

**PLANNING DEPARTMENT  
STAFF ANALYSIS  
CONDITIONAL USE**

**DATE:** March 9, 2020  
**CASE NUMBER:** 2019-0138  
**APPLICANT:** Ryan Mormon, Anchorage Sand and Gravel, Inc.  
**REPRESENTATIVE:** Tom Dreyer, S4 Group, LLC  
**REQUEST:** Amendment to conditional use for land reclamation  
**LOCATION:** Lancaster Subdivision Tract A, and Polen Park Subdivision, Tracts 1, 2, and 3  
**COMMUNITY COUNCIL:** Sand Lake  
**SITE:** ±75.89 acres  
**CURRENT LAND USE:** Land reclamation  
**UTILITIES:** Public water and sewer  
**TOPO:** Sloping downhill to the south

**COMPREHENSIVE PLAN**

Classification: “Compact Mixed Residential Low”, “Small Scale Commercial”, and “Other Open Space” in the 2017 *Anchorage 2040 Land Use Plan*  
  
“Low/Medium Intensity Residential (>8-15)”, “Small Scale Commercial”, and “Other Area that Functions as Park and Natural Resource” in the 2014 *West Anchorage District Plan*

**SURROUNDING AREA**

	NORTH	EAST	SOUTH	WEST
Zoning:	R-1A	R-1A	R-1A	R-1A
Land Use:	Fill site	Fill site	Multifamily and Single-Family Residential	Single-Family Residential

**REQUEST**

Anchorage Sand and Gravel, Inc. is requesting amendments to their conditional use for land reclamation. These amendments will: 1) update the legal description of the site; 2) include the five acres at the southwest corner of the site which were previously left out of the reclamation area; and 3) update the grading and drainage plan.

The initial application for amendment of the Sand Lake Reclamation Site was postponed in order to revise the project area to include Polen Park Subdivision, Tracts 2 and 3, and to hold another community meeting with the Sand Lake Community Council.

This subject property has been a land reclamation site for many decades. The last action taken by the Planning and Zoning Commission was to approve Resolution 2014-029, which ended a seven-year abeyance at the site and made minor changes to the site plan to move equipment further south.

The Assembly recently approved rezoning of the southwest ten acres of the site to B-1A SL (local and neighborhood business district) and R-2M SL (mixed residential district) with AO 2019-143AA. The rezoning requires that the conditional use for land reclamation be updated.

### **DEPARTMENTAL COMMENTS**

None of the State or Municipal reviewing agencies objected to this application. Watershed Management Services requests a condition of approval related to stormwater runoff and spill prevention. This should become a condition of approval.

The Parks and Recreation Department initially requested confirmation from the applicant that the final grading of the site does not impact the ground stability of the adjoining Jade Street Park. After further review, the Parks and Recreation Department determined that no new conditions of approval are necessary. This is because the Building Safety Division will review these amendments to the fill and grade permit. Note that the reclamation plan shows slopes of 3:1 (run over rise) and 4:1, where the site adjoins the park, and Title 23 (Building Code) allows a 2:1 slope, which is much steeper. Also, the toe of the fill slope is setback approximately 65 feet from the park, and Title 23 does not require any setback.

### **PUBLIC COMMENTS**

Four hundred and fifty-six public hearing notices were mailed on January 17, 2020. Two responses were received from the public on the current application. Five responses were received on the previous application. They are included to ensure that all public comments are provided to the Commission. The Sand Lake Community Council did not provide comments.

### **FINDINGS**

#### **21.03.080 Conditional Uses Pre-Application Conference**

A pre-application conference was held on July 17, 2019, in accordance with 21.03.080C.2.

### Community Meeting

The community meeting was held with the Sand Lake Community Council on November 13, 2019, in accordance with 21.03.080C.3.

**AMC 21.03.080D. Conditional Uses - Approval Criteria. The planning and zoning commission may approve a conditional use application if, in the judgment of the commission, all of the following criteria have been met in all material matters:**

- 1. The proposed use is consistent with the comprehensive plan and all applicable provisions of this title and applicable state and federal regulations.**

The standard is met.

*Anchorage 2040* designates most of the petition site as “Other Open Space.” Ten acres at the southwest corner of the site is identified as “Compact Mixed Residential Low” and “Small Scale Commercial”. The following goals and policies from the *Anchorage 2020* and *Anchorage 2040* are furthered by this land reclamation project:

*Anchorage 2020*

*Policy 7*      *Avoid incompatible uses adjoining one another.*

The petition site is surrounded by West Dimond Boulevard, Sand Lake Road, a residential neighborhood, and Jade Park. The future use of most of the property will not allow habitable structures because of the unclassified fill placed over a majority of the site. However, ten acres of land at the southwest corner will be receive structural fill to build new housing and businesses.

*Anchorage 2040*

*Policy 1.2*      *Employ land use and development strategies for the Anchorage Bowl to accommodate the forecast number of additional residents, households, and jobs through 2040.*

Even if all the residential land use designations in *Anchorage 2040* are developed with housing, there would still be a deficit of 7,900 housing units. The proposed reclamation plan will create eight acres of buildable land for housing and two acres for businesses.

*Policy 4.1*      *Provide sufficient land to meet the diverse housing needs of Anchorage’s citizens, where the integrity of the residential neighborhood area is protected from expanding commercial corridors or non-neighborhood employment activities.*

The result of this land reclamation amendment is to create a residential and commercial building pad of ten acres, which will

be zoned R-2M and B-1A.

**2. The proposed use is consistent with the purpose and intent of the zoning district in which it is located, including any district-specific standards set forth in chapter 21.04.**

The standard is met.

There are no applicable district-specific standards in the R-1A, R-2M SL, and B-1A SL districts.

The **R-1A district** is “intended primarily for detached single-family residential areas with gross densities up to four dwelling units per acre. The minimum lot size is slightly larger than the R-1 district. These areas generally are intended to have well-developed infrastructure, and municipal services generally are intended to be provided.”

The **R-2M district** is “intended primarily for residential areas that allow for a variety of single-family, two-family, and multifamily dwellings, with gross densities between five and 15 dwelling units per acre. The R-2M district provides residential neighborhoods with a greater diversity of housing by allowing a mix of both detached and a variety of attached dwelling types in close proximity to each other, rather than separated into different zoning districts. The R-2M district is to be located in established or redeveloping residential neighborhoods or is to create a transition between single-family, two-family, and higher density multifamily and mixed-use areas. The design of new development, such as building scale and setbacks, parking facility size and location, and yard landscaping, should be complementary to the existing neighborhood and mix of dwelling types.”

The **B-1A district** is “intended for small, compact commercial sites or areas within or surrounded by residential areas. The district is applied to encourage the provision of small-scale retail, office, and service uses compatible in scale and character with adjacent residential uses, and providing services to the surrounding neighborhood. B-1A centers are between one-half and two acres in size. Continuous retail frontages, largely uninterrupted by driveways and parking, are encouraged. Uses are to be limited in intensity to promote their local orientation, promote pedestrian access, reduce vehicle trips, and limit adverse impacts on the surrounding area. Upper story residential uses are also allowed.”

**3. The proposed use is consistent with any applicable use-specific standards set forth in chapter 21.05.**

The standard is met.

See the next section of this report for an analysis of the use-specific standards for land reclamation.

4. **The site size, dimensions, shape, location, and topography are adequate for the needs of the proposed use and any mitigation needed to address potential impacts.**

The standard is met.

The site size, location, and topography are adequate for the land reclamation amendment. The existing conditional use is approved until May 5, 2024, and this amendment will adhere to that expiration date. The inclusion of the southwest corner of the property into the grading and drainage plan is needed given the future development that will occur there.

5. **The proposed use will not alter the character of the surrounding area in a manner which substantially limits, impairs, or prevents the use of surrounding properties for the permitted uses listed in the underlying zoning district.**

The standard is met.

The conditional use for land reclamation is nearing completion. This amendment will solve the remaining issues about site grading and drainage.

6. **The proposed use is compatible with uses allowed on adjacent properties, in terms of its scale, site design, operating characteristics (hours of operation, traffic generation, lighting, noise, odor, dust, and other external impacts).**

The standard is met.

This amendment to the existing land reclamation operation is compatible with adjacent properties in terms of hours of operation, traffic generation, noise, and dust. The hours of operation will continue to be 7:00 a.m. to 6:00 p.m., Monday through Friday, with no work on Sundays and legal holidays. All on-site equipment is required to be muffled and use white noise motion alarms or motion detectors for backing up. The Health Department has approved the dust control plan to mitigate dust from the site. See the site plan for the location of driveways, the wheel washing station, and equipment storage.

7. **Any significant adverse impacts anticipated to result from the use will be mitigated or offset to the maximum extent feasible.**

The standard is met.

The site size and the operations plan are suitable for this land reclamation use. Significant adverse impacts on neighboring properties is mitigated to the extent possible. See standard 6 above.

- 8. The proposed use is appropriately located with respect to the transportation system, including but not limited to existing and/or planned street designations and improvements, street capacity, access to collectors or arterials, connectivity, off-site parking impacts, transit availability, impacts on pedestrian, bicycle, and transit circulation, and safety for all modes.**

The standard is met.

The existing roads continue to be adequate for this use. West Dimond Boulevard and Sand Lake Road are classified as “Arterials” in the *Official Streets and Highways Plan*. Both roads have separated multi-use pathways for pedestrians already installed.

- 9. The proposed use is appropriately located with respect to existing and/or planned water supply, fire and police protection, wastewater disposal, storm water disposal, and similar facilities and services.**

The standard is met.

The site is located within the Anchorage Roads and Drainage Service Area, the Building Safety Service Area, the Police and Fire Service Areas, and the Parks and Recreation Service Areas.

#### **AMC 21.05.060E.5., Conditional Use Standards for Land Reclamation**

**a. Definition**

**An operation engaged primarily in increasing land-use capability by changing the land’s character or environment through fill or regrading. Land reclamation shall include only operations at a scale involving 5,000 cubic yards or more of fill material. Site preparation as part of the development of a subdivision under a subdivision agreement is not included.**

**b. Use-Specific Standards**

- i. If the land reclamation operation will be completed within one year, the review and approval procedure shall be an administrative site plan review. If the operation will continue for more than one year, the review and approval procedure shall be the conditional use process. If an operation was approved under the administrative site plan review process but is not completed within one year, the operator must then apply for a conditional use permit.**

This application is not eligible for an administrative decision by the Planning Director because the land reclamation operation is anticipated to continue for four years.

- ii. In addition to the submittal requirements in the user’s guide, an**

**applicant for a land reclamation use shall submit the following:**

**(A) A site plan showing: Drainage, existing and proposed topographical contours (ten-foot intervals), water table information, and points of vehicular access to the site.**

A preliminary stormwater management report is included with the application. The grading plan shows existing and proposed topographical contours in ten-foot intervals.

The water table information for this site is provided. It shows that there that the final grade of the site will be 40 feet above the water table, which reduces the potential for groundwater contamination.

The site plan shows points of vehicular access to the site.

**(B) Erosion and sediment control plan.**

A new stormwater pollution prevention plan will be required with this amendment.

**(C) A description of the soil types encountered on the site.**

The existing soils primarily sand and gravel.

**(D) A landscape plan for the period of land reclamation operations and for final restoration of the site.**

The entire site will be reclaimed with topsoil and grass seed. The phasing plan shows the progression of fill operation from north to south.

**(E) A security plan to prevent casual trespass.**

The driveway accesses are gated to prevent casual trespass.

**(F) Proposed hours of operation.**

The normal hours of operation are from 7:00 a.m. to 6:00 p.m., Monday through Saturday. No operations will be permitted on Sundays and legal holidays.

**(G) A description of land reclamation and processing operations proposed for the site.**

These amendments change the grading and drainage plan and relocate the sediment basin. The amendments also incorporate five acres of land at the southwest corner of the site that were previously left out of the

conditional use project area. A total of ten acres at the southwest corner will have a new development pad for future construction of housing and businesses with structural fill its base. No processing of dirt occurs on-site, however, suitable topsoil from trucks bringing material to this site are stockpiled for revegetation of the site.

**(H) Projected traffic counts for each point of vehicular access to the site.**

The estimated number of daily truck trips to the site is 250, which is the same as previously approved. There are three permitted driveways onto Sand Lake Road, which is classified as a “Minor Arterial” in the *Official Streets and Highways Plan*.

**(I) An estimate of the quantity of materials to be imported to the site and timetable, with supporting calculations conforming to generally accepted engineering principals.**

The estimated quantity of fill still to be placed at the site is 1.2 million cubic yards. At an average yearly fill rate of 270,000 cubic yards, the site should be complete by the previously approved date, which is May 5, 2024. This amendment adds approximately 0.3 million cubic yards of fill over the previously approved amount. The increase is due to the revised grading and drainage plan.

**(J) A statement of the types of materials that will be accepted at the site.**

The site is approved to accept fill materials including: peat, clay, silty soil, hydro-axed materials, tree fragments, stumps, turf, and other organics associated with permitted clearing and grubbing operations, including wood chips from grinding operations, and concrete remnants related to demolition, concrete testing, and construction clean up.

The southwest ten acres of the site will receive structural fill to create a development pad for future residential homes and commercial businesses.

**(K) Such other materials as the director may require by regulation pursuant to AMC chapter 3.40.**

No other materials are required.

- iii. **The site plan and erosion and sediment control plan required in subsection ii. above shall be subject to review and approval for drainage, erosion and sedimentation control; for conformance with the 208 Areawide Water Quality Management Plan; and for compliance with generally accepted sound engineering principles.**

The preliminary stormwater management report is provided.

**iv. A building or land use permit is required for land reclamation.**

The site was issued fill and grade permit number X18-1618.

**v. In addition to the conditional use standards of approval at 21.03.080D., the planning and zoning commission may approve a land reclamation use only if the commission finds that the use also meets the following standards:**

**(A) Principal access to the site shall minimize the use of residential streets, and access roads shall be treated in a manner so as to make them dust free. Where access roads intersect arterials, suitable traffic controls shall be established.**

Driveways to the petition site are from Sand Lake Road, which is an "Arterial" in the *Official Streets and Highways Plan*. No residential streets will be used for this land reclamation operation.

The site plan shows a wheel washing station located near the site exit to prevent tracking of dirt onto Sand Lake Road. Also, there is a water truck on-site to control dust.

**(B) The site will not accept materials that are hazardous or flammable.**

Hazardous and flammable material is prohibited.

**(C) The site will not accept junk as defined in chapter 21.14.**

Junk is prohibited at this site.

**(D) The site will not accept soils contaminated with petroleum products or byproducts.**

Soils contaminated with petroleum products or byproducts is prohibited.

**(E) The reclamation operations will not pose a hazard to the public health and safety.**

This land reclamation site has been in operation for decades and does not pose a hazard to the public health and safety.

**(F) The reclamation operations will not generate noise, dust, surface water runoff, groundwater pollution, or traffic that will unduly impact surrounding land uses.**

The land reclamation operation will remain the same, except for the introduction of structural fill on the southwest corner of the site and the revised grading and drainage plan.

**(G) The restoration plan for the site ensures that, after reclamation operations cease, the site will be left in a safe, stable, and aesthetically acceptable condition.**

The updated grading and drainage plan is provided. It shows the plan final elevations for the development pad at the southwest corner and the sediment basin which will be moved further west. All areas of the site will be stabilized with topsoil and seeding.

**(H) The proposed use meets such additional standards for land reclamation conditional uses as the director may establish by regulation pursuant to AMC chapter 3.40. vi. The planning and zoning commission may attach such conditions to the approval of a land reclamation conditional use as it finds are necessary to mitigate potential negative impacts on adjacent uses.**

No special conditions are proposed for this amendment.

#### **DEPARTMENT RECOMMENDATION**

The Department recommends APPROVAL of the amendment to a conditional use for land reclamation, subject to the following conditions:

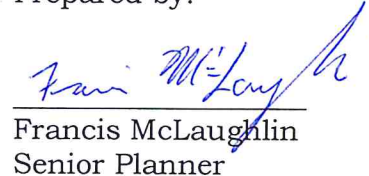
1. This approval is subject to the petitioner's application, narrative, and the following plans on file at the Planning Department, except as modified by these conditions of approval:
  - a. Sand Lake Fill Site – CUP Amendment Operations Plan
  - b. Sand Lake Fill Site – Estimated Filling Phases, 1-7-2020
  - c. Sand Lake Reclamation Site Conditional Use Amendment, Sheets C1 to C8, drawn by Brandon J. Marcott, Registered Professional Engineer, Triad Engineering, LLC.
2. A notice of zoning action and a final approved site plan shall be filed with the State Recorder's Office. Proof of such shall be submitted to the Planning Department.
3. Provide a stormwater pollution prevention plan to Watershed Management Services for review and approval.
4. This conditional use approval is valid until May 5, 2024.

5. At the end of the land reclamation operation, a close out inspection of the property with representatives of Private Development and Planning shall be conducted to evaluate the final restoration and compliance with the reclamation plan.
6. The list of acceptable fill materials is as follows: peat, clay, silty soil, hydro-axed materials, tree fragments, stumps, turf, and other organics associated with permitted clearing and grubbing operations, including wood chips from grinding operations, and concrete remnants related to demolition, concrete testing, or construction site clean-up.
7. Operational hours shall be limited to 7:00 a.m. to 6:00 p.m. on Monday through Saturday. No operations will be permitted on Sundays or legal holidays.
8. All on-site equipment shall be muffled and use white noise alarms or motion detectors for backing up.
9. Annually an inspection report prepared by a registered and professional engineer will identify the location and extent of the backfill as it relates to the fill being placed, and as it relates to the approved fill document. This report is to be submitted by December 31 of each year to the Planning Department for compliance to these conditions of approval.
10. The petitioner shall provide logbooks with dates, time and material dumped, to be available upon request of the Planning Department.
11. On-site personnel shall be formally trained on all aspects of the operation of the reclamation site.
12. The telephone number of Anchorage Sand and Gravel shall be placed on the side of the on-site operations building. The sign shall be of sufficient size to be visible from the adjacent roadway and the view of the sign shall be unobstructed by equipment, machinery, vegetation and the like.
13. On-site personnel shall have total authority to direct road clean-up and maintenance operations as needed. On-site personnel shall have the authority to call a sweeper, water truck and motor grader, as necessary, to respond to specific site conditions or complaints.

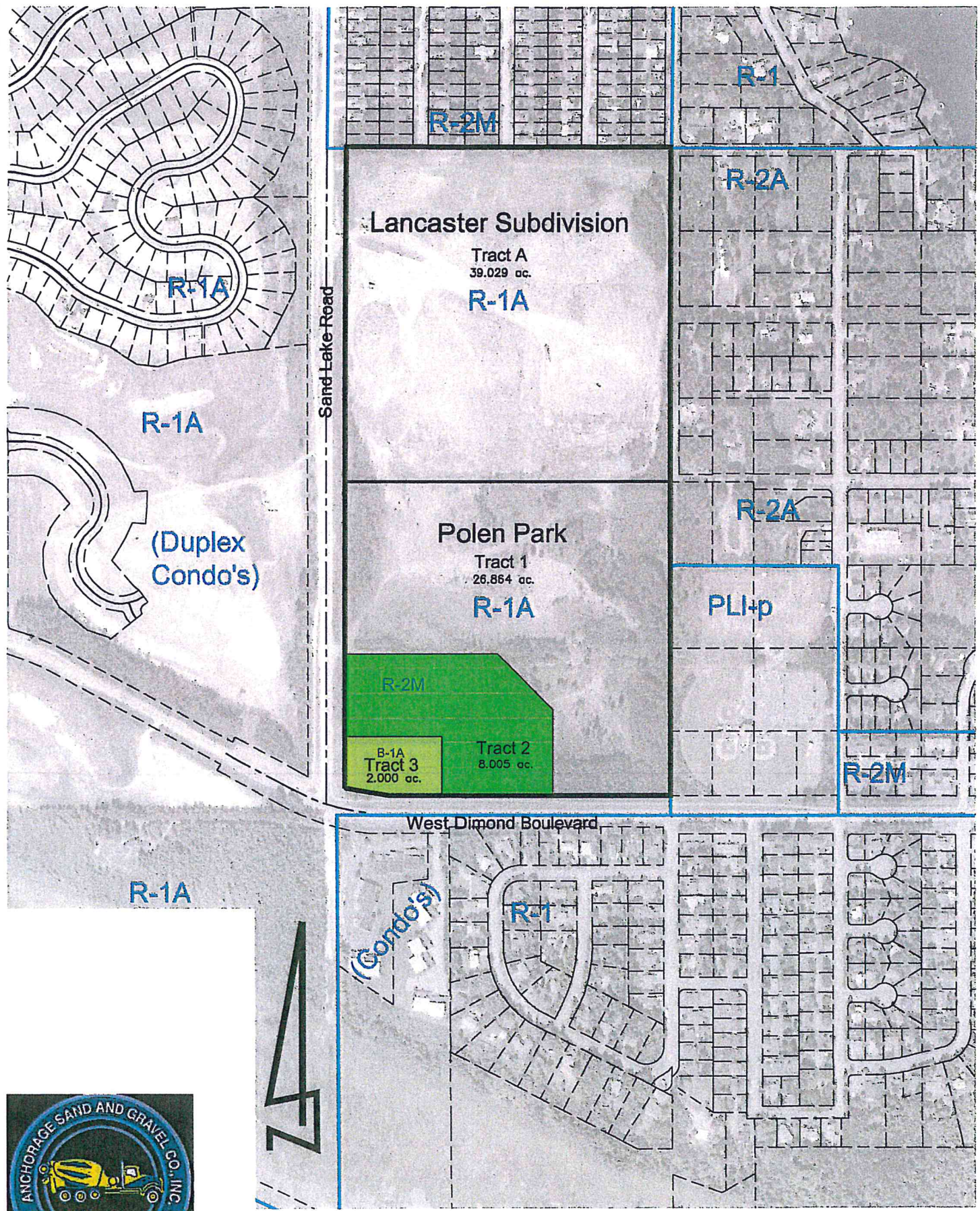
Reviewed by:

  
Michelle J. McNulty, AICP  
Director

Prepared by:

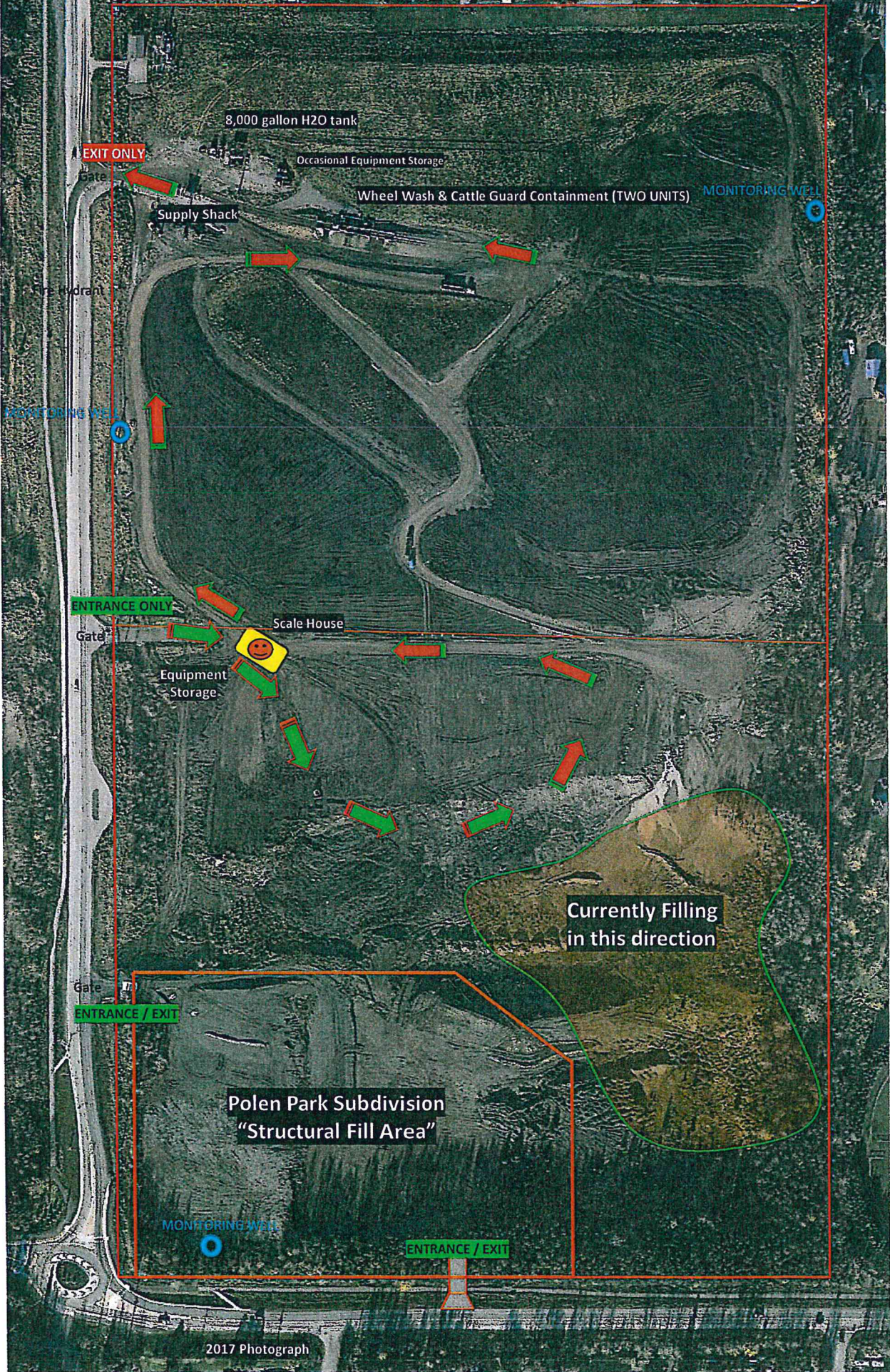
  
Francis McLaughlin  
Senior Planner

(Case 2019-0138; Parcel ID Numbers 011-162-42 and 011-201-92, 93, and 94)



Zoning Map  
Sand Lake Fill Site

# SAND LAKE FILL SITE – CUP AMENDMENT OPERATIONS PLAN



# Sand Lake Reclamation Site (Estimated - Filling Phases, 1-7-2020)



## Phase 1

Currently Finishing, just needing a little future work after wheel wash is removed.

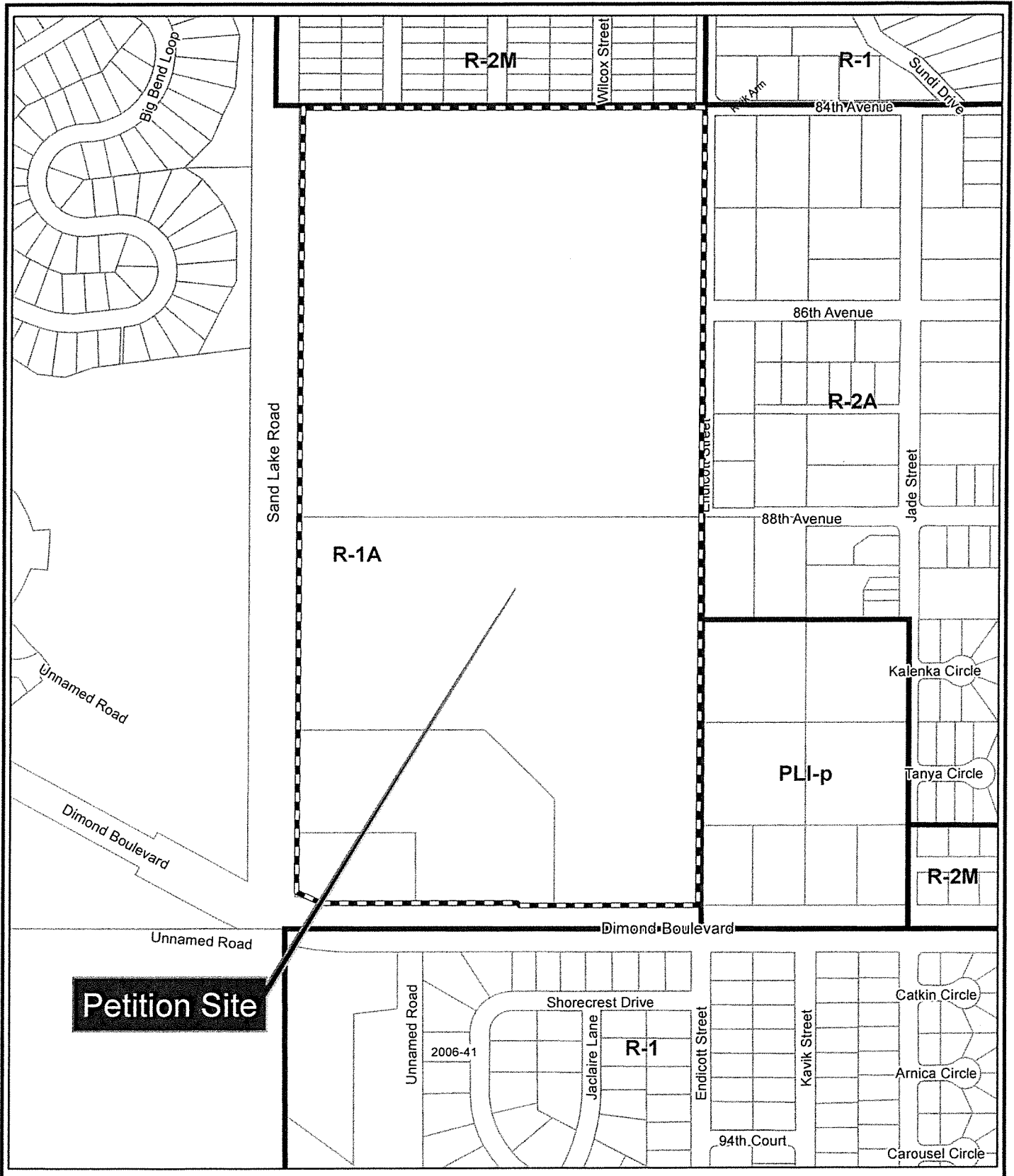
## Phase 2

## Phase 3

## Phase 4

## Phase 5

**ATTENTION:** Phases 2, 3, 4 and 5 will require several lifts to obtain final grade.





# Application

# Application for Conditional Use

Municipality of Anchorage  
 Planning Department  
 PO Box 196650  
 Anchorage, AK 99519-6650




PETITIONER*		PETITIONER REPRESENTATIVE (if any)	
Name (last name first) Anchorage Sand & Gravel, Inc (Ryan Mormon)		Name (last name first) S4 Group, LLC (Tom Dreyer)	
Mailing Address 1040 O'Malley Road		Mailing Address 124 E 7th Avenue	
Anchorage, AK 99515		Anchorage, AK 99501	
Contact Phone – Day 907-348-6433	Evening 907-529-0556	Contact Phone – Day 907-306-8104	Evening 907-227-1847
Fax		Fax	
E-mail ryan.mormon@anchsand.com		E-mail tom@s4ak.com	

\*Report additional petitioners or disclose other co-owners on supplemental form. Failure to divulge other beneficial interest owners may delay processing of this application.

PROPERTY INFORMATION		
Property Tax # (000-000-00-000):011-201-93-000, 011-201-94-000, 011-201-92-000, 011-162-42-000		
Site Street Address:5401 Dimond Blvd & 8501 Sand Lake Road		
Current legal description: (use additional sheet if necessary) Lancaster Subdivision Tract A, Polen Park Subdivision Tract 1,2, & 3		
Zoning:R-1A	Acreage:74	Grid #:2324

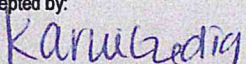
CONDITIONAL USE APPROVAL REQUESTED	
Use:Land reclamation	
<input type="checkbox"/> New conditional use	<input checked="" type="checkbox"/> Amendment to approved conditional use Original Case #:2014-056

I hereby certify that (I am)(I have been authorized to act for) owner of the property described above and that I petition for a conditional use permit in conformance with Title 21 of the Anchorage Municipal Code of Ordinances. I understand that payment of the application fee is nonrefundable and is to cover the costs associated with processing this application, and that it does not assure approval of the conditional use. I also understand that assigned hearing dates are tentative and may have to be postponed by Planning Department staff or the Planning and Zoning Commission for administrative reasons.


1-9-2020  
 Signature       Owner     Representative      Date  
(Representatives must provide written proof of authorization)

Craig Bennett

Print Name

Accepted by: 	Poster & Affidavit:	Fee: N/A postponed	Case Number: 2019-0138	Requested Meeting Date: PZC 3/9/20
---	---------------------	-----------------------	---------------------------	---------------------------------------

**COMPREHENSIVE PLAN INFORMATION**

Anchorage 2020 Urban/Rural Services:  Urban  Rural

Anchorage 2020 Major Elements – site is within or abuts:

- Major employment center  Redevelopment/mixed use area  Town center  
 Neighborhood commercial center  Industrial reserve  
 Transit - supportive development corridor  District/area plan area: West Anchorage District Plan

Chugiak-Eagle River Land Use Classification:

- Commercial  Industrial  Parks/open space  Public lands/institutions  Town center  
 Transportation/community facility  Alpine/slope affected  Special study area  Development reserve  
 Residential at \_\_\_\_\_ dwelling units per acre  Environmentally sensitive area

Girdwood- Turnagain Arm Land Use Classification

- Commercial  Industrial  Parks/open space  Public lands/institutions  Resort  
 Transportation/community facility  Alpine/slope affected  Special study area  Reserve  
 Residential at \_\_\_\_\_ dwelling units per acre  Mixed use  Rural homestead

**ENVIRONMENTAL INFORMATION** (All or portion of site affected)

- Wetland Classification:  None  "C"  "B"  "A"  
 Avalanche Zone:  None  Blue Zone  Red Zone  
 Floodplain:  None  100 year  500 year  
 Seismic Zone (Harding/Lawson):  "1"  "2"  "3"  "4"  "5"

**RECENT REGULATORY INFORMATION** (Events that have occurred in last 5 years for all or portion of site)

- Rezoning - Case Number: 2019-0118 & 2019-0119  
 Preliminary Plat  Final Plat - Case Number(s): S-12430, Recorded Plat 2019-41  
 Conditional Use - Case Number(s): 2014-056  
 Zoning variance - Case Number(s):  
 Land Use Enforcement Action for  
 Building or Land Use Permit for Fill/Grading Plan Permit C16-1442, C.O. Permit X-18-1618  
 Wetland permit:  Army Corp of Engineers  Municipality of Anchorage

**SUBMITTAL REQUIREMENTS**

- 1 copy required:  Signed application (original)  Ownership and beneficial interest form  
 Watershed sign off form  Underlying plat  
 Special limitations from the underlying zoning, if applicable
- 35 copies required:  Signed application (copies)  
 Map of area surrounding petition site within 500 feet, including zoning and existing uses  
 Map of existing conditions, to scale, including:  
 land uses  structures  utilities  vegetation  soils  
 natural features  drainage  topography  site access  pedestrian facilities  
 vehicle circulation and driveways  easements and/or reservations  
 Project narrative explaining:  
 the project  planning objectives  facility operations  
 an analysis of how the proposal meets the standards on page 3 of this application  
 construction and operation schedule  final ownership  
 gross and net density (PUDs only)  
 Site plan(s) to scale depicting, with dimensions:  
 building footprints  parking areas  vehicle circulation and driveways  
 pedestrian facilities  lighting  grading  landscaping  
 loading facilities  fences  drainage  required open space  
 snow storage area or alternative strategy  trash receptacle location and screening detail  
 easements  significant natural features  freestanding sign location(s)  
 Building plans to scale depicting, with dimensions:  
 floor plans  building elevations  exterior colors and textures  
 Summary of community meeting(s)

(Additional information may be required.)



Land Surveying  
Land Development Consultants  
Subdivision Specialists  
Construction Surveying

124 E 7th Avenue, Anchorage, Alaska 99501 www.S4AK.com 907-306-8104

January 9, 2020

Attachment 'A' Narrative  
Sand Lake Reclamation Site Conditional Use Permit Amendment

**The Project site:** Sand Lake Reclamation of the Sand Lake Gravel Pit, located at the northeast corner of Dimond Blvd. & Sand Lake Road, containing approximately 76 acres.

**Purpose & Planning Objectives:** The final planning objective is to continue reclamation of the site until reaching the final contours as shown on the proposed site plan. The purpose is three-fold:

1. Amend the conditional use with the new legal description based on the recently recorded plat. The legal description for the entire site is Tract A, Lancaster Subdivision, and Tracts 1, 2, & 3, Polen Park Subdivision.
2. Tract A, Lancaster, & Tract 1, Polen Park will continue to be a land reclamation area being filled with non-structural fill and other fill as per the underlying CUP. Tract 2 & 3 of Polen Park are being filled with only structural fill, as can be seen on sheet C2 of the grading & drainage plan attached to this application.
3. Amending the final grading & restoration plan to conform around Tracts 2 & 3 of Polen Park.

For purposes of this application, the areas accepting fill as per the underlying CUP will be referred to as Area A. The areas accepting only structural fill will be referred to as Area B.

**Construction & Operations Schedule:** The operations schedule is from 7:00 am to 6:00 pm, Monday thru Saturday. No operations will be permitted on Sundays or legal holidays.

**Final Ownership:** AS&G will retain ownership of the parcels.

**Community Participation:** As per Title 21, we held a community meeting on August 14, 2019 at 6:00 pm. The community meeting was held on-site at the project location. We mailed out approx. 221 mailers, the mailing list was provided by the MOA Planning Department. The meeting adjourned at 7:10 pm. The community meeting was held on-site for two salient reasons: 1. The Sand Lake Community Council did not hold a meeting in August, and, 2. This gave the community the chance to view the project and discuss the project while being right on the project itself. A lot of neighbors showed up for the meeting and participated in a healthy discussion of the project. The meeting lasted for an hour & 10 minutes, and the after-meeting went on for a while and the

community, AS&G & others partook in discussions and communications about the project. We also held another community meeting at the regularly scheduled Sand Lake Community Council meeting on November 13, 2019. Please refer to the enclosed "Summary of Community Meeting" for further detail.

### **Pre-Application Conference**

There was a pre-application conference held on July 17, 2019 at the MOA Planning Departments conference room.

### ***General Conditional Use Standards (AMC 21.03.080.D)***

#### ***1. The proposed use is consistent with the Comprehensive Plan and all applicable provisions of this title and applicable state and federal regulations;***

Response: The proposed use is consistent with the 2040 Land Use Plan as amended by A.O. 2019-142, and with the West Anchorage District Plan.

Area A: The 2040 plan classifies Area A as "Other Open Space". Other Open Space is defined on page 51 of the plan as; *"This designation applies to non-municipal public and private open spaces that function as part of the Anchorage Bowl's system of parks, open space, outdoor recreational facilities, and natural preservation areas.*

*It also includes private lands that by easement, subdivision, permit conditions, agreement, commercial activity, or environmental constraints – will continue to function as open space. Many are private lands set aside as common open space in residential development. Some open spaces in this designation are not intended to provide public recreation access. The uses recommended by the plan are: Natural areas, passive use areas, indoor and outdoor recreation facilities, community playgrounds, community or interpretive gardens, outdoor commercial recreation, or agricultural nursery and horticultural uses."*

Area B: The 2040 plan classifies Area B as 'compact mixed-residential low' & 'small scale commercial.' The filling of this site with structural materials will allow for the future development of this site as permitted by the 2040 Plan and Title 21 code.

In summary, this CUP Amendment & Land Reclamation plan fits within the qualifications and accepted uses as outlined in the 2040 Land Use Plan.

The West Anchorage District Plan classifies Area A as; "Other Areas that Function as Park & Natural Resources." The description of which is similar to the 2040 LUP description above, and *"Includes a small number of dispersed sites serving as private park, outdoor recreation, wetland mitigation, or natural resource areas, some of which may not allow public recreation access."* Area B is classified as 'small scale commercial' and 'low – medium residential.' The filling with structural fill will allow future development as per the WADP and Title 21 code.

**2. The proposed use is consistent with the purpose and intent of the zoning district in which it is located, including any district specific standards set forth in chapter 21.04:**

Response: Area A & B are zoned R-1A. Parks, public or private are a permitted use in R-1A. Natural Resource Extraction is allowed by zoning code through the conditional use process. Land Reclamation, this CUP, is allowed by Title 21 zoning code through the Conditional Use Process. (Smaller sites may be approved through the Administrative Site Plan Review process.)

Upon approval of a CUP amendment, Tract 2, Polen Park will become zoned R-2M, and Tract 3, Polen Park will become zoned B-1A.

**3. The proposed use is consistent with any applicable use-specific standards set forth in chapter 21.05;**

Response: This Land Reclamation Conditional Use Permit application complies with all of the specifics as outlined in Title 21.05.060.E.5, titled 'Land Reclamation.'

**4. The site size, dimensions, shape, location, and topography are adequate for the needs of the proposed use and any mitigation needed to address potential impacts;**

Response: This Land Reclamation CUP Amendment site has been successfully going through filling and reclamation for many years, and this CUP will bring the process to closure within about 5 years or so, depending on the economy. All mitigations have been addressed by past CUP's, and by this application. Please refer to the enclosed diagram titled "Estimated Filling Phases" that shows the areas that have already been graded and seeded, and the expected future phases.

**5. The proposed use will not alter the character of the surrounding area in a manner which substantially limits, impairs, or prevents the use of surrounding properties for the permitted uses listed in the underlying zoning district;**

Response: This CUP Land Reclamation permit will not alter the character of the surrounding area. The CUP will simply prepare the site for its future final use by finishing the filling and grading of the pit.

**6. The proposed use is compatible with the uses allowed on adjacent properties, in terms of its scale, site design, operating characteristics (hours of operation, traffic generation, lighting, noise, odor, dust, and other external impacts.);**

Response: This permit is compatible with the adjacent properties. The final site plan of Area A will create recreational and other possibilities for the surrounding neighborhood

as outlined in the allowable uses. The final site plan of area B will prepare the site for future residential & small-scale commercial development as per the 2040 plan.

**7. Any significant adverse impacts anticipated to result from the use will be mitigated or offset to the maximum extent feasible;**

Response: There is no significant adverse impact by the approval of this permit. The reclamation plan addresses all of the environmental issues involved in reclamation processes. The final product will be an asset to the local neighborhoods, and to the city in general.

**8. The proposed use is appropriately located with respect to the transportation system, including but not limited to existing and/or planned street designations and improvements, street capacity, access to collectors or arterials, connectivity, off-site parking impacts, transit availability, impact on pedestrian, bicycle, and transit circulation, and safety for all modes;**

Response: This parcel is well located to the transportation system, with access for reclamation filling only allowed off of Sand Lake Road, a type II minor arterial. Sand Lake Road will also serve as access to the property when the final site plan contours have been completed. The Sand Lake Fill Site does not utilize any residential streets for access. Access for reclamation operations are from Sand Lake Road, classified as a Class II minor arterial street, according to the Official Streets & Highway Plan. There are currently 3 approved reclamation-site related access points along Sand Lake Road. The new access point along Dimond Boulevard is only for providing access to Polen Park Tract 2 & 3 for future development. Access along Dimond Blvd, as stated in the underlying CUP, is prohibited for the purposes of the CUP reclamation filling of the site. The Dimond Blvd access was permitted under the State of Alaska Department of Transportation and Public Facilities under Driveway Approval to Construct #28095. The Sand Lake Road access to Polen Park was permitted under the State of Alaska Department of Transportation and Public Facilities under Driveway Approval to Construct #26494. Copies of all of the driveway permits have been copied to the Planning department.

**9. The proposed use is appropriately located with respect to existing and/or planned water supply, fire and police protection, wastewater disposal, storm water disposal, and similar facilities and services;**

Response: The site is currently served by public water supplies, public sewer systems, fire hydrants, and lies within the fire & police protection boundary.

**Use Specific Standards for Land Reclamation. Title 21.05.060.E.5.b.ii**

**(A) A site plan showing:** (see attached site plan.)

- (1) Drainage.**
- (2) Existing & proposed topographical contours.**
- (3) Water table information.**
- (3) Points of vehicular access to the site.**

**(B) An erosion & sediment control plan.**

Response: A complete erosion & sediment control plan report by Triad Engineering is attached to this application.

**(C) A description of the soil types encountered on the site.**

Response: Existing soils type are sand & gravel and fill material as per the grading plan.

**(D) A landscaping plan for the period of land reclamation operations and for the final restoration of the site.**

Response: The entire site will be graded to the contours as shown on the site plan, top-soiled and seeded. Please refer to the enclosed figure titled "Estimated Filling Phases" for further detail.

**(E) A security plan to prevent casual trespass.**

Response: All gates are locked during off hours. The entire site is monitored via live video cameras and is also being recorded via DVR. The wheel wash electrical control panel is fenced in and has razor wire at the top to prevent anyone from climbing over the secured area.

**(F) Proposed hours of operation.**

Response: The operations schedule is from 7:00 am to 6:00 pm, Monday thru Saturday. No operations will be permitted on Sundays or legal holidays.

**(G) A description of land reclamation and processing operations for the site.**

In Area A, there are no proposed changes in the process of land reclamation & processing operations from what is currently regulated by the underlying CUP. In Area B, only structural fill is allowed.

**(H) Projected traffic counts for each point of vehicular access to the site.**

Response: History has shown that the total number of truck trips for the site will average 250 one-way project-related trips per day of operation.

***(I) An estimate of the quantity of materials to be imported to the site and timetable, with supporting calculations conforming to generally accepted engineering principles.***

Response: According to Anchorage Sand & Gravel (AS&G) records, roughly 269,000 cubic yards (CY) of material was deposited at the Sand Lake Fill Site in 2018. Roughly 6.7 million CY's have been deposited in the Sand Lake Fill Site Pit since 1983. The remaining estimated fill quantity is 1.2 million CY's. At the average yearly fill rate of 270,000 CY's, the site should be completed in another 4 1/2 years. This coincides with the current CUP permit expiration date of May 5<sup>th</sup>, 2024. The quantity of fill remaining as stated in the underlying approved CUP PZC Resolution 2014-029, condition 5.B, was 2.5 million CY's. Since 2014, 1.6 million CY's of fill have been placed, which leaves 0.9 million CY's remaining as per the original CUP. With this new proposed final grading plan, there is an increase of 0.3 million CY's of fill anticipated. The increase is mainly due to the proposed design keeping the same elevation as the northern half, but extending that elevation southerly in order to create a larger area at the same elevation to more easily facilitate future uses.

***(J) A statement of the types of materials that will be accepted at the site.***

In Area A, there are not any proposed changes in the allowed types of fill from what is currently allowed by the existing CUP. The list of acceptable fill materials is as follows: peat, clay, silty soil, hydro-axed materials, tree fragments, stumps, turf, and other organics associated with permitted clearing and grubbing operations, including wood chips from grinding operations, and concrete remnants related to demolition, concrete testing, or construction site clean-up. In Area B, only structural fill will be allowed.

***(K) Such other materials as the director may require by regulation pursuant to AMC chapter 3.40.***

***21.05.060.E.5.b.iii The site plan and erosion and sediment control plan required in subsection ii. Above shall be subject to review and approval for drainage, erosion and sedimentation control; for conformance with the 208 Areawide Water Quality Management Plan; and for compliance with generally accepted sound engineering principles.***

Response: Please refer to the enclosed "Preliminary Stormwater Management Report" prepared by Triad Engineering.

***Title 21.05.060.E.5.b.v. In addition to the conditional use standards of approval at 21.03.080.D., the planning and zoning commission may approve a land reclamation use only if the commission finds that the use also meets the following standards;***

***A. Principal access to the site shall minimize the use of residential streets, and access roads shall be treated in a manner to make them dust free. Where access roads intersect arterials, suitable traffic controls shall be established.***

Response: The Sand Lake Fill Site does not utilize any local residential streets for access. Access for reclamation operations are from Sand Lake Road, classified as a Class II minor arterial street, according to the Official Streets & Highway Plan. Water trucks are utilized to keep dust at a minimum. There are currently 3 approved reclamation-site related access points along Sand Lake Road. The new access point along Dimond Boulevard is only for providing access to Polen Park Tract 2 & 3 for future development. Access along Dimond Blvd, as stated in the underlying CUP, is prohibited for the purposes of the CUP reclamation of the site. The Dimond Blvd access was permitted under the State of Alaska Department of Transportation and Public Facilities under Driveway Approval to Construct #28095.

***B. The site will not accept material that are hazardous or flammable.***

Response: In Area A, only peat, clay, silty soil, hydro-axed materials, tree fragments, stumps, turf, and other organics associated with permitted clearing and grubbing operations, including wood chips from grinding operations, and concrete remnants related to demolition, concrete testing, or construction site clean-up. No hazardous or flammable material are allowed. In Area B, only structural fill is allowed.

***C. The site will not accept junk as defined in chapter 21.14.***

Response: In Area A, none of the items defined as junk by Title 21.14 are allowed as fill material. Junk is defined in chapter 21.14 as: "Any worn-out, wrecked, scrapped, partially or fully dismantled, discarded tangible material, or combination of materials or items, including junk vehicles as defined in AMC 15.20.010. Also included are machinery, metal, rags, rubber, paper, plastics, chemicals, and building material which cannot, without further alteration and reconditioning, be used for their original purpose." In Area B, only structural fill is allowed.

***D. The site will not accept soils contaminated with petroleum product or byproducts.***

Response: No soils or any other product contaminated with petroleum products or byproducts are accepted as fill material. Strict monitoring is on-going.

***E. The reclamation operations will not pose a hazard to the public health & safety.***

Response: The Sand Lake Fill Site Land Reclamation does not pose a hazard to the public health or safety. All access points are gated and locked during non-operational hours. The entire site is monitored for safety by recording video security cameras.

***F. The reclamation operations will not generate noise, dust, surface water runoff, groundwater pollution or traffic that will unduly impact surrounding land use.***

Response: Noise will be kept to a minimum and at specific hours of operation as approved. Dust will be kept at a minimum with the use of a water truck. Surface water runoff will be strictly regulated as per public works standards and by the submittal and approval of a SWWTP, traffic will not be on any local residential streets, access is as shown on the site plan directly from Sand Lake Road. All on-site equipment shall be muffled and use white noise alarms or motion detectors for backing up.

***G. The restoration plan for the site ensures that, after reclamation operations cease, the site will be left in a safe, stable, and aesthetically acceptable condition.***

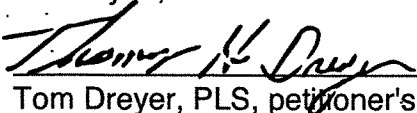
Response: This land reclamation will leave the site in a condition that is appropriate for the future use of the land. The final use of the land will be for development as per the underlying zoning and as per the conditions of the existing Conditional Use Permit. Upon final reclamation, Area A will allow for the creation of outdoor recreation areas subject to the applicable provisions of Title 21, passive or active open space, functional open space which could include open fields, athletic fields, community gardens, commercial nurseries, and the like. Area B will only be reclaimed with structural fill to facilitate future development as per the 2040 plan & Title 21 code. The entire site will be graded to the approved contours and seeded with grass.

***H. The proposed use meets such additional standards for land reclamation conditional uses as the director may establish by regulation pursuant to AMC chapter 3.40.***

Response: This refers to any future laws that may be passed as per AMC chapter 3.40. At this date, there are no known to us any added laws to the regulation of land reclamation conditional use permits.

A copy of the underlying CUP PZC Resolution 2014-029 is included in this packet, which includes an extensive history of the site.

Thank you,



e-signed 1/10/20

Tom Dreyer, PLS, petitioner's representative



Land Surveying  
Land Development Consultants  
Subdivision Specialists  
Construction Surveying

124 E 7th Avenue, Anchorage, Alaska 99501 www.S4AK.com 907-306-8104

August 26, 2019

MOA Planning Department  
4700 Elmore Road  
Anchorage, Ak 99519

### Letter of Authorization

The owners of the below listed parcels, do, hereby authorize the S4 Group to represent them before the MOA for the Conditional Use Permit Amendment/Land Reclamation of the parcels listed below:

Lancaster Subdivision, Tract A,  
Polen Park Subdivision, Tract 1 & 2

8-27-19

Owner: Authorized signature for: Anchorage Sand & Gravel, Inc.

**WMS WATERCOURSE MAPPING SUMMARY**

Per the requirements for watercourse verification outlined in Project Management and Engineering Operating Policy and Procedure #8 and Planning Department Operating Policy and Procedure #1 (effective June 18, 2007), MOA Watershed Management Services has inspected the following location for the presence or absence of stream channels or other watercourses, as defined in Anchorage Municipal Code (21.35).

- Project Case Number or Subdivision Name: Lancaster + Pollen Park Subds,
- Project Location, Tax ID, or Legal Description: Lancaster Tr A Parcel # 01116242  
Pollen Park Trk-3 (parcel #s 01120192, 01120193, 01120194)
- Project Area (if different from the entire parcel or subdivision): \_\_\_\_\_

In accordance with the requirements and methods identified, WMS verifies that this parcel, project area, or application:

X PPC **DOES NOT** contain stream channels and/or drainageways, as identified in WMS field or archival mapping information.\*

\_\_\_\_\_ **DOES** contain stream channels and/or drainageways **AND** these are located and identified on submittal documents in general congruence with WMS field and archival mapping information.

*New or additional mapping **IS NOT REQUIRED**.\**

\_\_\_\_\_ Contains stream channels and/or drainageways **BUT** one or more streams or other watercourses:

- are **NOT** shown on submittal documents, or
- are **NOT** depicted adequately on submittal documents for verification, or
- are **NOT** located or identified on submittal documents in general congruence with WMS field and archival mapping information.

*New or additional mapping **IS REQUIRED** and must be re-submitted for further review and verification.\**

\_\_\_\_\_ Presence of stream channels and/or drainageways is unknown **AND** field verification is not possible at this time. WMS will verify as soon as conditions and prioritized resources allow.

\* Streams omitted in error by WMS or others remain subject to MOA Code and must be shown in new mapping upon identification of the error.

**ADDITIONAL INFORMATION:**

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Y <input checked="" type="checkbox"/> N            | WMS written drainage recommendations are available.      | <input type="checkbox"/> Preliminary <input type="checkbox"/> Final            |
| <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N | WMS written field inspection report or map is available. | <input type="checkbox"/> Preliminary <input checked="" type="checkbox"/> Final |
| <input type="checkbox"/> Y <input checked="" type="checkbox"/> N            | Field flagging and/or map-grade GPS data is available.   |  |

Inspection Certified By:

Date:

[Signature]

8/29/19



Land Surveying  
Land Development Consultants  
Subdivision Specialists  
Construction Surveying

124 E 7th Avenue, Anchorage, Alaska 99501 www.S4AK.com 907-306-8104

November 18, 2019

Mr. Francis McLaughlin  
MOA Senior Planner  
4700 Elmore Road  
Anchorage, Ak 99507

Re: PZC Case # 2019-0138, Summary of Community Meeting # 2

Project: Sand Lake Fill Site CUP Amendment

Dear Mr. McLaughlin,

This Letter serves as the 'Summary of Community Meeting' as per Title 21.03.020.C.6. The property's legal description is:

**Legal Description:** Lancaster Subdivision Tract A, & Polen Park Subdivision Tract 1, 2, & 3.

The project includes the following task:

1. Amendment to an approved conditional use permit.

The mailing list for the surrounding area was created by the MOA Planning Department and we mailed by first class mail over 387 Notices of Community Meeting (21 were returned.) by October 08, 2019, which is at least 21 days before the meeting. We scheduled the Community Meeting at the regularly scheduled Sand Lake Community Council's meeting on November 11<sup>th</sup>, 2019. The meeting date was changed by the SLCC to November 13, 2019. (SLCC changed due to a scheduling conflict.) For the date change, we mailed out 387 mailers, with 20 returned, on November 4, 2019.

On November 13, 2019 we held the CM (Community Meeting) at 7:00 in the library of Sand Lake Elementary School. There was approximately 29 people from the area that attended, along with the owners, others, and the petitioner's representative. There was a lengthy discussion of about an hour & ten minutes on the project.

Questions & Responses

If members of the Community Council or the MOA Planning staff need any further information or clarification, please email me at: tom@s4ak.com.

Question: Why this second community meeting?

Response: We included Tract 2 & 3 of Polen Park Subdivision, which was not shown on the mailer for the first community meeting.

Question: How long is the existing CUP good for?

Response: The existing CUP expires in June of 2024.

Question: What is the settlement rate of the fill?

Response: It varies considerably according to differing fill types.

Question: Are the contours shown existing or proposed?

Response: The proposed contours are shown on the site plan.

Question: Is the existing grade in the northern area going to get taller?

Response: No, the northern half is already finished.

Question: Who will maintain ownership when the fill site is completed?

Response: AS&G currently owns the land, and will own it when the fill site is completed.

Question: Will this become a city park?

Response: At this point, the city has no plans on purchasing the property.

Question: What will the finished surface look like?

Response: The finished surface is required to be smoothly graded and seeded with grass.

Question: Why are we showing a parking lot & ball fields?

Response: We have shown a parking lot & ball fields on the site plan just to show what could be built and to show them to scale.

Question: What about the rezoning of Polen Park?

Response: The rezoning is a complete different application & is being introduced to the Assembly next Tuesday.

Question: What does introduced to the Assembly mean?

Response: It means that is when a packet of all the information gathered on the case is given to the Assembly members.

Question: How long has this Fill Site been going on?

Response: The fill site started in the early 1980's, as far as I know. Our research goes back to 1983.

Question: What's the status of the CUP Application?

Response: We will submit the application to the MOA in December or January.

Question: When was Polen Park subdivided?

Response: The subdivision was recorded in 2019.

Question: I thought this was going to be a park?

Response: It would only be a Muni Park if the Muni bought the land.

Question: Is the remainder going to ever be deeded to the city as a park?

Response: No. It has never been according to the CUP's, to be deeded to the city as a park.

Question: What are we going to build on the 10 acres of Polen Park?

Response: Again, this question relates to the rezone, not the CUP. The B-1A will be developed as what can be developed in B-1A according to Title 21 standards. The R-2M zoned parcel could be built with up to 8-plex residential housing.

Question: Who decides who gets the mailers?

Response: The list is created by the MOA planning department and given to us in a spreadsheet form. The list includes all property within 500 feet of the outer boundary, the list gets expanded until at least 50 properties are noticed.

Question: What about the trail connecting points along the eastern boundary?

Response: There will be access points for neighborhood connections as per the MOA trails coordinator.

Question: What is the elevation of the drainage pond?

Response: 110 foot elevation. 60 feet in elevation above the pond that's in Westpark.

Question: What else is changing on the grading plan?

Response: The grading plan is changing to fit around the Polen Park tracts and the middle step-down is being eliminated, so the elevation of the northern area will continue as shown on the site plan.

Question: Are you planning on vacating Endicott Street? What about access?

Response: We have no plans on vacating Endicott Street. Access could be limited by fencing along the Street.

Question: On the rezone, are you matching the density of the neighborhood with single family housing?

Response: The density will be a maximum of 15 dwelling units per acre on the R-2M zoned 8 acres, with a maximum building type of 8-plex units.

Question: I feel that we can appeal the PZC Case on the rezoning.

Response: The PZC recommendation in my opinion is not appealable, the proper path would be to take your issue to the Assembly.

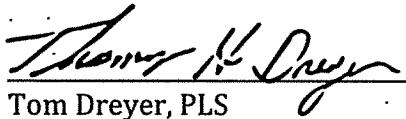
Question: Why was the SLCC Resolution on the rezone not in the PZC packet at the public hearing?

Response: The SLCC president said he would confer with the planning department and look into it.

Question: Voting on the rezone?

Response: The SLCC voted to not support the rezoning of Polen Park. The tally was 20+- for not supporting the rezone, 0 were for supporting the rezone.

Thank you,



e-signed 11/18/19

Tom Dreyer, PLS

S4 Group

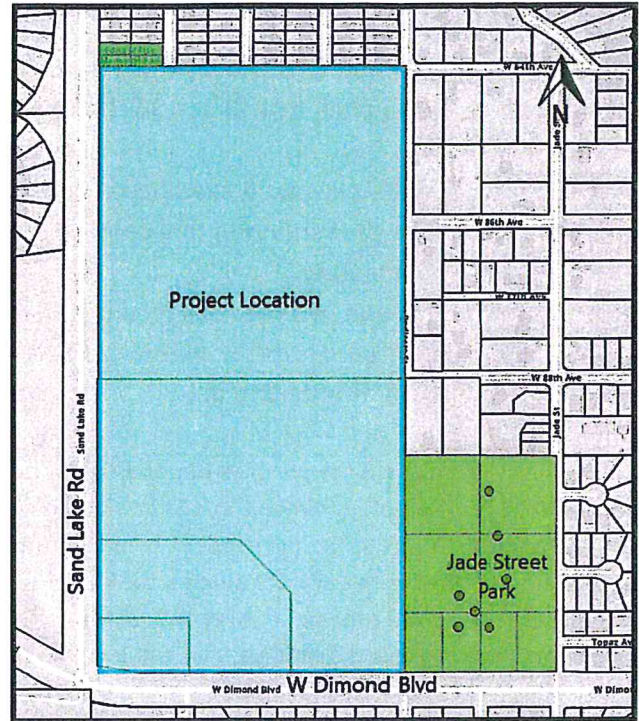
Petitioner's representative

# COMMUNITY MEETING

Sand Lake Community Meeting: Sand Lake Fill Site Conditional Use Amendment

S4 Group LLC, will be at the scheduled Sand Lake Community Council meeting on **November 11, 2019 at 6:30 PM** to present a proposed conditional use amendment. The project site is at the NE corner of W Dimond Blvd. and Sand Lake Rd; legal description: Polen Park Subdivision Tract 1, 2, 3, and Lancaster Tract A. The proposal is for a condition use permit amendment for the project site; as set forth in Title 21.

Representatives will provide an overview of the conditional use amendment, project schedule, and will be available to answer questions.



124 E 7th Ave  
Anchorage, AK 99501

**MON, NOV 11, 2019 @ 6:30 PM**

Sand Lake Community Council  
Sand Lake Elementary School Library  
7500 Jewel Lake Road  
Anchorage, AK 99502

AFUOLA CHAUNTEL T  
8325 SEAVIEW ST  
ANCHORAGE, AK 99502

We welcome your feedback! Interested parties may appear at the meeting and speak on the matter. You can also submit your comments or request additional information by contacting:

Tom Dreyer, PLS  
S4 Group, LLC  
Tom@s4ak.com

# COMMUNITY MEETING: DATE CHANGE

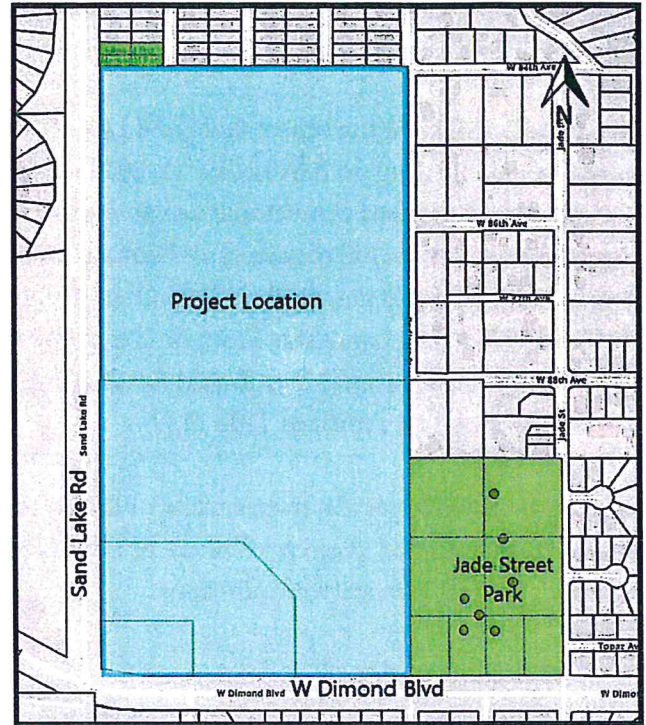
Sand Lake Community Meeting: Sand Lake Fill Site Conditional Use Amendment

Sand Lake Community Council's Nov 11, 2019 meeting has been moved to Wed, Nov 13 at 6:30 PM.

Representatives of the proposed conditional use amendment will still be presenting at this community meeting.

If you are not able to make this meeting, you can still submit any questions or concerns for planning review by calling or emailing us.

The project site is at the NE corner of W Dimond Blvd. and Sand Lake Rd; legal description: Polen Park Subdivision Tract 1, 2, 3, and Lancaster Tract A. The proposal is for a condition use permit amendment for the project site; as set forth in Title 21. Representatives will provide an overview of the conditional use amendment, project schedule, and will be available to answer questions.



124 E 7th Ave  
Anchorage, AK 99501

WED, NOV 13, 2019 @ 6:30 PM

Sand Lake Community Council  
Sand Lake Elementary School Library  
7500 Jewel Lake Road  
Anchorage, AK 99502

AFUOLA CHAUNTEL T  
8325 SEAVIEW ST  
ANCHORAGE, AK 99502

We welcome your feedback! Interested parties may appear at the meeting and speak on the matter. You can also submit your comments or request additional information by contacting:

Tom Dreyer, PLS  
S4 Group, LLC  
Tom@s4ak.com  
907-306-8104

# SAND LAKE FILL SITE

Tract A, Lancaster & Tract 1, 2, & 3, Polen Park Subdivision

## PRELIMINARY STORMWATER MANAGEMENT REPORT

Anchorage Sand & Gravel Co, Inc.

1040 O'Malley Road

Anchorage, AK 99507

Prepared By:

**TRIAD**  
ENGINEERING, LLC

P.O. Box 111989  
Anchorage, Alaska 99511  
(907) 561-6537  
www.triadak.com

REV January 2020

Prepared By: **Brandon J. Marcott, P.E.**



## Table of Contents

<b>1. Project Overview</b> .....	3
<b>1.1 Location</b> .....	3
<b>1.2 Description</b> .....	3
<b>1.3 Category Determination</b> .....	4
<b>1.4 Drainage Project Notification</b> .....	4
<b>2. Drainage Basin</b> .....	4
<b>2.1 Basin size</b> .....	4
<b>2.2 Existing Conditions &amp; Land Cover</b> .....	4
<b>2.3 Proposed Conditions &amp; Land Cover</b> .....	4
<b>2.4 Map of Basin</b> .....	5
<b>3. Existing Conditions</b> .....	5
<b>3.1 Predevelopment Site Plan</b> .....	5
<b>3.2 Floodways, Floodplains and Problem Areas</b> .....	6
<b>3.3 Soils</b> .....	6
<b>4. Proposed Conditions</b> .....	6
<b>4.1 Post-development Site Plan</b> .....	6
<b>4.2 Discharge Points and Receiving Water Bodies</b> .....	7
<b>5. Stormwater Controls Construction Consideration Plan</b> .....	7
<b>5.1 Vegetated Swale</b> .....	7
<b>5.2 Retention Pond</b> .....	7
<b>6. Compliance with Stormwater Management Requirements</b> .....	8
<b>6.1 Water Quality Treatment</b> .....	8
<b>6.2 Extended Detention (Channel Protection)</b> .....	8
<b>6.3 Conveyance</b> .....	8
<b>6.4 Detention and Peak Flow Control</b> .....	8
<b>6.5 Downstream Impact Analysis</b> .....	10
<b>6.6 Wetland Compliance</b> .....	10
<b>6.7 Operations and Maintenance Plan</b> .....	10
<b>6.7 Conclusion</b> .....	10
<b>7. Appendix</b> .....	11
<b>7.1 Orographic Map</b> .....	11

**7.2 Watershed Maps..... 12**  
**7.3 Hydrologic and Hydraulic Computations ..... 14**  
**7.4 Stormwater Management Design Drawings ..... 23**  
**7.5 Operation and Maintenance Plan ..... 23**

# 1. Project Overview

## 1.1 Location

The project is located in the northeast quadrant of the W. Dimond Boulevard and Sand Lake Road intersection in Anchorage, Alaska. The site address is 8501 Sand Lake Road. See below for a location map. Both Dimond Boulevard and Sand Lake Road are publicly dedicated streets owned and maintained by ADOT. In addition to these two streets, the site is bordered by residential development to the north and Jade Street Park and a residential development to the east. Vehicular access to the site is currently from Sand Lake Road. An additional access point is permitted from Dimond Boulevard when the site is subdivided and developed.

Due to the project's location, an orographic factor of 1.0 was used for this drainage analysis. An orographic map is included in Appendix 7.1.



Location Map

## 1.2 Description

The site contains four separate parcels, Tract A of Lancaster Subdivision and Tracts 1-3 of Polen Park Subdivision with a total area of approximately 79.2 acres. All parcels are owned by Anchorage Sand & Gravel Co, Inc. The site is currently operating under a Conditional Use Permit for a fill operation. Approximately 10 acres in the southwest

corner is planned for commercial/residential use and the remaining 69.2 acres are to remain undeveloped as open space.

### 1.3 Category Determination

The Anchorage Stormwater Manual, Version 1.0 (December 2017) will be used for the analysis and relevant stormwater management requirements. The project will disturb more than 10,000 square feet and is categorized as a “Large Project” per Table 3.3.1.

### 1.4 Drainage Project Notification

Mapping has been completed by Watershed Management in June of 2018. The site does not contain stream channels or MOA-identified drainageways.

## 2. Drainage Basin

### 2.1 Basin size

The overall drainage basin analyzed within this report is approximately 111 acres.

### 2.2 Existing Conditions & Land Cover

The site was once a natural resource extraction site and is currently undergoing land reclamation. The site has operated as a natural resource extraction site since 1979 and has received various types of fill over the past 40 years, including unusable excavated material, peat and concrete.

The primary landcover is bare soil and dirt access roads with some grass and mature vegetation present on site. Sand Lake Road and Dimond Boulevard contribute to the basin, as well as a residential neighborhood to the north, and Jade Park along with portions of the backyards of properties to the east of the parcel. The overall drainage basin is designated as a sink with the low point shown in the map on the following page. All 111 acres of the drainage basin contribute runoff. The proposed land cover for the basin is shown in the table below.

**Contributing Pre-development Land Cover**

Land Cover	Slope	Area [Acre]	Percent
Impervious	1-4%	17.7	15.9%
Bare Soil or Dirt Access Rd	2-50%	52.7	47.3%
Natural Forest (Poor)	2-5%	11	9.9%
Lawn (Moderate Slopes)	1-5%	30	26.9%

There is no impervious area within the 79.2 acres of the project site under pre-development conditions.

### 2.3 Proposed Conditions & Land Cover

The proposed development creates approximately 8 acres of impervious area within the commercial/residential portion on site. This correlates to 10% of the 79.2 acres. The remaining area, roughly 71.2 acres, was modeled as Lawn with varying slopes. The proposed land cover for the drainage basin is shown in the table on the following page.

### Contributing Post-development Land Cover

Land Cover	Slope	Area [Acre]	Percent
Impervious	1-4%	33.1	29.8%
Lawn (Moderate Slopes)	2-5%	66.2	59.6%
Lawn (Steep Slopes)	6-50%	11.7	10.6%

## 2.4 Map of Basin

See below for a map of the MOA-delineated drainage basin. The entire 111-acre basin drains to an existing low point on site near the south end of the existing fill operation.



MOA Drainage Map – Screenshot 11/18/18

## 3. Existing Conditions

### 3.1 Predevelopment Site Plan

Existing conditions are shown on the following page. Overland flow from the contributing area sheet drains towards the project where, over time, it infiltrates on site.

There are no established storm drains or conveyance systems present on site. Runoff from surrounding drainage basins is collected in swales or catch basin inlets and conveyed through the municipal storm system where it is discharged to nearby water bodies including Jewel Lake, Sundi Lake, Sand Lake and Cook Inlet.



**Pre-development Site Plan**

### **3.2 Floodways, Floodplains and Problem Areas**

The site is not located within a floodplain and there are no known problem areas in the project's immediate vicinity. There have been no known flooding incidents and there is no standing water visible at the low point on site.

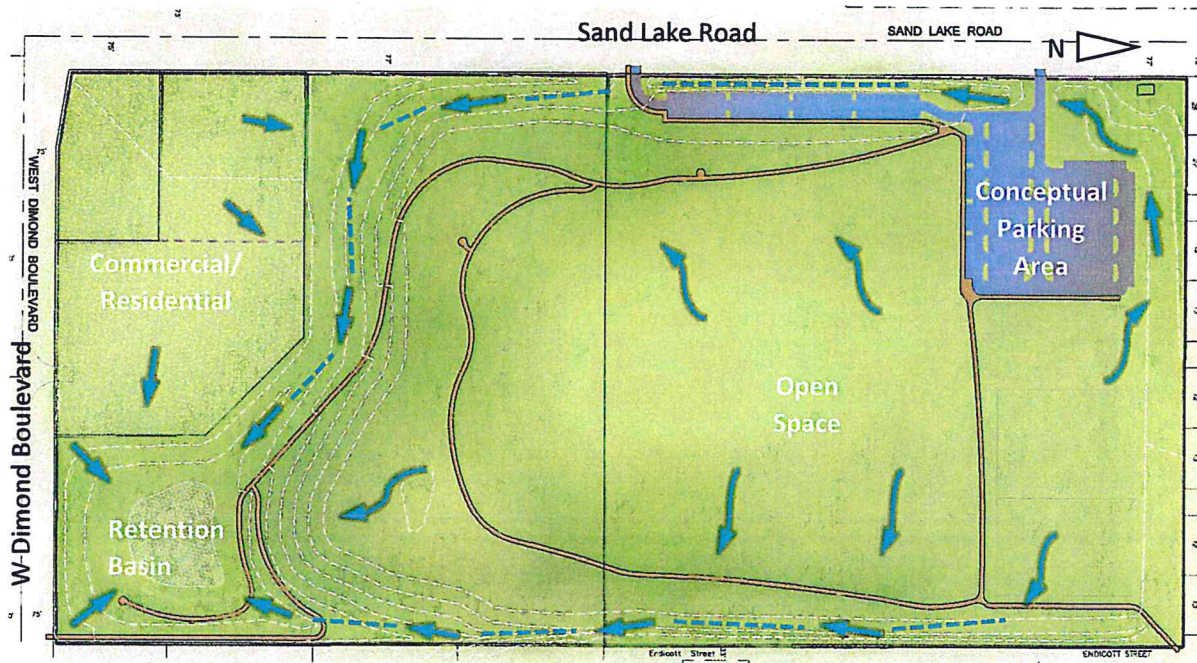
### **3.3 Soils**

As mentioned in Section 2.2, portions of the site have received various fill types under a Conditional Use Permit. The material has been placed and track-walked to an unknown density. Based on the site's history and overall uncompacted nature of the fill, a hydrologic soils group "C" was used for the drainage analysis. The USGS Web Soil Survey has no data for the subject property or immediate surrounding area.

## **4. Proposed Conditions**

### **4.1 Post-development Site Plan**

Post-development conditions will include approximately 10 acres of commercial and residential development and approximately 69.2 acres of lawn and park land. Runoff will be collected in vegetated swales and directed to an onsite retention pond that will be sized to contain the entire 100-year storm event. A post-development site plan is shown on the following page.



**Post-development Site Plan**

#### **4.2 Discharge Points and Receiving Water Bodies**

There is no proposed off-site discharge point. All runoff from the entire 111-acre drainage basin will be contained and infiltrated on site.

### **5. Stormwater Controls Construction Consideration Plan**

The primary controls used for stormwater management will be vegetated swales and a constructed retention pond. A piped storm drain system may be incorporated into the final design for the commercial/residential portion of the site. Any future piped systems within the commercial/residential area will outfall to the retention pond. Construction of a storm drain connection to the existing municipal system is not anticipated.

#### **5.1 Vegetated Swale**

Vegetated swales will be constructed around the perimeter of the open space and commercial area to pick up runoff generated on site as well as runoff flowing into the project from the surrounding area. The vegetated swales will be constructed per the Anchorage Stormwater Manual recommendations. To meet water quality requirements, the swales will be trapezoidal with a minimum 2-foot bottom and 3:1 maximum side slopes. The maximum longitudinal slope will be 6% and check dams will be installed as necessary to limit the velocity to 1 foot per second or less during the first 0.52 inches of rainfall.

#### **5.2 Retention Pond**

A retention pond will be constructed in the southeast corner of the project. The pond will be constructed per the Anchorage Stormwater Manual recommendations and is sized to retain the 100-year storm event on site. The footprint of the pond floor is

approximately 40,000 square feet with 4:1 side slopes around the perimeter. Pond depth varies between 10 and 15 feet. An infiltration rate of 0.5 in/hr was used. This is equivalent to 120 min/in and is based on an “upper limit” infiltration rate of 60 min/in with a factor of safety of 2.

## **6. Compliance with Stormwater Management Requirements**

To comply with the stormwater management requirements, the predevelopment peak runoff was compared to post-development peak flows and the system was designed and sized to meet the requirements of Section 3 of the Anchorage Stormwater Manual.

The Autodesk Storm and Sanitary Sewer program was utilized to model the drainage system. SCS TR-55 methodology with hydrodynamic routing was used for the runoff model. The SCS Type I Cumulative Dimensionless 24-hour Rainfall Distribution in 6-minute increments (Anchorage Stormwater Manual Page D-3) was used for the precipitation model. Time of concentration values for the post-development sub-basins vary from 5 minutes to 45 minutes. Calculations are included in Appendix 7.3.

### **6.1 Water Quality Treatment**

Stormwater management systems must be designed to provide water quality treatment through the use of Green Infrastructure. Treatment must be provided for runoff generated from the first 0.52 inches of rainfall from a 24-hour rainfall event preceded by 48 hours of no precipitation (Section 3.3.2.1).

The first 0.52 inches of precipitation will be treated through the use of vegetated swales and a constructed retention pond. Both of these management tools qualify as Green Infrastructure per Section 3.3.2.1.

### **6.2 Extended Detention (Channel Protection)**

Extended detention is not required since the design will incorporate Green Infrastructure. However, all runoff generated by the 1-year event. is retained on site.

### **6.3 Conveyance**

The storm system must be designed to convey the 10-year 24-hour event (Section 3.3.2.3).

The vegetated swales will be sized to convey the 10-year storm event. The swale used in the analysis is 2-feet deep, with a 2-foot bottom and 3:1 side slopes. At a 2% slope, the swale has a capacity of 111 cfs. The peak runoff carried by the swale during the 10-year event is 15 cfs or less than 14% of the swale’s capacity. During the 10-year event, the maximum depth of flow is 0.6 feet with 1.4 feet of additional freeboard.

### **6.4 Detention and Peak Flow Control**

For this analysis, Option 2 of Section 3.3.2.4 was utilized. Three requirements for Option 2 must be met:

**1) Peak Flow Control**

- a. *Maintain the post-development project runoff peak flow from the 10-year, 24-hour storm to less than or equal to the pre-development runoff peak flow at all project discharge points. AND*
- b. *Maintain the post-development project runoff peak flow from the 100-year, 24-hour storm to less than or equal to 1.05 times the pre-development runoff peak flows.*

The drainage design retains all runoff on site for both the 10 and 100-year events.

**2) Project Flood Bypass:** *Design bypass diversions for the post-development, 100-year, 24-hour storm runoff event or show an unobstructed, overland flow path safely bypassing project structures and/or overtopping project conveyance routes without impact to property affected by bypass route.*

No runoff is discharged off site during the 100-year event. The conveyance systems are designed to carry the peak flow from the 100-year event without adverse impacts to the site or to neighboring properties.

**3) Downstream Impacts:** *A downstream impact analysis is not required for this option if the project is located within the Anchorage Roads and Drainage Service Area (ARDSA).*

The project is located within ARDSA, therefore a downstream impact analysis is not required.

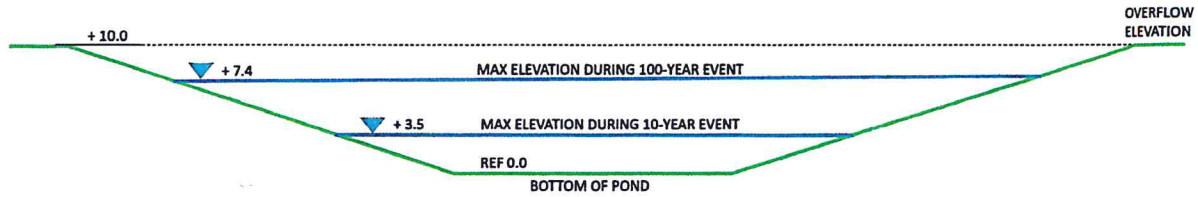
See the table below for a comparison of pre vs post-development flow rates.

**Peak Runoff Rate Comparison**

Peak Flow [cfs]	Pre-development	Post-development	Fraction
10 Year 24 Hour	0	0	1.0
100 Year 24 Hour	0	0	1.0

No runoff occurs during the 10 or 100-year event under pre-development conditions and no additional off-site runoff will be generated by the proposed development. Peak runoff for all events up to and including the 100-year storm will be collected onsite within a retention pond.

For this preliminary analysis, a retention pond footprint of 40,000 square feet with 4:1 side slopes and a max depth of 10 feet was used for the storage model. With these parameters, the basin reaches 28% capacity during the 10-year event and 68% capacity during the 100-year event. See below for a graphic depicting the retention basin cross section. Exact dimensions may change with the final grading design.



Calculations for the analysis are included in Appendix 7.3.

## 6.5 Downstream Impact Analysis

Not required for Option 2, Section 3.3.2.4.

## 6.6 Wetland Compliance

Not applicable, no wetlands are present on site.

## 6.7 Operations and Maintenance Plan

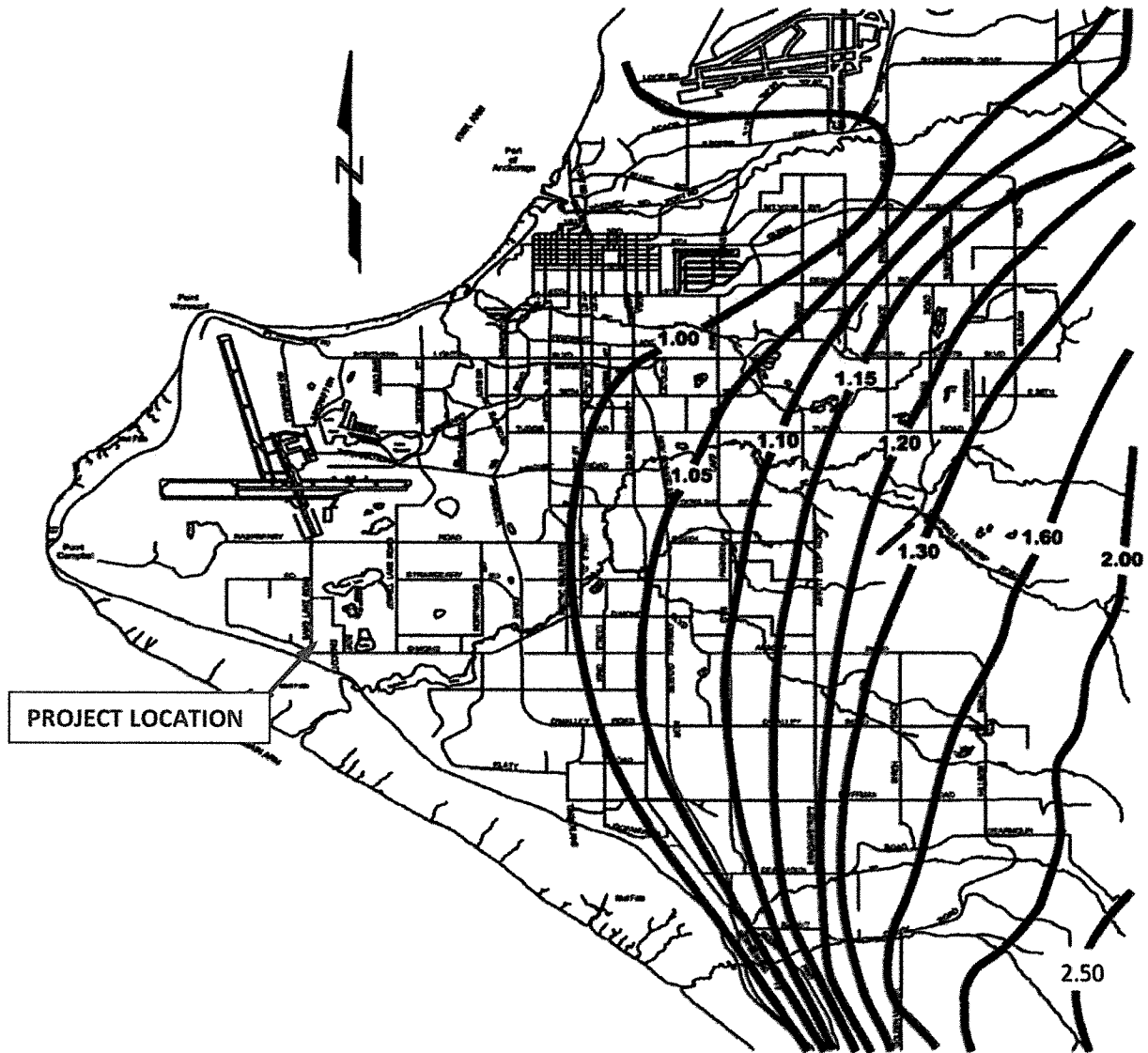
At a minimum, the vegetated swales will require periodic inspection for trash and debris and annual inspection of the soil and vegetation conditions. Revegetation and sediment removal will be required as necessary. The retention basin will also need to be periodically inspected for sediment, trash and debris, and the surrounding vegetation will require upkeep as part of the park's landscaping and maintenance plan.

## 6.7 Conclusion

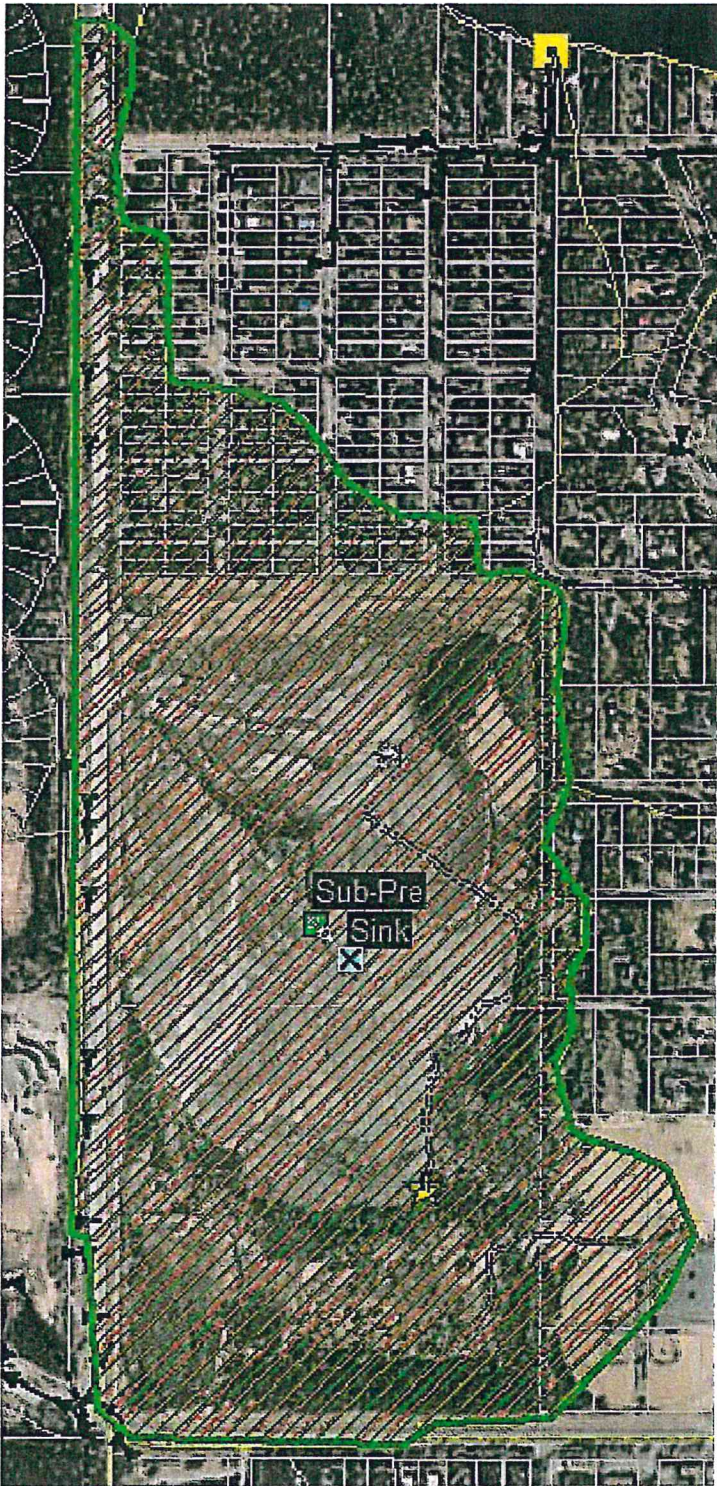
The proposed stormwater management plan complies with all Anchorage Stormwater Manual requirements. Runoff generated by the development will be treated and conveyed with vegetated swales to a constructed retention basin. The retention feature is sized to retain the 100-year storm event.

# 7. Appendix

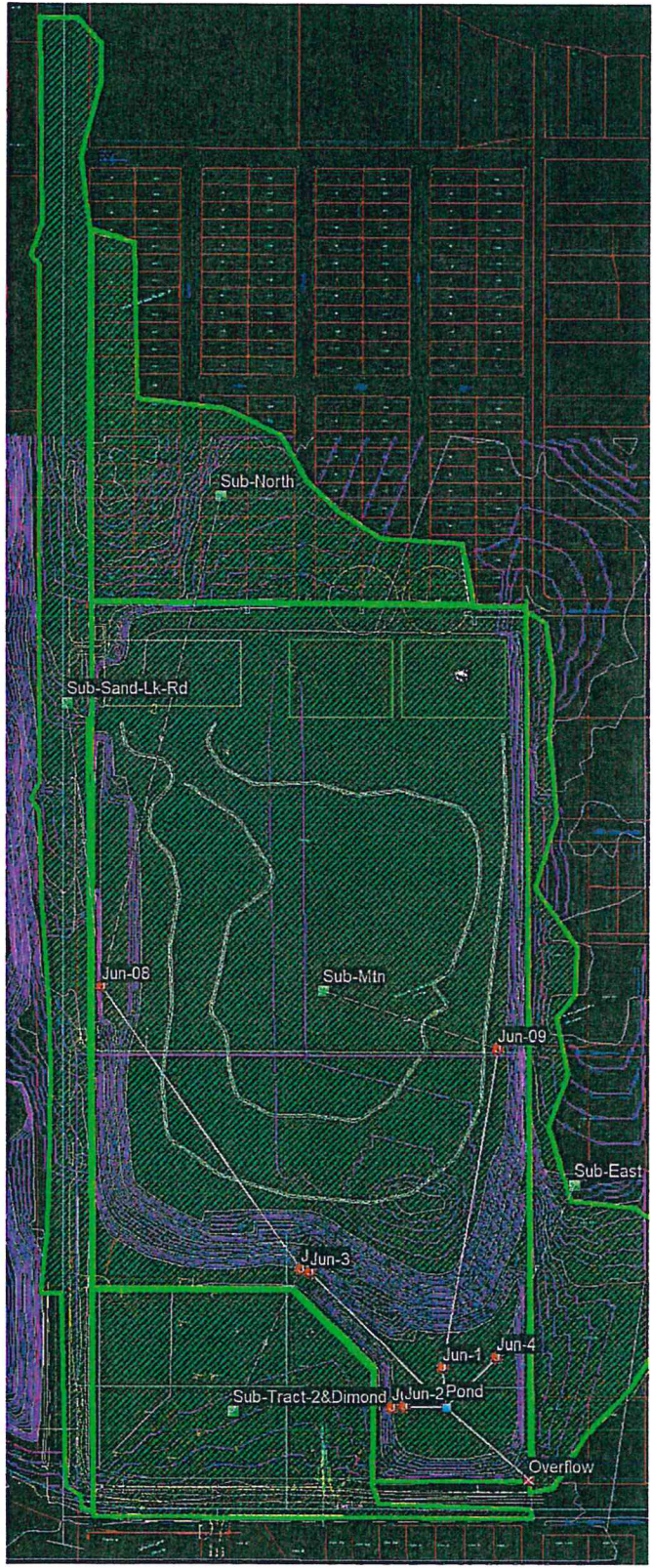
## 7.1 Orographic Map



7.2 Watershed Maps



Pre-development Watershed Map



Post-development Watershed Map

## 7.3 Hydrologic and Hydraulic Computations

### Pre-development

Due to the drainage basin's characterization as a sink, all runoff from the basin is assumed to drain to the property and no runoff leaves the site.

### Post-development

#### 10-year, 24-hour

```

Autodesk® Storm and Sanitary Analysis 2016 - Version 12.0.42 (Build 0)
-----
*****
Project Description
*****
File Name ..... Postdev Drainage 8-26-19 NEW DCM.SPF

*****
Analysis Options
*****
Flow Units ..... cfs
Subbasin Hydrograph Method.. SCS TR-55
Time of Concentration..... SCS TR-55
Link Routing Method ..... Hydrodynamic
Storage Node Exfiltration.. Constant Rate, free surface area
Starting Date ..... FEB-10-2015 00:00:00
Ending Date ..... FEB-11-2015 12:00:00
Report Time Step ..... 00:05:00

*****
Element Count
*****
Number of rain gages ..... 1
Number of subbasins ..... 5
Number of nodes ..... 11
Number of links ..... 10

*****
Raingage Summary
*****
Gage          Data          Data          Recording
ID            Source         Type           Interval
-----
Rain Gage-01  10YR - 24HR  NEW DCM  CUMULATIVE  6.00
min

*****
Subbasin Summary
*****
Subbasin      Total
              Area
ID            acres
-----
Sub-East      9.50
Sub-Mtn       64.68
Sub-North     11.50
Sub-Sand-Lk-Rd 13.00
Sub-Tract-2&Diamond 12.10

*****
Node Summary
*****
Node          Element   Invert   Maximum   Ponded   External
ID            Type      Elevation Elev.     Area     Inflow
              ft        ft        ft        ft²
-----
Jun-08        JUNCTION  138.00   157.50   0.00
Jun-09        JUNCTION  136.00   138.00   0.00
Jun-1         JUNCTION  126.00   128.00   0.00
Jun-10        JUNCTION  126.20   129.20   0.00
Jun-11        JUNCTION  126.00   128.00   0.00
Jun-12        JUNCTION  132.50   138.50   0.00
Jun-2         JUNCTION  126.00   128.00   0.00
Jun-3         JUNCTION  125.90   127.90   0.00
Jun-4         JUNCTION  126.00   128.00   0.00
Overflow      OUTFALL   124.00   126.00   0.00
Pond          STORAGE   84.00    94.00   0.00

*****
Link Summary
*****
Link          From Node  To Node     Element   Length   Slope   Manning's
ID            ID         ID           Type      ft        %       Roughness

```

Link	Date	Type	Channel	Length	Area	Capacity
Link-11	Jun-1	Pond	CHANNEL	100.0	42.0000	0.0320
Link-12	Jun-2	Pond	CHANNEL	100.0	42.0000	0.0320
Link-13	Overflow	Pond	CHANNEL	100.0	40.0000	0.0320
Link-14	Jun-3	Pond	CHANNEL	100.0	41.9000	0.0320
Link-15	Jun-4	Pond	CHANNEL	100.0	42.0000	0.0320
Link-16	Jun-09	Jun-12	CHANNEL	553.9	4.0618	0.0320
Link-17	Jun-09	Jun-1	CHANNEL	1000.0	1.0000	0.0320
Link-18	Jun-10	Jun-2	CHANNEL	10.0	2.0000	0.0320
Link-19	Jun-11	Jun-3	CHANNEL	5.0	2.0000	0.0320
Link-20	Jun-12	Jun-11	CHANNEL	646.1	1.0061	0.0320

\*\*\*\*\*  
Cross Section Summary  
\*\*\*\*\*

Link ID	Shape	Depth/ Diameter ft	Width ft	No. of Barrels	Cross Sectional Area ft <sup>2</sup>	Full Flow Hydraulic Radius ft	Design Flow Capacity cfs
Link-11	RECT OPEN	2.00	10.00	1	20.00	1.43	763.47
Link-12	RECT OPEN	2.00	10.00	1	20.00	1.43	763.47
Link-13	RECT OPEN	2.00	10.00	1	20.00	1.43	745.07
Link-14	RECT OPEN	2.00	10.00	1	20.00	1.43	762.56
Link-15	RECT OPEN	2.00	10.00	1	20.00	1.43	763.47
Link-16	TRAPEZOIDAL	2.50	17.00	1	23.75	1.33	269.28
Link-17	TRAPEZOIDAL	2.00	14.00	1	16.00	1.09	78.80
Link-18	TRAPEZOIDAL	2.00	14.00	1	16.00	1.09	111.44
Link-19	TRAPEZOIDAL	2.00	14.00	1	16.00	1.09	111.44
Link-20	TRAPEZOIDAL	2.00	14.00	1	16.00	1.09	79.04

	Volume acre-ft	Depth inches
Runoff Quantity Continuity		
Total Precipitation	21.125	2.288
Surface Runoff	0.738	0.080
Continuity Error (%)	-0.000	

	Volume acre-ft	Volume Mgallons
Flow Routing Continuity		
External Inflow	0.000	0.000
External Outflow	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	3.507	1.143
Continuity Error (%)	0.477	

\*\*\*\*\*  
Composite Curve Number Computations Report  
\*\*\*\*\*

-----  
Subbasin Sub-East  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
> 75% grass cover, Good	8.50	B	61.00
Paved parking & roofs	1.00	B	98.00
Composite Area & Weighted CN	9.50		64.89

-----  
Subbasin Sub-Mtn  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
> 75% grass cover, Good	60.38	C	74.00
Paved parking & roofs	4.30	C	98.00
Composite Area & Weighted CN	64.68		75.60

-----  
Subbasin Sub-North  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
Paved parking & roofs	8.00	B	98.00
> 75% grass cover, Good	3.50	B	61.00
Composite Area & Weighted CN	11.50		86.74

-----  
Subbasin Sub-Sand-Lk-Rd  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
Paved parking & roofs	11.70	B	98.00
> 75% grass cover, Good	1.30	B	61.00
Composite Area & Weighted CN	13.00		94.30

-----  
Subbasin Sub-Tract-2ADiamond  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
Paved parking & roofs	8.10	C	98.00
> 75% grass cover, Good	4.00	C	74.00
Composite Area & Weighted CN	12.10		90.07

\*\*\*\*\*  
 SCS TR-55 Time of Concentration Computations Report  
 \*\*\*\*\*

Sheet Flow Equation  
 -----

$$T_c = (0.007 * (n * L_f)^{0.8}) / (P^{0.5} * (S_f^{0.4}))$$

Where:

Tc = Time of Concentration (hrs)  
 n = Manning's Roughness  
 Lf = Flow Length (ft)  
 P = 2 yr, 24 hr Rainfall (inches)  
 Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation  
 -----

V = 16.1345 \* (Sf<sup>0.5</sup>) (unpaved surface)  
 V = 20.3282 \* (Sf<sup>0.5</sup>) (paved surface)  
 V = 15.0 \* (Sf<sup>0.5</sup>) (grassed waterway surface)  
 V = 10.0 \* (Sf<sup>0.5</sup>) (nearly bare & untilled surface)  
 V = 9.0 \* (Sf<sup>0.5</sup>) (cultivated straight rows surface)  
 V = 7.0 \* (Sf<sup>0.5</sup>) (short grass pasture surface)  
 V = 5.0 \* (Sf<sup>0.5</sup>) (woodland surface)  
 V = 2.5 \* (Sf<sup>0.5</sup>) (forest w/heavy litter surface)  
 Tc = (Lf / V) / (3600 sec/hr)

Where:

Tc = Time of Concentration (hrs)  
 Lf = Flow Length (ft)  
 V = Velocity (ft/sec)  
 Sf = Slope (ft/ft)

Channel Flow Equation  
 -----

$$V = (1.49 * (R^{2/3}) * (S_f^{0.5})) / n$$

$$R = A_q / W_p$$

$$T_c = (L_f / V) / (3600 \text{ sec/hr})$$

Where:

Tc = Time of Concentration (hrs)  
 Lf = Flow Length (ft)  
 R = Hydraulic Radius (ft)  
 Aq = Flow Area (ft<sup>2</sup>)  
 Wp = Wetted Perimeter (ft)  
 V = Velocity (ft/sec)  
 Sf = Slope (ft/ft)  
 n = Manning's Roughness

Subbasin Sub-East  
 -----

Sheet Flow Computations  
 -----

	Subarea A	Subarea B	Subarea C
Manning's Roughness:	0.40	0.00	0.00
Flow Length (ft):	150.00	0.00	0.00
Slope (%):	2.00	0.00	0.00
2 yr, 24 hr Rainfall (in):	1.40	0.00	0.00
Velocity (ft/sec):	0.06	0.00	0.00
Computed Flow Time (minutes):	44.90	0.00	0.00

Shallow Concentrated Flow Computations  
 -----

	Subarea A	Subarea B	Subarea C
Flow Length (ft):	1600.00	0.00	0.00
Slope (%):	6.00	0.00	0.00
Surface Type:	Unpaved	Unpaved	Unpaved
Velocity (ft/sec):	3.95	0.00	0.00
Computed Flow Time (minutes):	6.75	0.00	0.00
<b>Total TOC (minutes):</b>	<b>51.66</b>		

Subbasin Sub-Mtn  
 -----

Sheet Flow Computations  
 -----

	Subarea A	Subarea B	Subarea C
Manning's Roughness:	0.40	0.00	0.00
Flow Length (ft):	150.00	0.00	0.00
Slope (%):	1.00	0.00	0.00
2 yr, 24 hr Rainfall (in):	1.40	0.00	0.00
Velocity (ft/sec):	0.04	0.00	0.00
Computed Flow Time (minutes):	59.25	0.00	0.00

Shallow Concentrated Flow Computations  
 -----

	Subarea A	Subarea B	Subarea C
Flow Length (ft):	500.00	2000.00	0.00
Slope (%):	1.00	2.00	0.00
Surface Type:	Grassed waterway	Grassed waterway	Unpaved
Velocity (ft/sec):	1.50	2.12	0.00
Computed Flow Time (minutes):	5.56	15.72	0.00

Total TOC (minutes):		80.53		
-----				
Subbasin Sub-North				
-----				
Sheet Flow Computations				
	Subarea A	Subarea B	Subarea C	
Manning's Roughness:	0.30	0.00	0.00	
Flow Length (ft):	150.00	0.00	0.00	
Slope (%):	2.00	0.00	0.00	
2 yr, 24 hr Rainfall (in):	1.40	0.00	0.00	
Velocity (ft/sec):	0.07	0.00	0.00	
Computed Flow Time (minutes):	15.67	0.00	0.00	
Shallow Concentrated Flow Computations				
	Subarea A	Subarea B	Subarea C	
Flow Length (ft):	1500.00	0.00	0.00	
Slope (%):	3.00	0.00	0.00	
Surface Type:	Unpaved	Unpaved	Unpaved	
Velocity (ft/sec):	2.79	0.00	0.00	
Computed Flow Time (minutes):	8.96	0.00	0.00	
Total TOC (minutes):		44.63		

-----				
Subbasin Sub-Sand-Lk-Rd				
-----				
Sheet Flow Computations				
	Subarea A	Subarea B	Subarea C	
Manning's Roughness:	0.20	0.00	0.00	
Flow Length (ft):	100.00	0.00	0.00	
Slope (%):	2.00	0.00	0.00	
2 yr, 24 hr Rainfall (in):	1.40	0.00	0.00	
Velocity (ft/sec):	0.09	0.00	0.00	
Computed Flow Time (minutes):	18.65	0.00	0.00	
Shallow Concentrated Flow Computations				
	Subarea A	Subarea B	Subarea C	
Flow Length (ft):	2500.00	0.00	0.00	
Slope (%):	3.00	0.00	0.00	
Surface Type:	Unpaved	Unpaved	Unpaved	
Velocity (ft/sec):	2.79	0.00	0.00	
Computed Flow Time (minutes):	14.93	0.00	0.00	
Total TOC (minutes):		33.58		

-----				
Subbasin Sub-Tract-24Diamond				
-----				
Sheet Flow Computations				
	Subarea A	Subarea B	Subarea C	
Manning's Roughness:	0.01	0.00	0.00	
Flow Length (ft):	150.00	0.00	0.00	
Slope (%):	2.00	0.00	0.00	
2 yr, 24 hr Rainfall (in):	1.40	0.00	0.00	
Velocity (ft/sec):	0.99	0.00	0.00	
Computed Flow Time (minutes):	2.53	0.00	0.00	
Shallow Concentrated Flow Computations				
	Subarea A	Subarea B	Subarea C	
Flow Length (ft):	700.00	0.00	0.00	
Slope (%):	2.00	0.00	0.00	
Surface Type:	Paved	Unpaved	Unpaved	
Velocity (ft/sec):	2.87	0.00	0.00	
Computed Flow Time (minutes):	4.07	0.00	0.00	
Total TOC (minutes):		6.60		

\*\*\*\*\*  
Subbasin Runoff Summary  
\*\*\*\*\*

Subbasin ID	Total Precip in	Total Runoff in	Peak Runoff cfs	Weighted Curve Number	Time of Concentration days hh:mm:ss
Sub-East	2.28	0.22	0.21	64.890	0 00:51:39
Sub-Mtn	2.28	0.55	6.91	75.600	0 01:20:31
Sub-North	2.28	1.11	4.10	86.740	0 00:44:37
Sub-Sand-Lk-Rd	2.28	1.69	8.07	94.300	0 00:33:34
Sub-Tract-24Diamond	2.28	1.34	12.11	90.070	0 00:06:36

\*\*\*\*\*  
Node Depth Summary  
\*\*\*\*\*

Node ID	Average Depth Attained ft	Maximum Depth Attained ft	Maximum HGL Attained ft	Time of Max Occurrence days hh:mm	Total Flooded Volume acre-in	Total Time Flooded minutes	Retention Time hh:mm:ss
Jun-08	15.42	17.61	155.61	0 12:30	0	0	0:00:00
Jun-09	0.19	0.80	136.80	0 13:05	0	0	0:00:00
Jun-1	0.02	0.10	126.10	0 13:07	0	0	0:00:00
Jun-10	0.00	0.00	126.20	0 00:00	0	0	0:00:00
Jun-11	0.21	1.04	127.04	0 12:15	0	0	0:00:00
Jun-12	0.17	0.85	133.35	0 12:32	0	0	0:00:00
Jun-2	0.00	0.00	126.00	0 00:00	0	0	0:00:00
Jun-3	0.03	0.17	126.07	0 12:16	0	0	0:00:00
Jun-4	0.00	0.01	126.01	0 13:02	0	0	0:00:00
Overflow	0.00	0.00	124.00	0 00:00	0	0	0:00:00
Pond	1.93	3.49	87.49	1 01:27	0	0	0:00:00

\*\*\*\*\*  
Node Flow Summary  
\*\*\*\*\*

Node ID	Element Type	Maximum Lateral Inflow cfs	Peak Inflow cfs	Time of Peak Inflow Occurrence days hh:mm	Maximum Flooding Overflow cfs	Time of Peak Flooding Occurrence days hh:mm
Jun-08	JUNCTION	11.89	11.89	0 12:30	0.00	
Jun-09	JUNCTION	6.91	6.91	0 13:05	0.00	
Jun-1	JUNCTION	0.00	6.89	0 13:06	0.00	
Jun-10	JUNCTION	0.00	0.00	0 00:00	0.00	
Jun-11	JUNCTION	10.48	15.73	0 12:15	0.00	
Jun-12	JUNCTION	0.00	11.86	0 12:30	0.00	
Jun-2	JUNCTION	0.00	0.00	0 00:00	0.00	
Jun-3	JUNCTION	0.00	15.48	0 12:16	0.00	
Jun-4	JUNCTION	0.21	0.21	0 12:55	0.00	
Overflow	OUTFALL	0.00	0.00	0 00:00	0.00	
Pond	STORAGE	0.00	18.12	0 12:39	0.00	

\*\*\*\*\*  
Storage Node Summary  
\*\*\*\*\*

Storage Node ID	Maximum Ponded Volume 1000 ft <sup>3</sup>	Maximum Ponded Volume (%)	Time of Max Ponded Volume days hh:mm	Average Ponded Volume 1000 ft <sup>3</sup>	Average Ponded Volume (%)	Maximum Storage Outflow cfs	Maximum Exfiltration Rate cfm	Time of Max. Exfiltration Rate hh:mm:ss	Total Exfiltrated Volume 1000 ft <sup>3</sup>
Pond	160.640	28	1 01:27	87.203	15	0.00	36.21	25:25:00	61.781

\*\*\*\*\*  
Outfall Loading Summary  
\*\*\*\*\*

Outfall Node ID	Flow Frequency (%)	Average Flow cfs	Peak Inflow cfs
Overflow	0.00	0.00	0.00
System	0.00	0.00	0.00

\*\*\*\*\*  
Link Flow Summary  
\*\*\*\*\*

Link ID	Element Type	Time of Peak Flow Occurrence days hh:mm	Maximum Flow Velocity ft/sec	Length Factor	Peak Flow during Analysis cfs	Design Flow Capacity cfs	Ratio of Flow /Design Flow	Ratio of Maximum Flow Surcharged Depth	Total Time Surcharged minutes	Reported Condition
Link-11	CHANNEL	0 13:07	1.18	13.86	6.89	763.47	0.01	0.52	0	Calculated
Link-12	CHANNEL	0 00:00	0.00	13.86	0.00	763.47	0.00	0.50	0	Calculated
Link-13	CHANNEL	0 00:00	0.00	13.58	0.00	745.07	0.00	0.50	0	Calculated
Link-14	CHANNEL	0 12:17	4.69	13.85	15.45	762.56	0.02	0.52	0	Calculated
Link-15	CHANNEL	0 13:03	0.04	13.86	0.21	763.47	0.00	0.50	0	Calculated
Link-16	CHANNEL	0 12:30	3.92	1.00	11.86	269.28	0.04	0.29	0	Calculated
Link-17	CHANNEL	0 13:06	4.51	1.00	6.89	78.80	0.09	0.23	0	Calculated
Link-18	CHANNEL	0 00:00	0.00	39.09	0.00	111.44	0.00	0.00	0	Calculated
Link-19	CHANNEL	0 12:16	6.74	78.19	15.48	111.44	0.14	0.30	0	Calculated
Link-20	CHANNEL	0 12:32	2.68	1.00	11.72	79.04	0.15	0.46	0	Calculated

\*\*\*\*\*  
Highest Flow Instability Indexes  
\*\*\*\*\*  
All links are stable.

WARNING 117 : Conduit outlet invert elevation defined for Conduit Link-16 is below downstream node invert elevation.  
Assumed conduit outlet invert elevation equal to downstream node invert elevation.  
WARNING 002 : Max/rim elevation (depth) increased to account for connecting conduit height dimensions for Node Jun-08.

Analysis began on: Tue Jan 07 15:28:18 2020  
Analysis ended on: Tue Jan 07 15:28:20 2020  
Total elapsed time: 00:00:02

# 100-year, 24-hour

Autodesk® Storm and Sanitary Analysis 2016 - Version 12.0.42 (Build 0)

\*\*\*\*\*  
 Project Description  
 \*\*\*\*\*  
 File Name ..... Postdev Drainage 8-26-19 NEW DCM.SFF

\*\*\*\*\*  
 Analysis Options  
 \*\*\*\*\*  
 Flow Units ..... cfs  
 Subbasin Hydrograph Method.. SCS TR-55  
 Time of Concentration..... SCS TR-55  
 Link Routing Method ..... Hydrodynamic  
 Storage Node Exfiltration.. Constant rate, free surface area  
 Starting Date ..... FEB-10-2015 00:00:00  
 Ending Date ..... FEB-11-2015 12:00:00  
 Report Time Step ..... 00:05:00

\*\*\*\*\*  
 Element Count  
 \*\*\*\*\*  
 Number of rain gages ..... 1  
 Number of subbasins ..... 5  
 Number of nodes ..... 11  
 Number of links ..... 10

\*\*\*\*\*  
 Raingage Summary  
 \*\*\*\*\*  

Gage ID	Data Source	Data Type	Recording Interval
Rain Gage-01	100-YR NEW DCM	CUMULATIVE	6.00 min

\*\*\*\*\*  
 Subbasin Summary  
 \*\*\*\*\*  

Subbasin ID	Total Area acres
Sub-East	9.50
Sub-Mtn	64.68
Sub-Worth	11.50
Sub-Sand-Lk-Rd	13.00
Sub-Tract-24Diamond	12.10

\*\*\*\*\*  
 Node Summary  
 \*\*\*\*\*  

Node ID	Element Type	Invert Elevation ft	Maximm Elev. ft	Ponded Area ft²	External Inflow
Jun-08	JUNCTION	138.00	157.50	0.00	
Jun-09	JUNCTION	136.00	138.00	0.00	
Jun-1	JUNCTION	126.00	128.00	0.00	
Jun-10	JUNCTION	126.20	128.20	0.00	
Jun-11	JUNCTION	126.00	128.00	0.00	
Jun-12	JUNCTION	132.50	138.50	0.00	
Jun-2	JUNCTION	126.00	128.00	0.00	
Jun-3	JUNCTION	125.90	127.90	0.00	
Jun-4	JUNCTION	126.00	128.00	0.00	
Overflow	OUTFALL	124.00	126.00	0.00	
Pond	STORAGE	84.00	94.00	0.00	

\*\*\*\*\*  
 Link Summary  
 \*\*\*\*\*  

Link ID	From Node	To Node	Element Type	Length ft	Slope %	Manning's Roughness
Link-11	Jun-1	Pond	CHANNEL	100.0	42.0000	0.0320
Link-12	Jun-2	Pond	CHANNEL	100.0	42.0000	0.0320
Link-13	Overflow	Pond	CHANNEL	100.0	40.0000	0.0320
Link-14	Jun-3	Pond	CHANNEL	100.0	41.9000	0.0320
Link-15	Jun-4	Pond	CHANNEL	100.0	42.0000	0.0320
Link-16	Jun-08	Jun-12	CHANNEL	553.9	4.0618	0.0320
Link-17	Jun-09	Jun-1	CHANNEL	1000.0	1.0000	0.0320
Link-18	Jun-10	Jun-2	CHANNEL	10.0	2.0000	0.0320
Link-19	Jun-11	Jun-3	CHANNEL	5.0	2.0000	0.0320
Link-20	Jun-12	Jun-11	CHANNEL	646.1	1.0061	0.0320

\*\*\*\*\*  
 Cross Section Summary  
 \*\*\*\*\*  

Link ID	Shape	Depth/Diameter ft	Width ft	No. of Barrels	Cross Sectional Area ft²	Full Flow Hydraulic Radius ft	Design Flow Capacity cfs
Link-11	RECT_OPEN	2.00	10.00	1	20.00	1.43	763.47

Link-12	RECT_OPEN	2.00	10.00	1	20.00	1.43	763.47
Link-13	RECT_OPEN	2.00	10.00	1	20.00	1.43	745.07
Link-14	RECT_OPEN	2.00	10.00	1	20.00	1.43	762.56
Link-15	RECT_OPEN	2.00	10.00	1	20.00	1.43	763.47
Link-16	TRAPEZOIDAL	2.50	17.00	1	23.75	1.33	269.28
Link-17	TRAPEZOIDAL	2.00	14.00	1	16.00	1.09	78.80
Link-18	TRAPEZOIDAL	2.00	14.00	1	16.00	1.09	111.44
Link-19	TRAPEZOIDAL	2.00	14.00	1	16.00	1.09	111.44
Link-20	TRAPEZOIDAL	2.00	14.00	1	16.00	1.09	79.04

	Volume	Depth
Runoff Quantity Continuity	acre-ft	inches
Total Precipitation	33.261	3.603
Surface Runoff	1.611	0.174
Continuity Error (%)	-0.000	

	Volume	Volume
Flow Routing Continuity	acre-ft	Mgallons
External Inflow	0.000	0.000
External Outflow	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	8.769	2.858
Continuity Error (%)	0.414	

\*\*\*\*\*  
Composite Curve Number Computations Report  
\*\*\*\*\*

-----  
Subbasin Sub-East  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
> 75% grass cover, Good	8.50	B	61.00
Paved parking & roofs	1.00	B	98.00
Composite Area & Weighted CN	9.50		64.89

-----  
Subbasin Sub-Mtn  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
> 75% grass cover, Good	60.38	C	74.00
Paved parking & roofs	4.30	C	98.00
Composite Area & Weighted CN	64.68		75.60

-----  
Subbasin Sub-Worth  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
Paved parking & roofs	8.00	B	98.00
> 75% grass cover, Good	3.50	B	61.00
Composite Area & Weighted CN	11.50		86.74

-----  
Subbasin Sub-Sand-Lk-Rd  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
Paved parking & roofs	11.70	B	98.00
> 75% grass cover, Good	1.30	B	61.00
Composite Area & Weighted CN	13.00		94.30

-----  
Subbasin Sub-Tract-2&Diamond  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
Paved parking & roofs	8.10	C	98.00
> 75% grass cover, Good	4.00	C	74.00
Composite Area & Weighted CN	12.10		90.07

\*\*\*\*\*  
SCS TR-55 Time of Concentration Computations Report  
\*\*\*\*\*

Sheet Flow Equation

$$T_c = (0.007 * ((n * L_f)^{0.8}) / ((P^{0.5}) * (S_f^{0.4}))$$

Where:

Tc = Time of Concentration (hrs)  
n = Manning's Roughness  
Lf = Flow Length (ft)  
P = 2 yr, 24 hr Rainfall (inches)  
Sf = Slope (ft/ft)

Shallow Concentrated Flow Equation

V = 16.1345 \* (Sf^0.5) (unpaved surface)  
V = 20.3282 \* (Sf^0.5) (paved surface)  
V = 15.0 \* (Sf^0.5) (grassed waterway surface)

$V = 10.0 * (Sf^{0.5})$  (nearly bare & untilled surface)  
 $V = 9.0 * (Sf^{0.5})$  (cultivated straight rows surface)  
 $V = 7.0 * (Sf^{0.5})$  (short grass pasture surface)  
 $V = 5.0 * (Sf^{0.5})$  (woodland surface)  
 $V = 2.5 * (Sf^{0.5})$  (forest w/heavy litter surface)  
 $Tc = (L_f / V) / (3600 \text{ sec/hr})$

Where:

$Tc$  = Time of Concentration (hrs)  
 $L_f$  = Flow Length (ft)  
 $V$  = Velocity (ft/sec)  
 $Sf$  = Slope (ft/ft)

Channel Flow Equation

$V = (1.49 * (R^{(2/3)}) * (Sf^{0.5})) / n$   
 $R = A_q / W_p$   
 $Tc = (L_f / V) / (3600 \text{ sec/hr})$

Where:

$Tc$  = Time of Concentration (hrs)  
 $L_f$  = Flow Length (ft)  
 $R$  = Hydraulic Radius (ft)  
 $A_q$  = Flow Area (ft<sup>2</sup>)  
 $W_p$  = Wetted Perimeter (ft)  
 $V$  = Velocity (ft/sec)  
 $Sf$  = Slope (ft/ft)  
 $n$  = Manning's Roughness

Subbasin Sub-East

Sheet Flow Computations

	Subarea A	Subarea B	Subarea C
Manning's Roughness:	0.40	0.00	0.00
Flow Length (ft):	150.00	0.00	0.00
Slope (%):	2.00	0.00	0.00
2 yr, 24 hr Rainfall (in):	1.40	0.00	0.00
Velocity (ft/sec):	0.06	0.00	0.00
Computed Flow Time (minutes):	44.90	0.00	0.00

Shallow Concentrated Flow Computations

	Subarea A	Subarea B	Subarea C
Flow Length (ft):	1600.00	0.00	0.00
Slope (%):	6.00	0.00	0.00
Surface Type:	Unpaved	Unpaved	Unpaved
Velocity (ft/sec):	3.95	0.00	0.00
Computed Flow Time (minutes):	6.75	0.00	0.00

Total TOC (minutes): 51.66

Subbasin Sub-Mtn

Sheet Flow Computations

	Subarea A	Subarea B	Subarea C
Manning's Roughness:	0.40	0.00	0.00
Flow Length (ft):	150.00	0.00	0.00
Slope (%):	1.00	0.00	0.00
2 yr, 24 hr Rainfall (in):	1.40	0.00	0.00
Velocity (ft/sec):	0.04	0.00	0.00
Computed Flow Time (minutes):	59.25	0.00	0.00

Shallow Concentrated Flow Computations

	Subarea A	Subarea B	Subarea C
Flow Length (ft):	500.00	2000.00	0.00
Slope (%):	1.00	2.00	0.00
Surface Type:	Grassed waterway	Grassed waterway	Unpaved
Velocity (ft/sec):	1.50	2.12	0.00
Computed Flow Time (minutes):	5.56	15.72	0.00

Total TOC (minutes): 80.53

Subbasin Sub-Worth

Sheet Flow Computations

	Subarea A	Subarea B	Subarea C
Manning's Roughness:	0.30	0.00	0.00
Flow Length (ft):	150.00	0.00	0.00
Slope (%):	2.00	0.00	0.00
2 yr, 24 hr Rainfall (in):	1.40	0.00	0.00
Velocity (ft/sec):	0.07	0.00	0.00
Computed Flow Time (minutes):	35.67	0.00	0.00

Shallow Concentrated Flow Computations

	Subarea A	Subarea B	Subarea C
Flow Length (ft):	1500.00	0.00	0.00
Slope (%):	3.00	0.00	0.00
Surface Type:	Unpaved	Unpaved	Unpaved

Velocity (ft/sec):	2.79	0.00	0.00
Computed Flow Time (minutes):	8.96	0.00	0.00
<b>Total TOC (minutes):</b>	<b>44.63</b>		

-----  
Subbasin Sub-Sand-Lk-Rd  
-----

Sheet Flow Computations  
-----

	Subarea A	Subarea B	Subarea C
Manning's Roughness:	0.20	0.00	0.00
Flow Length (ft):	100.00	0.00	0.00
Slope (%):	2.00	0.00	0.00
2 yr, 24 hr Rainfall (in):	1.40	0.00	0.00
Velocity (ft/sec):	0.09	0.00	0.00
Computed Flow Time (minutes):	18.65	0.00	0.00

Shallow Concentrated Flow Computations  
-----

	Subarea A	Subarea B	Subarea C
Flow Length (ft):	2500.00	0.00	0.00
Slope (%):	3.00	0.00	0.00
Surface Type:	Unpaved	Unpaved	Unpaved
Velocity (ft/sec):	2.79	0.00	0.00
Computed Flow Time (minutes):	14.93	0.00	0.00

<b>Total TOC (minutes):</b>	<b>33.58</b>		
-----------------------------	--------------	--	--

-----  
Subbasin Sub-Tract-2&Diamond  
-----

Sheet Flow Computations  
-----

	Subarea A	Subarea B	Subarea C
Manning's Roughness:	0.01	0.00	0.00
Flow Length (ft):	150.00	0.00	0.00
Slope (%):	2.00	0.00	0.00
2 yr, 24 hr Rainfall (in):	1.40	0.00	0.00
Velocity (ft/sec):	0.99	0.00	0.00
Computed Flow Time (minutes):	2.53	0.00	0.00

Shallow Concentrated Flow Computations  
-----

	Subarea A	Subarea B	Subarea C
Flow Length (ft):	700.00	0.00	0.00
Slope (%):	2.00	0.00	0.00
Surface Type:	Paved	Unpaved	Unpaved
Velocity (ft/sec):	2.87	0.00	0.00
Computed Flow Time (minutes):	4.07	0.00	0.00

<b>Total TOC (minutes):</b>	<b>6.60</b>		
-----------------------------	-------------	--	--

\*\*\*\*\*  
Subbasin Runoff Summary  
\*\*\*\*\*

Subbasin ID	Total Precip in	Total Runoff in	Peak Runoff cfs	Weighted Curve Number	Time of Concentration days hh:mm:ss
Sub-East	3.59	0.79	1.84	64.890	0 00:51:39
Sub-Mtn	3.59	1.41	20.13	75.600	0 01:20:31
Sub-North	3.59	2.24	8.28	86.740	0 00:44:37
Sub-Sand-Lk-Rd	3.59	2.95	13.69	94.300	0 00:33:34
Sub-Tract-2&Diamond	3.59	2.54	22.40	90.070	0 00:06:36

\*\*\*\*\*  
Node Depth Summary  
\*\*\*\*\*

Node ID	Average Depth Attained ft	Maximum Depth Attained ft	Maximum HGL Attained ft	Time of Max Occurrence days hh:mm	Total Flooded Volume acre-in	Total Time Flooded minutes	Retention Time hh:mm:ss
Jun-08	15.96	17.81	155.81	0 12:30	0	0	0:00:00
Jun-09	0.32	1.33	137.33	0 13:01	0	0	0:00:00
Jun-1	0.04	0.20	126.20	0 13:02	0	0	0:00:00
Jun-10	0.00	0.00	126.20	0 00:00	0	0	0:00:00
Jun-11	0.30	1.40	127.40	0 12:15	0	0	0:00:00
Jun-12	0.24	1.12	133.62	0 12:32	0	0	0:00:00
Jun-2	0.00	0.00	126.00	0 00:00	0	0	0:00:00
Jun-3	0.05	0.25	126.15	0 12:16	0	0	0:00:00
Jun-4	0.01	0.05	126.05	0 12:44	0	0	0:00:00
Overflow	0.00	0.00	124.00	0 00:00	0	0	0:00:00
Pond	4.28	7.42	91.42	1 01:38	0	0	0:00:00

\*\*\*\*\*  
Node Flow Summary  
\*\*\*\*\*

Node ID	Element Type	Maximum Lateral Inflow cfs	Peak Inflow cfs	Time of Peak Inflow Occurrence days hh:mm	Maximum Flooding Overflow cfs	Time of Peak Flooding Occurrence days hh:mm
Jun-08	JUNCTION	21.51	21.51	0 12:30	0.00	
Jun-09	JUNCTION	20.10	20.10	0 13:00	0.00	
Jun-1	JUNCTION	0.00	20.05	0 13:01	0.00	
Jun-10	JUNCTION	0.00	0.00	0 00:00	0.00	
Jun-11	JUNCTION	19.56	29.25	0 12:15	0.00	
Jun-12	JUNCTION	0.00	21.47	0 12:30	0.00	
Jun-2	JUNCTION	0.00	0.00	0 00:00	0.00	
Jun-3	JUNCTION	0.00	28.87	0 12:16	0.00	
Jun-4	JUNCTION	1.83	1.83	0 12:40	0.00	
Overflow	OUTFALL	0.00	0.00	0 00:00	0.00	
Fond	STORAGE	0.00	41.30	0 12:40	0.00	

\*\*\*\*\*  
Storage Node Summary  
\*\*\*\*\*

Storage Node ID	Maximum Ponded Volume 1000 ft <sup>3</sup>	Maximum Ponded Volume (%)	Time of Max Ponded Volume days hh:mm	Average Ponded Volume 1000 ft <sup>3</sup>	Average Ponded Volume (%)	Maximum Storage Node Outflow cfs	Maximum Exfiltration Rate cfm	Time of Max Exfiltration Rate hh:mm:ss	Total Exfiltrated Volume 1000 ft <sup>3</sup>
Fond	394.981	68	1 01:38	220.765	38	0.00	46.84	25:35:00	77.817

\*\*\*\*\*  
Outfall Loading Summary  
\*\*\*\*\*

Outfall Node ID	Flow Frequency (%)	Average Flow cfs	Peak Inflow cfs
Overflow	0.00	0.00	0.00
System	0.00	0.00	0.00

\*\*\*\*\*  
Link Flow Summary  
\*\*\*\*\*

Link ID	Element Type	Time of Peak Flow Occurrence days hh:mm	Maximum Velocity Attained ft/sec	Length Factor	Peak Flow during Analysis cfs	Design Flow Capacity cfs	Ratio of Maximum Flow /Design Flow	Ratio of Maximum Flow Depth	Total Time Surcharged minutes	Reported Condition
Link-11	CHANNEL	0 13:02	1.82	13.86	20.05	763.47	0.03	0.55	0	Calculated
Link-12	CHANNEL	0 00:00	0.00	13.86	0.00	763.47	0.00	0.50	0	Calculated
Link-13	CHANNEL	0 00:00	0.00	13.58	0.00	745.07	0.00	0.50	0	Calculated
Link-14	CHANNEL	0 12:16	4.02	13.85	28.87	762.56	0.04	0.56	0	Calculated
Link-15	CHANNEL	0 12:44	0.18	13.86	1.82	763.47	0.00	0.51	0	Calculated
Link-16	CHANNEL	0 12:30	4.56	1.00	21.47	269.28	0.08	0.39	0	Calculated
Link-17	CHANNEL	0 13:01	6.13	1.00	20.05	78.80	0.25	0.38	0	Calculated
Link-18	CHANNEL	0 00:00	0.00	39.09	0.00	111.44	0.00	0.00	0	Calculated
Link-19	CHANNEL	0 12:16	7.84	78.19	28.87	111.44	0.26	0.41	0	Calculated
Link-20	CHANNEL	0 12:32	3.08	1.00	21.27	79.04	0.27	0.61	0	Calculated

\*\*\*\*\*  
Highest Flow Instability Indexes  
\*\*\*\*\*  
All links are stable.

WARNING 117 : Conduit outlet invert elevation defined for Conduit Link-16 is below downstream node invert elevation.  
Assumed conduit outlet invert elevation equal to downstream node invert elevation.  
WARNING 002 : Max/rim elevation (depth) increased to account for connecting conduit height dimensions for Node Jun-08.

Analysis began on: Tue Jan 07 15:32:41 2020  
Analysis ended on: Tue Jan 07 15:32:42 2020  
Total elapsed time: 00:00:01

## 7.4 Stormwater Management Design Drawings

Design drawings will be included in the final report.

## 7.5 Operation and Maintenance Plan

An O&M Plan will be included in the final report.

## **Brailey Hydrologic**

3527 North Point Drive  
Anchorage, AK 99502  
phone: 907-248-0058  
dbrailey@alaska.net

February 13, 2020

Anchorage Sand and Gravel Co., Inc.  
1040 O'Malley Road  
Anchorage, Alaska 99515-3032

Attn: Mr. Ryan Morman

Subject: MOA questions regarding Sand Lake groundwater

Dear Ryan:

During preparation of their staff report for the proposed amendment of Conditional Use Permit (CUP) No. 2010-005, the Municipality of Anchorage requested a simple explanation of the water table depth below final grade, and how this would affect groundwater contamination. This letter provides a summary of water table information beneath the Sand Lake fill site, and addresses the potential for groundwater contamination.

Groundwater beneath the Sand Lake fill site is perched on a low-permeability formation that was mapped extensively as part of post-1964 geotechnical studies (Ulery and Updike, 1983). The presence of this formation was confirmed by independent groundwater studies performed by the University of Alaska-Anchorage (Munk et al. 2004) and the University of Alaska-Fairbanks (Kane et al. 2008). This low-permeability formation (termed the cohesive facies of the Bootlegger Cove Formation) serves as a barrier between shallow groundwater and deeper drinking-water aquifers. Based on groundwater monitoring wells installed by AS&G, the flow direction of shallow groundwater beneath the Sand Lake fill site is toward the northwest, whereas the flow direction at the nearby Lucy Street fill site is toward the southeast (Figure 1). Figure 2 shows the vertical relationship between the two aquifers, indicating that the shallow aquifer is perched above the cohesive facies. Shallow groundwater was not encountered during installation of the Lucy Pit monitoring wells (Brailey 2010), which confirms the cohesive facies limit mapped by Ulery and Updike (Figure 1).

Consistent with conceptual models of the Anchorage Bowl (e.g., Figure 3), flow in the sea-level aquifer is toward Cook Inlet. An extensive well survey performed by the University of Alaska-Fairbanks shows that most Sand Lake drinking water wells tap aquifers below sea level, and that the deepest wells are located in the Sand Lake Subdivision (Figure 4).

Due to the fine-grained nature of the cohesive facies, the shallow aquifer beneath the Sand Lake fill site and the surrounding area is not suitable for water supply development. During

Figure 1. Water Table Elevation on December 19, 2019



Figure 2. Hydrogeologic Cross Section, Lucy Pit to Sand Lake Pit

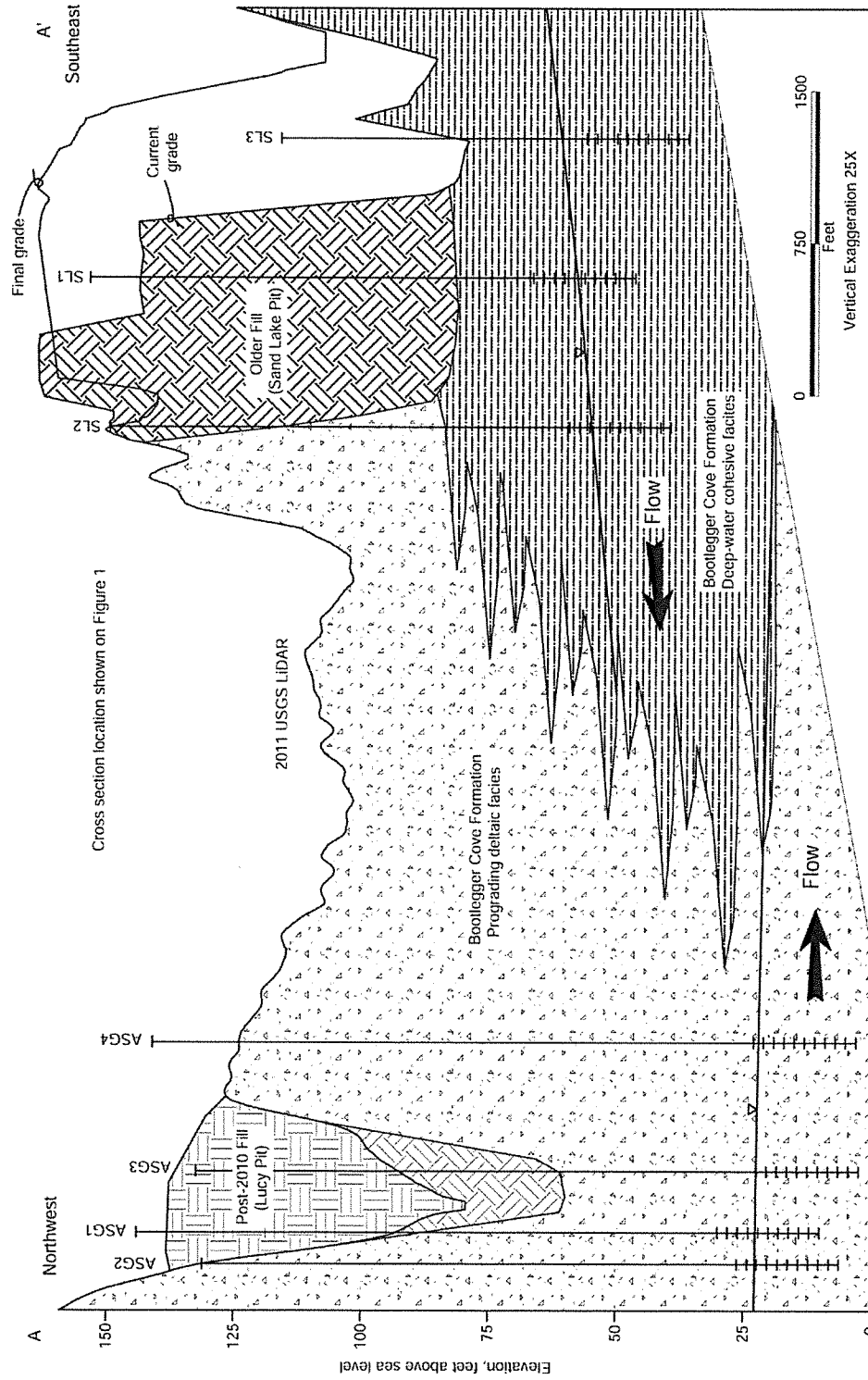
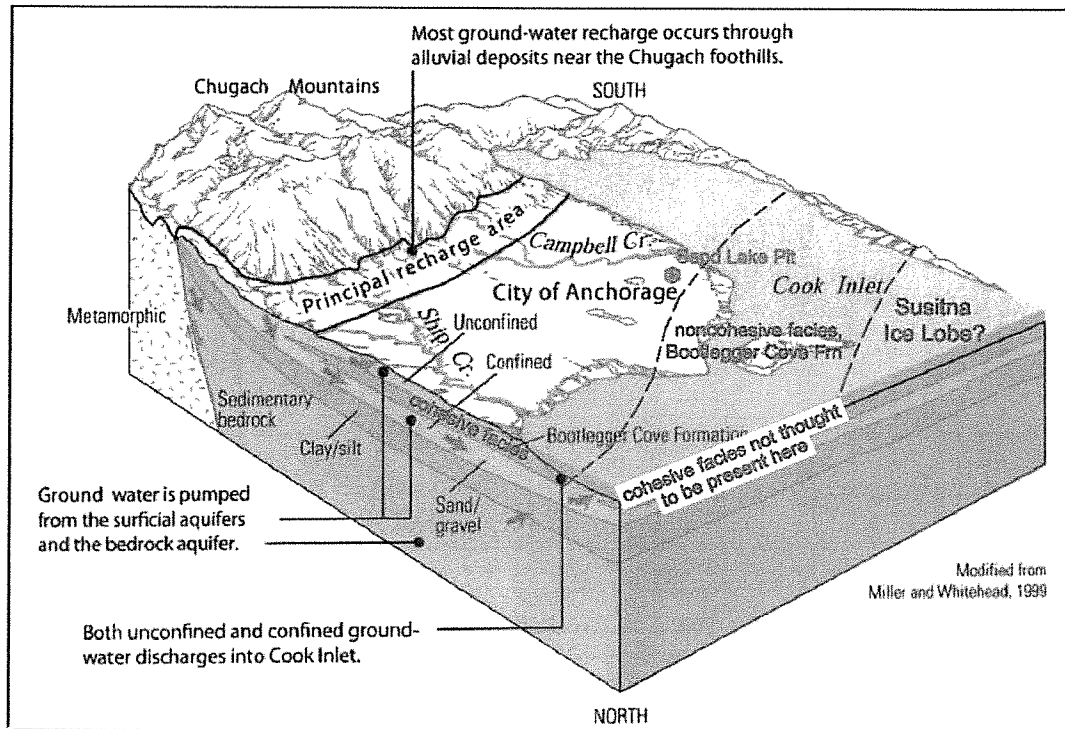


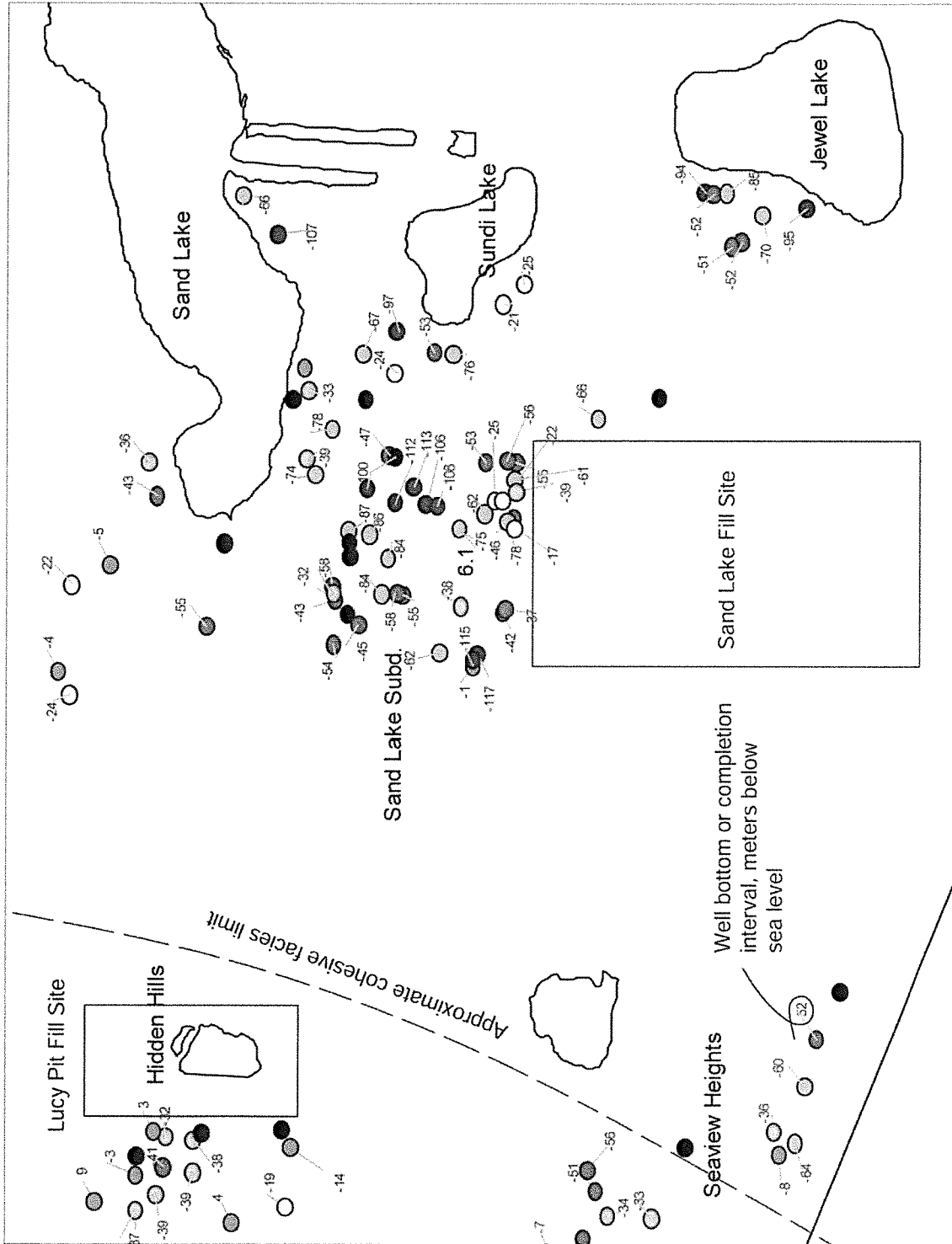
Figure 3. Conceptual Hydrogeologic Model of the Anchorage Bowl



installation of the Sand Lake monitoring wells, water was barely perceptible in the air-rotary cutting returns, and the well casings needed to be left overnight to determine whether sufficient water was available to warrant well completion. During sampling, the Sand Lake monitoring wells must be purged slowly to avoid dewatering, and standard well screens do not exclude the formation's fine-grained sediment. Excessive sediment in the discharge has caused damage to submersible sampling pump impellers. This explains why all of the drinking water wells identified by Kane et al. (2008) tap deeper aquifers (Figure 4).

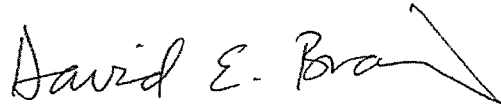
Surface soils presently exposed in the southeast corner of the Sand Lake fill site consist of silty sand, which is consistent with the cohesive facies of the Bootlegger Cove Formation. As shown on Figure 2, final grade in this area will be about 40 feet above the water table. This substantial vertical separation, together with the fine-grained nature of the intervening soils, will tend to reduce the potential for groundwater contamination.

Figure 4. Well Completion Intervals from Kane et al. 2008



Thank you for the opportunity to provide this information. Please call should you have any questions.

Sincerely,

A handwritten signature in black ink that reads "David E. Braley". The signature is written in a cursive style with a long, sweeping tail on the letter "y".

David E. Braley  
Brailey Hydrologic

**References Cited:**

- Brailey Hydrologic Consultants (Brailey) 2010. Groundwater Monitoring Plan, Lucy Street Fill Site. Brailey Hydrologic Consultants, Anchorage, Alaska, November 2010.
- Kane, D., Youcha, E., Billings, S., and R. Gieck, 2008. Flow Patterns and Chemistry of Groundwater Aquifers in Southwest Anchorage, Alaska. July 2008, University of Alaska Fairbanks, Water and Environmental Research Center, Report INE/WERC 08-03, Fairbanks, Alaska, 90 pp.
- Munk, L., Metheny, M., and Schnabel, W. 2004. Review of Geologic and Hydrogeologic Studies Related to the Proposed Kincaid Estates Subdivision, Anchorage, Alaska. University of Alaska Anchorage, October 2004.
- Ulery, C.A. and Updike, R.G. 1983. Subsurface Structure of the Cohesive Facies of the Bootlegger Cove Formation, Southwest Anchorage, Alaska. Alaska Division of Geological and Geophysical Surveys Professional Report No. 84.





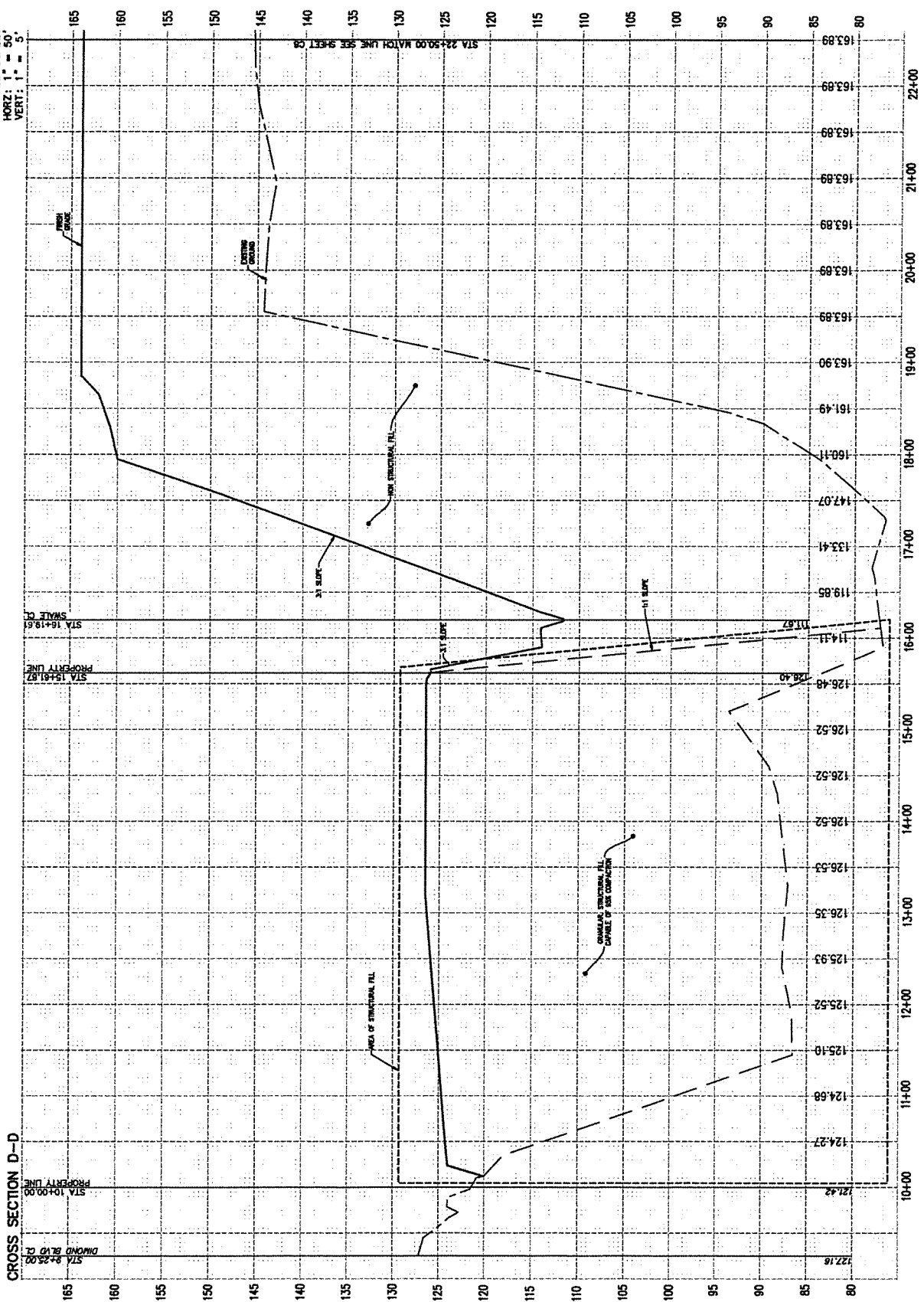








PROFILE SCALE:  
 HORIZ: 1" = 50'  
 VERT: 1" = 5'



CROSS SECTION D-D

PROPERTY LINE

SWALE CR

EXISTING DRAINAGE

PROPOSED DRAINAGE

1:1 SLOPE

CONVULSION STRUCTURAL FILL  
 CAPABLE OF 85% COMPACTION

PROPOSED STRUCTURAL FILL

PROPERTY LINE

DIPOND BLVD CR

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE

STA 15+81.87

PROPERTY LINE

STA 16+18.61

SWALE CR

STA 22+50.00

MATCH LINE SEE SHEET 05

PROPERTY LINE

STA 9+25.00

DIPOND BLVD CR

PROPERTY LINE

STA 10+00.00

PROPERTY LINE



# Departmental Comments

**McLaughlin, Francis D.**

---

**From:** Korosei, Tom J.  
**Sent:** Friday, February 14, 2020 12:55 PM  
**To:** McLaughlin, Francis D.  
**Cc:** Durand, Joshua A.; Rafuse, Stephen J.; Jackson, Evan G.  
**Subject:** Case 2019-0138 CU Amendment for Land Reclamation

Francis,

The Parks and Recreation Department has the following comments regarding the requested amendment:

Jade Street Park and Edna Fisk Memorial Park adjoin the subject site. The Parks and Recreation Department requests confirmation as to the grading and revegetation of the portion of the site adjacent to Jade Street Park to assure the stability of the adjoining land.

The application states that as a result of the reclamation plan the site would accommodate several potential end uses such as functional open space, consistent with the *Anchorage Bowl 2020 Comprehensive Plan*. The application states that the developer will remain the owner of the reclaimed site, and the property will remain in private ownership.

The Parks Department notes that the no additional municipal park needs are identified for this area in the *Anchorage Bowl Park, Natural Resource, and Recreation Facility Plan*.

Thank you for the opportunity to comment.

Tom Korosei  
**Municipality of Anchorage**  
**Parks and Recreation Department**  
P.O. Box 196650  
Anchorage, AK 99519  
O 907.343.4503 F 907.249.7375  
E [koroseitj@muni.org](mailto:koroseitj@muni.org) URL [www.muni.org/parks](http://www.muni.org/parks)

**McLaughlin, Francis D.**

---

**From:** Korosei, Tom J.  
**Sent:** Wednesday, February 26, 2020 1:26 PM  
**To:** McLaughlin, Francis D.  
**Cc:** Rafuse, Stephen J.  
**Subject:** Case 2019-0138 CU Amendment for Land Reclamation, revised comment

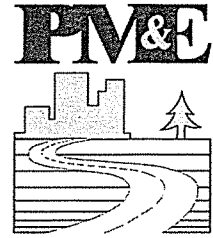
Francis,

Thank you for the clarification regarding the grading plan for the portion of the site adjacent to Jade Street Park. The Parks and Recreation Department understands that grading in that area will result in slopes not greater than 4:1, and the surface will be revegetated and/or existing vegetation will remain to prevent erosion. The Parks and Recreation Department is satisfied with this information assuring the stability of this area provided that MOA plan review engineers are also satisfied that the subject site is stable given soil quality, seismic conditions, drainage, and other factors.

Tom Korosei  
**Municipality of Anchorage**  
**Parks and Recreation Department**  
P.O. Box 196650  
Anchorage, AK 99519  
O 907.343.4503 F 907.249.7375  
E [koroseitj@muni.org](mailto:koroseitj@muni.org) URL [www.muni.org/parks](http://www.muni.org/parks)



**Municipality of Anchorage**  
**Project Management and Engineering**  
**MEMORANDUM**



**RECEIVED**

**DATE:** February 10, 2020

FEB 11 2020

**To:** Dave Whitfield

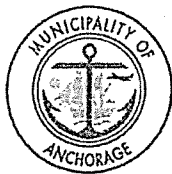
PLANNING DEPARTMENT

**FROM:** Kyle Cunningham

**SUBJECT:** Case 2019-0138: Comments from Watershed Management Services.

Watershed Management Services (WMS) has the following comments for the March 9, 2020 Planning and Zoning Commission hearing:

- 2019-0138 - Lancaster Subdivision, Tract A (Plat 80-59); Polen Park Subdivision, Tracts 1, 2 & 3 (Plat 2019-41);
  - Provide a Stormwater Pollution Prevention Plan (SWPPP) to WMS for review prior to the start of filling and grading activities.



# MUNICIPALITY OF ANCHORAGE

Anchorage Health Department



Anchorage  
Health  
Department

**RECEIVED**

FEB 11 2020

PLANNING DEPARTMENT

Date: February 6, 2020  
To: Planning Department, Current Planning Division  
Thru: *CL* Christy Lawton, Public Health Division Manger  
*JSH* Jeff Hickman, Acting Environmental Health Program Manager  
From: *J* Janine Nesheim, Environmental Sanitarian III  
Subject: Comments Regarding CUP 2019-0138, Anchorage Sand & Gravel, Inc.,  
Amendment to an existing Conditional Use for land reclamation.

---

This CUP reviews the final planning objective to continue reclamation of the Sand Lake Gravel Pit, located at 5401 Dimond Blvd. and 8501 Sand Lake Rd.

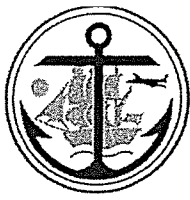
#### Comments re Air Quality

Per the approved original CUP, this site uses water trucks to minimize dust. After filling is completed, the site will be top-soiled and seeded, further reducing dust.

#### Comments re Noise

Operations at the site are restricted, minimizing noise impact during evening, Sunday, and holiday hours. Per the application, all on-site equipment will be muffled and use white noise alarms or motion detectors for backing up.

There are no objections at this time.



---

**MEMORANDUM**

DATE: February 6, 2020

RECEIVED

TO: Current Planning Division Supervisor,  
Planning Department

FEB 07 2020

THRU: Kristen A. Langley, Traffic Safety Section Supervisor,  
Traffic Department

PLANNING DEPARTMENT

FROM: Randy Ribble, Assistant Traffic Engineer

SUBJECT: **2019-0138 Amendment to existing Conditional Use Permit for land reclama-  
tion**

**8501 Sand Lake Road**

Traffic has no objection to the requested amendment to the existing conditional use permit.



THE STATE  
of **ALASKA**  
GOVERNOR MIKE DUNLEAVY

Department of Transportation and  
Public Facilities

DIVISION of PROGRAM DEVELOPMENT and STATEWIDE PLANNING  
Anchorage Field Office

4111 Aviation Avenue  
P.O. Box 196900  
Anchorage, AK 99519-6900  
Main: 907.269.0520  
Fax: 907.269.0521  
dot.alaska.gov

January 31, 2020

David Whitfield, Senior Planner  
MOA, Community Development Department  
Planning Division  
P.O. Box 196650  
Anchorage, Alaska 99519-6650

RECEIVED

JAN 31 2020

PLANNING DEPARTMENT

RE: MOA Zoning Review

Dear Mr. Whitfield:

The Alaska Department of Transportation and Public Facilities (DOT&PF), Central Region Planning Field Office has no comments on the following zoning cases:

- 2020-0028: 4335 Wisconsin Street
- 2020-0019: 165 Olympic Mountain Loop, Girdwood, AK 99587
- 2020-0023: W 30th Ave. & N. Star St. Upgrades
- 2020-0025: 538 West 10<sup>th</sup> Avenue
- 2019-0138: 8501 Sand Lake Road

If there are any questions regarding these comments, please feel free to contact me at (907) 269 – 0522 or [shawn.gardner@alaska.gov](mailto:shawn.gardner@alaska.gov) .

Sincerely,

Shawn Gardner  
Anchorage Area Planner, DOT&PF

Cc: Tucker Hum, Right of Way Agent, Right of Way, DOT&PF  
Scott Thomas, P.E., Regional Traffic Engineer, Traffic Safety and Utilities, DOT&PF  
Jim Amundsen, P.E., Highway Design Group Chief, DOT&PF  
Paul Janke, P.E., Regional Hydrologist, Hydrology DOT&PF  
James Starzec, AMATS Transportation Planner, DOT&PF

*“Keep Alaska Moving through service and infrastructure.”*

# MEMORANDUM

**DATE:** January 23, 2019  
**TO:** Dave Whitfield, Planning Manager, Planning Section, Planning Division  
**FROM:** Paul Hatcher, Engineering Technician III, Planning Section, AWWU  
**RE:** Zoning Case Comments  
Hearing date: March 9, 2020  
Agency Comments due: February 10, 2020

RECEIVED

JAN 24 2020

PLANNING DEPARTMENT

AWWU has reviewed the materials and has the following comments.

**2019-0138 LANCASTER TR A, & POLEN PARK TR 1, 2 & 3, Amendment to an existing Conditional Use for land reclamation, Grid SW2324**

1. AWWU water is available, sanitary sewer is not available to these parcels.
2. AWWU water mains located in West Dimond Boulevard, Sand Lake Road and Easement along the northern property line.
3. AWWU has no objection to this request for amendment to a conditional use permit.

If you have any questions pertaining to public water or sewer, please call 564-2721 or send an e-mail to [paul.hatcher@awwu.biz](mailto:paul.hatcher@awwu.biz)



# Public Comments on the Current Application

Municipality of Anchorage  
P. O. Box 196650  
Anchorage, Alaska 99519-6650  
(907) 343-7943



01122149013  
BARNES PAMELA J LIVING TRUST BARNES PAMELA JO/TRUSTEE  
2425 HIALEAH DR  
ANCHORAGE, AK, 99517

RECEIVED

FEB 26 2020

PLANNING DEPARTMENT

**NOTICE OF PUBLIC HEARING: Monday, March 9, 2020**

The Municipality of Anchorage Planning and Zoning Commission will consider the following:

CASE: 2019-0138

PETITIONER: Anchorage Sand & Gravel Co., inc.  
REQUEST: Amendment to an existing Conditional Use for land reclamation. \*POSTPONED FROM 11/4/19\*  
TOTAL AREA: 75.89 acres  
SITE ADDRESS: 8501 Sand Lake Road, Anchorage, Alaska 99502  
LOCATION: Generally located east of Sand Lake Road, south of West 82nd Avenue, west of Jade Street and north of West Dimond Blvd.  
CURRENT ZONE: R-1A Single-Family Residential (larger lot) District

COM COUNCIL(S): Sand Lake

LEGAL DESCR: Lancaster Subdivision, Tract A (Plat 80-59); Polen Park Subdivision, Tracts 1, 2 & 3 (Plat 2019-41)

The Planning and Zoning Commission will hold a public hearing on the above matter at 6:30PM, Monday, March 9, 2020 in the Loussac Library Assembly Chambers, 3600 Denali Street, Anchorage, Alaska.

The zoning ordinance requires that you be sent notice because your property, residence, or business is within the vicinity of the petition area. This will be the only public hearing before the commission regarding this case and you are invited to attend and present testimony, if you so desire.

If you would like to comment on the petition, this form may be used for your convenience. Mailing Address: Municipality of Anchorage, Planning Department, P.O. Box 196650, Anchorage, Alaska 99519-6650. For more information call 343-7943; FAX 343-7927. Case information may be viewed online at <http://www.muni.org/CityViewPortal>. Written comments on public hearing cases will be accepted up until 1:00 p.m. on the last business day before the meeting date. After that time, anyone wishing to submit comments must attend the meeting to testify at the public hearing.

Name: Pam Hanneman

Address: 5416 W Dimond Blvd Unit 1, Anchorage, AK 99502

Comments: I am strongly opposed to the amendment to fill contours in the affected parcels. please do not approve this amendment.

Thank you

I am out of ~~town~~ <sup>state</sup> on Mar 9 but would attend the hearing to voice my concern about this request to request your denial of it.

Municipality of Anchorage  
P. O. Box 196650  
Anchorage, Alaska 99519-6650  
(907) 343-7943



01122149002  
JOHNSON LINDA M  
5402 WEST DIMOND BLVD #A2  
ANCHORAGE , AK, 99502

RECEIVED

FEB 04 2020

PLANNING DEPARTMENT

### NOTICE OF PUBLIC HEARING: Monday, March 9, 2020

The Municipality of Anchorage Planning and Zoning Commission will consider the following:

CASE: 2019-0138

PETITIONER: Anchorage Sand & Gravel Co., Inc.  
REQUEST: Amendment to an existing Conditional Use for land reclamation. \*POSTPONED FROM 11/4/19\*  
TOTAL AREA: 75.89 acres  
SITE ADDRESS: 8501 Sand Lake Road, Anchorage, Alaska 99502  
LOCATION: Generally located east of Sand Lake Road, south of West 82nd Avenue, west of Jade Street and north of West Dimond Blvd.  
CURRENT ZONE: R-1A Single-Family Residential (larger lot) District

COM COUNCIL(S): Sand Lake

LEGAL DESCR: Lancaster Subdivision, Tract A (Plat 80-59); Polen Park Subdivision, Tracts 1, 2 & 3 (Plat 2019-41)

The Planning and Zoning Commission will hold a public hearing on the above matter at 6:30PM, Monday, March 9, 2020 in the Loussac Library Assembly Chambers, 3600 Denali Street, Anchorage, Alaska.

The zoning ordinance requires that you be sent notice because your property, residence, or business is within the vicinity of the petition area. This will be the only public hearing before the commission regarding this case and you are invited to attend and present testimony, if you so desire.

If you would like to comment on the petition, this form may be used for your convenience. Mailing Address: Municipality of Anchorage, Planning Department, P.O. Box 196650, Anchorage, Alaska 99519-6650. For more information call 343-7943; FAX 343-7927. Case information may be viewed online at <http://www.muni.org/CityViewPortal>. Written comments on public hearing cases will be accepted up until 1:00 p.m. on the last business day before the meeting date. After that time, anyone wishing to submit comments must attend the meeting to testify at the public hearing.

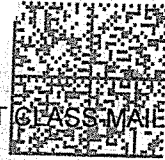
Name: Linda Johnson

Address: 5402 W Dimond, Apt 2  
Anchorage, AK 99502

Comments: This tract has been made unsuitable  
for construction and should not be  
re-zoned. I oppose the petition.

# Public Comments on Previous Application

Municipality of Anchorage  
P. O. Box 196650  
Anchorage, Alaska 99519-6650  
(907) 343-7943



U.S. POSTAGE PITNEY BOWE

ZIP 99501 \$ 000.50  
02 4W  
0000368435 OCT 15 2019

01122150002  
GUCKER THERESA J  
5400 WEST DIMOND BLVD #A2  
ANCHORAGE , AK, 99502

RECEIVED

NOV 06 2019

PLANNING DEPARTMENT

*Why?*

# POSTPONED INDEFINITELY

## NOTICE OF PUBLIC HEARING: Monday, November 4, 2019

The Municipality of Anchorage Planning and Zoning Commission will consider the following:

CASE: 2019-0138

PETITIONER: Anchorage Sand & Gravel Co., Inc.  
REQUEST: Amendment to an existing Conditional Use for land reclamation.  
TOTAL AREA: 75.89 acres  
SITE ADDRESS: Vacant Land and 8501 Sand Lake Road, Anchorage, Alaska 99502  
LOCATION: Generally located east of Sand Lake Road, south of West 82nd Avenue, west of Jade Street and north of West Dimond Blvd.  
CURRENT ZONE: R-1A Single-Family Residential (larger lot) District

COM COUNCIL(S): Sand Lake

LEGAL DESCR: Lancaster Subdivision, Tract A (Plat 80-59); Polen Park Subdivision, Tracts 1, 2 & 3 (Plat 2019-41)

The Planning and Zoning Commission will hold a public hearing on the above matter at 6:30PM, Monday, November 4, 2019 in the Loussac Library Assembly Chambers, 3600 Denali Street, Anchorage, Alaska.

The zoning ordinance requires that you be sent notice because your property, residence, or business is within the vicinity of the petition area. This will be the only public hearing before the commission regarding this case and you are invited to attend and present testimony, if you so desire.

If you would like to comment on the petition, this form may be used for your convenience. Mailing Address: Municipality of Anchorage, Planning Department, P.O. Box 196650, Anchorage, Alaska 99519-6650. For more information call 343-7943; FAX 343-7927. Case information may be viewed online at <http://www.muni.org/CityViewPortal>. Written comments on public hearing cases will be accepted up until 1:00 p.m. on the last business day before the meeting date. After that time, anyone wishing to submit comments must attend the meeting to testify at the public hearing.

Name:

Ms. Theresa J. Gucker  
Apt. A2  
5400 W Dimond Blvd.  
Anchorage, AK 99502-1315

Address:



*Why I oppose this Underhanded Plan!*

- 1 - Region Violates Concept of Tract 2 & 3!
- 2 - What part of Residential is not Underhanded?
- 3 - Negative Impact on our Housing Value!

Comments:

- 4 - Increased Traffic plus added entrance! Hazardous hazardous to lives of Elderly, Students, Marathoners, Walkers plus 2 existing Roundabouts & Lots of more!
- 5 - Commercial Business suggestion already exist less than 1 mile away!
- 6 - M.T. Views will be obliterated for folks who paid dearly to enjoy them!
- 7 - For over 30 years! This proposal has been consistently Voted down!
- 8 - We have been consistently lied to! Told it would be a Park, Soccer Field, School, Playground, etc.

*Why is Sand & Gravel taking Underhanded & Deceitful? and Municipality of Anch.*

SHAME!

Sincerely submitted,

Theresa J. Gucker - 83 m. and A. Lashon

Municipality of Anchorage  
P. O. Box 196650  
Anchorage, Alaska 99519-6650  
(907) 343-7943

FIRST CLASS MAIL



U.S. POSTAGE PITNEY BOWES

ZIP 99501 \$ 000.51  
02 4W  
0000368435 OCT 15 20

01122149017  
BREINIG CHRISTOPHER & JEANE  
5402 W DIMOND BLVD #3  
ANCHORAGE , AK, 99502

# POSTPONED INDEFINITELY

## NOTICE OF PUBLIC HEARING: Monday, November 4, 2019

The Municipality of Anchorage Planning and Zoning Commission will consider the following:

CASE: 2019-0138

RECEIVED

OCT 28 2019

PLANNING DEPARTMENT

PETITIONER: Anchorage Sand & Gravel Co., Inc.  
REQUEST: Amendment to an existing Conditional Use for land reclamation.  
TOTAL AREA: 75.89 acres  
SITE ADDRESS: Vacant Land and 8501 Sand Lake Road, Anchorage, Alaska 99502  
LOCATION: Generally located east of Sand Lake Road, south of West 82nd Avenue, west of Jade Street and north of West Dimond Blvd.  
CURRENT ZONE: R-1A Single-Family Residential (larger lot) District

COM COUNCIL(S): Sand Lake

LEGAL DESCR: Lancaster Subdivision, Tract A (Plat 80-59); Polen Park Subdivision, Tracts 1, 2 & 3 (Plat 2019-41)

The Planning and Zoning Commission will hold a public hearing on the above matter at 6:30PM, Monday, November 4, 2019 in the Loussac Library Assembly Chambers, 3600 Denali Street, Anchorage, Alaska.

The zoning ordinance requires that you be sent notice because your property, residence, or business is within the vicinity of the petition area. This will be the only public hearing before the commission regarding this case and you are invited to attend and present testimony, if you so desire.

If you would like to comment on the petition, this form may be used for your convenience. Mailing Address: Municipality of Anchorage, Planning Department, P.O. Box 196650, Anchorage, Alaska 99519-6650. For more information call 343-7943; FAX 343-7927. Case information may be viewed online at <http://www.muni.org/CityViewPortal>. Written comments on public hearing cases will be accepted up until 1:00 p.m. on the last business day before the meeting date. After that time, anyone wishing to submit comments must attend the meeting to testify at the public hearing.

Name: Jean & Chris  
Address: 5402 W Dimond #3  
ANC AK 99502

Comments: This is a quiet residential neighborhood with night shift workers at nearby airport including medical personnel. We do NOT need commercial in this area since we are close enough to all the shops/stores on Dimond, airport, increase etc) the area cannot handle the traffic (cars etc) on the new road part. It is not safe for school age children, increase traffic potential accidents. 87

Municipality of Anchorage  
P. O. Box 196650  
Anchorage, Alaska 99519-6650  
(907) 343-7943



01122149017  
BREINIG CHRISTOPHER & JEANE  
5402 W DIMOND BLVD #3  
ANCHORAGE, AK, 99502

**RECEIVED**  
OCT 28 2019

**NOTICE OF PUBLIC HEARING: Monday, November 4, 2019** PLANNING DEPARTMENT

The Municipality of Anchorage Planning and Zoning Commission will consider the following:

CASE: 2019-0138  
PETITIONER: Anchorage Sand & Gravel Co., Inc.  
REQUEST: Amendment to an existing Conditional Use for land reclamation.  
TOTAL AREA: 75.89 acres  
SITE ADDRESS: Vacant Land and 8501 Sand Lake Road, Anchorage, Alaska 99502  
LOCATION: Generally located east of Sand Lake Road, south of West 82nd Avenue, west of Jade Street and north of West Dimond Blvd.  
CURRENT ZONE: R-1A Single-Family Residential (larger lot) District  
COM COUNCIL(S): Sand Lake  
LEGAL DESCR: Lancaster Subdivision, Tract A (Plat 80-59); Polen Park Subdivision, Tracts 1, 2 & 3 (Plat 2019-41)

The Planning and Zoning Commission will hold a public hearing on the above matter at 6:30PM, Monday, November 4, 2019 in the Loussac Library Assembly Chambers, 3600 Denali Street, Anchorage, Alaska.

The zoning ordinance requires that you be sent notice because your property, residence, or business is within the vicinity of the petition area. This will be the only public hearing before the commission regarding this case and you are invited to attend and present testimony, if you so desire.

If you would like to comment on the petition, this form may be used for your convenience. Mailing Address: Municipality of Anchorage, Planning Department, P.O. Box 196650, Anchorage, Alaska 99519-6650. For more information call 343-7943; FAX 343-7927. Case information may be viewed online at <http://www.muni.org/CityViewPortal>. Written comments on public hearing cases will be accepted up until 1:00 p.m. on the last business day before the meeting date. After that time, anyone wishing to submit comments must attend the meeting to testify at the public hearing.

Name: The Breinigs  
Address: 5402 W Dimond # 3  
ANC 99502

Comments:  
No Rezone please! We bought into what was a quiet residential area. We dont not need commercial in this area. We are 1/2 mile from shopping district - walking distance or a 2 minutes car ride.  
It is unfair to residents for who bought here because it is residential to change it to commercial. We had heard there might be soccer field but certainly not commercial!

Municipality of Anchorage  
P. O. Box 196650  
Anchorage, Alaska 99519-6650  
(907) 343-7943



01122149002  
JOHNSON LINDA M  
5402 WEST DIMOND BLVD #A2  
ANCHORAGE, AK, 99502

RECEIVED

OCT 07 2019

PLANNING DEPARTMENT

### NOTICE OF PUBLIC HEARING: Monday, November 4, 2019

The Municipality of Anchorage Planning and Zoning Commission will consider the following:

CASE: 2019-0138

PETITIONER: Anchorage Sand & Gravel Co., Inc.

REQUEST: Amend it to an existing Conditional Use for land reclamation.

TOTAL AREA: 75.89 acres

SITE ADDRESS: Vacant Land and 8501 Sand Lake Road, Anchorage, Alaska 99502

LOCATION: Generally located east of Sand Lake Road, south of West 82nd Avenue, west of Jade Street and north of West Dimond Blvd.

CURRENT ZONE: R-1A Single-Family Residential (larger lot) District

COM COUNCIL(S): Sand Lake

LEGAL DESCR: Lancaster Subdivision, Tract A (Plat 80-59); Polen Park Subdivision, Tracts 1, 2 & 3 (Plat 2019-41)

The Planning and Zoning Commission will hold a public hearing on the above matter at 6:30PM, Monday, November 4, 2019 in the Loussac Library Assembly Chambers, 3600 Denali Street, Anchorage, Alaska.

The zoning ordinance requires that you be sent notice because your property, residence, or business is within the vicinity of the petition area. This will be the only public hearing before the commission regarding this case and you are invited to attend and present testimony, if you so desire.

If you would like to comment on the petition, this form may be used for your convenience. Mailing Address: Municipality of Anchorage, Planning Department, P.O. Box 196650, Anchorage, Alaska 99519-6650. For more information call 343-7943; FAX 343-7927. Case information may be viewed online at <http://www.muni.org/CityViewPortal>. Written comments on public hearing cases will be accepted up until 1:00 p.m. on the last business day before the meeting date. After that time, anyone wishing to submit comments must attend the meeting to testify at the public hearing.

Name: Linda Johnson

Address: 5402 W Dimond Apt 2  
Anchorage, AK 99502

Comments: This petition should be denied. AS&G has been allowed to use this area as a fill site as they requested. "Reclamation" of fill to the depth needed is not reasonable and can only create future problems. AS&G needs to act in good faith and keep to originally stated promises - ball field, park... no structures of any consequence.

# Public Comments: 2019-0138

Commenter	Email	Phone Number	Submitted
Brendan McKee P.O. Box 221862 Anchorage, AK 99522	bmckee@crweng.com		9/30/2019 10:55:23 AM
	<p>The West Dimond site access driveway permitted by ADOT&amp;PF and constructed in late summer 2019 is inadequate for future use by a residential development. The driveway crosses a popular area/neighborhood multiuse pathway. It has been demonstrated repeatedly that placing driveway pathway crossings well back from the edge of traveled way increases conflicts between vehicles and peds/bikes. I am surprised ADOT&amp;PF allowed this configuration as the standard for Central Region is to pull pathways to the shoulder of the intersecting roadway for driveway crossings. Reconstructing this driveway to meet current standards would also eliminate the 5% up and down grades at the crossing due to the driveway being much higher than the pathway. This pathway is a community asset and the bar should be set higher for disturbing the existing use.</p> <p>Secondary comments regarding development. This area doesn't need high density housing added. This is most definitely not in character with the surrounding R1 single family home zoning.</p> <p>Thanks, Brendan</p>		

# Affidavit of Posting and Historical Information



# AFFIDAVIT OF POSTING

CASE NUMBER: 2019-0138

I, Ben Armstrong hereby certify that I have posted a Notice as prescribed by Anchorage Municipal Code 21.03.020H.5. on the property that I have petitioned for REZONE. The notice was posted on 9/18/19 which is at least 21 days prior to the public hearing on this petition. I acknowledge this Notice(s) must be posted in plain sight and displayed until all public hearings have been completed.

Affirmed and signed this 18 day of SEPTEMBER, 2019.

[Signature]  
Signature



## LEGAL DESCRIPTION

Tract or Lot: \_\_\_\_\_  
Block: \_\_\_\_\_  
Subdivision: \_\_\_\_\_

SW 1/4 SW 1/4 S10 T12 N R4W  
SM, ALASKA. EXCEPTING  
THESE FROM ALL THAT PORTION  
CONVEYED TO THE TERRITORY  
OF ALASKA BY RIGHT-OF-WAY  
DEED RECORDED OCT 6, 1958  
IN BOOK 168 AT P. 226 &  
CORRECTED RIGHT-OF-WAY DEED  
RECORDED DEC 5, 1958 IN BOOK  
172 AT PAGE 136. ALSO EXCEPTING  
THESE FROM ALL THAT PORTION CONVEYED TO  
THE STATE OF ALASKA, 320 JUDICIAL DISTRICT, P. 1 MISC BOOK 17

**MUNICIPALITY OF ANCHORAGE  
MEMORANDUM**

---

DATE: November 4, 2019  
TO: Planning and Zoning Commission  
THRU:  Michelle McNulty, Planning Director  
FROM:  Francis McLaughlin, Senior Planner, Planning Department  
SUBJECT: Case 2019-0138, Sand Lake Fill Site

The petitioner requests to postpone indefinitely Case 2019-0138, Sand Lake Fill Site, amendment to a conditional use for land reclamation, in order to revise the project area and hold another community meeting. The Department recommends approval the postponement.



Land Surveying  
Land Development Consultants  
Subdivision Specialists  
Construction Surveying

124 E 7th Avenue, Anchorage, Alaska 99501    www.S4AK.com    907-306-8104

September 30, 2019

Mr Francis McLaughlin, MOA Senior planner  
4700 Elmore Road  
Anchorage, Ak 99507

Re: Reschedule PZC Hearing at Petitioners Request  
Project: Sand Lake Fill Site CUP Amendment

Dear Mr. McLaughlin,

This letter serves as a 'Request to Reschedule the PZC Public Hearing at Petitioners Request', and postpone indefinitely in order to revise the project area to include all of the Tracts within Polen Park Subdivision and hold another community meeting with the Sand Lake Community Council.

The project has been assigned the MOA project case number of: 2019-0138.

If members of the Community Council or the MOA Planning staff need any further information or clarification, please call 907-227-1847, or email me at: tom@s4ak.com.

Thank you,

A handwritten signature in blue ink, appearing to read 'Tom Dreyer', written over a horizontal line.

Tom Dreyer, PLS  
S4 Group  
Petitioner's representative

Anchorage, Alaska  
AO No. 2019-142, As Amended

1 AN ORDINANCE OF THE MUNICIPALITY OF ANCHORAGE AMENDING THE  
2 ANCHORAGE 2040 LAND USE PLAN TO CHANGE THE LAND USE MAP  
3 CLASSIFICATION FROM "OPEN SPACE" TO "COMPACT MIXED  
4 RESIDENTIAL LOW" FOR FIVE ACRES, LOCATED NORTH OF WEST  
5 DIMOND BOULEVARD AND EAST OF SAND LAKE ROAD.

6  
7 (Planning and Zoning Commission Case 2019-0119)

8  
9 WHEREAS, the Anchorage Assembly makes the following findings of fact,  
10 incorporated from Planning and Zoning Commission Resolution No. 2019-  
11 020:

12  
13 1. The five approval criteria for a comprehensive plan amendment  
14 are met. The amendment is consistent with goals of the Anchorage  
15 2040 Land Use Plan. Both Anchorage 2040 and the 2012 West  
16 Anchorage District Plan identified this area for moderate density  
17 housing and this action will expand the designation by approximately  
18 five acres to the east.

19  
20 2. Criterion A is met. The amendment is necessary because the  
21 land was assumed to be unbuildable based on anticipated fill, but now  
22 the property owner intends to place engineering fill instead.

23  
24 3. Criterion B is met. This is still largely an open space area, of  
25 which only ten acres out of the total of 80 acres can be developed with  
26 structures. This is a small area within a much larger area. The gross  
27 residential density is in the range of surrounding single-family and  
28 attached housing. Despite the current economy, these decisions are  
29 for the long-term. With housing needs and land for buildable housing,  
30 we look at all areas of the municipality, not just in a few. Being able  
31 to identify five additional acres for future housing helps further the  
32 general goals of the comprehensive plan.

33  
34 4. Page 27 of Anchorage 2040 identifies the area as "Areas of  
35 Moderate Growth" and "Land Use Designation Change from Uses  
36 Currently Allowed by Existing Zoning (as of 2017)". The "Compact-  
37 Mixed Residential-Low" classification is consistent with the Plan.

38  
39 5. Criterion D is met. The requested land use designation is found  
40 to be equally or more supportive of the comprehensive plan goals,  
41 objectives, policies, and guidelines, than the old land use designation.  
42 The change eliminates the current land use designation split on the  
43 property. The amendment is in favor of the public interest by  
44 providing additional residential capacity. There will be 70 acres of

**“Open Space” remaining, which is consistent with Anchorage 2040.;  
now, therefore**

**THE ANCHORAGE ASSEMBLY ORDAINS:**

**Section 1.** That the *Anchorage 2040 Land Use Plan* is hereby amended to change the land use map classification for five acres from “Open Space” to “Compact Mixed Residential Low”.

**Section 2.** That the *Anchorage 2040 Land Use Plan* is hereby amended to reflect the change as shown on Exhibit A.

**Section 3.** Anchorage Municipal Code section 21.01.080 is amended as follows (*the remainder of the subsection is not affected and therefore not set out*):

**21.01.080 COMPREHENSIVE PLAN**

**A. Purpose**

The purpose of the comprehensive plan is to set for the goals, objectives, strategies, and policies governing land use development of the municipality. As adopted, this section and the documents incorporated in this section constitute the comprehensive plan of the municipality.

**B. Elements**

**1. Adopted Elements**

The comprehensive plan consists of the adopted elements identified in the following table, and which are incorporated in this chapter by reference. Plans or other elements that are not listed below are not official elements of the comprehensive plan, though they may be valid planning tools.

\*\*\*      \*\*\*      \*\*\*

TABLE 21.01-1: COMPREHENSIVE PLAN ELEMENTS			
Area/Topic	Plan	Adoption Date <sup>1</sup>	Amendments
Anchorage Bowl	Anchorage 2020, Anchorage Bowl Comprehensive Plan	AO 2000-119(S); 2-20-2001	AO 2002-119; 9-10-2002
	Anchorage 2040 Land Use Plan	AO 2017-116, as amended; 9-26-2017	AO 2019- : ( <i>insert effective date of this ordinance</i> )
	Spenard Commercial District Development Strategy	AR 1986-121; 6-17-1986 AO 1987-145; 12-15-1987	
	Tudor Road Public Lands and Institutions Plan	AR 1986-162; 9-9-1986	
	3500 Tudor Road Master Plan	AO 2007-118; 11-13-2007	

**TABLE 21.01-1: COMPREHENSIVE PLAN ELEMENTS**


Area/Topic	Plan	Adoption Date <sup>1</sup>	Amendments
	Anchorage Downtown Comprehensive Plan	AO 2007-113; 12-11-2007	
	Hillside District Plan	AO 2010-22; 4-13-2010	AO 2014-134; 11-18-14 AO 2015-17; 3-3-15
	Utility Corridor Plan	AO 1990-13(S); 2-27-1990	AO 2003-78; 8-19-2003 AO 2005-121(S); 10-25-2005 AO 2007-97; 7-17-2007
	Section 36 Land Use Study (recommending Alternative 2)	AO 1992-125; 11-10-1992	
	The Ship Creek/Waterfront Land Use Plan (May 1991), including the Transportation Element, as supplemented by the Ship Creek Framework Plan, 7-22-14	AO 1991-88; 6-3-1991	AIM 1991-178 AO 2014-79; 7-22-14
	Potter Valley Land Use Analysis	AO 1999-144; 12-7-1999	
	UMED District Plan	AO 2015-140; 3-22-2016	
	West Anchorage District Plan	AO 2012-47; 7-10-2012	AO 2016-32; 4-12-16
	Government Hill Neighborhood Plan	AO 2013-11; 2-12-2013	AO 2015-18; 3-3-15
	Fairview Neighborhood Plan	AO 2014-108; 9-9-14	

\*\*\*      \*\*\*      \*\*\*

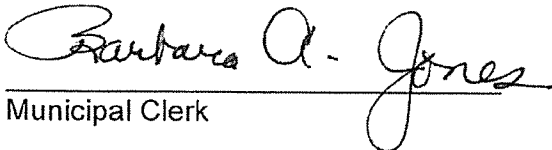
(AO 2012-124(S), 2-26-13; AO 2013-117, 12-3-13; AO 2013-132(S), 7-8-14; AO 2013-151, 1-14-14; AO 2014-63, 6-24-14; AO 2014-79, 7-22-14; AO 2014-108, 9-9-14; AO 2014-134, 11-18-14; AO 2014-139(S), 12-2-14; AO 2015-46, 5-14-15; AO 2015-17, 3-3-15; AO 2015-18, 3-3-15; AO 2015-140, 3-22-16; AO 2016-32, 4-12-16; AO 2016-101, 9-13-16 AO 2017-67; 5-9-2017; AO 2017-116, as amended; 9-26-17; AO 2017-134, 11-7-17; AO 2018-23, 3-20-18)

**Section 4.** This ordinance shall become effective immediately upon passage and approval by the Anchorage Assembly.

PASSED AND APPROVED by the Anchorage Assembly this 17th day of December, 2019.

  
Chair

ATTEST:

  
Municipal Clerk

# MUNICIPALITY OF ANCHORAGE

## ASSEMBLY MEMORANDUM

No. AM 763-2019

Meeting Date: November 19, 2019

1 FROM: MAYOR

2  
3 SUBJECT: AN ORDINANCE OF THE MUNICIPALITY OF ANCHORAGE  
4 AMENDING THE *ANCHORAGE 2040 LAND USE PLAN* TO  
5 CHANGE THE LAND USE MAP CLASSIFICATION FROM "OPEN  
6 SPACE" TO "COMPACT MIXED RESIDENTIAL LOW" FOR FIVE  
7 ACRES, LOCATED NORTH OF WEST DIMOND BOULEVARD AND  
8 EAST OF SAND LAKE ROAD.  
9

10 This is a comprehensive plan amendment to the *Anchorage 2040 Land Use Plan*.  
11 The amendment changes the land use classification for five acres of land from  
12 "Open Space" to "Compact Mixed Residential Low". On November 5, 2019, the  
13 Planning and Zoning Commission adopted a resolution recommending approval of  
14 the map amendment.  
15

16 There is already five acres of the "Compact Mixed Residential Low" classification  
17 present to the west of this site, and the amendment eliminates the split land use  
18 classifications that exists on Tracts 2 and 3, Polen Park Subdivision. The  
19 implementing zoning district for this classification is R-2M, mixed residential district,  
20 with gross densities between five and 15 dwelling units per acre. The *Anchorage*  
21 *2040 Land Use Plan* estimates that Anchorage will have a shortage of  
22 approximately 7,900 dwelling units over the next 20 years.  
23

24 The existing "Open Space" designation was based on an assumption that the site  
25 would not be developable, but now the property owner intends to place compacted  
26 structural fill at the site so that housing can be built.  
27

28 This ordinance has no private sector economic effects and local government effects  
29 are less than \$30,000. Pursuant to AMC 2.30.053B.1., a summary of economic  
30 effects is not required.  
31

### 32 THE ADMINISTRATION RECOMMENDS APPROVAL.

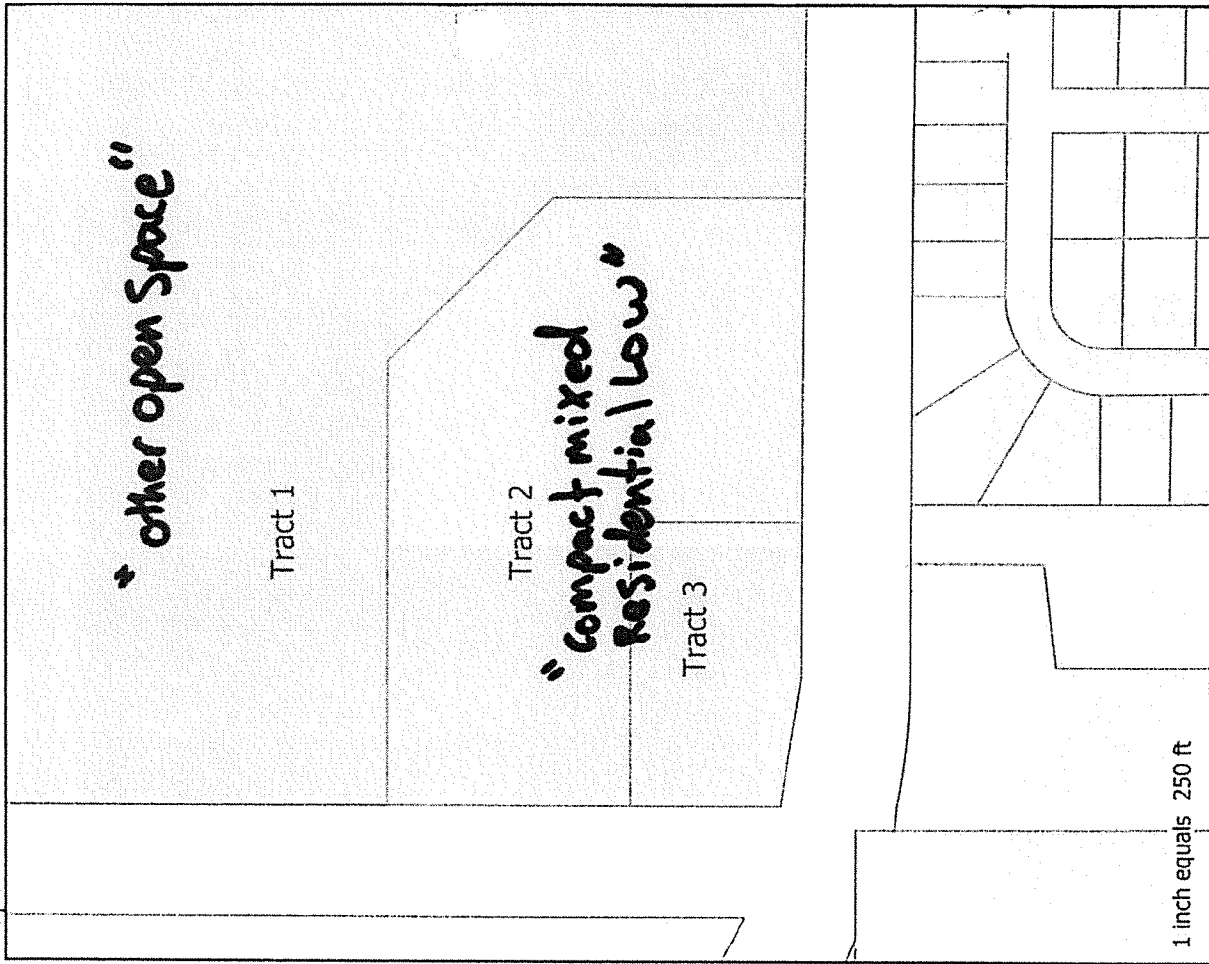
33  
34 Prepared by: Francis McLaughlin, Senior Planner  
35 Approved by: Michelle J. McNulty, Planning Director  
36 Concur: Lance Wilber, Director  
37 Office of Management and Budget  
38 Concur: Christopher M. Schutte, Director  
39 Office of Economic and Community Development  
40 Concur: Rebecca A. Windt Pearson, Municipal Attorney  
41 Concur: William D. Falsey, Municipal Manager  
42 Respectfully submitted: Ethan A. Berkowitz, Mayor  
43

44 Attachment: Planning Department Analysis Packet

Current - Existing



Proposed



Large-Lot Residential	Regional Commercial Center	University or Medical Center
Single-Family and Two-Family	City Center	Airport, Railroad, or Port Facility
Compact Mixed Residential - Low	Commercial Corridor	Potential Open Space - Alternative
Compact Mixed Residential - Medium	Main Street Corridor	Light Industrial / Commercial
Urban Residential - High	Park Or Natural Area	General Industrial
Neighborhood Center	Other Open Space	Water Feature
Town Center	Community Facility or Institution	ROW (White)

Planning & Zoning Commission Case #: 2019-0119

# Exhibit A

Municipal Clerk's Office  
Amended and Approved  
Date: December 17, 2019

Submitted by: Chair of the Assembly at the  
Request of the Mayor  
Prepared by: Planning Department  
For Reading: November 19, 2019

ANCHORAGE, ALASKA  
AO No. 2019-143, As Amended

1 AN ORDINANCE AMENDING THE ZONING MAP AND APPROVING THE  
2 REZONING OF APPROXIMATELY TEN ACRES FROM R-1A (SINGLE-FAMILY  
3 RESIDENTIAL DISTRICT, LARGE LOT) TO B-1A SL (LOCAL AND  
4 NEIGHBORHOOD BUSINESS DISTRICT) WITH SPECIAL LIMITATIONS AND R-  
5 2M SL (MIXED RESIDENTIAL DISTRICT) WITH SPECIAL LIMITATIONS FOR  
6 TRACTS 2 AND 3, POLEN PARK SUBDIVISION PER PLAT 2019-41;  
7 GENERALLY LOCATED NORTH OF WEST DIMOND BOULEVARD, EAST OF  
8 SAND LAKE ROAD, SOUTH OF THE WEST 82<sup>ND</sup> AVENUE, AND WEST OF  
9 JADE STREET, IN ANCHORAGE.

10  
11 (Sand Lake Community Council) (Planning and Zoning Commission Case 2019-  
12 0118)

13  
14 WHEREAS, the Anchorage Assembly makes the following findings of fact,  
15 incorporated from Planning and Zoning Commission Resolution No. 2019-021:  
16

17 1. This rezone complies with the nine approval criteria for  
18 rezonings, AMC 21.03.160E. The rezone is consistent with the  
19 Anchorage 2040 Land Use Plan Map and the 2012 West Anchorage  
20 District Plan. The B-1A and R-2M districts implement both Plans.  
21

22 2. Zoning is important because buying property is one of the  
23 biggest investments anyone will make. The approval criteria are met for  
24 this rezoning despite objections from members of the public. The public  
25 process for this rezone has been followed. This is a process that has  
26 continued since the West Anchorage District Plan was adopted in 2012  
27 and later with the Anchorage 2040 Land Use Plan. These Plans are  
28 followed for the benefit of everyone in the neighborhood and for future  
29 property buyers because they need to know that they can develop  
30 according to what is in the Plan. Anchorage 2040 classifies this site as  
31 "Compact Mixed Residential Low" and the implementing zoning district  
32 is the R-2M. The West Anchorage District Plan classifies the site as  
33 "Small Scale Commercial" and the implementing district is the B-1A.  
34 The Plans identified this site for growth, which no one wants in their  
35 backyard; however, growth has to go somewhere, and that is why it was  
36 identified in the Anchorage 2040 Land Use Plan.  
37

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42

3. Criterion 1 is met. Anchorage needs more residential units and this is one of the only sites slated to have that additional growth. The West Anchorage District Plan also identified this site for “Small Scale Commercial”, which is why the B-1A district is appropriate. This is not “spot-zoning” because this is the zoning called for in the Plan. The rezoning complies and conforms with the comprehensive plan as shown on pages 26 and 27 of Anchorage 2040 and page 75 of the West Anchorage District Plan.

4. This rezoning is compatible with the existing neighborhood. Traffic impacts will be evaluated at the time of development, which should alleviate concern from neighbors.

5. Public testimony was heard that speaks to the compatibility and the necessity of the rezoning, but the Plan shows this site as commercial and residential and these maps matter. This did not just sneak in; it has been there since at least 2012 and the community councils have already spoken to this, which answers the compatibility and the necessity elements. The site plan review requirement will satisfy some of the community’s concerns about compatibility and is a good balance.

6. The rezoning is compatible with surrounding zoning and development, and protects areas designated for specific uses on the zoning map from incompatible land uses, especially given the site plan review requirement. Residential development of 15 dwelling units per acre is incredibly challenging to do in our community. This is moderate residential density for Anchorage. The site is well served by roads, parks, and trails, which is better than a lot of places that are developed with higher-density housing. The need to distribute housing in more places around the whole city provides families with opportunities that everyone ought to be able to enjoy in our community.; now, therefore

**THE ANCHORAGE ASSEMBLY ORDAINS:**

**Section 1.** The zoning map shall be amended by designating Tracts 2 and 3, Polen Park Subdivision per Plat 2019-41, as R-2M (mixed residential district) and B-1A (local and neighborhood business district), respectively.

The property described above is shown on Exhibit “A,” attached.

1 **Section 2.** This zoning map amendment established in Section 1 shall become  
2 effective upon approval of an update to the conditional use permit for the fill site  
3 (PZC Resolution 2014-029).  
4

5 **Section 3.** The zoning map amendment is subject to the following special  
6 limitations:  
7

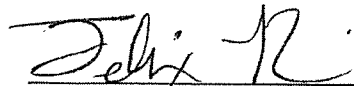
8 **A. Obtain major site plan approval for Tracts 2 and 3, unless a higher**  
9 **level of review is required. The site plan for Tract 3 shall**  
10 **demonstrate the design intent of 'Small-Scale Commercial' in the**  
11 **West Anchorage District Plan. [OBTAIN MAJOR SITE PLAN**  
12 **APPROVAL FOR TRACTS 2 AND 3 THAT DEMONSTRATES A**  
13 **SITE PLAN AND DESIGN INTENT MEETING THE DESCRIPTION**  
14 **OF SMALL-SCALE COMMERCIAL IN THE WEST ANCHORAGE**  
15 **DISTRICT PLAN.]**  
16

17 **B. Fueling stations are prohibited.**  
18

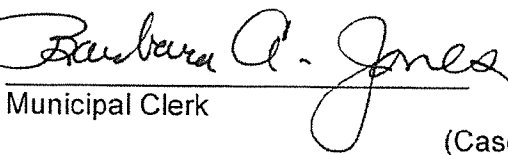
19 **C. Parking lots in the B-1A district shall be located beside or behind**  
20 **businesses.**  
21

22 **Section 4.** This ordinance shall become effective 10 days after the Director of the  
23 Planning Department has received the written consent of at least 51 percent of the  
24 owners of the property within the area described in Section 1 above to any special  
25 limitations contained herein. The rezone approval contained herein shall  
26 automatically expire, and be null and void, if the written consent is not received  
27 within 120 days after the date on which this ordinance is passed and approved. In  
28 the event no special limitations are contained herein, this ordinance is effective  
29 immediately upon passage and approval. The Director of the Planning Department  
30 shall change the zoning map accordingly.  
31

32 PASSED AND APPROVED by the Anchorage Assembly this 17th day of December,  
33 2019.  
34

35   
36 \_\_\_\_\_  
37 Chair

38 ATTEST:

39  
40   
41 \_\_\_\_\_  
42 Municipal Clerk  
43

(Case 2019-0118)

# MUNICIPALITY OF ANCHORAGE

## ASSEMBLY MEMORANDUM

No. AM 764-2019

Meeting Date: November 19, 2019

1 FROM: MAYOR

2  
3 SUBJECT: AN ORDINANCE AMENDING THE ZONING MAP AND APPROVING  
4 THE REZONING OF APPROXIMATELY TEN ACRES FROM R-1A  
5 (SINGLE-FAMILY RESIDENTIAL DISTRICT, LARGE LOT) TO B-1A  
6 SL (LOCAL AND NEIGHBORHOOD BUSINESS DISTRICT) WITH  
7 SPECIAL LIMITATIONS AND R-2M SL (MIXED RESIDENTIAL  
8 DISTRICT) WITH SPECIAL LIMITATIONS FOR TRACTS 2 AND 3,  
9 POLEN PARK SUBDIVISION PER PLAT 2019-41; GENERALLY  
10 LOCATED NORTH OF WEST DIMOND BOULEVARD, EAST OF  
11 SAND LAKE ROAD, SOUTH OF THE WEST 82<sup>ND</sup> AVENUE, AND  
12 WEST OF JADE STREET, IN ANCHORAGE.  
13  
14

15 The zoning map will change Tract 2 to the R-2M (mixed residential) district. Tract 2  
16 contains approximately eight acres surrounding Tract 3. The B-1A (local and  
17 neighborhood business) district will be applied to Tract 3, which contains two acres  
18 at the northeast corner of Sand Lake Road and West Dimond Boulevard.  
19

20 On October 7, 2019, the Planning and Zoning Commission recommended approval  
21 of the rezoning, subject to an effective clause requiring the existing fill site  
22 conditional use to be updated and requiring an approved major site plan review to  
23 ensure compatibility with the 2012 *West Anchorage District Plan*.  
24

25 There is a separate ordinance being processed concurrently with this rezoning that  
26 would amend the *Anchorage 2040 Land Use Plan Map* to make the east five acres  
27 of this site "Compact Mixed Residential Low." The implementing district for this  
28 designation is R-2M.  
29

30 The *West Anchorage District Plan* identifies the west five acres of this site as  
31 "Low/Medium Intensity Residential (>8-15)" and "Small Scale Commercial." The  
32 *Anchorage 2040 Land Use Plan* identifies the site as "Compact Mixed Residential"  
33 and refers to the *West Anchorage District Plan* for the "Small Scale Commercial"  
34 designation. Both of these *Plans* call for the property to be rezoned to the B-1A and  
35 R-2M districts. This rezoning is consistent with these *Plans* and meets the approval  
36 criteria for rezonings, AMC 21.03.160E.  
37

38 The R-2M district is intended for residential areas that allow for a variety of single-  
39 family, two-family, and multifamily dwellings, with gross densities between five and  
40 15 dwelling units per acre. The R-2M district provides residential neighborhoods  
41 with a greater diversity of housing by allowing a mix of both detached and a variety

1 of attached dwelling types in close proximity to each other, rather than separated  
2 into different zoning districts.

3  
4 The B-1A district is intended for small, compact commercial sites or areas within or  
5 surrounded by residential areas. The district is applied to encourage the provision  
6 of small scale retail, office, and service uses compatible in scale and character with  
7 adjacent residential uses, and providing services to the surrounding neighborhood.  
8 The district also allowed mixed-use development.

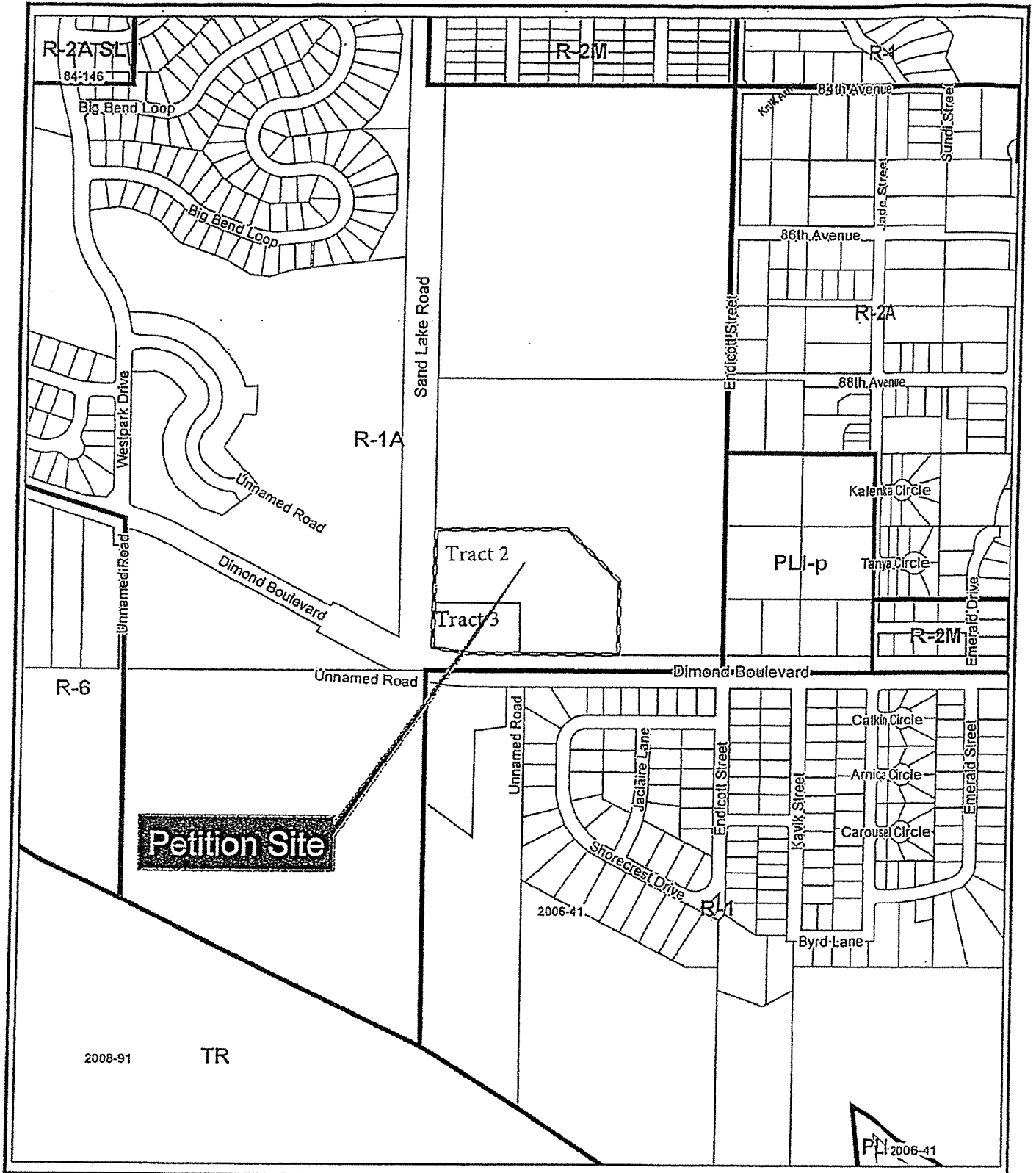
9  
10 This ordinance has no private sector economic effects and local government effects  
11 are less than \$30,000. Pursuant to AMC 2.30.053B.1., a summary of economic  
12 effects is not required.

13  
14 **THE ADMINISTRATION RECOMMENDS APPROVAL.**

15  
16 Prepared by: Francis McLaughlin, Senior Planner  
17 Approved by: Michelle J. McNulty, Director, Planning Department  
18 Concur: Christopher M. Schutte, Director  
19 Office of Economic and Community Development  
20 Concur: Rebecca A. Windt Pearson, Municipal Attorney  
21 Concur: William D. Falsey, Municipal Manager  
22 Respectfully submitted: Ethan A. Berkowitz, Mayor

23  
24 Attachment: Planning Department Analysis Packet

# 2019-0118 EXHIBIT A



Municipality of Anchorage  
Planning Department

Date: August 14, 2019



**MUNICIPALITY OF ANCHORAGE**  
**PLANNING AND ZONING COMMISSION RESOLUTION NO. 2014-029**

A RESOLUTION APPROVING A MODIFICATION TO A NATURAL RESOURCE EXTRACTION CONDITIONAL USE TO END A SEVEN YEAR ABEYANCE AND AMEND THE SITE PLAN, IN THE R-1A (SINGLE FAMILY RESIDENTIAL) DISTRICT FOR LANCASTER SUBDIVISION, TRACT A, AND T12N, R4W, SECTION 10, SW ¼, SW ¼, PARCEL 21, S.M., AK; GENERALLY LOCATED ON THE NORTHEAST CORNER OF SAND LAKE ROAD AND DIMOND BOULEVARD.

(Case 2014-056; Parcel ID Nos. 001-162-42 and 011-201-30)

WHEREAS, a request was received from Anchorage Sand and Gravel, petitioner, and DOWL HKM, representative, for a modification to a natural resource extraction conditional use to end the seven year abeyance and amend the site plan, in the R-1A (single family residential) district for Lancaster Subdivision, Tract A, and T12N, R4W, Section 10, SW ¼, SW ¼, Parcel 21, S.M., AK; generally located on the northeast corner of Sand Lake Road and Dimond Boulevard; and

WHEREAS, a non-public hearing was held in front of the Planning and Zoning Commission on June 2, 2014.

NOW, THEREFORE, BE IT RESOLVED by the Anchorage Planning and Zoning Commission that:

- A. The Commission makes the following findings of fact:
1. The site is located at 8501 Sand Lake Road, and is a part of the 80-acre former gravel pit known as the Anchorage Sand and Gravel (AS&G) pit and Sand Lake Fill Site. It is a former natural resource extraction site which is undergoing reclamation for future open space.
  2. The request meets the general standards for conditional use approval (AMC 21.50.020) and the standards for natural resource extraction approval (AMC 21.50.070). This case was reviewed in accordance with AMC 21.13.030G., *Approval of site plans and conditional uses - Modification of final approval.*
- B. The Commission APPROVES the modification to a conditional use, subject to the following conditions:
1. Provide a grading and drainage plan to Private Development and a sediment and erosion control plan to Watershed Management Services.
  2. Prior to using the Phase II driveway, obtain a driveway permit from DOT&PF for the new driveway location.
  3. Resolve traffic impact issues with DOT&PF.

4. Add a label identifying the paved drive between the cattle guard containment and Sand Lake Road.
5. All documents submitted with this application are part of the conditions of approval.
6. This conditional use approval allows a natural resource extraction for the AS&G site on Lancaster Subdivision, Tract A and T12N, R4W, Section 10, SW ¼, SW ¼, Parcel 21, AK, zoned R-1A (single-family residential district), to deposit 2.5 million CY of mixed fill. The site will then be graded and leveled for use of outdoor recreation area, subject to the applicable provisions of Title 21, AMC.
7. This resolution incorporates prior conditions of approval for the northern portion of the petition area (under separate conditional use) which are still in effect and continue to govern the restoration operations of the natural resource extraction site in its entirety and supersedes the following resolutions: 28-75F dated 9/19/83; 28-75G dated 2/21/85; 28-75H dated 5/11/87; 28-075I dated 10/24/88; 75-028J dated 9/24/90; 21-78 dated 3/16/78; 21-78A dated 6/26/78; 25-78 dated 3/23/78; 25-78A dated 7/24/78; 78-025H dated 5/11/87; 16-83 dated 3/15/83; 95-019 dated 3/6/95; and 95-019A dated 11/6/95. Resolution 2000-034, dated 5/8/00, contained no additional conditions of approval. These incorporated conditions are as worded in resolution 95-019A (a resolution consolidating all prior approvals). These incorporated conditions are as worded in resolutions 2005-073 and 2005-074. These conditions are still in effect, except as modified by this approval):
  - a. This approval combines amortization permits P78-18 (Tract A, Lancaster Subdivision formerly known as the Anchorage Sand and Gravel pit), P78-42 (SW 1/4, SW 1/4, Section 10, T12N, R4W, S.M., Alaska formerly known as the Richard Evenson property) and CU 83-022-3 (the 80 acre tract including Tract A, Lancaster Subdivision and SW 1/4, SW 1/4, Section T12N, R4W, S.M., Alaska). This approval is based on AMC 21.55.090, Resolution 16-83 and the Sand Lake Redevelopment Plan as adopted March 15, 1983. (Amended from Resolution 28-75F.)
  - b. At the end of the fill operation, a close out inspection of the property with representatives of Private Development and Planning shall be conducted to evaluate the final restoration and compliance with the reclamation plan.

- c. Operational hours shall be limited to 7:00 a.m. to 6:00 p.m. on Monday through Saturday. No operations will be permitted on Sundays or legal holidays. (Adopted from Resolution 28-75F.)
- d. Dust mitigation plans on public roadways and on the roadways within the site shall be submitted and approved by the Department of Health and Environmental Protection and the Municipal Planning Department as well as the methods to control spillage and clean up of the public roads shall be submitted to ensure that the tracking of peat on the Sand Lake Road shall be contained. (Adopted from Resolution 28-75F.)
- e. Stop signs shall be erected at all access points of the site, as approved in final site plans. These signs shall be maintained for the life of the restoration operations. (Amended from Resolution 25-78A.)
- f. There shall be no access to Dimond Boulevard from the petition site. (amended from Resolution 25-78A.)
- g. Effective access barriers shall be erected across any approved access to the site, as specified in final site plan approval, during any and all periods of pit closures. These barriers shall be maintained to prevent casual access into the pits. (adopted from Resolutions 21-78A and 25-78A.)
- h. All on-site equipment shall be muffled and use white noise alarms or motion detectors for backing up.
- i. Portable restrooms shall be maintained on-site during any periods of pit operations for employee use. Such restrooms shall be maintained in a sanitary condition at all times. (adopted from Resolutions 21-78A and 25-78A.)
- j. Annually an inspection report prepared by an Alaskan registered and professional engineer will identify the location and extent of the backfill as it relates to the fill being placed, and as it relates to the approved fill document. This report is to be submitted by December 31 of each year to the Planning Division for compliance to these conditions of approval. (adopted from Resolution 28-75F.)
- k. The petitioner shall provide log books with dates, time and material dumped, to be available upon request of the Community Development Department. (adopted from Resolution 78-025H.)

- l. Upon determination by Zoning Enforcement that a major violation of the conditions of approval is ongoing, by the filling of this property with other than structure soils and concrete (as permitted under Resolutions 78-025H and 28-075I), the use shall be suspended until the major violation has been corrected. (adopted from Resolutions 28-75F, 78-025H and 28-075I.)
- m. A staging map shall be submitted within 30 days of approval of the northern 35 acres to depict the staging of the fill for approval by the Community Development Department. As each stage, not to exceed 100 foot in width, is completed, it shall be stabilized and seeded with materials as approved by the Planning Staff within one six week growing season or on or before June 1 of the following year, whichever is earlier, to reduce air pollution and erosion. (Resolution 28-75F.)
- n. Clearly identified permanent control survey monuments shall be provided to Zoning Enforcement. The control survey monuments shall identify the maximum area of fill as depicted on Exhibit D1 and also establish the elevation so Zoning Enforcement will have the ability to substantiate the control filling. (adopted from Resolution 28-75F.)
- o. A performance bond in the amount of \$100,000 shall be provided to the Community Development Department within 30 days of approval to guarantee the implementation of the proposed restoration and preparation for redevelopment. The bond may be in any form found acceptable to staff including deeds of trusts and irrevocable letters of credit. (adopted from Resolution 28-75F.)
- p. The operation of the reclamation site shall include the following: (adopted from Resolution 95-019):
  - 1) On-site personnel shall be formally trained on all aspects of the operation of the reclamation site.
  - 2) The telephone number of Anchorage Sand & Gravel shall be placed on the side of the on-site operations building. The sign shall be of sufficient size to be visible from the adjacent roadway and the view of the sign shall be unobstructed by equipment, machinery, vegetation and the like.
  - 3) On-site personnel shall have total authority to direct road clean-up and maintenance operations as needed. On-site

personnel shall have the authority to call a sweeper, water truck and motor grader, as necessary, to respond to specific site conditions or complaints.


- 4) Circulation roads within the pit shall be maintained to minimize materials carried onto Sand Lake Road and Dimond Boulevard.
- 5) Anchorage Sand and Gravel shall identify contact people to respond to public inquiries. Currently, Wes VanderMartin, General Manager, AS&G, and Ryan Morman, Pit Operations Manager, AS&G can be reached at 349-3333. The home telephone numbers of the contact people shall be provided to the Chairman of the Sand Lake Community Council. The Community Council chairman and Land Use Enforcement shall be notified of any change in the AS&G contact personnel or business telephone number(s). The Community Council chairman shall be notified of any change in the home telephone numbers of AS&G contact personnel.
- q. The terms and conditions of this amortization permit shall be binding on the petitioner, his heirs, assigns, transferees, and other successors in interest and if violated shall subject the persons responsible for such violation to all penalties and remedies as provided by law. This resolution shall be recorded. (adopted from Resolutions 21-78A and 25-78A).
8. This conditional use approval is valid until May 5, 2024.
9. Future time extension requests shall require a nonpublic hearing review.
10. The list of acceptable fill materials is as follows: peat, clay, silty soil, hydro-axed materials, tree fragments, stumps, turf, and other organics associated with permitted clearing and grubbing operations, including wood chips from grinding operations, and concrete remnants related to demolition, concrete testing, or construction site clean-up.
11. The operation plan must address and include methods to prevent spontaneous combustion of materials on-site.
12. No gravel shall be removed from the site.
13. Submit a plan to Watershed Management Services and Planning for review and approval that addresses, but is not limited to, monitoring


protocol and monitoring well(s) to screen for contaminants and a method for third party review and reporting of results.

14. This approval includes a modification to the site plan, in accordance with the following plans:
  - a. Anchorage Sand and Gravel, Natural Resource Extraction Site, Grading/Drainage Plan; Figure 4; scale 1" = 200'; dated 2009-11-11; Drawn by DOWL HKM.
  - b. Sand Lake Fill Site CUP Amendment Operations Plan, Figure 3, drawn by DOWL HKM, dated 2014-3-10, scale 1" = 200'.
  - c. Anchorage Sand and Gravel, Natural Resource Extraction Site, Reclamation Plan; Figure 5; no scale; dated 2009-11-10; drawn by DOWL HKM.
15. A notice of zoning action shall be filed with the State Recorder's Office, along with a copy of the approved resolution and site plan. Proof of such shall be provided to the Planning Department.
16. The petitioner shall contract with a third party to evaluate methods and processes and how AS&G manages its site, the way AS&G processes and accepts materials, and the types of materials that are accepted. The petitioner shall, within 60 days, resolve with the Planning Department a process for reporting and memorializing the results of these third party reviews.

PASSED AND APPROVED by the Municipal Planning and Zoning Commission on the 2nd day of June, 2014.

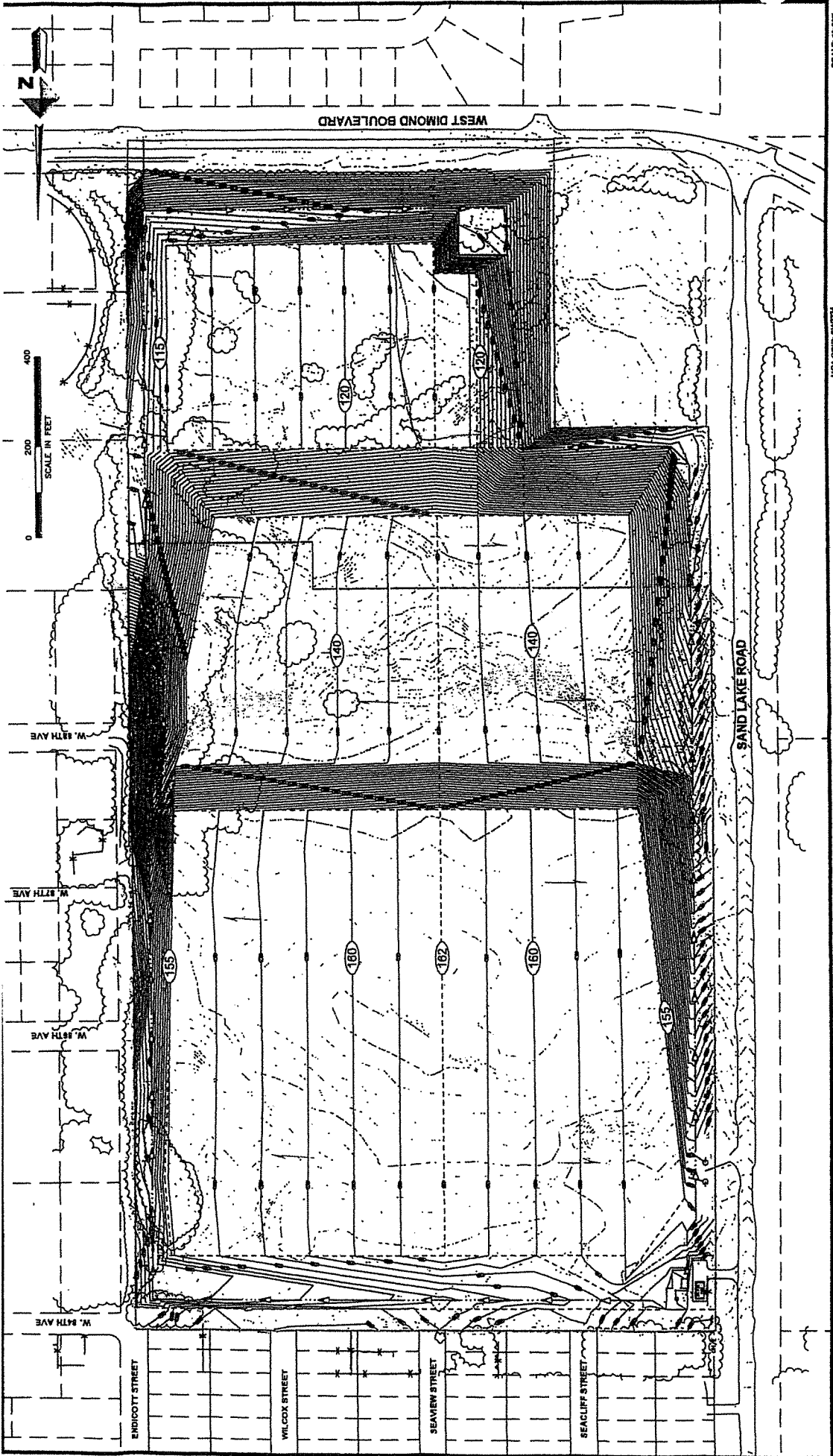
ADOPTED by the Anchorage Municipal Planning and Zoning Commission this 14<sup>th</sup> day of July, 2014. This written decision/resolution of the Planning and Zoning Commission is final and any party may appeal it within twenty (20) days to the Board of Adjustment pursuant to the Anchorage Municipal Code 21.30.030.

  
\_\_\_\_\_  
Jerry T. Weaver, Jr.  
Secretary

  
\_\_\_\_\_  
J.A. Fergusson  
Chair

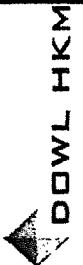
(Case 2014-056; Parcel ID Nos. 001-162-42 and 011-201-30)

fm



SCALE: 1"=50'

GRADING / DRAINAGE PLAN  
 ANCHORAGE SAND AND GRAVEL  
 SAND LAKE PIT  
 ANCHORAGE, ALASKA



27500 SAND AND GRAVEL SAND LAKE PIT PLAN 10/20/11