable, in a civil action, to the State for a sum to be assessed by the court of not less than \$500 nor more than \$100,000 for the initial violation, nor more than \$10,000 for each day after that on which the violation continues, and that shall reflect, when applicable:

- 4.1.1 Reasonable compensation in the nature of liquated damages for any adverse environmental effects caused by the violation, that shall be determined by the court according to the toxicity, degradability, and dispersal characteristics of the substance discharged, the sensitivity of the receiving environment, and the degree to which the discharge degrades existing environmental quality;
- 4.1.2 Reasonable costs incurred by the State in detection, investigation, and attempted correction of the violation;
- 4.1.3 The economic savings realized by the person in not complying with the requirements for which a violation is charged; and
- 4.1.4 The need for an enhanced civil penalty to deter future noncompliance.

4.2 Injunctive Relief

- 4.2.1 Under AS 46.03.820, the Department can order an activity presenting an imminent or present danger to public health or that would be likely to result in irreversible damage to the environment be discontinued. Upon receipt of such an order, the activity must be immediately discontinued.
- 4.2.2 Under AS 46.03.765, the Department can bring an action in Alaska Superior Court seeking to enjoin ongoing or threatened violations for Department-issued permits and Department statutes and regulations.

4.3 Criminal Action

Under AS 46.03.790(h), a person is guilty of a Class A misdemeanor if the person negligently:

- 4.3.1 Violates a regulation adopted by the Department under AS 46.03.020(12);
- 4.3.2 Violates a permit issued under the program authorized by AS 46.03.020(12);
- 4.3.3 Fails to provide information or provides false information required by a regulation adopted under AS 46.03.020(12);
- 4.3.4 Makes a false statement, representation, or certification in an application, notice, record, report, permit, or other document filed, maintained, or used for purposes of compliance with a permit issued under or a regulation adopted under AS 46.03.020(12); or
- 4.3.5 Renders inaccurate a monitoring device or method required to be maintained by a permit issued or under a regulation adopted under AS 46.03.020(12).

4.4 Other Fines

Upon conviction of a violation of a regulation adopted under AS 46.03.020(12), a defendant who is not an organization may be sentenced to pay a fine of not more than \$10,000 for each separate violation (AS 46.03.790(g)). A defendant that is an organization may be sentenced to pay a fine not exceeding the greater of: (1) \$200,00; (2) three times the pecuniary gain realized by the defendant as a result of the offense; or (3) three times the pecuniary damage or loss caused by the defendant to another, or the property of another, as a result of the offense (AS 12.55.035(c)(B), (c)(2), and (c)(3)).

Appendix B Acronyms (for the purposes of this permit)

Abbreviations	
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish & Game
AK-CESCL	Alaska Certified Erosion and Sediment Control Lead
APDES	Alaska Pollutant Discharge Elimination System
BMP	Best Management Practice
CESSWI	Certified Erosion, Sediment and Storm Water Inspector
CFR	Code of Federal Regulations
CGP	Construction General Permit
CISEC	Certified Inspector of Sediment and Erosion Control
CPESC	Certified Professional in Erosion and Sediment Control
CPISM	Certified Professional in Industrial Stormwater Management
CPSWQ	Certified Professional in Storm Water Quality
CWA	Clean Water Act
DWPA	Drinking Water Protection Areas
ELG	Effluent Limit Guideline
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FWS	United States Fish and Wildlife Service
MS4	Municipal Separate Storm Sewer System
MSGP	Multi-Sector General Permit
NHPA	National Historic Preservation Act
NMFS	United States National Marine Fisheries Service
NOI	Notice of Intent
NOT	Notice of Termination
PAM	Polyacrylamides
POTW	Publicly Owned Treatment Works
PWS	Public Water Systems
SHPO	State Historic Preservation Office
SWPPP	Storm Water Pollution Prevention Plan
THPO	Tribal Historic Preservation Officer
TMDL	Total Maximum Daily Load
WQS	Water Quality Standard

Appendix C Definitions

Definitions

2-year, 24-hour storm event	Means the maximum 24-hour precipitation event with a probable recurrence interval of once in two (2) years, respectively.
Active Treatment System (ATS)	For the purposes of this permit, means a treatment system comprised of automated chemical dispensing, mechanical aeration, pumps, and/or mechanical filtration that employs chemical coagulation, chemical flocculation, or electrocoagulation in order to reduce turbidity caused by fine suspended sediment. The system may also use gravity separation, inert media filtration and absorptive media. It does not include the passive application of treatment chemicals through the use of pre-manufactured products (e.g. floc logs, floc blocks, etc).
Actively Staffed	Projects that employ a sufficient number of essential personnel to maintain day-to-day operations at a construction site. Examples of essential personnel usually include a project engineer, foreman, or inspectors.
Activity	Any “point source” or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the APDES program.
Alaska Climatic Regions	For the purposes of this permit, means the climatic region (Coastal, South-central, Western, Interior, and Arctic) that the construction activity is located.
Anionic Polyacrylamide	Means a negatively charged chemical agent that binds soil particles together, which promotes coagulation and rapid settling.
Arid Areas	Areas with an average total precipitation of 0 to 10 inches. See xmacis.rcc-acis.org/ for precipitation data from the weather station closest to the construction project.
Best Management Practices (BMPs)	Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States (U.S.). BMPs also include treatment requirements, operating procedures, and practice to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
Buffer	For the purposes of this permit, means a setback that establishes a no-disturbance vegetated zone along and around waters of the U.S.. The buffer consists of a dense turf or vegetation judiciously placed across the path of surface runoff in a way that promotes sheet flow that can reduce the velocity of flow, increase the likelihood of infiltration, and promote the trapping and settling of suspended matter. It may be used in combination with other control measures in a treatment train approach to promote erosion and sediment control.
Business Day (or work day)	A day on which work is performed on site. For State offices, typically, Monday thru Friday with the exception of state holidays. For state holidays, see http://doa.alaska.gov/calendar .

Borrow Area	The areas where materials are dug for use as fill, either onsite or off-site.
Bypass	Defined in 40 CFR §122.41 and incorporated here by reference. Bypass means the intentional diversion of waste streams from any portion of a treatment facility. See Appendix A, Part 2.6.
Cationic Treatment Chemical	For the purposes of this permit, means polymers, flocculants, or other chemicals that contain an overall positive charge. Among other things, they are used to reduce turbidity in storm water discharges by chemically bonding to the overall negative charge of suspended silts and other soil materials and causing them to bind together and settle out. Common examples of cationic treatment chemicals are chitosan and cationic PAM.
Clean Water Act (CWA)	Means the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C. section 1251 et seq.
Clearing	For the purposes of this permit, means the cutting down and removal of trees and brush without the disturbance of soils and the root mass.
Coagulants	Are substances that cause clumping of particles in a discharge to settle out impurities, often induced by chemicals such as lime, alum, and iron salts.
Commencement of Construction Activities or Construction Activity	For the purposes of this permit, means the initial disturbance of soils associated with clearing that disturbs the vegetative map/grubbing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material, establishment of staging areas, or development of project-specific material sources).
Common Plan of Development or Sale	<p>For the purposes of this permit, means a site where multiple separate and distinct construction activities may be taking place at different times on different schedules, but still under a single plan. Examples include:</p> <ol style="list-style-type: none">1) phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g., a development where lots are sold to separate builders);2) a development plan for a rural infrastructure project that may be phased over multiple years and is under a consistent plan for long-term development (e.g., a project that is designed to be built over several years, however funding is available for those phases on a year-to-year basis). Projects that have multiple year development plans but have year-to-year funding shall file NOI and NOT at the beginning and end of each funded phase of the project; and3) projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility. <p>If the project is part of a common plan of development or sale, the disturbed area of the entire plan shall be used in determining permit requirements. For land subdivided for residential lots, see the definition of 'Residential Subdivision' for further discussion of the requirements.</p>

Where discrete construction projects within a larger common plan of development or sale are located one-quarter mile or more apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not being disturbed. If a utility company is constructing new trunk lines off an existing transmission line to serve separate residential subdivisions located more than one-quarter mile apart, the two trunk line projects could be considered to be separate projects.

Control Measure	For the purposes of this permit, refers to any BMP or other method used to prevent or reduce the discharge of pollutants to waters of the U.S..
Construction and Development Rule (C&D Rule)	As published in 40 CFR §450 is the regulation requiring effluent limitations guidelines (ELG's) and new source performance standards (NSPS) for controlling the discharge of pollutants from construction sites.
Disaster	Has the meaning in AS 26.23.900. As defined in AS 26.23.900 the term includes, but is not limited to, the occurrence or imminent threat of widespread or severe damage, injury, loss of life or property, or shortage of food, water, or fuel resulting from an incident such as storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, avalanche, snowstorm, prolonged extreme cold, drought, fire, flood, epidemic, explosion, or riot; the release of oil or a hazardous substance if the release requires prompt action to avert environmental danger or mitigate environmental damage; and equipment failure if the failure is not a predictably frequent or recurring event or preventable by adequate equipment maintenance or operation.
Disaster Emergency	For the purposes of this permit, means the condition declared by proclamation of the governor or declared by the principal executive officer of a political subdivision to designate the imminence or occurrence of a disaster.
Department or DEC	Refers to the Alaska Department of Environmental Conservation
Discharge	When used without qualification means the "discharge of a pollutant"
Discharge of Storm Water Associated with Construction Activity	For the purposes of this permit, refers to a discharge of pollutants in storm water from areas where soil disturbing activities (e.g., clearing, grading, or excavation), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck chute washdown, fueling), or other industrial storm water directly related to the construction process (e.g., concrete or asphalt batch plants) are located.
Discharge Point	Means the location where collected and concentrated storm water flows are discharged from the construction site.

Disturbed Area	Is a portion of any site that has been altered from pre-existing conditions, including but not limited to the following: providing access to a site, grubbing and clearing of vegetation (including the roots), grading, earth moving, altering land forms, and other construction-related activities (such as placement of project related stockpiles atop a soil surface).
Effluent	For the purposes of this permit, means any discharge of storm water and allowable non-storm water by a permittee either to the receiving water or beyond the property boundary controlled by the permittee.
Effluent Limit Guideline	Defined in 40 CFR §122.a as a regulation published by the Administrator under section 304(b) of the Clean Water Act to adopt or review effluent limitations.
Electronic Notice of Intent (eNOI)	For the purposes of this permit, means the ADEC online system for submitting electronic Construction General Permit forms.
Eligible	Qualified for authorization to discharge storm water under this general permit.
Equivalent Analysis Waiver	Means a waiver, available only to small construction activities which discharge to non-impaired waters only, based on the permittee performance of an equivalent analysis using existing instream concentrations, expected growth in pollutant concentrations from all sources, and a margin of safety
Erosion	Is the process of wearing away of the land surface by water, wind, ice, gravity, or other geologic agents.
Erosion Control Measures	Are control measures intended to minimize dislodging and mobilizing of sediment particles
Excavation Dewatering	The practice of dewatering excavation areas through the use of pumps placed within the excavation or well pumps in adjacent dewatering wells which lower the water table to provide a relative dry working condition.
Exceptional Recreational or Ecological Significance	For the purposes of this permit, means a waterbody that is important, unique, or sensitive ecologically and has been designated as an Outstanding Natural Resource Water or Tier 3 water.
Fall Freeze-up	For the purposes of this permit, means for planning purposes in the development of the SWPPP and initial planning of control measure maintenance the date in the fall that air temperatures will be predominately below freezing. It is the date in the fall that has an 80% probability that a minimum temperature below a threshold of 32.5 degrees Fahrenheit will occur on or after the given date. This date can be found by looking up the "Fall 'Freeze' Probabilities" for the weather station closest to the site on the website www.wrcc.dri.edu/summary/Climsmak.html . Alternatively, the Fall Freeze-up can be estimated by using the 5-year moving average from the First/Last dates where the minimum temperature below a threshold of 32.5 degrees Fahrenheit will occur on or after the given date for the weather station closest to the site on the website xmacis.rcc-acis.org . NOTE: this estimation of "Fall Freeze-up" is for planning purposes only. During construction the permittee will need to maintain control measures based on actual conditions.

Facility	See “activity.”
Federal Facility	Any buildings, installations, structures, land, public works, equipment, aircraft, vessels, and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to, the Federal government.
Field Measurements	Are testing procedures performed in the field with portable field-testing kits or meters.
Fill-only projects	For the purposes of this permit, means projects where the road prism or gravel pad is constructed using low-erodible fill material placed over an undisturbed vegetative mat. Typically, there is not soil disturbance that may be subject to erosion.
Flocculants	Are substances that interact with suspended particles and bind them together to form flocs. These flocs more readily settle out compared to individual particles.
Frozen Ground	For the purposes of this permit, is characterized by soil temperature below freezing. Frozen ground by itself is not considered an acceptable stabilization control measure. It may be used in combination with control measures (e.g. track walking, downgradient control measures, etc.)
Good Housekeeping Measures	For the purposes of this permit, means storm water controls designed to reduce or eliminate the addition of pollutants to construction site discharges through analysis of pollutant sources, implementation of proper handling and/or disposal practices, employee education, and other actions.
Grubbing	For the purposes of this permit, means the stripping and removal of the root mass on or near the ground surface. This is considered soil disturbance activity and requires coverage under this permit.
Hazardous Materials or Hazardous Substances or Hazardous or Toxic Waste	For the purposes of this permit, any liquid, solid, or contained gas that contain properties that are dangerous or potentially harmful to human health or the environment. See also 40 CFR §261.2.
Immediately	No later than the end of the next <u>work day</u> , following the day when the earth-disturbing activities have temporarily or permanently ceased.
Impaired Water	(or “Water Quality Impaired Water” or “Water Quality Limited Segment”) is defined as a water that is impaired for purposes of this permit if it has been identified by the State of Alaska or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State WQSs (These waters are called “water quality limited segments” under 40 CFR §30.2(j)). Impaired waters include both waters with approved or established TMDLs, and those for which a TMDL has not yet been approved or established. For more information and current listing of impaired waters, see http://dec.alaska.gov/water/water-quality/impaired-waters .

Indian Country	Defined at 40 CFR §122.2 to mean: <ol style="list-style-type: none">1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation;2. All dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof and whether within or without the limits of a state; and3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-ways running through the same.
Infeasible	Defined in 40 CFR §450.11 and incorporated here by reference. Infeasible means not technologically possible, or not economically practicable and achievable in light of best industry practices.
Large Construction Activity	Defined at 40 CFR §122.26(b)(14)(x) and incorporated here by reference. A large construction activity includes clearing, grading, and excavating resulting in a land disturbance that will disturb equal to or greater than five acres of land or will disturb less than five acres of total land area but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than five acres. Large construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity of conveyance channels, or original purpose of the site.
Linear Project	Is a land disturbing activity as conducted by an underground/overhead utility or highway department, including but not limited to any cable line or wire for the transmission of electrical energy; any conveyance pipeline for transportation of gaseous or liquid substance; any cable line for communications; or any other energy resource transmission right-of-way or utility infrastructure (e.g., roads and highways) along a long narrow area.
Maintenance	Activities performed to maintain the original line and grade, hydraulic capacity of conveyance channels, or original purpose of the site. For the purposes of this permit, means projects that repair, rehabilitate, or replace existing structures or facilities, provided that the maintenance activity does not change the original purpose of the structure or facility. Maintenance may include minor deviations in the configuration of the structure or facility due to changes in materials, construction methods, or current construction codes or safety standards.
Master Plan	For the purposes of this permit, means if the permittee has a long-range master plan of development (e.g. a rural infrastructure improvement project or military base construction) where some portions of the master plan are a conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended time period, the permittee may consider the “conceptual” phases of a master plan to be separate “common plans” provided the periods of construction for the physically interconnected phases do not overlap.

Mean Annual Precipitation	This is the average total precipitation based on weather records. This data is available on the website for the Western Regional Climate Center https://xmacis.rcc-acis.org/ .
Minimize	To reduce and/or eliminate to the extent achievable using control measures and good housekeeping measures that are technologically available and economically practicable and achievable in light of best industry practices.
Minimize Pollutant Discharge	See 'Minimize'
Municipality	A home rule municipality is a municipal corporation and political subdivision. It is a city or a borough that has adopted a home rule charter, or it is a unified municipality. A home rule municipality has all legislative powers not prohibited by law or charter. (§ 3 ch 74 SLA 1985) A general law municipality is a municipal corporation and political subdivision and is an unchartered borough or city. It has legislative powers conferred by law. (§ 3 ch 74 SLA 1985)
Municipal Separate Storm Sewer System (MS4)	<p>Defined at 40 CFR §122.26(b)(8) to mean a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):</p> <ol style="list-style-type: none"> 1. Owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under Section 208 of the CWA that discharges to waters of the U.S.; 2. Designed or used for collecting or conveying storm water; 3. Which is not a combined sewer; and 4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.
Nephelometric Turbidity Unit (NTU)	Is an expression of the optical property that causes light to be scattered and absorbed rather than transmitted in a straight line through the water.
New Project	The "commencement of construction" occurs after the effective date of this permit.
New Source	For the purpose of this permit, is any source whose discharges are defined in 40 CFR §122.26(b)(14)(x) and (b)(15), that commences construction activity after the effective date of the new Construction & Development rule.
New Source Performance Standards (NSPS)	Are technology-based standards for a construction site that qualifies as new source under 40 CFR §450.24.

Non-Storm Water Discharges	Are discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.
Notice of Intent (NOI)	Is the form required to be submitted by an applicant to the Department to obtain authorization of coverage under the Alaska Construction General Permit.
Notice of Termination (NOT)	Is the form required for terminating coverage under the Alaska Construction General Permit.
Ongoing Project	The “commencement of construction” occurs before the effective date of this permit.
Operator	<p>For the purpose of this permit, and in the context of storm water associated with construction activity, means any person associated with a construction project that meets either of the following two criteria:</p> <ol style="list-style-type: none"> <li>1. The person has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or <li>2. The person has day-to-day operational control of those activities at a site which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., the person is authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions). This definition is provided to inform permittees of the Department’s interpretation of how the regulatory definitions of “owner or operator” and “facility or activity” are applied to discharges of storm water associated with construction activity.
Owner	Subcontractors generally are not considered operators for the purposes of this permit.
	For the purposes of this permit, means the owner of any “facility or activity” subject to regulation under the APDES program.
Outfall	See ‘Discharge Point.’
Permanent Storm Water Management Controls	For the purposes of this permit, refers to “Nondomestic wastewater treatment works” as described in 18 AAC 72.990. These controls include: dry extended detention ponds, constructed wetlands, wet ponds, sand filters, oil/grit separator, rotational flow separators, etc.
Permitted Ongoing Project	Is a construction project that commenced prior to the effective date of this permit, which has been covered by a prior general permit for storm water discharges.
Permittee	Is a person who is authorized to discharge pollutants to waters of the U.S. in accordance with the conditions and requirements of this permit.

Person	For the purposes of this permit, means any public or private entity including but not limited to an individual, trust, firm, joint stock company, corporation (including government corporation), partnership, association, federal agency, state agency, city, borough, municipality, commission, political subdivision of the State, any interstate body or tribe.
Point Source	Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.
Pollutant	Defined at 40 CFR §122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.
Pollution Prevention Measures	See "Good Housekeeping Measures."
Polyacrylamide (PAM)	For the purposes of this permit, is a long-chain organic polymer developed to clarify drinking water that has many other beneficial uses including erosion control, enhanced infiltration, and nutrient removal. Some forms of PAM can be used to stabilize soils and remove fine suspended sediments from storm water runoff. In powder form PAM is easy to store, easy to transport, and is not a health concern when used as directed. PAM dissolved in nonaqueous emulsions are not recommended for use in this permit.
Polymers	For the purposes of this permit, means coagulants and flocculants used to enhance sediment removal capabilities of check dams, sediment traps, or basins. Common construction site polymers include polyacrylamide (PAM), chitosan, alum, polyaluminum chloride, and gypsum. A permittee using polymers should carefully consider the appropriateness of usage of these materials where there are sensitive or protected aquatic organisms in the receiving waters, including threatened or endangered species and their critical habitat.
Post-Construction Discharges	For the purposes of this permit, means the storm water discharges occurring after construction has been completed and final stabilization has been attained.
Practicable	For the purposes of this permit, means capable of being done after taking into consideration costs, existing technology, standards of construction practice, impacts to water quality, site conditions, and logistics in light of the overall project purpose.
Project Area	For the purposes of this permit, meant that

1. The areas on the construction site where storm water discharges originate and flow toward the point of discharge into the receiving waters (including areas where excavation, site development, or other ground disturbance activities occur) and the immediate vicinity. (Example: 1. Where bald eagles nest in a tree that is on or bordering a construction site and could be disturbed by the construction activity. 2. Where grading causes storm water to flow into a small wetland or other habitat that is on the site that contains listed species.)
2. The areas where storm water discharges flow from the construction site to the point of discharge into receiving waters. (Example: Where storm water flows into a ditch, swale, or gully that leads to receiving waters and where listed species (such as amphibians) are found in the ditch, swale, or gully.)
3. The areas where storm water from construction activities discharge into receiving waters and the areas in the immediate vicinity of the point of discharge. (Example: Where storm water from construction activities discharges into a stream segment that is known to harbor listed aquatic species.)
4. The areas where storm water BMPs will be constructed and operated, including any areas where storm water flows to and from BMPs. (Example: Where a storm water retention pond would be built.)
5. The areas upstream and /or downstream from construction activity that discharges into a stream segment that may be affected by the discharges. (Example: Where sediment discharged to a receiving stream settles downstream and impacts a breeding area of a listed aquatic species.)

Qualified Person

Given the range in size and types of projects in Alaska the following is a description of the experience and skills of a “qualified person” for the different roles typically required at a site to ensure compliance with this permit. The recommended experience or educational requirements for each of these “roles” is described below. The required training is described in Table 4. For projects that disturb 1 to less than 5 acres, all the roles described below will or may be carried out by one person. For the larger projects there will or maybe the need to have one person for each role (that is a project-specific choice by the permittee).

Storm Water Lead/SWPPP Manager

- A. A person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any erosion and sediment control measures selected to control the quality of storm water discharges from the construction activity.
- B. Such person shall have the authority to prepare the SWPPP, stop and/or modify construction activities as necessary to comply with the SWPPP and the terms and conditions of the permit, and modify the SWPPP.
- C. Such a person shall be responsible for inspections and recordkeeping.
- D. Such a person shall have the authority to supervise or initiate corrective actions identified by inspections, monitoring, or observation to fix control measures and minimize the discharge of pollutants.

Qualified Person
(continued)*SWPPP Preparer*

A person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality, the effectiveness of any erosion and sediment control measures selected to control the quality of storm water discharges from the construction activity, and is familiar with Part 5 as a means to implement this permit.

Storm Water Inspector

A person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality, the effectiveness of any erosion and sediment control measures selected to control the quality of storm water discharges from the construction activity, and is familiar with Part 6 as a means to ensure compliance with this permit. The person is familiar with the project specific inspection forms and how to fill them out, responsible for conducting inspections, and responsible for reporting the need for follow-up corrective action to the Storm Water Lead or site supervisor.

Monitoring Person

A person knowledgeable in the principles and practices of water quality monitoring who is familiar with Part 7 and the monitoring plan for the site and how to conduct water quality sampling, testing, and reporting.

Active Treatment System Operator

A person knowledgeable in the principles and practices of treatment systems that employs chemical coagulation, chemical flocculation, or electrocoagulation to aid in the treatment of storm water runoff who is familiar with Part 4.5 as a means to implement and comply with this permit.

(Table 4: Recommended Experience or Required Training for Specific Roles is located on the following page.)

Qualified Person
(continued)

Table 4: Recommended Experience or Required Training for Specific Roles

Storm Water Role	Total Project Disturbed Acreage		
	1 to < 5 acres	5 acres to <20 Acres	> 20 Acres
<i>Storm Water Lead/SWPPP Manager</i>	Recommend AK-CESCL training, but not required	Be AK-CESCL certified	Be AK-CESCL certified
<i>SWPPP Preparer</i>	Be familiar with permit.	Recommend taking a course in SWPPP preparation.	Be AK-CESCL certified, visit the site prior to writing the SWPPP or soon after project start and revised the SWPPP based on site conditions. Recommend taking a course in SWPPP preparation.
<i>Storm Water Inspector</i>	Be familiar with permit and SWPPP.	Be AK-CESCL certified	Be AK-CESCL certified
<i>Monitoring Person</i>	Not Required	Not Required	Be AK-CESCL certified
<i>Active Treatment System Operator</i>	Be AK-CESCL certified and have general experience and knowledge of storm water control measures. Have operational experience with the specific equipment used on-site.	Be AK-CESCL certified and have general experience and knowledge of storm water control measures. Have operational experience with the specific equipment used on-site.	Be AK-CESCL certified and have general experience and knowledge of storm water control measures. Have operational experience with the specific equipment used on-site.

Note: The following training and certifications may substitute for AK-CESCL training and certification: CPESC, CESSWI, CPISM or CPSWQ by EnviroCert International, Inc (ECI, <http://envirocertintl.org>) or CISEC by CISEC, Inc. (<http://ciscinc.org>).

Rain Gauge	For the purposes of this permit, means a type of instrument to gather and measure the amount of liquid precipitation occurring during a storm event for a set period of time.
Rainfall Erosivity Factor or R Factor	Means a measure of the erosive force and intensity of rain in a normal year. Two components of the factor are total energy and the maximum 30-minute intensity of storms. The R-Factor is the sum of the product of these two components for all major storms in the area during an average year.
Rainfall Erosivity Waiver	Means a waiver, available only to small construction activities, that is based on the rainfall erosivity factor for the project.
Reasonable	For purposes of this permit, means the permittee has selected, designed, installed, implemented and maintained control measures in light of manufacture's specifications and good engineering practices at the project to meet the control measures and good housekeeping measures established in Part 4.0 of the permit.
Reasonable Time(s)	For inspections it is time when inspections may occur, typically during normal business hours of 8:00 am to 5:00 pm Monday through Friday, except for those construction sites that are operational outside of these times. For information requests it is thirty (30) calendar days from the date of the receipt of a written request for information from the department, unless specified otherwise in this permit.
Receiving Water	The "Water of the United States" as defined in 40 CFR §122.2 into which the regulated storm water discharges
Residential Subdivision	For the purposes of this permit, means any parcel of land that is divided into smaller parcels with the intent of selling the smaller parcels for the development of residential homes for individual ownership.
Rural Infrastructure Improvement Project	For the purposes of this permit, means a project that is a rural water, wastewater, solid waste, or energy project that is funded, designed, or built by a third party such as the Alaska Native Tribal Health Consortium, DEC Village Safe Water Program, or the Alaska Energy Authority for a 2 nd class city, Tribe, Community Association, or statutory improvement district.
Rural Infrastructure Improvement Project Operators	For the purposes of this permit, means the agency or entity with "design control over plans and specifications" that acts as the operator rather than the ultimate owner of the rural infrastructure improvement project.
Sampling Point	For the purposes of this permit, means that point at which storm water samples are collected where the storm water or authorized non-storm water is discharged from the site.
Sediment	Is solid particulate matter, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

Sedimentation	Is the process of deposition of suspended matter carried by water, wastewater, or other liquids by gravity. It is usually accomplished by reducing the velocity of the liquid below the point at which it can transport the suspended material.
Sediment Control Measures	Are control measures that serve to capture sediment particles that have mobilized and are entrained in storm water with the objective of removing sediment and other pollutants from the storm water discharge. Examples of sediment control measures include but not limited to berms, dikes, fiber rolls, silt fences, sandbags, or gravel bags.
Semi-Arid Areas	Areas with an average total precipitation of 10 to 20 inches. See xmacis.rcc-acis.org/ for precipitation data from the weather station closest to the project.
Sensitive Area	For the purposes of this permit, means any lakes, ponds, perennial and intermittent streams, vernal pools, wetlands, floodplains, floodways and areas with highly erodible soils, which need special protection.
Sheet Flow	Is slow-velocity runoff that flows or is directed to flow across an overland area where there are no defined channels and the water spreads out over a large area at a uniform depth. Sometimes referred to as "sheetwash."
Site	The land or water area where any "facility or activity" is physically located or conducted, including adjacent and off-site land used in connection with the facility or activity, including related areas for support activities.
Small Construction Activity	Defined at 40 CFR §122.26(b)(15) and incorporated here by reference. A small construction activity includes clearing, grading, and excavating resulting in a land disturbance that will disturb equal to or greater than one (1) acre and less than five (5) acres of land or will disturb less than one (1) acre of total land area but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one (1) acre and less than five (5) acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity of conveyance channels, or original purpose of the site.
Snowmelt	The conversion of snow into water runoff that may infiltrate into the ground with the onset of warmer temperatures.

Spring Thaw	<p>For the purposes of this permit, means for planning purposes in the development of the SWPPP and initial planning of control measure maintenance the date in the spring that air temperatures will be predominately above freezing. It is the date in the spring that has a 20% probability that a minimum temperature below a threshold of 32.5 degrees Fahrenheit will occur on or after the given date. This date can be found by looking up the “Spring ‘Freeze’ Probabilities” for the weather station closest to the project on the website www.wrcc.dri.edu/summary/Climsmak.html. Alternatively, the Spring Thaw can be estimated by using the 5-year moving average from the First/Last dates where the minimum temperature below a threshold of 32.5 degrees Fahrenheit will occur on or after the given date for the weather station closest to the project site on the website xmacis.rcc-acis.org. NOTE: this estimation of “Spring Thaw” is for planning purposes only. During construction the permittee will need to maintain control measures based on actual conditions.</p>
Stabilization	<p>The use of vegetative and/or non-vegetative cover to prevent erosion and sediment loss in areas exposed by Construction Activities.</p>
Temporary Stabilization	<p>For the purposes of this permit, means protecting soils from erosion and sediment loss by rainfall, snow melt, runoff, or wind, with a temporary vegetative and/or non-vegetative protection cover. Temporary stabilization may include a combination of surface roughening (track walking), temporary seeding, geotextiles, mulches, surface tackifiers, rolled erosion control products, gravel or paving, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.</p>
Final Stabilization	<p>For the purposes of this permit, means that:</p> <ol style="list-style-type: none"> 1. All soil disturbing activities at the site have been completed and either of the two following criteria shall be met: <ol style="list-style-type: none"> a. a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or b. equivalent non vegetative permanent stabilization measures have been employed (such as the use of riprap, gabions, porous backfill (ADOT&PF Specification 703-2.10), railroad ballast or subballast, ditch lining (ADOT&PF Specification 610-2.01), geotextiles, or fill material with low erodibility as determined by an engineer familiar with the site and documented in the SWPPP). 2. When background native vegetation will cover less than 100 percent of the ground (e.g., arid areas, beaches), the 70 percent coverage criteria is adjusted as follows: if the native vegetation covers 50 percent of the ground, then 70 percent of 50 percent ($0.70 \times 0.50 = 0.35$) would require 35 percent total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.

3. In arid and semi-arid areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:
 - a. Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the permittee;
 - b. The temporary erosion control measures are selected, designed, and installed to achieve 70 percent vegetative coverage within three years.
4. For individual lots in residential construction, final stabilization means that either:
 - a. The homebuilder has completed final stabilization as specified above, or
 - b. The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.
5. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to "water of the United States," and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization criteria (1) or (2) or (3) above.

Steep Slope	For the purposes of this permit, mean any slope occurring on the construction site that is 20 percent or greater in grade for a length of the slope that exceeds 25 feet.
Storm Event	For the purposes of this permit, means a rainfall event that produces more than 0.5 inch of precipitation in 24 hours and that is separated from the previous storm event by at least 3 days of less than 0.1 inch of rain per day.
Storm Water	Storm water runoff, snow melt runoff, and surface runoff and drainage.
Storm Water Controls	See 'Control Measure'
Storm Water Discharge-Related Activities	Activities that cause, contribute to, or result in storm water point source pollutant discharges, including but not limited to: excavation, site development; grading and other surface disturbance activities; and measures to control storm water including the siting, construction and operation of BMPs to control, reduce or prevent storm water pollution.
Storm Water Inlet	A structure placed below grade to conduct water used to collect storm water runoff for conveyance purposes.

Storm Water Pollution Prevention Plan (SWPPP) Means a site-specific, written document that: (1) identifies potential sources of storm water pollution at the construction site; (2) describes practices to reduce or eliminate pollutants in storm water discharges from the construction site; and (3) identifies procedures the permittee will implement to comply with the terms and conditions of this general permit.

Support Activities For the purposes of this permit, means any concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, and borrow areas provided:

1. The support activity is directly related to the construction project that is covered under this general permit,
2. The support activity is not a commercial operation serving multiple unrelated construction projects by different permittees,
3. The support activity does not operate beyond the completion of the construction activity at the project it supports, and
4. Appropriate control measures are identified in the SWPPP covering the discharges from the support activity areas.

Material borrow areas that are developed specific for the projects and are non-contiguous to the project site (e.g. the material is barged in from another area not nearby the project area) are considered "support activities" however, they would not need to be routinely inspected as part of the project. These areas would need to comply with other conditions of the permit to control storm water discharge as described in the SWPPP. The permit provides an exception for concrete or asphalt plants used for highway paving projects that may also, incidental to the main project contract, pave residential driveways. This additional paving is allowed under this permit provided those activities are covered under the SWPPP.

For communities where equipment or materials are barged in, flown in, or shipped by Alaska Marine Highway, the support activities may serve more than one project if: (1) each project that qualifies for coverage under this permit files a project-specific NOI and includes an acknowledgement of the shared support activities; (2) identifies the operator responsible for maintaining those support activities in compliance with permit requirements; and (3) identifies the operator responsible for the support activities until an NOT is filed at the conclusion of use of the support activity.

Tackifier and Soil Stabilizer (binder) For the purposes of this permit, means hydraulically applied chemicals derived from natural and synthetic sources used for erosion control to promote adhesion among soil particles or mulch materials. In general soil stabilizers (also known as soil binders) are used to increase soil adhesion, which improves soil stabilization by reducing water and wind driven erosion. Tackifiers are used as "glue" to bind and immobilize straw, cellulose products, pine needles, or other mulch that has been applied to a seeded area. Common examples include polyacrylamide, guar, chloride compounds, psyllium, resins, enzymes, surfactants, and various polymers, starches, and other compounds.

Total Maximum Daily Load (TMDL)	The sum of the individual wasteload allocations (WLA) for point sources and load allocations (LAs) for nonpoint sources and natural background. If receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.
TMDL Waiver	Means a waiver, available only to small construction activities, based on an EPA established or approved TMDL.
Treatment Chemicals	For the purposes of this permit, means polymers, flocculants, or other chemicals used to reduce turbidity in storm water. Tackifiers and soil stabilizers (binders) are not considered treatment chemicals.
Turbidimeter	For the purposes of this permit, means an instrument that measures the amount of light scattered at right angles to an incident light beam by particles present in a storm water sample.
Turbidity	Means a condition of water quality characterized by the presence of suspended solids and/or organic material.
Upset	Defined in 40 CFR §122.41 and incorporated here by reference. Upset means an exceptional incident in which there is unintentional and temporary non-compliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See Appendix A, Part 2.7.
Water Quality Impaired	See 'Impaired Water.'
Water Quality Standard (WQS)	For the purposes of this permit, means the Alaska Water Quality Standards (18 AAC 70) as approved by U.S. EPA. As defined in 40 CFR § 131.3 water quality standards are provisions of State or Federal law which consist of a designated use or uses for the waters of the U.S. and water quality criteria for such waters based upon such uses. Water quality standards are to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act.
waters of the U.S. (WOUS)	Defined in 40 CFR §122.2 and incorporated here by reference.
Wetland	Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
Winter Construction	For the purposes of this permit, means the commencement of construction specifically during frozen conditions to aid in construction. Typically, this period is from December to March and is approximately from after fall freeze-up to before spring thaw.

Winter Shutdown

For the purposes of this permit, means the cessation of soil disturbing or soil stabilizing construction activity for the winter. Typically this period is from October/November to April/May and is approximately from fall freeze-up to spring thaw.

Appendix D Small Construction Waivers and Instructions

These waivers are only available to storm water discharges associated with small construction activities (i.e., 1-5 acres). As the operator of a small construction activity, the operator may be able to qualify for a waiver in lieu of needing to obtain coverage under this general permit based on: (A) a low rainfall erosivity factor, (B) a TMDL analysis, or (C) an equivalent analysis that determines allocations for small construction sites are not needed. Each applicant, otherwise needing permit coverage, must notify DEC of its intention for a waiver. It is the responsibility of that person wishing to obtain a waiver from coverage under this general permit to submit a complete and accurate waiver certification as described below. Where the operator changes or another is added during the construction project, the new operator must also submit a waiver certification to be waived.

D.1 Rainfall Erosivity Waiver

Under this scenario the small construction project's rainfall erosivity factor calculation ("R" in the Revised Universal Soil Loss Equation) is less than 5 during the period of construction activity. The operator must certify to the Department that construction activity will occur only when the rainfall erosivity factor is less than 5. The period of construction activity begins at initial earth disturbance and ends with final stabilization. Where vegetation will be used for final stabilization, the date of installation of a stabilization practice that will provide temporary non-vegetative stabilization can be used for the end of the construction period, provided the operator commits (as a condition of waiver eligibility) to periodically inspect and properly maintain the area until the criteria for final stabilization as defined in the construction general permit have been met. If use of this temporary stabilization eligibility condition was relied on to qualify for the waiver, signature on the waiver with its certification statement constitutes acceptance of and commitment to complete the final stabilization process. The applicant must submit a waiver certification to the Department prior to commencing construction activities.

Note: The basis of the rainfall erosivity factor "R" was determined in accordance with Chapter 2 of Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE), pages 21–64, dated January 1997; United States Department of Agriculture (USDA), Agricultural Research Service. R factor information for Alaska can be found in the Fact Sheet and were obtained from RUSLE2 Version 1.26.6.4 http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm. (Database last modified on Feb, 28, 2008).

If the operator is eligible for a waiver based on low erosivity potential, the operator may submit a rainfall erosivity waiver to the address listed in Appendix A, Part 1.1.1 and provide the following information on the waiver certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the operator;
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The rainfall erosivity factor calculation that applies to the active construction phase at your project site; and
5. A statement, signed and dated by an authorized representative as provided in Appendix A, Part 1.12, which certifies that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five.

An applicant can access the waiver certification form from ADEC's website at: (<http://dec.alaska.gov/water/wastewater/stormwater/>). The form must be sent to the address listed in Appendix A, Part 1.1.1, Permitting Program of this permit.

Note: If the R factor is five or greater, you cannot apply for the rainfall erosivity waiver, and must apply for permit coverage as per Part 2.2 of the construction general permit, unless you qualify for the Water Quality Waiver as described below.

If the small construction project continues beyond the projected completion date given on the waiver certification, the applicant must recalculate the rainfall erosivity factor for the new project duration. If the R factor is below five, the owner or operator must update all applicable information on the waiver certification and retain a copy of the revised waiver as part of the site SWPPP. The new waiver certification must be submitted prior to the projected completion date listed on the original waiver form to assure exemption from permitting requirements is uninterrupted. If the new R factor is five or above, the applicant must submit an NOI, in accordance with Part 2.0 of the permit.

D.2 TMDL Waiver

This waiver is available if DEC or EPA has established or approved a TMDL that addresses the pollutant(s) of concern and has determined that controls on storm water discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity, or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on TMDLs that have been established or approved by EPA is available from EPA online at <https://www.epa.gov/tmdl/impaired-waters-and-tmdls-region-10> and from DEC online at <http://dec.alaska.gov/water/water-quality/impaired-waters>.

If an applicant of the construction activity is eligible for a waiver based on compliance with a DEC or EPA established or approved TMDL, the operator must provide the following information on the Waiver Certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the operator;
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the water body(s) that would be receiving storm water discharges from your construction project;
5. The name and approval date of the TMDL;
6. A statement, signed and dated by an authorized representative as provided in Appendix A, Part 1.12 that certifies that the construction activity will take place and that the storm water discharges will occur, within the drainage area addressed by the TMDL.

D.3 Equivalent Analysis Waiver

This waiver is available for non-impaired waters only (see 2018 *Approved Integrated Report*, or most current EPA-approved version: <http://dec.alaska.gov/water/water-quality/integrated-report/> and <http://dec.alaska.gov/water/water-quality/impaired-waters/> for list of impaired waters). The operator can develop an equivalent analysis that determines allocations for the small construction site for the pollutant(s) of concern or determines that such allocations are not needed to protect water quality. This waiver requires a small construction site to develop an equivalent analysis based on existing in-stream concentrations, expected growth in pollutant concentrations from all sources, and a margin of safety.

If an operator wants to use this waiver, the operator must develop an equivalent analysis and provide the following information to be waived from permitting requirements:

1. Name, address and telephone number of the operator;
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the water bodies that would be receiving storm water discharges from your construction project;
5. The equivalent analysis;
6. A statement, signed and dated by an authorized representative as provided in Appendix A, Part 1.12, that certifies that the construction activity will take place and that the storm water discharges will occur, within the drainage area addressed by the equivalent analysis.

D.4 Waiver Deadlines and Submissions

1. Waiver certifications must be submitted prior to commencement of construction activities.
2. If an operator submits a TMDL or equivalent analysis waiver request, the operators request is not waived until the Department approves the request. As such, the operator may not commence construction activities until receipt of approval from the Department.
3. Late Notifications: operators are not prohibited from submitting waiver certifications after initiating clearing, grading, excavation activities, or other construction activities. The Department reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and waiver authorization is granted.

Submittal of a waiver certification is an optional alternative to obtaining permit coverage for discharges of storm water associated with small construction activity, provided the operator qualifies for the waiver. Any discharge of storm water associated with small construction activity not covered by either a permit or a waiver may be considered an unpermitted discharge under the CWA. As mentioned above, the Department reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and either discharge authorization is granted or a complete and accurate waiver certification is submitted. The Department may notify any operator covered by a waiver that they must apply for a permit. The Department may notify any construction project that has been in non-compliance with a waiver that they may no longer use the waiver for future projects. Any member of the public may petition the Department to take action under this provision by submitting written notice along with supporting justification.

Appendix E Forms

- Notice of Intent (NOI)
- Notice of Termination (NOT)
- Notice of Intent Modification
- Low Erosivity Waiver
- Annual Report



Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity under an APDES Construction General Permit

Submission of this Notice of Intent (NOI) constitutes notice that the party identified in Section II of this form requests authorization to discharge pursuant to the APDES Construction General Permit (CGP, AKR100000). Submission of this NOI also constitutes notice that the party identified in Section II of this form meets the eligibility requirements of the CGP for the project identified in Section III of this form. Permit authorization is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Refer to the instructions at the end of this form.

I. Single/Multiple NOI Project			
Is this NOI for a project with a single NOI?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If "No," then your project has multiple NOIs, will the fee be paid with this NOI?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If "No," then enter the name of the operator paying the fee:			
II. Operator Information			
Type of Operator/Responsibility per Permit Part 1.2.1:			
<input type="checkbox"/> Day-to-day operational control of on-site activities		<input type="checkbox"/> Construction Plans and Specifications	
Organization:	Name:	Title:	
Phone:	Fax (optional):	Email:	
Mailing Address: Street or PO Box:	City:	State:	Zip:
Primary SIC or NAICS Code:	SIC:	NAICS:	
III. Project / Site Information			
Project Name:		Estimated Start Date:	Estimated End Date:
Brief Description of Project:		Estimated Area to be Disturbed (nearest tenth acre):	
Location Address:		Borough or similar government subdivision:	
Street:	City:	State:	Zip:
Alaska			
Latitude <small>(decimal degree, 5 places):</small>	Longitude <small>(decimal degree, 5 places):</small>	Determined By: <input type="checkbox"/> GPS <input type="checkbox"/> Web, Source: <input type="checkbox"/> USGS Topographic Map, scale: <input type="checkbox"/> Other:	
IV. SWPPP (Storm Water Pollution Prevention Plan)			
Location of SWPPP for Viewing: <input type="checkbox"/> Address in Section II, <input type="checkbox"/> Address in Section III, <input type="checkbox"/> Other			
If other:	Street:	City:	State: Zip:
Additional Info:			
SWPPP Contact Information (if different than that in Section II):			
Organization:	Name:	Title:	
Phone:	Fax (optional):	Email:	
Mailing Address:	Street (PO Box):	City:	State: Zip:
<input type="checkbox"/> Check if same as Operator Information			

Has the SWPPP been prepared in advance of filing this NOI?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
For projects with 5 or more acres of disturbance, has a SWPPP been submitted to DEC?	<input type="checkbox"/> Yes	<input type="checkbox"/> No, ≤ 5 acres
Is your project / site less than one-acre, but part of a common plan of development?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If "Yes", provide the Permit Authorization Number and _____ Number: name of the common plan of development: _____ Name: _____		
Have storm water discharges from your project / site been authorized previously by a DEC permit?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If "Yes," provide the Permit Authorization Number for the previous DEC permit? _____		
If "Yes," have you updated your SWPPP according to the most recently issued CGP?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

V. Permanent Storm Water Controls

Will you construct a permanent storm water management control measure at the project site (Part 4.11)? Yes No

If "Yes", indicate the type of measure to be installed:

Pond Oil/Water/Grit Separator Proprietary Storm Water Sedimentation Device

Other: _____

VI. Discharge Information

Does your project discharge into a Municipal Separate Storm Sewer System (MS4)? Yes No

If yes, name of the MS4 Operator: _____

Receiving Water and Wetlands Information: (if additional space is needed for this question, attach separate sheet or annotate in Section XI.)

a. Identify the name(s) of waterbodies or wetlands to which you discharge.	Impaired waters/303d Listed waters: (see http://dec.alaska.gov/water/water-quality/impaired-waters or GIS map of Impaired Waters , and Integrated Water Quality and Monitoring and Assessment Reports Webpage .)		c. If you answered YES to question b, then answer the following three questions:			
	b. Are any of your discharges directly into any segment of a 303d Listed Water, i.e. "Impaired" Water?		i. What pollutant(s) are causing the impairment?	ii. Are the pollutant(s) causing the impairment present in your discharge?		iii. Is the discharge consistent with the assumptions and requirements of applicable EPA approved or established Total Maximum Daily Load (TMDL(s))?
	Yes	No		Yes	No	Yes
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII. Billing Contact Information

Organization: _____ Name: _____ Title: _____

Phone: _____ Fax (optional): _____ Email: _____

Mailing Address: _____ Street (PO Box): _____

Check if same as Operator Information

City: _____ State: _____ Zip: _____

VIII. NOI Preparer (Complete if NOI was prepared by someone other than the certifier.)

Organization: _____ Name: _____ Title: _____

Phone: _____ Fax (optional): _____ Email: _____

Mailing Address: _____ Street (PO Box): _____

Check if same as Operator Information

City: _____ State: _____ Zip: _____

IX. Certification Information

An Alaska Pollutant Discharge Elimination System (APDES) permit application or report must be signed by an individual with the appropriate authority per 18 AAC 83.385. For additional information, please refer to 18 AAC 83.385 at the following link: <http://www.legis.state.ak.us/basis/aac.asp#18.83.385>.

Corporate Executive Officer 18 AAC 83.385 (a)(1)(A)	For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation.
Corporate Operations Manager 18 AAC 83.385 (a)(1)(B)	For a corporation, the manager of one or more manufacturing, production, or operating facilities, if (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations; (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
Sole Proprietor or General Partner 18 AAC 83.385 (a)(2)	For a partnership or sole proprietorship, the general partner or the proprietor respectively.
Public Agency, Chief Executive Officer 18 AAC 83.385 (a)(3)(A)	For a municipality, state, or other public agency, the chief executive officer of the agency.
Public Agency, Senior Executive Officer 18 AAC 83.385 (a)(3)(B)	For a municipality, state, or other public agency, a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
<i>*For Delegated Authority: the delegation must be made in writing and submitted to the DEC. An Example of written authorization delegating authority can be found at http://dec.alaska.gov/media/13316/delegation-of-signatory-authority.pdf</i>	
Operations Manager (Delegated Authority)* 18 AAC 83.385 (b)(2)(A)	For a duly authorized representative, an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent or position of equivalent responsibility.
Environmental Manager (Delegated Authority)* 18 AAC 83.385 (b)(2)(B)	For a duly authorized representative, an individual or position having overall responsibility for environmental matters for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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.

Organization:	Name:	Title:
Phone:	Fax (optional):	Email:
Mailing Address:	Street (PO Box):	
<input type="checkbox"/> Check if same as Operator Information	City:	State:
		Zip:
Signature	Date	

X. Document Attachments and Supplemental Information

Documents attached with this application:

- Copy of SWPPP if ≥ 5 acres of disturbance.
- Delegation of Signatory Authority.
- Other:

Instructions for Completing a Notice of Intent (NOI) Form for Storm Water Discharges Associated with Construction Activity under an APDES Construction General Permit

Who Must File an NOI Form:

Operators of construction sites where one or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, or any other site specifically designated by the Director, must submit an NOI to obtain coverage under an APDES construction general permit. Each person, firm, public organization, or any other entity that meets either of the following criteria must file this form: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have day-to-day operational control of those activities at the project necessary to ensure compliance with SWPPP requirements or other permit conditions.

Completing the Form:

Obtain and read a copy of the APDES Construction General Permit. Type or print, in the appropriate areas only. "NA" can be entered in areas that are not applicable. If you have any questions about how or when to use this form, contact the DEC Storm Water Program at (907) 269-6285 or online at <http://dec.alaska.gov/water/wastewater/stormwater/>.

Section I. Single/Multiple NOI Project:

Indicate whether or not this is a single NOI project. If not, indicate if the fee will be paid with this NOI or another associated with this project. Provide the name of the operator that will be paying the fee.

Section II. Operator Information:

Provide the name of the contact person, title, and the legal name of the firm, public organization, or any other entity that operates the project described in this application. (An operator of a project is a legal entity that controls at least a portion of site operations and is not necessarily the site manager.) Also provide the operator's mailing address, telephone number, fax number (optional) and e-mail address (to be notified via e-mail of NOI approval when available). Correspondence for the NOI will be sent to this address.

Section III. Project/Site Information:

Enter the official or legal name, a brief description of the project or site, and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit authorization to be granted.

Provide the latitude and longitude of the facility in decimal degrees format with up to 5 digit accuracy. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic quadrangle maps, Google Earth, Bing Maps, and EPA's web-

based siting tools, among others. For consistency, DEC requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used. Enter the estimated construction start and completion dates using four digits for the year (i.e., 05/27/2021).

Enter the estimated area (acres) to be disturbed including but not limited to grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest tenth of an acre. Note: 1 acre = 43,560 sq. ft.

Indicate whether or not the project/site has been previously covered by an EPA or DEC permit. If "Yes" provide the permit authorization number that the project/site was covered under. If this is a project that was covered under a previous DEC construction general permit indicate whether or not the SWPPP has been updated in accordance with the most recently issued Alaska Construction General Permit.

If the project or site is less than one-acre, but part of a common plan of development, provide the permit authorization number and name of the common plan of development.

Section IV. SWPPP (Storm Water Pollution Prevention Plan) Information:

Note the SWPPP should be prepared in advance of filing the NOI form. For projects with 5 acres or more of disturbance, the initial SWPPP will need to be submitted to DEC with the NOI. Check the appropriate box for the location where the SWPPP may be viewed. Provide the name, fax number (optional), and e-mail address of the contact person if different than that listed in Section II of the NOI form.

Section V. Permanent Storm Water Controls

A permittee must comply with applicable APDES MS4 permit requirements, local requirements, and the applicable requirements under 18 AAC 72.600 (i.e., Nondomestic Wastewater System Plan Review) regarding the design and installation of permanent storm water management controls. Annotate the type of measure to be installed and see Permit Part 4.11 for additional requirements regarding plan submittal deadlines.

Section VI. Discharge Information:

Identify the receiving water bodies or wetlands to which the project's storm water will discharge. These should be the first bodies of water that the discharge will reach. (Note: If you discharge to more than one water body, please indicate all such waters in the space provided and attach a separate sheet if necessary.) For example, if the discharge leaves your site and travels through a roadside swale or a storm sewer and then enters a stream that flows to a river, the stream would be the receiving water body. Waters of the U.S. include lakes, streams, creeks, rivers, wetlands, impoundments, estuaries, bays, oceans, and other surface bodies of water within the confines of the U.S. and U.S. coastal waters. (Waters of the U.S. do not

include man-made structures created solely for the purpose of wastewater treatment.) U.S.G.S. topographical maps may be used to make this determination. If the map does not provide a name, use a format such as “unnamed tributary to Cross Creek”. If you discharge into a municipal separate storm sewer system (MS4), you must identify the water body into which that portion of the storm sewer discharges. That information should be readily available from the operator of the MS4. Indicate if any of your storm water discharges from construction activities will be reach a 303d listed water (i.e., impaired water body)?

For a listing of impaired waters and an interactive map, see <http://dec.alaska.gov/water/water-quality/impaired-waters>. Indicate whether your storm water discharges from construction activities will be consistent with the assumptions and requirements of applicable EPA approved or established total maximum daily load(s)(TMDL(s)). To answer this question, refer to <http://dec.alaska.gov/water/water-quality/impaired-waters/>. You may also have to contact DEC. If there are no applicable TMDLs or no related requirements, please check the “yes” box in the NOI form.

Section VII. Billing Contact Information

Provide the name of the contact person, title, and the legal name of the firm, public organization, or any other entity that is responsible for accounts payable for this project. Also provide the billing contact’s mailing address, telephone number, fax number (optional), and email address. Correspondence for billing purposes will be sent to this address. If the billing contact is that same as the operator, check the box.

Section VIII. NOI Preparer Information.

If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the project SWPPP contact or a consultant for the certifier’s signature), include the name, title, organization, address, telephone number, and email address of the NOI preparer.

Section IX. Certification Information:

The NOI must be signed as follows:

- (1) For a corporation, a responsible corporate officer shall sign the NOI, a responsible corporate officer means:
 - (A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making functions for the corporation; or
 - (B) the manager of one or more manufacturing, production, or operating facilities, if
 - (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

- (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
 - (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- (2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or
- (3) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means
 - (A) the chief executive officer of the agency; or
 - (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
- (4) Include the name, title, organization, address, telephone number, and email address of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered valid application for permit coverage.

Section X. Document Attachments and Supplemental Information

Include a copy of the SWPPP if ≥ 5 acres of disturbance. Indicate documents attached and supplemental information.

Where to File NOI form

Select one of three options:

- 1) **Preferred Option:** DEC encourages you to complete the NOI form electronically via DEC’s Online Application System (OASys): <https://myalaska.state.ak.us/dec/water/OASys/Login.aspx>. Filing electronically is the fastest way to obtain permit coverage and help ensure that your NOI is complete.
- 2) If you file by mail please submit the original form with a signature in ink. Remember to retain a copy for your records.

NOIs sent by mail:

Alaska Dept. of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501
Phone: (907) 269-6285

- 3) Submit all pages of scanned original form via Email: DEC.Water.WQPermit@alaska.gov. (Note, 20MB limit).



Notice of Termination (NOT) for Storm Water Discharges Associated with Construction Activity filed under an APDES General Permit

Submission of this Notice of Termination (NOT) constitutes notice that the operator identified in Section II of this form is no longer authorized discharge pursuant to the APDES Construction General Permit (CGP) from the site identified in Section III of this form. All necessary information must be included on this form.

Coverage under the APDES CGP is terminated at midnight of the day the NOT is signed. The NOT must be submitted within 30 calendar days of one of the conditions in Section 10.2 of the CGP being met. Refer to the instructions at the end of this form for information on submitting a NOT.

Note: As per 18 AAC 83.130(k), a permittee subject to pending state or federal enforcement actions, including citizen suits brought under state or federal law, may not submit a NOT.

I. Permit Information

Permit Tracking Number: _____

Reason for Termination (Check only one):

- Final stabilization has been achieved on all portions of the site for which you are responsible, all ground disturbing construction activity or use of support activities has been completed and all temporary BMP's have been removed.
- Another operator has assumed control, according to Appendix A, Part 2.3, over all areas of the site that have not been finally stabilized. Provide the other operator's permit authorization number: _____
- Coverage under an individual permit or alternative APDES general permit has been obtained.
- For residential construction only, temporary stabilization has been completed and the residence has been transferred to the homeowner.
- The planned construction activity identified on the original NOI was never initiated (e.g., no grading or earthwork was ever started) and plans for the construction have been permanently abandoned or indefinitely postponed.

II. Operator Information (as it appears on your NOI):

Organization:	Name:	Title:
Phone:	Fax (optional):	Email:
Mailing Address: Street or PO Box:	City:	State: Zip:

III. Project / Site Information (as it appears on your NOI):

Project / Site Name:			
Street:			
Location			
Address:	City:	State:	Zip: Borough or similar government subdivision:
Alaska			

IV. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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.

I certify that I am not subject to any pending state or federal enforcement actions, including citizen suits brought under state or federal law.

Organization	Name	Title
Phone	Fax (Optional)	Email
Mailing Address:	Street (PO Box)	City State Zip
<input type="checkbox"/> check if same as Operator Information		

Signature

Date

Instructions for Completing a Notice of Termination (NOT) Form for APDES Construction General Permit

Who May File an NOT Form

Permittees presently covered under the Alaska Pollutant Discharge Elimination System (APDES) General Permit for Storm Water Discharges Associated with Construction Activity may submit an NOT form when:

- final stabilization has been achieved on all portions of the site for which you are responsible;
- another operator has assumed control, in accordance with Appendix A, Part 2.3 of the General Permit, over all areas of the site that have not been finally stabilized;
- coverage under individual permit or an alternative APDES permit has been obtained;
- for residential construction only, temporary stabilization has been completed and the residence has been transferred to the homeowner; or
- the planned construction activity identified on the original NOI was never initiated (e.g., no grading or earthwork was ever started) and plans for the construction have been permanently abandoned or indefinitely postponed.

"Final stabilization" means that all soil disturbing activities at the site have been completed and that a uniform perennial vegetative cover with a density of at least 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed. See "final stabilization" definition in Appendix A of the Construction General Permit for further guidance where background native vegetation covers less than 100 percent of the ground, in arid or semi-arid areas, for individual lots in residential construction, and for construction projects on land used for agricultural purposes.

Completing the Form:

Type or print, in the appropriate areas only. "NA" can be entered in areas that are not applicable. If you have any questions about how or when to use this form, contact the DEC Storm Water Program at (907) 269-6285 or online at <http://dec.alaska.gov/water/wastewater/stormwater/>.

Section I. Permit Number:

Enter the existing APDES Construction General Permit authorization number assigned to the project by ADEC's Storm Water Program. If you do not know the tracking number, you can find the tracking number assigned to your project/facility on DEC's Water Permit Search: <http://dec.alaska.gov/Applications/Water/WaterPermitSearch/Search.aspx?number=akr10>.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box. Check only one.

Section II. Operator Information:

Provide the name of the contact person, and the legal name of the firm, public organization, or any other entity that operates the project described in this application. (An operator of a project is a legal entity that controls at least a portion of site operations and is not necessarily the site manager.)

Also provide the operator's mailing address, telephone number, fax number (optional) and e-mail address.

Section III. Project/Site Information:

Enter the official or legal name, and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for termination of permit authorization to be valid.

Section IV. Certification Information:

The NOT must be signed as follows:

- (1) For a corporation, a responsible corporate officer shall sign the NOT, a responsible corporate officer means:
 - (A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making functions for the corporation; or
 - (B) the manager of one or more manufacturing, production, or operating facilities, if
 - (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;
 - (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
 - (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or
 - (3) For a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means
 - (A) the chief executive officer of the agency; or
 - (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
 - (4) Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated NOT form will not be considered valid termination for permit coverage.
- As per 18 AAC 83.130(k) A permittee subject to pending state or federal enforcement actions, including citizen suits brought under state or federal law, may not proceed under expedited termination procedures. A permittee requesting expedited permit termination procedures must certify that it is not subject to any pending state or federal enforcement actions, including citizen suits brought under state or federal law.

Where to File NOT form

DEC encourages you to complete the NOT form electronically via DEC's Online Application System (OASys) can be found at <https://myalaska.state.ak.us/dec/water/OASys/Login.aspx>. Filing electronically is the fastest way to terminate permit coverage and help ensure that your NOT is complete. If you choose not to file electronically, you must send the NOT to the address listed below.

If you file by mail, please submit the original form with a signature in ink. Remember to retain a copy for your records.

NOTs sent by mail:

Alaska Dept. of Environmental Conservation
Division of Water, Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501
Phone: (907) 269-6285
Email: DEC.Water.WQPermit@alaska.gov



**Notice of Intent (NOI) Modification
for Storm Water Discharges Associated with
Construction Activity filed under an APDES General Permit**

(Please copy content exactly from your NOI. Indicate changes on the next page.)

I. Current NOI Information

I. Permit Authorization Number:

II. Operator Information *(as it appears on your NOI)*

Organization: _____ Name: _____ Title: _____

Phone: _____ Fax (optional): _____ Email: _____

Mailing Address: Street or PO Box: _____ City: _____ State: _____ Zip: _____

III. Project / Site Information

Project Name:

Brief Description of Project:

Location Address:

Street: _____ City: _____

Borough or similar government subdivision:

State: _____ Zip: _____

Alaska

Instructions for Completing a Modification to an APDES Notice of Intent (NOI)

Use the form on the subsequent pages to indicate the items for which you are submitting this modification. Only enter the information you wish to change. You may use this form to modify an NOI that you submitted to ADEC for coverage under the Construction General Permit (CGP). If you have any questions about modifying your NOI, call the DEC Storm Water Program at (907) 269-6285.

When Should You Modify Your Notice of Intent (NOI)?

- You can use this form to update or correct information on your NOI, including:
- Owner/Operator address and contact information
- Site Information
- Start or End dates *(if estimated start or end dates differ greater than 30 days)*
- Number of acres to be disturbed

(Note, if the original project disturbance was between 1 and < 5 acres, and now will disturb five acres or more, a SWPPP must also be submitted with the NOI modification. Please note the CGP has different provisions for small and large construction projects.)

- Storm Water Pollution Prevention Plan (SWPPP) location and contact information
- Continuation of expired permit in accordance with Part 2.6.

When must you Submit a Notice of Termination (NOT) Instead of a Modification Form?

- The owner/operator has changed: You must submit a NOT when you transfer control of a site to a new owner/operator. The new owner/operator must then file a new NOI to obtain coverage under DEC's CGP. Coverage is not transferable.



Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity under an APDES Construction General Permit

Submission of this Notice of Intent (NOI) constitutes notice that the party identified in Section II of this form requests authorization to discharge pursuant to the APDES Construction General Permit (CGP, AKR100000). Submission of this NOI also constitutes notice that the party identified in Section II of this form meets the eligibility requirements of the CGP for the project identified in Section III of this form. Permit authorization is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Refer to the instructions at the end of this form.

I. Single/Multiple NOI Project			
Is this NOI for a project with a single NOI?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If "No," then your project has multiple NOIs, will the fee be paid with this NOI?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If "No," then enter the name of the operator paying the fee:			
II. Operator Information			
Type of Operator/Responsibility per Permit Part 1.2.1:			
<input type="checkbox"/> Day-to-day operational control of on-site activities		<input type="checkbox"/> Construction Plans and Specifications	
Organization:	Name:	Title:	
Phone:	Fax (optional):	Email:	
Mailing Address: Street or PO Box:	City:	State:	Zip:
Primary SIC or NAICS Code:	SIC:	NAICS:	
III. Project / Site Information			
Project Name:		Estimated Start Date:	Estimated End Date:
Brief Description of Project:		Estimated Area to be Disturbed (nearest tenth acre):	
Location Address:		Borough or similar government subdivision:	
Street:	City:	State:	Zip:
Alaska			
Latitude <small>(decimal degree, 5 places):</small>	Longitude <small>(decimal degree, 5 places):</small>	Determined By: <input type="checkbox"/> GPS <input type="checkbox"/> Web, Source: <input type="checkbox"/> USGS Topographic Map, scale: <input type="checkbox"/> Other:	
IV. SWPPP (Storm Water Pollution Prevention Plan)			
Location of SWPPP for Viewing: <input type="checkbox"/> Address in Section II, <input type="checkbox"/> Address in Section III, <input type="checkbox"/> Other			
If other:	Street:	City:	State: Zip:
Additional Info:			
SWPPP Contact Information (if different than that in Section II):			
Organization:	Name:	Title:	
Phone:	Fax (optional):	Email:	
Mailing Address:	Street (PO Box):	City:	State: Zip:
<input type="checkbox"/> Check if same as Operator Information			

Has the SWPPP been prepared in advance of filing this NOI? Yes No

For projects with 5 or more acres of disturbance, has a SWPPP been submitted to DEC? Yes No, ≤ 5 acres

Is your project / site less than one-acre, but part of a common plan of development? Yes No

If "Yes", provide the Permit Authorization Number and _____ Number:
name of the common plan of development: _____ Name: _____

Have storm water discharges from your project / site been authorized previously by a DEC permit? Yes No

If "Yes," provide the Permit Authorization Number for the previous DEC permit? _____

If "Yes," have you updated your SWPPP according to the most recently issued CGP? Yes No

V. Permanent Storm Water Controls

Will you construct a permanent storm water management control measure at the project site (Part 4.11)? Yes No

If "Yes", indicate the type of measure to be installed:

Pond

Oil/Water/Grit Separator

Proprietary Storm Water Sedimentation Device

Other: _____

VI. Discharge Information

Does your project discharge into a Municipal Separate Storm Sewer System (MS4)? Yes No

If yes, name of the MS4 Operator: _____

Receiving Water and Wetlands Information: (if additional space is needed for this question, attach separate sheet or annotate in Section XI.)

a. Identify the name(s) of waterbodies or wetlands to which you discharge.	Impaired waters/303d Listed waters: (see http://dec.alaska.gov/water/water-quality/impaired-waters or GIS map of Impaired Waters , and Integrated Water Quality and Monitoring and Assessment Reports Webpage .)		c. If you answered YES to question b, then answer the following three questions:				
	b. Are any of your discharges directly into any segment of a 303d Listed Water, i.e. "Impaired" Water?		i. What pollutant(s) are causing the impairment?		ii. Are the pollutant(s) causing the impairment present in your discharge?		iii. Is the discharge consistent with the assumptions and requirements of applicable EPA approved or established Total Maximum Daily Load (TMDL(s))?
	Yes	No		Yes	No	Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

VII. Billing Contact Information

Organization: _____ Name: _____ Title: _____

Phone: _____ Fax (optional): _____ Email: _____

Mailing Address: _____ Street (PO Box): _____

Check if same as

Operator Information City: _____ State: _____ Zip: _____

VIII. NOI Preparer (Complete if NOI was prepared by someone other than the certifier.)

Organization: _____ Name: _____ Title: _____

Phone: _____ Fax (optional): _____ Email: _____

Mailing Address: _____ Street (PO Box): _____

Check if same as

Operator Information City: _____ State: _____ Zip: _____

IX. Certification Information

An Alaska Pollutant Discharge Elimination System (APDES) permit application or report must be signed by an individual with the appropriate authority per 18 AAC 83.385. For additional information, please refer to 18 AAC 83.385 at the following link: <http://www.legis.state.ak.us/basis/aac.asp#18.83.385>.

Corporate Executive Officer 18 AAC 83.385 (a)(1)(A)	For a corporation, a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation.
Corporate Operations Manager 18 AAC 83.385 (a)(1)(B)	For a corporation, the manager of one or more manufacturing, production, or operating facilities, if (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations; (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
Sole Proprietor or General Partner 18 AAC 83.385 (a)(2)	For a partnership or sole proprietorship, the general partner or the proprietor respectively.
Public Agency, Chief Executive Officer 18 AAC 83.385 (a)(3)(A)	For a municipality, state, or other public agency, the chief executive officer of the agency.
Public Agency, Senior Executive Officer 18 AAC 83.385 (a)(3)(B)	For a municipality, state, or other public agency, a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
<i>*For Delegated Authority: the delegation must be made in writing and submitted to the DEC. An Example of written authorization delegating authority can be found at http://dec.alaska.gov/media/13316/delegation-of-signatory-authority.pdf</i>	
Operations Manager (Delegated Authority)* 18 AAC 83.385 (b)(2)(A)	For a duly authorized representative, an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent or position of equivalent responsibility.
Environmental Manager (Delegated Authority)* 18 AAC 83.385 (b)(2)(B)	For a duly authorized representative, an individual or position having overall responsibility for environmental matters for the company.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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.

Organization:	Name:	Title:
Phone:	Fax (optional):	Email:
Mailing Address: Street (PO Box): <input type="checkbox"/> Check if same as Operator Information	City:	State: Zip:
Signature _____	Date _____	

X. Document Attachments and Supplemental Information

Documents attached with this application:

- Copy of SWPPP if ≥ 5 acres of disturbance.
 Delegation of Signatory Authority.
 Other:

Instructions for Completing a Notice of Intent (NOI) Form for Storm Water Discharges Associated with Construction Activity under an APDES Construction General Permit

Who Must File an NOI Form:

Operators of construction sites where one or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, or any other site specifically designated by the Director, must submit an NOI to obtain coverage under an APDES construction general permit. Each person, firm, public organization, or any other entity that meets either of the following criteria must file this form: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have day-to-day operational control of those activities at the project necessary to ensure compliance with SWPPP requirements or other permit conditions.

Completing the Form:

Obtain and read a copy of the APDES Construction General Permit. Type or print, in the appropriate areas only. "NA" can be entered in areas that are not applicable. If you have any questions about how or when to use this form, contact the DEC Storm Water Program at (907) 269-6285 or online at <http://dec.alaska.gov/water/wastewater/stormwater/>.

Section I. Single/Multiple NOI Project:

Indicate whether or not this is a single NOI project. If not, indicate if the fee will be paid with this NOI or another associated with this project. Provide the name of the operator that will be paying the fee.

Section II. Operator Information:

Provide the name of the contact person, title, and the legal name of the firm, public organization, or any other entity that operates the project described in this application. (An operator of a project is a legal entity that controls at least a portion of site operations and is not necessarily the site manager.) Also provide the operator's mailing address, telephone number, fax number (optional) and e-mail address (to be notified via e-mail of NOI approval when available). Correspondence for the NOI will be sent to this address.

Section III. Project/Site Information:

Enter the official or legal name, a brief description of the project or site, and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit authorization to be granted.

Provide the latitude and longitude of the facility in decimal degrees format with up to 5 digit accuracy. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic quadrangle maps, Google Earth, Bing Maps, and EPA's web-

based siting tools, among others. For consistency, DEC requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used. Enter the estimated construction start and completion dates using four digits for the year (i.e., 05/27/2021).

Enter the estimated area (acres) to be disturbed including but not limited to grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest tenth of an acre. Note: 1 acre = 43,560 sq. ft.

Indicate whether or not the project/site has been previously covered by an EPA or DEC permit. If "Yes" provide the permit authorization number that the project/site was covered under. If this is a project that was covered under a previous DEC construction general permit indicate whether or not the SWPPP has been updated in accordance with the most recently issued Alaska Construction General Permit.

If the project or site is less than one-acre, but part of a common plan of development, provide the permit authorization number and name of the common plan of development.

Section IV. SWPPP (Storm Water Pollution Prevention Plan) Information:

Note the SWPPP should be prepared in advance of filing the NOI form. For projects with 5 acres or more of disturbance, the initial SWPPP will need to be submitted to DEC with the NOI. Check the appropriate box for the location where the SWPPP may be viewed. Provide the name, fax number (optional), and e-mail address of the contact person if different than that listed in Section II of the NOI form.

Section V. Permanent Storm Water Controls

A permittee must comply with applicable APDES MS4 permit requirements, local requirements, and the applicable requirements under 18 AAC 72.600 (i.e., Nondomestic Wastewater System Plan Review) regarding the design and installation of permanent storm water management controls. Annotate the type of measure to be installed and see Permit Part 4.11 for additional requirements regarding plan submittal deadlines.

Section VI. Discharge Information:

Identify the receiving water bodies or wetlands to which the project's storm water will discharge. These should be the first bodies of water that the discharge will reach. (Note: If you discharge to more than one water body, please indicate all such waters in the space provided and attach a separate sheet if necessary.) For example, if the discharge leaves your site and travels through a roadside swale or a storm sewer and then enters a stream that flows to a river, the stream would be the receiving water body. Waters of the U.S. include lakes, streams, creeks, rivers, wetlands, impoundments, estuaries, bays, oceans, and other surface bodies of water within the confines of the U.S. and U.S. coastal waters. (Waters of the U.S. do not

include man-made structures created solely for the purpose of wastewater treatment.) U.S.G.S. topographical maps may be used to make this determination. If the map does not provide a name, use a format such as “unnamed tributary to Cross Creek”. If you discharge into a municipal separate storm sewer system (MS4), you must identify the water body into which that portion of the storm sewer discharges. That information should be readily available from the operator of the MS4. Indicate if any of your storm water discharges from construction activities will be reach a 303d listed water (i.e., impaired water body)?

For a listing of impaired waters and an interactive map, see <http://dec.alaska.gov/water/water-quality/impaired-waters>. Indicate whether your storm water discharges from construction activities will be consistent with the assumptions and requirements of applicable EPA approved or established total maximum daily load(s)(TMDL(s)). To answer this question, refer to <http://dec.alaska.gov/water/water-quality/impaired-waters/>. You may also have to contact DEC. If there are no applicable TMDLs or no related requirements, please check the “yes” box in the NOI form.

Section VII. Billing Contact Information

Provide the name of the contact person, title, and the legal name of the firm, public organization, or any other entity that is responsible for accounts payable for this project. Also provide the billing contact’s mailing address, telephone number, fax number (optional), and email address. Correspondence for billing purposes will be sent to this address. If the billing contact is that same as the operator, check the box.

Section VIII. NOI Preparer Information.

If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the project SWPPP contact or a consultant for the certifier’s signature), include the name, title, organization, address, telephone number, and email address of the NOI preparer.

Section IX. Certification Information:

The NOI must be signed as follows:

- (1) For a corporation, a responsible corporate officer shall sign the NOI, a responsible corporate officer means:
 - (A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making functions for the corporation; or
 - (B) the manager of one or more manufacturing, production, or operating facilities, if
 - (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

- (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
- (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- (2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or
- (3) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means
 - (A) the chief executive officer of the agency; or
 - (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
- (4) Include the name, title, organization, address, telephone number, and email address of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered valid application for permit coverage.

Section X. Document Attachments and Supplemental Information

Include a copy of the SWPPP if ≥ 5 acres of disturbance. Indicate documents attached and supplemental information.

Where to File NOI form

Select one of three options:

- 1) **Preferred Option:** DEC encourages you to complete the NOI form electronically via DEC’s Online Application System (OASys): <https://myalaska.state.ak.us/dec/water/OASys/Login.aspx>. Filing electronically is the fastest way to obtain permit coverage and help ensure that your NOI is complete.

- 2) If you file by mail please submit the original form with a signature in ink. Remember to retain a copy for your records.

NOIs sent by mail:

Alaska Dept. of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501
Phone: (907) 269-6285

- 3) Submit all pages of scanned original form via Email: DEC.Water.WQPermit@alaska.gov. (Note, 20MB limit).

Instructions for Completing a Notice of Intent (NOI) Form for Storm Water Discharges Associated with Construction Activity under an APDES Construction General Permit

Who May Qualify for a Low Erosivity Waiver

Under the Alaska Pollutant Discharge Elimination System (APDES) Program, operators of construction projects that result in land disturbances equal to or greater than one acre, including sites that are less than one acre but are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, are required to obtain coverage under an APDES permit for stormwater discharges associated with construction activity.

DEC may waive the otherwise applicable permit requirements for stormwater discharges from construction activities that disturb less than five acres if the construction activity will take place during a period when the rainfall erosivity factor (R factor) is less than five. More information on the low erosivity waiver is available in the 2021 CGP Fact Sheet Appendix D. For questions related to completion of this form, you may contact DEC's Stormwater Program at (907) 269-6285.

Completing the Form:

You must type or print in appropriate areas only. One form must be completed for each facility or site for which you are seeking to obtain a Low Erosivity Waiver. Additional guidance on completing this form can be accessed at DEC's Storm Water Program website:

<http://dec.alaska.gov/water/wastewater/stormwater>.

Please make sure you have addressed all applicable questions and have made a photocopy for your records before sending the completed form to DEC.

Section I. Operator Information:

Each legal entity that meets DEC's definition of "operator" (see definitions in Appendix C of DEC's APDES Construction General Permit) and that meets the eligibility conditions for the low erosivity waiver must file this form to have the permit requirements waived. The operator is the legal entity that either (1) has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications, or (2) has day-to-day operational control of some or all of those activities.

It is possible that there will be more than one operator at a site and, in such cases, each entity that meets the operator definition must complete a Low Erosivity Waiver Certification.

Provide the legal name of your firm, public organization, or other entity that operates the project described in this waiver certification. Usually this will be a company or organization's name but for construction activities undertaken by you as an individual, this should be your name. Enter the operator's complete mailing address and name of contact person, telephone number, fax number (optional) and email who can answer questions about the site (e.g., a project or site manager).

Section II. Project/Site Information:

Enter the official or legal name, a brief description of the project or site, and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit authorization to be granted.

Provide the latitude and longitude of the facility in , decimal degrees format with up to 5 digit accuracy. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic or quadrangle maps, Google Earth, Bing Maps, and EPA's web-based siting tools, among others. Refer to <https://www.epa.gov/npdes/construction-general-permit-resources-tools-and-templates> for further guidance on the use of these methodologies. For consistency, DEC requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used. Enter the estimated construction start and completion dates using four digits for the year (i.e., 05/27/2015).

Enter the estimated area (acres) to be disturbed including but not limited to: grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest tenth of an acre. Note: 1 acre = 43,560 sq. ft.

Section III. Rainfall Erosivity Factor Calculation Data

The construction period begins with the initial earth disturbance and ends with final site stabilization. To qualify for this waiver, the rainfall erosivity factor for the project must be less than five during the entire construction period. Specify the construction period by entering the project start date (date of initial earth disturbance) and project completion date (date of final site stabilization). For example, a grading contractor that is operating on-site for only one week during a nine month construction project, must enter the start date and completion date of the entire nine month construction period.

DEC believes, where the environmental threat is low (i.e., in arid and semi-arid climates), that "final stabilization" can include techniques that employ re-vegetation combined with other stabilization measures, consisting of temporary degradable rolled erosion control products, also known as "erosion control blankets (ECBs). With proper selection, design, and installation of the combination re-vegetation/ECB technique in arid or semi-arid areas, an operator can be considered to have achieved final stabilization upon completion of the installation process. Note that if more than three years is required to establish 70 percent of the natural

vegetative cover, this technique cannot be used or cited for fulfillment of the final stabilization requirement. If your waiver is based on use of interim non-vegetative stabilization measures, such as erosion control blankets, to establish the end of the construction period, you must indicate so on this form. In doing so, you must commit and certify (as a condition of waiver eligibility) to periodically inspect and properly maintain the area until the criteria for final stabilization, as defined in the Construction General Permit, have been met.

The rainfall erosivity factor "R" is determined in accordance with the U.S. Department of Agriculture *Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE)*, Chapter 2 pages 21-64, dated January 1997.

If the R factor is five or greater during the project's construction period, you must have or obtain coverage under an APDES stormwater permit. If the project was eligible for the waiver during the original construction period, but the construction activity will extend past the project completion date specified in the Low Erosivity Waiver Certification, the operator must recalculate the R factor using the original start date and a new project completion date. If the recalculated R factor is still less than five, a new waiver certification form must be submitted before the end of the original construction period. If the new R factor is five or greater, the operator must submit a Notice of Intent to be covered by the Construction General Permit before the original project completion date. The Notice of Intent (NOI) form may be submitted electronically using DEC's Online Application System (OASys). OASys can be accessed at <http://dec.alaska.gov/water/oasys.aspx>. If you choose to fill out an NOI and mail it to DEC you can obtain a copy at <http://dec.alaska.gov/water/wastewater/stormwater/forms/#tab-CGP>.

Section IV. Certification Information:

The Low Erosivity Waiver must be signed as follows:

- (1) For a corporation, a responsible corporate officer shall sign the Low Erosivity Waiver, a responsible corporate officer means:
 - (A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making functions for the corporation; or
 - (B) the manager of one or more manufacturing, production, or operating facilities, if
 - (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental

compliance with environmental statutes and regulations;

- (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
 - (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or
- (3) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means
 - (A) the chief executive officer of the agency; or
 - (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
- (4) Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated waiver form will not be considered valid application for exclusion from permit coverage.

Where to File Low Erosivity Certification Form

Please submit the original form with a signature in ink. Remember to retain a copy for your records.

NOIs sent by mail:

Alaska Dept. of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501
Phone: (907) 269-6285
Email: DEC.Water.WQPermit@alaska.gov



Alaska Department of Environmental Conservation

CGP Annual Reporting Form

Complete one set of tables for each storm event (rainfall or snowmelt) that resulted in a discharge from the site. At a minimum per part 7.3.2.2 of the CGP two samples per discharge point shall be collected and averaged. Attach additional tables as necessary. See instructions on the next page for more information.

I. Project Information

Permit Tracking Number:	Project Name:	Project Location:						
Project Operator Name		Nature of Discharge						
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Rainfall Amount (inches)</td> <td style="width: 33%;">Rainfall</td> <td style="width: 34%;">Snowmelt</td> </tr> <tr> <td></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	Rainfall Amount (inches)	Rainfall	Snowmelt		<input type="checkbox"/>	<input type="checkbox"/>
Rainfall Amount (inches)	Rainfall	Snowmelt						
	<input type="checkbox"/>	<input type="checkbox"/>						
Do you have substantially identical discharge points on a linear project as described in Part 7.3.4 of the ACGP? <input type="checkbox"/> Yes <input type="checkbox"/> No		Measurement Method						
List identical discharge point names or ID numbers which are identified in your SWPPP that are not sampled but visually monitored.		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">On Site Gauge:</td> <td style="width: 50%;">At Nearest National Weather Service Precipitation Gauge</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	On Site Gauge:	At Nearest National Weather Service Precipitation Gauge	<input type="checkbox"/>	<input type="checkbox"/>		
		On Site Gauge:	At Nearest National Weather Service Precipitation Gauge					
<input type="checkbox"/>	<input type="checkbox"/>							
		Date Samples Collected (mm/dd/yyyy):						

II. Monitoring Results

All discharge points on your site subject to monitoring shall have two turbidity samples collected, averaged, and reported as average downstream turbidity. Compliance is determined based upon the difference between the individual upstream sample for that specific discharge point and the average downstream turbidity result.

Upstream location ID <i>(used in the SWPPP)</i>							
Latitude/Longitude <i>(Decimal Degrees)</i>							
Time Sample collected:							
Turbidity (NTUs):							
Downstream location ID							
Latitude/Longitude <i>(Decimal Degrees)</i>							
Time Samples collected:							
Turbidity (NTUs):							
Average Downstream Turbidity (NTUs):							
Difference							
Difference in Turbidity (NTUs):							

III. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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.

Title	Printed Name	Signature	Date

Instructions for Completing the CGP Annual Report

Who Must Submit an Annual Report to DEC?

The operator of a construction site must submit an Annual Report if their site meets the requirements of Section 3.2 (Discharge to Impaired Water Body) of the 2021 APDES Construction General Permit (CGP).

Completing the Form

Obtain and read a copy of the CGP. Type or print in the appropriate areas only. "NA" can be entered in areas that are not applicable. If you have questions about how or when to use this form contact the DEC Storm Water Program at 907-269-6285 or online at <http://dec.alaska.gov/water/wastewater/stormwater/construction>.

For each storm event sampled, collect a minimum of two representative samples of each discharge point. To meet the requirements of Part 9.1 of the CGP, all completed forms must be submitted to DEC by December 31st of each year during construction and with the NOT upon submittal. The form must be submitted to the appropriate address in Appendix A, Part 1.1.2 of the CGP.

Section I. Project Information

Provide the APDES permit tracking number assigned by DEC to the project. If you do not know the tracking number, you can find the tracking number assigned to your project on DEC's Water Permit Search

<http://dec.alaska.gov/Applications/Water/WaterPermitSearch/search.aspx?number=akr10>

Provide the project name, location and project operator. Use the same name provided on your NOI. Enter the outfall name or number identified in the SWPPP for all discharge points subject to monitoring. If no discharge occurs at some outfalls simply state "No Discharge". Also indicate any discharge points that are considered substantially identical and list on the form pursuant to Section 7.3.4 of the CGP.

Indicate if the discharge was a result of a rain event or snowmelt. If the discharge was the result of rainfall provide the total amount of rain for the storm event in inches. Indicate if the measurement of rainfall was taken using an onsite gauge or a National Weather Service precipitation gauge.

Section II. Monitoring Results

Provide the date and time the samples were collected. Enter the measured turbidity for each sample in Nephelometric Turbidity Units (NTUs). Provide the average of the two samples collected from each discharge point.

Provide the difference between the upstream and average downstream sampling results from each discharge point sampled to determine compliance with Part 3.2 of the CGP.

Per Part 3.2.1 upstream monitoring must take place at a representative location (upgradient) from the point of discharge or outside the area of influence.

Downstream monitoring must take place at a representative location inside the area of influence or at the point the storm water discharge leaves the construction site.

Section III. Certification Information:

The Annual Report must be signed as follows:

- (1) For a corporation, a responsible corporate officer shall sign the Annual Report, a responsible corporate officer means:
 - (A) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy - or decision-making functions for the corporation; or
 - (B) the manager of one or more manufacturing, production, or operating facilities, if
 - (i) the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;
 - (ii) the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and
 - (iii) authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (2) For a partnership or sole proprietorship, the general partner or the proprietor, respectively; or
- (3) for a municipality, state, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means
 - (A) the chief executive officer of the agency; or
 - (B) a senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.
- (4) Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated form will not be considered valid submittal.

Where to File Annual Report form

Please submit the original form with a signature in ink. Remember to retain a copy for your records.

Annual Reports sent by mail:

State of Alaska
Department of Environmental Conservation
Division of Water
Compliance and Enforcement Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone Nationwide (877) 569-4114
Anchorage Area / International (907) 269-4114
Fax (907) 269-4604
Email: dec-wqreporting@alaska.gov

Mass Excavation, Inc.

SWPPP GRADING & STABILIZATION ACTIVITIES LOG

PAGE ____

Project Number: N/A

Project Name: Dedicated Contractor-Provided Sites

Project Area (if applicable):

<i>Date Grading Activity Initiated</i>	<i>Description of Grading Activity and Location</i>	<i>Date Grading Activity Ceased (Temporary or Permanent)</i>	<i>Date Stabilization Measures Initiated (Temporary or Permanent)</i>	<i>Date Stabilization Measure Complete</i>	<i>Description of Stabilization Measure</i>
		T <input type="checkbox"/> P <input type="checkbox"/>	T <input type="checkbox"/> P <input type="checkbox"/>		
		T <input type="checkbox"/> P <input type="checkbox"/>	T <input type="checkbox"/> P <input type="checkbox"/>		
		T <input type="checkbox"/> P <input type="checkbox"/>	T <input type="checkbox"/> P <input type="checkbox"/>		
		T <input type="checkbox"/> P <input type="checkbox"/>	T <input type="checkbox"/> P <input type="checkbox"/>		
		T <input type="checkbox"/> P <input type="checkbox"/>	T <input type="checkbox"/> P <input type="checkbox"/>		
		T <input type="checkbox"/> P <input type="checkbox"/>	T <input type="checkbox"/> P <input type="checkbox"/>		
		T <input type="checkbox"/> P <input type="checkbox"/>	T <input type="checkbox"/> P <input type="checkbox"/>		
		T <input type="checkbox"/> P <input type="checkbox"/>	T <input type="checkbox"/> P <input type="checkbox"/>		
		T <input type="checkbox"/> P <input type="checkbox"/>	T <input type="checkbox"/> P <input type="checkbox"/>		

APPENDIX G

APPENDIX H

APPENDIX I



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

SWPPP TRAINING LOG

Project name: Seward Meridian Parkway Road Improvements, Phase II:
Palmer-Wasilla Hwy to Seldon Rd

Project Number: 0001(417) / Z512210000

Project Location: Wasilla, Alaska 99654

Instructor's Name(s):

Instructor's Titles(s):

Course Location:

Course Date:

Course Length (hours):

Storm Water Training Topic: (check as appropriate)

- | | |
|--|---|
| <input type="checkbox"/> Erosion Control BMPs | <input type="checkbox"/> Emergency Procedures |
| <input type="checkbox"/> Sediment Control BMPs | <input type="checkbox"/> Good Housekeeping BMPs |
| <input type="checkbox"/> Non-Storm Water BMPs | <input type="checkbox"/> Treatment Chemicals |

Specific Training Objective:

Attendee Roster: (attach additional pages as necessary)

No.	Name of Attendee	Company	Attendee Initials
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

APPENDIX J

SWPPP CORRECTIVE ACTION LOG PAGE 1

Project Number: N/A

Project Name: Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Road Improvements, Ph II

Use this form to track completion of all corrective actions. Note that corrective actions can be identified during and outside of inspections.

Corrective Action Number	Date Identified (check box if outside inspection)	Description of corrective action, including the following as applicable: <ul style="list-style-type: none"> • Related SWPPP Amendment # • Note if a >2 yr., 24-hr. storm event occurred (see instructions) • All corrective actions require a complete by date and description 	Complete-by Date	Date Complete	Name of Person Documenting Completion
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				
	<input type="checkbox"/>				

APPENDIX K

SWPPP CONSTRUCTION SITE INSPECTION REPORT

1.0 General Information

1.1 Project Name	Dedicated Contractor-Provided Sites for Seward Meridian Pkwy Road Improvements, Ph II	Project No.	N/A
1.3 Site Location	Various as listed	City, ST	Wasilla, AK 99654
1.4 Operator/NOI No.			
1.5a Date of Inspection			
1.6 Inspectors' Names	Brenda Tapani		
1.7 Inspectors' Titles	SWPPP Manager		
1.8 Inspectors' Contact Information	(509) 859-7497		
1.9a AK-CESCL Cert. No.	AGC-22-0117		
1.9b AK-CESCL Exp. Date	3-25-2025		

1.10 Describe construction activities:

1.11 Type of Inspection: Regular Post-storm Event Reduced Inspection Frequency Period

2.0 Weather Information

2.1 Describe the weather since the last inspection, or start of construction activities if first inspection.

Check all appropriate boxes.

Clear Cloudy Rain Sleet Fog Snow High Winds Other:

2.2 Storm events. Complete storm event information if there were any storm events since the last inspection.

Storm event: a rainfall event that produces more than 0.5 inch of precipitation in 24 hours and that is separated from the previous storm event by at least 3 days of less than 0.1 inch of rain per day, CGP C16.

Estimated Start Date:					
Estimated Duration (#days):					
Approximate Amount of Precipitation (in):					

2.3 Weather at time of this inspection? Clear Cloudy Rain Sleet Fog Snow High Winds Other:

Temperature: 00°F

3.0 Overall Site Issues

- **Overall Site Issue** -- These are general site issues that must be assessed during inspections.
- **Implemented?** – If a BMP should be installed at the time of the inspection and you marked “No” in the “BMP Installed” column, then you must check “Yes” in the “BMP Action Required?” column. If there is good reason to mark “no” in the “BMP Installed” column (such as the BMP is no longer needed and was removed) then you can mark “no” in the “BMP Action Required?” column and explain in the “Comments” column.
- **Corrective Action Required?** - When maintenance or some other corrective action is required, check “Yes” in this column.
- **Corrective Action Required, Complete by Date** - When a corrective action is required, before certifying the report, fill in the date when the corrective action can reasonably be expected to be completed. When a corrective action is NOT required, leave the “Complete by Date” blank.
- **If Corrective Action is required, describe Action and Location** – Anytime you check “Yes” in the “Corrective Action Required?” column, you must fill in the “Describe Corrective Action and Location” column as well.
- **Corrective Action Log** - When a Corrective Action is required as noted in this report, you must also enter all the information for this action in the Corrective Action Log and document on the Log the actual date of completed correction.

	Overall Site Issue	Response	Corrective Action Required?	If Corrective Action is required, describe Action and Location	Comments or Corrective Action Number
3.1	Have stabilization measures been initiated on slopes and disturbed areas not actively being worked?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) required by the SWPPP to be delineated in the field, identified with barriers or markings?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.4	Are storm drain inlets properly protected?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.5	Are the construction exits preventing sediment from being tracked into the street?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.6	Is trash/litter from work areas collected and disposed of properly?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		

3.7	Are washout facilities (e.g., paint, concrete) available, clearly marked, and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.8	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other potential pollutants?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.9	Are materials that are potential stormwater contaminants stored inside or under cover?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.10	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.11	Has Spill Response kit been used since the last inspection?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.12	Is the SWPPP Main Entrance Signage legible and does it contain the correct information?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.13	Are erodible stockpiles properly covered and have a perimeter control?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.14	Are any additional BMPs needed?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
3.15	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		

5.0 Site-specific BMPs

- **BMP Identifier** – This column is a mandatory entry used to help correspond BMPs with the site map. Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary on the continuation sheets).
- **BMP and Location** - Describe and give the location of the structural and non-structural BMPs identified in your SWPPP in the BMP column below (Include areas that are required to be inspected by the CGP, such as material storage areas that are exposed to precipitation.)
- **BMP Installed?** – If a BMP should be installed at the time of the inspection and you marked “No” in the “BMP Installed” column, then you must check “Yes” in the “BMP Action Required?” column. If there is good reason to mark “no” in the “BMP Installed” column (such as the BMP is no longer needed and was removed) then you can mark “no” in the “BMP Action Required?” column and explain in the “Comments” column.
- **BMP Action Required?** - If a BMP needs repair, modification, replacement, maintenance or a new BMP is needed or a SWPPP amendment is needed, then a BMP Action is required.
- **BMP Action Required, Complete by Date** - Before certifying the report, fill in the date when the BMP Action can reasonably be expected to be completed. When a BMP Action is NOT required, leave the “Complete by Date” blank.
- **If BMP Action is required, describe Action and Location** – Anytime you check “Yes” for “BMP Action Required,” then you must also fill in the “Describe BMP Action and Location” column.
- **Corrective Action Log** - When a BMP Action is required as noted in this report, you must also enter all the information for this action in the Corrective Action Log, and document on the Log the actual date of completing correction.

BMP Identifier	BMP & Location	BMP Installed?	BMP Action Required?	If BMP Action is required, describe Action and Location	Comments or Corrective Action Number
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		
		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No Complete by Date:		

6.0 Inspection Certification

6.1 Areas of Inspection

Did you inspect all areas of the project that are required to be inspected by the CGP including areas disturbed by construction activity, areas used for storage of materials that are exposed to precipitation, areas where control measures are installed, areas where sediment or other pollutants have accumulated or been deposited and may have the potential for or are entering a stormwater conveyance system, locations where vehicles enter or exit the site, areas where storm water typically flows, points of discharge from the site, and portions of the site where temporary or permanent stabilization has been initiated?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If you did not inspect any required areas, list those locations here and explain why they weren't inspected.
--	---	--

6.2 Project Compliance

- If there are incidences of non-compliance identified in this inspection report then you must summarize below the incidence(s) of non-compliance.*

If there is an Action Item described in the non-compliance box below that does not already have a "Complete by Date" assigned elsewhere in this report, then add a Complete by Date within the

Non-Compliance

Incidence(s) of Non-compliance:

Action Item(s) and Complete by Date(s):

- Check the box below if there are no incidences of non-compliance with the CGP:*

I certify that on the date of this inspection, this project was found to be in compliance with the terms of the applicable Construction General Permit.

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision 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."

Contractor's Duly Authorized Representative

Print name: Robert Cornell

Title: Superintendent

Signature _____

Date _____

APPENDIX L

Report Oil and Hazardous Substance Spills

TOLL-FREE	1-800-478-9300
INTERNATIONAL	1-907-269-0667
ONLINE	ReportSpills.alaska.gov



It's Required by Alaska Law!

(AS 46.03.755, AS 46.03.450, 18 AAC 75.300, 18 AAC 75.325)

Oil and Petroleum Product Reporting

Spills to Water

- Any amount spilled to water must be reported **immediately**.

Spills to Land

- Spills in **excess of 55 gallons** must be reported **immediately**.
- Spills in **excess of 10 gallons but less than 55 gallons** must be reported within 48 hours.
- Facilities shall maintain a spill log and report a record of oil discharges from **1 to 10 gallons** monthly.

Spills to Impermeable Secondary Containment

- Spills in **excess of 55 gallons** must be reported within 48 hours.

Hazardous Substance Reporting

Any hazardous substance spill, other than oil, must be reported **immediately**.

Underground Storage Tank (UST)* Reporting

You must report a suspected below ground release from a UST system, in any amount, within 24 hours. (18 AAC 78.212)

If a release is suspected the owner or operator of a UST shall investigate the UST site and shall report to the UST Unit within the period specified. (18 AAC 78.200)



Alaska Department of Environmental
Conservation
Division of Spill Prevention and Response
<https://spills.alaska.gov>

Contact us: (907) 465-5250

* Regulated UST as defined in AS 46.03.450(8)

Revised 10/10/2022

Table 302.4 - List of Hazardous Substances and Reportable Quantities

[All comments/notes are located at the end of the table.]

Hazardous substance	CASRN ⁱ	Statutory code ⁱⁱ	RCRA waste No.	Final RQ [pounds (kg)]
A2213	30558-43-1	4	U394	5000 (2270)
Acenaphthene	83-32-9	2		100 (45.4)
Acenaphthylene	208-96-8	2		5000 (2270)
Acetaldehyde	75-07-0	1,3,4	U001	1000 (454)
Acetaldehyde, chloro-	107-20-0	4	P023	1000 (454)
Acetaldehyde, trichloro-	75-87-6	4	U034	5000 (2270)
Acetamide	60-35-5	3		100 (45.4)

Acetamide, N-(aminothioxomethyl)-	591-08-2	4 P002	1000 (454)
Acetamide, N-(4-ethoxyphenyl)-	62-44-2	4 U187	100 (45.4)
Acetamide, N-9H-fluoren-2-yl-	53-96-3	3,4 U005	1 (0.454)
Acetamide, 2-fluoro-	640-19-7	4 P057	100 (45.4)
Acetic acid	64-19-7	1	5000 (2270)
Acetic acid, (2,4-dichlorophenoxy)-, salts & esters	94-75-7	1,3,4 U240	100 (45.4)
Acetic acid, ethyl ester	141-78-6	4 U112	5000 (2270)

Acetic acid, fluoro-, sodium salt	62-74-8	4 P058	10 (4.54)
Acetic acid, lead(2 +) salt	301-04-2	1,4 U144	10 (4.54)
Acetic acid, thallium(1 +) salt	563-68-8	4 U214	100 (45.4)
Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5	1,4 See F027	1000 (454)
Acetic anhydride	108-24-7	1	5000 (2270)
Acetone	67-64-1	4 U002	5000 (2270)
Acetone cyanohydrin	75-86-5	1,4 P069	10 (4.54)
Acetonitrile	75-05-8	3,4 U003	5000 (2270)
Acetophenone	98-86-2	3,4 U004	5000 (2270)

2-Acetylaminofluorene	53-96-3	3,4 U005	1 (0.454)
Acetyl bromide	506-96-7	1	5000 (2270)
Acetyl chloride	75-36-5	1,4 U006	5000 (2270)
1-Acetyl-2-thiourea	591-08-2	4 P002	1000 (454)
Acrolein	107-02-8	1,2,3,4 P003	1 (0.454)
Acrylamide	79-06-1	3,4 U007	5000 (2270)
Acrylic acid	79-10-7	3,4 U008	5000 (2270)
Acrylonitrile	107-13-1	1,2,3,4 U009	100 (45.4)
Adipic acid	124-04-9	1	5000 (2270)
Aldicarb	116-06-3	4 P070	1 (0.454)
Aldicarb sulfone	1646-88-4	4 P203	100 (45.4)
Aldrin	309-00-2	1,2,4 P004	1 (0.454)
Allyl alcohol	107-18-6	1,4 P005	100 (45.4)

Allyl chloride	107-05-1	1,3		1000 (454)
Aluminum phosphide	20859-73-8	4 P006		100 (45.4)
Aluminum sulfate	10043-01-3	1		5000 (2270)
4-Aminobiphenyl	92-67-1	3		1 (0.454)
5-(Aminomethyl)-3-isoxazolol	2763-96-4	4 P007		1000 (454)
4-Aminopyridine	504-24-5	4 P008		1000 (454)
Amitrole	61-82-5	4 U011		10 (4.54)
Ammonia	7664-41-7	1		100 (45.4)
Ammonium acetate	631-61-8	1		5000 (2270)
Ammonium benzoate	1863-63-4	1		5000 (2270)

Ammonium bicarbonate	1066-33-7	1	5000 (2270)
Ammonium bichromate	9/5/7789	1	10 (4.54)
Ammonium bifluoride	1341-49-7	1	100 (45.4)
Ammonium bisulfite	10192-30-0	1	5000 (2270)
Ammonium carbamate	1111-78-0	1	5000 (2270)
Ammonium carbonate	506-87-6	1	5000 (2270)
Ammonium chloride	12125-02-9	1	5000 (2270)
Ammonium chromate	7788-98-9	1	10 (4.54)
Ammonium citrate, dibasic	3012-65-5	1	5000 (2270)

Ammonium fluoborate	13826-83-0	1		5000 (2270)
Ammonium fluoride	12125-01-8	1		100 (45.4)
Ammonium hydroxide	1336-21-6	1		1000 (454)
Ammonium oxalate	6009-70-7 5972-73-6 14258-49-2	1		5000 (2270)
Ammonium picrate	131-74-8	4	P009	10 (4.54)
Ammonium silicofluoride	16919-19-0	1		1000 (454)
Ammonium sulfamate	7773-06-0	1		5000 (2270)
Ammonium sulfide	12135-76-1	1		100 (45.4)
Ammonium sulfite	10196-04-0	1		5000 (2270)
Ammonium tartrate	14307-43-8 3164-29-2	1		5000 (2270)
Ammonium thiocyanate	1762-95-4	1		5000 (2270)
Ammonium vanadate	7803-55-6	4	P119	1000 (454)
Amyl acetate	628-63-7	1		5000 (2270)
iso-Amyl acetate	123-92-2	1		5000 (2270)
sec-Amyl acetate	626-38-0	1		5000 (2270)
tert-Amyl acetate	625-16-1	1		5000 (2270)
Aniline	62-53-3	1,3,4	U012	5000 (2270)
o-Anisidine	90-04-0	3		100 (45.4)
Anthracene	120-12-7	2		5000 (2270)

ANTIMONY AND COMPOUNDS	N.A.	2,3		**
Antimony Compounds	N.A.	2,3		**
Antimony ^{III}	7440-36-0	2		5000 (2270)
Antimony pentachloride	7647-18-9	1		1000 (454)
Antimony potassium tartrate	28300-74-5	1		100 (45.4)
Antimony tribromide	7789-61-9	1		1000 (454)
Antimony trichloride	10025-91-9	1		1000 (454)
Antimony trifluoride	7783-56-4	1		1000 (454)
Antimony trioxide	1309-64-4	1		1000 (454)
Argentate(1-), bis(cyano-C), potassium	506-61-6	4	P099	1 (0.454)
Aroclors	1336-36-3	1,2,3		1 (0.454)
Aroclor 1016	12674-11-2	1,2,3		1 (0.454)
Aroclor 1221	11104-28-2	1,2,3		1 (0.454)
Aroclor 1232	11141-16-5	1,2,3		1 (0.454)
Aroclor 1242	53469-21-9	1,2,3		1 (0.454)
Aroclor 1248	12672-29-6	1,2,3		1 (0.454)
Aroclor 1254	11097-69-1	1,2,3		1 (0.454)
Aroclor 1260	11096-82-5	1,2,3		1 (0.454)
ARSENIC AND COMPOUNDS	N.A.	2,3		**
Arsenic Compounds (inorganic including arsine)	N.A.	2,3		**
Arsenic ^{III}	7440-38-2	2,3		1 (0.454)
Arsenic acid H ₃ AsO ₄	7778-39-4	4	P010	1 (0.454)
Arsenic disulfide	12044-79-0	1		1 (0.454)
Arsenic oxide As ₂ O ₃	1327-53-3	1,4	P012	1 (0.454)
Arsenic oxide As ₂ O ₅	1303-28-2	1,4	P011	1 (0.454)
Arsenic pentoxide	1303-28-2	1,4	P011	1 (0.454)
Arsenic trichloride	7784-34-1	1		1 (0.454)
Arsenic trioxide	1327-53-3	1,4	P012	1 (0.454)
Arsenic trisulfide	1303-33-9	1		1 (0.454)
Arsine, diethyl-	692-42-2	4	P038	1 (0.454)
Arsinic acid, dimethyl-	75-60-5	4	U136	1 (0.454)
Arsonous dichloride, phenyl-	696-28-6	4	P036	1 (0.454)
Asbestosiv	1332-21-4	2,3		1 (0.454)
Auramine	492-80-8	4	U014	100 (45.4)

Azaserine	115-02-6	4 U015	1 (0.454)
Aziridine	151-56-4	3,4 P054	1 (0.454)
Aziridine, 2-methyl-	75-55-8	3,4 P067	1 (0.454)
Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-,1aS-(1aalpha,8beta,8aalpha,8balpha)]-	50-07-7	4 U010	10 (4.54)
Barban	101-27-9	4 U280	10 (4.54)
Barium cyanide	542-62-1	1,4 P013	10 (4.54)
Bendiocarb	22781-23-3	4 U278	100 (45.4)
Bendiocarb phenol	22961-82-6	4 U364	1000 (454)
Benomyl	17804-35-2	4 U271	10 (4.54)
Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5	4 U157	10 (4.54)
Benz[c]acridine	225-51-4	4 U016	100 (45.4)
Benzal chloride	98-87-3	4 U017	5000 (2270)
Benamide, 3,5-dichloro-N-(1,1-dimethyl-2propynyl)-	23950-58-5	4 U192	5000 (2270)
Benz[a]anthracene	56-55-3	2,4 U018	10 (4.54)
1,2-Benzanthracene	56-55-3	2,4 U018	10 (4.54)
Benz[a]anthracene, 7,12-dimethyl-	57-97-6	4 U094	1 (0.454)
Benzenamine	62-53-3	1,3,4 U012	5000 (2270)
Benzenamine, 4,4'-carbonimidoylbis (N,N dimethyl-	492-80-8	4 U014	100 (45.4)
Benzenamine, 4-chloro-	106-47-8	4 P024	1000 (454)
Benzenamine, 4-chloro-2-methyl-, hydrochloride	3165-93-3	4 U049	100 (45.4)
Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7	3,4 U093	10 (4.54)
Benzenamine, 2-methyl-	95-53-4	3,4 U328	100 (45.4)
Benzenamine, 4-methyl-	106-49-0	4 U353	100 (45.4)
Benzenamine, 4,4'-methylenebis [2-chloro-	101-14-4	3,4 U158	10 (4.54)
Benzenamine, 2-methyl-,hydrochloride	636-21-5	4 U222	100 (45.4)
Benzenamine, 2-methyl-5-nitro-	99-55-8	4 U181	100 (45.4)
Benzenamine, 4-nitro-	100-01-6	4 P077	5000 (2270)
Benzenea	71-43-2	1,2,3,4 U019	10 (4.54)

Benzeneacetic acid, 4-chloro- α -(4-chlorophenyl)- α -hydroxy-, ethyl ester	510-15-6	3,4 U038	10 (4.54)
Benzene, 1-bromo-4-phenoxy-	101-55-3	2,4 U030	100 (45.4)
Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	305-03-3	4 U035	10 (4.54)
Benzene, chloro-	108-90-7	1,2,3,4 U037	100 (45.4)
Benzene, (chloromethyl)-	100-44-7	1,3,4 P028	100 (45.4)
Benzenediamine, ar-methyl-	95-80-7 496-72-0 823-40-5 25376-45-8	3,4 U221	10 (4.54)
1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7	2,3,4 U028	100 (45.4)
1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	1,2,3,4 U069	10 (4.54)
1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	2,4 U088	1000 (454)
1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	2,3,4 U102	5000 (2270)
1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	2,4 U107	5000 (2270)
Benzene, 1,2-dichloro-	95-50-1	1,2,4 U070	100 (45.4)
Benzene, 1,3-dichloro-	541-73-1	2,4 U071	100 (45.4)
Benzene, 1,4-dichloro-	106-46-7	1,2,3,4 U072	100 (45.4)
Benzene, 1,1'-(2,2-dichloroethylidene) bis[4-chloro-	72-54-8	1,2,4 U060	1 (0.454)
Benzene, (dichloromethyl)-	98-87-3	4 U017	5000 (2270)
Benzene, 1,3-diisocyanatomethyl-	91-08-7 584-84-9 26471-62-5	3,4 U223	100 (45.4)
Benzene, dimethyl-	1330-20-7	1,3,4 U239	100 (45.4)
1,3-Benzenediol	108-46-3	1,4 U201	5000 (2270)
1,2-Benzenediol,4-[1-hydroxy-2-(methyl amino)ethyl]-	51-43-4	4 P042	1000 (454)
Benzeneethanamine, alpha,alpha-dimethyl-	122-09-8	4 P046	5000 (2270)
Benzene, hexachloro-	118-74-1	2,3,4 U127	10 (4.54)
Benzene, hexahydro-	110-82-7	1,4 U056	1000 (454)
Benzene, methyl-	108-88-3	1,2,3,4 U220	1000 (454)
Benzene, 1-methyl-2,4-dinitro-	121-14-2	1,2,3,4 U105	10 (4.54)

Benzene, 2-methyl-1,3-dinitro-	606-20-2	1,2,4 U106	100 (45.4)
Benzene, (1-methylethyl)-	98-82-8	3,4 U055	5000 (2270)
Benzene, nitro-	98-95-3	1,2,3,4 U169	1000 (454)
Benzene, pentachloro-	608-93-5	4 U183	10 (4.54)
Benzene, pentachloronitro-	82-68-8	3,4 U185	100 (45.4)
Benzenesulfonic acid chloride	98-09-9	4 U020	100 (45.4)
Benzenesulfonyl chloride	98-09-9	4 U020	100 (45.4)
Benzene, 1,2,4,5-tetrachloro-	95-94-3	4 U207	5000 (2270)
Benzenethiol	108-98-5	4 P014	100 (45.4)
Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-chloro-	50-29-3	1,2,4 U061	1 (0.454)
Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-methoxy-	72-43-5	1,3,4 U247	1 (0.454)
Benzene, (trichloromethyl)-	98-07-7	3,4 U023	10 (4.54)
Benzene, 1,3,5-trinitro-	99-35-4	4 U234	10 (4.54)
Benzidine	92-87-5	2,3,4 U021	1 (0.454)
Benzo[a]anthracene	56-55-3	2,4 U018	10 (4.54)
1,3-Benzodioxole, 5-(1-propenyl)-1	120-58-1	4 U141	100 (45.4)
1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7	4 U203	100 (45.4)
1,3-Benzodioxole, 5-propyl-	94-58-6	4 U090	10 (4.54)
1,3-Benzodioxol-4-ol, 2,2-dimethyl-	22961-82-6	4 U364	1000 (454)
1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	22781-23-3	4 U278	100 (45.4)
Benzo[b]fluoranthene	205-99-2	2	1 (0.454)
Benzo[k]fluoranthene	207-08-9	2	5000 (2270)
7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	1563-38-8	4 U367	10 (4.54)
7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	1563-66-2	1,4 P127	10 (4.54)
Benzoic acid	65-85-0	1	5000 (2270)
Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1)	57-64-7	4 P188	100 (45.4)
Benzonitrile	100-47-0	1	5000 (2270)
Benzo[rst]pentaphene	189-55-9	4 U064	10 (4.54)

Benzo[ghi]perylene	191-24-2	2		5000 (2270)
2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts	81-81-2	4	P001	100 (45.4)
			U248	
Benzo[a]pyrene	50-32-8	2,4	U022	1 (0.454)
3,4-Benzopyrene	50-32-8	2,4	U022	1 (0.454)
p-Benzoquinone	106-51-4	3,4	U197	10 (4.54)
Benzotrichloride	98-07-7	3,4	U023	10 (4.54)
Benzoyl chloride	98-88-4	1		1000 (454)
Benzyl chloride	100-44-7	1,3,4	P028	100 (45.4)
BERYLLIUM AND COMPOUNDS	N.A.	2,3		**
Beryllium ^{III}	7440-41-7	2,3,4	P015	10 (4.54)
Beryllium chloride	7787-47-5	1		1 (0.454)
Beryllium compounds	N.A.	2,3		**
Beryllium fluoride	7787-49-7	1		1 (0.454)
Beryllium nitrate	13597-99-4	1		1 (0.454)
	7787-55-5			
Beryllium powder ^{III}	7440-41-7	2,3,4	P015	10 (4.54)
alpha-BHC	319-84-6	2		10 (4.54)
beta-BHC	319-85-7	2		1 (0.454)
delta-BHC	319-86-8	2		1 (0.454)
gamma-BHC	58-89-9	1,2,3,4	U129	1 (0.454)
2,2'-Bioxirane	1464-53-5	4	U085	10 (4.54)
Biphenyl	92-52-4	3		100 (45.4)
[1,1'-Biphenyl]-4,4'-diamine	92-87-5	2,3,4	U021	1 (0.454)
[1,1'-Biphenyl]-4,4'-diamine,3,3'-dichloro-	91-94-1	2,3,4	U073	1 (0.454)
[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethoxy-	119-90-4	3,4	U091	100 (45.4)
[1,1'-Biphenyl]-4,4'-diamine,3,3'-dimethyl-	119-93-7	3,4	U095	10 (4.54)

Bis(2-chloroethoxy) methane	111-91-1	2,4 U024	1000 (454)
Bis(2-chloroethyl) ether	111-44-4	2,3,4 U025	10 (4.54)
Bis(chloromethyl) ether	542-88-1	3,4 P016	10 (4.54)
Bis(2-ethylhexyl) phthalate	117-81-7	3,4 U028	100 (45.4)
Bromoacetone	598-31-2	4 P017	1000 (454)
1-Bromopropane (1-BP)	106-94-5	3	1 (0.454)
Bromoform	75-25-2	2,3,4 U225	100 (45.4)
Bromomethane	74-83-9	2,3,4 U029	1000 (454)
4-Bromophenyl phenyl ether	101-55-3	2,4 U030	100 (45.4)
Brucine	357-57-3	4 P018	100 (45.4)
1,3-Butadiene	106-99-0	3	10 (4.54)
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3	2,3,4 U128	1 (0.454)
1-Butanamine, N-butyl-N-nitroso-	924-16-3	4 U172	10 (4.54)
1-Butanol	71-36-3	4 U031	5000 (2270)
2-Butanone	78-93-3	4 U159	5000 (2270)
2-Butanone, 3,3-dimethyl-1(methylthio)-, O- [(methylamino)carbonyl] oxime	39196-18-4	4 P045	100 (45.4)
2-Butanone peroxide	1338-23-4	4 U160	10 (4.54)
2-Butenal	123-73-9 4170-30-3	1,4 U053	100 (45.4)
2-Butene, 1,4-dichloro-	764-41-0	4 U074	1 (0.454)
2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy] methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z), 7(2S*,3R*),7aalpha)]-	303-34-4	4 U143	10 (4.54)
Butyl acetate	123-86-4	1	5000 (2270)
iso-Butyl acetate	110-19-0	1	5000 (2270)
sec-Butyl acetate	105-46-4	1	5000 (2270)
tert-Butyl acetate	540-88-5	1	5000 (2270)
n-Butyl alcohol	71-36-3	4 U031	5000 (2270)
Butylamine	109-73-9	1	1000 (454)
iso-Butylamine	78-81-9	1	1000 (454)
sec-Butylamine	513-49-5 13952-84-6	1	1000 (454)
tert-Butylamine	75-64-9	1	1000 (454)

Butyl benzyl phthalate	85-68-7	2		100 (45.4)
n-Butyl phthalate	84-74-2	1,2,3,4	U069	10 (4.54)
Butyric acid	107-92-6	1		5000 (2270)
iso-Butyric acid	79-31-2	1		5000 (2270)
Cacodylic acid	75-60-5	4	U136	1 (0.454)
CADMIUM AND COMPOUNDS	N.A.	2,3		**
Cadmium ^{III}	7440-43-9	2		10 (4.54)
Cadmium acetate	543-90-8	1		10 (4.54)
Cadmium bromide	7789-42-6	1		10 (4.54)
Cadmium chloride	10108-64-2	1		10 (4.54)
Cadmium compounds	N.A.	2,3		**
Calcium arsenate	7778-44-1	1		1 (0.454)
Calcium arsenite	52740-16-6	1		1 (0.454)
Calcium carbide	75-20-7	1		10 (4.54)
Calcium chromate	13765-19-0	1,4	U032	10 (4.54)
Calcium cyanamide	156-62-7	3		1000 (454)
Calcium cyanide Ca(CN) ₂	592-01-8	1,4	P021	10 (4.54)
Calcium dodecylbenzenesulfonate	26264-06-2	1		1000 (454)
Calcium hypochlorite	7778-54-3	1		10 (4.54)
Captan	133-06-2	1,3		10 (4.54)
Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10605-21-7	4	U372	10 (4.54)
Carbamic acid, [1-[(butylamino)carbonyl]-1H-benzimidazol-2-yl]-,methyl ester	17804-35-2	4	U271	10 (4.54)
Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	101-27-9	4	U280	10 (4.54)
Carbamic acid, [[dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	55285-14-8	4	P189	1000 (454)
Carbamic acid, dimethyl-, 1-[[dimethyl-amino)carbonyl]-5-methyl-1H-pyrazol-3-yl ester	644-64-4	4	P191	1 (0.454)
Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	119-38-0	4	P192	100 (45.4)
Carbamic acid, ethyl ester	51-79-6	3,4	U238	100 (45.4)
Carbamic acid, methyl-, 3-methylphenyl ester	1129-41-5	4	P190	1000 (454)
Carbamic acid, methylnitroso-, ethyl ester	615-53-2	4	U178	1 (0.454)

Carbamic acid, [1,2-phenylenebis(iminocarbonothioyl)]bis-, dimethyl ester	23564-05-8	4 U409	10 (4.54)
Carbamic acid, phenyl-, 1-methylethyl ester	122-42-9	4 U373	1000 (454)
Carbamic chloride, dimethyl-	79-44-7	3,4 U097	1 (0.454)
Carbamodithioic acid, 1,2-ethanediybis-, salts & esters	111-54-6	4 U114	5000 (2270)
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303-16-4	4 U062	100 (45.4)
Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	2303-17-5	4 U389	100 (45.4)
Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888-80-9	4 U387	5000 (2270)
Carbaryl	63-25-2	1,3,4 U279	100 (45.4)
Carbendazim	10605-21-7	4 U372	10 (4.54)
Carbofuran	1563-66-2	1,4 P127	10 (4.54)
Carbofuran phenol	1563-38-8	4 U367	10 (4.54)
Carbon disulfide	75-15-0	1,3,4 P022	100 (45.4)
Carbonic acid, dithallium(1+) salt	6533-73-9	4 U215	100 (45.4)
Carbonic dichloride	75-44-5	1,3,4 P095	10 (4.54)
Carbonic difluoride	353-50-4	4 U033	1000 (454)
Carbonochloridic acid, methyl ester	79-22-1	4 U156	1000 (454)
Carbon oxyfluoride	353-50-4	4 U033	1000 (454)
Carbon tetrachloride	56-23-5	1,2,3,4 U211	10 (4.54)
Carbonyl sulfide	463-58-1	3	100 (45.4)
Carbosulfan	55285-14-8	4 P189	1000 (454)
Catechol	120-80-9	3	100 (45.4)
Chloral	75-87-6	4 U034	5000 (2270)
Chloramben	133-90-4	3	100 (45.4)
Chlorambucil	305-03-3	4 U035	10 (4.54)
CHLORDANE (TECHNICAL MIXTURE AND METABOLITES)	57-74-9	1,2,3,4 U036	1 (0.454)
Chlordane	57-74-9	1,2,3,4 U036	1 (0.454)
Chlordane, alpha & gamma isomers	57-74-9	1,2,3,4 U036	1 (0.454)
	5103-71-9		

	5103-74-2			
CHLORINATED BENZENES	N.A.	2		**
Chlorinated camphene	8001-35-2	1,2,3,4	P123	1 (0.454)
CHLORINATED ETHANES	N.A.	2		**
CHLORINATED NAPHTHALENE	N.A.	2		**
CHLORINATED PHENOLS	N.A.	2		**
Chlorine	7782-50-5	1,3		10 (4.54)
Chlornaphazine	494-03-1	4	U026	100 (45.4)
Chloroacetaldehyde	107-20-0	4	P023	1000 (454)
Chloroacetic acid	79-11-8	3		100 (45.4)
2-Chloroacetophenone	532-27-4	3		100 (45.4)
CHLOROALKYL ETHERS	N.A.	2		**
p-Chloroaniline	106-47-8	4	P024	1000 (454)
Chlorobenzene	108-90-7	1,2,3,4	U037	100 (45.4)
Chlorobenzilate	510-15-6	3,4	U038	10 (4.54)
p-Chloro-m-cresol	59-50-7	2,4	U039	5000 (2270)
Chlorodibromomethane	124-48-1	2		100 (45.4)
1-Chloro-2,3-epoxypropane	106-89-8	1,3,4	U041	100 (45.4)
Chloroethane	75-00-3	2,3		100 (45.4)
2-Chloroethyl vinyl ether	110-75-8	2,4	U042	1000 (454)
Chloroform	67-66-3	1,2,3,4	U044	10 (4.54)
Chloromethane	74-87-3	2,3,4	U045	100 (45.4)
Chloromethyl methyl ether	107-30-2	3,4	U046	10 (4.54)
beta-Chloronaphthalene	91-58-7	2,4	U047	5000 (2270)
2-Chloronaphthalene	91-58-7	2,4	U047	5000 (2270)
2-Chlorophenol	95-57-8	2,4	U048	100 (45.4)
o-Chlorophenol	95-57-8	2,4	U048	100 (45.4)
4-Chlorophenyl phenyl ether	7005-72-3	2		5000 (2270)
1-(o-Chlorophenyl)thiourea	5344-82-1	4	P026	100 (45.4)
Chloroprene	126-99-8	3		100 (45.4)
3-Chloropropionitrile	542-76-7	4	P027	1000 (454)
Chlorosulfonic acid	7790-94-5	1		1000 (454)
4-Chloro-o-toluidine, hydrochloride	3165-93-3	4	U049	100 (45.4)
Chlorpyrifos	2921-88-2	1		1 (0.454)
Chromic acetate	1066-30-4	1		1000 (454)

Chromic acid	7738-94-5	1		10 (4.54)
Chromic acid H ₂ CrO ₄ , calcium salt	13765-19-0	1,4	U032	10 (4.54)
Chromic sulfate	10101-53-8	1		1000 (454)
CHROMIUM AND COMPOUNDS	N.A.	2,3		**
Chromium Compounds	N.A.	2,3		**
Chromium ^{III}	7440-47-3	2		5000 (2270)
Chromous chloride	10049-05-5	1		1000 (454)
Chrysene	218-01-9	2,4	U050	100 (45.4)
Cobalt Compounds	N.A.	3		**
Cobaltous bromide	7789-43-7	1		1000 (454)
Cobaltous formate	544-18-3	1		1000 (454)
Cobaltous sulfamate	14017-41-5	1		1000 (454)
Coke Oven Emissions	N.A.	3		1 (0.454)
COPPER AND COMPOUNDS	N.A.	2		**
Copper ^{II}	7440-50-8	2		5000 (2270)
Copper cyanide Cu(CN)	544-92-3	4	P029	10 (4.54)
Coumaphos	56-72-4	1		10 (4.54)
Creosote	N.A.	4	U051	1 (0.454)
Cresol (cresylic acid)	1319-77-3	1,3,4	U052	100 (45.4)
m-Cresol	108-39-4	3		100 (45.4)
o-Cresol	95-48-7	3		100 (45.4)
p-Cresol	106-44-5	3		100 (45.4)
Cresols (isomers and mixture)	1319-77-3	1,3,4	U052	100 (45.4)
Cresylic acid (isomers and mixture)	1319-77-3	1,3,4	U052	100 (45.4)
Crotonaldehyde	123-73-9	1,4	U053	100 (45.4)
	4170-30-3			
Cumene	98-82-8	3,4	U055	5000 (2270)
m-Cumenyl methylcarbamate	64-00-6	4	P202	10 (4.54)
Cupric acetate	142-71-2	1		100 (45.4)
Cupric acetoarsenite	12002-03-8	1		1 (0.454)
Cupric chloride	7447-39-4	1		10 (4.54)
Cupric nitrate	3251-23-8	1		100 (45.4)
Cupric oxalate	55671-32-4	1		100 (45.4)
Cupric sulfate	7758-98-7	1		10 (4.54)
Cupric sulfate, ammoniated	10380-29-7	1		100 (45.4)

Cupric tartrate	815-82-7	1		100 (45.4)
CYANIDES	N.A.	2,3		**
Cyanide Compounds	N.A.	2,3		**
Cyanides (soluble salts and complexes) not otherwise specified	N.A.	4	P030	10 (4.54)
Cyanogen	460-19-5	4	P031	100 (45.4)
Cyanogen bromide (CN)Br	506-68-3	4	U246	1000 (454)
Cyanogen chloride (CN)Cl	506-77-4	1,4	P033	10 (4.54)
2,5-Cyclohexadiene-1,4-dione	106-51-4	3,4	U197	10 (4.54)
Cyclohexane	110-82-7	1,4	U056	1000 (454)
Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 α , 2 α , 3 β -, 4 α , 5 α , 6 β)	58-89-9	1,2,3,4	U129	1 (0.454)
Cyclohexanone	108-94-1	4	U057	5000 (2270)
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	4	P034	100 (45.4)
1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4	1,2,3,4	U130	10 (4.54)
Cyclophosphamide	50-18-0	4	U058	10 (4.54)
2,4-D Acid	94-75-7	1,3,4	U240	100 (45.4)
2,4-D Ester	94-11-1	1		100 (45.4)
	94-79-1			
	94-80-4			
	1320-18-9			
	1928-38-7			
	1928-61-6			
	1929-73-3			
	2971-38-2			
	25168-26-7			
	53467-11-1			
2,4-D, salts and esters	94-75-7	1,3,4	U240	100 (45.4)
Daunomycin	20830-81-3	4	U059	10 (4.54)
DDD	72-54-8	1,2,4	U060	1 (0.454)
4,4'-DDD	72-54-8	1,2,4	U060	1 (0.454)
DDE _b	72-55-9	2,4		1 (0.454)
DDE _b	4/4/3547	3		5000 (2270)
4,4'-DDE	72-55-9	2,4		1 (0.454)
DDT	50-29-3	1,2,4	U061	1 (0.454)

4,4'-DDT	50-29-3	1,2,4 U061	1 (0.454)
DDT AND METABOLITES	N.A.	2	**
DEHP	117-81-7	2,3,4 U028	100 (45.4)
Diallate	2303-16-4	4 U062	100 (45.4)
Diazinon	333-41-5	1	1 (0.454)
Diazomethane	334-88-3	3	100 (45.4)
Dibenz[a,h]anthracene	53-70-3	2,4 U063	1 (0.454)
1,2:5,6-Dibenzanthracene	53-70-3	2,4 U063	1 (0.454)
Dibenzo[a,h]anthracene	53-70-3	2,4 U063	1 (0.454)
Dibenzofuran	132-64-9	3	100 (45.4)
Dibenzo[a,i]pyrene	189-55-9	4 U064	10 (4.54)
1,2-Dibromo-3-chloropropane	96-12-8	3,4 U066	1 (0.454)
Dibromoethane	106-93-4	1,3,4 U067	1 (0.454)
Dibutyl phthalate	84-74-2	1,2,3,4 U069	10 (4.54)
Di-n-butyl phthalate	84-74-2	1,2,3,4 U069	10 (4.54)
Dicamba	1918-00-9	1	1000 (454)
Dichlobenil	1194-65-6	1	100 (45.4)
Dichlone	117-80-6	1	1 (0.454)
Dichlorobenzene	25321-22-6	1,2	100 (45.4)
1,2-Dichlorobenzene	95-50-1	1,2,4 U070	100 (45.4)
1,3-Dichlorobenzene	541-73-1	2,4 U071	100 (45.4)
1,4-Dichlorobenzene	106-46-7	1,2,3,4 U072	100 (45.4)
m-Dichlorobenzene	541-73-1	2,4 U071	100 (45.4)
o-Dichlorobenzene	95-50-1	1,2,4 U070	100 (45.4)
p-Dichlorobenzene	106-46-7	1,2,3,4 U072	100 (45.4)
DICHLOROBENZIDINE	1331-47-1	2	**
3,3'-Dichlorobenzidine	91-94-1	2,3,4 U073	1 (0.454)
Dichlorobromomethane	75-27-4	2	5000 (2270)
1,4-Dichloro-2-butene	764-41-0	4 U074	1 (0.454)
Dichlorodifluoromethane	75-71-8	4 U075	5000 (2270)
1,1-Dichloroethane	75-34-3	2,3,4 U076	1000 (454)
1,2-Dichloroethane	107-06-2	1,2,3,4 U077	100 (45.4)
1,1-Dichloroethylene	75-35-4	1,2,3,4 U078	100 (45.4)
1,2-Dichloroethylene	156-60-5	2,4 U079	1000 (454)
Dichloroethyl ether	111-44-4	2,3,4 U025	10 (4.54)

Dichloroisopropyl ether	108-60-1	2,4	U027	1000 (454)
Dichloromethane	75-09-2	2,3,4	U080	1000 (454)
Dichloromethoxy ethane	111-91-1	2,4	U024	1000 (454)
Dichloromethyl ether	542-88-1	3,4	P016	10 (4.54)
2,4-Dichlorophenol	120-83-2	2,4	U081	100 (45.4)
2,6-Dichlorophenol	87-65-0	4	U082	100 (45.4)
Dichlorophenylarsine	696-28-6	4	P036	1 (0.454)
Dichloropropane	26638-19-7	1,2		1000 (454)
1,1-Dichloropropane	78-99-9	1,2		1000 (454)
1,2-Dichloropropane	78-87-5	1,2,3,4	U083	1000 (454)
1,3-Dichloropropane	142-28-9	1,2		1000 (454)
Dichloropropane - Dichloropropene (mixture)	8003-19-8	1		100 (45.4)
Dichloropropene	26952-23-8	1,2		100 (45.4)
1,3-Dichloropropene	542-75-6	1,2,3,4	U084	100 (45.4)
2,3-Dichloropropene	78-88-6	1,2		100 (45.4)
2,2-Dichloropropionic acid	75-99-0	1		5000 (2270)
Dichlorvos	62-73-7	1,3		10 (4.54)
Dicofol	115-32-2	1		10 (4.54)
Dieldrin	60-57-1	1,2,4	P037	1 (0.454)
1,2:3,4-Diepoxybutane	1464-53-5	4	U085	10 (4.54)
Diethanolamine	111-42-2	3		100 (45.4)
Diethylamine	109-89-7	1		100 (45.4)
N,N-Diethylaniline	91-66-7	3		1000 (454)
Diethylarsine	692-42-2	4	P038	1 (0.454)
1,4-Diethyleneoxide	123-91-1	3,4	U108	100 (45.4)
Diethylene glycol, dicarbamate	5952-26-1	4	U395	5000 (2270)
Diethylhexyl phthalate	117-81-7	2,3,4	U028	100 (45.4)
N,N'-Diethylhydrazine	1615-80-1	4	U086	10 (4.54)
O,O-Diethyl S-methyl dithiophosphate	3288-58-2	4	U087	5000 (2270)
Diethyl-p-nitrophenyl phosphate	311-45-5	4	P041	100 (45.4)
Diethyl phthalate	84-66-2	2,4	U088	1000 (454)
O,O-Diethyl O-pyrazinyl phosphorothioate	297-97-2	4	P040	100 (45.4)
Diethylstilbestrol	56-53-1	4	U089	1 (0.454)
Diethyl sulfate	64-67-5	3		10 (4.54)
Dihydrosafrole	94-58-6	4	U090	10 (4.54)

Diisopropylfluorophosphate (DFP)	55-91-4	4 P043	100 (45.4)
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-	309-00-2	1,2,4 P004	1 (0.454)
1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro- 1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta, 5beta,8beta,8abeta)-	465-73-6	4 P060	1 (0.454)
2,7:3,6-Dimethanonaphth[2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a- octahydro-,(1aalpha,2beta, 2aalpha,3beta,6beta,6aalpha, 7beta,7aalpha)-	60-57-1	1,2,4 P037	1 (0.454)
2,7:3,6-Dimethanonaphth[2, 3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a- octahydro-,(1aalpha,2beta, 2abeta,3alpha,6alpha, 6abeta,7beta,7aalpha)-, & metabolites	72-20-8	1,2,4 P051	1 (0.454)
Dimethoate	60-51-5	4 P044	10 (4.54)
3,3'-Dimethoxybenzidine	119-90-4	3,4 U091	100 (45.4)
Dimethylamine	124-40-3	1,4 U092	1000 (454)
Dimethyl aminoazobenzene	60-11-7	3,4 U093	10 (4.54)
p-Dimethylaminoazobenzene	60-11-7	3,4 U093	10 (4.54)
N,N-Dimethylaniline	121-69-7	3	100 (45.4)
7,12-Dimethylbenz[a]anthracene	57-97-6	4 U094	1 (0.454)
3,3'-Dimethylbenzidine	119-93-7	3,4 U095	10 (4.54)
alpha,alpha-Dimethylbenzylhydroperoxide	80-15-9	4 U096	10 (4.54)
Dimethylcarbamoyl chloride	79-44-7	3,4 U097	1 (0.454)
Dimethylformamide	68-12-2	3	100 (45.4)
1,1-Dimethylhydrazine	57-14-7	3,4 U098	10 (4.54)
1,2-Dimethylhydrazine	540-73-8	4 U099	1 (0.454)
alpha,alpha-Dimethylphenethylamine	122-09-8	4 P046	5000 (2270)
2,4-Dimethylphenol	105-67-9	2,4 U101	100 (45.4)
Dimethyl phthalate	131-11-3	2,3,4 U102	5000 (2270)
Dimethyl sulfate	77-78-1	3,4 U103	100 (45.4)
Dimetilan	644-64-4	4 P191	1 (0.454)
Dinitrobenzene (mixed)	25154-54-5	1	100 (45.4)

m-Dinitrobenzene	99-65-0	1		100 (45.4)
o-Dinitrobenzene	528-29-0	1		100 (45.4)
p-Dinitrobenzene	100-25-4	1		100 (45.4)
4,6-Dinitro-o-cresol	534-52-1	2,3,4	P047	10 (4.54)
4,6-Dinitro-o-cresol, and salts	534-52-1	3,4	P047	10 (4.54)
Dinitrophenol	25550-58-7	1		10 (4.54)
2,4-Dinitrophenol	51-28-5	1,2,3,4	P048	10 (4.54)
2,5-Dinitrophenol	329-71-5	1		10 (4.54)
2,6-Dinitrophenol	573-56-8	1		10 (4.54)
Dinitrotoluene	25321-14-6	1,2		10 (4.54)
2,4-Dinitrotoluene	121-14-2	1,2,3,4	U105	10 (4.54)
2,6-Dinitrotoluene	606-20-2	1,2,4	U106	100 (45.4)
3,4-Dinitrotoluene	610-39-9	1,2		10 (4.54)
Dinoseb	88-85-7	4	P020	1000 (454)
Di-n-octyl phthalate	117-84-0	2,4	U107	5000 (2270)
1,4-Dioxane	123-91-1	3,4	U108	100 (45.4)
DIPHENYLHYDRAZINE	38622-18-3	2		**
1,2-Diphenylhydrazine	122-66-7	2,3,4	U109	10 (4.54)
Diphosphoramidate, octamethyl-	152-16-9	4	P085	100 (45.4)
Diphosphoric acid, tetraethyl ester	107-49-3	1,4	P111	10 (4.54)
Dipropylamine	142-84-7	4	U110	5000 (2270)
Di-n-propylnitrosamine	621-64-7	2,4	U111	10 (4.54)
Diquat	85-00-7	1		1000 (454)
	2764-72-9			
Disulfoton	298-04-4	1,4	P039	1 (0.454)
Dithiobiuret	541-53-7	4	P049	100 (45.4)
1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime	26419-73-8	4	P185	100 (45.4)
Diuron	330-54-1	1		100 (45.4)
Dodecylbenzenesulfonic acid	27176-87-0	1		1000 (454)
ENDOSULFAN AND METABOLITES	N.A.	2		**
Endosulfan	115-29-7	1,2,4	P050	1 (0.454)
alpha-Endosulfan	959-98-8	2		1 (0.454)
beta-Endosulfan	33213-65-9	2		1 (0.454)
Endosulfan sulfate	1031-07-8	2		1 (0.454)

Endothall	145-73-3	4 P088	1000 (454)
ENDRIN AND METABOLITES	N.A.	2,4 P051	**
Endrin, & metabolites	72-20-8	1,2,4 P051	1 (0.454)
Endrin	72-20-8	1,2,4 P051	1 (0.454)
Endrin aldehyde	7421-93-4	2	1 (0.454)
Epichlorohydrin	106-89-8	1,3,4 U041	100 (45.4)
Epinephrine	51-43-4	4 P042	1000 (454)
1,2-Epoxybutane	106-88-7	3	100 (45.4)
Ethanal	75-07-0	1,3,4 U001	1000 (454)
Ethanamine, N,N-diethyl-	121-44-8	1,3,4 U404	5000 (2270)
Ethanamine, N-ethyl-N-nitroso-	55-18-5	4 U174	1 (0.454)
1,2-Ethanediamine, N,N-dimethyl-N'-2- pyridinyl-N'-(2-thienylmethyl)-	91-80-5	4 U155	5000 (2270)
Ethane, 1,2-dibromo-	106-93-4	1,3,4 U067	1 (0.454)
Ethane, 1,1-dichloro-	75-34-3	2,3,4 U076	1000 (454)
Ethane, 1,2-dichloro-	107-06-2	1,2,3,4 U077	100 (45.4)
Ethanedinitrile	460-19-5	4 P031	100 (45.4)
Ethane, hexachloro-	67-72-1	2,3,4 U131	100 (45.4)
Ethane, 1,1'-[methylenebis(oxy)]bis[2- chloro-	111-91-1	2,4 U024	1000 (454)
Ethane, 1,1'-oxybis-	60-29-7	4 U117	100 (45.4)
Ethane, 1,1'-oxybis[2-chloro-	111-44-4	2,3,4 U025	10 (4.54)
Ethane, pentachloro-	76-01-7	4 U184	10 (4.54)
Ethane, 1,1,1,2-tetrachloro-	630-20-6	4 U208	100 (45.4)
Ethane, 1,1,2,2-tetrachloro-	79-34-5	2,3,4 U209	100 (45.4)
Ethanethioamide	62-55-5	4 U218	10 (4.54)
Ethane, 1,1,1-trichloro-	71-55-6	2,3,4 U226	1000 (454)
Ethane, 1,1,2-trichloro-	79-00-5	2,3,4 U227	100 (45.4)
Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester	30558-43-1	4 U394	5000 (2270)
Ethanimidothioic acid, 2-(dimethylamino)-N-[[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester	23135-22-0	4 P194	100 (45.4)
Ethanimidothioic acid, N-[[[(methylamino) carbonyl]oxy]-, methyl ester	16752-77-5	4 P066	100 (45.4)

Ethanimidothioic acid, N,N'-[thiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester	59669-26-0	4 U410	100 (45.4)
Ethanol, 2-ethoxy-	110-80-5	4 U359	1000 (454)
Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7	4 U173	1 (0.454)
Ethanol, 2,2'-oxybis-, dicarbamate	5952-26-1	4 U395	5000 (2270)
Ethanone, 1-phenyl-	98-86-2	3,4 U004	5000 (2270)
Ethene, chloro-	75-01-4	2,3,4 U043	1 (0.454)
Ethene, (2-chloroethoxy)-	110-75-8	2,4 U042	1000 (454)
Ethene, 1,1-dichloro-	75-35-4	1,2,3,4 U078	100 (45.4)
Ethene, 1,2-dichloro-(E)	156-60-5	2,4 U079	1000 (454)
Ethene, tetrachloro-	127-18-4	2,3,4 U210	100 (45.4)
Ethene, trichloro-	79-01-6	1,2,3,4 U228	100 (45.4)
Ethion	563-12-2	1	10 (4.54)
Ethyl acetate	141-78-6	4 U112	5000 (2270)
Ethyl acrylate	140-88-5	3,4 U113	1000 (454)
Ethylbenzene	100-41-4	1,2,3	1000 (454)
Ethyl carbamate	51-79-6	3,4 U238	100 (45.4)
Ethyl chloride	75-00-3	2,3	100 (45.4)
Ethyl cyanide	107-12-0	4 P101	10 (4.54)
Ethylenebisdithiocarbamic acid, salts & esters	111-54-6	4 U114	5000 (2270)
Ethylenediamine	107-15-3	1	5000 (2270)
Ethylenediamine-tetraacetic acid (EDTA)	60-00-4	1	5000 (2270)
Ethylene dibromide	106-93-4	1,3,4 U067	1 (0.454)
Ethylene dichloride	107-06-2	1,2,3,4 U077	100 (45.4)
Ethylene glycol	107-21-1	3	5000 (2270)
Ethylene glycol monoethyl ether	110-80-5	4 U359	1000 (454)
Ethylene oxide	75-21-8	3,4 U115	10 (4.54)
Ethylenethiourea	96-45-7	3,4 U116	10 (4.54)
Ethylenimine	151-56-4	3,4 P054	1 (0.454)
Ethyl ether	60-29-7	4 U117	100 (45.4)
Ethylidene dichloride	75-34-3	2,3,4 U076	1000 (454)
Ethyl methacrylate	97-63-2	4 U118	1000 (454)
Ethyl methanesulfonate	62-50-0	4 U119	1 (0.454)
Famphur	52-85-7	4 P097	1000 (454)

Ferric ammonium citrate	1185-57-5	1		1000 (454)
Ferric ammonium oxalate	2944-67-4 55488-87-4	1		1000 (454)
Ferric chloride	7705-08-0	1		1000 (454)
Ferric fluoride	7783-50-8	1		100 (45.4)
Ferric nitrate	10421-48-4	1		1000 (454)
Ferric sulfate	10028-22-5	1		1000 (454)
Ferrous ammonium sulfate	10045-89-3	1		1000 (454)
Ferrous chloride	7758-94-3	1		100 (45.4)
Ferrous sulfate	7720-78-7 7782-63-0	1		1000 (454)
Fine mineral fibers ^c	N.A.	3		**
Fluoranthene	206-44-0	2,4	U120	100 (45.4)
Fluorene	86-73-7	2		5000 (2270)
Fluorine	7782-41-4	4	P056	10 (4.54)
Fluoroacetamide	640-19-7	4	P057	100 (45.4)
Fluoroacetic acid, sodium salt	62-74-8	4	P058	10 (4.54)
Formaldehyde	50-00-0	1,3,4	U122	100 (45.4)
Formetanate hydrochloride	23422-53-9	4	P198	100 (45.4)
Formic acid	64-18-6	1,4	U123	5000 (2270)
Formparanate	17702-57-7	4	P197	100 (45.4)
Fulminic acid, mercury(2 +)salt	628-86-4	4	P065	10 (4.54)
Fumaric acid	110-17-8	1		5000 (2270)
Furan	110-00-9	4	U124	100 (45.4)
2-Furancarboxaldehyde	98-01-1	1,4	U125	5000 (2270)
2,5-Furandione	108-31-6	1,3,4	U147	5000 (2270)
Furan, tetrahydro-	109-99-9	4	U213	1000 (454)
Furfural	98-01-1	1,4	U125	5000 (2270)
Furfuran	110-00-9	4	U124	100 (45.4)
Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-,D-	18883-66-4	4	U206	1 (0.454)
D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)-carbonyl]amino]-	18883-66-4	4	U206	1 (0.454)
Glycidylaldehyde	765-34-4	4	U126	10 (4.54)
Glycol ethers ^d	N.A.	3		**

Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	4 U163	10 (4.54)
Guthion	86-50-0	1	1 (0.454)
HALOETHERS	N.A.	2	**
HALOMETHANES	N.A.	2	**
HEPTACHLOR AND METABOLITES	N.A.	2	**
Heptachlor	76-44-8	1,2,3,4 P059	1 (0.454)
Heptachlor epoxide	1024-57-3	2	1 (0.454)
Hexachlorobenzene	118-74-1	2,3,4 U127	10 (4.54)
Hexachlorobutadiene	87-68-3	2,3,4 U128	1 (0.454)
HEXACHLOROCYCLOHEXANE (all isomers)	608-73-1	2	**
Hexachlorocyclopentadiene	77-47-4	1,2,3,4 U130	10 (4.54)
Hexachloroethane	67-72-1	2,3,4 U131	100 (45.4)
Hexachlorophene	70-30-4	4 U132	100 (45.4)
Hexachloropropene	1888-71-7	4 U243	1000 (454)
Hexaethyl tetraphosphate	757-58-4	4 P062	100 (45.4)
Hexamethylene-1,6-diisocyanate	822-06-0	3	100 (45.4)
Hexamethylphosphoramide	680-31-9	3	1 (0.454)
Hexane	110-54-3	3	5000 (2270)
Hexone	108-10-1	3,4 U161	5000 (2270)
Hydrazine	302-01-2	3,4 U133	1 (0.454)
Hydrazinecarbothioamide	79-19-6	4 P116	100 (45.4)
Hydrazine, 1,2-diethyl-	1615-80-1	4 U086	10 (4.54)
Hydrazine, 1,1-dimethyl-	57-14-7	3,4 U098	10 (4.54)
Hydrazine, 1,2-dimethyl-	540-73-8	4 U099	1 (0.454)
Hydrazine, 1,2-diphenyl-	122-66-7	2,3,4 U109	10 (4.54)
Hydrazine, methyl-	60-34-4	3,4 P068	10 (4.54)
Hydrochloric acid	7647-01-0	1,3	5000 (2270)
Hydrocyanic acid	74-90-8	1,4 P063	10 (4.54)
Hydrofluoric acid	7664-39-3	1,3,4 U134	100 (45.4)
Hydrogen chloride	7647-01-0	1,3	5000 (2270)
Hydrogen cyanide	74-90-8	1,4 P063	10 (4.54)
Hydrogen fluoride	7664-39-3	1,3,4 U134	100 (45.4)
Hydrogen phosphide	7803-51-2	3,4 P096	100 (45.4)
Hydrogen sulfide H2S	6/4/7783	1,4 U135	100 (45.4)
Hydroperoxide, 1-methyl-1-phenylethyl-	80-15-9	4 U096	10 (4.54)

Hydroquinone	123-31-9	3		100 (45.4)
2-Imidazolidinethione	96-45-7	3,4	U116	10 (4.54)
Indeno(1,2,3-cd)pyrene	193-39-5	2,4	U137	100 (45.4)
Iodomethane	74-88-4	3,4	U138	100 (45.4)
1,3-Isobenzofurandione	85-44-9	3,4	U190	5000 (2270)
Isobutyl alcohol	78-83-1	4	U140	5000 (2270)
Isodrin	465-73-6	4	P060	1 (0.454)
Isolan	119-38-0	4	P192	100 (45.4)
Isophorone	78-59-1	2,3		5000 (2270)
Isoprene	78-79-5	1		100 (45.4)
Isopropanolamine dodecylbenzenesulfonate	42504-46-1	1		1000 (454)
3-Isopropylphenyl N-methylcarbamate	64-00-6	4	P202	10 (4.54)
Isosafrole	120-58-1	4	U141	100 (45.4)
3(2H)-Isoxazolone, 5-(aminomethyl)-	2763-96-4	4	P007	1000 (454)
Kepone	143-50-0	1,4	U142	1 (0.454)
Lasiocarpine	303-34-4	4	U143	10 (4.54)
LEAD AND COMPOUNDS	N.A.	2,3		**
Lead ^{III}	7439-92-1	2		10 (4.54)
Lead acetate	301-04-2	1,4	U144	10 (4.54)
Lead arsenate	7784-40-9	1		1 (0.454)
	7645-25-2			
	10102-48-4			
Lead, bis(acetato-O)tetrahydroxytri-	1335-32-6	4	U146	10 (4.54)
Lead chloride	7758-95-4	1		10 (4.54)
Lead compounds	N.A.	2,3		**
Lead fluoborate	13814-96-5	1		10 (4.54)
Lead fluoride	7783-46-2	1		10 (4.54)
Lead iodide	10101-63-0	1		10 (4.54)
Lead nitrate	10099-74-8	1		10 (4.54)
Lead phosphate	7446-27-7	4	U145	10 (4.54)
Lead stearate	1072-35-1	1		10 (4.54)
	7428-48-0			
	56189-09-4			
Lead subacetate	1335-32-6	4	U146	10 (4.54)
Lead sulfate	7446-14-2	1		10 (4.54)

	15739-80-7		
Lead sulfide	1314-87-0	1	10 (4.54)
Lead thiocyanate	592-87-0	1	10 (4.54)
Lindane	58-89-9	1,2,3,4 U129	1 (0.454)
Lindane (all isomers)	58-89-9	1,2,3,4 U129	1 (0.454)
Lithium chromate	14307-35-8	1	10 (4.54)
Malathion	121-75-5	1	100 (45.4)
Maleic acid	110-16-7	1	5000 (2270)
Maleic anhydride	108-31-6	1,3,4 U147	5000 (2270)
Maleic hydrazide	123-33-1	4 U148	5000 (2270)
Malononitrile	109-77-3	4 U149	1000 (454)
Manganese, bis (dimethylcarbomodithioato-S,S')-	15339-36-3	4 P196	10 (4.54)
Manganese Compounds	N.A.	3	**
Manganese dimethyldithiocarbamate	15339-36-3	4 P196	10 (4.54)
MDI	101-68-8	3	5000 (2270)
MEK	78-93-3	4 U159	5000 (2270)
Melphalan	148-82-3	4 U150	1 (0.454)
Mercaptodimethur	2032-65-7	1,4 P199	10 (4.54)
MERCURY AND COMPOUNDS	N.A.	2,3	**
Mercury Compounds	N.A.	2,3	**
Mercuric cyanide	592-04-1	1	1(0.454)
Mercuric nitrate	10045-94-0	1	10 (4.54)
Mercuric sulfate	7783-35-9	1	10 (4.54)
Mercuric thiocyanate	592-85-8	1	10 (4.54)
Mercurous nitrate	10415-75-5	1	10 (4.54)
Mercury	7782-86-7	2,3,4 U151	1 (0.454)
	7439-97-6		
Mercury, (acetato-O)phenyl-	62-38-4	4 P092	100 (45.4)
Mercury fulminate	628-86-4	4 P065	10 (4.54)
Methacrylonitrile	126-98-7	4 U152	1000 (454)
Methanamine, N-methyl-	124-40-3	1,4 U092	1000 (454)
Methanamine, N-methyl-N-nitroso-	62-75-9	2,3,4 P082	10 (4.54)
Methane, bromo-	74-83-9	2,3,4 U029	1000 (454)
Methane, chloro-	74-87-3	2,3,4 U045	100 (45.4)

Methane, chloromethoxy-	107-30-2	3,4 U046	10 (4.54)
Methane, dibromo-	74-95-3	4 U068	1000 (454)
Methane, dichloro-	75-09-2	2,3,4 U080	1000 (454)
Methane, dichlorodifluoro-	75-71-8	4 U075	5000 (2270)
Methane, iodo-	74-88-4	3,4 U138	100 (45.4)
Methane, isocyanato-	624-83-9	3,4 P064	10 (4.54)
Methane, oxybis(chloro-	542-88-1	3,4 P016	10 (4.54)
Methanesulfenyl chloride, trichloro-	594-42-3	4 P118	100 (45.4)
Methanesulfonic acid, ethyl ester	62-50-0	4 U119	1 (0.454)
Methane, tetrachloro-	56-23-5	1,2,3,4 U211	10 (4.54)
Methane, tetranitro-	509-14-8	4 P112	10 (4.54)
Methanethiol	74-93-1	1,4 U153	100 (45.4)
Methane, tribromo-	75-25-2	2,3,4 U225	100 (45.4)
Methane, trichloro-	67-66-3	1,2,3,4 U044	10 (4.54)
Methane, trichlorofluoro-	75-69-4	4 U121	5000 (2270)
Methanimidamide, N,N-dimethyl-N'-[3- [[[(methylamino)-carbonyl]oxy]phenyl]], monohydrochloride	23422-53-9	4 P198	100 (45.4)
Methanimidamide, N,N-dimethyl-N'-[2-methyl-4- [[[(methylamino) carbonyl]oxy]phenyl]-	17702-57-7	4 P197	100 (45.4)
6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10- hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	115-29-7	1,2,4 P050	1 (0.454)
4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro- 3a,4,7,7a-tetrahydro-	76-44-8	1,2,3,4 P059	1 (0.454)
4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro- 2,3,3a,4,7,7a-hexahydro-	57-74-9	1,2,3,4 U036	1 (0.454)
Methanol	67-56-1	3,4 U154	5000 (2270)
Methapyrilene	91-80-5	4 U155	5000 (2270)
1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	143-50-0	1,4 U142	1 (0.454)
Methiocarb	2032-65-7	1,4 P199	10 (4.54)
Methomyl	16752-77-5	4 P066	100 (45.4)
Methoxychlor	72-43-5	1,3,4 U247	1 (0.454)
Methyl alcohol	67-56-1	3,4 U154	5000 (2270)

2-Methyl aziridine	75-55-8	3,4 P067	1 (0.454)
Methyl bromide	74-83-9	2,3,4 U029	1000 (454)
1-Methylbutadiene	504-60-9	4 U186	100 (45.4)
Methyl chloride	74-87-3	2,3,4 U045	100 (45.4)
Methyl chlorocarbonate	79-22-1	4 U156	1000 (454)
Methyl chloroform	71-55-6	2,3,4 U226	1000 (454)
3-Methylcholanthrene	56-49-5	4 U157	10 (4.54)
4,4'-Methylenebis(2-chloroaniline)	101-14-4	3,4 U158	10 (4.54)
Methylene bromide	74-95-3	4 U068	1000 (454)
Methylene chloride	75-09-2	2,3,4 U080	1000 (454)
4,4'-Methylenedianiline	101-77-9	3	10 (4.54)
Methylene diphenyl diisocyanate	101-68-8	3	5000 (2270)
Methyl ethyl ketone	78-93-3	4 U159	5000 (2270)
Methyl ethyl ketone peroxide	1338-23-4	4 U160	10 (4.54)
Methyl hydrazine	60-34-4	3,4 P068	10 (4.54)
Methyl iodide	74-88-4	3,4 U138	100 (45.4)
Methyl isobutyl ketone	108-10-1	3,4 U161	5000 (2270)
Methyl isocyanate	624-83-9	3,4 P064	10 (4.54)
2-Methylacetonitrile	75-86-5	1,4 P069	10 (4.54)
Methyl mercaptan	74-93-1	1,4 U153	100 (45.4)
Methyl methacrylate	80-62-6	1,3,4 U162	1000 (454)
Methyl parathion	298-00-0	1,4 P071	100 (45.4)
4-Methyl-2-pentanone	108-10-1	3,4 U161	5000 (2270)
Methyl tert-butyl ether	1634-04-4	3	1000 (454)
Methylthiouracil	56-04-2	4 U164	10 (4.54)
Metolcarb	1129-41-5	4 P190	1000 (454)
Mevinphos	7786-34-7	1	10 (4.54)
Mexacarbate	315-18-4	1,4 P128	1000 (454)
Mitomycin C	50-07-7	4 U010	10 (4.54)
MNNG	70-25-7	4 U163	10 (4.54)
Monoethylamine	75-04-7	1	100 (45.4)
Monomethylamine	74-89-5	1	100 (45.4)
Naled	300-76-5	1	10 (4.54)

5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	20830-81-3	4 U059	10 (4.54)
1-Naphthalenamine	134-32-7	4 U167	100 (45.4)
2-Naphthalenamine	91-59-8	4 U168	10 (4.54)
Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	4 U026	100 (45.4)
Naphthalene	91-20-3	1,2,3,4 U165	100 (45.4)
Naphthalene, 2-chloro-	91-58-7	2,4 U047	5000 (2270)
1,4-Naphthalenedione	130-15-4	4 U166	5000 (2270)
2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo)]bis(5-amino-4-hydroxy)-tetrasodium salt	72-57-1	4 U236	10 (4.54)
1-Naphthalenol, methylcarbamate	63-25-2	1,3,4 U279	100 (45.4)
Naphthenic acid	1338-24-5	1	100 (45.4)
1,4-Naphthoquinone	130-15-4	4 U166	5000 (2270)
alpha-Naphthylamine	134-32-7	4 U167	100 (45.4)
beta-Naphthylamine	91-59-8	4 U168	10 (4.54)
alpha-Naphthylthiourea	86-88-4	4 P072	100 (45.4)
NICKEL AND COMPOUNDS	N.A.	2,3	**
Nickel ^{III}	7440-02-0	2	100 (45.4)
Nickel ammonium sulfate	15699-18-0	1	100 (45.4)
Nickel carbonyl Ni(CO) ₄ , (T-4)-	13463-39-3	4 P073	10 (4.54)
Nickel chloride	7718-54-9	1	100 (45.4)
	37211-05-5		
Nickel compounds	N.A.	2,3	**
Nickel cyanide Ni(CN) ₂	557-19-7	4 P074	10 (4.54)
Nickel hydroxide	12054-48-7	1	10 (4.54)
Nickel nitrate	14216-75-2	1	100 (45.4)
Nickel sulfate	7786-81-4	1	100 (45.4)
Nicotine, & salts	54-11-5	4 P075	100 (45.4)
Nitric acid	7697-37-2	1	1000 (454)
Nitric acid, thallium (1 +) salt	10102-45-1	4 U217	100 (45.4)
Nitric oxide	10102-43-9	4 P076	10 (4.54)
p-Nitroaniline	100-01-6	4 P077	5000 (2270)

Nitrobenzene	98-95-3	1,2,3,4 U169	1000 (454)
4-Nitrobiphenyl	92-93-3	3	10 (4.54)
Nitrogen dioxide	10102-44-0 10544-72-6	1,4 P078	10 (4.54)
Nitrogen oxide NO	10102-43-9	4 P076	10 (4.54)
Nitrogen oxide NO ₂	10102-44-0 10544-72-6	1,4 P078	10 (4.54)
Nitroglycerine	55-63-0	4 P081	10 (4.54)
NITROPHENOLS	25154-55-6	2	**
Nitrophenol (mixed)	25154-55-6	1	100 (45.4)
m-Nitrophenol	554-84-7	1	100 (45.4)
o-Nitrophenol	88-75-5	1,2	100 (45.4)
p-Nitrophenol	100-02-7	1,2,3,4 U170	100 (45.4)
2-Nitrophenol	88-75-5	1,2	100 (45.4)
4-Nitrophenol	100-02-7	1,2,3,4 U170	100 (45.4)
2-Nitropropane	79-46-9	3,4 U171	10 (4.54)
NITROSAMINES	N.A.	2	**
N-Nitrosodi-n-butylamine	924-16-3	4 U172	10 (4.54)
N-Nitrosodiethanolamine	1116-54-7	4 U173	1 (0.454)
N-Nitrosodiethylamine	55-18-5	4 U174	1 (0.454)
N-Nitrosodimethylamine	62-75-9	2,3,4 P082	10 (4.54)
N-Nitrosodiphenylamine	86-30-6	2	100 (45.4)
N-Nitroso-N-ethylurea	759-73-9	4 U176	1 (0.454)
N-Nitroso-N-methylurea	684-93-5	3,4 U177	1 (0.454)
N-Nitroso-N-methylurethane	615-53-2	4 U178	1 (0.454)
N-Nitrosomethylvinylamine	4549-40-0	4 P084	10 (4.54)
N-Nitrosomorpholine	59-89-2	3	1 (0.454)
N-Nitrosopiperidine	100-75-4	4 U179	10 (4.54)
N-Nitrosopyrrolidine	930-55-2	4 U180	1 (0.454)
Nitrotoluene	1321-12-6	1	1000 (454)
m-Nitrotoluene	99-08-1	1	1000 (454)
o-Nitrotoluene	88-72-2	1	1000 (454)
p-Nitrotoluene	99-99-0	1	1000 (454)
5-Nitro-o-toluidine	99-55-8	4 U181	100 (45.4)
Octamethylpyrophosphoramide	152-16-9	4 P085	100 (45.4)

Osmium oxide OsO ₄ , (T-4)-	20816-12-0	4 P087	1000 (454)
Osmium tetroxide	20816-12-0	4 P087	1000 (454)
7-Oxabicyclo[221]heptane-2,3-dicarboxylic acid Oxamyl	145-73-3	4 P088	1000 (454)
	23135-22-0	4 P194	100 (45.4)
1,2-Oxathiolane, 2,2-dioxide	1120-71-4	3,4 U193	10 (4.54)
2H-1,3,2-Oxazaphosphorin-2-amine, N,N- bis(2-chloroethyl)tetrahydro-, 2-oxide	50-18-0	4 U058	10 (4.54)
Oxirane	75-21-8	3,4 U115	10 (4.54)
Oxiranecarboxyaldehyde	765-34-4	4 U126	10 (4.54)
Oxirane, (chloromethyl)-	106-89-8	1,3,4 U041	100 (45.4)
Paraformaldehyde	30525-89-4	1	1000 (454)
Paraldehyde	123-63-7	4 U182	1000 (454)
Parathion	56-38-2	1,3,4 P089	10 (4.54)
PCBs	1336-36-3	1,2,3	1 (0.454)
PCNB	82-68-8	3,4 U185	100 (45.4)
Pentachlorobenzene	608-93-5	4 U183	10 (4.54)
Pentachloroethane	76-01-7	4 U184	10 (4.54)
Pentachloronitrobenzene	82-68-8	3,4 U185	100 (45.4)
Pentachlorophenol	87-86-5	1,2,3,4 See F027	10 (4.54)
1,3-Pentadiene	504-60-9	4 U186	100 (45.4)
Perchloroethylene	127-18-4	2,3,4 U210	100 (45.4)
Phenacetin	62-44-2	4 U187	100 (45.4)
Phenanthrene	85-01-8	2	5000 (2270)
Phenol	108-95-2	1,2,3,4 U188	1000 (454)
Phenol, 2-chloro-	95-57-8	2,4 U048	100 (45.4)
Phenol, 4-chloro-3-methyl-	59-50-7	2,4 U039	5000 (2270)
Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	4 P034	100 (45.4)
Phenol, 2,4-dichloro-	120-83-2	2,4 U081	100 (45.4)
Phenol, 2,6-dichloro-	87-65-0	4 U082	100 (45.4)
Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)	56-53-1	4 U089	1 (0.454)
Phenol, 2,4-dimethyl-	105-67-9	2,4 U101	100 (45.4)
Phenol, 4-(dimethylamino)-3,5-dimethyl-, 4 methylcarbamate (ester)	315-18-4	1,4 P128	1000 (454)
Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	2032-65-7	1,4 P199	10 (4.54)

Phenol, 2,4-dinitro-	51-28-5	1,2,3,4	P048	10 (4.54)
Phenol, methyl-	1319-77-3	1,3,4	U052	100 (45.4)
Phenol, 2-methyl-4,6-dinitro-	534-52-1	2,3,4	P047	10 (4.54)
Phenol, 2-methyl-4,6-dinitro-, & salts	534-52-1	3,4	P047	10 (4.54)
Phenol, 2,2'-methylenebis[3,4,6- trichloro-	70-30-4	4	U132	100 (45.4)
Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	3,4	U411	100 (45.4)
Phenol, 3-(1-methylethyl)-, methyl carbamate	64-00-6	4	P202	10 (4.54)
Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	2631-37-0	4	P201	1000 (454)
Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	4	P020	1000 (454)
Phenol, 4-nitro-	100-02-7	1,2,3,4	U170	100 (45.4)
Phenol, pentachloro-	87-86-5	1,2,3,4	See F027	10 (4.54)
Phenol, 2,3,4,6-tetrachloro-	58-90-2	4	See F027	10 (4.54)
Phenol, 2,4,5-trichloro-	95-95-4	1,3,4	See F027	10 (4.54)
Phenol, 2,4,6-trichloro-	88-06-2	1,2,3,4	See F027	10 (4.54)
Phenol, 2,4,6-trinitro-, ammonium salt	131-74-8	4	P009	10 (4.54)
L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-	148-82-3	4	U150	1 (0.454)
p-Phenylenediamine	106-50-3	3		5000 (2270)
Phenylmercury acetate	62-38-4	4	P092	100 (45.4)
Phenylthiourea	103-85-5	4	P093	100 (45.4)
Phorate	298-02-2	4	P094	10 (4.54)
Phosgene	75-44-5	1,3,4	P095	10 (4.54)
Phosphine	7803-51-2	3,4	P096	100 (45.4)
Phosphoric acid	7664-38-2	1		5000 (2270)
Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5	4	P041	100 (45.4)
Phosphoric acid, lead(2+) salt (2:3)	7446-27-7	4	U145	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	298-04-4	1,4	P039	1 (0.454)
Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester	298-02-2	4	P094	10 (4.54)
Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2	4	U087	5000 (2270)
Phosphorodithioic acid, O,O-dimethyl S-[2(methylamino)-2-oxoethyl] ester	60-51-5	4	P044	10 (4.54)

Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4	4 P043	100 (45.4)
Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2	1,3,4 P089	10 (4.54)
Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2	4 P040	100 (45.4)
Phosphorothioic acid, O-[4-[(dimethylamino) sulfonyl]phenyl] O,O-dimethyl ester	52-85-7	4 P097	1000 (454)
Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0	1,4 P071	100 (45.4)
Phosphorus	7723-14-0	1,3	1 (0.454)
Phosphorus oxychloride	10025-87-3	1	1000 (454)
Phosphorus pentasulfide	1314-80-3	1,4 U189	100 (45.4)
Phosphorus sulfide	1314-80-3	1,4 U189	100 (45.4)
Phosphorus trichloride	12/2/7719	1	1000 (454)
Physostigmine	57-47-6	4 P204	100 (45.4)
Physostigmine salicylate	57-64-7	4 P188	100 (45.4)
PHTHALATE ESTERS	N.A.	2	**
Phthalic anhydride	85-44-9	3,4 U190	5000 (2270)
2-Picoline	109-06-8	4 U191	5000 (2270)
Piperidine, 1-nitroso-	100-75-4	4 U179	10 (4.54)
Plumbane, tetraethyl-	78-00-2	1,4 P110	10 (4.54)
POLYCHLORINATED BIPHENYLS	1336-36-3	1,2,3	1 (0.454)
Polycyclic Organic Mattere	N.A.	3	**
POLYNUCLEAR AROMATIC HYDROCARBONS	N.A.	2	**
Potassium arsenate	7784-41-0	1	1 (0.454)
Potassium arsenite	10124-50-2	1	1 (0.454)
Potassium bichromate	7778-50-9	1	10 (4.54)
Potassium chromate	7789-00-6	1	10 (4.54)
Potassium cyanide K(CN)	151-50-8	1,4 P098	10 (4.54)
Potassium hydroxide	1310-58-3	1	1000 (454)
Potassium permanganate	7722-64-7	1	100 (45.4)
Potassium silver cyanide	506-61-6	4 P099	1 (0.454)
Promecarb	2631-37-0	4 P201	1000 (454)
Pronamide	23950-58-5	4 U192	5000 (2270)

Propanal, 2-methyl-2-(methyl-sulfonyl)-, O- [(methylamino)carbonyl] oxime	1646-88-4	4 P203	100 (45.4)
Propanal, 2-methyl-2-(methylthio)-, O- [(methylamino)carbonyl]oxime	116-06-3	4 P070	1 (0.454)
1-Propanamine	107-10-8	4 U194	5000 (2270)
1-Propanamine, N-propyl-	142-84-7	4 U110	5000 (2270)
1-Propanamine, N-nitroso-N-propyl-	621-64-7	2,4 U111	10 (4.54)
Propane, 1,2-dibromo-3-chloro-	96-12-8	3,4 U066	1 (0.454)
Propane, 1,2-dichloro-	78-87-5	1,2,3,4 U083	1000 (454)
Propanedinitrile	109-77-3	4 U149	1000 (454)
Propanenitrile	107-12-0	4 P101	10 (4.54)
Propanenitrile, 3-chloro-	542-76-7	4 P027	1000 (454)
Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	1,4 P069	10 (4.54)
Propane, 2-nitro-	79-46-9	3,4 U171	10 (4.54)
Propane, 2,2'-oxybis[2-chloro-	108-60-1	2,4 U027	1000 (454)
1,3-Propane sulfone	1120-71-4	3,4 U193	10 (4.54)
1,2,3-Propanetriol, trinitrate	55-63-0	4 P081	10 (4.54)
Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1	1,4 See F027	100 (45.4)
1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7	4 U235	10 (4.54)
1-Propanol, 2-methyl-	78-83-1	4 U140	5000 (2270)
2-Propanone	67-64-1	4 U002	5000 (2270)
2-Propanone, 1-bromo-	598-31-2	4 P017	1000 (454)
Propargite	2312-35-8	1	10 (4.54)
Propargyl alcohol	107-19-7	4 P102	1000 (454)
2-Propenal	107-02-8	1,2,3,4 P003	1 (0.454)
2-Propenamide	79-06-1	3,4 U007	5000 (2270)
1-Propene, 1,3-dichloro-	542-75-6	1,2,3,4 U084	100 (45.4)
1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7	4 U243	1000 (454)
2-Propenenitrile	107-13-1	1,2,3,4 U009	100 (45.4)
2-Propenenitrile, 2-methyl-	126-98-7	4 U152	1000 (454)
2-Propenoic acid	79-10-7	3,4 U008	5000 (2270)
2-Propenoic acid, ethyl ester	140-88-5	3,4 U113	1000 (454)
2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	4 U118	1000 (454)
2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	1,3,4 U162	1000 (454)
2-Propen-1-ol	107-18-6	1,4 P005	100 (45.4)

Propham	122-42-9	4 U373	1000 (454)
beta-Propiolactone	57-57-8	3	10 (4.54)
Propionaldehyde	123-38-6	3	1000 (454)
Propionic acid	79-09-4	1	5000 (2270)
Propionic anhydride	123-62-6	1	5000 (2270)
Propoxur (Baygon)	114-26-1	3,4 U411	100 (45.4)
n-Propylamine	107-10-8	4 U194	5000 (2270)
n-Propyl bromide (nPB)	106-94-5	3	1 (0.454)
Propylene dichloride	78-87-5	1,2,3,4 U083	1000 (454)
Propylene oxide	75-56-9	1,3	100 (45.4)
1,2-Propylenimine	75-55-8	3,4 P067	1 (0.454)
2-Propyn-1-ol	107-19-7	4 P102	1000 (454)
Prosulfocarb	52888-80-9	4 U387	5000 (2270)
Pyrene	129-00-0	2	5000 (2270)
Pyrethrins	121-29-9	1	1 (0.454)
	121-21-1		
	8003-34-7		
3,6-Pyridazinedione, 1,2-dihydro-	123-33-1	4 U148	5000 (2270)
4-Pyridinamine	504-24-5	4 P008	1000 (454)
Pyridine	110-86-1	4 U196	1000 (454)
Pyridine, 2-methyl-	109-06-8	4 U191	5000 (2270)
Pyridine, 3-(1-methyl-2-pyrrolidiny)-, (S)-, & salts	54-11-5	4 P075	100 (45.4)
2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	66-75-1	4 U237	10 (4.54)
4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2	4 U164	10 (4.54)
Pyrrolidine, 1-nitroso-	930-55-2	4 U180	1 (0.454)
Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a- hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	57-47-6	4 P204	100 (45.4)
Quinoline	91-22-5	1,3	5000 (2270)
Quinone	106-51-4	3,4 U197	10 (4.54)
Quintobenzene	82-68-8	3,4 U185	100 (45.4)
Radionuclides (including radon)	N.A.	3	§

Reserpine	50-55-5	4 U200	5000 (2270)
Resorcinol	108-46-3	1,4 U201	5000 (2270)
Safrole	94-59-7	4 U203	100 (45.4)
SELENIUM AND COMPOUNDS	N.A.	2,3	**
Selenium Compounds	N.A.	2,3	**
Selenious acid	7783-00-8	4 U204	10 (4.54)
Selenious acid, dithallium (1 +) salt	12039-52-0	4 P114	1000 (454)
Selenium ^{III}	7782-49-2	2	100 (45.4)
Selenium dioxide	8/4/7746	1,4 U204	10 (4.54)
Selenium oxide	8/4/7746	1	10 (4.54)
Selenium sulfide SeS ₂	7488-56-4	4 U205	10 (4.54)
Selenourea	630-10-4	4 P103	1000 (454)
L-Serine, diazoacetate (ester)	115-02-6	4 U015	1 (0.454)
SILVER AND COMPOUNDS	N.A.	2	**
Silver ^{III}	7440-22-4	2	1000 (454)
Silver cyanide Ag(CN)	506-64-9	4 P104	1 (0.454)
Silver nitrate	7761-88-8	1	1 (0.454)
Silvex (2,4,5-TP)	93-72-1	1,4 See F027	100 (45.4)
Sodium	7440-23-5	1	10 (4.54)
Sodium arsenate	7631-89-2	1	1 (0.454)
Sodium arsenite	7784-46-5	1	1 (0.454)
Sodium azide	26628-22-8	4 P105	1000 (454)
Sodium bichromate	10588-01-9	1	10 (4.54)
Sodium bifluoride	1333-83-1	1	100 (45.4)
Sodium bisulfite	7631-90-5	1	5000 (2270)
Sodium chromate	11/3/7775	1	10 (4.54)
Sodium cyanide Na(CN)	143-33-9	1,4 P106	10 (4.54)
Sodium dodecylbenzenesulfonate	25155-30-0	1	1000 (454)
Sodium fluoride	7681-49-4	1	1000 (454)
Sodium hydrosulfide	16721-80-5	1	5000 (2270)
Sodium hydroxide	1310-73-2	1	1000 (454)
Sodium hypochlorite	7681-52-9	1	100 (45.4)
	10022-70-5		
Sodium methylate	124-41-4	1	1000 (454)
Sodium nitrite	7632-00-0	1	100 (45.4)

Sodium phosphate, dibasic	7558-79-4 10039-32-4 10140-65-5	1		5000 (2270)
Sodium phosphate, tribasic	7601-54-9 10101-89-0 10361-89-4	1		5000 (2270)
Sodium selenite	7782-82-3 10102-18-8	1		100 (45.4)
Streptozotocin	18883-66-4	4 U206		1 (0.454)
Strontium chromate	6/2/7789	1		10 (4.54)
Strychnidin-10-one, & salts	57-24-9	1,4 P108		10 (4.54)
Strychnidin-10-one, 2,3-dimethoxy-	357-57-3	4 P018		100 (45.4)
Strychnine, & salts	57-24-9	1,4 P108		10 (4.54)
Styrene	100-42-5	1,3		1000 (454)
Styrene oxide	96-09-3	3		100 (45.4)
Sulfuric acid	7664-93-9 8014-95-7	1		1000 (454)
Sulfuric acid, dimethyl ester	77-78-1	3,4 U103		100 (45.4)
Sulfuric acid, dithallium (1 +) salt	7446-18-6	1,4 P115		100 (45.4)
	10031-59-1			
Sulfur monochloride	12771-08-3	1		1000 (454)
Sulfur phosphide	1314-80-3	1,4 U189		100 (45.4)
2,4,5-T	93-76-5	1,4 See F027		1000 (454)
2,4,5-T acid	93-76-5	1,4 See F027		1000 (454)
2,4,5-T amines	2008-46-0 1319-72-8 3813-14-7 6369-96-6 6369-97-7	1		5000 (2270)
2,4,5-T esters	93-79-8 1928-47-8 2545-59-7 25168-15-4 61792-07-2	1		1000 (454)

2,4,5-T salts	13560-99-1	1		1000 (454)
TCDD	1746-01-6	2,3		1 (0.454)
TDE	72-54-8	1,2,4	U060	1 (0.454)
1,2,4,5-Tetrachlorobenzene	95-94-3	4	U207	5000 (2270)
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	2,3		1 (0.454)
1,1,1,2-Tetrachloroethane	630-20-6	4	U208	100 (45.4)
1,1,2,2-Tetrachloroethane	79-34-5	2,3,4	U209	100 (45.4)
Tetrachloroethylene	127-18-4	2,3,4	U210	100 (45.4)
2,3,4,6-Tetrachlorophenol	58-90-2	4	See F027	10 (4.54)
Tetraethyl pyrophosphate	107-49-3	1,4	P111	10 (4.54)
Tetraethyl lead	78-00-2	1,4	P110	10 (4.54)
Tetraethyldithiopyrophosphate	3689-24-5	4	P109	100 (45.4)
Tetrahydrofuran	109-99-9	4	U213	1000 (454)
Tetranitromethane	509-14-8	4	P112	10 (4.54)
Tetraphosphoric acid, hexaethyl ester	757-58-4	4	P062	100 (45.4)
THALLIUM AND COMPOUNDS	N.A.	2		**
Thallic oxide	1314-32-5	4	P113	100 (45.4)
Thallium ^{III}	7440-28-0	2		1000 (454)
Thallium (I) acetate	563-68-8	4	U214	100 (45.4)
Thallium (I) carbonate	6533-73-9	4	U215	100 (45.4)
Thallium chloride TlCl	7791-12-0	4	U216	100 (45.4)
Thallium (I) nitrate	10102-45-1	4	U217	100 (45.4)
Thallium oxide Tl ₂ O ₃	1314-32-5	4	P113	100 (45.4)
Thallium (I) selenite	12039-52-0	4	P114	1000 (454)
Thallium (I) sulfate	7446-18-6	1,4	P115	100 (45.4)
	10031-59-1			
Thioacetamide	62-55-5	4	U218	10 (4.54)
Thiodicarb	59669-26-0	4	U410	100 (45.4)
Thiodiphosphoric acid, tetraethyl ester	3689-24-5	4	P109	100 (45.4)
Thiofanox	39196-18-4	4	P045	100 (45.4)
Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH	541-53-7	4	P049	100 (45.4)
Thiomethanol	74-93-1	1,4	U153	100 (45.4)
Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl-	137-26-8	4	U244	10 (4.54)
Thiophanate-methyl	23564-05-8	4	U409	10 (4.54)

Thiophenol	108-98-5	4 P014	100 (45.4)
Thiosemicarbazide	79-19-6	4 P116	100 (45.4)
Thiourea	62-56-6	4 U219	10 (4.54)
Thiourea, (2-chlorophenyl)-	5344-82-1	4 P026	100 (45.4)
Thiourea, 1-naphthalenyl-	86-88-4	4 P072	100 (45.4)
Thiourea, phenyl-	103-85-5	4 P093	100 (45.4)
Thiram	137-26-8	4 U244	10 (4.54)
Tirpate	26419-73-8	4 P185	100 (45.4)
Titanium tetrachloride	7550-45-0	3	1000 (454)
Toluene	108-88-3	1,2,3,4 U220	1000 (454)
Toluenediamine	95-80-7 496-72-0 823-40-5 25376-45-8	3,4 U221	10 (4.54)
2,4-Toluene diamine	95-80-7 496-72-0 823-40-5 25376-45-8	3,4 U221	10 (4.54)
Toluene diisocyanate	91-08-7 584-84-9 26471-62-5	3,4 U223	100 (45.4)
2,4-Toluene diisocyanate	91-08-7 584-84-9 26471-62-5	3,4 U223	100 (45.4)
o-Toluidine	95-53-4	3,4 U328	100 (45.4)
p-Toluidine	106-49-0	4 U353	100 (45.4)
o-Toluidine hydrochloride	636-21-5	4 U222	100 (45.4)
Toxaphene	8001-35-2	1,2,3,4 P123	1 (0.454)
2,4,5-TP acid	93-72-1	1,4 See F027	100 (45.4)
2,4,5-TP esters	32534-95-5	1	100 (45.4)
Triallate	2303-17-5	4 U389	100 (45.4)
1H-1,2,4-Triazol-3-amine	61-82-5	4 U011	10 (4.54)
Trichlorfon	52-68-6	1	100 (45.4)
1,2,4-Trichlorobenzene	120-82-1	2,3	100 (45.4)
1,1,1-Trichloroethane	71-55-6	2,3,4 U226	1000 (454)

1,1,2-Trichloroethane	79-00-5	2,3,4 U227	100 (45.4)
Trichloroethylene	79-01-6	1,2,3,4 U228	100 (45.4)
Trichloromethanesulfonyl chloride	594-42-3	4 P118	100 (45.4)
Trichloromonofluoromethane	75-69-4	4 U121	5000 (2270)
Trichlorophenol	25167-82-2	1,2	10 (4.54)
2,3,4-Trichlorophenol	15950-66-0	1,2	10 (4.54)
2,3,5-Trichlorophenol	933-78-8	1,2	10 (4.54)
2,3,6-Trichlorophenol	933-75-5	1,2	10 (4.54)
2,4,5-Trichlorophenol	95-95-4	1,2,3,4 See F027	10 (4.54)
2,4,6-Trichlorophenol	88-06-2	1,2,3,4 See F027	10 (4.54)
3,4,5-Trichlorophenol	609-19-8	1,2	10 (4.54)
Triethanolamine dodecylbenzenesulfonate	27323-41-7	1	1000 (454)
Triethylamine	121-44-8	1,3,4 U404	5000 (2270)
Trifluralin	1582-09-8	3	10 (4.54)
Trimethylamine	75-50-3	1	100 (45.4)
2,2,4-Trimethylpentane	540-84-1	3	1000 (454)
1,3,5-Trinitrobenzene	99-35-4	4 U234	10 (4.54)
1,3,5-Trioxane, 2,4,6-trimethyl-	123-63-7	4 U182	1000 (454)
Tris(2,3-dibromopropyl) phosphate	126-72-7	4 U235	10 (4.54)
Trypan blue	72-57-1	4 U236	10 (4.54)
Unlisted Hazardous Wastes Characteristic of Corrosivity	N.A.	4 D002	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Ignitability	N.A.	4 D001	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Reactivity	N.A.	4 D003	100 (45.4)
Unlisted Hazardous Wastes Characteristic of Toxicity			
Arsenic (D004)	N.A.	4 D004	1 (0.454)
Barium (D005)	N.A.	4 D005	1000 (454)
Benzene (D018)	N.A.	1,2,3,4 D018	10 (4.54)
Cadmium (D006)	N.A.	4 D006	10 (4.54)
Carbon tetrachloride (D019)	N.A.	1,2,4 D019	10 (4.54)
Chlordane (D020)	N.A.	1,2,4 D020	1 (0.454)
Chlorobenzene (D021)	N.A.	1,2,4 D021	100 (45.4)

Chloroform (D022)	N.A.	1,2,4 D022	10 (4.54)
Chromium (D007)	N.A.	4 D007	10 (4.54)
o-Cresol (D023)	N.A.	4 D023	100 (45.4)
m-Cresol (D024)	N.A.	4 D024	100 (45.4)
p-Cresol (D025)	N.A.	4 D025	100 (45.4)
Cresol (D026)	N.A.	4 D026	100 (45.4)
2,4-D (D016)	N.A.	1,4 D016	100 (45.4)
1,4-Dichlorobenzene (D027)	N.A.	1,2,4 D027	100 (45.4)
1,2-Dichloroethane (D028)	N.A.	1,2,4 D028	100 (45.4)
1,1-Dichloroethylene (D029)	N.A.	1,2,4 D029	100 (45.4)
2,4-Dinitrotoluene (D030)	N.A.	1,2,4 D030	10 (4.54)
Endrin (D012)	N.A.	1,4 D012	1 (0.454)
Heptachlor (and epoxide) (D031)	N.A.	1,2,4 D031	1 (0.454)
Hexachlorobenzene (D032)	N.A.	2,4 D032	10 (4.54)
Hexachlorobutadiene (D033)	N.A.	2,4 D033	1 (0.454)
Hexachloroethane (D034)	N.A.	2,4 D034	100 (45.4)
Lead (D008)	N.A.	4 D008	10 (4.54)
Lindane (D013)	N.A.	1,4 D013	1 (0.454)
Mercury (D009)	N.A.	4 D009	1 (0.454)
Methoxychlor (D014)	N.A.	1,4 D014	1 (0.454)
Methyl ethyl ketone (D035)	N.A.	4 D035	5000 (2270)
Nitrobenzene (D036)	N.A.	1,2,4 D036	1000 (454)
Pentachlorophenol (D037)	N.A.	1,2,4 D037	10 (4.54)
Pyridine (D038)	N.A.	4 D038	1000 (454)
Selenium (D010)	N.A.	4 D010	10 (4.54)
Silver (D011)	N.A.	4 D011	1 (0.454)
Tetrachloroethylene (D039)	N.A.	2,4 D039	100 (45.4)
Toxaphene (D015)	N.A.	1,4 D015	1 (0.454)
Trichloroethylene (D040)	N.A.	1,2,4 D040	100 (45.4)
2,4,5-Trichlorophenol (D041)	N.A.	1,4 D041	10 (4.54)
2,4,6-Trichlorophenol (D042)	N.A.	1,2,4 D042	10 (4.54)
2,4,5-TP (D017)	N.A.	1,4 D017	100 (45.4)
Vinyl chloride (D043)	N.A.	2,3,4 D043	1 (0.454)
Uracil mustard	66-75-1	4 U237	10 (4.54)
Uranyl acetate	541-09-3	1	100 (45.4)

Uranyl nitrate	10102-06-4 36478-76-9	1		100 (45.4)
Urea, N-ethyl-N-nitroso-	759-73-9	4 U176		1 (0.454)
Urea, N-methyl-N-nitroso-	684-93-5	3,4 U177		1 (0.454)
Urethane	51-79-6	3,4 U238		100 (45.4)
Vanadic acid, ammonium salt	7803-55-6	4 P119		1000 (454)
Vanadium oxide V2O5	1314-62-1	1,4 P120		1000 (454)
Vanadium pentoxide	1314-62-1	1,4 P120		1000 (454)
Vanadyl sulfate	27774-13-6	1		1000 (454)
Vinyl acetate	108-05-4	1,3		5000 (2270)
Vinyl acetate monomer	108-05-4	1,3		5000 (2270)
Vinylamine, N-methyl-N-nitroso-	4549-40-0	4 P084		10 (4.54)
Vinyl bromide	593-60-2	3		100 (45.4)
Vinyl chloride	75-01-4	2,3,4 U043		1 (0.454)
Vinylidene chloride	75-35-4	1,2,3,4 U078		100 (45.4)
Warfarin, & salts	81-81-2	4 P001, U248		100 (45.4)
Xylene (mixed)	1330-20-7	1,3,4 U239		100 (45.4)
Xylenes (isomers and mixture)	1330-20-7	1,3,4 U239		100 (45.4)
Xylene	1330-20-7	1,3,4 U239		100 (45.4)
m-Xylene	108-38-3	3		1000 (454)
o-Xylene	95-47-6	3		1000 (454)
p-Xylene	106-42-3	3		100 (45.4)
Xylenol	1300-71-6	1		1000 (454)
Yohimban-16-carboxylic acid,11,17-dimethoxy-18- [(3,4,5-trimethoxybenzoyl)oxy], methyl ester (3beta,16beta,17alpha, 18beta,20alpha)	50-55-54	4 U200		5000 (2270)
ZINC AND COMPOUNDS	N.A.	2		**
Zinc ^{III}	7440-66-6	2		1000 (454)
Zinc acetate	557-34-6	1		1000 (454)
Zinc ammonium chloride	52628-25-8 14639-97-5 14639-98-6	1		1000 (454)
Zinc, bis(dimethylcarbamodithioato-S,S')-	137-30-4	4 P205		10 (4.54)
Zinc borate	1332-07-6	1		1000 (454)
Zinc bromide	7699-45-8	1		1000 (454)

Zinc carbonate	3486-35-9	1		1000 (454)
Zinc chloride	7646-85-7	1		1000 (454)
Zinc cyanide Zn(CN) ₂	557-21-1	1,4	P121	10 (4.54)
Zinc fluoride	7783-49-5	1		1000 (454)
Zinc formate	557-41-5	1		1000 (454)
Zinc hydrosulfite	7779-86-4	1		1000 (454)
Zinc nitrate	7779-88-6	1		1000 (454)
Zinc phenolsulfonate	127-82-2	1		5000 (2270)
Zinc phosphide Zn ₃ P ₂	1314-84-7	1,4	P122, U249	100 (45.4)
Zinc silicofluoride	16871-71-9	1		5000 (2270)
Zinc sulfate	7733-02-0	1		1000 (454)
Ziram	137-30-4	4	P205	10 (4.54)
Zirconium nitrate	13746-89-9	1		5000 (2270)
Zirconium potassium fluoride	16923-95-8	1		1000 (454)
Zirconium sulfate	14644-61-2	1		5000 (2270)
Zirconium tetrachloride	10026-11-6	1		5000 (2270)
F001 - The following spent halogenated solvents used in degreasing; all spent solvent mixtures/blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the halogenated solvents listed below or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures		4	F001	10 (4.54)
(a) Tetrachloroethylene	127-18-4	2,3,4	U210	100 (45.4)
(b) Trichloroethylene	79-01-6	1,2,3,4	U228	100 (45.4)
(c) Methylene chloride	75-09-2	2,3,4	U080	1000 (454)
(d) 1,1,1-Trichloroethane	71-55-6	2,3,4	U226	1000 (454)
(e) Carbon tetrachloride	56-23-5	1,2,3,4	U211	10 (4.54)
(f) Chlorinated fluorocarbons	N.A.			5000 (2270)

F002 - The following spent halogenated solvents; all spent solvent mixtures/blends containing, before use, a total of ten percent or more (by volume) of one or more of the halogenated solvents listed below or those solvents listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures		4 F002	10 (4.54)
(a) Tetrachloroethylene	127-18-4	2,3,4 U210	100 (45.4)
(b) Methylene chloride	75-09-2	2,3,4 U080	1000 (454)
(c) Trichloroethylene	79-01-6	1,2,3,4 U228	100 (45.4)
(d) 1,1,1-Trichloroethane	71-55-6	2,3,4 U226	1000 (454)
(e) Chlorobenzene	108-90-7	1,2,3,4 U037	100 (45.4)
(f) 1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1		5000 (2270)
(g) o-Dichlorobenzene	95-50-1	1,2,4 U070	100 (45.4)
(h) Trichlorofluoromethane	75-69-4	4 U121	5000 (2270)
(i) 1,1,2-Trichloroethane	79-00-5	2,3,4 U227	100 (45.4)
F003 - The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents		4 F003	100 (45.4)
(a) Xylene	1330-20-7		1000 (454)
(b) Acetone	67-64-1		5000 (2270)
(c) Ethyl acetate	141-78-6		5000 (2270)
(d) Ethylbenzene	100-41-4		1000 (454)
(e) Ethyl ether	60-29-7		100 (45.4)
(f) Methyl isobutyl ketone	108-10-1		5000 (2270)
(g) n-Butyl alcohol	71-36-3		5000 (2270)
(h) Cyclohexanone	108-94-1		5000 (2270)
(i) Methanol	67-56-1		5000 (2270)
F004 - The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents		4 F004	100 (45.4)
(a) Cresols/Cresylic acid	1319-77-3	1,3,4 U052	100 (45.4)
(b) Nitrobenzene	98-95-3	1,2,3,4 U169	1000 (454)

F005 - The following spent non-halogenated solvents and the still bottoms from the recovery of these solvents		4 F005	100 (45.4)
(a) Toluene	108-88-3	1,2,3,4 U220	1000 (454)
(b) Methyl ethyl ketone	78-93-3	4 U159	5000 (2270)
(c) Carbon disulfide	75-15-0	1,3,4 P022	100 (45.4)
(d) Isobutanol	78-83-1	4 U140	5000 (2270)
(e) Pyridine	110-86-1	4 U196	1000 (454)
F006 - Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum, (2) tin plating on carbon steel, (3) zinc plating (segregated basis) on carbon steel, (4) aluminum or zinc-aluminum plating on carbon steel, (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel, and (6) chemical etching and milling of aluminum		4 F006	10 (4.54)
F007 - Spent cyanide plating bath solutions from electroplating operations.		4 F007	10 (4.54)
F008 - Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process		4 F008	10 (4.54)
F009 - Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process		4 F009	10 (4.54)
F010 - Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process		4 F010	10 (4.54)
F011 - Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations		4 F011	10 (4.54)
F012 - Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process		4 F012	10 (4.54)

<p>F019 - Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process . . . Wastewater treatment sludges from the manufacturing of motor vehicles using a zinc phosphating process will not be subject to this listing at the point of generation if the wastes are not placed outside on the land prior to shipment to a landfill for disposal and are either: Disposed in a Subtitle D municipal or industrial landfill unit that is equipped with a single clay liner and is permitted, licensed or otherwise authorized by the state; or disposed in a landfill unit subject to, or otherwise meeting, the landfill requirements in § 258.40, § 264.301 or § 265.301. For the purposes of this listing, motor vehicle manufacturing is defined in § 261.31(b)(4)(i) and § 261.31(b)(4)(ii) describes the recordkeeping requirements for motor vehicle manufacturing facilities</p>		4 F019	10 (4.54)
<p>F020 - Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol)</p>		4 F020	1 (0.454)

<p>F021 - Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol or of intermediates used to produce its derivatives</p>		<p>4 F021</p>	<p>1 (0.454)</p>
<p>F022 - Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions</p>		<p>4 F022</p>	<p>1 (0.454)</p>
<p>F023 - Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or a component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol)</p>		<p>4 F023</p>	<p>1 (0.454)</p>

<p>F024 - Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in 40 CFR 261.31 or 261.32)</p>		4 F024	1 (0.454)
<p>F025 - Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution</p>		4 F025	1 (0.454)
<p>F026 - Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions</p>		4 F026	1 (0.454)

<p>F027 - Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5- trichlorophenol as the sole component)</p>		4 F027	1 (0.454)
<p>F028 - Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, and F027</p>		4 F028	1 (0.454)
<p><u>F032 - Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with § 261.35 of this chapter or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol</u></p>		4 F032	1 (0.454)

<p>F034 - Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol</p>		4 F034	1 (0.454)
<p>F035 - Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol</p>		4 F035	1 (0.454)

<p>F037 - Petroleum refinery primary oil/water/solids separation sludge-Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to those generated in oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in § 261.31(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under § 261.4(a)(12)(i), if those residuals are to be disposed of</p>		4 F037		1 (0.454)
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<p><u>F038 - Petroleum refinery secondary (emulsified) oil/water/solids separation sludge-Any sludge and/or float generated from the physical and/or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: Induced air flotation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow. sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in aggressive biological treatment units as defined in § 261.31(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and F037, K048, and K051 wastes are not included in this listing</u></p>		4 F038	1 (0.454)
<p><u>F039 - Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under subpart D of 40 CFR part 261. (Leachate resulting from the disposal of one or more of the following EPA Hazardous Wastes and no other hazardous wastes retains its EPA Hazardous Waste Number(s): F020, F021, F022, F026, F027, and/or F028)</u></p>		4 F039	1 (0.454)
<p>K001 - Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol</p>		4 K001	1 (0.454)
<p>K002 - Wastewater treatment sludge from the production of chrome yellow and orange pigments</p>		4 K002	10 (4.54)
<p>K003 - Wastewater treatment sludge from the production of molybdate orange pigments</p>		4 K003	10 (4.54)
<p>K004 - Wastewater treatment sludge from the production of zinc yellow pigments</p>		4 K004	10 (4.54)

K005 - Wastewater treatment sludge from the production of chrome green pigments		4	K005	10 (4.54)
K006 - Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)		4	K006	10 (4.54)
K007 - Wastewater treatment sludge from the production of iron blue pigments		4	K007	10 (4.54)
K008 - Oven residue from the production of chrome oxide green pigments		4	K008	10 (4.54)
K009 - Distillation bottoms from the production of acetaldehyde from ethylene		4	K009	10 (4.54)
K010 - Distillation side cuts from the production of acetaldehyde from ethylene		4	K010	10 (4.54)
K011 - Bottom stream from the wastewater stripper in the production of acrylonitrile		4	K011	10 (4.54)
K013 - Bottom stream from the acetonitrile column in the production of acrylonitrile		4	K013	10 (4.54)
K014 - Bottoms from the acetonitrile purification column in the production of acrylonitrile		4	K014	5000 (2270)
K015 - Still bottoms from the distillation of benzyl chloride		4	K015	10 (4.54)
K016 - Heavy ends or distillation residues from the production of carbon tetrachloride		4	K016	1 (0.454)
K017 - Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin		4	K017	10 (4.54)
K018 - Heavy ends from the fractionation column in ethyl chloride production		4	K018	1 (0.454)
K019 - Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production		4	K019	1 (0.454)
K020 - Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production		4	K020	1 (0.454)
K021 - Aqueous spent antimony catalyst waste from fluoromethanes production		4	K021	10 (4.54)

K022 - Distillation bottom tars from the production of phenol/acetone from cumene		4 K022	1 (0.454)
K023 - Distillation light ends from the production of phthalic anhydride from naphthalene		4 K023	5000 (2270)
K024 - Distillation bottoms from the production of phthalic anhydride from naphthalene		4 K024	5000 (2270)
K025 - Distillation bottoms from the production of nitrobenzene by the nitration of benzene		4 K025	10 (4.54)
K026 - Stripping still tails from the production of methyl ethyl pyridines		4 K026	1000 (454)
K027 - Centrifuge and distillation residues from toluene diisocyanate production		4 K027	10 (4.54)
K028 - Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane		4 K028	1 (0.454)
K029 - Waste from the product steam stripper in the production of 1,1,1- trichloroethane		4 K029	1 (0.454)
K030 - Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene		4 K030	1 (0.454)
K031 - By-product salts generated in the production of MSMA and cacodylic acid		4 K031	1 (0.454)
K032 - Wastewater treatment sludge from the production of chlordane		4 K032	10 (4.54)
K033 - Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane		4 K033	10 (4.54)
K034 - Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane		4 K034	10 (4.54)
K035 - Wastewater treatment sludges generated in the production of creosote		4 K035	1 (0.454)

K036 - Still bottoms from toluene reclamation distillation in the production of disulfoton		4	K036	1 (0.454)
K037 - Wastewater treatment sludges from the production of disulfoton		4	K037	1 (0.454)
K038 - Wastewater from the washing and stripping of phorate production		4	K038	10 (4.54)
K039 - Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate		4	K039	10 (4.54)
K040 - Wastewater treatment sludge from the production of phorate		4	K040	10 (4.54)
K041 - Wastewater treatment sludge from the production of toxaphene		4	K041	1 (0.454)
K042 - Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T		4	K042	10 (4.54)
K043 - 2,6-Dichlorophenol waste from the production of 2,4-D		4	K043	10 (4.54)
K044 - Wastewater treatment sludges from the manufacturing and processing of explosives		4	K044	10 (4.54)
K045 - Spent carbon from the treatment of wastewater containing explosives		4	K045	10 (4.54)
K046 - Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds		4	K046	10 (4.54)
K047 - Pink/red water from TNT operations		4	K047	10 (4.54)
K048 - Dissolved air flotation (DAF) float from the petroleum refining industry		4	K048	10 (4.54)
K049 - Slop oil emulsion solids from the petroleum refining industry		4	K049	10 (4.54)
K050 - Heat exchanger bundle cleaning sludge from the petroleum refining industry		4	K050	10 (4.54)
K051 - API separator sludge from the petroleum refining industry		4	K051	10 (4.54)
K052 - Tank bottoms (leaded) from the petroleum refining industry		4	K052	10 (4.54)

K060 - Ammonia still lime sludge from coking operations		4 K060	1 (0.454)
K061 - Emission control dust/sludge from the primary production of steel in electric furnaces		4 K061	10 (4.54)
K062 - Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332)		4 K062	10 (4.54)
K069 - Emission control dust/sludge from secondary lead smelting. (Note: This listing is stayed administratively for sludge generated from secondary acid scrubber systems. The stay will remain in effect until further administrative action is taken. If EPA takes further action effecting the stay, EPA will publish a notice of the action in the Federal Register)		4 K069	10 (4.54)
K071 - Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used		4 K071	1 (0.454)
K073 - Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production		4 K073	10 (4.54)
K083 - Distillation bottoms from aniline production		4 K083	100 (45.4)
K084 - Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds		4 K084	1 (0.454)
K085 - Distillation or fractionation column bottoms from the production of chlorobenzenes		4 K085	10 (4.54)

K086 - Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead		4	K086	10 (4.54)
K087 - Decanter tank tar sludge from coking operations		4	K087	100 (45.4)
K088 - Spent potliners from primary aluminum reduction		4	K088	10 (4.54)
K093 - Distillation light ends from the production of phthalic anhydride from ortho-xylene		4	K093	5000 (2270)
K094 - Distillation bottoms from the production of phthalic anhydride from ortho-xylene		4	K094	5000 (2270)
K095 - Distillation bottoms from the production of 1,1,1-trichloroethane		4	K095	100 (45.4)
K096 - Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane		4	K096	100 (45.4)
K097 - Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane		4	K097	1 (0.454)
K098 - Untreated process wastewater from the production of toxaphene		4	K098	1 (0.454)
K099 - Untreated wastewater from the production of 2,4-D		4	K099	10 (4.54)
K100 - Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting		4	K100	10 (4.54)
K101 - Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds		4	K101	1 (0.454)

K102 - Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds		4 K102	1 (0.454)
K103 - Process residues from aniline extraction from the production of aniline		4 K103	100 (45.4)
K104 - Combined wastewater streams generated from nitrobenzene/aniline production		4 K104	10 (4.54)
K105 - Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes		4 K105	10 (4.54)
K106 - Wastewater treatment sludge from the mercury cell process in chlorine production		4 K106	1 (0.454)
K107 - Column bottoms from product separation from the production of 1,1- dimethylhydrazine (UDMH) from carboxylic acid hydrazines		4 K107	10 (4.54)
K108 - Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1- dimethylhydrazine (UDMH) from carboxylic acid hydrazides		4 K108	10 (4.54)
K109 - Spent filter cartridges from product purification from the production of 1,1- dimethylhydrazine (UDMH) from carboxylic acid hydrazides		4 K109	10 (4.54)
K110 - Condensed column overheads from intermediate separation from the production of 1,1- dimethylhydrazine (UDMH) from carboxylic acid hydrazides		4 K110	10 (4.54)
K111 - Product washwaters from the production of dinitrotoluene via nitration of toluene		4 K111	10 (4.54)

K112 - Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene		4	K112	10 (4.54)
K113 - Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene		4	K113	10 (4.54)
K114 - Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene		4	K114	10 (4.54)
K115 - Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene		4	K115	10 (4.54)
K116 - Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine		4	K116	10 (4.54)
K117 - Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene		4	K117	1 (0.454)
K118 - Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene		4	K118	1 (0.454)
K123 - Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts		4	K123	10 (4.54)
K124 - Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts		4	K124	10 (4.54)

K125 - Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts		4 K125	10 (4.54)
K126 - Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts		4 K126	10 (4.54)
K131 - Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide		4 K131	100 (45.4)
K132 - Spent absorbent and wastewater separator solids from the production of methyl bromide		4 K132	1000 (454)
K136 - Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene		4 K136	1 (0.454)
K141 - Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal This listing does not include K087 (decanter tank tar sludges from coking operations)		4 K141	1 (0.454)
K142 - Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal		4 K142	1 (0.454)
K143 - Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal		4 K143	1 (0.454)

K144 - Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal		4	K144	1 (0.454)
K145 - Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal		4	K145	1 (0.454)
K147 - Tar storage tank residues from coal tar refining		4	K147	1 (0.454)
K148 - Residues from coal tar distillation, including, but not limited to, still bottoms		4	K148	1 (0.454)
K149 - Distillation bottoms from the production of alpha-(or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. [This waste does not include still bottoms from the distillation of benzyl chloride]		4	K149	10 (4.54)
K150 - Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups		4	K150	10 (4.54)
K151 - Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of waste-waters from the production of alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups		4	K151	10 (4.54)

K156 - Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate)		4 K156	10 (4.54)
K157 - Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate)		4 K157	10 (4.54)
K158 - Bag house dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate)		4 K158	10 (4.54)
K159 - Organics from the treatment of thiocarbamate wastes		4 K159	10 (4.54)
K161 - Purification solids (including filtration, evaporation, and centrifugation solids), bag-house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126)		4 K161	1 (0.454)
K169f - Crude oil storage tank sediment from petroleum refining operations		4 K169	10 (4.54)
K170f - Clarified slurry oil tank sediment and/or in-line filter/separation solids from petroleum refining operations		4 K170	1 (0.454)
K171f - Spent hydrotreating catalyst from petroleum refining operations. (This listing does not include inert support media)		4 K171	1 (0.454)

K172r - Spent hydrorefining catalyst from petroleum refining operations. (This listing does not include inert support media)		4 K172	1 (0.454)
K174r		4 K174	1 (0.454)
K175r		4 K175	1 (0.454)
K176 - Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide)		4 K176	1 (0.454)
K177 - Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide)		4 K177	5000 (2270)
K178 - Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process		4 K178	1000 (454)
K181 - Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in paragraph (c) of section 261.32 that are equal to or greater than the corresponding paragraph (c) levels, as determined on a calendar year basis		4 K181	(##)

[I Provides reference to Note I to Table 302.4 to discuss the applicability of CASRNs.](#)

[II Indicates the statutory source defined by 1, 2, 3, and 4, as described in the Note II to Table 302.4.](#)

III No reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is larger than 100 micrometers (0.004 inches).

iv The RQ for asbestos is limited to friable forms only.

The Agency may adjust the statutory RQ for this hazardous substance in a future rulemaking; until then the statutory one-pound RQ applies.

§ The adjusted RQs for radionuclides may be found in appendix B to this table.

** Indicates that no RQ is being assigned to the generic or broad class.

[a Benzene was already a CERCLA hazardous substance prior to the CAA Amendments of 1990 and received an adjusted 10-pound RQ based on potential carcinogenicity in an August 14, 1989, final rule \(54 FR 33418\). The CAA Amendments specify that "benzene \(including benzene from gasoline\)" is a hazardous air pollutant and, thus, a CERCLA hazardous substance.](#)

[b The CAA Amendments of 1990 list DDE \(3547-04-4\) as a CAA hazardous air pollutant. The CAS number, 3547-04-4, is for the chemical, p,p'-dichlorodiphenylethane. DDE or p,p'-dichlorodiphenyldichloroethylene, CAS number 72-55-9, is already listed in Table 302.4 with a final RQ of 1 pound. The substance identified by the CAS number 3547-04-4 has been evaluated and listed as DDE to be consistent with the CAA section 112 listing, as amended.](#)

c Includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

d Includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH₂CH₂)_n-OR' where:
n = 1, 2, or 3;
R = alkyl C7 or less; or

R = phenyl or alkyl substituted phenyl;

R' = H or alkyl C7 or less; or

OR' consisting of carboxylic acid ester, sulfate,
phosphate, nitrate, or sulfonate.

e Includes organic compounds with more than one
benzene ring, and which have a boiling point greater
than or equal to 100 °C.

[f See 40 CFR 302.6\(b\)\(1\) for application of the mixture rule to
this hazardous waste.](#)



STATE OF ALASKA
 Department of Environmental Conservation
 Division of Spill Prevention & Response
 PO Box 111800; Juneau, Alaska 99811-1800
[http://dec.alaska.gov/](http://dec.alaska.gov)



LOCATION DATA SHEET

This form is to be used to log the collection of locational information for applicable regulated facilities and spill sites.

Date: _____

Facility Name: _____

Spill Site: (if applicable) _____

Name of Collector: _____ Phone: _____

Email: _____

Preferred horizontal datum is NAD 83; latitude/longitude in decimal degrees (to 6 decimal places).

Latitude: _____ Longitude: _____

Horizontal Datum: NAD 83 WGS 84 NAD 27 Unknown

How Lat./Long. information was obtained:

(Pick One) On-Line (Google Earth, Google Maps, ArcGIS Online)

GPS – Type of Instrument _____

_____ +/- Accuracy of the Reading Meters Feet

_____ Single Reading _____ Average _____ # of readings averaged

Other _____

Description of the physical location where the Lat./Long. was collected (i.e. address, center of tank farm, wellhead, middle of platform, main building, stain on ground).



ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION OIL & HAZARDOUS SUBSTANCES SPILL NOTIFICATION FORM

ADEC USE ONLY

ADEC SPILL #:	ADEC FILE #:	ADEC LC:
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PERSON REPORTING:	PHONE NUMBER:	REPORTED HOW? (ADEC USE ONLY) <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> PERS <input type="checkbox"/> E-mail
DATE/TIME OF SPILL:	DATE/TIME DISCOVERED:	DATE/TIME REPORTED TO ADEC:

INCIDENT LOCATION/ADDRESS:	DATUM: <input type="checkbox"/> NAD27 <input type="checkbox"/> NAD83 <input type="checkbox"/> WGS84 <input type="checkbox"/> Other	PRODUCT SPILLED:
	LAT.:	
	LONG.:	

QUANTITY SPILLED: <input type="checkbox"/> gallons <input type="checkbox"/> pounds	QUANTITY CONTAINED: <input type="checkbox"/> gallons <input type="checkbox"/> pounds	QUANTITY RECOVERED: <input type="checkbox"/> gallons <input type="checkbox"/> pounds	QUANTITY DISPOSED: <input type="checkbox"/> gallons <input type="checkbox"/> pounds
--	--	--	---

POTENTIAL RESPONSIBLE PARTY:	OTHER PRP, IF ANY:	VESSEL NAME:
Name/Business:		
Mailing Address:		VESSEL NUMBER:
Contact Name:		
Contact Number:		> 400 GROSS TON VESSEL: <input type="checkbox"/> Yes <input type="checkbox"/> No

SOURCE OF SPILL:	CAUSE CLASSIFICATION:
CAUSE OF SPILL: <input type="checkbox"/> Under Investigation	<input type="checkbox"/> Accident <input type="checkbox"/> Human Factors <input type="checkbox"/> Structural/Mechanical <input type="checkbox"/> Other

CLEANUP ACTIONS:

DISPOSAL METHODS AND LOCATION:

AFFECTED AREA SIZE:	SURFACE TYPE: <i>(gravel, asphalt, name of river etc.)</i>	RESOURCES AFFECTED/THREATENED: <i>(Water sources, wildlife, wells, etc.)</i>
---------------------	--	--

COMMENTS:

ADEC USE ONLY

SPILL NAME:	NAME OF DEC STAFF RESPONDING:	C-PLAN MGR NOTIFIED? <input type="checkbox"/> Yes <input type="checkbox"/> No
-------------	-------------------------------	--

DEC RESPONSE: <input type="checkbox"/> Phone follow-up <input type="checkbox"/> Field visit <input type="checkbox"/> Took Report	CASELOAD CODE: <input type="checkbox"/> First and Final <input type="checkbox"/> Open/No LC <input type="checkbox"/> LC Assigned	CLEANUP CLOSURE ACTION: <input type="checkbox"/> NFA <input type="checkbox"/> Monitoring <input type="checkbox"/> Transferred to CS or STP
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COMMENTS:	Status of Case: <input type="checkbox"/> Open <input type="checkbox"/> Closed	DATE CASE CLOSED:
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REPORT PREPARED BY:	DATE:
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ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites and Prevention Preparedness and Response Programs

Contaminated Media Transport and Treatment or Disposal Approval Form

HAZARD ID # or SPILL ID #		NAME OF CONTAMINATED SITE OR SPILL	
CONTAMINATED SITE OR SPILL LOCATION – ADDRESS OR OTHER APPROPRIATE DESCRIPTION			
CURRENT PHYSICAL LOCATION OF MEDIA		SOURCE OF THE CONTAMINATION (DAY TANK, FIRE TRAINING PIT, LUST, ETC.)	
CONTAMINANTS OF CONCERN		ESTIMATED VOLUME	DATE(S) GENERATED
POST TREATMENT ANALYSIS REQUIRED (such as GRO, DRO, RRO, VOCs, metals, PFAS, and/or Chlorinated Solvents)			
COMMENTS OR OTHER IMPORTANT INFORMATION			

TREATMENT FACILITY, LANDFILL, AND/OR FINAL DESTINATION OF MEDIA	PHYSICAL ADDRESS/PHONE NUMBER
RESPONSIBLE PARTY	ADDRESS/PHONE NUMBER
WASTE MANAGEMENT CO. / ORGANIZER	ADDRESS/PHONE NUMBER

*Note, disposal of polluted soil in a landfill requires prior approval from the landfill operator and ADEC Solid Waste Program.

Name of the Person Requesting Approval (printed)

Title/Association

Signature

Date

Phone Number

-----DEC USE ONLY-----

Based on the information provided, ADEC approves transport of the above mentioned material. The Responsible Party or their consultant must submit to the DEC Project Manager a copy of weight receipts of the loads transported and a post treatment analytical report, if disposed of at an approved treatment facility. The contaminated soil shall be transported as a covered load in compliance with 18 AAC 60.015.

DEC Project Manager Name (printed)

Project Manager Title

Signature

Date

Phone Number

Instructions to Complete *Contaminated Media Transport and Treatment or Disposal Approval Form*

The Alaska Department of Environmental Conservation (DEC) must approve the movement or disposal of contaminated soil and water from a site in accordance with 18 Alaska Administrative Code (AAC) 75.325(i), 18 AAC 75.370(b), and 18 AAC 78.274(b). The *Contaminated Media Transport and Treatment or Disposal Approval Form* should be used to document this approval. Soil treatment facilities regulated under 18 AAC 75.365 are required by their Operations Plans to only accept contaminated soil for which an approval form has been signed by a DEC project manager.

Site information can be found on the Contaminated Site Database (www.alaska.gov/Applications/SPAR/PublicMVC/CSP/Search/) or the Spills Database (<http://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillSearch/>).

Instructions to Complete:

- Hazard ID or Spill ID #:** For a contaminated site, the Hazard ID can be found on the Contaminated Sites Database. For a spill, the Spill ID can be found in the subject line of letters from DEC or the Spills Database. If the waste originates from multiple sites, all Hazard IDs or Spill IDs must be listed.
- Name of Contaminated Site or Spill:** For a contaminated site, the official site name can be found on the Contaminated Sites Database. For a spill, the official name of the spill is found in the subject line of letters from DEC or the Spills Database.
- Contaminated Site or Spill Location – Address or Other Appropriate Description:** This address or description captures the origin of the contaminated media or the location of the spill. For a contaminated site, the address or other appropriate description can be found on the Contaminated Sites Database. For a spill, this can be found on the Spill Report or the Spills Database.
- Current Physical Location of the Media:** Provide the physical location where the contaminated media (soil, water, etc.) is currently stored. This location may be the same as location provided in the “Contaminated Site or Spill Location”, or it could be a hazardous waste facility or other location/staging area agreed upon in the DEC-approved work plan.
- Source of Contamination (Day Tank, Fire Training Pit, LUST, etc.):** List all sources which contributed to the contamination in the media being transported. Sources can include previous releases that have comeled. If the source is unknown, state “Unknown”.
- Contaminants of Concern (CoCs):** List all contaminants detected above the most stringent Method 2 Tables B1 and B2 soil cleanup levels in 18 AAC 75.341(c) and (d), the Table C groundwater cleanup levels in 18 AAC 75.345, and other applicable action levels (e.g., TCLP results). Attach the laboratory data package for the contaminated media that is being disposed of and, if applicable, a data summary table or narrative to this form. Data gathered during site characterization activities may be sufficient to determine the CoCs. There are situations in which generator knowledge of the contaminant source may be accepted by a treatment or disposal facility in lieu of analytical sample results, such as, diesel-impacted media from a heating oil tank. If you are using generator knowledge in lieu of analytical sample results, include a statement which documents this knowledge in the Comments section.

7. **Estimated Volume:** Include the total volume of contaminated media to be transported; for instance, "Nine 55-gallon drums" or "25 cubic yards of soil."
8. **Date(s) Generated:** Provide the date the media was generated (e.g., excavated, pumped out of the ground, etc.). If the media was generated over multiple days, list the range of dates.
9. **Post Treatment Analysis Required (such as GRO, DRO, RRO, VOCs, PAHs, metals, PFAS, chlorinated solvents, etc.):** Provide the list of all contaminants that exceed the most stringent Method 2 cleanup levels. For DEC-approved soil treatment facilities in Alaska, specific post treatment analyses will be determined by the facility based upon the contaminants and requirements of their Operations Plan. If the media are being transported to a landfill or permitted liquid waste facility without off-site treatment, include "Not Applicable".
10. **Comments or Other Important Information:** Provide any other information which needs to be conveyed.
 - a. If generator knowledge of the CoCs is being used in lieu of sample analytical results, an explanation needs to be provided in this field.
 - b. If the material is going to be placed in a landfill in Alaska, include a statement that the landfill has agreed to accept the material and provide the contact information for the landfill point of contact. If the material is going to be placed in a Class 2 or 3 landfill, attach the DEC Solid Waste Program's approval letter to this form.
 - c. If the media is going to an intermediate location or facility prior to its final destination, describe the complete transportation route with intermediate locations in this field.
11. **Treatment Facility, Landfill, and/or Final Destination of Media:** Include the name of the facility, landfill, or the final destination of the media. A list of DEC-approved Alaskan soil treatment facilities is available at www.dec.alaska.gov/spar/csp/offsite-remediation/. If multiple treatment facilities will be used, use separate forms to document what media will go to which facility. For material that will go to a waste transfer facility prior to disposal at another facility, the final destination should be listed.
 - a. **Physical Address/Phone Number:** Provide the physical location and telephone number of the facility, landfill, or the final destination of the media.
12. **Responsible Party:** Provide the name of the party responsible for the contaminated site or spill.
 - a. **Address/Phone Number:** Provide the mailing address and telephone number of the responsible party.
13. **Waste Management Co./Organizer:** Provide the name of company or person shipping and/or organizing the shipment of the media.
 - a. **Address/Phone Number:** Provide the mailing address and telephone number of the waste management company or organizer.

Submit this completed form along with all necessary attachments to the assigned DEC project manager for approval, or contact the Contaminated Sites Program at (907) 269-7558 or the Prevention, Preparedness and Response Program at (907) 269-7557.

8. Description of cleanup actions taken:	
9. Estimated amount of: (A) oil or hazardous substance cleaned up: _____ (B) oily or hazardous waste generated: _____	
10. Date, location, and method of ultimate disposal of the oil, hazardous substance and any contaminated materials, including cleanup materials:	
11. Description of actions being taken to prevent recurrence of the discharge:	
12. Other information the department requires to fully assess the cause and impact of the discharge (receipts for disposal if available):	
Signature	Printed name
Date	Title

MAIL OR FAX TO the Closest A.D.E.C. Office below

Anchorage

Phone: 269-3063
 Fax: 269-7687
 555 Cordova Street
 Anchorage, AK 99501

Fairbanks

Phone: 451-2121
 Fax: 451-2362
 610 University Ave.
 Fairbanks, AK 99709-3643

Juneau

Phone: 465-5340 Fax:
 465-5245
 P.O. Box 111800
 Juneau, AK 99801-1800

DEC USE ONLY

ADEC Project Manager:	ADEC Spill #:
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Department of Environmental Conservation

Standard Procedures for Cleaning Up Domestic Wastewater Spills Outdoors

The following are recommended procedures for cleaning up untreated or inadequately treated sewage, spilled to the ground surface.

1. *In all conditions:*

- A. If the area in which the spill occurred is accessible to the public or domestic pets, the contaminated area must be clearly marked or cordoned off to restrict access.
- B. Protective clothing (at a minimum, rubber or latex gloves and rubber boots) should be worn when cleaning up a sewage spill. (Dispose of gloves and wash rubber boots when leaving spill site). Keep children and interested bystanders away from cleanup activities.
- C. Please note that hydrated lime is a caustic material and can be dangerous to handle and apply. Lime should only be used or applied by people experienced in using this material.
- D. Do not mix cleaning / disinfecting products or chemicals. Cleaning products can react with one another to produce toxic vapor or liquid substances.

2. *In non-freezing conditions, when sewage is a mixture of liquid and solid material, the following steps should be taken:*

- A. If the spilled material can't be recovered using hand tools, a commercial vacuum / pump truck should be called to remove all visible liquid and solid material.
- B. When the area is visibly clean, either a chlorine / water solution (using Clorox or an equal bleach) or hydrated lime should be applied to the spill area to disinfect. To make a 5% chlorine solution, add 3/4 cup Clorox bleach to one (1) gallon of water. You can verify the chlorine concentration by using test paper available at food supply warehouses or chemical supply companies. **ONLY USE BLEACH THAT HAS "SANITIZES" OR "KILLS GERMS" ON THE LABEL.**

If the spill occurred in a heavily populated area and odor may be an issue or within 100 feet of surface water, hydrated lime should be applied to the area in place of chlorine bleach. Enough hydrated lime should be applied to raise the pH to at least 12. By raising the pH to 12 for at least 1 hour, the area will be disinfected. You can test the pH by using litmus paper obtained at a chemical supply facility. Because lime is a caustic material, access to the area treated with lime must be restricted during the disinfection period.

Department of Environmental Conservation

- C. After the spill area has been cleansed (24 hours after the chlorine solution or hydrated lime has been applied), the barriers may be removed and access to the area restored.

3. *In freezing or frozen conditions.*

- A. An attempt should be made to clean up the spill before it becomes completely frozen.
- B. If possible, the frozen sewage should be removed down to the natural ground surface (or at least one inch below the spilled sewage if on thicker ice) and the recovered material disposed of properly. This could require that approval be obtained from the local government for disposal in a permitted landfill. An acceptable alternative solution is to stock pile the frozen sewage in an approved lined containment area until conditions are more favorable for transport and disposal. (Because each spill site and situation is different, please contact you local ADEC office for recommendations regarding constructing an acceptable containment area.) If the material thaws, the liquid must be properly handled and disposed of at a permitted wastewater treatment and disposal facility. Keep in mind that frozen and / or thawed sewage may still contain active, harmful bacteria, cysts and viruses.
- C. When the area is visibly clean, either a chlorine / water solution (using Clorox or an equal bleach) or hydrated lime should be spread across the spill area to disinfect. You can verify the chlorine concentration by using test paper available at food supply warehouses or chemical supply companies.
- D. If the spill occurred in a heavily populated area and odor may be an issue or within 100 feet of surface water, hydrated lime should be applied to the spill area in place of chlorine bleach. The hydrated lime will raise the pH to 12, which will disinfect the area. By raising the pH to 12 for at least 1 hour, the area will be disinfected. You can test the pH by using litmus paper obtained at a chemical supply facility. Because lime is a caustic material, access to the area treated with lime must be restricted during the disinfection period.
- E. When the spill area has been cleansed (24 hours after the chlorine solution or hydrate lime has been spread), the barriers can be removed and access to the area restored.

NOTIFY YOUR LOCAL ADEC OFFICE WHEN CLEANUP IS COMPLETE.

Anchorage	269-7517	555 Cordova St., Anchorage, AK 99501
Fairbanks	451-2109	610 University Ave., Fairbanks, AK 99709
Juneau	465-5302	410 Willoughby Ave., Suite 303, Juneau, AK 99801
Kenai	262-5210	43335 Kalifornsky Beach Rd., Ste. 11, Soldotna, AK 99669
Wasilla	376-5038	P.O. Box 871064, Wasilla, AK 99687

APPENDIX M

SWPPP Amendment / Revision Log:

Number	Date of Amendment	Pages and/or Appendix affected	Description and Signature
1	5-28-24	Pgs. 8, 11, 14, App A	Add Fairview Park Investments, Ltd site Superintendent or SWPPP Preparer Signature <i>Elaine Nefzger (electronic signature)</i>
2	9-18-24	Pgs. 8 11, 14, 16 App A	Fairview Park Investments, Ltd. Section 18, Lots A5, A12, A13, & A14 Superintendent or SWPPP Preparer Signature <i>Elaine Nefzger (electronic signature)</i>
3	9-20-24	Pg. 1, App F	Add NOI Modification to add the area from Amendment 2 and extend project completion date. Superintendent or SWPPP Preparer Signature <i>Elaine Nefzger (electronic signature)</i>
4			Superintendent or SWPPP Preparer Signature
5			Superintendent or SWPPP Preparer Signature
6			Superintendent or SWPPP Preparer Signature
7			Superintendent or SWPPP Preparer Signature
8			Superintendent or SWPPP Preparer Signature
9			Superintendent or SWPPP Preparer Signature
10			Superintendent or SWPPP Preparer Signature
11			Superintendent or SWPPP Preparer Signature
12			Superintendent or SWPPP Preparer Signature

APPENDIX N

COMMENTS

Agency Comments

From: [Fred Wagner](#)
To: [Peggy Horton](#)
Subject: RE: Request for Comments for Mass Excavation Fairview Loop Earth Material Excavation CUP
Date: Monday, October 21, 2024 9:15:02 AM

Platting has no comments or concerns.

Sincerely,

Fred Wagner, PLS
MSB Platting Officer
(907)861-7870 Office
(907)355-8507 Cell

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Monday, October 21, 2024 9:03 AM
To: White, Ben M (DOT) <ben.white@alaska.gov>; Huling, Kristina N (DOT) <kristina.huling@alaska.gov>; Kyler Hylton (kyler.hylton@alaska.gov) <kyler.hylton@alaska.gov>; dnr.scro@alaska.gov; colton.percy@alaska.gov; Sarah Myers (sarah.myers@alaska.gov) <sarah.myers@alaska.gov>; roderj@akrr.com; dueberk@akrr.com; msb.hpc@gmail.com; MEA ROW - MEA (mearow@mea.coop) <mearow@mea.coop>; Enstar ROW (row@enstarnaturalgas.com) <row@enstarnaturalgas.com>; Right of Way Dept. <row@mtasolutions.com>; GCI ROW (ospdesign@gci.com) <ospdesign@gci.com>; Fire Code <Fire.Code@matsugov.us>; Land Management <Land.Management@matsugov.us>; regpagemaster@usace.army.mil; Tom Adams <Tom.Adams@matsugov.us>; Brad Sworts <Brad.Sworts@matsugov.us>; Daniel Dahms <Daniel.Dahms@matsugov.us>; Tammy Simmons <Tammy.Simmons@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Katrina Kline <katrina.kline@matsugov.us>; Alex Strawn <Alex.Strawn@matsugov.us>; Planning <MSB.Planning@matsugov.us>; Fred Wagner <Frederic.Wagner@matsugov.us>; Permit Center <Permit.Center@matsugov.us>; Jason Ortiz <Jason.Ortiz@matsugov.us>; Michelle Olsen <Michelle.Olsen@matsugov.us>; Taunnie Boothby <Taunnie.Boothby@matsugov.us>; John Aschenbrenner <John.Aschenbrenner@matsugov.us>; Dolores McKee <Dee.McKee@matsugov.us>; council@gatewaycommunitycouncil.org; mdemp1776ctzn@gmail.com; Gateway Community Council <gatewaycommunitycouncil@gmail.com>; Tim Alley (talley@tbcak.com) <talley@tbcak.com>; sandytraini@hotmail.com; Dan Tucker <antiquetuck@gmail.com>; lisahak@duck.com
Cc: Rick Benedict <Rick.Benedict@matsugov.us>
Subject: Request for Comments for Mass Excavation Fairview Loop Earth Material Excavation CUP

Good Morning,

Mass Excavation Inc. applied for an Administrative Permit under MSB 17.30 – Earth Materials Extraction Activities. The Administrative Permit would allow for the removal of approximately

350,000 cubic yards of sand, gravel, and rock for two years starting in May 2025. The site is located between East Fireweed Road and East Fairview Loop, Tax ID#s 17N01E18A004, 17N01E18A012, 17N01E18A013, & 17N01E18A014. RSA: 9

The Planning Director will conduct a public hearing on this request on November 21, 2024, at 9 a.m. in the Assembly Chambers.

Application materials may be viewed online at www.matsugov.us by clicking on 'All Public Notices & Announcements'. A direct link to the application material is here:

[Matanuska-Susitna Borough - MSB 17.30 Administrative Permit for Earth Materials Extraction Activities](#)

We are requesting comments at this time. Comments are due on or before **November 8, 2024**, and will be included in the packet for the Planning Director's review and information. Please be advised that comments received after that date will not be included in the staff report but will be given to the Planning Director on the day of the hearing. Thank you for your review.

Regards,

Peggy Horton
Matanuska-Susitna Borough
Development Services Division
Current Planner
907-861-7862



Matanuska-Susitna Borough

Development Services Division

Request for Review

Contact: Phone:

Due Date:

Project:

Special Considerations

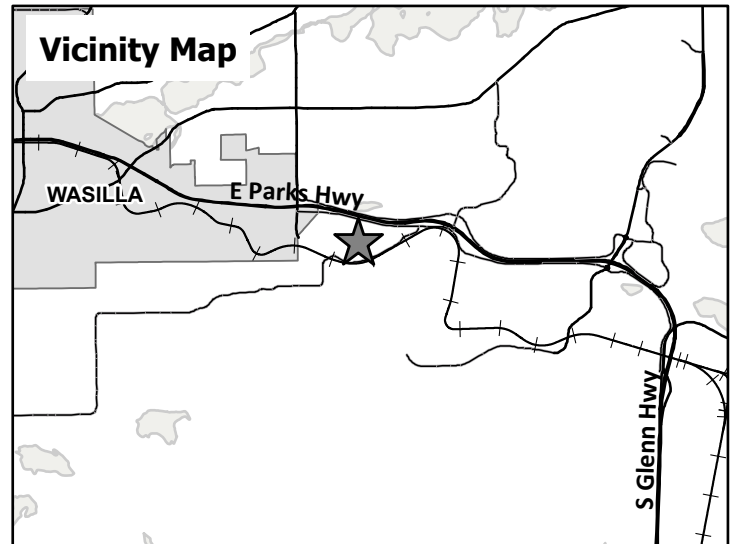
Reviewed By: Date:

No Comment:

Comments:



17N01E18A005
17N01E18A012
17N01E18A013
17N01E18A014



This map is solely for informational purposes only. The Borough makes no express or implied warranties with respect to the character, function, or capabilities of the map or the suitability of the map for any particular purpose beyond those originally intended by the Borough. For information regarding the full disclaimer and policies related to acceptable uses of this map, please contact the Matanuska-Susitna Borough GIS Division at 907-861-7858.



From: [Farmer, Carolyn H CIV USARMY CEPOA \(USA\)](#)
To: [Peggy Horton](#)
Subject: RE: Request for Comments for Mass Excavation Fairview Loop Earth Material Excavation CUP
Date: Tuesday, October 22, 2024 7:39:04 AM
Attachments: [image001.png](#)
[image002.png](#)

Good morning Ms. Horton,

The Corps of Engineers (Corps) does not have any specific comments regarding the subject project.

Department of the Army authorization is required if anyone proposes to place dredged and/or fill material into waters of the U.S., including wetlands and/or perform work in navigable waters of the U.S.

A copy of the DA permit application can be found online at www.poa.usace.army.mil/Missions/Regulatory. Sample drawings can also be found on our website at www.poa.usace.army.mil/Portals/34/docs/regulatory/guidetodrawings2012.pdf.

Section 404 of the Clean Water Act requires that a DA permit be obtained for the placement or discharge of dredged and/or fill material into waters of the U.S., including jurisdictional wetlands (33 U.S.C. 1344). The Corps defines wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Section 10 of the Rivers and Harbors Act of 1899 requires that a DA permit be obtained for structures or work in or affecting navigable waters of the U.S. (33 U.S.C. 403). Section 10 waters are those waters subject to the ebb and flow of the tide shoreward to the mean high water mark, and/or other waters identified by the Alaska District. Aquaculture structures and work would require Section 10 Authorization.

Mass Excavation Inc. are welcome to submit a preapplication meeting request, a jurisdictional determination request, or a permit application directly to our general mailbox (regpagemaster@usace.army.mil) and they will be assigned a project manager to assist them.

Sincerely,
Carolyn Farmer



Carolyn Farmer
Project Manager
North Central Section
U.S. Army Corps of Engineers | Alaska District
Phone 561-785-5634
Email carolyn.h.farmer@usace.army.mil



From: CEPOA-SM-RD-Pagemaster <regpagemaster@usace.army.mil>
Sent: Monday, October 21, 2024 1:39 PM
To: Land, Frederick J CIV USARMY CEPOA (USA) <Frederick.J.Land@usace.army.mil>
Subject: FW: Request for Comments for Mass Excavation Fairview Loop Earth Material Excavation CUP

Please read and respond if necessary. Thank you!

Amie Schoelen
U.S. Army Corps of Engineers, Alaska District
Regulatory Program Assistant, Regulatory Division
(907)753-2607

From: Peggy Horton <Peggy.Horton@matsugov.us>
Sent: Monday, October 21, 2024 9:03 AM
To: White, Ben M (DOT) <ben.white@alaska.gov>; Huling, Kristina N (DOT) <kristina.huling@alaska.gov>;
Kyler Hylton (<kyler.hylton@alaska.gov> <kyler.hylton@alaska.gov>; <dnr.scro@alaska.gov>;
<colton.percy@alaska.gov>; Sarah Myers (<sarah.myers@alaska.gov> <sarah.myers@alaska.gov>;
<roderj@akrr.com>; <dueberk@akrr.com>; <msb.hpc@gmail.com>; MEA ROW - MEA (<mearow@mea.coop>
<mearow@mea.coop>; Enstar ROW (<row@enstarnaturalgas.com> <row@enstarnaturalgas.com>; Right of
Way Dept. (<row@mtasolutions.com>; GCI ROW (<ospdesign@gci.com> <ospdesign@gci.com>; Fire Code
<Fire.Code@matsugov.us>; Land Management (<Land.Management@matsugov.us>; CEPOA-SM-RD-
Pagemaster <regpagemaster@usace.army.mil>; Tom Adams <Tom.Adams@matsugov.us>; Brad Sworts
<Brad.Sworts@matsugov.us>; Daniel Dahms <Daniel.Dahms@matsugov.us>; Tammy Simmons
<Tammy.Simmons@matsugov.us>; Jamie Taylor <Jamie.Taylor@matsugov.us>; Katrina Kline
<katrina.kline@matsugov.us>; Alex Strawn <Alex.Strawn@matsugov.us>; Planning
<MSB.Planning@matsugov.us>; Fred Wagner <Frederic.Wagner@matsugov.us>; Permit Center
<Permit.Center@matsugov.us>; Jason Ortiz <Jason.Ortiz@matsugov.us>; Michelle Olsen
<Michelle.Olsen@matsugov.us>; Taunnie Boothby <Taunnie.Boothby@matsugov.us>; John Aschenbrenner
<John.Aschenbrenner@matsugov.us>; Dolores McKee <Dee.McKee@matsugov.us>;
<council@gatewaycommunitycouncil.org>; <mdemp1776ctzn@gmail.com>; Gateway Community Council
<gatewaycommunitycouncil@gmail.com>; Tim Alley (<talley@tbcak.com> <talley@tbcak.com>;
<sandytraini@hotmail.com>; Dan Tucker <antiquetuck@gmail.com>; <lisahak@duck.com>
Cc: Rick Benedict <Rick.Benedict@matsugov.us>
Subject: [Non-DoD Source] Request for Comments for Mass Excavation Fairview Loop Earth Material
Excavation CUP

Good Morning,

Mass Excavation Inc. applied for an Administrative Permit under MSB 17.30 – Earth Materials Extraction Activities. The Administrative Permit would allow for the removal of approximately 350,000 cubic yards of sand, gravel, and rock for two years starting in May 2025. The site is located between East Fireweed Road and East Fairview Loop, Tax ID#s 17N01E18A004, 17N01E18A012, 17N01E18A013, & 17N01E18A014. **RSA: 9**

The Planning Director will conduct a public hearing on this request on November 21, 2024, at 9 a.m. in the Assembly Chambers.

Application materials may be viewed online at www.matsugov.us by clicking on 'All Public Notices & Announcements'. A direct link to the application material is here:

[Matanuska-Susitna Borough - MSB 17.30 Administrative Permit for Earth Materials Extraction Activities](#)

We are requesting comments at this time. Comments are due on or before **November 8, 2024**, and will be included in the packet for the Planning Director's review and information. Please be advised that comments received after that date will not be included in the staff report but will be given to the Planning Director on the day of the hearing. Thank you for your review.

Regards,

Peggy Horton
Matanuska-Susitna Borough
Development Services Division
Current Planner
907-861-7862



ENSTAR Natural Gas Company, LLC

Engineering Department, Right of Way Section
401 E. International Airport Road
P. O. Box 190288
Anchorage, Alaska 99519-0288
(907) 277-5551
FAX (907) 334-7798

October 21, 2024

Matanuska-Susitna Borough, Platting Division
350 East Dahlia Avenue
Palmer, AK 99645-6488

To whom it may concern:

ENSTAR Natural Gas Company, LLC has reviewed the following conditional use permit for earth material extraction and has no comments or recommendations.

- **(MSB Case # 17.30)**

If you have any questions, please feel free to contact me at 334-7944 or by email at james.christopher@enstarnaturalgas.com.

Sincerely,

James Christopher

James Christopher
Right of Way Agent
ENSTAR Natural Gas Company, LLC



THE STATE
of **ALASKA**
GOVERNOR MICHAEL J. DUNLEAVY

Department of Transportation and
Public Facilities

RECEIVED
NOV 08 2024
Mat-Su Borough
Development Services

4111 Aviation Avenue
P.O. Box 196900
Anchorage, AK 99519-6900
Main: 907-269-0520
Fax: 907-269-0521
dot.alaska.gov

November 8, 2024

Peggy Horton, Planner
Development Services Division
Matanuska-Susitna Borough
350 East Dahlia Avenue
Palmer, AK 99645

[Sent Electronically]

Re: Administrative Permit 10301 and Conditional Use Permit 10248 Review

Dear Ms. Horton:

The Alaska Department of Transportation and Public Facilities (DOT&PF) Central Region has reviewed the following conditional use permits and have the following comments:

- **Permit 10301 – Administrative Permit for Earth Materials Extraction Activities – MSB 17.30 – Mass Excavation, Inc / Cody Troseth (Fireweed Road and Fairview Loop Road)**
 - Track out conditions onto Fireweed Road as detailed within the driveway permit.
 - Please be advised that this permit is within the boundary of the [Fairview Loop Pathway & Safety Improvements project](#). For further information please contact project manager Lauren Little at lauren.little@alaska.gov or 907-378-5911.
- **Permit 10248 – Conditional Use Permit for Denali State Park Special Land Use District – MSB 17.17 – Ark @ Denali RV Campground Resort / The Boutet Company Inc., for Yolanda D'Oyen (Parks Highway MP 136)**
 - DOT&PF will require a Traffic Impact Analysis (TIA) or a Limited Traffic Impact Analysis for this development. Contact DOT&PF Right of Way Property Manager Supervisor Matt Walsh at matthew.walsh@alaska.gov or 907-269-0677 to initiate the TIA process. The TIA will determine requirements for access to the Parks Highway, which will then be permitted through the Approach Road Review process. Approach Road Review's can be applied for at DOT&PF's online ePermits website: <https://dot.alaska.gov/row/Login.po>. Please contact DOT&PF's ROW division at 1-800-770-5263 to speak with a regional permit officer if you have any questions.
 - The Parks Highway is classified as Interstate and changes to Interstate access require review and concurrence from the Federal Highway Administration (FHWA).

"Keep Alaska Moving through service and infrastructure."

- Please be advised that this permit is within the boundary of the [Parks Highway MP 99 – 163 Drainage & Culvert Improvements](#) project Phase 1, which is scheduled for construction in the spring of 2025. For further information contact design project manager Aaron Hunting at aaron.hunting@alaska.gov or 907-269-0546. For construction questions please contact construction project manager Ericka Moore at ericka.moore@alaska.gov or 907-269-0450.

All properties accessing DOT&PF roads must apply to Right of Way for a driveway permit and/or approach road review, subject to provisions listed in 17 AAC 10.020. Any previously issued access permits become invalid once the property undergoes a platting action or change in use and must be reissued.

If there are any questions regarding these comments please feel free to contact me at (907) 269-0509 or kristina.huling@alaska.gov.

Sincerely,



Kristina Huling
Mat-Su Area Planner, DOT&PF

cc: Sean Baski, Highway Design Chief, DOT&PF
Matt Walsh, Property Management Supervisor, Right of Way, DOT&PF
Devki Rearden, Engineering Associate, DOT&PF
Morris Beckwith, Right of Way, DOT&PF
Brad Sworts, Pre-Design & Engineering Div. Manager, MSB
Anna Bosin, Traffic & Safety Engineer, DOT&PF

Public Comments

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

RECEIVED
NOV - 6 2024

Mat-Su Borough
Development Services

64

HAWN JERE G & LISA L
1990 S PADDOCK DR
WASILLA, AK 99654

Mass Excavation Inc. applied for an Administrative Permit under MSB 17.30 – Earth Materials Extraction Activities. The Administrative Permit would allow for the removal of approximately 350,000 cubic yards of sand, gravel, and rock for two years starting in April 2025. The site is located between East Fireweed Road and East Fairview Loop, Tax ID #s 17N01E18A004, 17N01E18A012, 17N01E18A013, & 17N01E18A014.

The Matanuska-Susitna Borough Planning Director will conduct a public hearing concerning the application on Thursday, November 21, 2024, at 9:00 a.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Director, and you are invited to attend.

Application materials may be viewed online at www.matsugov.us by clicking on “All Public Notices & Announcements.” For additional information, you may contact Peggy Horton, Current Planner, by phone at 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us, or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

The public may provide verbal testimony at the meeting or telephonically by calling 1-855-290-3803. In order to be eligible to file an appeal from a decision of the Planning Director, a person must be designated an interested party. See MSB 15.39.010 for the definition of an interested party. The procedures governing appeals to the Board of Adjustment and Appeals are contained in MSB 15.39.010-250, which is available on the Borough home page: www.matsugov.us, in the Borough Clerk’s office, and at various libraries within the borough.

Comments are due on or before November 8, 2024, and will be included in the Planning Director packet. Please be advised that comments received from the public after that date will not be included in the staff report, but will be provided to the Director at the meeting.

Name: Jere + Lisa Hawn Mailing Address: 1990 S. Paddock Dr. Wasilla

Location/Legal Description of your property: Same as mailing address AK 99654

Comments: We are opposed to this application. The heavy dust and sediment from these extraction activities not only creates unhealthy air to breath but it also leaves behind layers of this dust and sediment on literally everything in my home even with my windows closed. We are extremely against this application moving forward.

Note: Vicinity Map Located on Reverse Side

Matanuska-Susitna Borough
Development Services Division
350 E. Dahlia Avenue
Palmer, Alaska 99645

Matanuska-Susitna Borough
Development Services

NOV 19 2024

Received

17
FABER ALASKA COMM PROP TR
FABER LAURENCE TRE FABER WANDA J TRE
13411 GRAYWOLF PL NE
POULSBO, WA 98370-8000

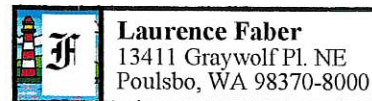
Mass Excavation Inc. applied for an Administrative Permit under MSB 17.30 – Earth Materials Extraction Activities. The Administrative Permit would allow for the removal of approximately 350,000 cubic yards of sand, gravel, and rock for two years starting in April 2025. The site is located between East Fireweed Road and East Fairview Loop, Tax ID #s 17N01E18A004, 17N01E18A012, 17N01E18A013, & 17N01E18A014.

The Matanuska-Susitna Borough Planning Director will conduct a public hearing concerning the application on **Thursday, November 21, 2024**, at 9:00 a.m. in the Borough Assembly Chambers located at 350 E. Dahlia Avenue in Palmer. This may be the only presentation of this item before the Planning Director, and you are invited to attend.

Application materials may be viewed online at www.matsugov.us by clicking on “All Public Notices & Announcements.” For additional information, you may contact Peggy Horton, Current Planner, by phone at 907-861-7862. Provide written comments by e-mail to peggy.horton@matsugov.us, or by mail to MSB Development Services Division, 350 E. Dahlia Avenue, Palmer, AK 99645.

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Comments are due on or before **November 8, 2024**, and will be included in the Planning Director packet. Please be advised that comments received from the public after that date will not be included in the staff report, but will be provided to the Director at the meeting.



Name: LAURENCE FABER Mailing Address: 517N01E18

Location/Legal Description of your property: TOWNSHIP 17N, RANGE 1E, SEC. 18 Lot 4059 E, FAIRVIEW LOOP

Comments: Thank you for this notification. I would oppose this huge excavation project because I believe it would leave a huge SCAR on the landscape. If the applicant would do remedial work at the time the excavation is complete and restore the damaged landscape to its former attractiveness, then I might feel differently.
tax account Number: 117N01E18C001

DRAFT PERMIT



MATANUSKA-SUSITNA BOROUGH

Planning and Land Use Department

350 East Dahlia Avenue • Palmer, AK 99645

Phone (907) 861-7822

www.matsugov.us

ADMINISTRATIVE PERMIT FOR EARTH MATERIALS EXTRACTION

PERMIT#: 10301

ACTION: In accordance with provisions in Matanuska-Susitna Borough Code 17.28 and 17.30, an Administrative Permit for earth materials extraction is hereby approved as referenced within this document. This permit is for the extraction of earth material from an approximately 13-acre mining site within four parcels totaling 53.92 acres. The total volume of extraction will be approximately 350,000 cubic yards through April 2027. This decision is based on the findings of fact and conclusions of law contained within the Development Services Division Staff Report.

EFFECTIVE DATES: April 1, 2025 – April 1, 2027

PERMITTED SITE: 4290, 4370, & 4480 East Fireweed Road and 4401 East Fairview Loop, Tax ID #s 17N01E18A005, 17N01E18A012, 17N01E18A013, and 17N01E18A014

PERMITTEE/ Mass Excavation, Inc
PO Box 241093
Anchorage AK 99524

PROPERTY OWNER: Fairview Park Iv LTD
PO Box 92225
Anchorage, AK 99509

General Requirements and Conditions:

All development and use of the permitted site shall occur as described in the approved application submitted and as further specified by the conditions listed herein. Any variation from the requirements or conditions of this permit or from the borough code may be grounds for penalties as authorized by the borough code.

Specific conditions of the permit for earth material extraction activities:

1. All aspects of the operation shall comply with the details outlined in the application material. An amendment to the Administrative Permit shall be required prior to any alteration or expansion of the material extraction operation.
2. Material extraction shall be limited to the area identified in the applicant's site plan, submitted on October 8, 2024.
3. The authorization for earth material extraction activities approved by this Administrative

Providing Outstanding Borough Services to the Matanuska-Susitna Community.

Permit begins on April 1, 2025, and expires on April 1, 2027.

4. Each contractor or company working at the site shall be provided with a copy of the approved permit.
5. The operation may operate 24 hours a day, seven days a week; however, it shall comply with the maximum permissible sound level limits allowed in the MSB Code, as specified in MSB 17.28.060—Site Development Standards.
6. Vehicles and equipment shall be inspected for leaks daily.
7. Vehicle on-site maintenance shall be done in an area where drip pans or other discharge prevention devices can contain all leaks.
8. Any hazardous materials, drips, leaks, or spills shall be promptly attended to and adequately treated.
9. All construction exits shall comply with standard Alaska Pollutant Discharge Elimination System requirements to minimize off-site vehicle tracking of sediments and discharges to stormwater.
10. The operation shall perform dust mitigation techniques as described in the application as needed to minimize dust impacts to the surrounding areas.
11. All track-out sediments from the site shall be removed from the right-of-way daily.
12. The operation shall comply with all applicable federal, state, and local regulations.
13. A four-foot vertical separation shall be maintained between all excavations and the seasonal high-water table.
14. The use of either a batch plant or a hot mix plant at the site is prohibited.
15. The property owner shall comply with the reclamation standards of MSB 17.28.067.
16. All junk, junk vehicles, and trash, as defined by MSB 8.50, shall be removed and properly disposed of prior to the completion of reclamation on the subject parcel.
17. If reclamation information is updated with the Alaska Department of Natural Resources, a copy of the updated information shall be provided to the MSB Development Services Division.
18. If cultural remains are found during material extraction activities, the MSB Planning Department shall be contacted immediately so the remains can be documented.
19. Borough staff shall be permitted to enter any portion of the property to monitor compliance with permit requirements. Such access will, at minimum, be allowed on demand when activity is occurring and, with prior verbal or written notice, and at other times as necessary to monitor compliance. Denial of access to Borough staff shall be a violation of this Administrative Permit.

The Director's decision may be appealed within 21 days of the date of approval in accordance with MSB 15.39 – Board of Adjustment and Appeals.