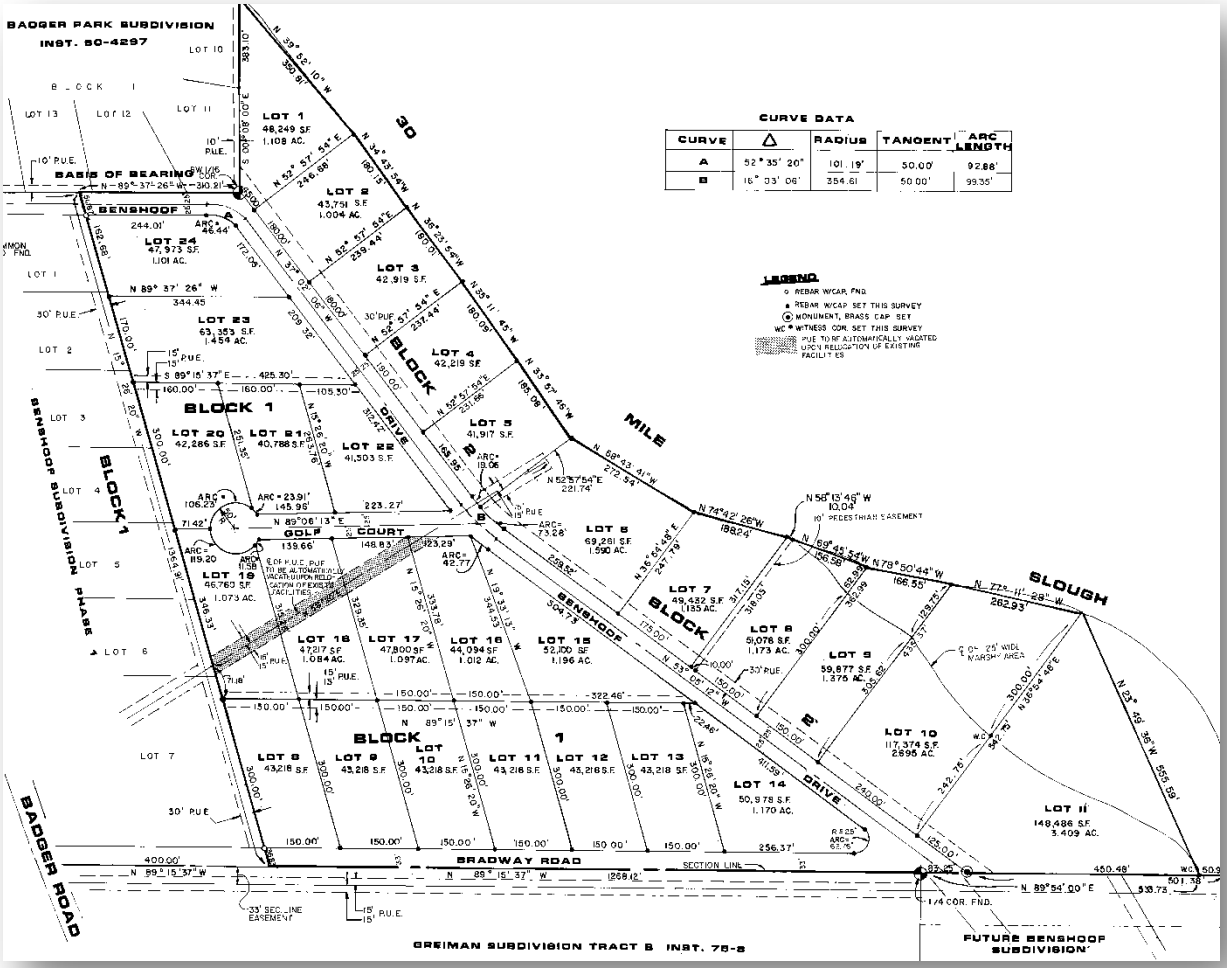
Benshoof Subdivision
Objection Statement

Standard Marijuana Cultivation Facility

License Number: 13603



CONSOLIDATED STATEMENT BY

THE RESIDENTS OF BENSHOOF SUBDIVISION - PHASE 2 NORTH

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Table of Contents

This consolidated objection statement from our Benshoof Subdivision Community Council includes discussion of these key points:

1. **Public Notice Postings for License Application**
2. **State Marijuana Establishment License Application Details**
3. **State Protection of School Grounds**
4. **Air Quality & Specific Health Concerns**
5. **Disregard for State Fire Marshal Authority**
6. **Fire Protection Deficiencies**
7. **Involvement in Residential Neighborhood**
8. **Property Values & FNSB Regional Comprehensive Plan**
9. **Pollution Potential**
10. **Non-Domestic Wastewater Disposal System**
11. **Security & Neighborhood Crime Prevention**
12. **Incomplete FNSB Permit Application**
13. **Closing Summary**

We are not presenting these objections to grandstand against the legalization of marijuana nor the legitimacy of such business enterprises. Our intent is to clearly explain our case for DENIAL of the State Marijuana Establishment License #13603 which is proposed in a residential neighborhood.

Thank you for your time and consideration.

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

3 AAC 306.025(b) Public Notice Postings

We request that this objection be reviewed by the State Marijuana Board because the public notice postings have not been fully completed.

We understand that the AMCO considers that the 30-day window for objection is closed. However, the public notice postings do not appear to meet the complete requirements of *3 AAC 306.025(b)*:

(b) As soon as practical after initiating a new marijuana license application, the applicant must give notice of the application to the public by

(1) posting a copy of the application, on the form the board prescribes, for 10 days at

(A) the location of the proposed licensed premises; and

(B) one other conspicuous location in the area of the proposed premises;

(2) publishing an announcement once a week for three consecutive weeks in a newspaper of general circulation in the area; in an area where no newspaper circulates, the applicant must arrange for broadcast announcements on a radio station serving the local area where the proposed licensee seeks to operate twice a week for three successive weeks during triple A advertising time; the newspaper or radio notice must state

(A) the name of the applicant;

(B) the name and location of the proposed premises;

(C) the type of license applied for along with a citation to a provision of this chapter authorizing that type of license; and

(D) a statement that any comment or objection may be submitted to the board; and

(3) submitting a copy of the application on the form the board prescribes to

(A) the local government; and

(B) any community council in the area of the proposed licensed premises.

The Applicant did comply with the public notice requirements of paragraphs (2) and (3)(A). However, no posting was seen on the property and paragraph (1) requires two separate postings in the area of the proposed premises. Additionally, our Benshoof Subdivision Community Council was not notified of this license application. The Applicant made no effort to reach out to the residents of our community to provide notification of the application or request contact info for our council members.

Instead of posting the public notices on the location proposed for this marijuana establishment, AK Green Bee, Inc. reported that they chose only to place the postings miles from the property:

- Riverview Quick Stop – 4.1 miles from the business location
- Badger Gas Convenience Store – 1.6 miles from the business location

This does not meet the intent of notifying the public around this proposed marijuana establishment. As such, the residents of our neighborhood did not see the public notice to provide timely objection.
As written in the State Regulations these postings are identified as "AND" requirements; not an "either-or" requirements. A partially complete posting does not meet the requirement for completing the public notice requirements so that comments can be submitted within the objection window. **We respectfully request that the State Marijuana Control Board review and consider our objection statement.**

Attached are sworn affidavits from the residential neighborhood which overlooks this property to document that none of us have seen a posting on the site of this proposed business location, and certainly not one that qualifies as "conspicuous". This property is literally in our back yards and is a flat open field with no trees or shrubs to obstruct the view from our homes. There is a narrow strip of trees and shrubs along the west side of the property at Badger Road but this provides no screening to the residential neighborhood which borders this property to the northeast, east, and southeast.

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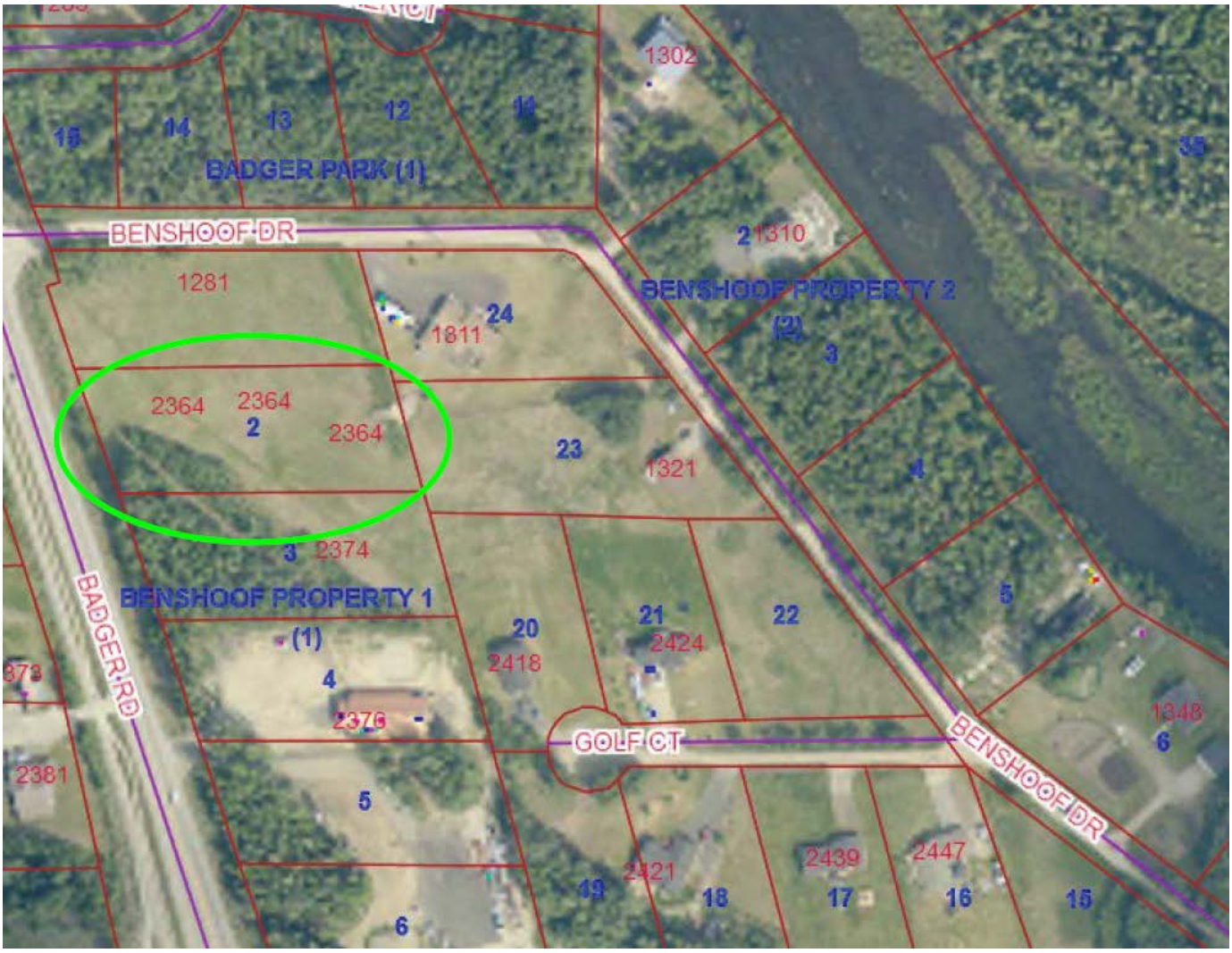
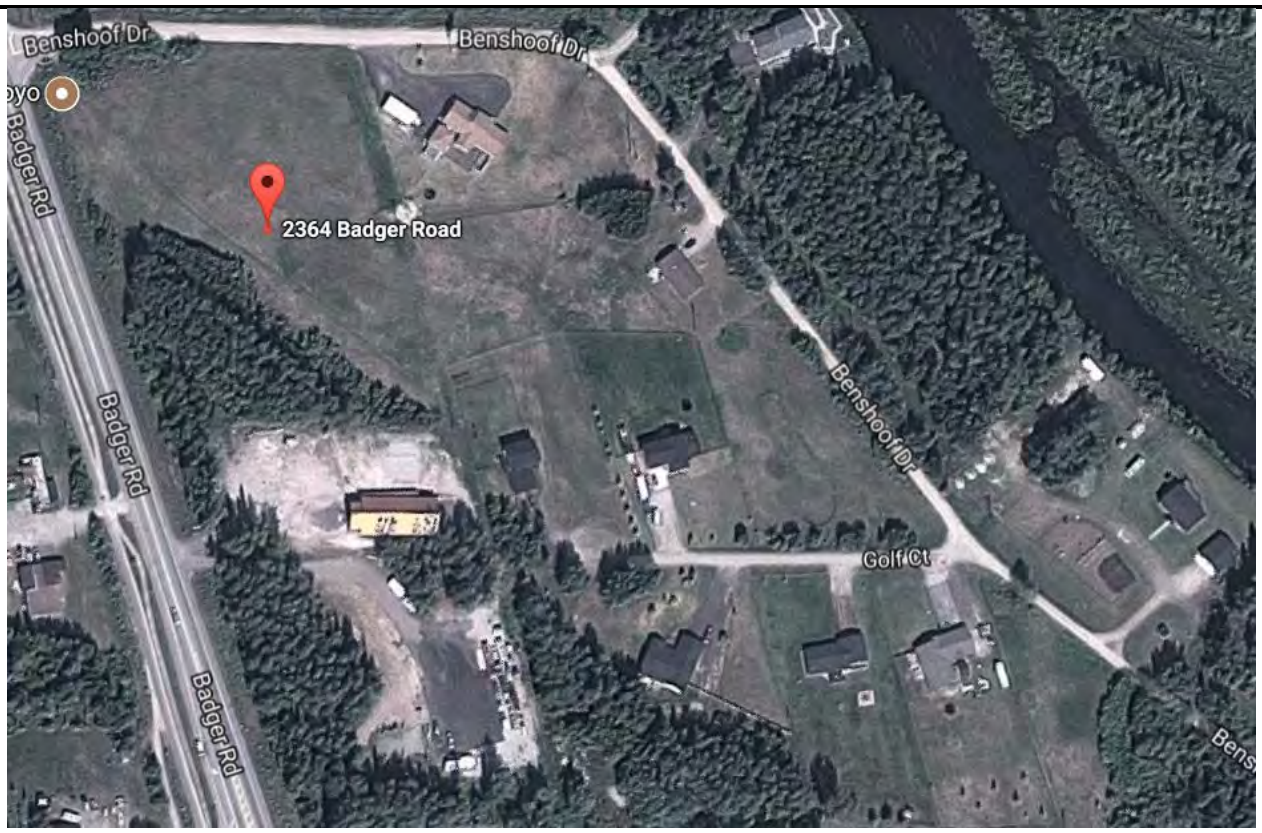
The satellite image of our neighborhood on the next page demonstrates the wide open space between our homes, our road, and the proposed location of this facility. It would be extremely difficult for a "conspicuous" posting of the application to go unseen by all of us.



This satellite image was excerpted from the FNSB Fairbanks North Star Borough Base Map Web Map: https://www.arcgis.com/home/webmap/viewer.html?webmap=b9a4e2f690a849008ff30800c510798a

However, a similar satellite image of the neighborhood is also visible on Google Maps as excerpted on the page below:

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603



This satellite image was acquired from Google Maps:
https://www.google.com/maps/place/2364+Badger+Rd,+North+Pole,+AK+99705/@64.8075971,-147.401798,453m/data=!3m1!1e3!4m5!3m4!1s0x51324c4ad5ff6543:0x1c92c2e6e7ab4ed5!8m2!3d64.808667!4d-147.404399

(c) A marijuana establishment license application must include the applicant's operating plan, in a format the board prescribes, describing to the board's satisfaction the proposed marijuana establishment's plans for

(1) security;

(2) inventory tracking of all marijuana and marijuana products on the premises;

(3) employee qualification and training;

(4) waste disposal;

(5) transportation and delivery of marijuana and marijuana products; and

(6) signage and advertising.

(d) An application for a marijuana establishment license must be signed by

(1) the applicant, if the applicant is an individual;

(2) an authorized general partner if the applicant is a partnership, including a limited partnership;

(3) a member who owns at least 10 percent of the limited liability company if the applicant is a limited liability company;

(4) the authorized officers of the corporation if the applicant is a corporation; or

(5) a designated official if the applicant is a local government.

(e) Each person signing an application for a marijuana establishment license must declare under penalty of unsworn falsification that

(1) the application is true, correct, and complete;

(2) the applicant has read and is familiar with AS 17.38 and this chapter; and

(3) the applicant will provide all information the board requires in support of the application.

3 AAC 306.025. Application procedure

(a) An applicant must initiate a new marijuana establishment license application on a form the board prescribes, using the board's electronic system.

(b) As soon as practical after initiating a new marijuana license application, the applicant must give notice of the application to the public by

(1) posting a copy of the application, on the form the board prescribes, for 10 days at

(A) the location of the proposed licensed premises; and

(B) one other conspicuous location in the area of the proposed premises;

(2) publishing an announcement once a week for three consecutive weeks in a newspaper of general circulation in the area; in an area where no newspaper circulates, the applicant must arrange for broadcast announcements on a radio station serving the local area where the proposed licensee seeks to operate twice a week for three successive weeks during triple A advertising time; the newspaper or radio notice must state

(A) the name of the applicant;

(B) the name and location of the proposed premises;

(C) the type of license applied for along with a citation to a provision of this chapter authorizing that type of license; and

(D) a statement that any comment or objection may be submitted to the board; and

(3) submitting a copy of the application on the form the board prescribes to

(A) the local government; and

(B) any community council in the area of the proposed licensed premises.

(c) After the applicant completes the notice requirements in (b) of this section and submits each remaining application requirement listed in 3 AAC 306.020, the applicant must pay the application and licensing fees set out in 3 AAC 306.100. The applicant must then use

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Austin Somaduroff, being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

I frequent walks around the neighborhood with my family, doing my best to be attentive to the activities in my area. These walks take me around the front of the proposed property, the west side facing badger. My family and I own the property immediately to the East. We can see their property from all of our West facing windows. There are no trees separating our properties causing no blockages in line of sight.

The only "conspicuous" location in our neighborhood is the cluster of mailboxes at the entrance of Benshoof Dr from Badger Road. Myself and at least ten other households visit this site on a regular basis. This would have been the most appropriate location for a sign if they intended on the sign fulfilling its intent.

My primary residence is located at 1321 Benshoof Drive which is the property directly to the east of this marijuana establishment which is being proposed in our residential neighborhood.

_____
Signature

Austin J. Somaduroff
1321 Benshoof Dr. North Pole Ak 99705
Print Name & Address of Affiant

I hereby certify that on this 26th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Austin Somaduroff, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

_____
Notary Public (signature)

Notary Public
ZACHARY PETERSON
State of Alaska
My Commission Expires April 21, 2021

Printed name: Zachary Peterson

My commission expires: April 21, 2021

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Brad Erichson being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 1311 Benshoof Drive which is within 100 feet of this marijuana establishment which is being proposed in our residential neighborhood.

My house and Lot adjoin this property from my back yard, and there are no trees or obstructions to prevent a good view. From my Kitchen window I can clearly see the subject property and ongoing construction for this proposed marijuana establishment every day.

Brad Erichson
Signature

Brad Erichson
1311 Benshoof Drive
North Pole, AK 99705
Print Name & Address of Affiant

I hereby certify that on this 25TH day of Aug, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared BRAD ERICKSON, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public (signature)

Printed name: GERALD J. LANCASTER

My commission expires: MAY 21ST 2018

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Christa Dyer being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3 AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3 AAC 306.025.b.1.B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 2439 Golf Court which is within 600 feet of this marijuana establishment which is being proposed in our residential neighborhood. I have a view of the property from my living room window which is only partially limited by the neighbor's house. When I drive along Benshoof Drive to leave our neighborhood for work or to run errands, I have a clear an unobstructed view of the property from the southeast, east, northeast, and northern directions across the grass in my neighbors' yards. Until construction started at the beginning of August this was a flat vacant lot with nothing to obstruct the view from our neighborhood.

Signature

Christa Dyer

2439 Golf Court

North Pole, AK 99705

Print Name & Address of Affiant

I hereby certify that on this 31st day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Christa Dyer, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public
H. SCHIKORA
State of Alaska
My Commission Expires April 21, 2021

Notary Public (signature)

Printed name: Harry Schikora

My commission expires: April 21, 2021

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Christie Neff being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 1311 Benshoof drive which is within 100 feet of this marijuana establishment which is being proposed in our residential neighborhood.

There are no trees, ~~schrubs~~ shrubs or other obstructions between my yard and the marijuana (proposed) facility. I can see from either my kitchen window or solarium the whole construction site. I have never seen any signs or posting regarding this proposed facility. I'm in my yard several times a day with my dog, which butts up to the power easement. Never a posting or contact from the owners of the site.

Christie Neff
Signature

Christie Neff
1311 Benshoof drive
North Pole, AK 99705
Print Name & Address of Affiant

I hereby certify that on this 25th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Christie Neff, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

MELISSA BARON NOTARY PUBLIC STATE OF ALASKA

MBaron
Notary Public (signature)

Printed name: Melissa Baron

My commission expires: 8/30/2020

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Crystal McCormick, _____ being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 1302 Benshoof Drive which is within 500 feet of this marijuana establishment which is being proposed in our residential neighborhood. Also, Benshoof Drive, on which I travel on an average of four times per day to and from work, as well as other errands, has a clear view of this property because the houses are widely spaced and there is only one small patch of trees to present a partial obstruction.

Signature

Crystal McCormick
1302 Benshoof Dr.
North Pole, AK 99705
Print Name & Address of Affiant

I hereby certify that on this 28 day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Crystal McCormick, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public
NIA CUMMINGS
State of Alaska
My Commission Expires Jan. 1, 2021

Notary Public (signature)

Printed name: NIA CUMMINGS

My commission expires: 01/01/2021

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Cyrus Walter Freeman being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 1348 Benshoof Drive which is within 1100 feet of this marijuana establishment which is being proposed in our residential neighborhood.

In addition, I drive on Benshoof Drive and Badger Road, roads nearest the property, on a daily basis, and I still saw no trace of such a notice.

Signature

Cyrus Freeman
1348 Benshoof Dr.
North Pole, AK 99705
Print Name & Address of Affiant

I hereby certify that on this 29th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared _____, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public
A. SOMADUROFF
State of Alaska
My Commission Expires Feb. 8, 2018

Notary Public (signature)

Printed name: A. Somaduroff

My commission expires: Feb. 8, 2018

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Geraldine Benshoof being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 1336 Benshoof Drive North Pole AK 99705 which is within 600 feet of this marijuana establishment which is being proposed in our residential neighborhood.

I have never seen the sign regarding the marijuana license application as I travel on that portion of Badger Road every day.

Geraldine Benshoof
Signature

Geraldine Benshoof
1336 Badger Rd
North Pole AK 99705
Print Name & Address of Affiant

I hereby certify that on this 28th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Geraldine Benshoof, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Katherine A. Compton
Notary Public (signature)

KATHERINE A. COMPTON
NOTARY PUBLIC - STATE OF ALASKA
MY COMMISSION EXPIRES October 01, 2019

Printed name: Katherine A. Compton

My commission expires: 10-01-2019

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Ildefonso Rodriguez being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3 AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3 AAC 306.025.b.1.B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 24214 Golf Ct North Pole AK 99705 which is within 400 feet of this marijuana establishment which is being proposed in our residential neighborhood.

I play daily with my kids in my back yard, but neve saw any kind of posting from that view. or on my daily driving using Bradway as a point to get to Badger rodd, the same way naver saw any posting for this kind of business

Signature

Ildefonso Rodriguez
24214 Golf Ct
North Pole, AK 99705
Print Name & Address of Affiant

STATE OF ALASKA
NOTARY PUBLIC
Natalia Taylor
My Commission Expires: May 8, 2018

I hereby certify that on this 29 day of August, 20 17 before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Ildefonso Rodriguez known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Natalia Taylor
Notary Public (signature)

Printed name: Natalia Taylor

My commission expires: May 8, 2018

Affidavit
Regarding State Marijuana Establishment License Application #13603

I, Leo J Valdrow Jr __ being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025. b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 2447 GOLF CT ___ which is within ___600___ feet of this marijuana establishment which is being proposed in our residential neighborhood.

As per 3 AAC 306.025. b.1. I have not seen any onsite posting as required by this statute, at the proposed property. Benshoof Drive is my main route of travel to and from work. There is a clear view from Benshoof Drive of the proposed property due to the houses being widely spaced, with only a small stand of trees that presents a partial blockage of the property.

Leo J Valdrow Jr
Signature

Leo J Valdrow Jr
2447 Golf CT
North Pole, AK 99705
Print Name & Address of Affiant

I hereby certify that on this 27th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Leo J Valdrow Jr, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public (signature)

Notary Public
A. SOMADUROFF
State of Alaska
My Commission Expires Feb. 8, 2018

Printed name: A. Somaduroff

My commission expires: Feb. 8, 2018

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Lara Freeman being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 1348 Benshoof Drive which is within 1,000 feet of this marijuana establishment which is being proposed in our residential neighborhood.

I have driven past the property multiple times per day, as well as stopping by the mailboxes on Benshoof daily and have not seen any signage relating to this issue.

Signature

Lara Freeman
1348 Benshoof Dr
North Pole Ak 99705

Print Name & Address of Affiant

I hereby certify that on this 29th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Lara Freeman, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public
A. SOMADUROFF
State of Alaska
My Commission Expires Feb. 8, 2018

Notary Public (signature)

Printed name: A. Somaduroff

My commission expires: Feb. 8, 2018

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Lois Maxwell being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 2429 Golf Court which is within 500 feet of this marijuana establishment which is being proposed in our residential neighborhood.

I drove by the site several times when going to and from North Pole or Fairbanks from Benshoof Dr. and Badger Road. also, I stopped several times at the mailbox on Benshoof Dr. and Badger Road

Lois D. Maxwell
Signature

Lois D. Maxwell
2429 Golf Court
North Pole Ak 99705
Print Name & Address of Affiant

I hereby certify that on this 29th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Lois D Maxwell, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public
A. SOMADUROFF
State of Alaska
My Commission Expires Feb. 8, 2018

Notary Public (signature)

Printed name: A. Somadurcoff

My commission expires: Feb. 8, 2018

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Lyman Benshoof being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 1336 Benshoof Dr, North pole AK which is within 600 feet of this marijuana establishment which is being proposed in our residential neighborhood.

I have Never seen a sign for this marijuane License application.

Lyman Benshoof
Signature

LYMAN BENSHOOF
1336 BENSHOOF DR.
North pole, AK 99705
Print Name & Address of Affiant

I hereby certify that on this 28 day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Lyman Benshoof, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Katherine A Compton
Notary Public (signature)

KATHERINE A. COMPTON
NOTARY PUBLIC - STATE OF ALASKA
MY COMMISSION EXPIRES October 01, 2019

Printed name: Katherine A Compton

My commission expires: 10-01-2019

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Manda Kassel, being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, it would have been apparent to me because our neighborhood road, Benshoof Drive, where I ride bikes with our children several times a week, more often when I drive to and from school, has a clear view of the property where this proposed marijuana facility is to be located.

My primary residence is located at 1310 Benshoof Drive which is within 400 feet of this marijuana establishment which is being proposed in our residential neighborhood.

Manda Kassel
Signature

Manda Kassel 1310 Benshoof Dr. North Pole, AK 99705
Print Name & Address of Affiant

I hereby certify that on this 26th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Manda Kassel, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public (signature)

Printed name:
A. Somaduroff

My commission expires:
Feb 8, 2018

Notary Public
A. SOMADUROFF
State of Alaska
My Commission Expires Feb. 8, 2018

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Marchelle Somaduroff, being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

The backyard where I play with my children every day shares a property line with the location for this proposed marijuana establishment. There are no trees or obstructions that would prevent full, clear view of a "conspicuous" posting on this property. I have full view of the property and construction from my kitchen window. Furthermore, my children and I frequently walk the neighborhood and the adjacent road, Badger.

My primary residence is located at 1321 Benshoof Drive which is the property directly behind the lot of this marijuana establishment which is being proposed in our residential neighborhood.

Marchelle A Somaduroff

Signature

Marchelle A Somaduroff
1321 Benshoof Dr
North Pole, AK 99705

Print Name & Address of Affiant

I hereby certify that on this 26th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Marchell A Somaduroff, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public
ZACHARY PETERSON
State of Alaska
My Commission Expires April 21, 2021

Notary Public (signature)

Printed name: Zachary Peterson

My commission expires: April 21, 2021

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Robert Dyer being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3 AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3 AAC 306.025.b.1.B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at 2439 Golf Court which is within 600 feet of this marijuana establishment which is being proposed in our residential neighborhood. I have a clear view of this property from multiple angles as I drive down our road, Benshoof Drive. If there had been a conspicuous posting, there is nothing that would have prevented me from seeing it from my front yard or driving through our neighborhood.

Signature

Robert Dyer

2439 Golf Court

North Pole, AK 99705

Print Name & Address of Affiant

I hereby certify that on this 31st day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Robert Dyer, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public
H. SCHIKORA
State of Alaska
My Commission Expires April 21, 2021

Notary Public (signature)

Printed name: Harry Schikora

My commission expires: April 21, 2021

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Sue Ann Valdrow_____ being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, especially that required to be "conspicuous", it would have been apparent to me because:

My primary residence is located at __2447 Golf Ct_____ which is

within ___600_____ feet of this marijuana establishment which is being proposed in our residential neighborhood.

Benshoof Drive is my main route of travel to and from work. There is a clear view from Benshoof Drive of the proposed property due to the houses being widely spaced, with only a small stand of trees that presents a partial blockage of the property. At no time have I seen any signs posted on the proposed property.

Sue A Valdrow

Signature

Sue A Valdrow

2447 Golf CT

North Pole, AK 99705

Print Name & Address of Affiant

I hereby certify that on this 27th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Sue A. Valdrow, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public
A. SOMADUROFF
State of Alaska
My Commission Expires Feb. 8, 2018

Notary Public (signature)

Printed name: A. Somaduroff

My commission expires: Feb. 8, 2018

Affidavit

Regarding State Marijuana Establishment License Application #13603

I, Zachary Kassel, being duly sworn and under oath, depose and state that the following is true and based on my own personal knowledge:

I testify that I have seen no posting of the marijuana license application at the location of the proposed licensed premises as required by 3AAC 306.025.b.1.A, and I have seen no secondary posting of the marijuana license application in a "conspicuous" location in the area of the proposed premises as required by 3AAC 306.025.b.1B. Additionally, no copy of the application was submitted to the Benshoof Subdivision Community Council as required per 3 AAC 306.025.b.3.B.

Had the required postings been located on the proposed site per 3 AAC 306.025.b.1, it would have been apparent to me because I drive past the location at least twice a day going to work, sometimes more if I am running errands. There is a clear view of this property because the houses are widely spaced and there is only one small patch of trees to present a partial obstruction.

My primary residence is located at 1310 Benshoof Drive which is within 400 feet of this marijuana establishment which is being proposed in our residential neighborhood.

Zachary Kassel

Signature

Zachary Kassel 1310 Benshoof Dr.
North Pole, AK 99705

Print Name & Address of Affiant

I hereby certify that on this 26th day of August, 2017, before me, the undersigned Notary Public in and for the State of Alaska, personally appeared Zachary Kassel, known to me to be that individual, and made his/her oath in due form of law that the matters and facts set forth in this Affidavit are true. In witness whereof, I hereunto set my hand and official seal.

Notary Public (signature)

Printed name: A. Somaduroff

My commission expires: Feb. 8, 2018

Notary Public
A. SOMADUROFF
State of Alaska
My Commission Expires Feb. 8, 2018

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Application for State Marijuana Establishment License

While we understand that the State Marijuana Control Board has not yet reviewed this application, we submit our objection comments as currently provided by AK Green Bee, Inc. for your consideration.

Disregard for State Regulations in the Application Process
As discussed at the beginning of this objection statement, their failure to complete public notice postings at the location as required by State Regulation *3 AAC 306.025* represent a disregard for following the guidelines required by the State for this controlled-substance business. How can we trust that they will comply with other regulations, when they shrug off the initial requirements so easily?

Form MJ-00: Application Certifications

Section 4 – Certifications
It is noteworthy that page 2 of the Certification is missing from the application data provided for Isaac Humes. The omission makes it appears that the applicant is attempting to obscure information relevant to the application requirements.

Form MJ-01: Marijuana Establishment Operating Plan

Section 2 – Security
There is no plan to address building security while opening the Garage Door directly into the Harvesting Area. It appears that this will compromise the building security perimeter and without a buffer zone or additional security measures to protect the controlled-substances throughout the facility. What are the protocols to make sure that controlled substances are not in the harvesting area when the garage door is open? What means of access confirmation will be used to ensure clearance of transport vehicle before this door is opened?

Additionally, the applicant has confirmed their intent to utilize an alarm system with cellular notification system and no land-line backup. This is concerning because of the ease with which cellular signal can be defeated by homemade signal jammers. If the cameras are wireless, the signal can be blocked with a laptop.

The requirements for this facility include security lighting which they note will be pointed down, but this does not address the **light pollution** in our residential neighborhood. However, this fails to consider that "down" is snow more than half of the year. **This snow will amplify and reflect the light throughout our neighborhood.** This is a significant impact to our neighborhood as the light will be shining in our windows – especially those who live within 100ft of this proposed building location. Additionally, this much light will block our clear view of the northern lights. This facility represents a significant amount of light pollution in our neighborhood.

An additional hazard of these light fixtures is the concern that the selection of the color temperature could have impacts because a high temperature (over 3,000k) have more blue wavelengths and will be more straining on our eyes. As documented by the AMA, these lights could have a significant disruption to the neighborhood inside and outside of our homes.

Section 5 – Waste Disposal
The Site Plan and Floor Plan proposed for this facility, do not indicate a location for storage of solid waste products. There does not appear to be room inside the facility to store a significant amount of waste product while waiting the 3-days for authorization for disposal per *3 AAC 306.740.c.1*. Please confirm that this waste product will not be stored outside the secure facility both for the purposes of security and to prevent odor in the community. Per *FNSB Code 18.96.240.4* no outdoor storage of marijuana, marijuana products or hazardous substances shall be allowed.

This application specifies that AK Green Bee, Inc. plans to dispose of liquid nondomestic wastewater either by spreading on the surrounding soil (on-site gardens) or via a waste water leach field system. Both of these represent a direct discharge into the groundwater which supplies our drinking water wells and the impaired waters of the Chena Slough. Additional discussion on this topic is included under the Pollution Potential and Non-Domestic Wastewater Disposal System sections of this Objection Statement.

Form MJ-02: Premises Diagram

Floor Plan – the proposed building layout for this marijuana facility is missing key information:

- The floor plan identifies a 3'x9' space for "**utilities**". This does not appear to be sufficient for water pump, water heater, heating system, ventilation system, electrical panel, communications system, sprinkler riser, alarm system, etc.

- Where will the **ventilation system** be installed? Where will exterior exhaust vents be located on the building? Size of vents? Elevation above the ground? How will these be constructed to maintain security of the facility? Will these have smoke dampers on the exterior air louvers to prevent expulsion of marijuana and chemical smoke in the event of a fire? Please confirm that ventilation system and fire dampers will have system interlocks to the fire alarm system. This needs to be an engineered system to ensure proper air filtration, filter monitoring system, interlocks with fire alarm system, and proper air exchange to reduce the risk of mold and fungal growth in the air ducts. **The ventilation system is critical for compliance with *3 AAC 306.430.c.2* to prevent any odor that is detectable by the public.** This is especially important since this facility is in our residential neighborhood.

- Proposed Floor Plan for the facility indicates that **the main entrance door and rear entrance door which are labeled as "egress" are both non-compliant with Building Code and Life Safety Code requirements for egress doors with panic hardware.** These doors must swing out to provide easy exit in an emergency. Additionally, all room doors are show to open into the hallway which will block the path to the exit. These should be re-designed to open inward or a wider hallway will likely be required to provide clear path to the exit in an emergency. These most basic fire egress deficiencies are examples that show the Applicant has not done due-diligence in planning for employee safety.

- **How will fire egress paths be maintained** during harvesting and packaging operations? It appears that use of this open loading area provides no separation to maintain a clear path to the exit.

- Does not indicate **location of security cameras** to document interior and exterior surveillance coverage to confirm compliance with *3 AAC 306.430.d*.

- Please clarify how the **water from the trench drain** will be collected for proper disposal to prevent fertilizer and chemical contamination in the soils and ground water.

- Where will **plant waste** and compost be stored while awaiting the 3-day notice period required before disposal? Per *FNSB Code 18.96.240.A.4* no marijuana products or hazardous waste can be stored outside of the secure facility. However, it does not appear that sufficient space has been allocated inside the facility.

- **What type of building construction** will be used? How will this building blend into the residential neighborhood? Will this be an industrial warehouse or bunker that looks out of place? This is important to concerns regarding resale and property values in this neighborhood. There is a very

limited pool of potential home buyer who are interested in purchasing a home which is next to a marijuana establishment

Site Plan – the proposed site plan for this marijuana facility is missing key information:

- Location of the **commercial well and wastewater systems** are not identified to document compliance with required separation distances *DEC 18 AAC 80.020*.

- **Fuel oil tank** location to confirm 100ft separation from commercial water well per *DEC 18 AAC 80.020*. Will there be a propane tank onsite?

- **Off-street parking spaces** are required to be at least 9' by 18' per *FNSB 18.96.060.H.3*. The Site Plan includes a note that parking spaces will be 9'x18', but indicates that 9 parking spaces will be provided in 71" wide area which equates to **7.9' wide parking spaces** which is more than 1 foot short of the minimum requirement for each space.

- Please confirm that this business plans to comply with the ***Americans with Disabilities Act***. The parking lot design does not allow for handicap access from parking lot to building along an accessible route of travel that does not pass behind the car spaces. This is an important protection to protect handicap people from crossing behind parked cars because they cannot be seen in the rearview mirrors or move more slowly. The proposed depth of the parking lot is only 18' which means that the parking lot would have to be completely reworked and expanded to accommodate Handicap Parking per *FNSB Code18.96.060.G* and the *Americans with Disabilities Act*. **Please confirm that this business does not plan to discriminate its hiring practices.**

- Type and depth of driving surfaces is identified as 2" gravel. **This is not sufficient to support the weight of 60 ton fire trucks in the event of an emergency.** Will this support delivery trucks?

- Location and area of existing or proposed landscaping, screening, and existing vegetation to be retained, if applicable. How will landscaping be completed to prevent dust a bare dirt lot from blowing onto the neighbors' properties? What type of screening will be installed as separation buffer to the residential neighborhood and the provide protection from traffic noise?

- Does not indicate location of **standby generator** and appropriate noise attenuation screening. This is does not address noise of standby generator which will be running 24/7 for 5-7 day durations when there is a weather related power outage. Because this neighborhood is at the end of the power feeders these outages average 3 days longer than the surrounding community. Where will generator be located? What is size of generator? What type of noise attenuating (muffling) screening will be installed around generator? There is no natural screening between this facility and our homes so the noise from this commercial-sized generator are a significant concern.

Form MJ-04: Marijuana Cultivation Facility

Section 3 – Cultivation Plan

The application does not list the chemicals and fertilizers planned for use in this hydroponic operation and instead only lists a brand name. This does not clarify the pollution potential of this facility sufficiently for evaluation.

Application states that the nutrient rich solution will be changed every 7-14 days and waste will be disposed via an onsite liquid waste disposal leach field or in on-site gardens (directly in the soil). This does not appear to meet the DEC requirements for protection of groundwater systems including drinking water wells from this type of non-domestic wastewater as discussed in more detail under the Pollution Potential and Non-Domestic Wastewater Disposal System sections of this Objection Statement.

Section 4 – Odor Control

This narrative does not clarify how odor and allergens will be controlled when the Garage Door is open directly to the atmosphere. This is a large unfiltered opening in the Harvesting Area.

How will the air filters be monitored to ensure they are changed on regular intervals?

There is no mention of Fire Dampers on exhaust air ducts. How will odors be controlled in the event of a fire?

Form MJ-07: Public Notice Posting Affidavit

Per the affidavit submitted by AK Green Bee, Inc. the public notice postings were not located at the site of the proposed marijuana business. Instead they were located miles away at:

- Riverview Quick Stop – **4.1 miles** from the business location
- Badger Gas Convenience Store – **1.6 miles** from the business location

As documented by the affidavits from property owners next to this proposed marijuana establishment, a public notice posting was not seen at the location of the proposed facility and certainly not in a "conspicuous" location.

Form MJ-09: Statement of Financial Interest

The Quitclaim Deed to document property ownership indicates that Janet Marie Daigle transferred the property on which this business is to operate for a consideration of $1. Yet Janet Daigle is not listed as having a financial interest in this business. Does this mean that the property was donated to the business without any plan for return on investment?

(c) A marijuana establishment license application must include the applicant's operating plan, in a format the board prescribes, describing to the board's satisfaction the proposed marijuana establishment's plans for

(1) security;

(2) inventory tracking of all marijuana and marijuana products on the premises;

(3) employee qualification and training;

(4) waste disposal;

(5) transportation and delivery of marijuana and marijuana products; and

(6) signage and advertising.

(d) An application for a marijuana establishment license must be signed by

(1) the applicant, if the applicant is an individual;

(2) an authorized general partner if the applicant is a partnership, including a limited partnership;

(3) a member who owns at least 10 percent of the limited liability company if the applicant is a limited liability company;

(4) the authorized officers of the corporation if the applicant is a corporation; or

(5) a designated official if the applicant is a local government.

(e) Each person signing an application for a marijuana establishment license must declare under penalty of unsworn falsification that

(1) the application is true, correct, and complete;

(2) the applicant has read and is familiar with AS 17.38 and this chapter; and

(3) the applicant will provide all information the board requires in support of the application.

3 AAC 306.025. Application procedure

(a) An applicant must initiate a new marijuana establishment license application on a form the board prescribes, using the board's electronic system.

(b) As soon as practical after initiating a new marijuana license application, the applicant must give notice of the application to the public by

(1) posting a copy of the application, on the form the board prescribes, for 10 days at

(A) the location of the proposed licensed premises; and

(B) one other conspicuous location in the area of the proposed premises;

(2) publishing an announcement once a week for three consecutive weeks in a newspaper of general circulation in the area; in an area where no newspaper circulates, the applicant must arrange for broadcast announcements on a radio station serving the local area where the proposed licensee seeks to operate twice a week for three successive weeks during triple A advertising time; the newspaper or radio notice must state

(A) the name of the applicant;

(B) the name and location of the proposed premises;

(C) the type of license applied for along with a citation to a provision of this chapter authorizing that type of license; and

(D) a statement that any comment or objection may be submitted to the board; and

(3) submitting a copy of the application on the form the board prescribes to

(A) the local government; and

(B) any community council in the area of the proposed licensed premises.

(c) After the applicant completes the notice requirements in (b) of this section and submits each remaining application requirement listed in 3 AAC 306.020, the applicant must pay the application and licensing fees set out in 3 AAC 306.100. The applicant must then use

the board's electronic system to inform the board that the applicant has submitted a complete application.

(d) When the director receives an application for a marijuana establishment license, the director shall determine if the application is complete. Any application for a marijuana establishment license that the director receives without the application fee is incomplete. If the director determines the application is complete, the director shall immediately give written notice to;

(1) the applicant;

(2) the local government with jurisdiction over the applicant's proposed licensed premises;

(3) the community council if the proposed licensed premises are located within the boundary of a community council established by municipal charter or ordinance; and

(4) any nonprofit community organization that has requested notification in writing.

(e) If an application for a marijuana establishment license is incomplete, the director shall notify the applicant by electronic mail at the address provided by the applicant and shall either

(1) return an incomplete application in its entirety; or

(2) request the applicant to provide additional identified items needed to complete the application.

(f) When the director informs an applicant that its application is incomplete as provided in (e) of this section, the applicant must complete the application not later than 90 days after the date of the director's notice. If an applicant fails to complete its application during the 90-day period after the director's notice, the applicant must file a new application and pay a new application fee to obtain a marijuana establishment license

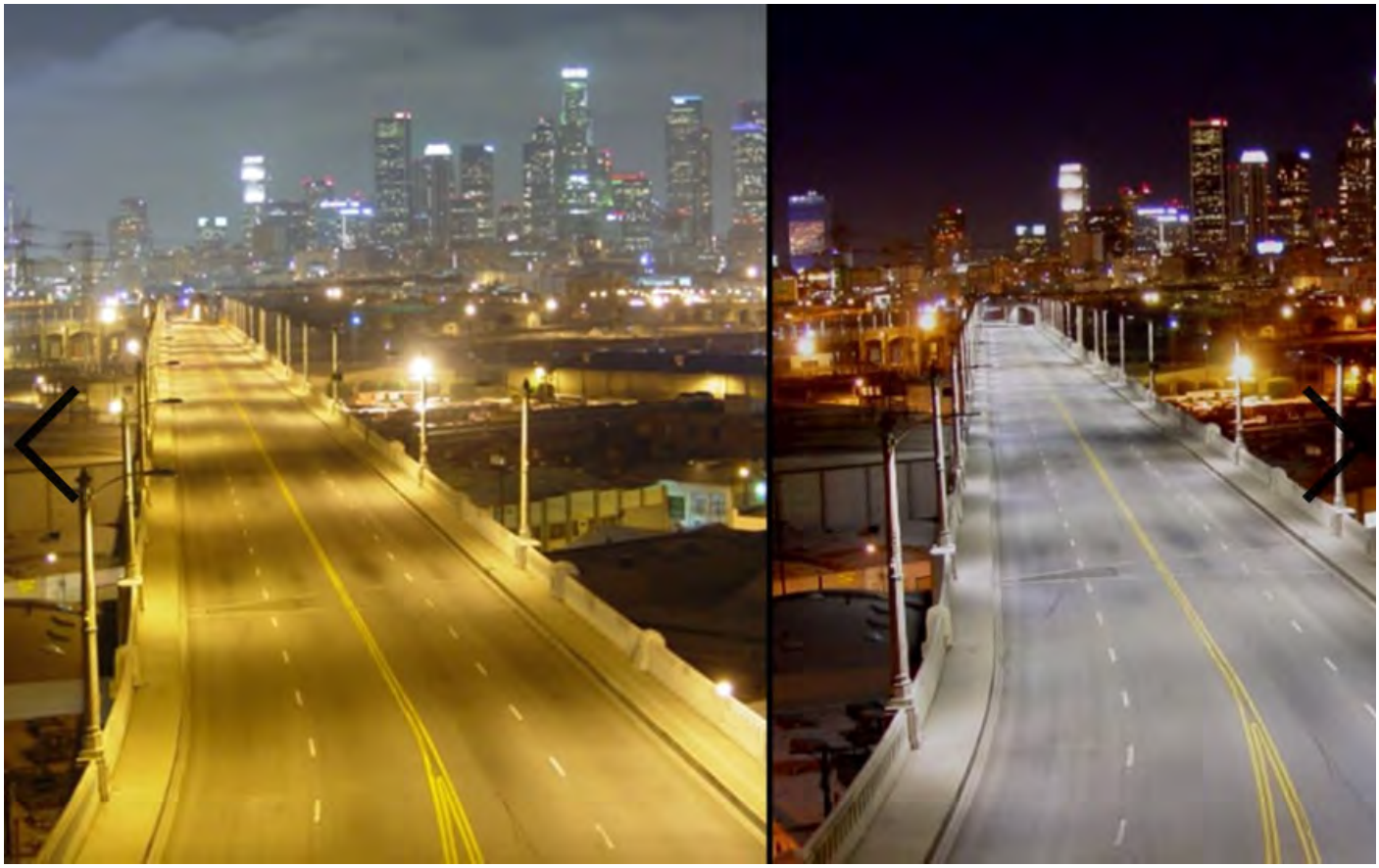
3 AAC 306.030. Petition for license in area with no local government

(a) The board will not approve a new license in an area outside, but within 50 miles of, the boundary of a local government unless the board receives a petition to issue the license signed by a majority of the permanent residents residing within one mile of the proposed premises.

THE CONVERSATION

By Richard G. "Bugs" Stevens, The Conversation

Updated 2:00 PM ET, Tue June 21, 2016



Photos: Los Angeles LED streetlights

The Sixth Street bridge over the Los Angeles River looks a bit different with old, left, and new stree

1 of 5

Hide

The American Medical Association urges communities to minimize health and environmental risks

White LEDs are thought to be five times more effective at suppressing melatonin than sodium lamps

The statement, adopted unanimously at the AMA's annual meeting in Chicago on June 14, comes in response to the rise of new LED street lighting sweeping the country. An AMA committee issued guidelines on how communities can choose LED streetlights to "minimize potential harmful human health and environmental effects."

Municipalities are replacing existing streetlights with efficient and long-lasting LEDs to save money on energy and maintenance. Although the streetlights are delivering these benefits, the AMA's stance reflects how important proper design of new technologies is and the close connection between light and human health.

The AMA's statement recommends that outdoor lighting at night, particularly street lighting, should have a color temperature of no greater than 3000 Kelvin (K). Color temperature (CT) is a measure of the spectral content of light from a source; how much blue, green, yellow and red there is in it. A higher CT rating generally means greater blue content, and the whiter the light appears.

Related Article: Apparently This Matters: L.A.'s fancy new streetlights

A white LED at CT 4000K or 5000K contains a high level of short-wavelength blue light; this has been the choice for a number of cities that have recently retrofitted their street lighting such as Seattle and New York.

Explainer: What is seasonal affective disorder?

But in the wake of these installations have been complaints about the harshness of these lights. An extreme example is the city of Davis, California, where the residents demanded a complete replacement of these high color temperature LED street lights.

Can communities have more efficient lighting without causing health and safety problems?

Two problems with LED street lighting

An incandescent bulb has a color temperature of 2400K, which means it contains far less blue and far more yellow and red wavelengths. Before electric light, we burned wood and candles at night; this artificial light has a CT of about 1800K, quite yellow/red and almost no blue. What we have now is very different.

The new "white" LED street lighting which is rapidly being retrofitted in cities throughout the country has two problems, according to the AMA. The first is discomfort and glare. Because LED light is so concentrated and has high blue content, it can cause severe glare, resulting in pupillary constriction in the eyes. Blue light scatters more in the human eye than the longer wavelengths of yellow and red, and sufficient levels can damage the retina. This can cause problems seeing clearly for safe driving or walking at night.

You can sense this easily if you look directly into one of the control lights on your new washing machine or other

The other issue addressed by the AMA statement is the impact on human circadian rhythmicity.

Related Article: Full moon may disrupt sleep, study says

Color temperature reliably predicts spectral content of light -- that is, how much of each wavelength is present. It's designed specifically for light that comes off the tungsten filament of an incandescent bulb.

New atlas shows extent of light pollution; what does it mean for our health?

However, the CT rating does not reliably measure color from fluorescent and LED lights.

Another system for measuring light color for these sources is called correlated color temperature (CCT). It adjusts the spectral content of the light source to the color sensitivity of human vision. Using this rating, two different 3000K light sources could have fairly large differences in blue light content.

Therefore, the AMA's recommendation for CCT below 3000K is not quite enough to be sure that blue light is minimized. The actual spectral irradiance of the LED -- the relative amounts of each of the colors produced -- should be considered, as well.

The reason lighting matters

The AMA policy statement is particularly timely because the new World Atlas of Artificial Night Sky Brightness just appeared last week, and street lighting is an important component of light pollution. According to the AMA statement, one of the considerations of lighting the night is its impact on human health.

In previous articles for The Conversation, I have described how lighting affects our normal circadian physiology, how this could lead to some serious health consequences and most recently how lighting the night affects sleep.

Related Article: Warning labels on your light bulbs

In the case of white LED light, it is estimated to be five times more effective at suppressing melatonin at night than the high pressure sodium lamps (given the same light output) which have been the mainstay of street lighting for decades. Melatonin suppression is a marker of circadian disruption, which includes disrupted sleep.

A dark night is good for your health

Bright electric lighting can also adversely affect wildlife by, for example, disturbing migratory patterns of birds and some aquatic animals which nest on shore.

Street lighting and human health

The AMA has made three recommendations in its new policy statement:

First, the AMA supports a "proper conversion to community based Light Emitting Diode (LED) lighting, which reduces energy consumption and decreases the use of fossil fuels."

Second, the AMA "encourage[s] minimizing and controlling blue-rich environmental lighting by using the lowest emission of blue light possible to reduce glare."

Third, the AMA "encourage[s] the use of 3000K or lower lighting for outdoor installations such as roadways. All LED lighting should be properly shielded to minimize glare and detrimental human and environmental effects, and consideration should be given to utilize the ability of LED lighting to be dimmed for off-peak time periods."

There is almost never a completely satisfactory solution to a complex problem. We must have lighting at night, not only in our homes and businesses, but also outdoors on our streets. The need for energy efficiency is serious, but so too is minimizing human risk from bad lighting, both due to glare and to circadian disruption. LED technology can optimize both when properly designed.

Richard G. "Bugs" Stevens is a professor in the School of Medicine at the University of Connecticut.

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FNSB Code
Chapter 18.96
SUPPLEMENTARY REGULATIONS

18.96.240 Standards for commercial marijuana establishments.

A. General Standards.

1. Applicability. Standards of this section shall apply to commercial marijuana establishments regardless of whether they are a permitted or conditional use.

2. A commercial marijuana establishment may only be allowed with the written consent of the owner of the property.

3. No marijuana establishment, except a marijuana testing facility, shall be located within the following buffer distances:

a. Five hundred feet of primary and secondary school buildings (K-12) including vocational programs, playgrounds, adult and juvenile correctional facilities and housing facilities owned by a public housing authority with children as residents; and

b. Two hundred feet of any post-secondary school buildings including but not limited to trade/technical/vocational schools, colleges and universities; and

c. One hundred feet of youth centers, group homes serving persons ages 18 and under, public swimming pools, state licensed day care facilities, arcades, state licensed substance use treatment provider or facility providing substance abuse use treatment, church buildings and residential zones (RE, RR, SF, TF, MF, MFO).

d. Buffer distances shall be measured from the nearest public entrance of a commercial marijuana establishment to:

i. Outer boundaries of school buildings, including outdoor school facilities where students are regularly found;

ii. Outer boundaries of playgrounds;

iii. The lot line of a lot in a residential zone; or

iv. The principal building containing other uses listed in subsections (A)(3)(a) through (c) of this section.

e. Buffer distance measurements shall not extend beyond the nearest ordinary high water (OHW) mark of a river or lake or beyond the nearest edge of a right-of-way (ROW) of a controlled access facility.

4. Outdoor Storage. No outdoor storage of marijuana, marijuana products or hazardous substances shall be allowed.

5. In all zones in which marijuana establishments, with the exception of a marijuana testing facility, are a permitted or conditional use, the applicant shall include an area map drawn to scale indicating all land uses on complete parcels within a 500-foot proximity of the lot upon which the applicant is seeking a zoning permit or conditional use permit.

6. Marijuana establishments other than marijuana cultivation facilities, indoor small and marijuana testing facilities located in GU-1 or GU-5 zoning and adjacent to a lot upon which a principal building used as a dwelling is located are a conditional use subject to the requirements of this title.

FNSB Code
Chapter 18.96
SUPPLEMENTARY REGULATIONS

B. Cultivation Facility Standards.

1. Yard Setbacks. Outdoor marijuana cultivation facilities, including all land planted with marijuana, shall be located at least 50 feet from a lot line.

2. Height Limitations.

a. The maximum height for a marijuana cultivation facility, indoor small shall be 35 feet.

b. The maximum height for a marijuana cultivation facility, indoor large shall be 75 feet. (Ord. 2017-14 § 2, 2017; Ord. 2015-41 § 19, 2015. 2004 Code § 18.50.300.)

(G) the testing procedure and protocols the marijuana cultivation facility will follow.

3 AAC 306.425. Marijuana handler permit required

A marijuana cultivation facility shall ensure that each licensee, employee, or agent who is required or permitted to be physically present on the licensed premises at any time

(1) obtains a marijuana handler permit as provided in 3 AAC 306.700 before being present or employed at the marijuana cultivation facility's licensed premises; and

(2) has the marijuana handler permit card in the person's immediate possession, or a valid copy on file on the premises, at all times while on the marijuana cultivation facility's licensed premises.

3 AAC 306.430. Restricted access area

(a) A marijuana cultivation facility shall conduct any operation in a restricted access area in compliance with 3 AAC 306.710 and this section.

(b) A marijuana cultivation facility shall conduct any marijuana growing operation within a fully enclosed secure indoor facility or greenhouse with rigid walls, a roof, and doors. Where not prohibited by local government, outdoor production may take place in non-rigid greenhouses, other structures, or an expanse of open or cleared ground fully enclosed by a physical barrier. To obscure public view of the premises, outdoor production must be enclosed by a sight- obscuring wall or fence at least six feet high.

(c) A marijuana cultivation facility shall ensure that any marijuana at the marijuana cultivation facility

(1) cannot be observed by the public from outside the marijuana cultivation facility; and

(2) does not emit an odor that is detectable by the public from outside the cultivation facility except as allowed by a local government conditional use permit process.

(d) A marijuana cultivation facility shall have full video surveillance of the licensed premises as required under 3 AAC 306.720, including any area where marijuana is grown, processed, packaged, or stored, or where marijuana waste is destroyed.

(4) another form of excavation that might contaminate a public water system.

(e) A person who decommissions a public water supply well, an observation well associated with testing a public water system supply well, a private water well, or a monitoring well shall use

(1) a method that conforms to ANSI/AWWA Standard A100-06, *Water Wells*, and Appendix H to ANSI/AWWA Standard A100-06 (Decommissioning of Test Holes, Partially Completed Wells, and Abandoned Completed Wells), adopted by reference in 18 AAC 80.010(b); or

(2) an alternate method that has been presented to and approved by the department as protective of public health; the department will, as the department considers necessary to serve the interest of public health, require that an alternative plan submitted under this paragraph be signed and sealed by a registered engineer. (Eff. 10/1/99, Register 151; am 1/11/2006, Register 177; am 8/19/2006, Register 179; am 4/24/2009, Register 190; am 2/11/2017, Register 221)

Authority: AS 46.03.020 AS 46.03.710 AS 46.03.720
AS 46.03.050

Editor's note: In addition to the requirements in (b) of this section, requirements of the Department of Natural Resources at 11 AAC 93 might apply.

Information about how to review or obtain the materials referred to in 18 AAC 80.015 is in the editor’s note to 18 AAC 80.010.

18 AAC 80.020. Minimum separation distances. (a) A person may not construct, install, maintain, or operate a public water system unless the minimum separation distances in Table A, in this subsection, are maintained between a potential source of contamination and a drinking water source for the public water system.

TABLE A. Minimum Separation Distances[a] Between Drinking Water Sources and Potential Sources of Contamination (Measured horizontally in feet)	
	Type of Drinking Water System
Potential Sources of Contamination	**Community Water Systems, Non-transient Non-Community Water Systems, and Transient Non-Community Water Systems**
Wastewater treatment works,[b] wastewater disposal system,[b] pit privy,[b] sewer manhole, lift station, cleanout	200
Community sewer line, holding tank,[b] other potential sources of contamination[c]	200
Private sewer line, petroleum lines and storage tanks,[d] drinking water treatment waste[e]	100

Notes to Table A:

[a] These minimum distances will be expanded, or additional monitoring will be required under 18 AAC 80.020(b) and (e)(2).
[b] Distance to a drinking water source is measured from the nearest edge of the drinking water source to the nearest edge of the potential source of contamination.
[c] Other potential sources of contamination include sanitary landfills, domestic animal and agricultural waste, and industrial discharge lines.
[d] The minimum separation distances for petroleum storage tanks do not apply to tanks that contain propane, or to above-ground storage tanks or drums that, in the aggregate, have a storage capacity of less than 500 gallons of petroleum products, and that store only petroleum products necessary for the operation and maintenance of pumps, power generation systems, or heating systems associated with a potable water source.
[e] Drinking water treatment wastes include the backwash water from filters and water softeners, and the reject water from reverse osmosis units.

(b) The department will require a greater separation distance than that required by Table A in (a) of this section if the department determines that additional distance is necessary to protect surface water, groundwater, or a drinking water source. The department will make this decision after considering soil classifications, groundwater conditions, surface topography, geology, past experience, or other factors relevant to protection of surface water, groundwater, or drinking water.

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In all districts, except the GU-1, general use district, off-street parking and loading areas shall be provided in the amount and location as set forth herein.

A. General Provisions.

1. The off-street parking and loading facilities required by this section shall be established.

2. Required off-street parking spaces and loading facilities for multiresidential, commercial and industrial land uses shall provide vehicle parking.

3. Any area once designated for required off-street parking and loading shall not thereafter be used for any other purpose unless and until equal facilities are provided elsewhere in conformance with this title.

B. Rules for Computing the Number of Off-Street Parking Spaces. The number of required off-street parking spaces to be provided for each use shall be determined as follows:

1. Where the computation of required parking space results in a fractional number, the determination of required parking spaces shall be made by rounding the fractional number to the nearest whole number.

2. Except as otherwise indicated, the number of parking spaces shall be determined by the net floor area, which for the purpose of this section shall mean that floor area of the building accessible to or devoted to use by the customer or patron of a business establishment. Net floor area shall not include those areas used for storage, cooking, stairwells, etc.

C. Minimum Standards for Off-Street Parking Spaces. For every use, there shall be provided the following minimum number of off-street parking spaces:

1. Bed and breakfast residence: one space per guestroom over four rooms;

2. Bowling alley: one space per three seats;

3. Furniture store: one space per 500 square feet of sales area;

4. Hospital, sanitarium; one space per three beds;

5. Hotel (guestrooms only, add other uses extra), roominghouse: three spaces per four guestrooms;

6. Office: one space per 200 square feet;

7. Residential: one space per dwelling unit, and one additional parking space per bedroom over four bedrooms;

8. Store (except furniture): one space per 200 square feet of sales area;

9. Theater or auditorium (including school auditoriums), church, funeral parlor, assembly hall: one space per four seats;

10. Restaurant: one space per three seats;

11. Trailer park, hotel: one space per unit;

12. All commercial and industrial uses not otherwise designated: three spaces per four employees.

No off-street parking is required in the general use zone or in the downtown core area bounded by First Avenue to Fifth Avenue, Noble Street to Barnette Street, and First Avenue to Third Avenue, Barnette Street to Wickersham Street.

D. Minimum Standards for Off-Street Loading Facilities. For every use requiring the loading and unloading of merchandise, off-street facilities for loading and unloading within or adjacent to the building shall be provided in a manner as to not obstruct the traffic movement on adjacent streets and alleys. No off-street parking space shall be used as an off-street loading facility.

E. Location of Off-Street Parking Spaces. All required off-street parking spaces shall be located within the property lines of the same zoning lot, or, where permitted, on a lot within 300 feet of the zoning lot that accommodates the building, structure or use being served.

F. Shared Off-Street Parking Spaces. Up to 50 percent of the off-street parking spaces required for a particular use may be utilized by other uses seeking additional off-street parking spaces; provided, that the uses involved are not normally open, used or operated during the same hours as the primary use for which such off-street parking spaces are required, and that a written agreement is drawn assuring their retention for such purposes as set forth herein.

G. Handicapped Parking Requirements. There shall be provided one handicapped equipped and designated off-street parking space for every 50 required off-street parking spaces or 10 such spaces, whichever is less. Said space or spaces shall be at least eight feet in width with an access aisle at least five feet in width adjacent to the driver's or passenger's side of the car space. Said space or spaces shall be within 200 feet of an entrance to the building, structure or use being served and, where there is more than one entrance, evenly distributed throughout the parking lot also within the distance requirement. The accessible route of travel shall have ramps where curbs are present, shall not cross traffic lanes, and shall not pass behind car spaces. Each handicapped car space shall be identified with an unobscured sign.

H. Design. Except for single-family and two-family residences, all off-street parking spaces and loading facilities shall be designed with the following standards:

1. No wall, post, guardrail or other obstruction that would restrict car door opening shall be permitted within five feet of the centerline of a parking space. Access to each parking space shall be designed so that a driver can enter and leave a space without backing up more than 25 feet.

2. Turning and maneuvering space shall be located entirely on the lot of the use being served. A portion of an alley may be credited as turning and maneuvering space.

3. Each parking space shall have a minimum dimension of nine feet in depth and 18 feet in length with circulation drives of adequate width to make each stall accessible and usable without the need of moving other vehicles.

4. Each loading and unloading area shall have a minimum width of 10 feet, a minimum length of 40 feet, and a minimum height clearance of 14 feet.

5. All off-street parking and loading facilities including circulation drives and access routes shall be surfaced with at least two inches of compacted gravel and graded and drained. (Ord. 2002-04 § 4, 2002; Ord. 89-099 § 13, 1990; Ord. 88-010 § 2, 1988. 2004 Code § 18.50.060.)

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

State License Restrictions – Protection of School Grounds

We are requesting that this application for marijuana establishment license be DENIED because it violates the buffer zones required State Regulation 3 AAC 306.010(a) for the protection of children.

In *AS 17.38.010*, the State of Alaska acknowledges the legal age limit for marijuana use at 21 years. The State of Alaska acknowledges that this is an adult-oriented industry. This Application represents the request by AK Green Bee, Inc. to establish an adult-oriented business in a residential neighborhood that is home to many small children.

3 AAC 306.010(a) License Restrictions establish specific boundaries from school grounds to protect children from marijuana businesses. Per this regulation, a marijuana establishment license will not be issued for a premises within 500 feet of a school ground.

Per the attached School Bus Route excerpt published by the FNSB School District, the School Bus Stop for Ticasuk Brown Elementary School is designated by the Fairbanks North Star Borough at the corner of Badger Rd and Benshoof Drive. This bus stop location has been **designated by the FNSB School District** as a safe place for students to both enter and exit a school bus.

Furthermore, the FNSB School District has claimed jurisdiction of this School Bus Stop by publishing rules governing student behavior while waiting at the bus stop. A copy of the rules is included in this section can be reviewed on the school districts website at https://www.k12northstar.org/Page/2049. These rules are enforced by the School District when the School determines that student behavior falls outside of that acceptable on school grounds. Parents in this neighborhood have firsthand experience with situations where the School District has exerted its authority over the School Bus Stop as school grounds by issuing punishments for inappropriate behavior at the bus stop and calling parents in for disciplinary meetings. The School District enforces rules over student behavior at the Bus Stop in the same manner they do on any other school grounds. This confirms that School Bus Stops are under the jurisdiction of the FNSB School District and are therefore school grounds so children are entitled to the same protections as they have at school.

However, License #13603 is for a marijuana business that would be located within 500 feet of the elementary school bus stop at the corner of Badger Rd and Benshoof Dr. This School Bus Stop is within 160ft of the property proposed for this marijuana facility.

Because the State measures the distance from school grounds to the marijuana establishment based on the shortest pedestrian route, we have provided the image below to demonstrate the well-established pedestrian route from this School Bus Stop. Children do not follow roads or stay on sidewalks. They choose the shortest distance for determining their routes. As demonstrated in this satellite image the children have developed routes from the School Bus Stop that are so well established they can be seen by satellites. This proposed marijuana facility is well within 500 feet of the school ground at the School Bus Stop based on the pedestrian routes determined by the children it serves.

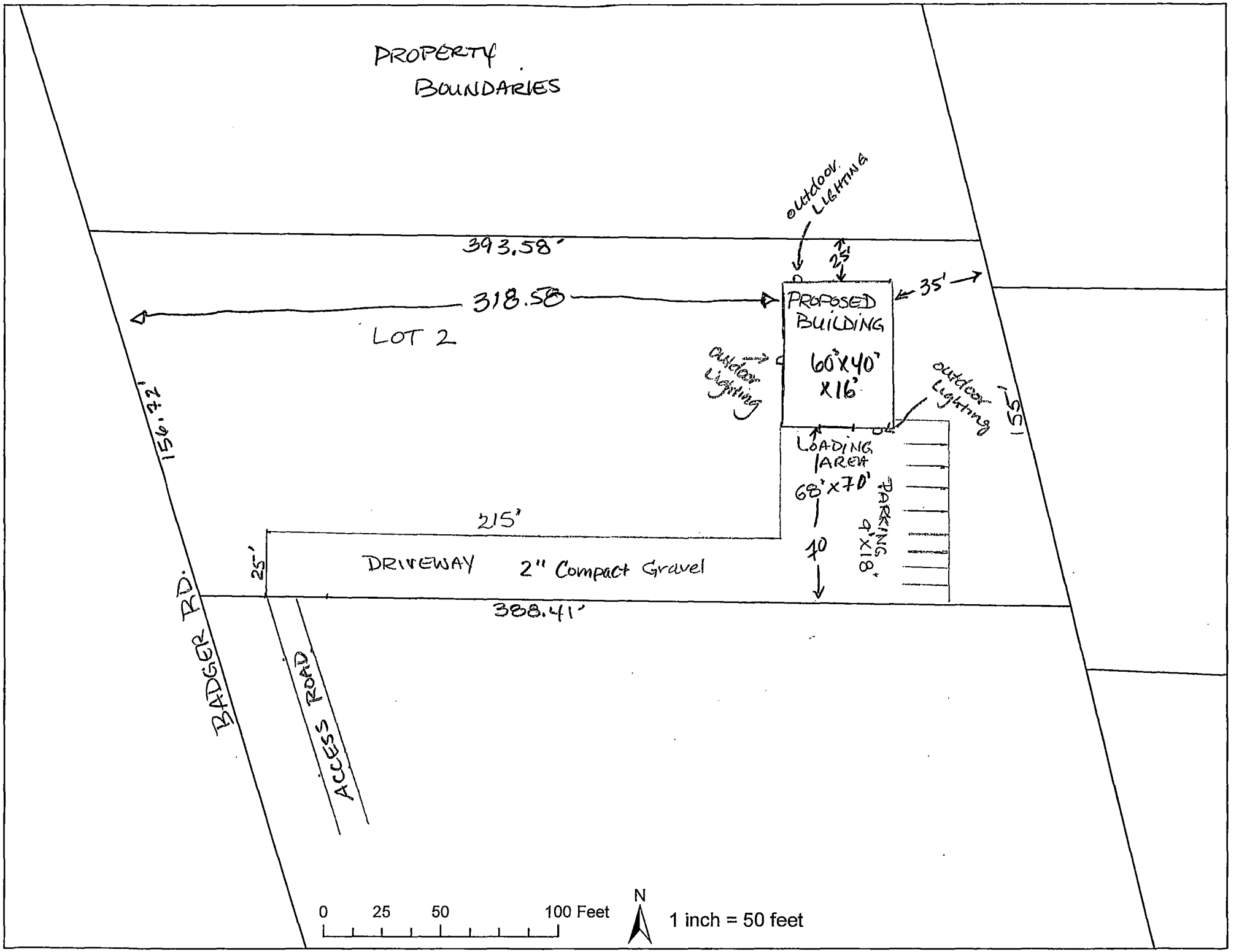
Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

This satellite image was excerpted from the FNSB Fairbanks North Star Borough Base Map Web Map: https://www.arcgis.com/home/webmap/viewer.html?webmap=b9a4e2f690a849008ff30800c510798a

However, a similar satellite image showing the children's walk path is also visible on Google Maps as shown on the page below:

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

We request that this application for State Marijuana License #13603 be DENIED to uphold the State Regulation requirements for protection of school grounds in our neighborhood.


PROPERTY BOUNDARIES
outdoor LIGHTING
25'
393.58'
318.58
35'
PROPOSED BUILDING
60'x40' x16'
LOT 2
outdoor Lighting
outdoor Lighting
151
156.22'
LOADING AREA
68'x70'
PARKING 9'x18'
215'
10
25'
DRIVEWAY 2" Compact Gravel
388.41'
BADGER RD.
ACCESS ROAD
0 25 50 100 Feet
N
1 inch = 50 feet

FNSB Code
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SUPPLEMENTARY REGULATIONS

18.96.240 Standards for commercial marijuana establishments.

A. General Standards.

1. Applicability. Standards of this section shall apply to commercial marijuana establishments regardless of whether they are a permitted or conditional use.

2. A commercial marijuana establishment may only be allowed with the written consent of the owner of the property.

3. No marijuana establishment, except a marijuana testing facility, shall be located within the following buffer distances:

a. Five hundred feet of primary and secondary school buildings (K-12) including vocational programs, playgrounds, adult and juvenile correctional facilities and housing facilities owned by a public housing authority with children as residents; and

b. Two hundred feet of any post-secondary school buildings including but not limited to trade/technical/vocational schools, colleges and universities; and

c. One hundred feet of youth centers, group homes serving persons ages 18 and under, public swimming pools, state licensed day care facilities, arcades, state licensed substance use treatment provider or facility providing substance abuse use treatment, church buildings and residential zones (RE, RR, SF, TF, MF, MFO).

d. Buffer distances shall be measured from the nearest public entrance of a commercial marijuana establishment to:

i. Outer boundaries of school buildings, including outdoor school facilities where students are regularly found;

ii. Outer boundaries of playgrounds;

iii. The lot line of a lot in a residential zone; or

iv. The principal building containing other uses listed in subsections (A)(3)(a) through (c) of this section.

e. Buffer distance measurements shall not extend beyond the nearest ordinary high water (OHW) mark of a river or lake or beyond the nearest edge of a right-of-way (ROW) of a controlled access facility.

4. Outdoor Storage. No outdoor storage of marijuana, marijuana products or hazardous substances shall be allowed.

5. In all zones in which marijuana establishments, with the exception of a marijuana testing facility, are a permitted or conditional use, the applicant shall include an area map drawn to scale indicating all land uses on complete parcels within a 500-foot proximity of the lot upon which the applicant is seeking a zoning permit or conditional use permit.

6. Marijuana establishments other than marijuana cultivation facilities, indoor small and marijuana testing facilities located in GU-1 or GU-5 zoning and adjacent to a lot upon which a principal building used as a dwelling is located are a conditional use subject to the requirements of this title.

FNSB Code
Chapter 18.96
SUPPLEMENTARY REGULATIONS

B. Cultivation Facility Standards.

1. Yard Setbacks. Outdoor marijuana cultivation facilities, including all land planted with marijuana, shall be located at least 50 feet from a lot line.

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a. The maximum height for a marijuana cultivation facility, indoor small shall be 35 feet.

b. The maximum height for a marijuana cultivation facility, indoor large shall be 75 feet. (Ord. 2017-14 § 2, 2017; Ord. 2015-41 § 19, 2015. 2004 Code § 18.50.300.)

Fairbanks North Star Borough School District

Stop Locations For 014.068 BUS SIGN: PEACOCK TICASUK BROWN

Bus:068
Route:014.068 BUS SIGN: PEACOCK
Anchor Abbr:TIC

Start Time:8:21 am
End Time:8:50 am
Total Time:28:09

Distance:10.38 mi.

8:21 am	**(1)**	**1129 BROCK RD**
8:22 am	**(2)**	**BROCK RD @ LEE LN**
8:23 am	**(3)**	**BROCK RD @ MILLER LN**
8:25 am	**(4)**	**1449 BROCK RD**
8:26 am	**(5)**	**CARRIE LYNN DR @ LUCINDA CT**
8:27 am	**(6)**	**CARRIE LYNN DR @ LISA ANN DR**
8:28 am	**(7)**	**2610 LISA ANN DR**
8:29 am	**(8)**	**LISA ANN DR @ BROCK RD**
8:31 am	**(9)**	**PALOMINO DR @ MUSTANG CIR**
8:32 am	**(10)**	**PALOMINO DR @ CLYDESDALE DR**
8:33 am	**(11)**	**2593 CLYDESDALE DR**
8:35 am	**(12)**	**2521 CLYDESDALE DR**
8:37 am	**(13)**	**BADGER RD @ ITTA DR**
8:38 am	**(14)**	**BADGER RD @ BRADWAY RD**
8:39 am	**(15)**	**BADGER RD @ BENSHOOF DR**
8:39 am	**(16)**	**BADGER RD @ CANDLE LITE LOOP**
8:50 am	**(17)**	**TICASUK ELEM SCHOOL**

Fairbanks North Star Borough School District

Stop Locations For 014.168 BUS SIGN: PEACOCK TICASUK BROWN

Bus:068
Route:014.168 BUS SIGN: PEACOCK
Anchor Abbr:TIC

Start Time:3:30 pm
End Time:4:00 pm
Total Time:30:01

Distance:11.05 mi.

3:30 pm		**TICASUK ELEM SCHOOL**
3:37 pm	**(1)**	**TICASUK ELEM SCHOOL**
3:48 pm	**(2)**	**BROCK RD @ LEE LN**
3:49 pm	**(3)**	**BROCK RD @ MILLER LN**
3:51 pm	**(4)**	**CARRIE LYNN DR @ LUCINDA CT**
3:51 pm	**(5)**	**CARRIE LYNN DR @ LISA ANN DR**
3:52 pm	**(6)**	**2610 LISA ANN DR**
3:52 pm	**(7)**	**LISA ANN DR @ BROCK RD**
3:54 pm	**(8)**	**PALOMINO DR @ MUSTANG CIR**
3:55 pm	**(9)**	**PALOMINO DR @ CLYDESDALE DR**
3:56 pm	**(10)**	**2593 CLYDESDALE DR**
3:57 pm	**(11)**	**2521 CLYDESDALE DR**
3:58 pm	**(12)**	**BADGER RD @ ITTA DR**
3:59 pm	**(13)**	**BADGER RD @ BRADWAY RD**
3:59 pm	**(14)**	**BADGER RD @ BENSHOOF DR**
4:00 pm	**(15)**	**BADGER RD @ CANDLE LITE LOOP**

http://busstop.k12northstar.org/elinkrp/Students/BasicTransBoundaryResults.aspx?BasicTB=Y&GradeID=9&HHouseNumber=2438&HStreet=GOLF+CT&HZip=99705&GradeDesc=03

School/Transportation

Versatrans e-Link tyler school solutions

Exit

School/Transportation Information

Simple Search | Advanced Search |

Simple Search:

Grade = '03'

Home Address = '2438 GOLF CT 99705'

The information displayed below is subject to confirmation by the transportation or district office.

School/Transportation Information

Your school of residence is TICASUK BROWN ELEMENTARY
You attend TICASUK BROWN ELEMENTARY
You live 4.87 mi. from your school.

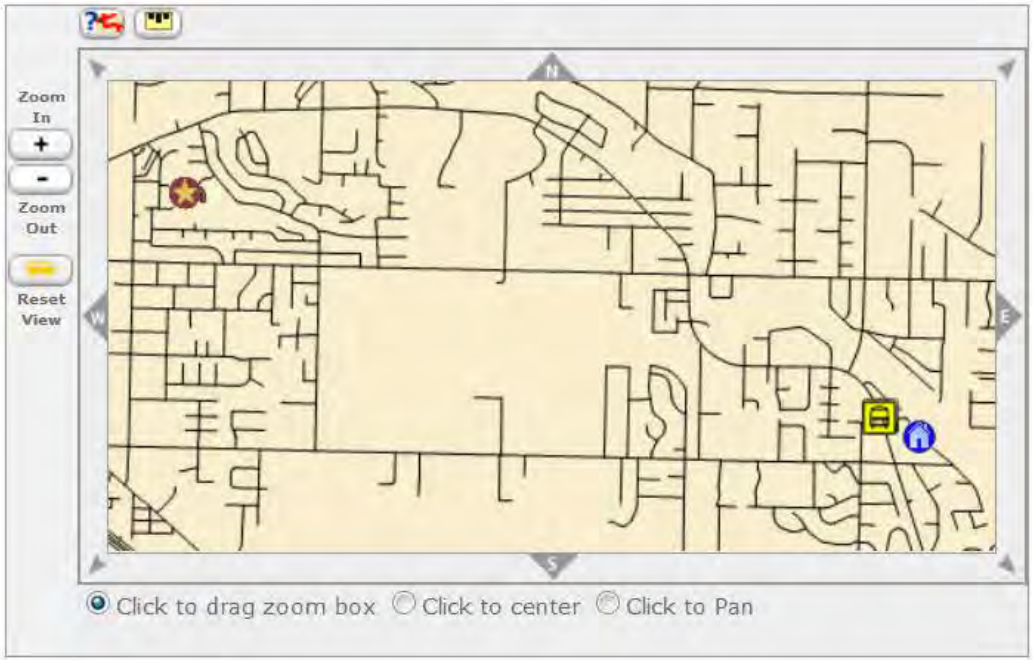
On the way to School

You Ride.
You have to walk this far: 0.30 mi.
You would be assigned to this bus stop: BADGER RD @ BENSHOOF DR
Where bus number 068 (Route 014.068 - BUS SIGN: PEACOCK) arrives at 8:39 AM

On the way from School

You Ride.
Where bus number 068 (Route 014.168 - BUS SIGN: PEACOCK) arrives at 3:59 PM
You are assigned this bus stop: BADGER RD @ BENSHOOF DR
You have to walk this far: 0.30 mi.

View Detailed Results



Bus Rules

FAIRBANKS NORTH STAR BOROUGH SCHOOL DISTRICT RULES FOR STUDENT TRANSPORTATION
BUS CONDUCT:(Ref. Admin. Regs. 761)

Alaska statutes do not mandate pupil transportation in this state. School bus transportation is provided as a courtesy and is a privilege, not a right. If a student's conduct is such that the health, safety, comfort, or the well-being of others is jeopardized, on or *off* the bus, a school district official may deny the privilege of riding the bus. The school bus driver is in charge of the bus and all its passengers and has total authority and responsibility. Only designated school officials are authorized to suspend transportation privileges.

GENERAL BUS POLICIES

1. Students are required to ride the bus assigned to them and to board and disembark at their assigned bus stop. Students may be transported to an already established bus stop or on a different bus on an occasional basis. Parents should contact the school office with their request for a Bus Stop Deviation. The student must give the driver a Bus Stop Deviation issued by the school office authorizing this transportation. Requests for students to be transported to new bus stops must be directed to the transportation department.
2. The bus driver has full responsibility and authority for the safety of students while they are being transported on the bus.
3. Parents may not remove a student from a bus, after the student has boarded, without the approval of a school representative.
4. Parents may not accompany their children on the bus to or from school.
5. Parents are responsible for damages to the school bus if caused by their children.
6. The driver will assign seats for elementary, middle, and high school students.
7. Items that can be held in the student's lap or under the student's seat in the bus may be transported on the bus. Large musical instruments may not be transported on the bus.
8. Only electronic equipment that is allowed on school grounds is allowed on the bus, such as cell phones, radios or stereos, {etc.)
9. Ice skates must have protective guards on the blades or be placed in an appropriate box. Paper bags are not adequate blade protection. Skis, ski poles and other such sharp edged objects should not be transported unless previously coordinated with the school principal and the bus contractor. Sleds and plastic toboggans may not be transported.
10. No animals, of any kind, are allowed on the bus at any time.
11. Any items not permitted at school may not be transported on the bus.
12. Students will be issued a School Bus Misconduct Citation by the bus driver for infractions of the rules. The school bus driver and the school principal are responsible for handling behavioral problems occurring on the school bus, but only the school principal, or his/her designee, has the authority to suspend a student's bus riding privileges.
13. Suspension from bus transportation does not excuse the student from school attendance.

STUDENT RESPONSIBILITIES

1. Students must always follow the school bus driver's instructions. The driver's primary concern is for student safety.
2. Students should exercise good manners, caution and consideration for other people. Show respect for the driver, the bus, other students and other adults.
3. Students should dress properly for the weather.

4. Students may not have anything in their possession that may cause injury to others.
5. Students will not transport any items on the bus that are not permitted at school.
6. Students will obtain a bus deviation for getting off at a different stop than normal.
7. Students will sit in their assigned seats.
8. Students will take bus route change information home to parents.

WHILE WAITING FOR THE BUS

1. Dress properly for the weather.
2. Be outside at your stop three (3) minutes before your scheduled bus stop time. Your school bus driver has a schedule to keep and cannot wait for you. Be on time for the bus.
3. Stay a safe distance from the roadway, and stay away from the bus until it stops.
4. Line up at the place designated by the bus driver when the school bus approaches.
5. Stay out of the danger zone--don't play in or near the road or push others.
6. Let the smaller children board first.

BOARDING AND DISEMBARKING FROM THE SCHOOL BUS

1. Students must cross the roadway approximately fifteen (15) feet in front of the bus and only when the driver instructs the pupils to cross. Watch for traffic. Stop immediately if the bus driver sounds the horn or tells you to stop over the loud speaker.
2. Students boarding from the right must wait for the driver's command to board.
3. Always use the handrail and go up and down the steps one at a time.
4. Don't push, crowd or disturb others.
5. When boarding, go directly to your assigned seat and be seated.
6. After you leave the bus, go directly home or to the assigned place.

STUDENT CONDUCT ON THE SCHOOL BUS

1. In general, classroom conduct will be observed. The school bus is not a playground, save horseplay and wrestling for another place and time.
2. Place books and other gear in your lap.
3. Avoid loud talking, or anything else that might distract the driver.
4. Do not sit in the driver's seat or interfere with him/her in any manner at any time.
5. Keep quiet near railroad tracks so that the driver can listen for trains.
6. Keep head, arms and body inside the bus. Keep your hands and feet to yourself.
7. Do not throw objects inside of or out of the bus.
8. No eating, drinking or smoking on the bus. Do not chew or spit tobacco. Do not have in your possession, or make use of, alcohol, drugs or controlled substances on the bus.
9. Remain seated until the bus has come to a complete stop and get off only at your assigned bus stop.
10. Do not open windows without permission; maximum two (2) notches.
11. Do not damage the bus and always assist in keeping it clean.
12. Take a seat and remain seated, facing forward, while the bus is moving. Keep your feet on the floor in front of the seat, not in the aisle.

13. Keep the aisle and the exits clear.
14. Fighting with other students and/or attacking other students or the driver is prohibited.
15. Use of abusive or vulgar language, or directing such language toward other students or adults is prohibited.
16. The emergency door and exit controls may be used only during supervised drills or actual emergencies.

BUS MISCONDUCT CITATION POLICY AND PROCEDURES

Drivers are responsible for maintaining order on the buses. Administering sanctions for misconduct on the school bus is the responsibility of the principal at the school where the student is enrolled. Only the principal or designee has the authority to suspend a student's bus riding privileges. It is the responsibility of the principal to advise parents when a student has been suspended. In the event of misbehavior on the part of the student riding the bus, the bus driver may issue the student a "Bus Misconduct Citation" for minor and/or major infractions. The driver will complete a School Bus Misconduct Citation. Three (3) copies will be forwarded to the Principal. The Principal will forward one (1) copy to the parents and return one (1) copy to the school bus contractor indicating any disciplinary action taken. The following courses of action are considered as minimum:

1. Depending on the nature and severity of the incident, the first misconduct citation may result in a warning, or other disciplinary action, up to and including temporary or permanent suspension of bus privileges by the principal.
2. The second misconduct citation may result in the imposition of "PROBATIONARY" status. This process will include counseling with the student and official notification to the parents of the probationary action. Bus riding privileges may be denied the student for additional violations.
3. The third misconduct citation may result in suspension of bus privileges for a minimum of three (3) days, depending on the severity of the incident.
4. The fourth misconduct citation may result in suspension of bus privileges. In either case, privileges will not be reinstated until such time a conference has been held with the student, the parents, the principal, and a representative from the bus company.
5. Habitual misconduct may result in permanent suspension from the privilege of bus transportation. This procedure will not preclude the right and responsibility of school officials to take other immediate action, as may be necessary in their judgment, for the preservation of good order and specifically for the safety and well-being of others who ride the bus. Suspension from bus transportation does not excuse the student from school attendance.

FOR SAFETY'S SAKE

1. Parents should review and discuss bus safety and conduct rules with their children. Parental support of the bus driver and the school will help ensure safe rides to and from school for all riders.
2. Students must be responsible for their own conduct on the bus so that nothing they do will risk their own safety or the safety of others.
3. Buses depart the schools (7) seven minutes after the dismissal bell in the afternoon. Students are expected to be on the bus at pull-away time at the schools. Students will not be allowed to board the bus after the first bus moves away from the curb.
4. Know the location of your child's bus stop. Know the other students waiting at the bus stop. Be sure your child is dressed appropriately for the weather.
5. Call the bus company or your child's school if your child does not arrive home on time.
6. Contact your child's principal or assistant principal if there are problems on the bus.
7. Contact the bus company about bus driver concerns.
8. Contact the FNSBSD transportation department regarding questions about your child's bus route or times.
9. Observe all traffic laws regarding school buses, e.g. stopping for flashing lights, school speed limit zones, etc.

PLEASE REMEMBER

1. Riding on the school bus is a privilege and not a right.
2. Inappropriate bus conduct may result in loss of bus riding privilege and/or suspension from school by a school district official. A pupil's conduct should not jeopardize the health, safety, comfort, or well-being of others, on or *off* the bus.
3. The goal is a safe, pleasant, and enjoyable trip for all riders.

FOR MORE INFORMATION PLEASE CALL THE FAIRBANKS NORTH STAR BOROUGH SCHOOL DISTRICT TRANSPORTATION DEPARTMENT
{907) 452-2000 option 4
OFFICE HOURS:
8:00 AM – 4:30 PM

FIRST STUDENT, INC.
OFFICE HOURS:
5:00AM – 6:30PM FAIRBANKS {907) 456-6921
TWO RIVERS, NORTH POLE, AND MOOSE CREEK {907) 488-4477

Chapter 306

Regulation of Marijuana Industry

Article 1

Licensing; Fees

3 AAC 306.005. License required

A marijuana establishment may not operate in the state unless it has obtained the applicable marijuana establishment license from the board. The board will issue the following marijuana establishment licenses under this chapter:

(1) a retail marijuana store license, granting authority for activities allowed under AS 17.38.070(a), and subject to the provisions of 3 AAC 306.300 - 3 AAC 306.360 and 3 AAC 306.700 - 3 AAC 306.755;

(2) a marijuana cultivation facility license, as described in 3 AAC 306.405 and 3 AAC 306.410, granting authority for activities allowed under AS 17.38.070(b), and subject to the provisions of 3 AAC 306.400 - 3 AAC 306.480 and 3 AAC 306.700 - 3 AAC 306.755;

(3) a marijuana product manufacturing facility license, as described in 3 AAC 306.505 and 3 AAC 306.515, granting authority for activities allowed under AS 17.38.070(c), and subject to the provisions of 3 AAC 306.500 - 3 AAC 306.570 and 3 AAC 306.700 - 3 AAC 306.755; and

(4) a marijuana testing facility license, granting authority for activities allowed under AS 17.38.070(d), and subject to the provisions of 3 AAC 306.600 - 3 AAC 306.675 and 3 AAC 306.700 - 3 AAC 306.755.

3 AAC 306.010. License restrictions

(a) The board will not issue a marijuana establishment license if the licensed premises will be located within 500 feet of a school ground, a recreation or youth center, a building in which religious services are regularly conducted, or a correctional facility. The

distance specified in this subsection must be measured by the shortest pedestrian route from the public entrance of the building in which the licensed premises would be located to the outer boundaries of the school ground, the outer boundaries of the recreation or youth center, the main public entrance of the building in which religious services are regularly conducted, or the main public entrance of the correctional facility. This section does not prohibit the renewal of an existing marijuana establishment license or the transfer of an existing marijuana establishment license to another person if the licensed premises were in use before the school ground, recreation or youth center, the building in which religious services are regularly conducted, or a correctional facility began use of a site within 500 feet. If an existing marijuana establishment license for premises located within 500 feet of a school ground, a recreation or youth center, a building in which religious services are regularly conducted, or a correctional facility is revoked or expires, the board will

not issue another marijuana establishment license for the same premises unless the school ground, the recreation or youth center, the building in which religious services are regularly conducted, or the correctional facility no longer occupies the site within 500 feet.

(b) The board will not issue a marijuana establishment license if the licensed premises will be located in a liquor license premises.

(c) The board will not issue a marijuana establishment license when a local government protests an application under 3 AAC 306.060 on the grounds that the applicant's proposed licensed premises are located in a place within the local government where a local zoning ordinance prohibits the marijuana establishment, unless the local government has approved a variance from the local ordinance.

(d) The board will not issue a marijuana establishment license to a person that

(1) is prohibited under AS 17.38.200(i) from receiving a marijuana establishment license because of a conviction of a felony; if the applicant is a partnership, limited liability company, or corporation, the board will not issue a license if any person named in 3 AAC 306.020(b)(2) is prohibited under AS 17.38.200(i) from obtaining a license; in this paragraph, "conviction of a felony" includes a suspended imposition of sentence;

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Air Quality & Specific Health Concerns

We request that this license application be DENIED as it is a violation of *Alaska DEC Air Quality Code 18 AAC 05.110* which protects the health of this neighborhood by stating:

> **"*No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property*."**

The code also clarifies that in *18 AAC 50.005* that "The requirements of this chapter apply to any person who allows or causes air pollutants to be emitted into the ambient air." This code clearly applies here.

Leo (Joe) and Sue Valdrow's home is within 600 feet of this proposed marijuana cultivation facility. Both Sue & Joe have specific, severe allergies associated with marijuana cultivation activities.

Sue has a severe cannabis allergy that makes her face itch uncontrollably, her tongue swells, and it becomes difficult to breathe. Sue's body is so sensitive to this allergy that her symptoms begin before she can even smell contaminates in the air. This cannabis allergy is confirmed by her physician and the doctor's notes are included to document this condition. As she comes in contact with marijuana products, second hand smoke, and other cannabis contaminants at work and in the Fairbanks area, Sue's allergy is becoming increasingly more severe.

Furthermore, **Joe Valdrow has severe anaphylaxis reactions to mold spores and many flowing plants**. He is similarly concerned that this marijuana cultivation facility will increase the frequency of his allergy attacks, increase his use of rescue epipen, and require more ambulance responses to allergy related emergencies at his home.

AK Green Bee, Inc. has not provided any details regarding the engineering of the ventilation system, exhaust air filtration, or other aspects of emissions and odor control in their license application. Nor are these details provided in their land use permit application to the FNSB.

We understand that the cultivation activities will be indoors and some form of filtration is planned for use, but this will not provide continuous protection of the neighborhood. Any glitch in the ventilation system or missed filter change interval could result in a life-threatening allergic reaction. Even in normal daily operations, the presented plan acknowledges that there will be times that the facility is open to the air. **The proposed building Floor Plan as submitted with the FNSB Land Use Permit Application indicates that there will be a large garage door that opens directly into the space dedicated for Harvesting and Packaging of the marijuana product. Each time this garage door is opened large amount of the allergens will be released into the neighborhood without restriction and will be carried on the prevailing southeast breeze directly to Joe & Sue's house.**

Transportation of all related products presents another risk. We understand that usable product must be sealed for transport to retail and testing facilities. **However, unless all waste products are vacuum sealed for transport, this represents another key opportunity for allergens to be dispersed into the neighborhood.** It would be costly to require such a facility to provide such seals all of their trash before it is transported to the landfill, but the alternative is risking the health and welfare of our neighborhood residents.

After living in this neighborhood for more than 15 years, Joe & Sue anticipate that they will likely be forced out of our home because of the health risk if this marijuana facility is allowed to open a cultivation facility in this location. They live in a home that is approx. 600ft from the proposed marijuana cultivation facility where they have raised their children. The insertion of this marijuana grow operation in this neighborhood may prevent them from being able to use their yard, make them uncomfortable even inside their own home, and will make them live in constant fear of a severe allergy

attack in an area where they have first-hand knowledge that EMS response is 30+ minutes.

We all want to be able to feel safe in our own homes and on our own properties. It would be improper for the State to approve a marijuana establishment license knowing that the plan for this facility has allowances for release of emissions that are injurious to human health in this neighborhood and which will unreasonably interfere with the enjoyment of life on my own property. **Operation of this marijuana cultivation facility at 2364 Badger Road would be a violation of the *Alaska DEC Air Quality Code 18 AAC 05.110* because it is documented to be a specific, severe health hazard to the residents of this neighborhood. We request that this license application be DENIED.**

Article 1. Ambient Air Quality Management.

Section

05. Purpose and applicability of chapter
07. Local government powers or obligations under a local air quality control program
10. Ambient air quality standards
15. Air quality designations, classifications, and control regions
20. Baseline dates and maximum allowable increases
25. Visibility and other special protection areas
30. State air quality control plan
35. Documents, procedures, and methods adopted by reference
40. Federal standards adopted by reference
45. Prohibitions
50. Incinerator emission standards
52. (Repealed)
55. Industrial processes and fuel-burning equipment
60. Pulp mills
65. Open burning
70. Marine vessel visible emission standards
75. Wood-fired heating device visible emission standards
76. Solid fuel-fired heating device fuel requirements; registration of commercial wood sellers
77. Standards for wood-fired heating devices
80. Ice fog standards
85. Volatile liquid storage tank emission standards
90. Volatile liquid loading racks and delivery tank emission standards
100. Nonroad engines
110. Air pollution prohibited

18 AAC 50.005. Purpose and applicability of chapter. (a) The purpose of this chapter is to identify, prevent, abate, and control air pollution in a manner that meets the purposes of AS 46.03, AS 46.14, and 42 U.S.C. 7401 - 7671q (Clean Air Act).

(b) The requirements of this chapter apply to any person who allows or causes air pollutants to be emitted into the ambient air. (Eff. 1/18/97, Register 141; am 10/1/2004, Register 171)

Authority: AS 46.03.020 AS 46.14.030 Sec. 30, ch. 74, SLA 1993
AS 46.14.010

18 AAC 50.007. Local government powers or obligations under a local air quality control program. Nothing in 18 AAC 50.010 – 18 AAC 50.110 alters a local government's powers or obligations under a local air quality control program established under AS 46.14.400 and other local laws, as applicable. (Eff. 2/28/2015, Register 213)

Authority: AS 46.03.020 AS 46.14.030 Sec. 30, ch. 74, SLA 1993
AS 46.14.010

18 AAC 50.110. Air pollution prohibited. No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. (Eff. 5/26/72, Register 42)

Authority: AS 46.03.020 AS 46.03.710

1001 Noble Street | Fairbanks, AK 99701 | (907) 459-3500 | (888) 459-3500

Patient: Sue Valdrow
Date of Birth: [redacted] Age: [redacted]
Date: 08/15/2017 08:00 AM
Provider: Richard J. Sheridan MD
Location: Noble St 1st Care
Visit Type: Urgent Care Visit
MR#: [redacted]

PATIENT PLAN FOR 08/15/2017 08:00 AM

Thank you for choosing us for your healthcare needs. The following is a summary of the outcome of today's visit and other instructions and information we hope you find helpful.

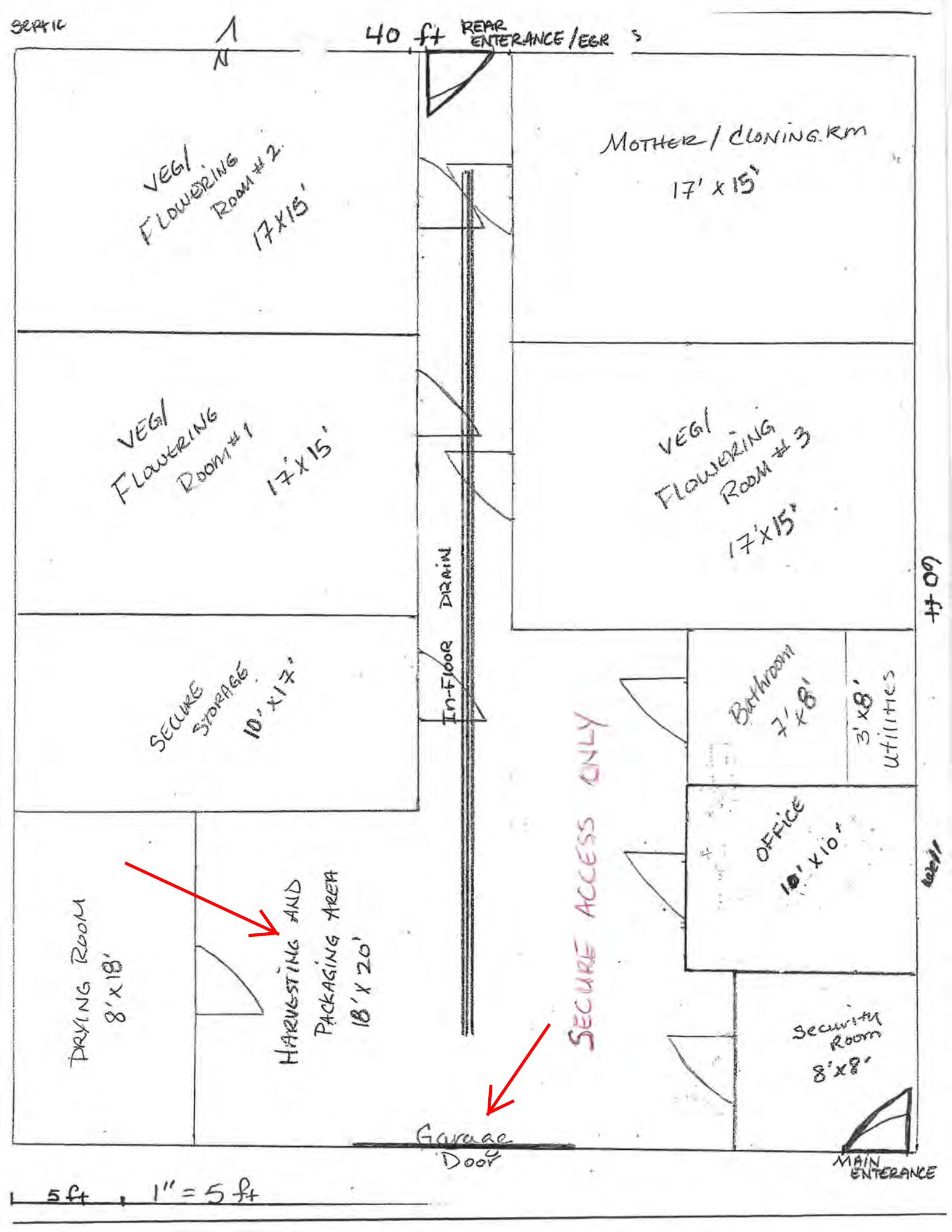
TODAY'S VISIT
REASON(S) FOR VISIT
allergies.

Assessment/Plan

#	Detail Type	Description
1.	Assessment	Asthma due to environmental allergies (J45.909).
	Patient Plan	severe cannabis (marijuana) allergy causing bronchospasm, lip swelling, and pruritis from even distant second hand exposure (such as the smell on a user's clothing) Increase advair to 250/50 twice daily take allegra in the morning, cetirizine at night continue singulair albuterol inhaler 2-4 puffs for tightening of the airway may take an additional 50mg of benadryl at acute onset of symptoms.

MEDICATIONS

Medication	Dose	Sig Description
Valdrow, Sue A. [redacted]		


SEPTIC
N
40 ft
REAR ENTERANCE / EGR
VEG/ FLOWERING ROOM #2 17X15'
MOTHER / CLONING RM 17' X 15'
VEG/ FLOWERING ROOM #1 17'X15'
VEG/ FLOWERING ROOM #3 17'X15'
60 ft
DRAIN
In-Floor
SECURE STORAGE 10' X 17'
BATHROOM 7' X 8'
3' X 8' UTILITIES
SECURE ACCESS ONLY
OFFICE 10' X 10'
DRYING ROOM 8' X 18'
HARVESTING AND PACKAGING AREA 18' X 20'
Security Room 8' X 8'
Garage Door
MAIN ENTERANCE
5 ft
1" = 5 ft

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Disregard for State Fire Marshal Authority

This commercial facility requires plan review and approval by the State Fire Marshal, who is also the recognized State Building Official. As of Wednesday, August 9th, Dave Aiden, with the State Fire Marshal's Office, confirmed that they have received no communication or plans for review from AK Green Bee, Inc. or the Applicant. However, construction has been proceeding onsite since the beginning of August as shown in the attached photos.

On the Plan Review Bureau homepage for The Department of Public Safety website it very clearly states:

> "Construction, repair, remodel, addition, or change of occupancy of any building/structure, or installation or change of fuel tanks must be approved by the Division of Fire and Life Safety before ANY work is started." (*the emphasis on "ANY" is written in all caps on their website*)

Furthermore, this decision to disregard the State Fire Marshal's authority was made even though the State and FNSB have both made extraordinary efforts to ensure that marijuana business are aware of the requirements.

The State of Alaska has published a guide titled "How to get State Fire Marshals Approval" which is specifically geared to providing the marijuana industry a detailed guide through the process. No other industry is provided this type of specific support and guidance and yet they manage to follow the State requirements. A copy of this document is attached for reference.

Additionally, the FNSB Community Planning Department has developed a detailed publication titled "How to Get Your Commercial Marijuana Facility Permit – The Packet". This includes full contact information for the State Fire Marshal.

Despite having every opportunity to meet the requirements, AK Green Bee, Inc. has made a deliberate decision to proceed with construction without approval by the State Building Official. This is a blatant violation of the requirements that are clearly stated on the agency homepage and a complete disregard for safe facility construction and operation.

AK Green Bee has now invested a substantial amount of money in site work and foundation preparation in a location that does not appear to meet the Life Safety Requirements for a business on this site. This work was done at their own risk and in direct violation of the published State requirements. Because these existing conditions were not constructed in good faith they should not be allowed for consideration in favor of future requests by the Applicant for Grandfather Rights or variance of fire protection, building, sewer, water, zoning, and other requirements.

This intentional violation of State Building Official requirements should be sufficient grounds for DENIAL of this license application. This action shows that AK Green Bee, Inc. does not respect the authority of state agencies and brings up concerns regarding their ability to operate a controlled-substance facility within the State statutes and regulations.

08/05/2017

08/08/2017

08/09/2017

JADE CONSTRUCTION
160C LC
08/10/2017

Quick Links

- Alaska Adopted Codes
- Fire System Permits
- Code Talk

Division Links

- Fire Home
- Director's Office
- Alaska Fire Standards Council
- Life Safety Inspection
- Plan Review
- Fire Training
- Contact Us
- ANFIRS
- Burn Injury Reports
- Fire Department Registration
- Fire Statistics
- FD Registration Status

Plan Review Bureau

Fairbanks Plan Review Bureau Office Closure Notice

In order to start the closing of the Plan Review Bureau office in Fairbanks on June 30, 2017 we will stop receiving Plan Reviews at that office location as of April 1, 2017. After that date, all Plan Reviews will need to be mailed or delivered to our Anchorage office at:

Division of Fire And Life Safety
Plan Review Bureau
5700 East Tudor Road
Anchorage, AK 99507-1225

Due to construction season, plan reviews may take up to eight weeks for completion, however, additional information may be required.

If you have any questions please contact our Anchorage Plan Review Office at 907-269-2004.

The Division of Fire and Life Safety is the State Building Official.

Construction, repair, remodel, addition, or change of occupancy of any building/structure, or installation or change of fuel tanks must be approved by the Division of Fire and Life Safety before ANY work is started.

Residential housing that is three-plex or smaller is exempt from this requirement.

The Division of Fire and Life Safety has statewide jurisdiction for fire code enforcement and plan review authority except in the following communities which have received deferrals:

THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Commerce, Community, and Economic Development

ALCOHOL & MARIJUANA CONTROL OFFICE
550 West 7th Avenue, Suite 1600
Anchorage, AK 99501
Main: 907.269.0350

How to get State Fire Marshals Approval

The State Fire Marshal's Office has jurisdiction over commercial buildings across the State of Alaska (13 AAC 50.027). In order to get the approval of the State Fire Marshal's Office please review the following document.

Proposed Marijuana Establishments Packet

If you have any questions regarding this process please call 907-269-2004

THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Public Safety

DIVISION OF FIRE AND LIFE SAFETY
Plan Review Bureau - Anchorage

5700 East Tudor Road
Anchorage, Alaska 99507-1225
Main: 907.269.2004
Fax: 907.269.0098

Submittals for Proposed Marijuana Establishments

The State Fire Marshal's Office has jurisdiction over commercial buildings across the State of Alaska. (13 AAC 50.027) It is our mission to protect life and property by promoting building safety. Marijuana establishments (retail, cultivation, product manufacturing, and testing facilities) may fall under our jurisdiction for review and approval.

To determine your building's occupancy type and whether or not a plan review is required, you need to provide hardcopies of the following items:

- A completed plan review application
- A scaled site plan showing distances to property lines and buildings
- A floor plan of the entire building
- List of materials & chemicals used in the establishment (C02 enrichment, fertilizer, insecticides, etc.)
- A copy of the establishment's operating plan (prepared for the Marijuana Board)
- Technical specifications for the establishment's lighting, heating & ventilation equipment
- Approval from your local government agency (building authority)
- Emergency access approval from your local fire authority

After we receive all of the requested items, we will determine if your establishment requires approval from our office. We will provide our decision in writing to you within one (1) week after receiving the entire packet. Your establishment's packet will then be forwarded to the appropriate office. Please note, partial submittals will delay the process.

If your establishment requires a plan review, you will receive a fee letter. This fee needs to be paid before the review of your plans can continue. Please note, if you begin construction or renovation before the review is complete, a special processing fee will be charged.

This packet includes:

1. Fire & Life Safety Plan Review Application
2. Explanation of plan review application
3. Fee explanation (with examples)

If you have any questions regarding this process, please contact us at: 907.269.2004.

[ ] 2760 Sherwood Lane, Ste 1-A
Juneau, Alaska 99801
Phone (907) 465-4331
Fax (907) 465-5521

[ ] 5700 E. Tudor Road
Anchorage, Alaska 99507
Phone (907) 269-2004
Fax (907) 269-0098

[ ] 1979 Peger Road
Fairbanks, Alaska 99709
Phone (907) 451-5200
Fax (907) 451-5218

APPLICATION FOR FIRE AND LIFE, SAFETY PLAN REVIEW

Authority: 13 AAC 50.027

1. Name of building (previous and new): _____

_____

2. Provide a project description and *previous review number* (if applicable) of the work: _____

_____

3. Type of Project and cost: [ ] new building [ ] addition to an existing building [ ] renovations [ ] occupancy change

[ ] foundation [ ] exterior wall envelope (framing) [ ] fuel system project [ ] relocation [ ] fire system project

Project Cost $ _____ (Required for Fuel Systems and Renovations/Remodels (labor and materials))

4. Describe use of the building: _____

Lot Number: _____ **Block Number:** _____ **Subdivision Name:** _____

Physical Address (required): # _____**Street**_____**Suffix**_____ **City**_____**Zip**_____

Type of construction: _____ (I, II, III, IV, V) **Indicate use or IBC occupancy:** _____(A,B,E,F,S,I,H,R,U)

Total square footage: _____ **Suppression system to be installed: [ ] YES [ ] NO - # Devices:** _____
Fire Alarm system to be installed: [ ] YES [ ] NO - # Devices: _____

APPLICANT NAME: _____	OWNER NAME: _____
COMPANY NAME: _____	BUSINESS NAME: _____
MAILING ADDRESS: _____	MAILING ADDRESS: _____
CITY: _____	CITY: _____
ZIP: _____ STATE: _____	ZIP: _____ STATE: _____
PHONE: _____ FAX: _____	PHONE: _____ FAX: _____
EMAIL: _____	EMAIL: _____

I certify that I have read and examined this application and know the same to be true and correct. I recognize that approval of plans submitted does not presume to give approval to oversights by the Division of Fire and Life Safety nor grant authority to violate or cancel the provisions of any other state or local law regulating this occupancy. 13AAC 50.027(c)(5): "If any work for which a plan review and approval is required by this subsection has been started without first obtaining plan review and approval, a special processing plan review fee will be charged."

_____ _____

APPLICANT SIGNATURE ***DATE***

Please Submit Applicable Documents – stamped by an Alaskan Registered Design Professional

[ ] SCALED PLOT PLAN: Show distance to property lines and existing buildings.
[ ] STRUCTURAL DRAWINGS - including: design criteria, connections.
[ ] ARCHITECTURAL DRAWINGS - including: Interior and exterior wall details, means of egress, fire extinguisher information.
[ ] MECHANICAL DRAWINGS - including: Hood and duct, fuel tank size and location.
[ ] ELECTRICAL DRAWINGS - including: Emergency lighting, exit signs.
[ ] FIRE PROTECTION SYSTEM: Automatic sprinklers, hood suppression, fire alarm.
[ ] FIRE DEPARTMENT ACCESS LETTER – including: access and fire flow approval and notification

IT IS IN VIOLATION OF STATE LAW TO BEGIN ANY CONSTRUCTION BEFORE A PERMIT HAS BEEN ISSUED BY THIS OFFICE.

Explanation of Application for Fire & Life Safety Plan Review

1. Name of Building

   Our office uses building names for our files and systems. Because of this, we need to know how you will be referring to the building. If it's an existing building, be sure to include any previous names the building may have been called in the past. If this project involves a tenant in a building, provide the building name and the tenant name with the suite number.

2. Project Description

   Provide a brief project description (ex. "expand office space for Suite 102 by removing two walls"). If this building has been reviewed in the past, provide any previous plan review numbers.

3. Type of Project & Cost

   Select the type of project. Provide project cost for renovation projects or fuel systems.

4. Use of Building

   Provide brief description on building (ex. "Office space on 1st floor and long term rental apartments on 2nd floor")

5. Lot Number / Block Number / Subdivision Name

   This information is to be provided if you have it.

6. Physical Address

   If your area does not have physical addresses, please provide Lot/Block/Subdivision names.

7. Type of Construction (I, II, III, IV, V)

   Designators used to describe the type of materials that will be used in the construction of the building. This information can be found in more detail in Chapter 6 of the 2009 International Building Code (IBC). (This information can be found on our website at www.akburny.com)

   Below are examples of the more common construction types:

   Type II – (noncombustible) metal or masonry

   Type V – (combustible) wood

8. Use or IBC Occupancy (A, B, E, F, H, I, M, R, S, U)

These are classifications for building use and occupancy. This information can be found in more detail in Chapter 3 of the 2009 International Building Code (IBC). (This information can be found on our website at www.akburny.com.)

A: Assembly occupancy – buildings used for social events and gatherings

Theaters, restaurants, churches, bowling alleys

B: Business occupancy – buildings involved in professional or office type transactions

Banks, outpatient clinics, post offices

E: Educational occupancy – buildings used for educational purposes through 12th grade

Day cares, schools

F: Factory occupancy – buildings used for assembling, packaging, repairing or processing

Bakeries, breweries, water treatment

H: Hazardous occupancy – buildings used for storage and processing of materials which constitute a health hazard

Storage of explosives, toxic chemicals, corrosives, flammable, combustible materials/liquids

I: Institutional occupancy – supervised environments in which people are cared for

Alcohol & drug centers, assisted living facilities, hospitals, jails

M: Mercantile occupancy – buildings used for display and sale of merchandise

Retail stores, gas stations

R: Residential occupancy – buildings used for sleeping purposes

Hotels, apartments, boarding houses

S: Storage occupancy – buildings used for storage of nonhazardous materials

Aircraft hangars, food storage, warehouses

U: Utility occupancy – accessory buildings not classified under other occupancies

Barns, sheds, tanks

9. Total Square Footage

   Provide total square footage of the project and of the building itself. If you are submitting for an addition review, provide the square footage of the addition and the total square footage of the building.

10. Suppression & Alarm system to be installed

    Only to be used if you are submitting for a fire alarm or fire suppression or kitchen hood & duct suppression system. Provide the number of devices for an accurate fee.

11. Applicant Information

    The primary applicant will receive any correspondence or questions from our office. The owner's information needs to be provided if different than the primary applicant.

12. Applicant Signature

    This application is a legal document and needs to be signed before our office can proceed with the review.

13. Checklist

    This checklist is provided to assist with the submittal process. This is a summary of the information we may need to see depending on the type of project you have.

Please note:

Your project may be delayed in processing if your application is not completed entirely. If you have any questions regarding the application – please call our office at 907.269.2004

Plan Review Fees Explanation

Our procedure for determining fees is detailed in our Regulations and can be found in total on our website (www.akburny.com).
The pertinent sections are included below followed by step-by-step examples.

(1) upon application for a plan review, a plan review fee must be paid to the State of Alaska; the plan review fee is established by *I.B.C.*, Section, 108 adopted by reference in 13 AAC 50.020; the value of the proposed construction will be determined by the division of fire and life safety using the valuation schedule, the plan review fee table and the plan review fee formula set out in (6), (7), and (8) of this subsection; renovation, alterations, and mechanical changes and fuel system installation and replacement valuation is determined by the project cost; the fee schedule will then be applied to the calculated fee; if the division of fire and life safety cannot determine project value using the valuation schedule or the construction estimate, an hourly fee of $75 per hour or fraction of an hour will be charged; the minimum review fee for industrial (oil, gas, and mining) use facilities is $1000; the plan review fee for home day cares is $100; the plan review fee for a relocation review is $150; the minimum fee for other uses requiring administrative approval, such as impairments, code modifications, foundations, and framings is $150;

(5) if any work for which a plan review and approval is required by this subsection has been started without first obtaining plan review and approval, a special processing plan review fee will be charged; the special processing plan review fee is an additional charge equal to the amount of the standard plan review fee for the project; subsequent violations by the same person or business will result in an additional special processing fee multiplied by the number of previous violations;

(6) the division of fire and life safety shall determine value of the proposed construction using the Valuation Schedule set out in this paragraph, as follows:

Valuation Schedule

Group	2006 International Building Code	Square Foot Construction Costs Types of Construction								
		IA	IB	IIA	IIB	IIIA	IIIB	IV (HT)	VA	VB
A-1	Assembly, theaters with stage	$176.86	$171.15	$166.88	$159.97	$148.38	$147.66	$154.79	$137.22	$132.12
A-1	Assembly, theaters without stage	163.20	157.49	153.22	146.31	134.72	134.00	141.12	123.56	118.45
A-2	Assembly, nightclubs	137.74	133.48	130.10	125.03	116.08	115.77	120.68	106.71	103.11
A-2	Assembly, restaurants, bars, banquet halls	136.74	132.48	128.10	124.03	114.08	114.77	119.68	104.71	102.11
A-3	Assembly, churches	163.64	157.92	153.66	146.75	135.13	134.40	141.56	123.97	118.86
A-3	Assembly, general, community halls	139.33	133.62	128.35	122.44	109.81	110.09	117.26	98.65	94.55
	Public Buildings	148.08	148.08	120.00	114.72	124.56	120.24	117.26	114.00	109.92
A-3	Bowling Alleys	98.88	98.88	61.20	57.12	66.60	62.28	47.10	44.88	57.24
A-4	Assembly, arena	136.74	132.48	128.10	124.03	114.08	114.77	119.68	104.71	102.11
B	Business	140.02	134.95	130.65	124.54	111.53	110.82	1193.78	99.60	95.75
B	Medical Offices	143.40	143.40	110.64	105.12	120.00	111.72	109.98	108.24	104.40
B	Banks	177.72	177.72	130.92	126.72	139.32	130.92	117.12	130.92	125.40
B	Fire Stations	137.58	137.28	90.36	85.20	98.88	94.68	93.81	92.76	87.96
E	Educational	149.11	144.06	139.83	133.69	123.37	120.45	129.32	110.19	106.00
F-1	Factory & Industrial, moderate hazard	85.02	81.11	76.36	73.96	63.99	64.99	70.93	54.57	51.74
F-2	Factory & Industrial, low hazard	84.02	80.11	76.36	72.96	63.99	63.99	69.93	54.57	50.74
Oil & Gas	Production facilities, well pads	68.28	68.28	47.52	43.68	52.32	49.32	NP	49.32	45.12
H-1	High Hazard, explosives	79.75	75.84	72.09	68.68	59.88	59.88	65.66	50.46	NP
H-2, 3, 4	High Hazard	79.75	75.84	72.09	68.68	59.88	59.88	65.66	50.46	46.63
H-5	Hazardous Production Materials	140.02	134.95	130.65	124.54	111.53	110.82	119.78	99.60	95.75
I-1	Institutional, supervised environment	138.30	133.59	130.04	124.80	114.46	114.52	123.94	105.39	101.21
I-2	Institutional, incapacitated	223.04	227.97	223.67	217.56	204.05	N.P.	221.80	192.13	N.P.
I-3	Institutional, restrained	159.07	154.00	149.70	143.59	131.82	130.11	138.83	119.89	114.03
I-4	Institutional, day care facilities	138.30	133.59	130.04	124.80	114.56	114.52	123.94	105.39	101.21
M	Mercantile	102.58	98.32	93.94	89.87	80.45	81.15	85.52	71.08	68.48
R-1	Residential, hotels	138.69	133.98	130.43	125.19	115.04	115.00	124.42	105.87	101.68

Group	2006 International Building Code	Square Foot Construction Costs								
		Types of Construction								
		IA	IB	IIA	IIB	IIIA	IIIB	IV (HT)	VA	VB
R-2	Residential, multi family	116.34	111.63	108.08	102.84	92.80	92.76	102.18	83.63	79.45
R-3	Residential, one- & two-family	111.51	108.46	105.79	102.87	98.15	97.91	101.12	93.50	88.03
R-4	Residential, care/assisted living facilities	138.30	133.59	130.04	124.80	114.56	114.52	123.94	105.39	101.21
S-1	Storage, moderate hazard	78.75	74.84	70.09	67.68	57.88	58.88	64.66	48.46	45.63
S-2	Storage, low hazard	77.75	73.84	70.09	66.68	57.88	57.88	63.66	48.46	44.63
U	Utility, misc.	59.54	56.30	52.95	50.29	43.72	43.72	46.94	35.89	34.18

(7) The division of fire and life safety shall use the following for calculating fees for plan review:

TOTAL VALUATION FEE Valuation	**Basic Fee**	**Each Additional $1,000 or Fraction of $1,000**
$1 to $25,000	$100 for the first $8,000	$16
$25,001 to $50,000	$430.25 for the first $25,000	$11.10
$50,001 to $100,000	$780.05 for the first $50,000	$8
$100,001 to $500,000	$1,093.05 for the first $100,000	$6.60
$500,001 to $1,000,000	$3,556.75 for the first $500,000	$5.75
Over $1,000,000	$6,168.75 for the first $1,000,000	$4.15

(8) Plan review fees shall be determined using the following formula: (A) for valuation, project floor area in square feet multiplied by the cost per square foot from valuation schedule set out in (6) of this subsection, equals the project total valuation; (B) for fee, basic fee from plan review fee table set out in (7) of this subsection plus the additional fee per $1,000 valuation over basic fee from plan review fee table multiplied by 75 percent equal the plan review fee.

In summary:
For projects involving new buildings, the fee is based on occupancy type, construction type & square footage. If your establishment will be located in an existing building, the fee is based on the cost of any renovations.

Examples:

A. New building with 1,000 sqft, F-1 (processing occupancy), type VB (wood) construction

1. Using the tables under section (6), determine the cost per square foot for a F-1/VB building
   - $51.74
2. Determine the project cost - multiply the square footage cost by the square footage
   - $51.74 x 1,000 sqft = $51,740
3. Using calculated project cost & the Valuation Table (above) – determine the basic fee
   - $780.05 for the first $50,000
4. Determine fee for remainder of project cost (for each additional $1,000 or fraction of $1,000)
   - Subtract project cost by $50,000
     - $51,740 - $50,000 = $1,740
   - Round up to nearest thousand
     - $2,000

- Divide by 1,000
    - $2,000 / 1,000 = $2.00
- Multiply by factor determined by table above
    - $2.00 x $8.00 = $16.00

5. Add both factors for calculated fee
    - $780.05 + $16.00 = $796.05
6. According to our regulations (#8 above), we charge 75% of this calculated fee:
    - $796.05 x 0.75 = $597.04

So, for a new building with 1,000 square feet, F-1 (processing) occupancy and type VB (wood) construction, the plan review fee would be - $597.04

B. <u>Existing building with $70,000 renovation</u>

Use the same steps in Example A. Use $70,000 as project cost.

1. Determine basic fee for $70,000 project cost
    - $780.05 for the first $50,000
2. Determine fee for remainder of project cost
    - $70,000 - $50,000 = $20,000
      $20,000 / $1,000 = $20
      $20.00 x $8.00 = $160
3. Determine calculated fee
    - $780.05 + 160 = $940.05
4. Determine actual fee (75% of calculated fee)
    - $940.05 x 0.75 = $705.04

So, the plan review fee for a renovation project costing $70,000 would be - $ 705.04

How to Get Your Commercial Marijuana Facility Permit

THE PACKET

- **Richard Finney, Investigator III**
  Fairbanks Office
  richard.finney@alaska.gov
  455 3rd Avenue, Suite 140
  Fairbanks, AK 99701
  Phone (907) 451-2030
  Fax (907) 451-2742

State of Alaska Department of Public Safety, Division of Fire & Life Safety

- www.dps.alaska.gov/fire/
- **David Tyler – Alaska State Fire Marshal/Director**
  david.tyler@alaska.gov
  Phone (907) 269-5491
- **Plan Review Bureau – Fairbanks Location**
  David Aden, Building Plans Examiner I
  david.aden@alaska.gov
  1979 Peger Road
  Fairbanks, AK 99709
  Phone (907) 451-5200
  Fax (907) 451-5218
- **Plan Review Bureau – Anchorage Location (Main)**
  Diana Parks, Building Plans Examiner II
  diana.parks@alaska.gov
  (907) 269-2004

State of Alaska Department of Environmental Conservation

- www.dec.alaska.gov
- **Jessica Davidson**
  Jessica.davison@alaska.gov (*NOTE: no second "d" in Davidson)
  Phone (907) 269-5491

State List of Daycare Facilities

https://dpasysops.dhss.alaska.gov/FindProviderVS8/zSearch.aspx

Drug & Alcohol Treatment Facilities:

Alaska Statewide Alcohol Safety Action Program

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Fire Protection

We object to this marijuana establishment license because AK Green Bee, Inc. has not provided a plan for construction and operation of the facility that complies with Life-Safety requirements. This is especially concerning to us as this business is proposed to be located in our residential neighborhood.

AK Green Bee, Inc. submitted Marijuana Facility Conditional Use Permit Application CU2017-025 to the Fairbanks North Star Borough. **The business plan narrative in this application stated that the sole source of fire protection for this facility is the local volunteer fire department.** This does not meet the requirements of the 2009 International Fire Code nor is it implemented in a manner that will provide fire protection for our residential community that surrounds this proposed location.

Although they claim fire protection of the local volunteer fire department, AK Green Bee, Inc. has not contact the North Star Volunteer Fire Department on Bradway Road to ask what was required to ensure emergency service. When we spoke with the Fire Chief for North Star Volunteer Fire Department at Station 1 located on Bradway Road, he confirmed that the Fire Trucks serving this area of Badger Road are 35 feet long and weigh 60 tons (120,000 pounds) when responding to an emergency.

The Site Plan proposes a 2" depth of gravel for construction of driveway and loading area which is insufficient to support access by even a single 60 ton Fire Truck. The trucks will sink into the soil, get stuck, and not be able to reach the facility to respond to a fire. This means that a fire could burn unchecked and pose a threat of spreading to the homes in the neighborhood. Additionally, should the facility experience a fire, the marijuana smoke and burning chemicals will create an overwhelming amount of air pollution over the entire neighborhood. **Putting the fire out quickly will be critical to the health and welfare of the families who live in this neighborhood.** Even so, the water used to douse the flames will wash the chemicals used and stored in the facility directly into the soil creating a significant contamination issue in the soil and groundwater.

FNSB Code 17.56.120 Road Construction Standards have been established to ensure that access roads can be traversed by emergency vehicles such as Fire Trucks. This section of the code requires a minimum of 6 inches of compacted base material be installed for alleys and pioneer access roads. The Applicant has not requested a waiver to this code requirement, and yet proposes a Site Plan that does not comply with the minimum standards. The *FNSB Code 17.56.060* requires specific acknowledgement on the property plat record that access roads not constructed to this minimum standard, may result in a facility whose access to fire protection, ambulance and other public services is severely limited or not available year-around.

An access road that does not meet the local government requirements for fire truck access, falls short of the requirements of *IFC Section D102* for an *approved* fire apparatus access road.

Furthermore, the Site Plan proposes to install an access road/driveway that is 25' wide, 212' long, and dead ends into a loading area which is to be 50'x71' including the width of the road (exclusive of parking spaces). A designated Fire Lane that wraps around any commercial building is what the local fire department stated that they need for fire service full access. **This Site Plan does not provide adequate maneuvering or turn around space for a 35-foot long Fire Truck and definitely does not meet the requirements of the *ICC International Fire Code (IFC)* which has been adopted by the State of Alaska as effective statewide.**

Because the access road on this property is a dead end road in excess of 500 feet from Badger Road, the access provisions of *IFC Appendix D Table D103.4* are to be applied. Per this table, the access road is required to be 26' wide, and requires a minimum turnaround space required for a fire truck is a 120-ft

Hammerhead configuration, 60-ft "Y", or a 96-ft diameter cul-de-sac in accordance with *Figure D103.1*. Without a compliant Fire Apparatus Access Road, Fire Trucks will be restricted from accessing the property in an emergency. Currently, the proposed Site Plan indicates a maximum of 25' wide access road on the property and no information is provided regarding the dimension of the access to Badger Road.

Additionally, this narrative fails to incorporate 3 critical aspects of a commercial building fire safety that are addressed in building codes: Fire Alarm System, Fire Dampers, & Sprinkler Systems.

A Fire Alarm System with 24/7 professional monitoring service and interlocks to shut down the ventilation system is critical because this is high-risk facility. This is reflected in the requirements of *IFC Chapter 9*. This cultivation facility represents a volatile mix of water, high humidity, drying plants, flammable chemicals, and large amounts of electricity. The Fire Alarm system will provide immediate notification to the fire department of an alarm day or night. This minimizes response time so that a fire is more quickly controlled to minimize the hazardous exposure of people in the community. The interlocks will allow a fire alarm condition to shut down the ventilation system and close fire dampers to minimize the growth of the fire and the release of chemical smoke outside of the facility and into our residential neighborhood.

Without a fire alarm system to notify the fire department of an emergency, a fire could burn unchecked and pose a threat of spreading to the homes in the neighborhood. Additionally, the marijuana smoke and burning chemicals will create an overwhelming amount of air pollution over the entire neighborhood.

Because response time from a volunteer fire department is not immediate, and the spread of fire is expected to be exponential in these tight conditions. The fire alarm system should also be interlocked to an Automatic Sprinkler System. By blanketing the facility with an engineered pattern of water a Sprinkler System will provide immediate fire dampening effort while awaiting professional assistance from the North Star Volunteer Fire Department.

By proposing to build this industrial facility very close to lot line in a residential neighborhood, and yet not providing for fire protection, this Site Plan presents a fire danger and risk of substantial marijuana and chemical smoke pollution to our residential neighborhood because it does not meet the minimum requirements of the IFC.

We object to this application for State marijuana facility license because it is clear that the business does not have a functional Life-Safety plan and poses a significant danger to the homes in this residential neighborhood. We request that this license application be DENIED.

Fairbanks North Star Borough
Department of Community Planning
907 Terminal Street/P.O. Box 71267
Fairbanks, Alaska 99707-1267
(907) 459-1260 Fax: (907) 459-1255
planning@fnsb.us

For Office Use Only
Received By: MS
Receipt No.: 529183
Sign #: M
Date Submitted:
Comm. Planning Dept
JUN 30 2017
RECEIVED

MARIJUANA FACILITY CONDITIONAL USE PERMIT APPLICATION

File No. CU2017-025

FEES:
- [x] $800 conditional use permit application #529183
- [x] $250 verification of sensitive use buffers — #529182
- [x] $200 sign deposit (check or cash only)

Applicant:		Property Owner:
Contact Name: Monique Daigle		Name: Monique Daigle
Business Name: Ak Green Bee, Inc		Mailing Address: 2374 Badger Rd
Mailing Address: 2364 Badger Rd		City, State Zip: North Pole, Ak 99705
City, State Zip: North Pole, Ak 99705		Phone: 907/978-0443
Phone:	Cell: 907/978-0443	Cell: 907/978-0443
E-mail: Admin@AkGreenBee.com		E-mail: MoniqueDaigle907@gmail.com

Property Information:	
Property Description: LOT 2 Block 1 BENSHOOF PHASE 1	
Street Address: 2364 Badger Rd	Lot Size: 55475 sf
Parcel Account Numbers (PAN): 0432431	Zoning District: 2003 Badger East (GU-1)
Existing Use(s): VACANT Land	

Conditional Use Request Information:

Proposed Use(s):
Standard Marijuana Cultivation facility - INDOOR LARGE

Request Description and Reasons for the Request:
40'x60' Building for Cultivation Facility; GU-1 Zoned, Conditional use Required.

I have attached a detailed site plan drawn to scale and to the standards of the Commercial/Industrial Site Plan guidelines.

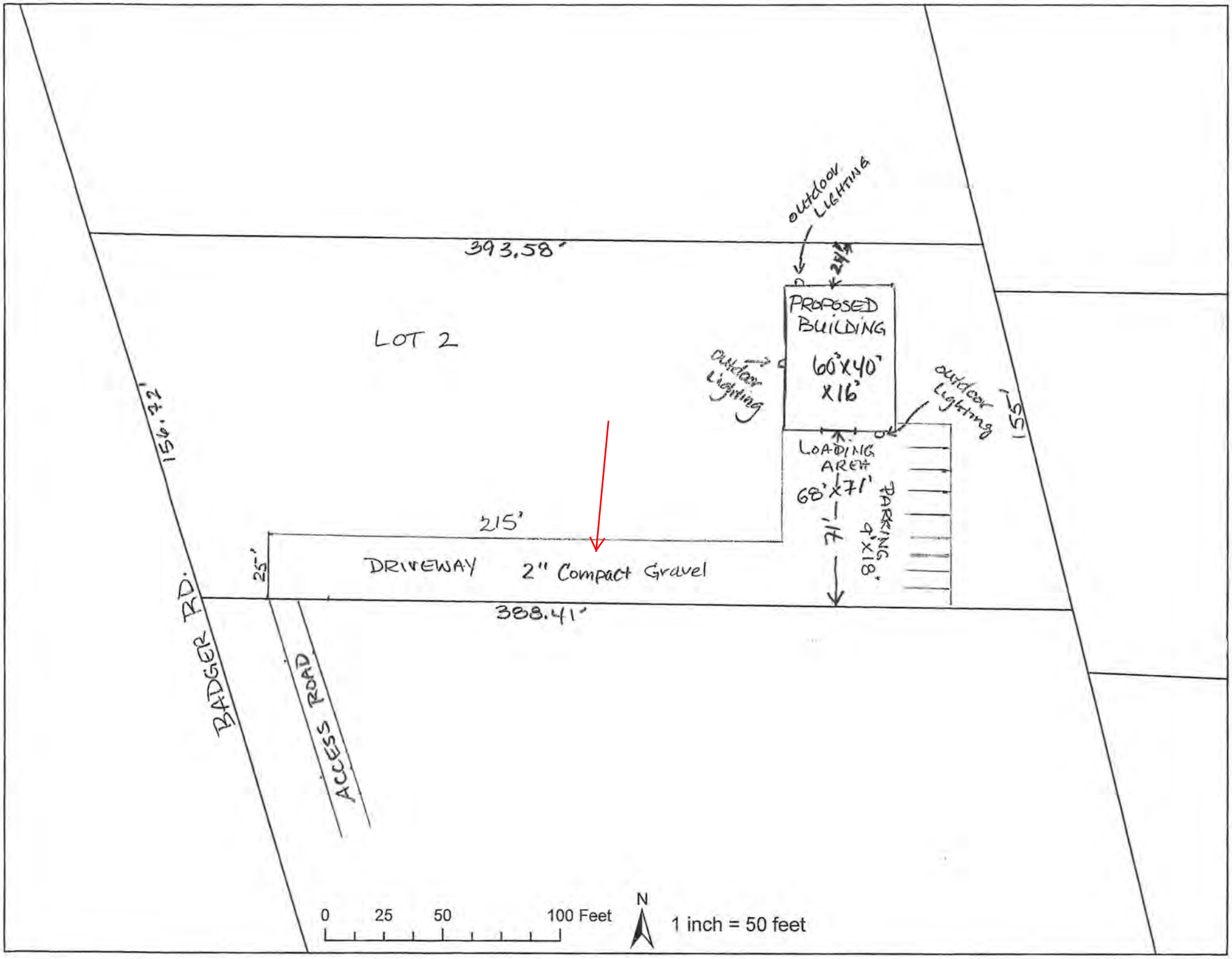
I certify that the information included in this application is to the best of my knowledge true and complete.

APPLICANT SIGNATURE: M Daigle DATE: 29 June 2017

OWNER SIGNATURE (if different): _____ DATE: _____

If the applicant is not the sole property owner, written consent of all property owners must be provided pursuant to FNSBC 18.104.050(B).

Fairbanks North Star Borough is subject to the Alaska Public Records Act, AS 40.25 et seq. and this document may be subject to public disclosure under state law.


393.58'
LOT 2
156.22'
BADGER RD.
ACCESS ROAD
25'
215'
DRIVEWAY
2" Compact Gravel
388.41'
PROPOSED BUILDING
60'x40' x16'
outdoor LIGHTING
24'
outdoor Lighting
outdoor Lighting
LOADING AREA
68'x71'
71'
PARKING 9'x18'
155'
0
25
50
100 Feet
N
1 inch = 50 feet

SEPTIC

N

40 ft REAR ENTERANCE / EGR

VEG/ FLOWERING ROOM #2 17X15'

MOTHER / CLONING RM 17' X 15'

VEG/ FLOWERING ROOM #1 17'X15'

VEG/ FLOWERING ROOM #3 17'X15'

60 ft

SECURE STORAGE 10' X 17'

In-Floor DRAIN

BATHROOM 7' X 8'

3' X 8' UTILITIES

SECURE ACCESS ONLY

OFFICE 10' X 10'

DRYING ROOM 8' X 18'

HARVESTING AND PACKAGING AREA 18' X 20'

Security Room 8' X 8'

Garage Door

MAIN ENTERANCE

5 ft , 1" = 5 ft

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (We) hereby certify that I (we) am (are) the owner(s) of the property shown and described hereon and that I (we) hereby adopt this plan of subdivision with my (our) free consent, and dedicate all streets, alleys, walks, parks and other open spaces so dedicated to public use.

Lyman W. Benshoof Aug 12, 1985

Geraldine Benshoof 8-12-85

THE NOTARY'S ACKNOWLEDGEMENT

UNITED STATES OF AMERICA
STATE OF ALASKA } ss.

This is to certify that on this 12 day of August, 1985, before me, a Notary Public, for the State of Alaska duly commissioned and sworn, personally appeared Lyman & Geraldine Benshoof to me known to be the identical individual(s) mentioned and who executed the within plat and he (they) acknowledged to me that he (they) signed the same freely and voluntarily for the uses and purposes therein specified.

Witness my hand and notarial seal the day and year in this certificate first herein written.

NOTARY PUBLIC in and for the State of Alaska
My Commission expires: 7/23/88

CERTIFICATE OF REGISTERED LAND SURVEYOR

I, R.K. Stalder a professional land surveyor registered in the State of Alaska, do hereby certify this plat to be a true and correct representation of lands actually surveyed by me or under my direct supervision and that the distances and bearings are shown correctly and that all monuments required have been set.

R.K. Stalder 8/14/1985
Registration No. 2235-S

CERTIFICATE OF PAYMENT OF TAXES

I, the undersigned, being duly appointed and qualified Tax Collector for the Fairbanks North Star Borough, do hereby certify that, according to the records of the Fairbanks North Star Borough the following described property is carried on the tax records in the name of:
Lyman & Geraldine Benshoof
Description: T-2011 SEC 20 T1S-R2E F.M.

and that, according to the records in my possession, all taxes assessed and due against said land and in favor of the Fairbanks North Star Borough, are paid in full.
Dated at Fairbanks, Alaska, this 13 day of AUGUST, 1985.

TAX COLLECTOR
Fairbanks North Star Borough

CERTIFICATE OF APPROVAL BY THE PLATTING BOARD

I hereby certify that the subdivision plat shown hereon has been found to comply with the regulations of Title 17, Subdivisions, of the Fairbanks North Star Borough Code of Ordinances, and that said plat has been approved by the board on August 14 1985, and that the plat shown hereon has been approved.

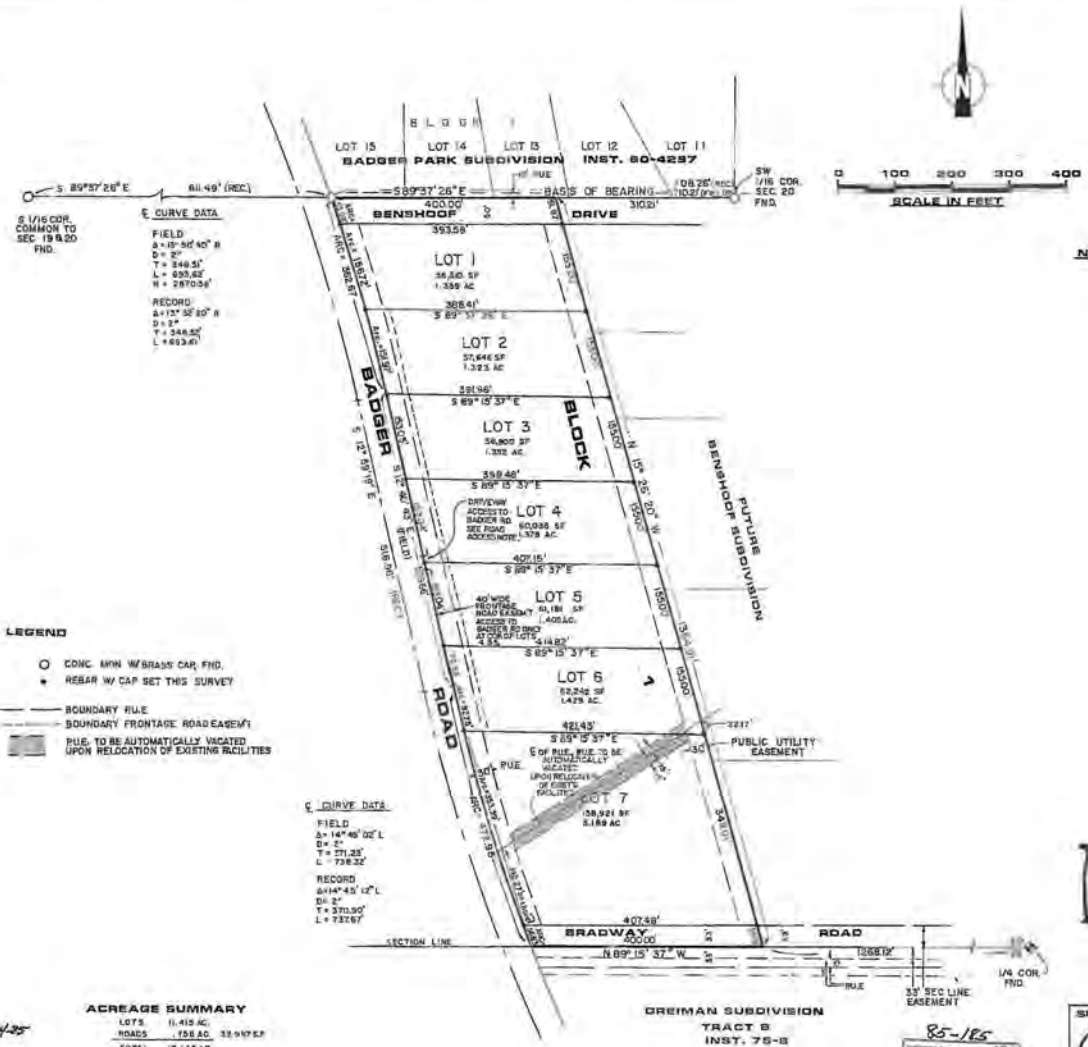
Dated this 15th day of August, 1985, at Fairbanks, Alaska.

Chairman
Fairbanks North Star Borough Platting Board

CERTIFICATE OF APPROVAL BY THE STATE DEPARTMENT OF CONSERVATION

This subdivision has been reviewed in accordance with 18 AAC 72-065 and is approved by the State Department of Environmental Conservation.

Signature Date 08-12-85



LEGEND

- ○ CONC. MON W/BRASS CAP, FND.
- ● REBAR W/ CAP SET THIS SURVEY
- BOUNDARY RULE
- BOUNDARY FRONTAGE ROAD EASEMENT
- P.U.E. TO BE AUTOMATICALLY VACATED UPON RELOCATION OF EXISTING FACILITIES

℄ CURVE DATA

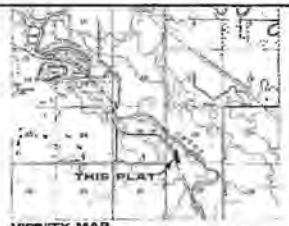
FIELD
Δ = 14° 46' 02" L
D = 2°
T = 271.25'
L = 738.32'

RECORD
Δ=14° 45' 12" L
D= 2°
T = 270.90'
L = 737.67'

ACREAGE SUMMARY

LOTS	11.415 AC.	
ROADS	.758 AC.	33,017 S.F.
TOTAL	12.173 AC.	

8-14-85



VICINITY MAP
FROM USGS QUAD FAIRBANKS D-1
SCALE: 1" = 1 MILE

NOTES:

BASIS OF BEARING
The Basis of Bearing for this plat is from Badger Park Subdivision recorded as Instrument #80-4297 with the Fairbanks Recording District Office, Fairbanks, AK 99701.

SOIL ABSORPTION SYSTEMS
The bottom of the soil absorption system must be a minimum of 4 feet above the seasonal high ground water level. This may require the construction of an alternative wastewater system such as a mound.

A minimum horizontal distance of 100 feet must be maintained between single family residential wells and septic tank/soil absorption systems, including those on adjacent lots. The requirements for residential units larger than single family are different. For more information call 452-1714.

A septic tank and its soil absorption system may not be placed within 100 feet, measured horizontally, of any natural or man-made lake, river, stream, slough or coastal water of the state.
For on-site wastewater system, see the soil report filed with the Fairbanks recording District Office this _____ day of _____, 19____ in Book _____, page _____.

PUBLIC UTILITY EASEMENTS
A 35' radius key (in addition to the platted public utility easement) is granted at each pole location as necessary for supportive device.

The utility companies shall have the right to remove any dead, weak, overhanging or otherwise dangerous trees adjacent to or in the vicinity of the easement. Such trees shall be identified by the utility company.

A 15' wide strip of land is granted (as determined necessary by the utility companies) for the installation, maintenance, repair or removal of yard poles.

Easement is hereby dedicated within all lots for secondary aerial crossings as determined necessary by the utility companies.

FLOOD
This phase (Phase I) of Benshoof Subdivision is between the limits of the 100-year flood and the 500 year flood. This phase was not flooded in the 1967 Fairbanks Flood.

SOIL
Salchaket very fine sandy loam--Area generally consists of gravel alluvial deposits of silt over sand over interbedded sandy gravel, gravelly sand and sand.

Ground water table in area in March, 1985 is 48' below the ground surface

ROAD ACCESS
No direct access to Badger Road shall be permitted. Lots 2 through 6 shall access Badger Road by Frontage Road driveway, at the corner of Lots 4 and 5, only.

RESTRICTIVE COVENANTS
There are no RESTRICTIVE COVENANTS that affect this plat.

BENSHOOF SUBDIVISION – PHASE I

A PORTION OF SW 1/4 SW 1/4 OF SECTION 20, T.1S., R.2E., F.M., AK.

85-185

SURVEYOR
ARCTURUS SURVEYS
R.K. STALDER, R.L.S. 2235-S
PO BOX 55155
(907) 488-3300 NORTH POLE, AK

BENSHOOF SUBDIVISION
PHASE 1

A PORTION OF THE SW 1/4 SW 1/4 SEC. 20, T.1S., R.2E., F.M., AK.

OWNERS LYMAN & GERALDINE BENSHOOF
SR BOX 60753, NORTH POLE, AK. 99705

DRAWN D Shedley

D S J S SERVICES 452-2049

CHECKED	SCALE	DATE	SHEET
	1" = 100'	5/29/85	1 OF 1

FRD1985_185_001 RECORDER

Narrative for AK Green Bee, Inc., 2364 Badger Rd, North Pole, AK 99705

• Total (maximum) number of employees expected to be working on the site, including full and part-time, temporary and seasonal:

The total number of employees expected to be working at this site is 5-10.

• Type and frequency of other vehicle trips to the site such as deliveries, security, product transport, or other visitors:

Expected traffic at this location will be minimal - Daily employee traffic; deliveries are anticipated to be received 3-4 times a month; product transport is anticipated at 3-4 times a month, visitors will be minimal. Traffic at this site will be more significant during set up and prep for initial operations to accommodate initial equipment delivery and required inspections.

• Hours of operation:

Regular hours of operation will be 7 days a week, 8a – 8p.

• Activities occurring on the site on a daily, weekly, monthly, periodic, seasonal, occasional and annual basis:

On-site activity will include daily monitoring and preening of plants; weekly change out of reservoirs, harvesting, packing, transporting, disposal of waste and deliveries; monthly cloning and planting; occasional required inspections.

• Phases of development, if applicable:

Planned phases of development are - construction phase, July – September; prep and inspection stage, September – October; begin cultivating, October/November. (Timeline subject to change based on timing of permits and licenses)

• Impacts of the proposed use that may cross property lines such as odor, noise, dust, light, etc.:

This is an indoor cultivation facility with no windows; noise is not expected to be a factor and lighting impacts will be limited to outdoor security lights. Exterior lights will be pointed down to accommodate maximum lighting for security cameras and ensure minimal light intrusion for neighboring properties. Odor will be controlled via an HRV system with air scrubbers/carbon filter air cleaners.

• Provide a list of the chemicals utilized or stored on the site:

The chemicals to be stored and used at this site are - General Hydroponics Nutrients used in Deep Water Culture/Ebb and flow delivery system and Clonex Rooting Hormone.

- Describe how plant waste and/or product waste materials will be handled and disposed of:

  Disposal of plant waste - Excessive trim material and unsalable product will be disposed of according to state regulations. Plant material will be ground up and mixed with an acceptable medium for disposal and will be either composted or taken to the Borough Landfill. Liquid waste - will be used in on-site gardens with DEC approval and/or disposed of onsite via a DEC approved commercial and industrial waste water leach field system.

- Energy source serving the proposed use:

  GVEA will provide energy to the site with generator back up.

- Water source serving the proposed use:

  There will be a new well dug for this site.

- Method of sewage disposal for the proposed use:

  There will be a new DEC approved commercial and industrial septic system placed at this site in compliance with all State regulations.

- Method of wastewater management for the proposed use:

  There will be a new DEC approved commercial and industrial waste water leach field system placed at this site in compliance with all State regulations.

- Other public utilities and services to serve the proposed use such as garbage, communications, fire protection, police, etc.:

  Other public utilities include: GCI for internet service; North Star Volunteer Fire Dept; AST.

- For a marijuana manufacturing facility, provide information on the type of manufacturing process(es) to be utilized:

  N/A

- Compliance with state requirements for facility security:

  This facility will comply with all requirements of 3 AAC 306.715 to include - ID badges for all persons on premises, appropriately placed exterior lighting and motion detectors, a security alarm system on all exterior doors, commercial grade door locks on all exterior doors, continuous video monitoring as required in 3 AAC 306.720 and documented policies and procedures designed to prevent diversion of marijuana or marijuana product. This facility will remained locked at all times and will have no public access. All visitors will be required to log their name, address, business affiliation and present valid ID showing that they are 21 or older prior to receiving access into the secured area. All visitors must have an approved escort at all times while in the secure area.

FNSB Code
Chapter 17.56
DESIGN AND PUBLIC IMPROVEMENT REQUIREMENTS

17.56.120 Road construction standards.

A. Subbase.

1. All base material shall be placed upon properly constructed and compacted subbase of sufficient depth and composition to ensure a driveable surface during adverse surface conditions.

2. Prior to placement or construction of the road subbase, all trees and brush shall be removed for at least 10 feet on both sides of the appropriate trafficway width. This debris material may be burned if the necessary permits are obtained. Clearing debris under four inches in diameter may be disposed of within the construction limits by spreading in an even layer, provided the material shall not intrude into the upper four feet of subgrade.

B. Base.

1. Alleys and pioneer access roads must be constructed with at least six inches of base material.

2. Local roads must be constructed with at least 12 inches of base material.

3. Collector roads must be constructed with at least 15 inches of base material.

C. Surface Course.

1. Sections of road with grades greater than seven percent shall have surface course material substituted for the top four inches of base material.

2. Sections of road with grades of seven percent or less shall have surface course material substituted for the top three inches of base material.

3. Alleys and pioneer access roads are exempt from this subsection.

D. Elevation. All roads will be built to an elevation sufficient to ensure a driveable surface for two-way traffic during periods of adverse conditions or seasonal high water flows.

E. Placement. All construction shall be contained within the right-of-way except where the creation of additional slope easements is noted on the plat.

F. Compaction and Grading.

1. The applicant shall grade and compact all roadway surfaces prior to final inspection.

2. Except at intersections or along a superelevated curve, all unpaved roads shall have a three to five percent crown. Subbase and base will also have a crown.

3. Roadway compaction shall be at least 90 percent of the maximum dry density for the given material as determined by the modified Proctor method (AASHTO T180, Method D).

G. Inspections. Inspections shall be performed by the developer's registered professional during construction to ensure that all required improvements meet the specifications of this title and the requirements of preliminary plat approval. At a minimum, inspections shall occur upon completion of the subbase, the base, and the surface course phases of construction and include review of the road crown, width, and depth; type of material; drainage; and sign placement. (Ord. 2016-40 § 74, 2016; Ord. 2016-07 § 11, 2016; Ord. 2013-66 § 2, 2014; Ord. 2011-61 § 4, 2011; Ord. 2005-33 § 13, 2006;

APPENDIX D

FIRE APPARATUS ACCESS ROADS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION D101
GENERAL

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *International Fire Code*.

SECTION D102
REQUIRED ACCESS

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an *approved* fire apparatus access road with an asphalt, concrete or other *approved* driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34 050 kg).

SECTION D103
MINIMUM SPECIFICATIONS

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1).

D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade.

Exception: Grades steeper than 10 percent as *approved* by the fire chief.

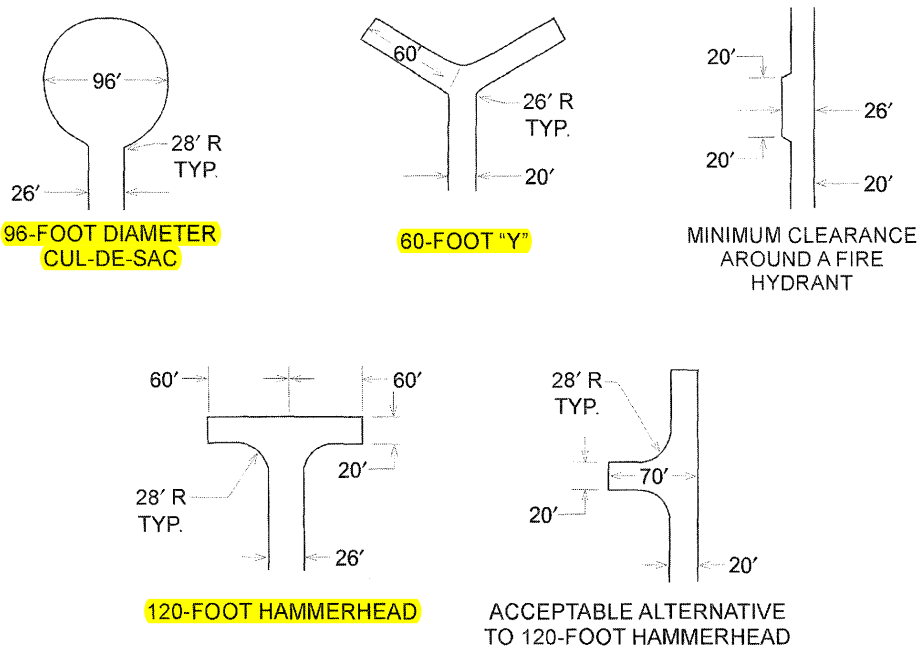
D103.3 Turning radius. The minimum turning radius shall be determined by the *fire code official*.

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

TABLE D103.4
REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
501-750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
Over 750	Special approval required	

For SI: 1 foot = 304.8 mm.



For SI: 1 foot = 304.8 mm.

FIGURE D103.1
DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND

International Codes-Adoption by State (May 2016)

ICC makes every effort to provide current, accurate code adoption information. Not all jurisdictions notify ICC of code adoptions.
To obtain more detailed information on amendments and changes to adopted codes, please contact the jurisdiction. To submit code adoption information: www.iccsafe.org/adoptions

X = Effective Statewide A = Adopted, but may not yet be effective L = Adopted by Local Governments S = Statewide adoptions with limitations **XL = Adopted by the State for Local Adoption**
12= 2012 Edition 09 = 2009 Edition 06 = 2006 Edition 04 = 2004 Edition 03 = 2003 Edition 00 = 2000 Edition

* The title of the 2000 and 2003 IUWIC Code was changed to IWUIC in the 2006 version.

Jurisdiction	IBC	IRC	IFC	IMC	IPC	IPSDC	IFGC	IgCC	IECC	IPMC	IEBC	ISPSC	ICCPC	IWUIC	IZC	ICC 700
Alabama	A15, L	XA15, L	A15, L	A15, L	S09, L	L	A15, L		XL	L	L		L	L	L	
Alaska	X09	L06, L09	X09	X09			X09		L06, S12 SFR							
Arizona	S12, L	S09, L	S12, L	S12, L	S12, L	S12,L	S12, L	L	S09, L	L	L	L	L	L	L	L
Arkansas	X12	X12	X12	X09	X06	L	X06		X09	L	L					
California	X12	X12	X12							L	X12	L		L		
Colorado	S15, L	S15, L	S15, L	S15, L	X15, L	L	X15, L	L	S12, L	L	S15,L	L	L	S12,L	L	L
Connecticut	X03	X09	X03	X03	X03				X09	L	X03					
Delaware	L12	L12	L12	S15	S12		S15		S12	L	L					
District of Columbia	X12	X12	X12	X12	X12		X12	X12	X12	X12	X12	X12				
Florida	X12	X12		X12	X12		X12	X	X12	L12	X12					
Georgia	X12	X12	X12	X12	X12		X12		X09	XL12	XL12	XL12		XL12		XL08
Hawaii	X06	X06, L06							X06, L09							
Idaho	X12	X12	X12	X12			X12	L12	X12, L12		X12					L
Illinois	S09, L	L	S09, L	S09, L	L	L	S09, L		X15	S09, L	S09, L	L12	L	L	L	
Indiana	X12	X03	X12	X12	X06		X12									
Iowa	S09, L	S09, L	X09	S09, L	L	L	L		X12	L	S09, L				L	
Kansas	L	L	S06, L	L	L	L	L		S09, L	L	L					
Kentucky	X12	X12	X12	X12					X09/X12	L						
Louisiana	X12	X12	L	X12	X12		X12		X09,L	L	X12					
Maine	X09	X09							X09	L	X09					
Maryland	X15	X15		X15	L15	L	L	X12	X15	X15	X15					
Massachusetts	X09	X09		X09					X12		X09					
Michigan	X12	X15	L	X12	X12	L	X12		X09	L	X12		L			
Minnesota	X12	X12	X12	X12			X12	L	X12	L	X12					
Mississippi	A15, L	A15, L	A15, L	A15, L	A15, L	L	A15, L		L	L	A15, L		L			
Missouri	S12,L	S00, L	L	S12, L	S12,L	L	S00		S12	L	L		L	L	L	
Montana	X12	X12	L	X12			X12		X12		X12	S,XL15		S,XL 12		
Nebraska	S12, L	S12, L	L	L	L	L	L		S12, L	L	S12, L			L	L	
Nevada	S12, L	S12, L	S12, L	L	L	L	L		S12, L	L	S12,L		L	X09, L		
New Hampshire	X09	X09	L	X09	X09			L	X09	L	X09					
New Jersey	X15	X15	X15	X15			X15		X15	L		X15				
New Mexico	X09	X09	X03	L	L		L		X09	L	X09		L	L		

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Residential Neighborhood

We object to this application for marijuana establishment license because it is proposed at a location in long-established residential neighborhood.

As you can see in the attached photos, we are an established residential neighborhood. These are photos of the backyards that come together at the property line for this proposed conditional use. The playground equipment such as the trampoline and swing set demonstrate that these dwellings are home to small children. Additional photos are included of other homes that are within 600ft of this proposed marijuana facility.

This proposed controlled-substance, adult-oriented business does not fit in this residential community which is home to many children including 10 under the age of 10. Six (6) of whom live on properties whose backyards share a property line with this proposed marijuana establishment.

FNSB Code 18.96.240.A.3(a) establishes a 500ft buffer zone around child-oriented facilities and includes very specific language including housing locations "with children as residents".

The code specifically outlines a 500ft buffer zone around housing facilities owned by a public housing authority with children as residents. The children in our residential neighborhood are entitled to the same 500 foot buffer protection as children living in publicly funded housing. Children should not be discriminated against because of their socioeconomic status; and discrimination against children is not a winnable fight in any arena. **All children are precious and should be protected regardless of their circumstances.**

This proposed property is wholly within the 500ft buffer zone protected by this local code, and no variance has been granted. We request that this application be DENIED to uphold the appropriate buffer zones for protection of the children in our neighborhood.

Home that Shares Property
Line to East of the Applicant

Home to the Southeast
of the Applicant

Home to the Northeast
of the Applicant

View from Home to the Northeast of the Applicant

Homes to the Southeast
of the Applicant

Home to the
South-southeast
of the Applicant

FNSB Code
Chapter 18.96
SUPPLEMENTARY REGULATIONS

18.96.240 Standards for commercial marijuana establishments.

A. General Standards.

1. Applicability. Standards of this section shall apply to commercial marijuana establishments regardless of whether they are a permitted or conditional use.

2. A commercial marijuana establishment may only be allowed with the written consent of the owner of the property.

3. No marijuana establishment, except a marijuana testing facility, shall be located within the following buffer distances:

a. Five hundred feet of primary and secondary school buildings (K-12) including vocational programs, playgrounds, adult and juvenile correctional facilities and housing facilities owned by a public housing authority with children as residents; and

b. Two hundred feet of any post-secondary school buildings including but not limited to trade/technical/vocational schools, colleges and universities; and

c. One hundred feet of youth centers, group homes serving persons ages 18 and under, public swimming pools, state licensed day care facilities, arcades, state licensed substance use treatment provider or facility providing substance abuse use treatment, church buildings and residential zones (RE, RR, SF, TF, MF, MFO).

d. Buffer distances shall be measured from the nearest public entrance of a commercial marijuana establishment to:

i. Outer boundaries of school buildings, including outdoor school facilities where students are regularly found;

ii. Outer boundaries of playgrounds;

iii. The lot line of a lot in a residential zone; or

iv. The principal building containing other uses listed in subsections (A)(3)(a) through (c) of this section.

e. Buffer distance measurements shall not extend beyond the nearest ordinary high water (OHW) mark of a river or lake or beyond the nearest edge of a right-of-way (ROW) of a controlled access facility.

4. Outdoor Storage. No outdoor storage of marijuana, marijuana products or hazardous substances shall be allowed.

5. In all zones in which marijuana establishments, with the exception of a marijuana testing facility, are a permitted or conditional use, the applicant shall include an area map drawn to scale indicating all land uses on complete parcels within a 500-foot proximity of the lot upon which the applicant is seeking a zoning permit or conditional use permit.

6. Marijuana establishments other than marijuana cultivation facilities, indoor small and marijuana testing facilities located in GU-1 or GU-5 zoning and adjacent to a lot upon which a principal building used as a dwelling is located are a conditional use subject to the requirements of this title.

FNSB Code
Chapter 18.96
SUPPLEMENTARY REGULATIONS

B. Cultivation Facility Standards.

1. Yard Setbacks. Outdoor marijuana cultivation facilities, including all land planted with marijuana, shall be located at least 50 feet from a lot line.

2. Height Limitations.

a. The maximum height for a marijuana cultivation facility, indoor small shall be 35 feet.

b. The maximum height for a marijuana cultivation facility, indoor large shall be 75 feet. (Ord. 2017-14 § 2, 2017; Ord. 2015-41 § 19, 2015. 2004 Code § 18.50.300.)

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Property Values & the FNSB Regional Comprehensive Plan

We request that the State DENY this application for marijuana establishment license because it is proposed in our residential neighborhood and will negatively impact our property values because it does not comply with the FNSB Regional Comprehensive Plan.

The area proposed for this marijuana establishment is primarily of residential makeup. There are in fact 20 residential properties that were specifically acknowledged by the Applicant within 500ft of this proposed business and another 30+ within 1,000ft of this property. Commercial properties within 500 feet are limited to a Church, a residential service business, Total Toyo, and a seldom used storage yard for Granite Boulders.

Per the requirements of *AS 29.40.030* a strategy for development in the Fairbanks North Star Borough was created in the FNSB Regional Comprehensive Plan as a guide for long-term development of the area in a manner that minimizes land use conflicts, promotes economic growth, and protects the environment. By following this development plan, property values are preserved and the goals of the Borough are promoted. However, this marijuana establishment which is proposed in our residential neighborhood does not comply with the long-term plans established in the FNSB Regional Comprehensive Plan and will therefore lower our property values as the residences become less desirable to potential buyers.

The FNSB Regional Comprehensive Plan Map identifies our area of Badger Road as "Perimeter Area and Preferred Residential Land", and the FNSB Comprehensive Plan requires that development of this Perimeter Area is to be compatible with the surrounding community. This adult-oriented business is not compatible with our residential neighborhood where within 500ft are the homes of at least 10 children and a Church with an active youth program. Incorporation of a controlled-substance establishment into this long-established residential area does not encourage continued development of residences – especially by families with children. Furthermore, it also limits the pool of potential home buyers in the event that property owners wish to sell.

Economic Development Goals

One of the most significant impacts that development of marijuana facilities has in residential neighborhoods is its impact on military use of housing. **Fort Wainwright and Eielson are adding every marijuana facility to their Black List** as soon as become public record. As these facilities move into the residential neighborhoods they will begin black listing sections of the residential zones as well. The FNSB has been anticipating the economic boom of the F-35A Squadron's relocation to Eielson Air Force Base. However, this is going to create significant conflict in the community if we cannot provide satisfactory housing for airmen and their families because they are not allowed to live next to a marijuana establishment and cannot come to work smelling like cannabis. The Military Base/Post will be forced to segregate themselves from the community. Federal funds will be focused on building military housing within the confines of the military reservations and the military personnel and their families will spend less time and money in FNSB community.

Not only does this pose a risk to the economic development of the Borough, if the military is forced to Black List residential neighborhoods because they are inundated with marijuana establishments, then we as homeowners will have a very limited group potential buyers for any property we try to sell. This increase of marijuana establishments in residential neighborhoods will have a negative impact on the housing market because its health is so dependent on the military population.

Fewer buyers = lower property values.

Although the newly legalized marijuana industry provides one avenue for economic development in the

FNSB, failure to properly segregate the industrial aspects of this business will negatively impact the economic contribution of residential households in the Borough. Per the FNSB Comprehensive Economic Development Plan, the construction, maintenance, utility usage, and resale market of residential homes are a significant factor in the local economy. If the established residential zones are not sufficiently protected from industrial impacts by substantial buffer zones, property values will suffer and residential development projects will stall throughout the Borough. Since the construction industry is a significant contributor to the regional economy, this is a concern that also has wide-ranging economic impact.

Health of the environment is another important consideration for property values.
The **Environmental Goals** of the FNSB Regional Comprehensive Plan include promotion of responsible stewardship of the Borough ecosystem and to protect natural systems. However, compliance with the goals is not demonstrated by the State license application or the FNSB land use permit application which fail to acknowledge that this property is located **within 550ft of the open waterways of the Chena Slough which is already classified as an impaired body**. Any surface contaminants on this site will make their way directly into these waters – especially during spring break-up when snow melts and creates significant ponding and runoff before the ground thaws to allow for absorption.

Additionally, the Applicant's statement that they intend to utilize a "commercial and industrial septic system" for both sewage and nondomestic wastewater management demonstrates their lack of understanding and research to confirm compliance with requirements for protection of groundwater systems. A large septic system does not provide for treatment of the heavy concentrations of fertilizers, pesticides, and fungicides used in hydroponic agricultural facilities. An improperly constructed nondomestic wastewater treatment system will result in contamination of the ground water on which the residents depend for their drinking water and domestic use. This represents a significant risk to the environment and is very concerning to our residential neighborhood.

Land Use Goals as described in the FNSB Regional Comprehensive Plan are not met by this application because it creates land use conflicts in our community by promoting an industrial facility that is not compatible with our established residential neighborhood. The primary goal of the Land Use section is to maintain private property rights, and we strongly support this goal. However, **it is an overreach to allow one property owner's use to impact the entire neighboring residential community against our wishes and limit our opportunities for use and resale of our own properties.**

We are not taking a position that the area along Badger Road could not be developed as commercial property. The commercial use of adjacent properties such as Total Toyo and Church are compatible with our residential community. Total Toyo sells and maintains heating equipment for residential customers and has intentionally designed their storefront to imitate a residential structure so that it blends into the surroundings. The Church is also designed to mimic a log home and merge into the residential community.

There is simply no justification for encouraging an adult-oriented, controlled-substance business to be built in a residential neighborhood. There are thousands upon thousands of remote, agricultural, industrial, or commercial zones in the FNSB and the State were this type of business is readily permitted. It does not create an economic hardship on the community to limit development of this industry in areas where the land use does not create conflict.

This marijuana establishment license in the proposed location will negatively impact the livelihood of our residential neighborhood by lowering our property values because it does not meet the goals of the FNSB Regional Comprehensive Plan.

AS 29.40.030. Comprehensive Plan.

(a) The comprehensive plan is a compilation of policy statements, goals, standards, and maps for guiding the physical, social, and economic development, both private and public, of the first or second class borough, and may include, but is not limited to, the following:

(1) statements of policies, goals, and standards;

(2) a land use plan;

(3) a community facilities plan;

(4) a transportation plan; and

(5) recommendations for implementation of the comprehensive plan.

(b) With the recommendations of the planning commission, the assembly shall adopt by ordinance a comprehensive plan. The assembly shall, after receiving the recommendations of the planning commission, periodically undertake an overall review of the comprehensive plan and update the plan as necessary.

FAIRBANKS NORTH STAR BOROUGH

REGIONAL COMPREHENSIVE PLAN

Adopted in September 2005

LANCE MACKEY WINS THE 2005 YUKON QUEST

A FREIGHT TEAM IN THE MID-1940S

Fairbanks North Star Borough
Regional Comprehensive Plan

Adopted by the FNSB Borough Assembly September 13, 2005 (Ordinance No. 2005-56)

Garry Hutchison, Presiding Officer
Bonnie Williams
Randy Frank
Guy Sattley
Charlie Rex
Luke Hopkins
Earl Romans
Terry Aldridge
Hank Bartos

FNSB PLANNING COMMISSION MEMBERS

Merle Jantz, Chair
Toby Hall
Deborah Horner
Alexandra M. Kienle
Steve Krause
Chris Miller, Vice Chair
Kelly Dryer
Gerald V. Neubert
Roy Earnest
Bruce Hamilton

FNSB Mayor

Jim Whitaker

FNSB Community Planning Department

Bernardo Hernandez, Director

Community Planning Department
P.O. Box 71267
Fairbanks, AK
(907) 459-1260
www.co.fairbanks.ak.us

Fairbanks North Star Borough
Regional Comprehensive Plan

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Fairbanks North Star Borough
Regional Comprehensive Plan

Introduction

Purpose

The Fairbanks North Star (FNSB) Regional Comprehensive Plan provides the foundation for future growth coupled with responsible stewardship of major attributes of the community in the perpetual evolving changes natural to man. The Plan provides the framework for citizens and officials to make decisions related to land use, and to form the basis for ordinances and programs to guide land development, and use. It is also a guide for responding to change in the community. Most importantly, the Plan states the vision that will guide the Borough through the next few decades. Goals, strategies and actions are provided in order to implement the vision.

Vision

Since 1984, when the FNSB Assembly approved the first Regional Comprehensive Plan, the Borough has experienced an 18.4% increase in population. This moderate level of growth brings change and opportunity to any community. In the FNSB, the opportunities brought about by growth encourage careful responses, given the unique qualities of the community and the region.

The FNSB Regional Comprehensive Plan is the guide for the community's response to future growth and change. Significant opportunities that deserve attention include, but are not limited to:

- Strengthening the Borough's role as the commercial, transportation, and cultural hub of Interior Alaska.
- Expanding the urban area and increasing water and sewer infrastructure.
- Creating opportunities for development while minimizing land use conflicts.
- Maintaining a healthy economy that provides ongoing opportunities for residents to be gainfully employed.
- Integrating existing services and industries with emerging technologies.
- Providing essential human services that support the needs of the population.
- Integrating development with responsible stewardship of our resources.
- Encourage solving the extreme shortage of privately owned land within the Borough.

Process

The FNSB is required by state statute to provide comprehensive planning to guide the physical, social and economic development of the Borough. Beginning in 2001, the FNSB undertook the revision of the Regional Comprehensive Plan that had been adopted in 1984. Data collection and analysis to determine the community's values and goals were conducted, and public meetings were held to gather comments on needs

and issues. Fifteen Borough residents were appointed to the Comprehensive Plan Advisory Committee (CPAC). The CPAC held over forty meetings to guide and oversee the Community Planning Department's creation of the Proposed Regional Comprehensive Plan draft. The FNSB Planning Commission, over the course of nine months beginning in August of 2003, reviewed the plan draft. Chapter by chapter, the Planning Commission made modifications to the document, which was then passed on to the Borough Assembly for review. The Borough Assembly adopted the Plan on September 13, 2005.

The Regional Comprehensive Plan should be revised every 20 years and/or when the population reaches another 20% growth benchmark. Informal reviews of the Plan will be carried out every five years. Community participation and input through vision planning at five to ten year intervals will be encouraged.

Organization

The FNSB Regional Comprehensive Plan is organized into five categories:

- Land Use
- Economic Development
- Transportation and Infrastructure
- Environment
- Community and Human Resources

Additional plans are periodically adopted as integral elements of the FNSB Regional Comprehensive Plan. These currently include the Comprehensive Economic Development Strategy (CEDS), Chena Riverfront Plan, Recreational Trail Plan, Parks & Recreation Plan, Solid Waste Management Plan and the Road Plan. These plans are available at the Department of Community Planning.

The Plan Abstract provides a summary of the goals and strategies of the Plan. It serves as an easy reference to the Plan. This is the basic foundation of what the community values and wishes to protect, improve and/or create.

The Plan Implementation section provides an in-depth guide for how to achieve the goals and strategies and give action to the Plan. All of the actions contained in the Plan Implementation section are suggested. The impetus to carry out the actions can come from any public or private sector of the community.

The Regional Comprehensive Plan is intended to stand alone over a twenty-year or 20% population increase time horizon. Although not specifically a "to do" list, the plan offers potential strategies and actions to achieve community goals. The following terms are used throughout the document:

GOAL	A broad statement defining an end toward which effort is directed.
STRATEGY	A more specific means to achieve an identified goal.
ACTION	Implements a tactic to achieve a goal.

Included in the FNSB Regional Comprehensive Plan are maps and definitions of Borough areas and land categories. These are located in the Land Use section.

The goals, strategies and actions of the Plan are all interrelated. As such, the numerical ordering is used only for referencing items in the Plan. No goal is seen as more important than another. Similarly, the strategies and actions that support the goals are arranged by association only and not by priority.

History and Current Conditions

Although modern-day Fairbanks had its genesis in 1902 during the turn-of-the-century gold rush, the area has long been the home of the Athabascan Indians. Oral tradition holds that the present day site of the University of Alaska Fairbanks was an important gathering place for Interior tribes, known as Troth Yeddha. Gold mining sustained the community through the depression. Beginning in 1939, the U.S. military established its presence in the borough; today, both the Army's Ft. Wainwright and Eielson Air Force Base contribute significantly to the life of the community. During the 1970's, Fairbanks served as the hub for the construction of the Trans-Alaska Pipeline. As well, it is the terminus of the Alaska Highway and the gateway to the North Slope.

Map courtesy of Carl Benson

The FNSB is an economic, communication, service and transportation center for Alaska as well as the circumpolar North. The major engines driving the economy today include the military, resource development, tourism, government, Native organizations, and the University of Alaska Fairbanks, a land, sea and space-grant institution. The Borough is also a global hub at 65° N.; 148° W., which in this age of air transportation is centrally located to most major cities of the northern hemisphere.

Situated in the geographic center of Alaska, the community is justifiably proud of its special character. Fairbanks residents enjoy a sub-arctic environment with strong seasonal changes, from less than four to more than 22 hours of sunlight per day in mid winter/summer respectively. The frontier spirit still flourishes alongside historic traditions. Diverse cultures blend together for an interesting array of citizenry; the area boasts a robust and exceptionally broad arts community. Despite a relatively small population, there is a broad spectrum of both public and private community and human services available to Borough residents, including schools, hospitals, libraries, recreational facilities, and arts and cultural opportunities. Our dynamic volunteer organizations and non-profit agencies contribute to this public wealth. Rich in modern-day opportunities, the borough is located in the midst of a vast undeveloped frontier area renowned the world over. Residents cite these unique qualities as reasons they call the Fairbanks North Star Borough home.

PLAN ABSTRACT

Land Use

Land use is the keystone of any community. Proper land use enables, assists, protects, safeguards, enhances and contributes to societal momentum and growth. A wide variety of land uses are necessary to support residential, commercial, recreational, and industrial activities. As the FNSB continues to grow, many development opportunities will emerge. At the same time, any alteration in current usage can lead to land use conflicts. The Regional Comprehensive Plan will guide us to take advantage of present and future opportunities while helping to minimize land use conflicts through its long-term vision and implementation.

GOAL 1 To recognize that the foremost aspect of land use involving private property is the retention and maintenance of private property rights

- **Strategy 1:** Work for decisions by commissioners and the Assembly that protects individual private property rights to the maximum extent possible.
- **Strategy 2:** Work for community end goals with a minimum impact and disruption of individual private property rights.
- **Strategy 3:** To work to reduce to the fullest extent possible the natural conflict that develops between private property right and community needs and interests.

GOAL 2 To continue public land use and sales programs

- **Strategy 4:** Plan for, designate, and retain sufficient lands for future public purpose prior to the sales of public lands.
- **Strategy 5:** Plan, promote and work diligently with other public land owners to secure ongoing release of appropriate public lands into private ownership, to expand the overall total acreage of private property.

GOAL 3 To have a variety of land uses that fit the diverse needs of the community

- **Strategy 6:** Provide for commercial land uses in both urban and non-urban areas.
- **Strategy 7:** Provide a variety of residential land use opportunities.
- **Strategy 8:** Provide for industrial land uses in both urban and non-urban areas.
- **Strategy 9:** Recognize individual communities within the Borough as unique planning areas.

GOAL 4 To enhance development opportunities while minimizing land use conflicts

- **Strategy 10:** Attract and support development that is compatible with and enhances existing land use.
- **Strategy 11:** Encourage effective and harmonious resolution of community land-use conflicts.

Early First Ave.

Economic Development

A robust economy is the cornerstone of a vibrant community. In the Fairbanks North Star Borough, we must seek a balance between economic development and the creation of good job opportunities with the protection of our resources and our quality of life.

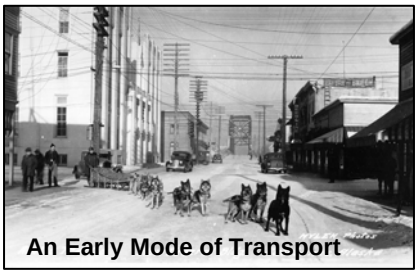
GOAL 1 To strengthen and expand the existing economy

Strategy 1: Establish the Borough as the center of economic activity for Interior Alaska.
Strategy 2: Encourage opportunities for economic growth while ensuring continued public access to wilderness areas.
Strategy 3: Develop and maintain Fairbanks as the transportation hub for the Interior.
Strategy 4: Emphasize development and expansion of mining, local manufacturing, agriculture, tourism, convention, hospitality, and forest-related businesses.
Strategy 5: Recognize and promote the economic importance of the military's presence.

GOAL 2 To diversify the economy

Strategy 6: Emphasize development that brings new dollars into the community, including efforts to add value to the region's natural, manufactured, service and intellectual resources.
Strategy 7: Advocate for education and research activities at the University of Alaska Fairbanks that create new economic opportunities.

Gold Pour at Ft. Knox Mine


An Early Mode of Transport

Transportation and Infrastructure

A dynamic transportation system is an essential component of any thriving community. The FNSB will be well served by transportation options that are multi-faceted, safe, sustainable, convenient and efficient.

Utilities are also a vital part of the infrastructure of any community. In the FNSB, there are many challenges to maintaining and expanding our utilities. Chief among them are the soil conditions and extreme winter temperatures that make constructing and maintaining water and sewer lines particularly costly. In order to be cost-effective, there needs to be higher-density development; however, that development cannot happen without utilities already in place. This is a serious challenge that will continue to face the Borough in the face of future growth.

A Modern MACS Bus

GOAL 1 **To have a safe, efficient, multi-modal transportation system that anticipates community growth**

Strategy 1: Encourage location, design and maintenance of roads based on their function and community needs.
Strategy 2: Support multi-modal transportation linkages.
Strategy 3: Make the Borough more pedestrian-friendly in urban and suburban areas and safer in rural and remote areas.
Strategy 4: Integrate safe multiuse trail circulation into road networks and maintain multiuse trails for commuter and recreational purposes.
Strategy 5: Support and maintain coordination with the Alaska Railroad.

GOAL 2 **To have sufficient public utilities and infrastructure to meet existing and future demands**

Strategy 6: Develop appropriate infrastructures that support all land use categories.
Strategy 7: Encourage the expansion of utility services to accommodate existing and future development.
Strategy 8: Encourage energy-efficient utility patterns.
Strategy 9: Encourage safe and full utilization of available public utilities (i.e., public water and sewer services).

Environment

Resplendent Fall Colors

The ecosystem of a community contributes significantly to the wellbeing of its residents. Everything from clean air and water to landscaped urban areas, open spaces and view sheds influence the quality of life of Borough residents. As the population increases, however, so will the impacts on the environment. Continuing pressures to develop land will increase particularly for marginal lands. It is essential that development efforts be balanced by a comprehensive approach to protecting the areas natural heritage, while addressing the difficulties posed by the enormous public holdings versus the very small private property holdings. We must identify those impacts and plan to mitigate them so as to minimize their overall effects within a realistic apprehension of available developable lands.

UAF Botanical Garden

GOAL 1 **Work to increase the overall percentage of private property holdings, to allow more land uses both public and private**

Strategy 1: Work with borough, state and federal agencies to expand the private property holdings within Borough boundaries.

GOAL 2 **To promote responsible stewardship of the Borough ecosystem**

Strategy 2: Maintain favorable air and water quality in the community.
Strategy 3: Encourage the recycling of resources and reduction of waste.
Strategy 4: Recognize, identify and address existing contaminated areas.
Strategy 5: Seek mitigation opportunities to balance development and preservation goals.
Strategy 6: Encourage reasonable interpretation of wet lands regulations by government agencies.

GOAL 3 To protect natural systems

Strategy 7: Consider land development toward areas where natural systems will be least adversely affected.
Strategy 8: Encourage use of natural resources under best stewardship practices.
Strategy 9: Support efforts to protect waterways.
Strategy 10: Borough public land and open spaces.
Strategy 11: Identify and plan for locations on public lands that provide for roadside pullouts that have scenic viewing opportunities.

GOAL 4 To protect and enhance both the natural and formal landscape

Strategy 12: Support beautification measures.

Early 2nd Avenue

Community and Human Resources

Our Borough is rich in many resources. As we grow into the future, our greatest wealth will result from having a healthy, active and productive population that meets the needs of our economy and contributes to the public life of our community.

GOAL 1 To have services and facilities that enrich the quality of life for all residents

Strategy 1: Provide for the delivery of essential human service for residents.
Strategy 2: Enhance public safety.
Strategy 3: Provide opportunities for community recreation.
Strategy 4: Assess and plan for future community needs.

GOAL 2 To have a variety of educational and training opportunities available to residents

Strategy 5: Support and sustain elementary, secondary and higher education.
Strategy 6: Encourage training opportunities that benefit all segments of the population.

GOAL 3 To embrace the cultural and historic heritage of the community

Strategy 7: Recognize and celebrate the cultural diversity of residents.
Strategy 8: Recognize and preserve our historic past.

GOAL 4 To maximize citizen involvement in all aspects of our community

Strategy 9: Encourage citizen participation in governmental affairs.
Strategy 10: Encourage volunteer participation in local activities.

PLAN IMPLEMENTATION

GOAL 1 **To recognize that the foremost aspect of land use involving private property is the retention and maintenance of private property rights**

Strategy 1: Work for decisions by commissioners and the Assembly that protects individual private property rights to the maximum extent possible.

Strategy 2: Work for community end goals with a minimum impact and disruption of individual private property rights.

Strategy 3: To work to reduce to the fullest extent possible the natural conflict that develops between private property right and community needs and interests.

GOAL 2 **To continue public land use and sales programs**

Strategy 4: Plan for, designate, and retain sufficient lands for future public purposes prior to the sales of public lands.

Action A: Encourage early selection of land for public purposes in areas designated for urban and residential growth.

- Identify, acquire, or retain sites appropriate for public facilities and trails:
  - Prior to sales of public land.
  - Before full development of the area takes place, if land is privately owned.
  - Encourage neighborhood siting of elementary schools.
- Assure that public land sales have legal and physical access.
- Retain public lands that are unsuitable for development with present technology but that may improve with future technological changes.
- Meet the following criteria for all new public facilities:
  - Locate in areas that are envisioned for growth.
  - Where possible, locate on sites where soils or natural hazards do not require expensive construction techniques.
  - Adequate, safe, site access.
  - Assure potential exists for adequate potable water supply and sewage treatment before acquisition of the site.
  - Adequate space needs as determined by commonly held regulations or standards.
  - Reasonable access to utility services, public transportation, emergency services, and related public service facilities
  - Economical site acquisition.
  - Obtain proper land use designation.
  - Energy efficient, quality construction.

Action B: Target preferred residential land for public residential land sales.

- Discourage public residential land sales in areas designated high mineral potential, while recognizing that there will be site-specific exceptions in this process.

Action C: Encourage the development of agricultural industries in the Interior.

- Encourage transfer of public land to private hands for agricultural use.
- Work with State, local and Federal agencies to conduct soil-mapping studies to refine the preferred agricultural land classification.

Action D: Discourage subdivision of preferred forestlands for residential, commercial, or industrial use.

- Identify and maintain the Tanana Valley State Forest and other state designated forestlands as preferred forestry land.
- Support the continued personal and subsistence use of preferred forestlands.
- Recognize the cultural and economic importance of fishing, hunting and trapping activities that depend on sustainable forestlands.

Strategy 5: Plan, promote and work diligently with other public land owners to secure ongoing release of appropriate public lands into private ownership, to expand the overall total acreage of private property.

GOAL 3 To have a variety of land uses that fit the diverse needs of the community

Strategy 6: Provide for commercial land uses in both urban and non-urban areas.

Action A: Provide for a variety of commercial areas that adequately serve the market area.

- Review and recommend changes to the Comprehensive Plan map to include commercial land use designations.
- Encourage new public and private offices, clustered commercial developments, and groups of stores within preferred commercial areas.
- Insure that commercial areas are safe, convenient, attractive and efficient.

Action B: Allow commercial facilities outside preferred commercial areas after considering if:

- ❑ A need is served that cannot be met elsewhere in the preferred commercial areas.
- ❑ Traffic flow and safety impacts are addressed.
- ❑ Use is compatible with other development and sensitive to natural systems in the area.
- ❑ Adequate landscaping and buffering is provided to minimize adverse impacts on surrounding land uses.
- ❑ Adequate parking space is available.
- ❑ Adequate fire protection/suppression and hazardous materials response is available.
- ❑ Public transit is available.

OR in non-urban areas if, in addition to the above:

- ❑ Area lighting is shielded from residential and undeveloped areas.
- ❑ The use expands an existing commercial node or is sufficiently separated from existing commercial nodes to avoid strip development.
- ❑ A legal commitment is made to provide alternative water and wastewater facilities.
- ❑ Greenbelts and open spaces are maintained.

Strategy 7: Provide a variety of residential land use opportunities**.**

Action A: Designate residential areas on the Comprehensive Plan map.

- Provide different housing types, densities and costs.

- Maintain existing residential areas that accommodate diverse lifestyles.
- Discourage residential development on lands in high mineral potential areas.
- Discourage intensive residential infill on marginal, permafrost-rich lands.

Action B: Encourage a mix of lot sizes.

- Address compatibility of the surrounding community, conformance with natural systems, and availability of public or private water/sewer facilities.
- Ensure and recognize the importance of the rural lifestyle in the Borough.
- Maintain and encourage residential patterns that minimize public and private costs, both initial and long-term.
- Allow residential development of lands with steep slopes (over 20 percent) if configuration and lot size address safe access for residents, emergency response and construction vehicles, on-site water and sewer, and appropriate soil conditions exist to support development.

Strategy 8: Provide for industrial land uses in both urban and non-urban areas.

Action A: Protect and preserve the integrity of industrially classified areas.

- Rezone industrial-designated areas with appropriate industrial zoning.
- Encourage related complementary business and commercial activities in and around designated industrial areas.

Action B: Allow industrial uses in non-urban areas after considering if:

- ❑ Traffic flow and safety impacts are addressed.
- ❑ Industrial uses are buffered to minimize adverse impacts on surrounding land uses.
- ❑ Adequate parking space can be provided to support the use.
- ❑ The use expands an existing industrial node or is sufficiently separated from existing industrial nodes to avoid strip development
- ❑ The use is compatible with surrounding development and uses, and is sensitive to natural systems in the area.
- ❑ Must provide a water and wastewater plan that has been approved by DEC.
- ❑ Adequate water supply for fire protection/suppression.

Action C: Major industrial locations that occur in isolated rural areas, as a result of the Borough's Industrial Site Study, should observe the following guidelines:

- ❑ Adjacent lands are allocated such that encroaching, incompatible land uses can be prevented.
- ❑ Environmental quality standards are not violated (air, water, noise).

Action D: Encourage the movement of the Alaska Railroad yard outside of the Fairbanks urban core in accordance with the railroad realignment plan.

- Develop a long-term plan for the Railroad Industrial area.

Strategy 9: Recognize individual communities within the Borough as unique planning areas.

Action A: Support efforts to identify potential areas for urbanization.

- Create a strategy to develop new urban areas.
- Prepare and update comprehensive land use plans for each community that:
  - Coordinate with the cities' efforts to develop plans for downtown areas.
  - Promote mixed uses in downtown areas.
  - Develop programs and physical structures in downtown, that encourage use beyond the usual workday, such as theaters, restaurants, housing, recreation, and waterfront amenities including access to recreational trails.

- Update, in cooperation with the cities of North Pole and Fairbanks, appropriate downtown commercial core areas for a range of shopping and services.
- Attract more tourists and residents to downtown areas.
- Incorporate schools, parks, stores & other small businesses within residential areas.
- Encourage efficient multimodal transportation access to urban core areas.
- Encourage the development of new rural commercial nodes at sites identified by individual community plans.

Action B: Designate appropriate uses and rezone as necessary those Reserve Lands outside of individual communities.

GOAL 4 To enhance development opportunities while minimizing land use conflicts

Strategy 10: Attract and support development that is compatible with and enhances existing land use.

Action A: Support innovative land development and compatible land use that addresses special area needs, site constraints, energy, or design objectives.

- Rezone new subdivisions to appropriate land use designations concurrent with the platting process.
- Recognize forest, mining, and agricultural activities as a priority while addressing existing residential uses within these designated reserve areas.
- Protect active airports from the encroachment of incompatible land uses.
  - Rezone areas adjacent to Eielson Air Force Base, Bradley Sky Ranch, and the Fort Wainwright airport to include an "airport noise sensitive area" overlay zone to enhance the coexistence of the airports and the public.
- Facilitate airport expansion if the development is compatible with the surrounding community.
  - Investigate a new zone that provides for height restrictions and prohibits noise-sensitive uses near airports.
- Encourage energy-efficient land use through higher densities and clustered housing.
- Provide suitable areas for the location of essential human services.
- Promote guidelines that encourage solar access to residential and commercial structures, including winter city design guidelines.

Action B: Develop a pattern of compatible land uses and either separate, transition or buffer incompatible land uses.

- Separate commercial and industrial uses from residential or incompatible land uses by methods such as screening, buffering, and/or alleys.
  - Develop land use buffering guidelines to reduce impacts on established residential areas.
- Encourage agricultural development that is compatible with surrounding land uses and densities.
- Minimize disruption to adjoining land uses while providing access for mineral development.
- Designate and protect sand and gravel, riprap and aggregate resources on the Comprehensive Plan map.
- Where Borough permitting is required for the extraction of sand, gravel, peat, placer and hard rock mining, the following guidelines should be used:
  - Surrounding properties are not adversely damaged.
  - Excessive dust does not materially affect surrounding properties.

        - Hours of operation, lights, and noise levels are compatible with surrounding uses.
        - Truck traffic, where possible, is routed so as to minimize impact to surrounding sensitive neighborhoods.
        - Sites are restored by the property owner for long-term reuse consistent with the Comprehensive Plan on a case-by-case basis.
        - Water quality and quantity are either not diminished or they are mitigated.
    - Support the State of Alaska requirements for the long-term reclamation of the land.
        - Work with public and private stakeholders to create and implement a plan to reuse the Fort Knox mine facility when mineral extraction is complete.

Strategy 11: Encourage effective and harmonious resolution of community land-use conflicts.

Action A: Provide and/or evaluate zoning regulations for difficult planning issues.

- Rewrite zoning regarding dog barns and kennels.
- Provide zoning for compatible locations for airstrips.
    - Develop a procedure for safely establishing new private airfields that mitigates platting, zoning and easement conflicts.
- Rewrite zoning regarding junkyards.
    - Expand and clarify the definition of "junkyard" in Borough ordinances.
- Resolve specific zoning problems such as those occurring in Smith Ranch/Beaver Park/6 Mile Village, and General Commercial rezones adjacent to existing residential areas.
- Modify zoning to allow variable lot sizes to take natural hazards into consideration.
- Use rezoning or other methods to protect high mineral potential-bearing areas that have not been developed.
    - Designate and update high mineral potential areas on the Comprehensive Plan map as needed.
- Create a noise plan that identifies sensitive areas, determines acceptable sound levels, mitigates development and traffic noise, and establishes an ordinance.

Action B: Create mediation opportunities and procedures for difficult planning issues.

Action C: Encourage cooperative military/community solutions to land use issues of mutual concern.

- Pursue an appropriate realignment route for the Alaska Railroad that will meet both the needs of the military and the Borough.
- Pursue joint land use studies between the military and the Borough.
- Create alternative access to private land east of Fort Wainwright.

REGIONAL COMPREHENSIVE PLAN MAP DEFINITIONS

BOROUGH AREA DESIGNATIONS

OUTSKIRT Area generally within a 20 to 30 minute travel time of urban destinations, and which contains primarily open space, mining and residential uses; variable densities are encouraged provided they are compatible with the surrounding community, sensitive to natural systems and have adequate water and sewer facilities. Other uses include agriculture, and supporting commercial uses.

PERIMETER Area generally within a 10 to 20 minute travel time of urban destinations, and which contains primarily residential use; variable densities are encouraged providing they are compatible with the surrounding community, sensitive to natural systems and have adequate water and sewer facilities.

RURAL This area includes nine distinct land categories, including military land, rural settlement, remote settlement, high mineral potential land, agricultural land, forest, and wildlife resource area. These areas are intended for limited public improvement.

URBAN Area that is served or can be served with community water and sewer, and contains the most intensive residential, commercial, and industrial development.

LAND CATEGORIES

HEAVY INDUSTRIAL AREA Activities such as manufacturing, processing, and storage that handle explosives or other hazardous materials, or emit noise, air, chemicals, or other pollutants detrimental to surrounding land uses and should therefore be developed in areas sufficiently buffered to avoid detrimental effects.

HIGH MINERAL POTENTIAL Areas in the RURAL and OUTSKIRT areas that have been identified as having a high potential for mineral deposits. The priority land use in these areas is mining. Land uses incompatible with mining are discouraged.

LIGHT INDUSTRIAL AREA Activities such as manufacturing, storage, wholesaling, repair maintenance and relate office functions which do not handle explosives or other hazardous materials, or emit noise, air, chemicals, or other pollutants detrimental to surrounding land uses.

MILITARY LAND Federal property allowing military activity.

OPEN SPACE/ NATURAL AREA Open space is an undeveloped area in a natural state, golf course, park, or cemetery, along a road that provides some visual relief from urbanization and public recreation. Open space may or may not be improved, but it does serve to interrupt more intense land uses.

Natural area is an area left in natural state deemed not suitable for development. Natural areas may be minimally improved, i.e., to provide access to or through them, or to accommodate a trail, but basically they are left to their natural state.

PREFERRED AGRICULTURAL LAND Land consisting of well-drained agricultural soils, located at elevations of less than 1,200 feet, on slopes that are farmable and outside of the URBAN and PERIMETER areas, but with proximity to transportation and markets.

PREFERRED FOREST LAND	An area with tree growth covering a large tract of land for commercial or research purposes on a sustained yield basis, including woodcutting.
PREFERRED RESIDENTIAL LAND	Land determined to be more suitable than other lands for development because it is generally: a) on slopes of 20% or less, b) not designated wetlands, c) has a lower probability of containing detrimental permafrost conditions.
REMOTE SETTLEMENT AREA	Publicly owned land planned for remote land disposals. Remote land disposals are not intended for public improvements.
RESERVE AREA	Area to be reserved under public ownership until sufficient data is available to make definitive planning judgments. Permitted uses include mining, hunting, fishing, trapping, recreation, forestry, and agriculture. No foreseeable development plans, but development is possible.
RURAL SETTLEMENT AREA	Publicly owned land planned for residential land disposals. Rural settlement areas are intended to have appropriate public improvements common in other rural residential areas.
URBAN PREFERRED COMMERCIAL AREA	Activities such as office buildings, government offices, schools, public facilities, entertainment, shopping, and churches. These facilities shall be located to provide conveniently to residential areas without impacting residential uses. Primarily located in URBAN areas.
WILDLIFE RESOURCE AREA	Those areas that have both wildlife habitat value and value to citizens, as they provide access to wildlife, unlike other areas with low access possibilities.

*** Comprehensive Plan Maps are located in the pocket at the back of the plan**

PUBLIC IMPROVEMENTS AVAILABILITY

HIGH	Community water and sewer, public road maintenance, fire/medical services, community police protection, telephone, and power.
MED	Service area or public road maintenance, fire/medical services, telephone and power.
LOW	Service area road maintenance, fire/medical services, telephone and power.
VERY LOW	Minimal improvements.

The following general land use summary outlines the use of land within the Borough. The definitions for the land uses are included in the definition section. All Borough lands fall in the four major land use designations. This Comprehensive Plan strives to maintain the appropriate use of lands within these major areas to minimize future conflicts within a growing community.

SUMARY OF BOROUGH AREAS						
Designation	Public Improvements Availability				Land Uses	
	High	Med	Low	Very Low	Primary	Secondary
Urban	X				Residential Commercial Institutional Industrial	Open Space
Perimeter		X			Residential Open Space	Commercial Industrial Agricultural
Outskirt		(X)	X		Residential Open Space	Commercial Agricultural Mining Forestry
Rural			(X)	X	Agricultural Forestry Mining Residential Open Space	

NOTE: (X) refers to development within outskirt communities (Fox and Ester) and near commercial/community facility nodes in rural settlement areas.

ECONOMIC DEVELOPMENT

GOAL 1 To strengthen and expand the existing economy

Strategy 1: Establish the Borough as the center of economic activity for Interior Alaska.

Action A: Update and maintain the Comprehensive Economic Development Strategy (CEDS) as an integral part of the Comprehensive Plan.

Action B: Create economic enterprise zones for downtown Fairbanks, South Fairbanks, North Pole, Airport Industrial Zone, and other areas using local, state and federal incentives.

Action C: Increase the Borough's role in support of North Slope and statewide energy development.

- Support the gas pipeline from the North Slope through the Fairbanks North Star Borough and natural gas value added industries.
- Encourage mechanisms to support the development of alternative energy sources.
- Support efforts to develop gas from Nenana Basin for use in the FNSB.

Action D: Continue efforts to:

- Foster and retain local entrepreneurs.
- Establish local procurement strategies.
- Promote local hire.
- Retain the presence of University of Alaska administration.

Action E: Expand existing and create new economic ventures with Interior and Northern Alaska communities.

Action F: Continue revitalization efforts of downtown Fairbanks.

Action G: Continue efforts to create infrastructure to foster economic development objectives.

Strategy 2: Encourage opportunities for economic growth while ensuring continued public access to wilderness areas.

Strategy 3: Develop and maintain Fairbanks as the transportation hub for the Interior.

Action A: Encourage efforts to expand marketing to increase domestic and international cargo and passenger usage of the Fairbanks International Airport.

Action B: Encourage the expansion of the rail system to Canada and northern and western Alaska.

Strategy 4: Emphasize development and expansion of mining, local manufacturing, agriculture, tourism, conventions, hospitality and forest-related businesses.

Action A: Promote mining by:

- Encouraging efforts that add value to mining products and activities.
- Maintaining the Borough's urban areas as the support and administrative hub of mining activity for the Interior.
- Support and promote reasonable, expeditious permitting processes.

Action B: Promote agriculture by:

- Supporting non-profit and volunteer organizations that promote agricultural development within the Borough.
- Promoting and enhancing agricultural administration, processing, and distribution within the Borough.
- Support maintenance and further development of the University of Alaska's agricultural programs.
- Maintaining and developing agricultural programs at the local schools.
- Support the building of storage facilities for agricultural products when we are assured that there is a need for them.
- Supporting the expansion of Tanana Valley Farmers Market and other local agricultural markets.

Action C: Promote tourism and hospitality by:

- Producing trail, bicycle, and snow machine maps for residents and visitors.
- Supporting economic revitalization of historical resources within the Borough where appropriate.
- Beautification through landscaping and/or signage of highways and junctions that create "first-impressions" of Fairbanks.
- Continue to support the visitor industry by reinvesting a significant portion of the bed taxes collected in marketing.
- Opposing additional targeted taxes and fees on segments of the visitor industry.

Action D: Promote forest-related businesses by:

- Developing property tax incentives that encourage forest products industry development in the Interior.
- Identifying projects and businesses that increase the economic value of forest resources.
- Establishing projects to ensure future timber supply.

Action E: Promote local manufacturing.

Strategy 5: Recognize and promote the economic importance of the military's presence.

Action A: Advocate for continued military presence.

Action B: Continue research regarding the value of the military presence to the community.

GOAL 2 To diversify the economy

Strategy 6: Emphasize development that brings new dollars into the community, including efforts to add value to the region's natural, manufactured, service and intellectual resources.

Action A: Encourage transportation projects that would provide new economic opportunities and result in lower costs of doing business.

Action B: Create a variety of types and sizes of commercial and industrial areas that support diversification of economic activity.

Action C: Promote the characteristics of the Borough that have potential for economic development.

- Catalog resources that attract economic development.
- Develop strategies for leveraging resources.
- Emphasize our strategic geographical location and foreign trade zone.

Action D: Encourage economic relationships across Alaska, the United States and internationally.

Action E: Encourage pursuit of economic opportunities that lead toward emerging technologies and knowledge-based industries.

Strategy 7: Advocate for education and research at the University of Alaska Fairbanks that creates new economic opportunities.

TRANSPORTATION AND INFRASTRUCTURE

GOAL 1 To have a safe, efficient, multi-modal transportation system that anticipates community growth

Strategy 1: Encourage location, design and maintenance of roads based on their function and community needs.

Action A: Update and maintain the Comprehensive Road Plan.

Action B: Revise Title 17 to:

- ❑ Improve road standards.
- ❑ Ensure access for emergency service vehicles to new developments.
- ❑ Include the pedestrian element in the subdivision platting process.
- ❑ Require public and private developers to provide adequate rights-of-way and road construction in conformance with Borough road standards.

Action C: Ensure that road designs improve safety and minimize adverse impacts

- Encourage limiting the number access points to high volume/speed roads.
- Identify and correct problem intersections.
- Provide recessed bus stops for public transportation systems.
- Reduce wildlife interactions.
- Integrate pedestrian-friendly sidewalks and bike trails along newly-developed roads or as enhancements during road maintenance.

Action D: Retain the integrity of neighborhoods as the road network expands.

Action E: Resolve road service area issues that include:

- ❑ Maintenance.
- ❑ Consolidation of road service areas.
- ❑ Inequities in road quality.
- ❑ Improve cost-saving measures.
- ❑ Enforcement of driveway permits.
- Enhance coordination of road maintenance among various agencies within the Borough.
- Pursue changing federal restrictions in highway funds to include maintenance.

Action F: Encourage adequate transportation services to serve business activities.

- Transportation routes, including rail and trucking, and storage areas for hazardous materials should be routed away from residential and intensive human-use areas.

Action G: Research avenues for funding roads and trails.

Strategy 2: Support multi-modal transportation linkages.

Action A: Improve and expand road and bridge linkages among communities including:

- ❑ A road from Two Rivers to North Pole.

- ❑ Chena Hot Springs Road connected to Circle Hot Springs Road and Northern Steese Highway, forming a loop.
- ❑ Dennis Road extension to Secluded Acres.

Action B: Expand public transportation options.

- Partner with major employers and other entities to expand public transportation.
- Research and develop a plan for a park and ride program.
- Explore light rail connections or expansion of transit between Fairbanks and North Pole.
- Improve transportation options for all segments of the community, including children, the elderly, and persons with disabilities.
- Investigate the need for a park and ride program.

Action C: Promote a comprehensive Borough bicycle plan that:

- ❑ Expands bicycle circulation routes throughout the Borough.
- ❑ Links communities within the Borough.
- ❑ Incorporates maintenance of bicycle circulation routes.
- ❑ Links public facilities, including schools and parks.
- ❑ Addresses safety considerations.
- ❑ Maintain and update the bicycle transportation map.

Strategy 3: Make the Borough more pedestrian-friendly in urban and suburban areas and safer in rural and remote areas.

Action A: Improve existing and create new walkways in urban areas that meet design standards.

- Have circulation patterns that are pedestrian friendly.
- Promote alternate forms of access between downtown and new railroad depot off Danby.
- Provide good sidewalk connections to bus stops and Para transit facilities.
- Create and implement a maintenance plan for walk ways that when possible makes sidewalks useable year-round for all citizens.

Strategy 4: Integrate safe multiuse trail circulation into road networks and maintain multiuse trails for commuter and recreational purposes.

Action A: Promote a comprehensive multiuse trail plan that:

- ❑ Links communities.
- ❑ Incorporates maintenance.
- ❑ Links public facilities, including schools and parks.
- ❑ Addresses safety considerations.
- ❑ Creates a map of multiuse paths.
- ❑ Provides urban right-of-ways to rural trails.
- Create a task force that resolves issues surrounding use of multiuse paths, especially during winter.

Action B: Encourage use of non-motorized transportation systems.

Action C: Recognize waterways as transportation corridors.

Strategy 5: Support and maintain coordination with the Alaska Railroad.

Action A: Encourage a reroute of the railroad to reduce the number of at-grade railroad crossings; create separate grade crossings for the remainder, when possible.

GOAL 2 To have sufficient public utilities and infrastructure to meet existing and future demands

Strategy 6: Develop appropriate infrastructures that support all land use categories.

Action A: Encourage development of industrial infrastructure.

- Identify utility capacity for the areas designated industrial
- Identify types and location of needed industrial infrastructure

Action B: Support development of infrastructure for agricultural activities.

Action C: Continue developing infrastructure that enhances the economic potential of mining developments, including adequate transportation into and out of the Borough.

Strategy 7: Encourage the expansion of utility services to accommodate existing and future development.

Action A: Coordinate cooperation amongst utility companies for the expansion of services.

- Provide a forum for infrastructure providers to meet periodically with the Borough to discuss long-term growth issues.

Action B: Promote and upgrade core area utilities, streets and sidewalks to meet future needs and encourage private sector investment.

Action C: Require easements within new subdivisions that would accommodate future water and sewer systems, and all other utilities as the areas infill.

Action D: Support grant funding that is equally available for publicly- and privately-owned utilities

Action E: Investigate the feasibility of a future regional wastewater treatment facility.

Strategy 8: Encourage energy-efficient utility patterns.

Action A: Recognize and encourage solar access to residential and commercial structures.

- Adopt winter city guidelines for residential and commercial development that consider:
    - Reflective light
    - Building orientations.
    - Subdivision layout.
    - Height limitations.
    - Southern exposure densities.
    - Winter landscaping
    - Quality of indoor environments.

Action B: Use waste heat from utility plants to heat surrounding buildings.

Action C: Encourage the development and use of alternative energy sources including solar and wind energy.

Strategy 9: Encourage safe and full utilization of available public utilities (i.e., public water and sewer services).

Action A: Encourage optimal development where public water and sewer exists.

Action B: Cooperate with state and federal agencies to ensure safe water supplies and proper sewage disposal within the Borough.

ENVIRONMENT

GOAL 1 Work to increase the overall percentage of private property holdings, to allow more land uses both public and private

Strategy 1: Work with borough, state and federal agencies to expand the private property holdings within Borough boundaries.

GOAL 2 To promote responsible stewardship of the Borough ecosystem

Strategy 2: Maintain favorable air and water quality in the community.

Action A: Encourage ongoing programs to monitor water quality and quantity, including programs to:

- Monitor wells for water quality and quantity.
- Improve surface water quality, which may include using natural vegetation and drainage plans to minimize parking lot and commercial runoff.
- Conduct additional water supply and sewage disposal studies to determine soil capabilities and appropriate building densities and revise the Comprehensive Plan accordingly.
- Encourage continued State of Alaska involvement with Fox Springs, assuring that it remains a safe, free water supply available to all residents.
- Educate the public concerning water quality issues.

Action B: Continue efforts to lower carbon monoxide levels.

- Encourage environmentally friendly energy sources.
- Explore ways to increase recovery of waste heat.

Action C: Advocate for reasonable application of wetlands regulations by the Corps of Engineers and other federal and state agencies.

Strategy 3: Encourage the recycling of resources and reduction of waste**.**

Action A: Expand recycling efforts.

- Encourage a long-term recycling plan, including investigating the feasibility of a centralized recycling facility.
- Encourage inbound carriers to provide reasonable freight rates to move recycled material.
- Promote maximum recycling of solid waste disposal from industrial land use.
- Create incentives that encourage comprehensive recycling by all sectors of the economy.
- Provide incentives for the development of businesses that reduce, reuse, recycle, or transform waste into products for resale.
- Investigate the cost effectiveness of recycling at the transfer stations.
- Support efforts to educate the public about reducing, recycling, and reusing.

Action B: Encourage a litter-free community.

- Create a comprehensive litter control program, including Borough waterways.
    - Enforce existing litter control regulations.
    - Improve the abandoned vehicle program.
    - Expand the clean-up day program.

Strategy 4: Recognize, identify and address existing contaminated areas.

Action A: Maintain a map of known contaminated areas within the borough.

- Encourage resolution of contaminated areas.
- Locate hazardous material storage away from residential areas or areas of dense population.

Strategy 5: Seek mitigation opportunities to balance development and preservation goals.

Action A: Support Fairbanks North Star Borough, State of Alaska, and Alaska's Federal Delegations efforts to reorganize Federal 9th Circuit Court of Appeals at San Francisco to more closely reflect decisions and needs of the American Northwest States and the orderly development needs of America's Alaskan Resources.

Action B: Continue supporting the efforts of the Fairbanks North Star Borough Assembly, the Alaska Municipal League, the Administration and Governor of Alaska, and Alaska's Federal Delegation for the establishment of a Federal Environmental Protection Agency Region #11 Research Center in conjunction with the University of Alaska and the Alaska Department of Environmental Conservation.

Strategy 6: Encourage reasonable interpretation of wet lands regulations by government agencies.

GOAL 3 To protect natural systems

Strategy 7: Consider land development toward areas where natural systems will be least adversely affected.

Action A: Define and identify areas with severe natural hazards.

- Modify Title 17 and 18 to minimize development in areas with severe natural hazards and, where unavoidable, ensure that it proceeds with precautions essential to avoid unnecessary public and/or private costs.
- Zone properties in accordance with natural hazards such as soil types, slope and aspect, incidence of flooding, and presence of ice-rich permafrost and other items detrimental to development.
- Create incentives for environmentally sensitive uses of natural hazard areas.
- Update Title 15 Floodplain Ordinance to be consistent with current FEMA regulations.
- Update the federal insurance rate maps for the FNSB.

Action B: Prevent or minimize damage to environmentally sensitive areas.

Strategy 8: Encourage use of natural resources under best stewardship practices.

Action A: Identify and preserve areas that support sustainable harvesting.

- Identify and survey the value of natural resources.
- Provide for opportunities to enjoy the outdoors
- Promote sustainable forest and harvest practices.
- Identify and reserve accessible forestlands as firewood resource areas.

Strategy 9: Support efforts to protect waterways.

Action A: Develop a riparian plan for the Borough's waterways that will:

- ❑ Protect riparian habitat by establishing riparian zones.
- ❑ Replace existing Outdoor Recreational zoning along waterways with appropriate zones.
- ❑ Limit erosion along waterways.
- ❑ Ensure public access to all rivers.
- ❑ Protect riparian rights of property owners along lakes and rivers.

Action B: Maintain the Chena River Plan and update it as necessary to accommodate growth and change.

Strategy 10: Borough public land and open spaces

Action A: Identify and provide public borough land for open spaces that can maintain, enhance and conserve outdoor recreational opportunities, wildlife, marginal lands, drainage areas, linkage between existing public open spaces, natural vegetative areas near urban development, public open spaces along transportation corridors between borough communities, tourism opportunities.

Strategy 11: Identify and plan for locations on public lands that provide for roadside pullouts that have scenic viewing opportunities.

Action A: Provide regular review of ongoing maintenance and enhancements.

GOAL 4 To protect and enhance both the natural and formal landscape

Strategy 12: Support beautification measures**.**

Action A: Consider a landscaping ordinance that includes:

- ❑ Urban green areas.
- ❑ Landscaping for businesses
- ❑ Landscaping for highway projects, including fencing and lighting.
- ❑ Incentives for compliance and maintenance.
- ❑ Considerations of existing natural vegetation and topography.
- ❑ Requirements for new subdivision development.
- ❑ Provide incentives to business owners to beautify their places of business including consultation, education, volunteer efforts.
- Support Arbor Day tree-planting programs.
- Encourage decorative winter lighting.
- Develop greenbelt plans for establishing and maintaining vegetated areas in intensely developed urban areas.
- Maintain, enhance, and conserve vegetation, preferably natural, along transportation corridors, rivers, lakes and ponds to preserve scenic beauty, prevent erosion, and support wildlife.

Action B: Maintain the aesthetic integrity of rural highways and community roads.

- Encourage retention of vegetation and landscaping within highway and railroad rights-of-way as safety allows.
- Encourage development and maintenance of aesthetically pleasing entrances into communities.

COMMUNITY AND HUMAN RESOURCES

GOAL 1 To have services and facilities that enrich the quality of life for all residents

Strategy 1: Provide for delivery of the essential human services for residents**.**

Action A: Encourage coordination, improvement, and cooperation among social service agencies in order to eliminate duplicate services, address unmet needs, and assure efficient development and provision of services.

- Expand human services for the aging population.
- Consider special needs of individuals and groups in the development of public and private facilities, programs, and social support services.

Action B: Encourage measures that provide residents access to safe and affordable housing.

- Provide for specialized housing to meet the needs of persons with disabilities, low-income, elderly and other special populations that is integrated within the general community. This housing should not be congregated or clustered in any specific area.

Action C: Encourage measures that provide access to affordable healthcare.

- Provide health care training for caregivers of persons with disabilities and aging residents.

Action D: Encourage programs to reduce substance abuse in the community.

Action E: Encourage local food production.

- Support the Tanana Valley Farmers Market and other local agricultural markets.
- Create community gardens on selected public or private land to provide agricultural opportunities to densely populated areas.
- Encourage agricultural education programs at the local schools

Action F: Provide suitable facilities for solid waste collection and disposal to meet present and future needs.

Strategy 2: Enhance public safety.

Action A: Maintain public safety services including the following:

- ❑ Emergency operations plans.
- ❑ Animal control services.
- ❑ Fire protection.
- ❑ Emergency Medical System (EMS).
- ❑ Hazardous material emergency response operations.
- ❑ Police protection.
- ❑ Lighting on urban streets and sidewalks.

Action B: Encourage cooperation of public safety agencies.

- Provide orderly delivery of services.
- Develop efficient expanded services.
- Function in an emergency.
- Coordinate programs of volunteer organizations that improve public safety.
- Improve Insurance Services Organization (ISO) ratings throughout the Borough.

Action C: Enhance fire prevention outside city limits through education, voluntary inspections and improved information on construction standards.

Action D: Encourage education of life safety issues.

- Coordinate with schools to provide life safety education to children.
- Educate the public about the content of FNSB Emergency Operations Plan.
- Provide the benefits of residential building code adoption for fire prevention.

Action E: Develop a public safety services comprehensive funding plan for:

- ❑ Personnel.
- ❑ Facilities.
- ❑ Equipment.
- ❑ Training.

Action F: Develop a long term facilities plan for animal control.

- Update periodically.
- Support additions, remodels and new structures within plan.

Strategy 3: Provide opportunities for community recreation.

Action A: Support activities for youth.

- Support new opportunities for youth-centered activities.
- Support creating more youth outdoor recreational facilities.
- Support creating additional indoor youth facilities.

Action B: Maintain a Parks and Recreation Master Plan.

- Support a variety of sporting activities.
- Support more regional, national and international sporting events.

Action C: Maintain a Recreational Trail Plan that addresses:

- ❑ Easements.
- ❑ Maintenance.
- ❑ Multiple-use trails.
- ❑ Cooperative recreational use agreements of military land, e.g. the Tanana Flats.

Action D: Encourage safety education about off-road recreational vehicles (e.g. snow machines, ATV's, personal watercraft).

Strategy 4: Assess and plan for future community service needs.

Action A: Conduct research and planning to meet future needs.

- Develop information for the public about the relative costs of providing services throughout the Borough.
- Research aging population demands on housing, health care and assisted living needs.
- Maintain the Borough function that tracks broad community indicators.

Action B: Provide quality and economical public services facilities that:

- Fully utilize and maintain existing facilities.
- Provide for compatible joint use of facilities.
- Replace antiquated and wasteful facilities.
- Build new space to accommodate needs.
- Develop satellite service centers in areas of high population density.
- Improve accessibility to all public facilities (i.e. ADA guidelines).

GOAL 2 To have a variety of educational and training opportunities available to residents

Strategy 5: Support and sustain elementary, secondary and higher education.

Action A: Encourage excellence of educational programming.

Action B: Support organizations and programs that improve education.

Action C: Support and encourage private and parochial schools and alternative education.

Action D: Support sustaining higher education at the University of Alaska Fairbanks.

Action E: Maintain and improve educational buildings, sport fields, and equipment such as computers.

Strategy 6: Encourage training opportunities that benefit all segments of the population.

Action A: Support job and vocational training opportunities relevant to the economic development needs within the Borough.

- Define necessary employee skills and provide training for local residents in conjunction with employers.
- Help coordinate and promote a state program to fund seats at medical schools to guarantee doctors in Alaska (and other professions as needed).
- Support increased minority participation.

Action B: Maintain the community library system to support training and education.

Action C: Provide training for community basic needs.

- Identify funding for job training and employment training assistance.
- Encourage "welfare to work" and other employment development programs.
- Encourage the provision of daycare service to support employment.
- Encourage parenting education programs.
- Expand training opportunities for persons with disabilities.
- Encourage programs to educate residents of all ages about effective citizen participation in government.

GOAL 3 To embrace the cultural and historic heritage of the community

Strategy 7: Recognize and celebrate the cultural diversity of residents.

Action A: Foster social interactions among diverse cultures of the population.

- Encourage participation of residents with differing cultures, ages, philosophies, abilities, races and lifestyles in community activities.
- Encourage integration of the military population into the local community.
- Implement an "Adopt-a-Service Member" program.

Action B: Encourage arts and cultural activities.

- Support more regional, national and international arts events.
- Support cultural and eco-tourism economic development opportunities.

Strategy 8: Recognize and preserve our historic past.

Action A: Maintain a Historic Preservation Plan.

Action B: Recognize and preserve our Alaska Native cultural activities and historic past.

Action C: Emphasize and support the expansion of historic economic development opportunities.

Action D: Invite public participation in development issues that affect historic sites.

GOAL 4 To maximize citizen involvement in all aspects of our community

Strategy 9: Encourage citizen participation in governmental affairs.

Action A: Develop relationships to accomplish Comprehensive Plan objectives.

- Encourage civic and special interest groups to participate in the planning, development and implementation of projects in the Borough.
- Encourage community participation and input through vision planning at five to ten year intervals.

Action B: Support individual volunteers in the local governments.

- Provide training opportunities for government volunteers.
- Conduct an annual recognition program for government volunteers.

Action C: Cooperate on transportation projects.

- Continue the transportation planning process through the Fairbanks Metropolitan Area Transportation System (FMATS) and the Metropolitan Planning Organization.
- Encourage public input at the earliest stages of transportation project planning.
- Encourage all agencies involved in transportation programs and systems to coordinate with local governments.

Action D: Gather public input.

- Maintain an effective notification system for public hearing items.
- Develop a community council plan and provide for optional implementation.
- Sponsor a periodic forum for borough-wide dialogue on civic issues.

Strategy 10: Encourage volunteer participation in local activities.

APPENDIX

CPAC MEMBERS:

Tom Marsh	Greg Whisennant
Deb Hickok	Robert Gray
Emily Ennis	Tom Bundtzen
Joseph Beedle	Carl Benson
Jan Dawe	Dennis Hedgecock
Audrey Foldoe	Richard Green
Arthur Hussey	John Finch
Dave Tyler	

PLANNING COMMISSION MEMBERS:

Merle Jantz, Chair	Chris Miller, Vice Chair
Deborah Horner	Roy Earnest
Toby Hall	Steve Krause
Kelly Dryer	Alexandra M. Kienle
Gerald V. Neubert	Bruce Hamilton

BOROUGH ASSEMBLY MEMBERS:

Garry Hutchison, Presiding Officer

Bonnie Williams	Earl Romans
Randy Frank	Terry Aldridge
Guy Sattley	Hank Bartos
Charlie Rex	Luke Hopkins

ADDITIONAL ELEMENTS OF THE REGIONAL COMPREHENSIVE PLAN:

Chena Riverfront Plan
Comprehensive Economic Development Strategy (CEDS)
Historic Preservation Plan
Parks and Recreation Plan
Recreational Trail Plan
Road Plan
Solid Waste Management Plan

SOURCE MATERIAL USED FOR THE PLAN:

Chabin Report (Economic Summit 1999)
Community Meetings (56 Public Meetings throughout the Borough)
Compass II Action Plan (United Way and Borough joint visioning session)
Comprehensive Plan Advisory Committee
Craciun Scientific Attitudinal Telephone Survey 2002
Fairbanks North Star Borough Regional Comprehensive Plan Background Reports
Fairbanks North Star Borough Visioning Priorities, June 2002
Mayor’s Visioning Session, 2002
If I Were Mayor Contest, 2002
Youth Summit, 2002

ALASKA STATE STATUTE 29.40.010-29.40.040:

AS 29.40.010. Planning, Platting, and Land Use Regulation.

(a) A first or second class borough shall provide for planning, platting, and land use regulation on an areawide basis.

(b) If a city in a borough consents by ordinance, the assembly may by ordinance delegate any of its powers and duties under this chapter to the city. The assembly may by ordinance, without first obtaining the consent of the city, revoke any power or duty delegated under this section.

AS 29.40.020. Planning Commission.

(a) Each first and second class borough shall establish a planning commission consisting of five residents unless a greater number is required by ordinance. Commission membership shall be apportioned so that the number of members from home rule and first class cities reflects the proportion of borough population residing in home rule and first class cities located in the borough. A member shall be appointed by the borough mayor for a term of three years subject to confirmation by the assembly, except that a member from a home rule or first class city shall be selected from a list of recommendations submitted by the council. Members first appointed shall draw lots for one, two, and three year terms. Appointments to fill vacancies are for the unexpired term. The compensation and expenses of the planning commission and its staff are paid as directed by the assembly.

(b) In addition to the duties prescribed by ordinance, the planning commission shall

(1) prepare and submit to the assembly a proposed comprehensive plan in accordance with AS 29.40.030 for the systematic and organized development of the borough;

(2) review, recommend, and administer measures necessary to implement the comprehensive plan, including measures provided under AS 29.40.040 .

AS 29.40.030. Comprehensive Plan.

(a) The comprehensive plan is a compilation of policy statements, goals, standards, and maps for guiding the physical, social, and economic development, both private and public, of the first or second class borough, and may include, but is not limited to, the following:

(1) statements of policies, goals, and standards;

(2) a land use plan;

(3) a community facilities plan;

(4) a transportation plan; and

(5) recommendations for implementation of the comprehensive plan.

(b) With the recommendations of the planning commission, the assembly shall adopt by ordinance a comprehensive plan. The assembly shall, after receiving the recommendations of the planning commission, periodically undertake an overall review of the comprehensive plan and update the plan as necessary.

AS 29.40.040. Land Use Regulation.

(a) In accordance with a comprehensive plan adopted under AS 29.40.030 and in order to implement the plan, the assembly by ordinance shall adopt or amend provisions governing the use and occupancy of land that may include, but are not limited to,

(1) zoning regulations restricting the use of land and improvements by geographic districts;

(2) land use permit requirements designed to encourage or discourage specified uses and construction of specified structures, or to minimize unfavorable effects of uses and the construction of structures;

(3) measures to further the goals and objectives of the comprehensive plan.

(b) A variance from a land use regulation adopted under this section may not be granted if

(1) special conditions that require the variance are caused by the person seeking the variance;

(2) the variance will permit a land use in a district in which that use is prohibited; or

(3) the variance is sought solely to relieve pecuniary hardship or inconvenience.

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Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Pollution Potential

We are very concerned by the lack of planning for preservation of the environment that is evidenced in this application for State Marijuana Establishment License and the FNSB Permit Application.

The Applicant has verbally expressed to our neighborhood residents that AK Green Bee, Inc. is not concerned regarding the pollution potential of this industrial facility because all of the agricultural products used will be "organic". This represents a significant misunderstanding of the risks associated with the chemicals and nutrients utilized in cultivation operations and therefore a significant risk of pollution in our residential neighborhood. **Organic does not = safe. Arsenic is organic and found apple seeds. Anthrax is organic. Oil is organic. All fertilizer – even natural fertilizer like cow manure which contains high concentrations of nitrogen – in large quantities will create pollution.**

In fact, the EPA has dedicated substantial effort and expenses to combat the hazards of nutrient pollution as described on their website at https://www.epa.gov/nutrientpollution. This is type of pollution has devastated waterways such the toxic algal blooms in the Chesapeake Bay, the hypoxic Dead Zone in the Gulf of Mexico, and the **impaired waterways of the Chena Slough within 550ft of this proposed hydroponic marijuana cultivation facility**.

Organic fertilizers do not mean NO pollution; it just means a different type of pollution. Pollution is not only caused by manmade chemicals and compounds. **Preservation of a healthy environment is all about balance in the eco system**. Pollution is determined by the concentration of chemicals, compounds, or nutrients when compared to what the natural systems can safely process. There is a saying "The solution to pollution is dilution". This speaks to the fact that pollution occurs when the quantity of nutrients greatly exceeds the capacity of the land to assimilate these wastes.

It is true that organic fertilizers can be better than synthetic fertilizers. However, all fertilizer – even natural fertilizer like cow manure which contains high concentrations of nitrogen – in large quantities will create pollution. This causes algae blooms and dead zones like is present in the Gulf of Mexico. The concentrated use of fertilizing nutrients such as needed to encourage growth of plants in a large cultivation facility creates an excess of nutrients in the wastewater. **If released into the soil, this is pollution**. When the soil is oversaturated, these compounds are transferred directly into the groundwater and neighboring waterways such as the already impaired Chena Slough which is fed primarily by groundwater springs. Soil contamination also poses a risk of surface water discharge and rain and snow melt wash it into the Chena Slough.

Fertilizers categorized as "organic" still rely on high levels of nitrogen and phosphates for function. **A simple example of pollution from nitrogen is a familiar site to anyone who has owned a dog.** When a dog pees in the grass (especially repetitively in the same spot), the excessive nitrogen kills the center of the urine spot, but the grass around the edges will be dark green and extra tall because it is getting a more ideal concentration of nitrogen to support growth. However, both the level of nitrogen in the center of this spot and the level of nitrogen that promotes grass growth are above what is safe for human consumption. **What is healthy for plants is not the same as what is healthy for people.**

One of the primary reasons that ALL nitrogen fertilizers (synthetic and organic) pose a serious threat of water pollution is that they at some point convert to the nitrate ion (NO3-). This particular form of nitrogen is very water soluble so the nitrate can move down into ground water or sideways in surface water. The "Dead Zone" or "Hypoxia zone" in the Gulf of Mexico is driven in large part by nitrate coming from farms. Nitrates in groundwater will contaminate drinking water wells and pose serious health risks including Methemoglobinemia or "Blue Baby Syndrome" which decreases the oxygen carrying capacity of hemoglobin in babies leading to death. A couple of articles addressing the risks of nitrates in drinking water are attached in this section. **Nitrates are NOT neutralized or filtered out by passing through**

the soil so it continues to increase levels in the groundwater system.

This facility will be using a variety of fertilizers, pesticides, and fungicides to promote growth and health of the crop. Regardless of whether or not they are organic, a high concentration of them will overwhelm the ability of the natural eco system to successfully neutralize and filter them before they reach the depth of our neighborhood drinking water wells at 30-40ft below grade.

It is a requirement that careful evaluation of the chemicals and concentrations thereof, planned for use needs to be done by a professional engineer licensed in the State of Alaska in determining the appropriate wastewater treatment system before it can be submitted to DEC for approval and permitting. DEC has confirmed that the "commercial and industrial septic system" septic system has not been submitted for approval. **One the factors that is most concerning, is that this application fails to list the chemicals which will be used onsite.** This is a requirement of the application, but instead they are only generally referenced by one potential brand name. **Even more distressing is the fact that the Applicant confirmed that AK Green Bee simply doesn't know what they plan to use. The exact products that will be used should be key information in determining whether a license should be granted.** This lack of planning can be disastrous to the environment.

Any release of fertilizers, pesticides, fungicides into the soil at this site will very quickly be transferred to the groundwater system and pollute our wells and the already impaired waters of the Chena Slough. This waterway is already plagued with fertilizer-caused pollution that is causing algae blooms and decimating Grayling populations. The Chena Slough is registered as a Category 5 impaired water, Section 303(d) list, requiring TMDL.

Because the open waters of the Chena Slough are only 550ft from this proposed marijuana cultivation facility, pollution of the Chena Slough is of special concern on this site for many reasons, but the most direct paths of contamination are:

- chemicals leaching into the soil and contaminating the groundwater springs which feed the Slough
- surface water contamination caused by contaminants being washed into the Slough in run-off especially during Spring Break-up and during heavy rains.

As documented by the attached article from Scientific American, once nitrogen loads a waterway, it is a compounding problem.

Despite these concerns that Applicant has repeatedly confirmed to the residents of our neighborhood that they fully intent to discharge all nondomestic wastewater from this hydroponic cultivation operation into a septic tank with leach field. This is considered a direct discharge into the groundwater that feeds our drinking water wells and the Chena Slough.

Another aspect of groundwater protection that has not been considered is protection of soils from chemical leaching through the floor of the facility. Concrete is a very porous substrate and affords no barrier for liquid contaminants. Anything spilled or splashed on the floor will pass straight thru the concrete slab and into the ground below. This is especially concerning in a hydroponics operation, so precautions should be taken in construction of this facility. **What type of secondary containment membrane is going to be used below the concrete slab to prevent permeation of chemicals and pollution of soil and ground water?** The Floor Plan for this facility includes a trench drain down its full length which makes it clear that large amounts of liquid are expected on the floor. However, at this time, the applicant has not proposed to protect the soil from any contaminants.

Another overlooked aspect of pollution from hydroponic cultivation activities is air pollution. Per the EPA discussion of Nutrient Pollution, excessive levels of nitrogen in the atmosphere contribute to the formation of air pollutants like smog, which can restrict visibility and affect human health. "Ground-level

or "bad" ozone is the main component of smog. Ground-level ozone is not emitted directly into the air, but is created by chemical reactions between airborne nitrogen compounds and other compounds in the presence of sunlight. People with lung disease, children, older adults, and people who are active can be affected when ozone levels are unhealthy. Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Under the Clean Air Act, EPA has set protective health-based standards for ozone in the air we breathe." The basin geography around the FNSB has already been classified as $PM_{2.5}$ Nonattainment Area because of air pollution issues. Increasing nitrogen levels in waterways and air from large hydroponic operation poses a significant risk to the local environment.

This application does not demonstrate an understanding of the pollution potential of this facility. It also does not present a viable plan for how chemicals will be handled to prevent pollution of the soils and groundwater systems. This application should be DENIED to protect the local environment.

Nutrient Pollution

The Problem

Nutrient pollution is one of America's most widespread, costly and challenging environmental problems, and is caused by excess nitrogen and phosphorus in the air and water.

Nitrogen and phosphorus are nutrients that are natural parts of aquatic ecosystems. Nitrogen is also the most abundant element in the air we breathe. Nitrogen and phosphorus support the growth of algae and aquatic plants, which provide food and habitat for fish, shellfish and smaller organisms that live in water.

But when too much nitrogen and phosphorus enter the environment - usually from a wide range of human activities - the air and water can become polluted. Nutrient pollution has impacted many streams, rivers, lakes, bays and coastal waters for the past several decades, resulting in serious environmental and human health issues, and impacting the economy.

Too much nitrogen and phosphorus in the water causes algae to grow faster than ecosystems can handle. Significant increases in algae harm water quality, food resources and habitats, and decrease the oxygen that fish and other aquatic life need to survive. Large growths of algae are called algal blooms and they can severely reduce or eliminate oxygen in the water, leading to illnesses in fish and the death of large numbers of fish. Some algal blooms are harmful to humans because they produce elevated toxins and bacterial growth that can make people sick if they come into contact with polluted water, consume tainted fish or shellfish, or drink contaminated water.

Too much nitrogen and phosphorus in the water can have diverse and far-reaching impacts on public health, the environment and the economy. Photo credit: Bill Yates.

Excess nitrogen in the air can impair our ability to breathe, limit visibility and alter plant growth.

Nutrient pollution in ground water - which millions of people in the United States use as their drinking water source - can be harmful, even at low levels. Infants are vulnerable to a nitrogen-based compound called nitrates in drinking water. Excess nitrogen in the atmosphere can produce pollutants such as ammonia and ozone, which can impair our ability to breathe, limit visibility and alter plant growth. When excess nitrogen comes back to earth from the atmosphere, it can harm the health of forests, soils and waterways.

Nutrient Pollution

Sources and Solutions

Excessive nitrogen and phosphorus that washes into water bodies and is released into the air are often the direct result of human activities. The primary sources of nutrient pollution are:

- Agriculture: Animal manure, excess fertilizer applied to crops and fields, and soil erosion make agriculture one of the largest sources of nitrogen and phosphorus pollution in the country.
- Stormwater: When precipitation falls on our cities and towns, it runs across hard surfaces - like rooftops, sidewalks and roads - and carries pollutants, including nitrogen and phosphorus, into local waterways.
- Wastewater: Our sewer and septic systems are responsible for treating large quantities of waste, and these systems do not always operate properly or remove enough nitrogen and phosphorus before discharging into waterways.
- Fossil Fuels: Electric power generation, industry, transportation and agriculture have increased the amount of nitrogen in the air through use of fossil fuels.
- In and Around the Home: Fertilizers, yard and pet waste, and certain soaps and detergents contain nitrogen and phosphorus, and can contribute to nutrient pollution if not properly used or disposed of. The amount of hard surfaces and type of landscaping can also increase the runoff of nitrogen and phosphorus during wet weather.

Animal waste contributes excess nutrients to our waterways when manure is improperly managed.

Our homes, yards and streets contribute to nitrogen pollution in a variety of ways, but solutions exist to address this pollution at its source.

Nutrient Pollution

The Effects

Nutrient pollution can have various effects on human health, the environment and the economy.

Nutrient pollution and harmful algal blooms cause major environmental damage as well as serious health problems in people and animals.

Nutrient pollution and algal blooms also take a toll on the economy, hurting industries and sectors that depend on clean water. Federal, state and local governments spend billions of dollars per year to combat nutrient pollution or prevent its effects.

Learn more about:

- **Human health effects**

Nutrient pollution and harmful algal blooms create toxins and compounds that are dangerous for your health. There are several ways that people (and pets) can be exposed to these compounds.

Direct exposure to toxic algae
Drinking, accidentally swallowing or swimming in water affected by a harmful algal bloom can cause serious health problems including:

- Rashes
- Stomach or liver illness
- Respiratory problems
- Neurological affects

Drinking water can be a source of exposure to chemicals caused by nutrient pollution.

Nitrates in drinking water
Nitrate, a compound found in fertilizer, often contaminates drinking water in agricultural areas. Infants who drink water too high in nitrates can become seriously ill and even die. Symptoms include shortness of breath and blue-tinted skin, a condition known as blue baby syndrome.

A 2010 report on nutrients in ground and surface water by the U.S. Geological Survey found that nitrates were too high in 64 percent of shallow monitoring wells in agricultural and urban areas.

Byproducts of water treatment
Stormwater runoff carries nutrients directly into rivers, lakes and reservoirs which serve as sources of drinking water for many people. When disinfectants used to treat drinking water react with toxic algae, harmful chemicals called dioxins can be created. These byproducts have been linked to reproductive and developmental health risks and even cancer.

- **Environmental effects**

Nutrient pollution fuels the growth of harmful algal blooms which devastate aquatic ecosystems.

Direct exposure to algae
Harmful algal blooms sometimes create toxins that can kill fish and other animals. After being consumed by small fish and shellfish, these toxins move up the food chain and hurt larger animals like sea lions, turtles, dolphins, birds, manatees, and fish.

Nutrient Pollution

Even if algal blooms are not toxic, they can hurt aquatic life by blocking out sunlight and clogging fish gills.

Algal blooms can reduce the ability of fish and other aquatic life to find food and can cause entire populations to leave an area or even die.

Harmful algal blooms cause thick, green muck that impacts clear water, recreation, businesses and property values.

Dead zones and hypoxia
Nutrient pollution can create dead zones, areas in water with little or no oxygen where aquatic life cannot survive. Also known as hypoxia, these areas are caused by algal blooms consuming oxygen as they die and decompose. Aquatic animals must leave the affected area or die. Young fish and seafloor dwellers like crabs and clams are most likely to die in hypoxic areas.

Over 166 dead zones have been documented nationwide, affecting waterbodies like the Chesapeake Bay and the Gulf of Mexico. The Gulf of Mexico dead zone is the largest in the United States, measured to be 5,840 square miles in 2013. It occurs every summer because of nutrient pollution from the Mississippi River Basin, an area that drains 31 upstream states. The Mississippi River/Gulf of Mexico Hypoxia Task Force coordinates nutrient management in this area.

Acid rain
Acid rain, caused by nutrient pollution in the air, damages lakes, streams, estuaries, forests and grasslands across the country.

Air pollution
Airborne nitrogen compounds like nitrogen oxides contribute to the formation of other air pollutants such as ground-level ozone, a component of smog which can restrict visibility. Wind and weather can carry ozone many miles from urban to rural areas. Ozone pollution can damage trees and harm the appearance of vegetation and scenic areas.

- **Economic effects**

Nutrient pollution has diverse and far-reaching effects on the U.S. economy, impacting tourism, property values, commercial fishing, recreational businesses and many other sectors that depend on clean water.

Nutrient pollution can have severe economic impacts on recreational fishing, businesses, and tourism.

Drinking water costs
Nitrates and algal blooms in drinking water sources can drastically increase treatment costs. Nitrate-removal systems in Minnesota caused supply costs to rise from 5-10 cents per 1000 gallons to over $4 per 1000 gallons.

It can also cost billions of dollars to clean up polluted water bodies. Every dollar spent on protecting sources of drinking water saves in water treatment costs.

Tourism losses
The tourism industry loses close to $1 billion each year, mostly through losses in fishing and boating activities, as a result of water bodies that have been affected by nutrient

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pollution and harmful algal blooms.

Airborne nutrient pollution can also affect visibility at popular outdoor destinations like national parks. This kind of pollution can also damage buildings and other structures, especially those made of marble and limestone.

Commercial fishing and shellfish losses
Fishing and shellfish industries are hurt by harmful algal blooms that kill fish and contaminate shell fish. Annual losses to these industries from nutrient pollution are estimated to be in the tens of millions of dollars.

Real estate losses
Clean water can raise the value of a nearby home by up to 25 percent. Waterfront property values can decline because of the unpleasant sight and odor of algal blooms.

Nutrient pollution causes millions of dollars in losses to the commercial fishing industry.

Where Nutrient Pollution Occurs

Nutrient pollution affects air and water around the country. The impacts of nutrient pollution are found in all types of water bodies. Pollutants often enter upstream waters like creeks and streams and then flow into larger water bodies like lakes, rivers and bays. Excess nitrogen and phosphorus can also travel thousands of miles to coastal areas where the effects of the pollution are felt in the form of massive dead zones, such as those in the Gulf of Mexico and Chesapeake Bay. More than 100,000 miles of rivers and streams, close to 2.5 million acres of lakes, reservoirs and ponds, and more than 800 square miles of bays and estuaries in the United States have poor water quality because of nitrogen and phosphorus pollution.

Nutrient pollution affects all types of water bodies – our lakes and rivers, our coasts and bays, our sources of clean water – and our air.

Additionally, nutrients can soak into ground water, which provides drinking water to millions of Americans. And urban areas across the country have hazy skies and air quality problems related to airborne nitrogen pollution.

Learn more about where nutrient pollution occurs:

- **Lakes and Rivers**

Nutrient pollution builds up in our nation's lakes, ponds, and streams. EPA's 2010 National Lakes Assessment found that almost 20 percent of the 50,000 lakes surveyed had been impacted by nitrogen and phosphorus pollution. The report also showed that poor lake conditions related to nitrogen or phosphorus pollution doubled the likelihood of poor ecosystem health.

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When river or stream currents are slow, or when waters are stagnant, nutrients, sediment, and particles accumulate, increasing the chances of harmful pollution and algal growth. In EPA's 2006 Wadeable Stream Assessment, 30 percent of streams across the country had high levels of nitrogen or phosphorus. Lakes and rivers are common sources for drinking water supplies. Both algae and high nitrate levels cause problems in sources of drinking water. Nationwide, violations of the nitrate limit in drinking water doubled over a 10-year period.

Excess nutrients from agricultural, urban, and suburban runoff contribute to the growth of algal blooms lakes.

Case Study: Lake Oneida, New York: Agricultural Environmental Management Projects Reduce Excess Nutrients
Algal blooms and rooted vegetation impaired recreational uses of New York's Oneida Lake, causing New York to add the lake to its Clean Water Act impaired waters list in 1998. Excess nutrients, specifically phosphorus, from agricultural, urban and suburban runoff contributed to the growth of algal blooms in the lake. Implementing best management practices such as barnyard runoff management systems, manure storage systems, and nutrient and sediment control systems successfully reduced phosphorus loads to Oneida Lake. The New York State Department of Environmental Conservation delisted Oneida Lake because data showed steady declines in phosphorus levels and indicated that the lake supports aquatic life and recreation.

Case Study: Lower Piper Creek and Upper and Lower Goat Creek, Montana
Goat Creek is a tributary to Swan River, which is situated in a heavily forested watershed in northwest Montana. Construction of forest roads and timber harvesting led to sediment and nutrient pollution in Goat Creek, which made the creek unable to adequately support aquatic life. Private development also contributed to this problem due to the removal of wooded areas, the introduction of septic systems and road construction.

The Montana Department of Environmental Quality, a group of partners from the timber industry and federal agencies developed Total Maximum Daily Loads for waters in the Swan Lake Watershed to reduce sediment and nitrogen and phosphorus pollution. Over the past 20 years, efforts have included the implementation of forestry best management practices-establishing drainage catchments along forest roads to intercept sediment in runoff, upgrading old roads, and implementing an erosion control standard by the end of 2015. As a result of these actions, by 2006, Upper Goat Creek was no longer considered impaired due to nutrients.

- **Coasts and Bays**
- **Groundwater and Drinking Water**

Nutrient pollution can affect vital ground water sources and our drinking water. Surface waters, like lakes, rivers and streams, provide drinking water for about 170 million people in the United States. Some of these waters are impaired or affected by excessive amounts of nitrogen and phosphorus. Ground water is water that soaks into the soil and into the water table, and close to 90 million people rely on ground water as a drinking water supply. As ground water works its way through the soil, it can pick up nitrogen and phosphorus and transport them to the water table. This polluted water then reaches public drinking water systems and private wells, where it can pose serious public health threats. Public drinking water

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systems can also bear a substantial financial burden to treat drinking water polluted by nutrients. EPA's 2010 report on nutrients in the nation's streams and groundwater found that nitrate contamination of ground water used for drinking water, particularly shallow domestic wells in agricultural areas, is a growing concern.

As ground water works its way through the soil, it can pick up excess nutrients and transport them to the water table. When polluted groundwater reaches drinking water systems it can pose serious public health threats.

Case Study: Waupaca, Wisconsin
The City of Waupaca, Wisconsin, identified elevated levels of nitrate, a form of nitrogen, in its municipal ground water supply in the early 1990s, mainly due to agricultural activities. Highly-permeable soils in the area facilitated filtration of nitrate into the soil, allowing it to easily contaminate the ground water, the primary drinking water source for Waupaca.

The Waupaca government, technical experts and citizens developed a wellhead protection plan, which included the tracking of nitrate levels. The resulting monitoring data was used in land use decision-making. The commission also provided educational crop consulting services to farmers about nitrate reduction. By 2009, Waupaca reported average nitrate concentrations below EPA's maximum contaminant level.

- **Air**

Airborne nitrogen compounds, especially nitrogen oxides, contribute to the formation of air pollutants like smog, which can restrict visibility and affect human health. Ground-level or "bad" ozone is the main component of smog. Ground-level ozone is not emitted directly into the air, but is created by chemical reactions between airborne nitrogen compounds and other compounds in the presence of sunlight. Sunlight and hot weather cause ground-level ozone to form in harmful amounts in the air. As a result, it is known as a summertime air pollutant. Many urban areas tend to have high levels of ground-level ozone, but increased ozone affects rural areas too, because wind can carry ozone and the pollutants from hundreds of miles away. People with lung disease, children, older adults, and people who are active can be affected when ozone levels are unhealthy. Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Under the Clean Air Act, EPA has set protective health-based standards for ozone in the air we breathe. EPA and states have implemented a variety of programs to meet these health-based standards.

Ozone air pollution has reduced growth and damaged foliage of the tulip poplar.

Case Study: Reducing Nitrogen Oxide Emissions and Ozone Pollution Across the Eastern United States
Wind and weather can carry ground-level ozone hundreds of miles from urban areas to rural areas, where it can impact human health and vital ecosystems. Ground-level ozone can also strongly impact the health of many plants, including a variety of commercial and ecologically important forest tree species.

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Effects can include reduced growth and productivity, damaged foliage, and increased susceptibility to diseases, insects, pests, and other stresses.

To address the problem of ground-level ozone, EPA took steps to dramatically reduce air pollution across state boundaries and issued the Clean Air Interstate rule (CAIR) in 2005. CAIR addresses the problem of interstate transport of ozone and fine particle pollution or soot. CAIR requires certain states in the Eastern U.S. to limit annual emissions of nitrogen oxide and sulfur dioxide from power plants and some industrial facilities, which contribute to the formation of ground-level ozone and soot. Between 2005 and 2010, annual nitrogen oxide emissions from CAIR and acid rain program sources dropped 42 percent from the 2005 levels. During this same period, ozone season nitrogen oxide emissions from CAIR sources alone decreased by approximately 27 percent. This has translated into significant human health and environmental benefits. nitrogen oxide emissions reductions attributable to CAIR are expected to have between $305 million and $1.5 billion annually. A majority of this monetized benefit comes from premature deaths avoided — 10,000 to 26,000 annually due to reduction in fine particle pollution and 39 to 180 annually due to reduction in ozone.

In addition, since implementation of the nitrogen oxide budget program and CAIR, the number of forested areas studied with significant reduced growth due to ozone exposure was 16 percent for the period of 2007 to 2009, down from 37 percent for the period of 2000 to 2002 for seven tree species in the eastern United States that are sensitive to ground-level ozone: black cherry, yellow-poplar, sugar maple, eastern white pine, Virginia pine, red maple and quaking aspen. The results illustrate how EPA's programs to reduce emissions of nitrogen oxide and other major pollutants from power plants and some industrial facilities are resulting in broad, regional-scale benefits to human health and the environment.

ALASKA's IMPAIRED WATERS – 2010

As of September 2010

Impaired Waterbody Categories:

Category 4a – Impaired water with a final/approved TMDL

Category 4b – Impaired water with other pollution controls

Category 5 – Impaired water, Section 303(d) list, require TMDL

Within the tables waters are listed by region - -Interior, Southcentral, Southeast – and alphabetically.

Category 4a Waterbodies

Alaska's 2010

Category 4a Waterbodies – Impaired but not needing a TMDL, TMDL has been completed

Region	*Category*	*Alaska ID #*	*Waterbody*	*Location*	*Area of Concern*	*Water Quality Standard*	*Pollutant Parameters*	*Pollutant Sources*
IN	**Category 4a**	**40402-001**	**Birch Creek Drainage:- Upper Birch Creek; Eagle Creek; Golddust Creek**	**North of Fairbanks**	**N/A**	**Turbidity**	**Turbidity**	**Placer Mining**
IN	**Category 4a**	**40506-009**	**Garrison Slough**	**Eielson Air Force Base**	**N/A**	**Toxic & Other Deleterious Organic and Inorganic Substances**	**Polychlorinated biphenyls (PCBs)**	**Military Base/ Operations**
IN	**Category 4a**	**40506-003**	**Noyes Slough**	**Fairbanks**	**7 miles**	**Residues**	**Debris**	**Urban Runoff**
SC	**Category 4a**	**30102-604**	**Akutan Harbor**	**Akutan Island**	**N/A**	**Residues** **Dissolved Gas**	**Settleable Solids** **Low Dissolved Oxygen**	**Seafood Processing/ Waste**
SC	**Category 4a**	**20401-004**	**Campbell Creek**	**Anchorage**	**10 miles**	**Fecal Coliform Bacteria**	**Fecal Coliform Bacteria**	**Urban Runoff**
SC	**Category 4a**	**20401-402**	**Campbell Lake**	**Anchorage**	**125 acres**	**Fecal Coliform Bacteria**	**Fecal Coliform Bacteria**	**Urban Runoff**

				Peninsula				
SE	**Category 4b**	**10203-808**	**East Port Frederick**	**NE Chichagof Island**	**0.4 acres**	**Residues**	**Bark & Woody Debris**	**Log Transfer Facility**
SE	**Category 4b**	**10103-031**	**Fubar Creek**	**Prince of Wales Island**	**N/A**	**Sediment**	**Sediment**	**Timber Harvesting**

Category 5/Section 303(d) Listed Waterbodies

Alaska's 2010

Category 5 Waterbodies – Impaired by pollutant(s) for one or more designated uses and requiring a TMDL; Clean Water Act Section 303(d) Listed Waters

Region	*Category*	*Alaska ID #*	*Waterbody*	*Location*	*Area of Concern*	*Water Quality Standard*	*Pollutant Parameters*	*Pollutant Sources*
IN	**Category 5 Section 303(d) listed**	**40506-007**	**Chena River**	**Fairbanks**	**15 miles**	**Sediment**	**Sediment**	**Urban Runoff**
IN	**Category 5 Section 303(d) listed**	**40506-002**	**Chena Slough**	**Fairbanks**	**13 miles**	**Sediment**	**Sediment**	**Urban Runoff**
IN	**Category 5 Section 303(d) listed**	**40402-010**	**Crooked Creek Bonanza Crooked Deadwood Ketchem Mammoth Mastodon Porcupine**	**North of Fairbanks**	**77 miles**	**Turbidity**	**Turbidity**	**Placer Mining**
IN	**Category 5 Section 303(d) listed**	**40509-001**	**Goldstream Creek**	**Fairbanks**	**70 miles**	**Turbidity**	**Turbidity**	**Placer Mining**
IN	**Category 5 Section 303(d) listed**	**30501-002**	**Kuskokwim River**	**Red Devil**	**1,000 feet, 900 feet down river and 100 feet upriver from mouth of Red**	**Toxic & Other Deleterious Organic and Inorganic Substances**	**Metals - Antimony, Arsenic, Mercury**	**Mining**

Fertilizer Runoff Overwhelms Streams and Rivers--Creating Vast "Dead Zones"

The nation's waterways are brimming with excess nitrogen from fertilizer--and plans to boost biofuel production threaten to aggravate an already serious situation

By David Biello on March 14, 2008
Scientific American

Credit: ©LAURA JOHNSON

The water in brooks, streams and creeks from Michigan to Puerto Rico carries a heavy load of pollutants, particularly nitrates from fertilizers. These nitrogen and oxygen molecules that crops need to grow eventually make their way into rivers, lakes and oceans, fertilizing blooms of algae that deplete oxygen and leave vast "dead zones" in their wake. There, no fish or typical sea life can survive. And scientists warn that a federal mandate to produce more biofuel may make the situation even worse.

Researchers led by aquatic ecologist Patrick Mulholland of the Oak Ridge National Laboratory in Tennessee report in *Nature* that streams and other waterways are losing their ability to filter excess nitrates from fertilizers and sewage. They discovered this by releasing a concentrated nitrate solution carrying an unusual isotope of nitrogen into 72 different streams—ranging from heavily altered urban waterways to pristine rivulets—and then tracked the isotope to find out how much made it downstream. The amount at the end indicated each stream's ability to naturally remove the pollutant—a measure of its health.

"We found that they continue to take up nitrate, but they remove a smaller fraction of the overall nitrate as you overload them," Mulholland says. "This is probably the reason we're seeing hypoxia [low oxygen levels] and other problems in coastal waters."

Typically, bacteria remove excess fertilizer from water through a chemical process known as denitrification, which enables them to convert nitrate to nitrogen that is then released into the atmosphere as a gas. The team found, however, that bacteria in the streams they studied only eliminated an average of 16 percent of the nitrogen pollution; bacteria in the most undisturbed streams performed the best, removing as much as 43 percent.

"Denitrification is the only process that we know for sure removes nitrogen from water," Mulholland says. "The other 84 percent [of the pollution] was just taken up by algae, microbes and other organisms in the stream bottom. A portion of that is probably also denitrified, and it could be a large portion. But we don't know that fate of that material."

What is clear is that a significant portion of such fertilizer is still making its way through the soil and water to the sea. As a result, algae and other microorganisms take up the nitrogen, bloom and, after they die, suck the oxygen out of coastal waters. Such "dead zones" have appeared seasonally near most major river mouths, including those emptying into Maryland's Chesapeake Bay as well as the Gulf of Mexico, where lifeless waters now cover more than 7,700 square miles (20,000 square kilometers) during the summer months.

The bulk of this nitrate comes from fertilizer running off agricultural fields. Scientists warn that a boom in crops such as corn for biofuel will only make matters worse. Last year, U.S. farmers planted more than 90 million acres (35 million hectares) of corn for the first time since the 1940s as a result of growing demand for that crop for both fuel and food.

Based on this trend, geographer Simon Donner of the University of British Columbia and atmospheric scientist Christopher Kucharik of the University of Wisconsin–Madison predict that nitrogen pollution from the Mississippi River Basin—the nation's largest watershed—will increase as much as 34 percent by 2022 if corn kernels continue to be the source of a growing proportion of ethanol fuel that U.S. energy legislation mandates.

That would also make it almost impossible, they say, to reduce the New Jersey-size dead zone at the Mississippi's outlet into the Gulf of Mexico to less than 2,000 square miles (5,000 square kilometers), as recommended by a 2001 U.S. Environmental Protection Agency task force.

In fact, the scientists wrote this week in *Proceedings of the National Academy of Sciences*, the only way to increase ethanol production from corn and reduce nitrogen runoff would be for Americans to stop eating meat, thereby freeing up corn used as livestock feed for other uses.

Potential solutions to overloaded streams seem equally difficult, such as restoring their natural flow or reducing the fertilizer and sewage draining into them. "We need to either maintain or, in many cases, restore the integrity of this stream network, including the smallest streams," Mulholland says. "That [also] means not utilizing all the land to grow crops."

He adds: "Certainly, the outlook is not great because there is a lot of pressure to go in the other direction."

Wisconsin Department of Health and Family Services,
Columbia County Health Department and Human Services,
Wisconsin Department of Natural Resources,
Wisconsin Department of Agriculture

Blue Babies and Nitrate-Contaminated Well Water

Lynda Knobeloch,[1] Barbara Salna,[2] Adam Hogan,[3] Jeffrey Postle,[4] and Henry Anderson[1]

[1]Wisconsin Department of Health and Family Services, Madison, Wisconsin, USA; [2]Columbia County Health Department and Human Services, Portage, Wisconsin, USA; [3]Wisconsin Department of Natural Resources, Madison, Wisconsin, USA; [4]Wisconsin Department of Agriculture, Trade and Consumer Protection, Madison, Wisconsin, USA

The use of nitrate-contaminated drinking water to prepare infant formula is a well-known risk factor for infant methemoglobinemia. Affected infants develop a peculiar blue-gray skin color and may become irritable or lethargic, depending on the severity of their condition. The condition can progress rapidly to cause coma and death if it is not recognized and treated appropriately. Two cases of blue baby syndrome were recently investigated. Both cases involved infants who became ill after being fed formula that was reconstituted with water from private wells. Water samples collected from these wells during the infants' illnesses contained nitrate–nitrogen concentrations of 22.9 and 27.4 mg/L. *Key words*: blue baby syndrome, methemoglobinemia, nitrate, nitrate-contaminated well water. *Environ Health Perspect* 108:675–678 (2000). [Online 6 June 2000]
http://ehpnet1.niehs.nih.gov/docs/2000/108p675-678knobeloch/abstract.html

Blue baby syndrome is a potentially fatal condition that occurs when the hemoglobin (Fe^{2+}) in an infant's red blood cells is oxidized to methemoglobin (Fe^{3+}). Because methemoglobin is unable to transport oxygen, the condition produces symptoms of cyanosis. Affected infants develop an unusual blue-gray or lavender skin color and are often described as irritable or lethargic, depending on the severity of their illness. Methemoglobin levels > 50% can quickly lead to coma and death if the condition is not recognized and treated.

A variety of risk factors including inherited enzyme deficiencies, infectious and inflammatory conditions, drug reactions, and chemical exposures can increase methemoglobin levels. The most common environmental agent associated with this diagnosis is nitrate-contaminated water; however, foods that are high in nitrate or nitrite may also be involved. Infants are particularly susceptible to the condition during their first 6 months of life because they have low amounts of methemoglobin reductase, a red blood cell enzyme that converts methemoglobin back to hemoglobin. The impact of these risk factors is additive.

The association between nitrate-contaminated well water and blue baby syndrome was first described by Hunter Comly, an Iowa City physician, who treated two infants for symptoms of cyanosis during the early 1940s (*1*). He found that both infants became ill after they were fed formulas that were diluted with water from shallow wells. Nitrate–nitrogen (nitrate-N) concentrations in the related wells were 90 and 150 mg/L. After Comly's findings were published, many similar cases were reported. In 1951, Walton (*2*) reviewed data from 278 cases that had been reported by 14 different states. Although health care providers and water quality experts have greatly reduced infant exposure to nitrate-contaminated water, emergency room physicians and pediatricians continue to diagnose and treat infants for this condition. The Wisconsin Department of Health and Family Services (Madison, Wisconsin) has an active surveillance program for methemoglobinemia. In this paper, we summarize findings from two recent case investigations.

Case Summaries

Case 1. During June 1998, public health nurses in Columbia County, Wisconsin, noted that a 6-month-old white male, who had been brought to a clinic in the Village of Cambria for immunizations, appeared cyanotic. The skin around his mouth and nose was unusually gray. According to his parents, the infant's skin color had been "gray" and he had been "crabbier than normal" for a couple of weeks. The infant also had a 6-week history of vomiting after feedings, which began shortly after the family moved to a new home that had a private water supply. Their previous residence was served by a municipal water system. The infant's daily diet consisted of 24 oz formula, 6 oz cereal, and 4–6 oz fruit (type not specified). The formula consisted of a powdered concentrate that was diluted with water from the family's well. Because of concern that the infant's illness might have been caused by nitrate-contaminated water, a public health nurse visited the family's home the following day to collect a water sample. The laboratory analysis indicated that the well was bacteriologically safe but had a nitrate-N concentration of 22.9 mg/L. The family was notified of these results and advised to use bottled water for formula preparation. They were also urged to have the infant examined by a physician.

This infant's parents reported that his skin color and temperament improved within a week after they began using bottled water to prepare his formula. The infant was examined by a physician's assistant 12 days after being placed on bottled water. At that time he appeared healthy and had a methemoglobin level of 0.5% (normal range 0.1–1.9%). His cardiac and pulmonary functions were normal.

This family shared a well with a neighboring home. The 178-ft well was drilled in 1989 and was cased to a depth of 42 ft. The family's home is situated in an area of rolling hills that is intensively farmed. Local crops include hay, corn, and soybeans. Both homes have mound-type septic systems that comply with local and state codes. Water collected from the well during August 1998 had a nitrate-N concentration of 30.5 mg/L. First draw and flushed tap water samples were low in copper (48 and 31 µg/L, respectively).

Case 2. During April 1999, a 3-week-old white female was admitted to an emergency room in Grant County, Wisconsin. According to her parents, she had been healthy until the night before admission when she became irritable and fussy. On the

Address correspondence to L. Knobeloch, Division of Public Health, DHFS, 1 W. Wilson Street, Madison, WI 53703-3044 USA. Telephone: (608) 266-1251. Fax: (608) 267-2832. E-mail: knobelm@dhfs.state.wi.us

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day of her admission, the parents reported that the infant had turned "completely blue" and was having breathing difficulties. Local emergency room staff noted that the infant was dehydrated, dusky, and cold to the touch. Her temperature was 90°F and her oxygen saturations remained in the low 80s while on 100% oxygen per nasal cannula. She was given a dose of intramuscular ceftriaxone, stabilized with warming blankets and intravenous fluids, and transported by MedFlight to a regional medical center.

On arrival, the infant was described as irritable. Her skin appeared pale, cyanotic, and mottled. An echocardiogram revealed a normal functioning, well-formed heart. Laboratory studies indicated a hemoglobin concentration of 11.5 g/dL, with a methemoglobin concentration of 91.2%. Blood gas analyses also indicated a profound metabolic acidosis (pH 6.72). This infant responded rapidly to treatment with methylene blue, oral bicarbonate, and intravenous fluids.

This infant lived with her parents and grandparents on a goat dairy farm in southwestern Wisconsin. She was born at 37 weeks gestation, weighed 5 lb 2 oz at birth, and had been doing well on a liquid concentrate formula that was diluted with bottled water. She became ill 1–2 days after her parents ran out of bottled water and began using water from the farm well to prepare her formula. The parents boiled the well water several minutes before using it. Water samples collected from the well 2 days after the infant was hospitalized tested positive for *E. coli* bacteria and had a nitrate-N concentration of 27.4 mg/L. Copper and lead concentrations were low at 29 and 0.9 µg/L, respectively.

The physicians who cared for this infant concluded that her illness was caused by ingestion of nitrate-contaminated well water. Metabolic disorders were ruled out after serum amino acids, urine organic acids, and metabolic screening were all determined to be within normal limits. Infectious illnesses apparently did not contribute to her illness. She remained afebrile throughout her hospitalization and did not receive antibiotic therapy. The infant was discharged 17 days after admission. At this time her parents were instructed not to use well water to prepare her formula.

Based on available well logs, it appears that the family's well was built in 1951. The well was originally constructed to a depth of 85 ft and had 30 ft of casing. In 1952 the well was drilled deeper, from 85 ft to 228 ft. An unused tin-cased well was also located on the property approximately 200 ft from the active well and immediately downgradient from the barnyard. Potential sources of nitrate were identified as barnyard runoff, septic tank effluent, and agricultural fertilizers.

Discussion

Since 1990, the Wisconsin Department of Health and Family Services has investigated three cases of methemoglobinemia in infants who were exposed to nitrate-contaminated well water. The first of these occurred in 1992 and was described in a 1993 issue of *Morbidity Mortality Weekly Report* (*3*). That case involved a 6-week-old infant who was hospitalized twice for symptoms of vomiting, diarrhea, and cyanosis. On her second admission, she was found to have a methemoglobin concentration of 21.4%. A detailed investigation concluded that her illness was caused by exposure to water that contained elevated levels of nitrate and copper. Although vomiting and diarrhea are frequently signs of gastrointestinal infection, in this case there was no evidence of a concurrent infectious process. Investigators concluded that these symptoms were caused by the irritant effects of copper that had leached from the household plumbing.

The occurrence of two additional cases during 1998 and 1999 suggests that nitrate-contaminated groundwater continues to be an important infant health problem in rural Wisconsin. Although case 1 was not confirmed by a laboratory analysis, the infant's cyanotic appearance and nitrate exposure history support a presumptive diagnosis of methemoglobinemia as described by Bosch et al. (*4*). Spontaneous improvement of the infant's condition after he was switched to bottled water lends further support to this diagnosis. The manner in which this case was handled by the county health department is typical of public health interventions practiced throughout Wisconsin and in many other regions of the United States. In rural areas where private well use is common, awareness of blue baby syndrome is widespread. Health care providers and others who are familiar with the condition frequently advise parents of sick infants to use bottled water for formula preparation or to use prepared formula. The combination of community awareness and early intervention has reduced the number of infants who require medical treatment for the condition.

Unfortunately, this safety net is not always effective. Case 2 illustrates the devastating consequences of neonatal nitrate exposure. That case involved a 3-week-old infant who was transported by helicopter to a regional pediatric intensive care unit with a life-threatening methemoglobin concentration. The nitrate-N concentration in the well water that was used to prepare her formula was 27.4 mg/L—less than 3 times the current federal drinking water standard for this contaminant. Extensive medical diagnostics ruled out underlying metabolic disorders and infectious illnesses as contributing factors to her illness.

Other reports of nitrate-induced methemoglobinemia. In a 1999 case report, Herman et al. (*5*) described the treatment of a 6-week-old infant with an intraosseous infusion of methylene blue after she was hospitalized with a methemoglobin concentration of 29.3%. Herman et al. (*5*) concluded that her

> ... methemoglobinemia was ... caused by the well water used to prepare the child's feedings, and ... may have been exacerbated by a recent diarrheal illness.

Unfortunately, their case report did not provide specific information about the well or the results of water quality tests.

The national death certificate database maintained by the Center for Disease Control and Prevention (Atlanta, GA) includes six infant deaths that were attributed to methemoglobinemia [*International Classification of Diseases, Revision* 9 (ICD-9 code 289.7)] between 1979 and 1996. These included two male and four female infants who were residents of Jim Wells County, Texas (1980); Kingsbury County, South Dakota (1986); New Orleans Parish, Louisiana (1986); Henry County, Virginia (1988); Garfield County, Colorado (1994); and Mesa County, Colorado (1996). It is unclear how many of these deaths might have been caused by exposure to nitrate-contaminated water because only the case in South Dakota was reported in the literature (*6*). The South Dakota case involved an infant who experienced several episodes of cyanosis after her mother stopped breast-feeding and began feeding her powdered formula that was reconstituted with water from the family's private well. At 8 weeks of age, the infant became acutely ill with symptoms of vomiting, diarrhea, and severe cyanosis. Her parents rushed her to a local physician who administered oxygen for several minutes. When the infant's color did not improve, the family was referred to a hospital 33 miles away. The infant stopped breathing on the way to the hospital and could not be resuscitated. The nitrate-N concentration in a water sample collected from the family's well after her death was 150 mg/L.

Infant exposure to nitrate-contaminated water continues to be a common public health problem in Eastern Europe. Ayebo et al. (*7*) found methemoglobinemia incidence rates ranging from 24 to 363 cases per 100,000 live births in the Transylvania region of Romania between 1990 and 1994. The average age ar diagnosis was 39 days. Investigators identified the primary cause of methemoglobinemia to be the use of polluted well water to dilute formula concentrates. Over a 14-year period, the Poison Information Center in Krakow,

Poland, investigated 239 cases of infant methemoglobinemia, and reported that 90% of these illnesses were associated with ingestion of contaminated water (*8*).

Regulation of nitrate in drinking water. The Safe Drinking Water Act (*9*) established a maximum contaminant concentration for nitrate-N of 10 mg/L. This federal standard is used to ensure the safety of public water supplies, but does not apply to private wells. According to a recent report to Congress, approximately 15 million families in the United States obtain their drinking water from unregulated, domestic wells (*10*). In a 1994 survey of 5,500 private water supplies in nine Midwestern states, 13% of the wells were found to have nitrate-N concentrations > 10 mg/L (*11*). If the rate of contamination is similar in other regions of the nation, an estimated 2 million household water supplies may fail to meet the federal standard. Based on current birth rates (*12*), approximately 40,000 infants < 6 months of age are expected to be living in homes that have nitrate-contaminated water supplies.

In a paper titled "Infantile Methemoglobinemia: Reexamining the Role of Drinking Water Nitrates," Avery (*13*) stated that

> Reports of infantile methemoglobinemia linked to contaminated drinking water are now virtually non-existent in the United States, with only two cases reported since the mid-1960s.

Avery (*13*) discussed several recent reports of elevated methemoglobin levels in infants who were hospitalized because of prematurity or severe diarrhea and concluded that

> ... endogenous nitrite production, not exogenous nitrate contamination of drinking water, is the primary cause of methemoglobinemia.

In the final paragraph of his paper, Avery (*13*) wrote,

> ... there is little indication that relaxing the drinking water standard for nitrate (not nitrite) to 15 or 20 ppm nitrate-N would increase the health risk to infants.

Our findings do not support Avery's conclusions regarding the roles of gastrointestinal infections and nitrate-contaminated water in the etiology of infant methemoglobinemia, nor do they support a higher drinking water standard for nitrate. Avery's statements regarding the low incidence of nitrate-induced illness (*13*) are based on an assumption that all cases of infant methemoglobinemia are investigated to determine their cause and are then described in the literature. Unfortunately, this is not the case. For example, only one of the six methemoglobinemia deaths in the national death index was reported in the literature. Upon investigation, we found that the respective state and local health departments were often unaware of these deaths. Most physicians and state and local public health officials do not have time to conduct detailed investigations and have even less time to prepare case reports for publication. These case reports, if written, might not be published if the topics were not deemed newsworthy.

Investigation during the infant illness is essential. However, cases are often identified using data systems such as electronic death certificates and hospital discharge records. Such data is typically not available until 6 months to 1 year after the illness. Retrospective investigation and analysis of these illnesses is difficult because the condition can be induced by a wide variety of chemical exposures (Table 1). It is often impossible to reconstruct an infant's exposure to environmental agents, nitrate-rich foods, contaminated water, and medications.

Almost 20 years ago Hegesh and Shiloah (*15*) described the role of endogenous nitrate production in the etiology of infant methemoglobinemia. They studied 58 infants (1 week to 1.5 years of age) who were hospitalized for treatment of diarrhea. After finding that some of the infants were excreting more nitrate than was provided in their diets, Hegesh and Shiloah (*15*) concluded that infants with diarrhea were able to synthesize up to 875 µmol (12.2 mg) nitrate-N per day. Methemoglobin levels in these infants ranged from < 0.4% to > 8%, and were positively correlated with blood nitrate concentrations. None of the infants were described as having symptoms consistent with clinically significant methemoglobinemia, such as cyanosis or tachycardia. Two conclusions can be drawn from this research: *a*) exposure to as little as 12 mg nitrate-N per day can significantly increase an infant's methemoglobin level, and *b*) infants with diarrhea are at risk of developing methemoglobinemia, even in the absence of dietary nitrate exposure.

Since Hegesh and Shiloah's research (*15*) was published, several similar studies have confirmed their findings (*16–18*). Most have found mildly elevated methemoglobin levels in infants who were hospitalized due to prematurity or gastrointestinal infections. Only a small percentage of infants in these cohorts had clinically significant methemoglobin levels. Unfortunately, none of the case reports provides detailed information about secondary risk factors such as *a*) inherited enzyme deficiencies, or *b*) exposure to methemoglobin-inducing agents such as local anesthetics (*19*) or nitric oxide, which is used to enhance oxygenation in premature infants (*20*).

Other potential health concerns. Although approximately 2 million U.S. families drink water from private wells that fail to meet the federal drinking water standard for nitrate-N, little is known about the reproductive and chronic health effects of their exposure to nitrate. Families with nitrate-contaminated wells should not use the water to prepare infant formula. Experts disagree about the need to issue advisories to pregnant women. In a recent study in Indiana, high nitrate concentrations were found in several wells used by women who had suffered miscarriages (*21*). Some of the women had successful pregnancies after they stopped drinking water from these wells. Most state health agencies provide no specific guidance on the use of nitrate-contaminated water by other household members, despite recent reports that prolonged exposure might increase the risk of a variety of health problems.

Studies conducted in Spain (*22*), China (*23*), and Taiwan (*24*) suggest that long-term ingestion of nitrate-contaminated water may increase the risk of gastric cancer. The proposed mechanism involves the conversion of ingested nitrate to nitrite, followed by the transformation of nitrite to nitrosamines. An ecologic study of cancer incidence in the United Kingdom (*25*) failed to confirm an association between nitrate exposure and gastric cancer, but higher incidences of brain and central nervous system cancers were found in areas with elevated nitrate concentrations. In addition to these findings, Ward et al. (*26*) reported that long-term exposure to nitrate-contaminated drinking water may contribute to the risk of non-Hodgkin lymphoma.

In 1992, Kostraba et al. (*27*) suggested that low-level nitrate exposure may play a role in the etiology of insulin-dependent diabetes mellitus. The authors theorized that ingested nitrate damages the insulin-producing cells in

Table 1. Methemoglobin-inducing substances.

Substance	Uses
Aniline dyes	Laundry inks, markers
Benzocaine, lidocaine	Local anesthetics
Chlorates	Matches
Isobutyl nitrite	Room deodorizers
Naphthalene	Moth balls
Nitrate/nitrite	Drinking water, fruits, vegetables, cured meats
Nitric oxide	Inhalant used to treat pulmonary hypertension in newborns
Nitrobenzene	Metal cleaners
Nitroethane	Nail care products
Nitrogen oxides	Auto emissions, wood smoke, gas-burning appliances
Nitroglycerine	Angina drug, explosives
Resorcinol	Antipruritic, over-the-counter medications
Sodium nitrite	Pickling salts, boiler conditioners, cleaning solutions
Sulfonamides	Antibiotics

Adapted from the ATSDR (*14*).

the pancreas through the generation of free radicals. In 1994, Virtanen et al. (*28*) reported results from a nationwide case–control study of childhood diabetes in Finland. They found that case children and their mothers had higher intakes of nitrite-rich foods than did control children and their mothers. Virtanen et al. (*28*) did not find an association between diabetes and exposure to nitrate-contaminated water. In a 1997 study conducted at the University of Leeds, Parslow et al. (*29*) reported that the risk of childhood diabetes increased from a baseline of 1.00 at nitrate concentrations < 3.22 mg/L to 1.27 at concentrations > 14.85 mg/L. These concentrations correspond to 0.7 and 3.34 mg nitrate-N per liter, respectively.

Nitrate exposure may also play a role in the development of thyroid disease. In the Netherlands, Van Maanen et al. (*30*) recently evaluated thyroid volume and function in populations exposed to different nitrate concentrations in their drinking water. Their research revealed a dose-dependent difference in the volume of the thyroid between low and medium nitrate-exposure groups versus high nitrate-exposure groups. The authors observed thyroid hypertrophy at nitrate concentrations > 50 mg/L (11mg/L as nitrogen) (*30*). An inverse relationship was established between the volume of the thyroid and serum thyroid stimulating hormone levels (*30*).

Conclusions

In this paper we describe two recent cases of infant methemoglobinemia, or blue baby syndrome, that were associated with the use of water from shallow private wells to dilute formula concentrates. Nitrate-N concentrations in these water supplies ranged from 22.9 to 27.4 mg/L. These cases serve as reminders of the hazard that nitrate-contaminated water poses to infants during the first 6 months of life. Chronic exposure to nitrate-contaminated drinking water has also been linked to cancer, thyroid disease, and diabetes. In an effort to ensure the safety of rural water supplies, action should be taken to reduce nitrate inputs to groundwater. In addition, families with private water supplies should conduct annual or semiannual testing and avoid drinking the water if the nitrate-N concentration exceeds the federal drinking water standard of 10 mg/L.

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Hours

Kennewick:
8am to noon
1pm to 5pm
Monday-Friday

Vital Records
Same-day
In-Person
Service
(Kennewick office only)
8am to 11:30am
1pm to 4pm
Monday-Friday

Pasco:
8am to noon
1pm to 5pm
Monday-Friday

What are nitrates?

Nitrates (NO3) are an essential source of nitrogen (N) for plants. When nitrogen fertilizers are used to enrich soils, nitrates may be carried by rain, irrigation and other surface waters through the soil into ground water. Human and animal wastes can also contribute to nitrate contamination of ground water. In Benton and Franklin Counties, agricultural practices have been linked to elevated levels of nitrates in drinking water. Although any well can become contaminated by nitrates, shallow, poorly constructed, or improperly located wells are more susceptible to contamination. Nitrate levels in drinking water can also be an indicator of overall water quality. Elevated nitrate levels may suggest the possible presence of other contaminants such as disease-causing organisms, pesticides, or other inorganic and organic compounds that could cause health problems.

Who is at risk from high nitrates in drinking water?

The Environmental Protection Agency (EPA) has set the Maximum Contaminant Level (MCL) of nitrate as nitrogen (NO3-N) at 10 mg/L (or 10 parts per million) for the safety of drinking water. Nitrate levels at or above this level have been known to cause a potentially fatal blood disorder in infants under six months of age called methemoglobinemia or "blue-baby" syndrome; in which there is a reduction in the oxygen-carrying capacity of blood. The symptoms of blue-baby syndrome can be subtle and often confused with other illnesses. An infant with mild to moderate blue-baby syndrome may have diarrhea, vomiting, and/or be lethargic. In more serious cases, infants will start to show obvious symptoms of cyanosis: the skin, lips or nailbeds may develop a slate-gray or bluish color and the infant could have trouble breathing. A sample of the infant's blood can easily confirm a diagnosis of blue-baby syndrome. It is difficult to determine the true incidence of blue-baby syndrome in Washington State because it is not a reportable disease.

Others at risk from excess nitrates in drinking water are:

- Pregnant women
- Individuals with reduced gastric acidity, and
- Individuals with a hereditary lack of methemoglobin reductase.

In addition, some health studies have suggested that exposure to high levels of nitrates could lead to some forms of cancer, but results are inconclusive

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Testing recommendations:

The only way to know if your drinking water is contaminated with nitrates is to have it tested. If you own a single family (domestic) well, it is recommended that you test your water every three years for nitrates; more often if you live in an area with a history of high nitrate levels or if someone in your home is at risk from nitrate contamination.

What to do if you have high nitrates in your drinking water:

If your drinking water sample tested above the MCL for nitrates and you or someone else in your home is at risk of developing health problems due to high nitrates, it is recommended that you do not drink the water. Find a safe, alternative water supply until you decide on a more permanent solution.

There is no simple way to remove all nitrates from your water. Finding and correcting the source of nitrate contamination is the best course of action. Although it is common to think of boiling, softening or filtration as a

means of purifying water, none of these methods reduce nitrate contamination. In fact, boiling water that contains high nitrates can actually increase the nitrate concentration. Reverse osmosis, ion exchange and distillation units could conceivably provide home treatment for removing nitrates from water, but those processes can be complicated, expensive, and generally require routine maintenance. Activated carbon and other simple filters do not remove nitrates to any significant degree. Home treatment units are generally not recommended, particularly as a permanent solution to assure nitrate-free water for infant use.

Your only long-term option may be to find a new source of water. This can be achieved by either drilling a new well or connecting to a public water supply system that has acceptable nitrate levels. When selecting a new well (or looking for sources of nitrate contamination around your existing well), be sure to consider ALL possible sources of contamination. Unlike other contaminants, nitrates are not diluted and filtered out as water travels through soil, so water wells:

- must be separated from possible sources of nitrate contamination, including both leaching and surface drainage such as barnyard runoff.
- should never be within 100 feet of a septic system, where an opportunity may exist for wastes to enter the well.
- should have a sanitary seal specifically designed for the top of the well casing. This seal must be correctly positioned, with all openings properly sealed, to disallow the entrance of any potential contaminant into the well casing and ultimately into the water source.

In addition, inspect surrounding areas within a 100 foot radius of the well for sources of pollution such as garbage, animal pens, barns and especially agricultural areas where nitrogen fertilizers can contaminate ground water (this includes your home garden).

For further information and/or assistance contact the Environmental Health Division at 460 4205 or the BFHD Laboratory at 460 4206.

Home **Top**

Benton Franklin Health District

Kennewick
7102 W Okanogan Pl
Kennewick WA
99336
(509) 460 4200

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412 W Clark
Pasco WA
99301
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Emergency Contact Information

Personal Emergency for Medical, Police, Fire, or Other: 911
Washington Poison Center: 1 (800) 222-1222 (www.wapc.org)
Washington Community Resource Information: 211 (www.win211.org)
BFHD Public Health Emergency/Imminent Health Hazard After-Hours Reporting: 509-543-3851

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State and County Resources

Rules and Regulations Administered by or Governing the Benton-Franklin Health District

WAC's - RCW's

Community Health Status Indicators

Reportable Conditions

Contact: info(at)bfhd.wa.gov

Employees

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Non-Domestic Wastewater Disposal System

We object to this license application because it demonstrates a lack of understanding and planning for an engineered non-domestic wastewater system that will meet the requirements of DEC standards.

DEC makes an important distinction between domestic wastewater and industrial/non-domestic wastewater.

- Domestic wastewater is the greywater and human water-borne waste from a dwelling. This includes wastewater generally derived from toilets, sinks, showers and laundry use.
- Non-domestic wastewater is discharge from any industrial or non-domestic activities.

Marijuana cultivation activities are clearly defined by DEC as non-domestic activities per *18 AAC 72 Wastewater Disposal* and therefore require special permitting and handling of wastewater disposal systems.

The Applicant has stated their intent to utilize a "commercial and industrial septic" for discharge of both sewage and non-domestic wastewater. This does not appear to represent a viable plan. DEC does not allow simple "septic systems" for discharge of non-domestic wastewater. This would be a violation of the DEC & EPA guidelines because it is considered a discharge of hazardous substances directly into the groundwater.

To clarify the process of planning this type of facility, DEC has created a 3-page document titled "*Marijuana Growing and Processing Facility Wastewater Frequently Asked Questions*". This sheet explains that such facilities are treated just like any other agricultural facility because they require management of the same industrial pollutants.

Anything that goes into a septic system must be carefully evaluated by a professional engineer licensed by the State of Alaska to confirm that the existing soils are capable of sufficient filtration and neutralization before it reaches the groundwater system. Because groundwater is inaccessible there is not an effective means of environmental cleanup of pollution if contaminants reach the groundwater. For residential sewage systems, there is an established standard based on prior engineering review for the industry as a whole, but nondomestic wastewater systems are each unique and each circumstance must be evaluated individually.

A recent example of illegal discharge of nondomestic wastewater into a septic system was reported in the Fairbanks Daily News-Miner when the EPA required a local business to shut down floor drains found to be illegally connected to a septic system. The attached article emphasizes the importance of proper management of wastewater that drains into septic systems because of its impact on drinkingwater systems.

Because of the intensive engineering, wastewater treatment equipment, and permitting process, a representative at the Fairbanks ADEC office confirmed that none of the marijuana cultivation facilities to date have received DEC permitting for discharge of non-domestic wastewater onsite. Instead they have all chosen to utilize a holding tank system with various levels of onsite neutralization equipment before the waste is pumped from the tank and transported to a local wastewater treatment facility.

DEC clarifies in the FAQ's that even an on-site wastewater system such as a holding tank must be designed by a professional engineer licensed by the State of Alaska and permitted by DEC prior to disposing of the non-domestic wastewater into the holding tank. The separation distances from a commercial well to a non-domestic wastewater holding tank remain 200ft. This will require careful

consideration as the Applicant reworks their Site Plan.

The State License Application and FNSB Permit Application demonstrate that AK Green Bee has not yet planned for operation of this facility per DEC requirements. Additionally, the applicant has verbally confirmed to the residents of our community that the business still intends to utilize only a septic system with leach field for discharge of all nondomestic wastewater from the facility despite our concerns regarding Nutrient Pollution. **The Site Plan submitted in the Application packet does not indicate location of the non-domestic wastewater system and has not planned for an access road that will be needed to support the weight of wastewater pump trucks that will be required for removal of wastewater from the site.**

It is clear that DEC qualifies wastewater from this type of facility as high risk, and it should not be allowed to spill onto the ground or enter the groundwater. Our concerns are heightened as we watch construction on this unpermitted facility continue. The foundation is being prepared for concrete, but no piping has yet been installed to capture the water from the trench drain that runs the length of the facility. **If any amount of this wastewater is allowed to drain directly into the soils it will be a serious point of groundwater contamination and a violation of DEC codes. This application does not include a plan for land use within the requirements of DEC and should be DENIED.**

MARIJUANA GROWING OR PROCESSING FACILITY

WASTEWATER FREQUENTLY ASKED QUESTIONS

Is there a specific wastewater permit or authorization required for marijuana wastewater discharge?

No, there is not a specific wastewater permit or authorization required for marijuana at this time. However, see below for additional information on wastewater discharges to public utility sanitary systems and engineering plan review.

Is there anything special I need for my wastewater system to support a marijuana growing or processing facility?

There is nothing of specific concern about the growing or processing of marijuana for your wastewater system that is not already applicable for similar agricultural activities. Examples could include commercial greenhouses, farms, agricultural product processing facilities, etc.

If I want to begin growing or processing marijuana, what steps should I take regarding wastewater?

It is important to understand that wastewater generated in the production of marijuana, both commercially and privately, is considered *non-domestic wastewater* according to state regulations Alaska Administrative Code (AAC) 18 AAC 72, Wastewater Disposal (go to the following website for the regulations: http://dec.alaska.gov/commish/regulations/pdfs/18%20AAC%2072.pdf). On-site septic systems and public sanitary systems are designed to treat domestic wastewater, which is wastewater generally derived from toilets, sinks, showers and laundry use.

If your intended facility will be or is connected to a public sanitary sewer, and you intend to dispose of the non-domestic wastewater to that sewer, you should contact the owner and/or operator of the sewer. The owner and/or operator will likely ask you to explain how much wastewater you will be generating and the expected chemical characteristics of the wastewater such as fertilizers, pesticides, solid material, etc. The owner and/or operator of the system will inform you if your connection is acceptable or if additional treatment of your wastewater is required prior to disposing of it in the public sewer system. The owner and/or operator also may elect not to accept non-domestic wastewater since it could adversely impact their treatment works.

If your intended facility has an onsite septic system or other on-site wastewater system such as a holding tank that you propose to receive wastewater from your operations, you will need to have the system reviewed by a professional engineer licensed by the State of Alaska prior to disposing of the non-domestic wastewater into the existing system. The existing on-site system was likely not designed to accommodate a non-domestic wastewater. A licensed professional engineer can evaluate your existing system and determine if the system can accept a non-domestic wastewater and still function in a manner that protects public health and the environment. Your engineer would submit a plan to the Alaska Department of Environmental Conservation (Department) Wastewater Discharge Authorization Program, with an appropriate plan review fee, for approval to modify the

use of the system, along with any necessary system modification needed to accommodate the new waste stream.

Note discharge of the wastewater directly to surface water (e.g., marine waters, lakes, ponds, rivers, streams, wetlands, etc.) is discouraged and may only be done after obtaining an Alaska Pollutant Discharge Elimination System (APDES) permit from the Department's Wastewater Discharge Authorization Program. APDES permits can take several months to issue and contain routine monitoring and reporting requirements to be conducted and paid for by the permittee to verify the discharge is not adversely impacting surface water quality.

What are the fees for an on-site wastewater plan review?

The plan review fees are located in 18 AAC 72.955, Table C. Click HERE for a link to the regulation. The fees are determined by the design daily flow of the system under review.

Are there other options besides modifying the existing on-site system?

Yes. Your engineer could elect to completely segregate the non-domestic wastewater and treat or store it separately from the domestic wastewater. You can discuss these, and other options with your licensed professional engineer.

Can you recommend an engineer?

The Department does not provide a recommendation of engineers in the interest of being fair and impartial. Any professional engineer in civil or environmental engineering licensed by the State of Alaska may submit sealed wastewater plans to the Department for review. The internet, telephone book and talking with local contractors are all sources of information for locating licensed professional engineers.

How long will a plan review take?

Once the Department receives a complete plan submittal, we issue a response within 30 days.

What if I grow or process marijuana in my home or don't do it commercially?

From a wastewater perspective, the location or commercial activity doesn't change the fact that wastewater from that activity is non-domestic.

Is there a certain threshold where it's just too small to worry about?

The Department has not established a certain size of agricultural activity below which there is no concern. If you have questions, you should consult with a licensed professional engineer to evaluate your operation and the specifics of your on-site wastewater system.

What if I simply do not generate any wastewater requiring disposal from my growing or processing operation (i.e., closed loop, recycled system; zero disposal)?

Approval of wastewater discharge or disposal is only required when the wastewater is intentionally released to lands or waters (surface water and groundwater) of the State. If disposal or discharge is not planned, then approval from the Department's Wastewater Discharge Authorization Program is unnecessary.

What could happen if I don't evaluate my on-site system and just put my non-domestic wastewater in it?

First, the system could cease to operate as it was designed to. You could overload the system with too much water and cause it to fail. Failed systems can "daylight", which means the partially treated wastewater would be above ground and become a public health hazard.

Additionally, any non-domestic wastes present in the wastewater (e.g., pesticides, fertilizers, etc.) would now be disposed of in the ground. These chemicals could enter the groundwater and potentially contaminate public or private drinking water systems threatening public health.

MINIMUM SEPARATION DISTANCES

WELL CLASSIFICATION AND ABBREVIATED DEFINITIONS (SEE 18 AAC 80 FOR COMPLETE DEFINITIONS)

Private Water System: means a potable water system that is not a public water system.

Public Water System: a potable water system serving 25 or more people at least 60 days per year (formerly known as Class "A" and Class "B" Water Systems). Public Water Systems are either:

1. Community Water Systems
2. Non-Community Water Systems

Waterline: means a distribution main line (see 18 AAC 80.1990)

Water Service Line: has the meaning found in 18 AAC 80.1990

Private Water Service Line: means a line or pipe serving a Private Water System (see 18 AAC 80.1990)

Distance From Well	Distance To Private Sewer Line or Cleanout	Distance To Community Sewer Line	Distance To Community Sewer Cleanout	Distance To Septic Tank	Distance To Holding Tank	Distance To Absorption Field	Distance To Fuel Tank
Public Water System Well	100 feet	200 feet	200 feet	200 feet	200 feet	200 feet	100 feet
Private Water System Well	25 feet	75 feet	100 feet	100 feet	75 feet	100 feet	25 feet
Waterline	10 feet	10 feet	10 feet	10 feet	10 feet	10 feet	10 feet
Water Service Line	No State of Alaska separation distance requirement to sewer components. Please refer to the Uniform Plumbing Code for the current separation distance requirements.						10 feet
Private Water Service Line							10 feet

Distance From Sewer Component	Distance To River, Lake, Stream, Spring, Slough	Distance To Lot Line	Distance To Foundation	Distance To Absorption Field	Distance To Ground Surface (cover)	Other Absorption Fields	Seasonal High Water Table (vertically)	Impermeable Soil (vertically)	Slopes Greater than 25%
Septic Tank	100 feet	recommend 10 feet	10 feet	10 feet	See Note 1 Below	recommend 10 feet	Not Applicable	Not Applicable	Not Applicable
Absorption Field	100 feet	recommend 10 feet	10 feet	Not Applicable	See Note 1 Below	See Note 2 Below	4 feet	6 feet	50 feet

Note 1-Southwest Alaska (Kodiak and southwest of Chignik)=2 feet minimum ground cover; Southeast Alaska, Municipality of Anchorage & Valdez=3 feet minimum ground cover; All remaining areas of the State of Alaska=4 feet minimum ground cover **Note 2**-2x gravel depth or 6 feet whichever is greater.

http://www.newsminer.com/business/epa-orders-fairbanks-business-to-close-illegal-motor-vehicle-waste/article_f78c4f90-7ecf-11e7-91ce-17bd1a2a9c27.html

EPA orders Fairbanks business to close illegal motor vehicle waste disposal well

Staff Report Aug 11, 2017

FAIRBANKS - Stepping Stone Builders, Inc. has agreed with the Environmental Protection Agency to close an illegal motor vehicle waste disposal well, according to an EPA news release.

Motor vehicle waste disposal wells are often found in maintenance bays and catch fluids from vehicles such as oil, transmission fluid, and antifreeze, and dispose of them into septic systems. These wells pose a high risk to drinking water.

In 2016, an inspection found that Stepping Stone Builders had three floor drains illegally connected to a septic system. The Cushman Street business is located within the groundwater protection area for the public drinking water system, and close to other water systems.

The business also also paid a $36,500 penalty for alleged violations of the Safe Drinking Water Act. In 2000, the EPA banned new motor vehicle waste disposal wells nationwide. In 2005, all existing wells in Alaska were ordered closed due to the high risk they pose to drinking water. About 80 percent of Alaskans depend on groundwater for drinking water.

“Motor vehicle waste disposal wells have the potential to allow oil, antifreeze, brake fluid and other hazardous chemicals to contaminate drinking water sources and put people’s health at risk,” said Edward Kowalski, director of the Office of Compliance and Enforcement in EPA’s Seattle office. “EPA will continue to focus on closing these illegal motor vehicle waste disposal wells to protect drinking water in Alaska.”

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Security & Crime Prevention

We object to the license application for this marijuana establishment which is being proposed in our residential neighborhood because of the increased risk to security and increase of crime in our community.

A significant element of the fight for legalization of marijuana has been the conflict between federal and state legislation. This dispute has resulted in marijuana establishments being well-publicized as primarily cash businesses. **This means that the facilities are expected to have large quantities of cash onsite which makes them prime targets for burglary.** With burglaries on the rise in the FNSB criminals are actively working through the communities looking for targets, and ones anticipated to have a stash of cash are top of the list. The marijuana establishments are easy targets because their locations are easily identified on their license and listed on the Alcohol and Marijuana Control Office website.

The Applicant shows clear awareness of the residential makeup of this neighborhood in the application, and yet they have no intention of setting up any type of security fence at this time. She stated that it might be considered in the summer of 2018. This will be a completely unprotected structure planted between multiple residences with nothing stopping intruders from approaching on any side **through our residential neighborhood**. This is especially ironic since one of the business partners operates as a fencing contractor.

This particular location is easily accessible from Badger Road but still somewhat screened from passing traffic so that the burglary might not be readily detected. AK Green Bee's solution for a security system is a cellular connected alarm device. However, this can be quite simply overcome with a homemade cellular jamming device following plans found on the internet. This would prevent the security system from alerting the authorities during a burglary. Most "jammers" can be made at home using basic electronics and plans that are available on the Internet. These are not complicated devices, and there are plenty of people with the resources to make and use them.

Once the security system was jammed from reaching out to local authorities, the wireless cameras would also be blocked as well or wired camera systems are easily bypassed with simple spray paint or laser pointers. Most budget security cameras provide a record of what happened, but the picture quality is so low that facial features are blurred and cannot be recognized. Door locks, if connected to the security system, can be tampered with once the security system is compromised. Electronic door locks have plenty of vulnerabilities. These technologies are not fool proof. Key-card entry can be spoofed. RFID and NFC Cards can be cloned in less than one minute. **Access to this marijuana facility could be gained within minutes, and without a functional alarm system, the authorities would not be notified to respond.**

Apprehending and prosecuting such criminals to prevent repeat occurrences will be nearly impossible with the current policies of local law enforcement. Because of limited resources for processing of evidence, the Troopers do not typically collect fingerprints for DNA for any crime other than rape or murder. This means that unless the security cameras are high quality (read "very expensive") to allow for capture of a very clear image, there will be little of no follow-up by law enforcement.

Another significant vulnerability of the building security is the garage door. These types of doors are very difficult to secure effectively because they cover a large opening and are structurally weak. Someone could easily cut their way through the door or drive a truck into it. Once this door is compromised, the entire facility is vulnerable. The security system would only notify the Owner of an alarm if the door were actually opened to break contact of the door sensors. **Cutting into the door would not be expected to trigger an alarm so it would allow unrestricted access directly into the Harvesting Area without alarm notification**.

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

In the event that a burglary was attempted without disabling the alarm system, the monitoring service does not have the authority to request a response from the Alaska State Troopers. Instead they will contact the Applicant who will confirm what is happening at the building and then call the Troopers. The Applicant has specifically assured us that the authorities will be onsite within 2 minutes, but we are well aware that AK State Trooper response time is typically 30-45 minutes because they have a limited number of officers covering a large area of the Borough. The thieves would be long gone by then, and if not **they will flee into our neighborhood – which will make it a dangerous place for us and our kids.**

Targeting of these establishments will in turn increase the criminal element in and around our residential neighborhood. If would-be thieves cannot break into the grow facility, they will turn the surrounding residential properties in frustration looking for loot. At that point they are more likely to pose a risk of bodily harm to residents.

There is already a high rate of mail theft in this area, and burglaries are on the rise throughout the Borough. We has already experienced a noticeable amount of traffic throughout our neighborhood with construction vehicles trying to find the access road to AK Green Bee, Inc. – which is through the church parking lot. Would-be criminals will do the same thing casing our homes and properties looking for the best access for burglaries. **We do not want a business neighbor that increases the likelihood of crime in our homes.**

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

FNSB Marijuana Establishment Conditional Use Permit Application CU2017-025

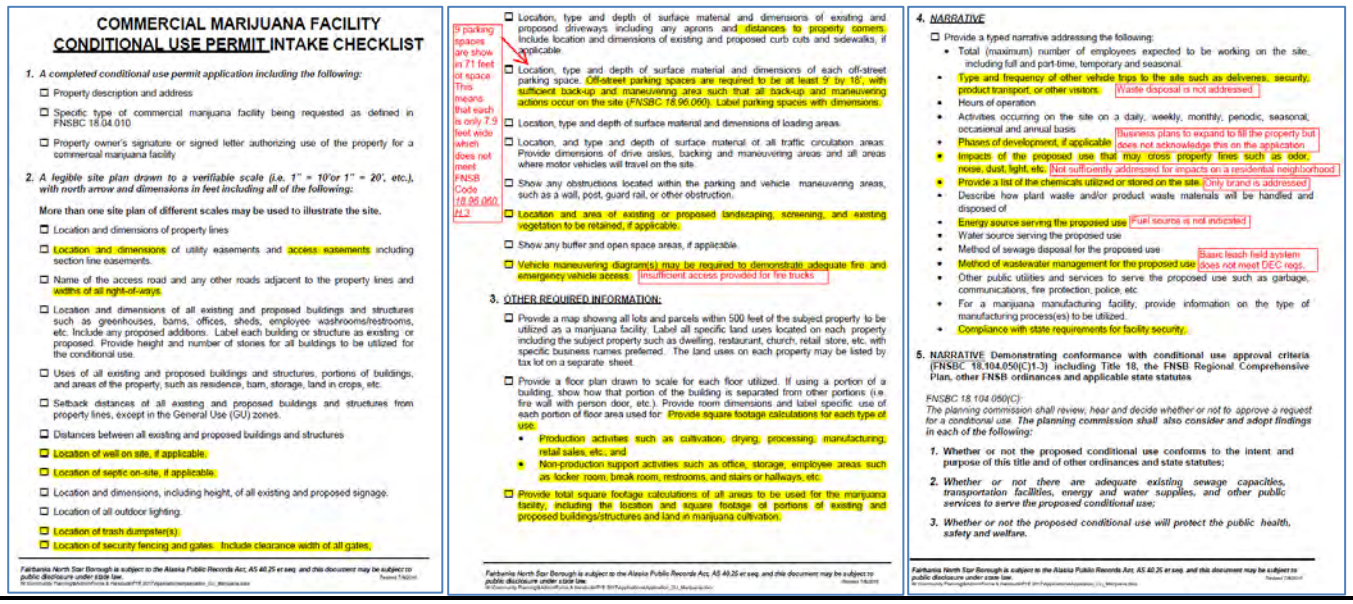
The residents of our neighborhood first became aware of AK Green Bee, Inc.'s intent to establish a marijuana facility in our residential neighborhood when we were notified by the FNSB of the Public Hearing for the land use permit. As we reviewed the FNSB Marijuana Establishment Conditional Use Permit Application CU2017-025 for this facility we became increasingly concerned by the lack of due diligence demonstrated.

Incomplete Application

To assist development of the marijuana industry in the FNSB, the Community Planning Department has developed a comprehensive "**How to Get Your Commercial Marijuana Facility Permit, The Packet**". It is more detailed information than is provided to any other industry or small business preparing for establishment in FNSB. A copy is attached for reference. This packet includes:

- FNSB Codes and Definitions
- Marijuana Zoning Matrix
- Commercial Marijuana Facility Permit Workshop – Mapping Made Easy Presentation
- Marijuana Facility Zoning Permit Application
  - Detailed Instruction Checklist
  - How to Draw a Commercial/Industrial Site Plan
- ***Marijuana Facility Conditional Use Permit Application***
  - ***Detailed Instruction Checklist***
  - ***Public Notice Sign Posting Affidavit***
- Marijuana Licensing Frequently Asked Questions
- Marijuana Resource and Contact Information

This large cultivation facility required submittal of a Marijuana Facility Conditional Use Permit Application. The application is provided by the FNSB with a very clear and detailed set of instructions in the form of a checklist for ease of use. However, having a detailed checklist of the requirements, this application fails to address many of the key items required to demonstrate a comprehensive plan for safe operation of the facility. Our review found the application lacking in at least 1/3 of the required items detailed on the checklist. The missing and incomplete items are highlighted in yellow on the checklist which is included in this section for reference.



COMMERCIAL MARIJUANA FACILITY
CONDITIONAL USE PERMIT INTAKE CHECKLIST

1. *A completed conditional use permit application including the following:*
   - ☐ Property description and address
   - ☐ Specific type of commercial marijuana facility being requested as defined in FNSBC 18.04.010
   - ☐ Property owner's signature or signed letter authorizing use of the property for a commercial marijuana facility
2. *A legible site plan drawn to a verifiable scale (i.e. 1" = 10'or 1" = 20', etc.), with north arrow and dimensions in feet including all of the following:*

   More than one site plan of different scales may be used to illustrate the site.
   - ☐ Location and dimensions of property lines
   - ☐ Location and dimensions of utility easements and access easements including section line easements.
   - ☐ Name of the access road and any other roads adjacent to the property lines and widths of all right-of-ways.
   - ☐ Location and dimensions of all existing and proposed buildings and structures such as greenhouses, barns, offices, sheds, employee washrooms/restrooms, etc. Include any proposed additions. Label each building or structure as existing or proposed. Provide height and number of stories for all buildings to be utilized for the conditional use.
   - ☐ Uses of all existing and proposed buildings and structures, portions of buildings, and areas of the property, such as residence, barn, storage, land in crops, etc.
   - ☐ Setback distances of all existing and proposed buildings and structures from property lines, except in the General Use (GU) zones.
   - ☐ Distances between all existing and proposed buildings and structures
   - ☐ Location of well on site, if applicable.
   - ☐ Location of septic on-site, if applicable.
   - ☐ Location and dimensions, including height, of all existing and proposed signage.
   - ☐ Location of all outdoor lighting.
   - ☐ Location of trash dumpster(s).
   - ☐ Location of security fencing and gates. Include clearance width of all gates.

Fairbanks North Star Borough is subject to the Alaska Public Records Act, AS 40.25 et seq. and this document may be subject to public disclosure under state law.

If parking spaces are show in 71 feet or space. This means that each is only 7.9 feet wide which does not meet FNSB Code 18.96.060 (1.3)

   - ☐ Location, type and depth of surface material and dimensions of existing and proposed driveways including any aprons and distances to property corners. Include location and dimensions of existing and proposed curb cuts and sidewalks, if applicable.
   - ☐ Location, type and depth of surface material and dimensions of each off-street parking space. Off-street parking spaces are required to be at least 9' by 18', with sufficient back-up and maneuvering area such that all back-up and maneuvering actions occur on the site (FNSBC 18.96.060). Label parking spaces with dimensions.
   - ☐ Location, type and depth of surface material and dimensions of loading areas.
   - ☐ Location, and type and depth of surface material of all traffic circulation areas. Provide dimensions of drive aisles, backing and maneuvering areas and all areas where motor vehicles will travel on the site.
   - ☐ Show any obstructions located within the parking and vehicle maneuvering areas, such as a wall, post, guard rail, or other obstruction.
   - ☐ Location and area of existing or proposed landscaping, screening, and existing vegetation to be retained, if applicable.
   - ☐ Show any buffer and open space areas, if applicable.
   - ☐ Vehicle maneuvering diagram(s) may be required to demonstrate adequate fire and emergency vehicle access. Insufficient access provided for fire trucks
3. OTHER REQUIRED INFORMATION:
   - ☐ Provide a map showing all lots and parcels within 500 feet of the subject property to be utilized as a marijuana facility. Label all specific land uses located on each property including the subject property such as dwelling, restaurant, church, retail store, etc. with specific business names preferred. The land uses on each property may be listed by tax lot on a separate sheet.
   - ☐ Provide a floor plan drawn to scale for each floor utilized. If using a portion of a building, show how that portion of the building is separated from other portions (i.e. fire wall with person door, etc.). Provide room dimensions and label specific use of each portion of floor area used for. Provide square footage calculations for each type of use.
     - Production activities such as cultivation, drying, processing, manufacturing, retail sales, etc., and
     - Non-production support activities such as office, storage, employee areas such as locker room, break room, restrooms, and stairs or hallways, etc.
   - ☐ Provide total square footage calculations of all areas to be used for the marijuana facility, including the location and square footage of portions of existing and proposed buildings/structures and land in marijuana cultivation.

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4. NARRATIVE
   - ☐ Provide a typed narrative addressing the following:
     - Total (maximum) number of employees expected to be working on the site, including full and part-time, temporary and seasonal.
     - Type and frequency of other vehicle trips to the site such as deliveries, security, product transport, or other visitors. Waste disposal is not addressed
     - Hours of operation.
     - Activities occurring on the site on a daily, weekly, monthly, periodic, seasonal, occasional and annual basis
     - Phases of development, if applicable Business plans to expand to fill the property but does not acknowledge the on the application
     - Impacts of the proposed use that may cross property lines such as odor, noise, dust, light, etc. Not sufficiently addressed for impacts on a residential neighborhood
     - Provide a list of the chemicals utilized or stored on the site. Only brand is addressed
     - Describe how plant waste and/or product waste materials will be handled and disposed of
     - Energy source serving the proposed use Fuel source is not indicated
     - Water source serving the proposed use
     - Method of sewage disposal for the proposed use
     - Method of wastewater management for the proposed use Basic leach field system does not meet DEC regs.
     - Other public utilities and services to serve the proposed use such as garbage, communications, fire protection, police, etc.
     - For a marijuana manufacturing facility, provide information on the type of manufacturing process(es) to be utilized.
     - Compliance with state requirements for facility security.
5. NARRATIVE Demonstrating conformance with conditional use approval criteria (FNSBC 18.104.050(C)1-3) including Title 18, the FNSB Regional Comprehensive Plan, other FNSB ordinances and applicable state statutes

   FNSBC 18.104.050(C):
   The planning commission shall review, hear and decide whether or not to approve a request for a conditional use. The planning commission shall also consider and adopt findings in each of the following:
   1. *Whether or not the proposed conditional use conforms to the intent and purpose of this title and of other ordinances and state statutes;*
   2. *Whether or not there are adequate existing sewage capacities, transportation facilities, energy and water supplies, and other public services to serve the proposed conditional use;*
   3. *Whether or not the proposed conditional use will protect the public health, safety and welfare.*

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Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Despite the grossly incomplete application when compared to the instructions checklist, the Applicant for AK Green Bee, Inc. freely signed the certification statement:

> **"I certify that the information included in this application is to the best of my knowledge true and complete."**

Public Notice Sign Posting

Furthermore, this Conditional Use Permit Application includes a Public Notice Sign Posting. To document compliance with posting requirements, the Affidavit of posting requires sworn testimony of compliance including the following stipulations in *FNSB Code 18.104.010*:

- **b.** Sign is clearly visible from streets and roads
- **c.** Sign will be maintained free of snow and other materials which impede readability.
- **d.** Sign is posted between an elevation of 2' and 8' above ground level and *no further* than 50' from the edge of the road to further ensure readability from streets.

NONE of these requirements have been met by the posting at the site as documented by the attached photos.

b. Public Notice Sign was not properly posted for clear visibility from the road.

- The sign posting was so obscured from Badger Road that we were only able to locate the sign by parking along the road and walking down in the ditch line of Badger Road through the brush searching for it specifically. It was not mounted facing toward Badger Road, but was perpendicular to the roadway. It is mounted on a tree facing the neighboring parking lot, but in a way that is completely screened by trees and NOT visible from this parking lot.
- The sign was facing directly north along this section of Badger Road which runs north-south. Therefore it is completely invisible when travelling along the road from the south.
- When travelling along Bader Road heading south at the 55mph speed limit, the sign posting has been virtually invisible behind a thick screen of trees and brush.

c. Sign was NOT maintained free of tree and shrub growth that impedes readability.
The sign was required to be posted from July 25th to Aug 15th. However, until August 8, NO attempt had been made to trim the trees and shrubs between the posing location and Badger Rd to allow for visibility. Even the branches within 12 inches of the sign were not cut. Driving along the road, the sign has been just barely visible at a quick glimpse between trees and shrubs, and only if you know where to look. It has been completely screened by the vegetation. Even after the Aug 8th trimming, the visibility remains obstructed from much of the roadway.

d. Sign was NOT posted within 50' of the edge of Badger Road to ensure readability from streets.
Field dimensions taken onsite, confirm that the sign is posted at a distance more than **70'** from the edge of Badger Road (the white line). Additionally, it is worth noting that because the posting is not facing the roadway directly, it is obstructed by oncoming traffic, and the distance from direction of travel (yellow line) to the only viewable position of the sign is significantly more than 84 feet.

The Public Notice Sign Posting clearly has not met the requirements for Public Notice for 20 days nor was a good faith effort made to meet the intent of the posting. **Despite these easily quantifiably facts, the applicant completed the sworn affidavit confirming compliance. This represents the second false certification by AK Green Bee, Inc. in this permit application.**

As the neighboring residents we are very concerned by this pattern of disregard for regulation as it relates to this controlled-substance facility. If AK Green Bee, Inc. cannot follow simple rules and regulations, how are we to trust that more significant aspects of the business will meet State statutes and regulations?

How to Get Your Commercial Marijuana Facility Permit

THE PACKET

18.96.240 Standards for commercial marijuana establishments

A. General Standards.

1. Applicability. Standards of this section shall apply to commercial marijuana establishments regardless of whether they are a permitted or conditional use.

2. A commercial marijuana establishment may only be allowed with the written consent of the owner of the property.

3. No marijuana establishment, except a marijuana testing facility, shall be located within the following buffer distances:

a. Five hundred feet of primary and secondary school buildings (K-12) including vocational programs, playgrounds, adult and juvenile correctional facilities and housing facilities owned by a public housing authority with children as residents; and

b. Two hundred feet of any post-secondary school buildings including but not limited to trade/technical/vocational schools, colleges and universities; and

c. One hundred feet of youth centers, group homes serving persons ages 18 and under, public swimming pools, state licensed day care facilities, arcades, state licensed substance use treatment provider or facility providing substance abuse use treatment, church buildings and residential zones (RE, RR, SF, TF, MF, MFO).

d. Buffer distances shall be measured from the lot line of the lot containing a use or zone listed in subsections (A)(3)(a) through (c) of this section to the commercial marijuana establishment.

e. Buffer distance measurements shall not extend beyond the nearest ordinary high water (OHW) mark of a river or lake or beyond the nearest edge of a right-of-way (ROW) of a controlled access facility.

4. Outdoor Storage. No outdoor storage of marijuana, marijuana products or hazardous substances shall be allowed.

5. In all zones in which marijuana establishments, with the exception of a marijuana testing facility, are a permitted or conditional use, the applicant shall include an area map drawn to scale indicating all land uses on complete parcels within a 500-foot proximity of the lot upon which the applicant is seeking a zoning permit or conditional use permit.

6. Marijuana establishments other than marijuana cultivation facilities, indoor small and marijuana testing facilities located in GU-1 or GU-5 zoning and adjacent to a lot upon which a

principal building used as a dwelling is located are a conditional use subject to the requirements of this title.

B. Cultivation Facility Standards.

1. Yard Setbacks. Outdoor marijuana cultivation facilities, including all land planted with marijuana, shall be located at least 50 feet from a lot line.

2. Height Limitations.

a. The maximum height for a marijuana cultivation facility, indoor small shall be 35 feet.

b. The maximum height for a marijuana cultivation facility, indoor large shall be 75 feet.

18.04.010 Definitions

A. Rules of Construction. The language set forth in the text of this title shall be interpreted in accordance with the following rules of constructions:
1. Words used in the present tense shall include the past and future tenses;

2. All references to the singular include the plural as well;

3. The word “shall” is mandatory and not discretionary;

4. The word “may” is permissive;

5. The word “person” shall include a corporation or partnership as well as an individual;

6. The masculine gender shall include the feminine and neuter genders;

7. The word “lot” shall include the words “plot,” “parcel,” or “tract”;

8. The word “building” shall include the word “structure”;

9. Any words not defined herein shall be construed according to their generally accepted meanings.

B. Definitions. For purposes of this title, the words and terms defined herein shall be defined and interpreted as follows:

“Marijuana” means all parts of the plant of the genus cannabis whether growing or not, the seeds thereof, the resin extracted from any part of the plant, and every compound, manufacture, salt, derivative, mixture, or preparation of the plant, its seeds, or its resin, including marijuana concentrate. “Marijuana” does not include fiber produced from the stalks, oil, or cake made from the seeds of the plant, sterilized seed of the plant which is incapable of germination, or the weight of any other ingredient combined with marijuana to prepare topical or oral administrations, food, drink, or other products.

"Marijuana cultivation facility, indoor large" means a legally licensed, fully enclosed commercial marijuana cultivation facility as defined by state law, in which all growing, preparation and packaging activities are conducted completely indoors. Net floor area of all cultivation facility structures does not exceed 10,000 square feet.

"Marijuana cultivation facility, indoor small" means a legally licensed, fully enclosed commercial marijuana cultivation facility as defined by state law, in which all growing, preparation and packaging activities are conducted completely indoors. Net floor area of all cultivation facility structures does not exceed 1,500 square feet.

"Marijuana cultivation facility, indoor unlimited" means a legally licensed, fully enclosed commercial marijuana cultivation facility as defined by state law, in which all growing, preparation and packaging activities are conducted completely indoors and for which the net floor area of all cultivation facility structures exceeds 10,000 square feet.

"Marijuana cultivation facility, outdoor limited" means a legally licensed, commercial marijuana cultivation facility as defined by state law in which any portion of the growing, preparation and packaging activities are conducted outdoors or within buildings that are not fully enclosed or which utilize odor-permeable materials. Area of the marijuana cultivation facility does not exceed 20 percent of the total parcel area, including all land planted with marijuana and the net floor area of all temporary and permanent buildings utilized to grow, prepare and package marijuana.

"Marijuana cultivation facility, outdoor unlimited" means a legally licensed, commercial marijuana cultivation facility as defined by state law in which any portion of the growing, preparation and packaging activities are conducted outdoors or within buildings that are not fully enclosed or which utilize odor-permeable materials. Area of the marijuana cultivation facility exceeds 20 percent of the total parcel area, including all land planted with marijuana and the net floor area of all temporary and permanent buildings utilized to grow, prepare and package marijuana.

"Marijuana establishment" means a marijuana cultivation facility, a marijuana testing facility, a marijuana product manufacturing facility, a retail marijuana store, or a marijuana retail agricultural accessory facility.

"Marijuana product manufacturing facility, limited" means a legally licensed commercial marijuana product manufacturing facility as defined by state law, that packages, prepares or processes marijuana into a value-added form or product subject to testing, but excluding extraction processes utilizing hazardous substances, volatile chemicals or explosive materials or processes. Net floor area of the marijuana product manufacturing facility does not exceed 10,000 square feet.

"Marijuana product manufacturing facility, unlimited" means a legally licensed commercial marijuana product manufacturing facility as defined by state law that processes marijuana into a product via any means that utilizes hazardous substances, volatile chemicals or explosive

materials or processes, including, but not limited to, propane or butane, or for which the net floor area exceeds 10,000 square feet.

“Marijuana products” means concentrated marijuana products and marijuana products that are comprised of marijuana and other ingredients and are intended for use or consumption, such as, but not limited to, edible products, ointments, and tinctures.

“Marijuana retail agricultural accessory facility” means a legally licensed commercial marijuana agricultural retail facility that sells only marijuana plants, seeds and packaged marijuana grown at the legally licensed commercial marijuana cultivation facility located on the same lot. The agricultural accessory retail facility shall be clearly incidental and accessory to the marijuana cultivation facility and does not exceed a maximum of 1,000 square feet in net floor area.

“Marijuana testing facility” means a legally licensed commercial marijuana testing facility as defined by state law that is registered to analyze and certify the safety and potency of marijuana and marijuana products.

“Retail marijuana store” means a legally licensed commercial retail marijuana store as defined by state law. A retail marijuana store may sell marijuana accessories as defined by state law.

FAIRBANKS NORTH STAR BOROUGH Department of Community Planning
809 Pioneer Road ☆ P.O. Box 71267 ☆ Fairbanks, Alaska 99707-1267 (907) 459-1260 ☆ FAX (907) 459-1255

This sheet only presents FNSB zoning/requirements and does not present state or city law/requirements. This information is presented for illustrative purposes only; it may not be accurate and should not be relied upon. For complete and accurate zoning information, please review Title 18 of FNSB code.

FNSB MARIJUANA FACILITIES ZONING

TYPE OF MARIJUANA FACILITY	Zoning District															
	OR	RA	RF	RE	RR	SF	TF	MF	MFO	LC	GC	CBD	LI	HI	ML	GU
MJ CULTIVATION INDOOR SMALL		Z	Z							CUP	CUP		Z	Z		Z
MJ CULTIVATION INDOOR LARGE		Z	Z							CUP	CUP		Z	Z		Z†/CUP
MJ CULTIVATION INDOOR UNLIMITED		CUP	CUP								CUP		CUP	Z		Z†/CUP
MJ CULTIVATION OUTDOOR LIMITED		Z	Z													Z†/CUP
MJ CULTIVATION OUTDOOR UNLIMITED		CUP	CUP													CUP
MJ PRODUCT MANUFACTURING LIMITED		CUP	CUP							CUP	Z*/CUP**	Z*/CUP**	Z	Z		Z†/CUP
MJ PRODUCT MANUFACTURING UNLIMITED													CUP	Z		CUP
MJ RETAIL											Z	Z	Z	Z		Z†/CUP
MJ RETAIL AGRICULTURAL ACCESSORY		CUP	CUP													Z†/CUP
MJ TESTING		CUP	CUP							Z	Z	Z	Z	Z		Z

Residential Zones

Notes:

Z = Permitted Use: Zoning Permit Required

CUP = Conditional Use Permit: Public Hearing Required

* Only in conjunction with a marijuana retail facility on the same site

** If not in conjunction with a marijuana retail facility on the same site

† If not adjacent to a lot upon which a principal building used as a dwelling is located

In addition, marijuana establishments must be located:

1) 500 feet from primary and secondary schools (K-12) including vocational programs, playgrounds, adult and juvenile correctional facilities and housing facilities owned by a public housing authority with children as residents

2) 200 feet from any post-secondary school including but not limited to trade/technical/vocational schools, colleges and universities

3) 100 feet from youth centers, group homes serving persons age 18 and under, public swimming pools, state licensed daycare facilities, arcades, and state licensed substance use treatment provider or facility providing substance abuse treatment, church buildings and residential zones (RE, RR, SF, TF, MF, MFO)

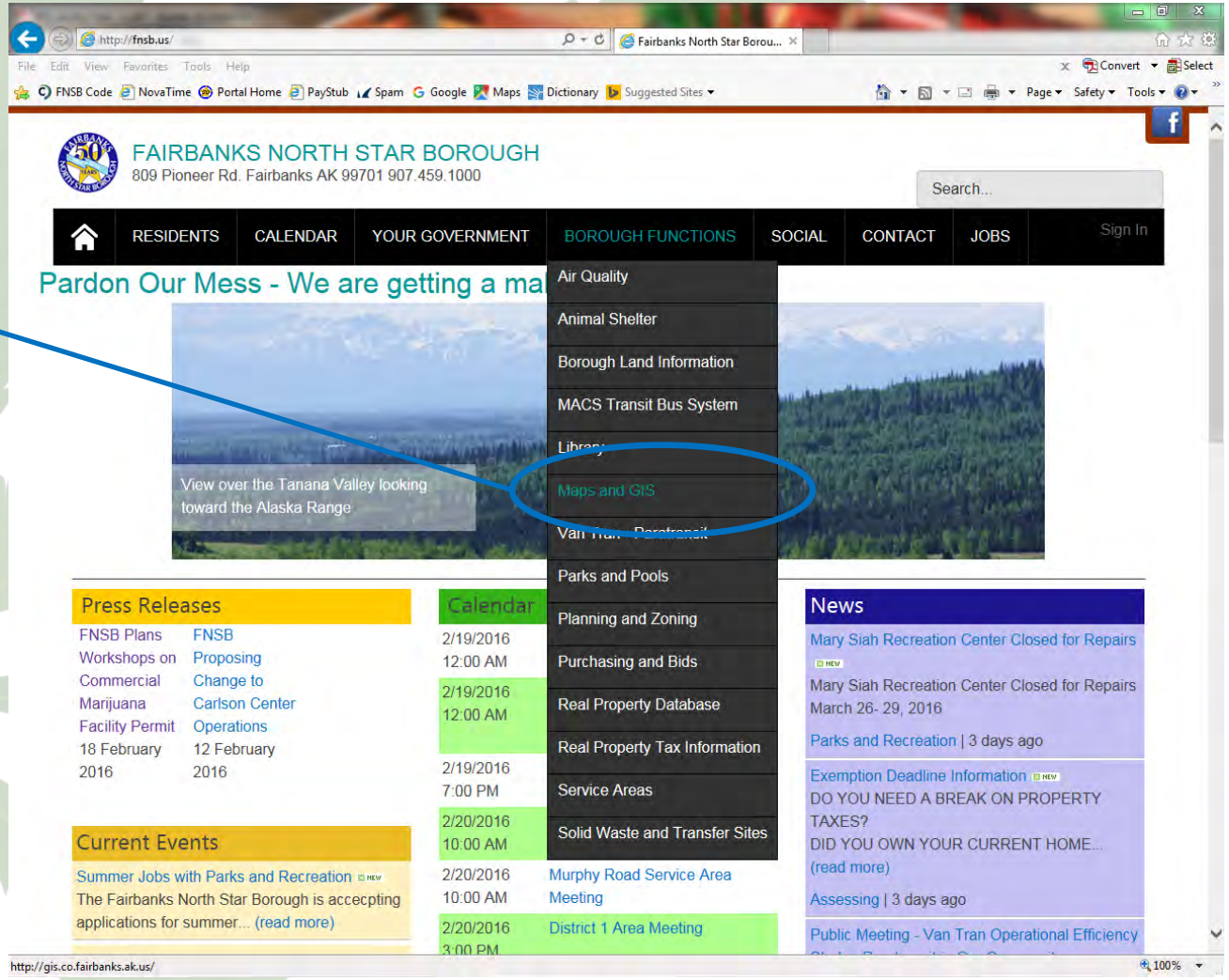
4) Buffer distances shall be measured from the lot line of the lot containing a use or zone listed above to the marijuana facility

5) Buffer distance measurements shall not extend beyond rivers and lakes or beyond the nearest edge of a right-of-way (ROW) of an access-controlled highway

COMMERCIAL MARIJUANA FACILITY PERMIT WORKSHOP:

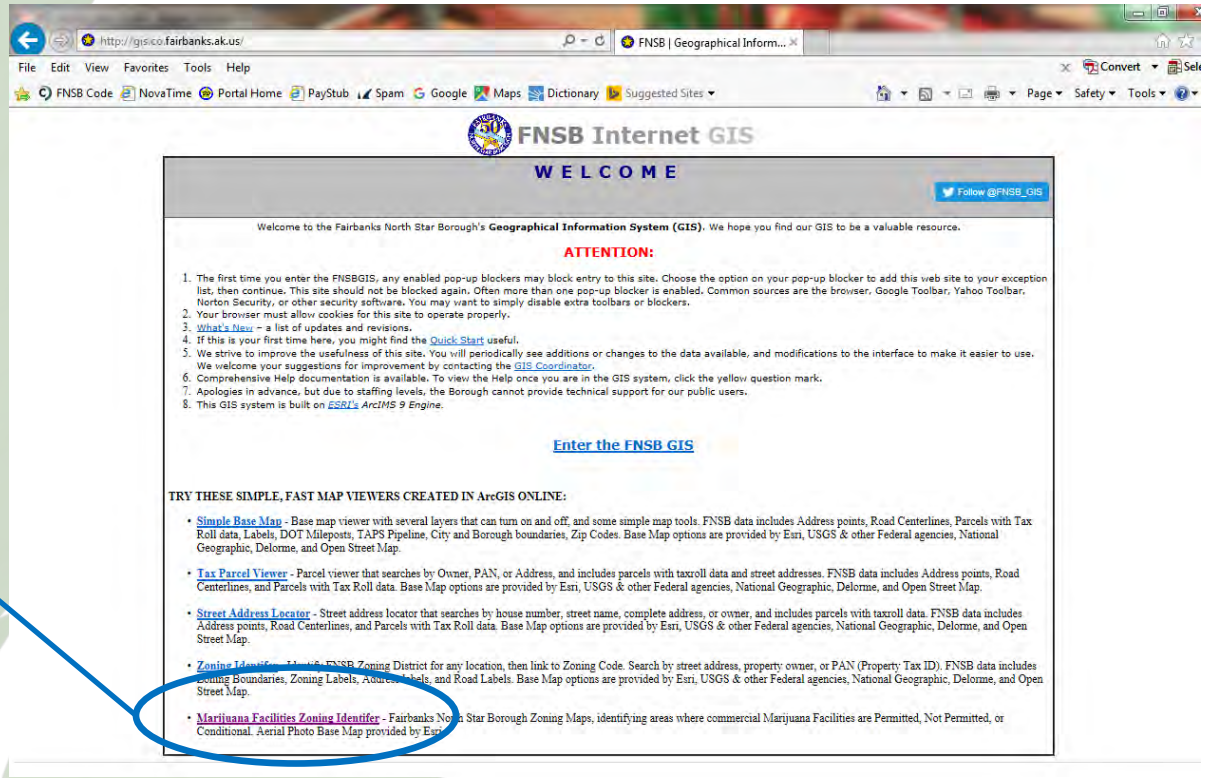
Use online FNSB maps and identify areas where commercial Marijuana Facilities are Permitted or Conditional

1. Go to www.fnsb.us
2. Under 'Borough Functions' click on 'Maps and GIS'

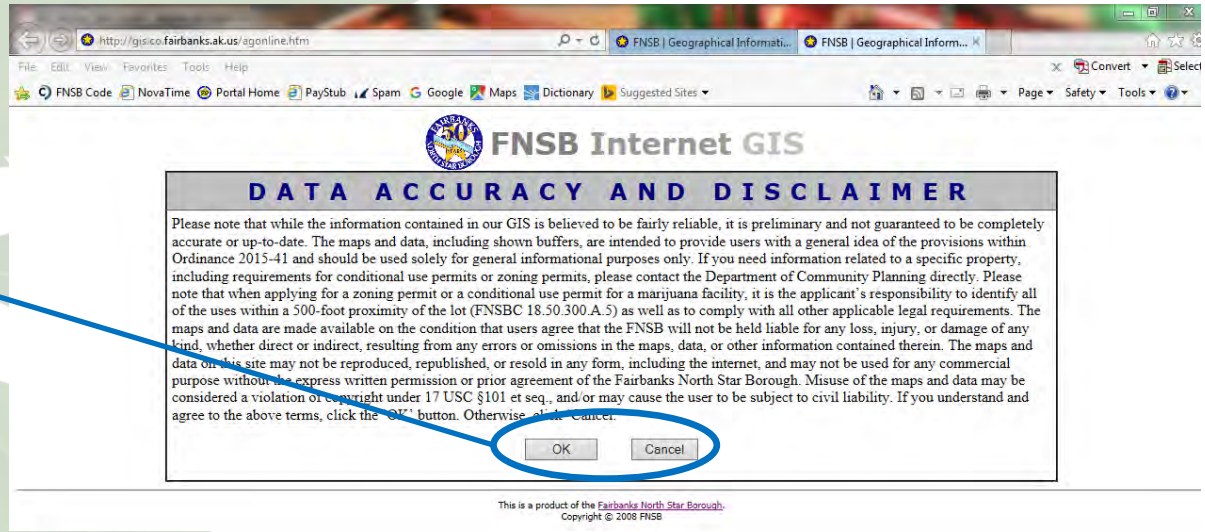


For questions or comments, please contact FNSB Department of Community Planning at (907) 459-1260 or planning@co.fairbanks.ak.us

3. Select 'Marijuana Facilities Zoning Identifier'



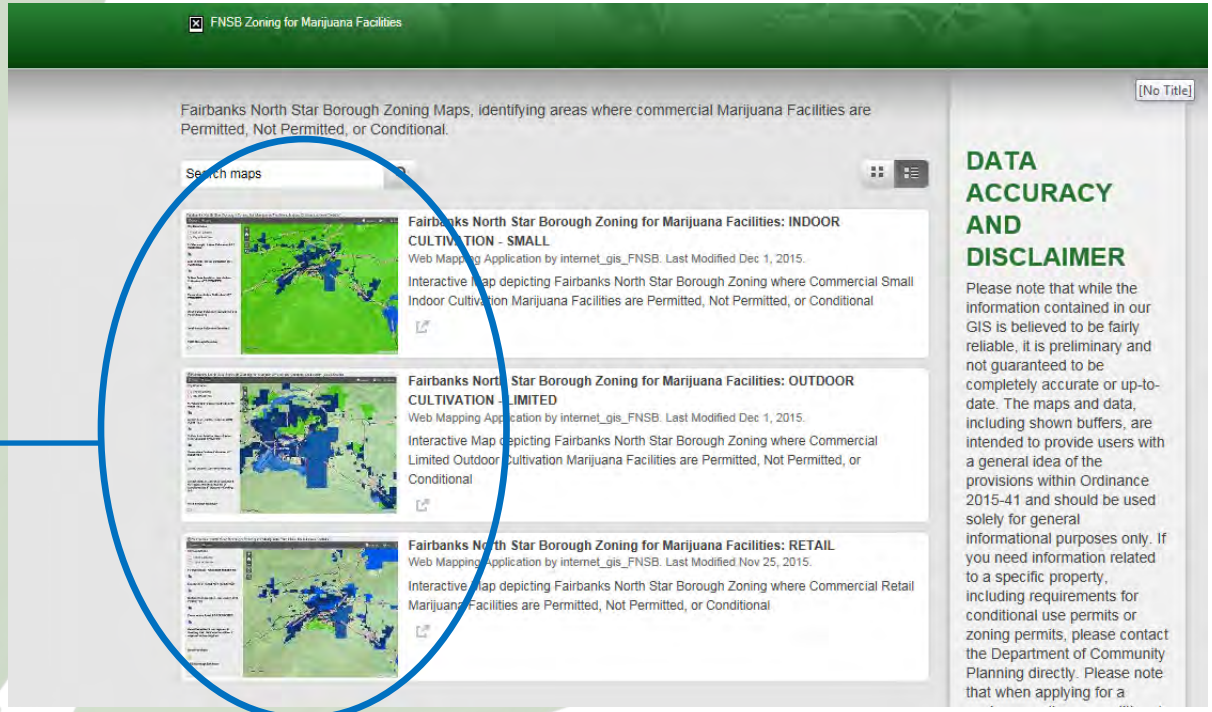
4. Read the 'Data Accuracy and Disclaimer' and click 'OK' if you agree

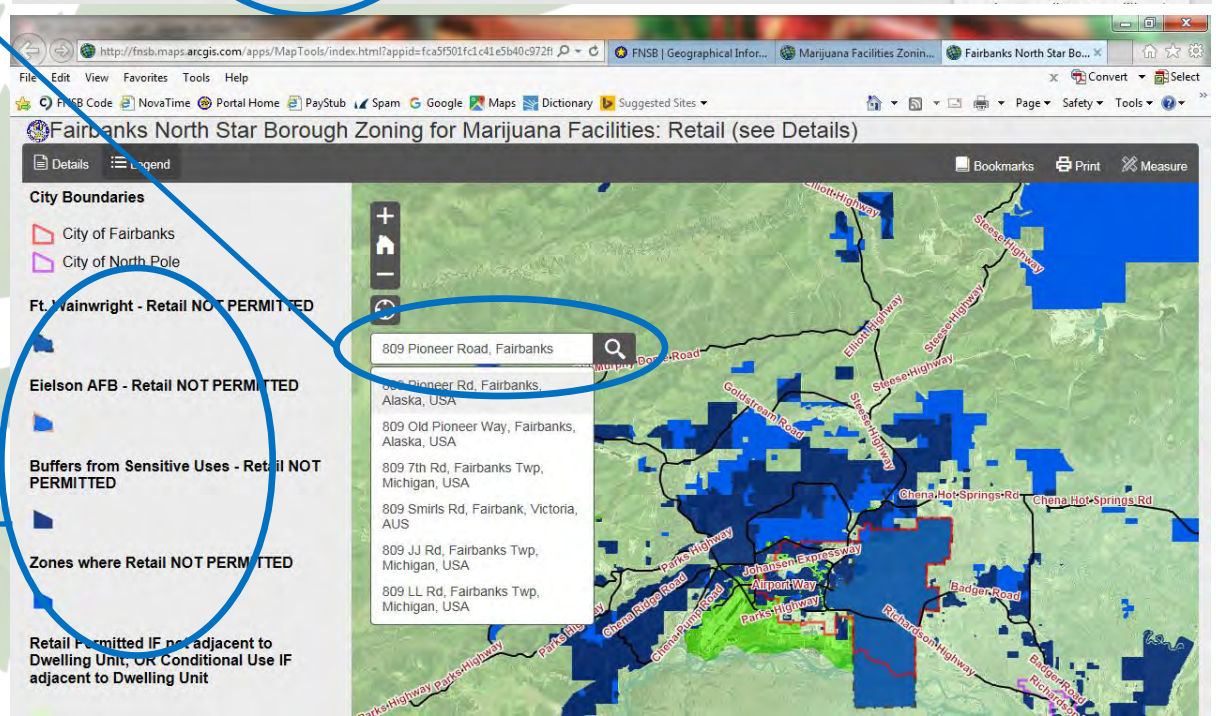


5. Select a map for Indoor Cultivation Small, Outdoor Cultivation Limited or Retail Facility

6. Type full address in the search tab or simply zoom and pan to find a property

7. Refer to Legend on the left sidebar to understand the colors on the map





Fairbanks North Star Borough
Department of Community Planning
809 Pioneer Road/P.O. Box 71267
Fairbanks, Alaska 99707-1267
(907) 459-1260 Fax: (907) 459-1255
planning@fnsb.us

For Office Use Only
Received By: _____
Date Submitted:

MARIJUANA FACILITY ZONING PERMIT APPLICATION

Applicant:	**Property Owner:**
Contact Name:	Name:
Business Name:	Mailing Address:
Mailing Address:	City, State Zip:
City, State Zip:	Phone:
Contact Number:	Cell:
E-mail:	E-mail:

Property Information:	
Property Description:	
Situs Address:	Lot Size: ❒ acres ❒ square feet
Parcel Account Numbers (PAN):	Existing Zone:
Existing Use & Structures:	

Proposed Use/Construction:		
Description of proposed use:		
Include number of employees, seating capacity, net office or sales area (sq. ft.)		
Size of existing construction in square feet:	Size of proposed construction in square feet:	Building height/number of stories:

I have attached a detailed site plan drawn to scale and to the standards of the Commercial/Industrial Site Plan guidelines.
I certify that the information included in this application is to the best of my knowledge true and complete.

APPLICANT SIGNATURE: _____ **DATE:** _____

OWNER SIGNATURE (if different): _____ **DATE:** _____

If the applicant is not the sole property owner, written consent of all property owners must be provided pursuant to FNSBC 18.104.040(B).

I understand that the Zoning Permit is appealable and that said appeal must be submitted and perfected within 15 days of the date of the decision in accordance with FNSBC 18.104.090.

I can be notified of the decision at the above ❒ (phone number) ❒ (address) ❒ (e-mail).

The Fairbanks North Star Borough is subject to the Alaska Public Records Act, AS 40.25 et seq. and this document may be subject to public disclosure under state law.

COMMERCIAL MARIJUANA FACILITY
ZONING PERMIT INTAKE CHECKLIST

1. **A completed zoning permit application form including all of the following information:**

   ☐ Property description and address

   ☐ Total (maximum) number of employees working on the site, including full and part-time, temporary and seasonal

   ☐ Property owner's signature or signed letter authorizing use of the property for a commercial marijuana facility

2. **A site plan drawn to a verifiable scale with north arrow and dimensions in feet (i.e. 1" = 10' or 1" = 20', etc.), including all of the following information:**
   More than one site plan of different scales may be used to illustrate the site.

   ☐ Location and dimensions of property lines

   ☐ Name of the access road and any other roads adjacent to the property lines

   ☐ Location and dimensions of all existing and proposed buildings and structures (including additions) such as greenhouses, barns, offices, employee washrooms/restrooms, sheds, carports, etc. Label as existing or proposed

   ☐ In the Light Commercial (LC) zone, list the height of all buildings

   ☐ Uses of all existing and proposed buildings and structures, portions of buildings, and areas of the property, such as residence, barn, storage, land in crops, etc.

   ☐ Setback distances of all existing and proposed buildings and structures from property lines, except in the General Use (GU) zones

   ☐ Location and dimensions of all existing and proposed signage, except in GU zones

   ☐ If adjacent to residentially zoned property, show the location of all outdoor lighting

- ☐ Location, type and depth of surface material and dimensions of existing and proposed driveways. *A driveway permit may be needed if accessing a Road Service Area (RSA) road or AKDOT&PF permitted right-of-way (ROW) or if located within city limits.*
- ☐ Location, type and depth of surface material and dimensions of off-street parking spaces, except in the GU zones. Off-street parking spaces are required to be at least 9' by 18', with sufficient back-up and maneuvering area such that all back-up and maneuvering actions occur on the site (*FNSBC 18.96.060*). Label parking spaces with dimensions.
- ☐ Location, type and depth of surface material and dimensions of loading areas. This requirement does not apply in the GU zones.
- ☐ Location, type and depth of surface material and dimensions of all traffic circulation areas, except in the GU zones. Show drive aisles, backing and maneuvering areas and all areas where motor vehicles will travel on the site.
- ☐ Show any obstructions located within the parking and vehicle maneuvering areas, such as a wall, post, guard rail, or other obstruction, except in GU zones.
- ☐ Demonstrate compliance with Marijuana Facility Standards listed in FNSBC 18.96.030.

3. <u>OTHER REQUIRED INFORMATION:</u>

- ☐ Provide a floor plan drawn to scale. This requirement does not apply in GU zones unless using only a portion of a building. If using a portion of a building, show how portions of building are separated (i.e. fire wall with person door, etc.). Label with dimensions, square footage and specific use of each floor area used for:
  - Production activities such as cultivation, drying, processing, manufacturing, retail sales, etc.
  - Non-production activities such as storage, employee areas such as locker room, break room, rest rooms, and stairs or hallways, etc.
- ☐ Provide a map showing all lots and parcels within 500 feet of the subject property to be utilized as a marijuana facility. Label all specific land uses located on each property including the subject property such as dwelling, restaurant, church, retail store, etc. The land uses on each property may be listed by tax lot on a separate sheet.

- ☐ Provide total square footage of all areas to be used for the marijuana facility, including the location and square footage of portions of existing and proposed buildings/structures and land in cultivation.

- ☐ For a marijuana manufacturing facility, provide information on the type of manufacturing and a list of the chemicals utilized in manufacturing operations.

Additional information may be required beyond the items listed above. All of the above permit submittal requirements may not be required if locating in a separate unit in a multi-unit building such as a strip-mall. Contact the Community Planning Department located on the second floor of the Juanita Helms Administrative Center at 809 Pioneer Road or call 907-459-1260 for specific requirements.

FAIRBANKS NORTH STAR BOROUGH Department of Community Planning
809 Pioneer Road ☆ P.O. Box 71267☆ Fairbanks, Alaska 99707-1267 (907) 459-1260 ☆ FAX (907) 459-1255

How to Draw a Commercial / Industrial Site Plan

A site plan is a detailed drawing which depicts the current and proposed structures and uses of a parcel of land. Site plans must be drawn to scale and are required for all zoning permits.

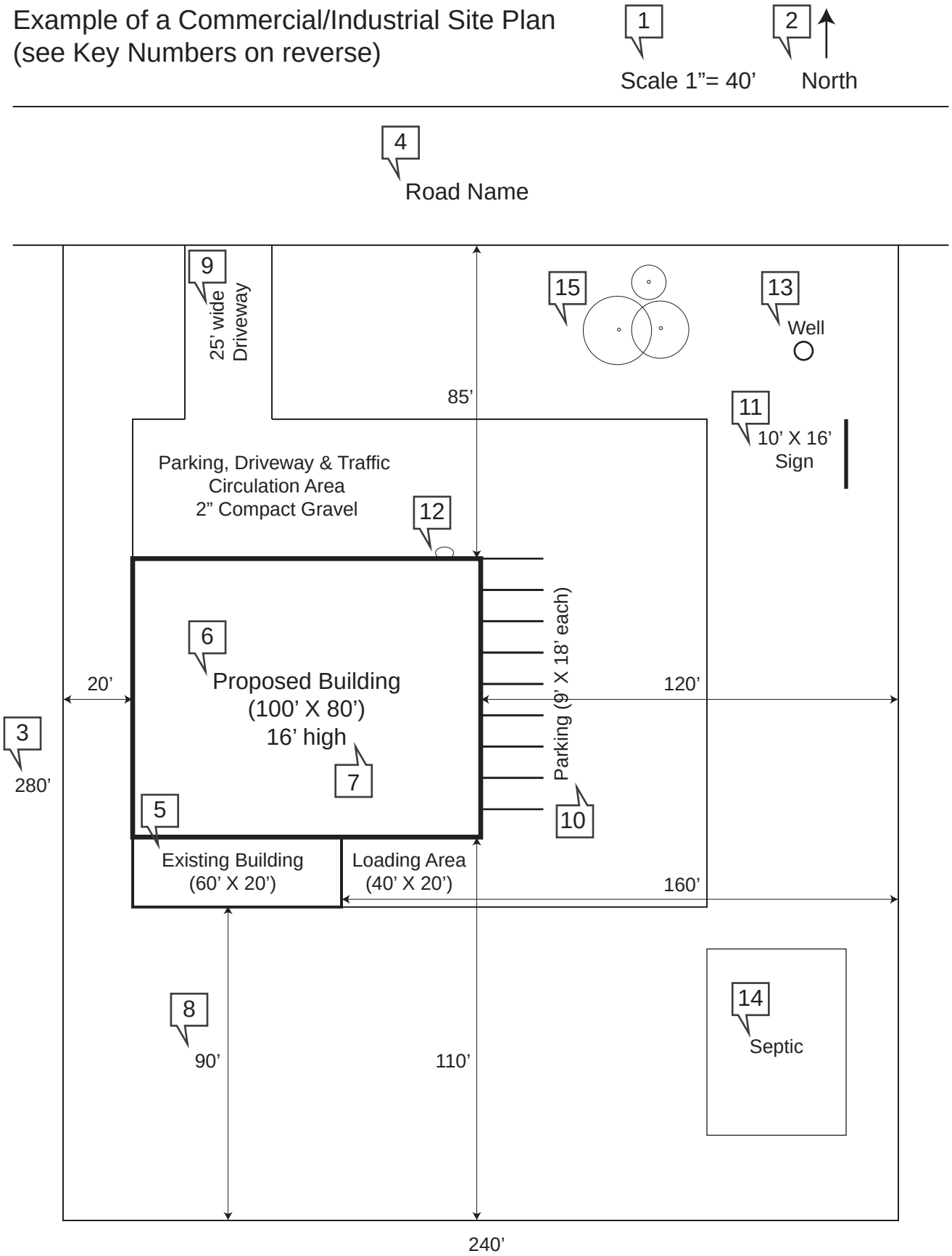
Drawing your own site plan is easier than you might expect. A site plan need not be professionally prepared and can be hand drawn. With a little work, you can draw an acceptable site plan for your project, if all information required on this guideline document is included. However, depending on the size, scope and complexity of the project you may need to obtain professional expertise. You may also submit multiple drawings at different scales.

A Commercial / Industrial Site Plan Includes the Following Information and More: (See the Key Numbers on the Example Site Plan on reverse)

1. Scale at which site plan is drawn (for example 1”= 20’)
2. North arrow
3. All property lines and their dimensions
4. Names of adjacent roads
5. Location, type and dimensions of all existing structures
6. Location, type and dimensions of all proposed structures and/or additions
7. If located in Light Commercial (LC) zone, height of all structures and/or additions
8. Setback distances of all existing and proposed structures and/or additions to all property lines, except in the General Use (GU) zones
9. Location, type and depth of surface material and dimensions of existing and/or proposed driveways
10. Location, type and depth of surface material and dimensions of off-street parking spaces, loading areas, and all traffic circulation area, except in the General Use (GU) zones. Off-street parking spaces are required to be at least 9’ by 18’, with sufficient back-up and maneuvering area such that all back-up and maneuvering actions occur on the site (FNSBC 18.96.060). Show any obstructions located within the parking and vehicle maneuvering areas such as a wall, post, sign or a guard rail.
11. Location and dimensions of all existing and proposed signage, except in General Use (GU) zones
12. Location of all outdoor lighting, if adjacent to residentially zoned property
13. Location of well on site (optional)
14. Location of septic on site (optional)
15. Landscaping (optional)

Information may be required in addition to the items listed above.

Example of a Commercial/Industrial Site Plan
(see Key Numbers on reverse)



Fairbanks North Star Borough
Department of Community Planning
809 Pioneer Road/P.O. Box 71267
Fairbanks, Alaska 99707-1267
(907) 459-1260 Fax: (907) 459-1255
planning@fnsb.us

For Office Use Only
Received By: _____
Receipt No.: _____
Sign #: _____
Date Submitted:

MARIJUANA FACILITY CONDITIONAL USE PERMIT APPLICATION

File No. _____

FEES: ❒ $800 conditional use permit application
❒ $250 verification of sensitive use buffers
❒ $200 sign deposit (check or cash only)

Applicant:		**Property Owner:**
Contact Name:		Name:
Business Name:		Mailing Address:
Mailing Address:		City, State Zip:
City, State Zip:		Phone:
Phone:	Cell:	Cell:
E-mail:		E-mail:

Property Information:	
Property Description:	
Street Address:	Lot Size:
Parcel Account Numbers (PAN):	Zoning District:
Existing Use(s):	

Conditional Use Request Information:
Proposed Use(s):
Request Description and Reasons for the Request:

I have attached a detailed site plan drawn to scale and to the standards of the Commercial/Industrial Site Plan guidelines.
I certify that the information included in this application is to the best of my knowledge true and complete.

APPLICANT SIGNATURE: _____ DATE: _____

OWNER SIGNATURE (if different): _____ DATE: _____

If the applicant is not the sole property owner, written consent of all property owners must be provided pursuant to FNSBC 18.104.050(B).

Fairbanks North Star Borough is subject to the Alaska Public Records Act, AS 40.25 et seq. and this document may be subject to public disclosure under state law.

COMMERCIAL MARIJUANA FACILITY
CONDITIONAL USE PERMIT INTAKE CHECKLIST

1. ***A completed conditional use permit application including the following:***

   - ☐ Property description and address
   - ☐ Specific type of commercial marijuana facility being requested as defined in FNSBC 18.04.010
   - ☐ Property owner's signature or signed letter authorizing use of the property for a commercial marijuana facility

2. ***A legible site plan drawn to a verifiable scale (i.e. 1" = 10'or 1" = 20', etc.), with north arrow and dimensions in feet including all of the following:***

   More than one site plan of different scales may be used to illustrate the site.

   - ☐ Location and dimensions of property lines
   - ☐ Location and dimensions of utility easements and access easements including section line easements.
   - ☐ Name of the access road and any other roads adjacent to the property lines and widths of all right-of-ways.
   - ☐ Location and dimensions of all existing and proposed buildings and structures such as greenhouses, barns, offices, sheds, employee washrooms/restrooms, etc. Include any proposed additions. Label each building or structure as existing or proposed. Provide height and number of stories for all buildings to be utilized for the conditional use.
   - ☐ Uses of all existing and proposed buildings and structures, portions of buildings, and areas of the property, such as residence, barn, storage, land in crops, etc.
   - ☐ Setback distances of all existing and proposed buildings and structures from property lines, except in the General Use (GU) zones.
   - ☐ Distances between all existing and proposed buildings and structures
   - ☐ Location of well on site, if applicable.
   - ☐ Location of septic on-site, if applicable.
   - ☐ Location and dimensions, including height, of all existing and proposed signage.
   - ☐ Location of all outdoor lighting.
   - ☐ Location of trash dumpster(s).
   - ☐ Location of security fencing and gates. Include clearance width of all gates,

9 parking spaces are show in 71 feet of space. This means that each is only 7.9 feet wide which does not meet FNSB Code *18.96.060. H.3*

- ☐ Location, type and depth of surface material and dimensions of existing and proposed driveways including any aprons and distances to property corners. Include location and dimensions of existing and proposed curb cuts and sidewalks, if applicable.
- ☐ Location, type and depth of surface material and dimensions of each off-street parking space. Off-street parking spaces are required to be at least 9' by 18', with sufficient back-up and maneuvering area such that all back-up and maneuvering actions occur on the site (*FNSBC 18.96.060*). Label parking spaces with dimensions.
- ☐ Location, type and depth of surface material and dimensions of loading areas.
- ☐ Location, and type and depth of surface material of all traffic circulation areas. Provide dimensions of drive aisles, backing and maneuvering areas and all areas where motor vehicles will travel on the site.
- ☐ Show any obstructions located within the parking and vehicle maneuvering areas, such as a wall, post, guard rail, or other obstruction.
- ☐ Location and area of existing or proposed landscaping, screening, and existing vegetation to be retained, if applicable.
- ☐ Show any buffer and open space areas, if applicable.
- ☐ Vehicle maneuvering diagram(s) may be required to demonstrate adequate fire and emergency vehicle access. Insufficient access provided for fire trucks

3. OTHER REQUIRED INFORMATION:

- ☐ Provide a map showing all lots and parcels within 500 feet of the subject property to be utilized as a marijuana facility. Label all specific land uses located on each property including the subject property such as dwelling, restaurant, church, retail store, etc. with specific business names preferred. The land uses on each property may be listed by tax lot on a separate sheet.
- ☐ Provide a floor plan drawn to scale for each floor utilized. If using a portion of a building, show how that portion of the building is separated from other portions (i.e. fire wall with person door, etc.). Provide room dimensions and label specific use of each portion of floor area used for: Provide square footage calculations for each type of use.
  - Production activities such as cultivation, drying, processing, manufacturing, retail sales, etc.; and
  - Non-production support activities such as office, storage, employee areas such as locker room, break room, restrooms, and stairs or hallways, etc.
- ☐ Provide total square footage calculations of all areas to be used for the marijuana facility, including the location and square footage of portions of existing and proposed buildings/structures and land in marijuana cultivation.

4. ***NARRATIVE***

☐ Provide a typed narrative addressing the following:

- Total (maximum) number of employees expected to be working on the site, including full and part-time, temporary and seasonal.
- Type and frequency of other vehicle trips to the site such as deliveries, security, product transport, or other visitors. Waste disposal is not addressed
- Hours of operation
- Activities occurring on the site on a daily, weekly, monthly, periodic, seasonal, occasional and annual basis
- Phases of development, if applicable Business plans to expand to fill the property but does not acknowledge this on the application
- Impacts of the proposed use that may cross property lines such as odor, noise, dust, light, etc. Not sufficiently addressed for impacts on a residential neighborhood
- Provide a list of the chemicals utilized or stored on the site. Only brand is addressed
- Describe how plant waste and/or product waste materials will be handled and disposed of
- Energy source serving the proposed use Fuel source is not indicated
- Water source serving the proposed use
- Method of sewage disposal for the proposed use
- Method of wastewater management for the proposed use Basic leach field system does not meet DEC reqs.
- Other public utilities and services to serve the proposed use such as garbage, communications, fire protection, police, etc.
- For a marijuana manufacturing facility, provide information on the type of manufacturing process(es) to be utilized.
- Compliance with state requirements for facility security.

5. NARRATIVE Demonstrating conformance with conditional use approval criteria (FNSBC 18.104.050(C)1-3) including Title 18, the FNSB Regional Comprehensive Plan, other FNSB ordinances and applicable state statutes

FNSBC 18.104.050(C):
The planning commission shall review, hear and decide whether or not to approve a request for a conditional use. ***The planning commission shall also consider and adopt findings in each of the following:***

1. **Whether or not the proposed conditional use conforms to the intent and purpose of this title and of other ordinances and state statutes;**

2. ***Whether or not there are adequate existing sewage capacities, transportation facilities, energy and water supplies, and other public services to serve the proposed conditional use;***

3. ***Whether or not the proposed conditional use will protect the public health, safety and welfare.***

The planning commission may approve or deny a conditional use request or may approve a conditional use request with conditions to ensure the protection of the public health, safety and welfare.

Additional information may be required beyond the items listed above. If you have questions about the conditional use permit application requirements, the public hearing process and timelines, or any other concerns, please contact the Community Planning Department located on the second floor of the Juanita Helms Administrative Center at 809 Pioneer Road or by phone at 907-459-1260.

Post By: _____
Date

Instructions to comply with FNSBC 18.104.010.C.3:

1. Post the sign(s) in accordance with #2 below.
2. Take a photograph of the posted sign.
3. Return this affidavit and the photograph to the Department of Community Planning at least 20 days prior to the Planning Commission meeting (see the 'Post By' date). If these items are not received by the 'Post By' date, your application may be postponed to a future meeting.
4. This affidavit must be notarized. The Borough has notaries on staff or you may use your own notary.

PUBLIC NOTICE SIGN POSTING AFFIDAVIT

STATE OF ALASKA)
) ss.
FOURTH JUDICIAL DISTRICT)

I, _____, being first duly sworn, depose and state that:

1. I have submitted an application identified as _____.
2. I have posted and will maintain public notice sign #_____in accordance with the following provisions:
   a. Sign is posted on the property on which my request for rezone, conditional use or variance has been made.
   b. Sign is clearly visible from streets and roads.
   c. Sign will be maintained free of snow or other materials which impede readability.
   d. Sign is posted between an elevation of 2' and 8' above ground level and no further than 50' from the edge of the road to further ensure readability from streets.
   e. Sign was posted on _____ (date) and complies with posting requirements of 20 days prior to the public hearing date.
   f. I shall return the sign to the FNSB Department of Community Planning within 10 days following the final public hearing.
3. I understand a refund check of $200.00 (the amount I have deposited for said sign) will be issued 7-10 days following return of the sign providing that sign is returned in usable condition. I further understand I may receive only partial refund if the sign is damaged when returned to the Borough.
4. This document is null and void when necessary action has been completed as provided in Item #2 f.

_____
Signature

_____
_____
_____
_____
_____
(Print Name and Address of Affiant)

SUBSCRIBED AND SWORN TO BEFORE ME on this _____day of _____, 20_____

_____ _____
Notary Public in and for Alaska Commission Expires

DEPOSIT / REFUND FORM
PUBLIC NOTICE SIGN DEPOSITS & EXPERT REVIEW DEPOSITS

DEPOSITS

SIGN DEPOSIT ❑ **EXPERT REVIEW DEPOSIT** ❑ **(see box below)**

Sign # _____
(if required)

DATE Prepared:_____

Prepared By: _____
Fairbanks North Star Borough

RECEIPT Number:_____

PAID By: Cash ❑ CHECK ❑#_____

(if paying by check we **MUST** refund to name & address showing on check)

Name & Address on Check _____

If cash name and address for refund: _____

_____

_____

_____

I understand that I owe the actual cost for the expert review of my telecom application and that this is only a deposit towards the cost.

_____
(applicant initials)

REFUNDS

Sign Returned: Date: _____ Initiate Refund: ❑YES ❑NO

Staff who took sign in: _____

Be sure application has been completely acted on and the reconsideration has expired prior to taking in the sign. For Rezones, be sure the Assembly decision is final prior to taking in the sign.

Additional Damage Yes ❑ No ❑ Partial Refund ❑Yes $_____

Describe _____ Applicant Initial _____

Fairbanks North Star Borough is subject to the Alaska Public Records Act, AS 40.25 et seq. and this document may be subject to public disclosure under state law.

Revised 7/26/2016

W:\Community Planning\$Admin\Forms & Handouts\FYE 2017\Forms\Deposit-RefundForm.docx

Marijuana Licensing Frequently Asked Questions

The Most FAQ's! Updated January 4, 2016

Included below are the most frequently asked questions regarding marijuana licensing and implementation of law relating to commercial marijuana establishments. If you have questions not answered here, please submit them in writing to marijuana@alaska.gov and the staff of the Alcohol and Marijuana Control Office will do it's best to answer your question in a timely manner. We will continue to update this page as appropriate in the coming months.

Can I apply for a marijuana license right now?

Yes, before initiating your application for a commercial marijuana license, please click on the link below. Be sure you have done the following:

- Read the Final regulations as adopted and amended by the Marijuana Control Board
- Read the questions and answers on our Marijuana License Frequently Asked Questions
- Watch the entire training video on the Marijuana Application Process

Where can I find the online application?

On the Alcohol and Marijuana Control Office (AMCO) under Marijuana Application. Before initiating your application for a commercial marijuana license, please click on the link below. Be sure you have done the following:

- Read the Final regulations as adopted and amended by the Marijuana Control Board
- Read the questions and answers on our Marijuana License Frequently Asked Questions
- Watch the entire training video on the Marijuana Application Process

When will licenses be issued?

Licenses will be issued within 90 days of receipt of a completed application, as outlined in the statute and regulations. The exact date is dependent upon several factors including the 1) type of license applied for, 2) response time from local governments, and 3) the implementation of the marijuana inventory tracking system.

1) Type of license and completed application –AS 17.38.100(b) calls for the board to begin accepting and processing applications one year after the effective date of the act; therefore, applications will be accepted beginning on February 24, 2016. The board will grant or deny an application for a license within 90 days after a completed application is received. It is possible the Marijuana Control Board will issue testing facility and cultivation facility licenses first, with retail store and product manufacturing facility licenses to follow. This sequential issuing of license types may be necessary so the latter license types can have legally grown and tracked marijuana in their inventory before opening for business.

2) Response time from local governments – After the director of the Alcohol and Marijuana Control Office deems an application to be complete, staff will transmit the application to the local government with jurisdiction over the proposed licensed premises. The local government has 60 days from the date of receipt of the notice of the application to file a protest to the application or waive its right to protest. If a protest is received, the Marijuana Control Board will consider the application and protest at its next meeting.

3) Marijuana inventory tracking system – All marijuana license types will be required to use the State of Alaska-selected marijuana inventory tracking system to assure that marijuana sold in licensed retail stores was grown, produced and tested by licensed establishments. The board will not issue any licenses before the marijuana inventory tracking system is implemented; the anticipated date of implementation is May 23, 2016.

How many licenses will the MCB issue?

The Marijuana Control Board is not limited in the number of marijuana licenses it can issue at the state level. However, AS 17.38.110(b) provides that local governments can restrict the time, place, manner and number of marijuana licenses.

Can I submit a paper application for a marijuana license?

No, the regulations anticipate that the entire process will be conducted electronically, other than attachment of non-electronic documents such as payment and fingerprint cards. 3 AAC 306.020 states that the application must be initiated electronically; the completed application and fees may be filed electronically, or mailed, or delivered to the director at the office of the board.

Why do I have to initiate my application online?

By regulation, applications must be submitted electronically in order for applicants to demonstrate their capability to enter and submit data/documents electronically. All marijuana licensees are required to use the statewide marijuana inventory tracking system, which is electronic and requires a stable internet connection and basic computer literacy.

Where do I get the marijuana regulations?

You may download and save the final regulations as amended and adopted by the Marijuana Control Board. Because of the length of the packet, if you choose to print the regulations you may want to consider printing two pages on one sheet of paper, i.e., the “booklet” option on your print properties screen.

What happens now that the Marijuana Control Board has adopted the regulations?

The Department of Law is currently reviewing the regulations and will send them to Lt. Governor Mallott once their review is complete. The regulations will take effect 30 days after the Lt. Governor signs them into law. Lt. Governor Mallott will need to sign the regulations by January 24, 2016 in order for the Alcohol and Marijuana Control Office to begin accepting online applications by February 24, 2016, as outlined in AS 17.38.100(b).

Can I own more than one license?

Yes, with one exception—testing facility licenses are independent of all other license types. According to 3 AAC 306.610, a licensed marijuana testing facility may not have any licensee, employee, or agent who holds any type of marijuana establishment license other than a testing facility license.

Can I own more than one license type at the same premises?

Yes, except as set out in the previous question (Question 9).

The location of the premises I am considering is near a park. Is that allowed?

The only location rules defined by the State of Alaska are the buffer zones set out in 3 AAC 306.010(a), which prohibit a marijuana establishment license from being issued within 500 feet of a school, recreation or youth center (defined in 3 AAC 306.900(35)), a building in which religious services are regularly conducted, or a correctional facility. Please see the regulation for instructions regarding how to measure the distance. All other zoning issues are locally established; contact your local government to inquire about zoning restrictions.

What can I do now, since I cannot apply for a license yet?

Prepare to submit your application—

1) Read 3 AAC 306 articles 1, 7, 8, 9 and the specific article(s) that pertains to the type of license(s) you plan to apply for. When you apply for a license, you are stating that you have read and understand all of the marijuana regulations, and are prepared to follow them.

2) Work on your operating plan. All license types are required to submit an operating plan with their application. Requirements for the operating plan are set forth in 3 AAC 306.020(c). The format in which the operating plan will have to be submitted will be approved by the Marijuana Control Board on February 11, 2016. In the meantime, you can begin drafting your operating plan based on the information requirements outlined in the regulations.

3) Attend the Marijuana Control Board meeting on February 11, 2016 in Juneau. A public call-in number will be available for those unable to attend in person.

Are facilities expected to be 100% ready when we apply for license, or will we have time to finish construction between February and May, when licenses are expected to be issued?

It is not expected that the physical premises is 100% ready at the time the applicant initiates their application. The applicant must ensure however, that their finished facility matches what is laid out in their operating plan. The premises will undergo a preliminary inspection before operations begin.

Can I take cuttings or clones from plants I have growing right now for use when my licensed is issued?

It's expected that cultivators will either start their plants from seeds, or from cuttings, only after receiving a license from the Marijuana Control Board (MCB). The source of the cultivators' seeds or cuttings is not information that is required by regulation.

Do the existing regulations allow a home-rule municipality to protest the issuance of a marijuana license? Also, do they preclude home-rule municipalities from charging a permit fee to operate marijuana facilities in city limits?

A home rule municipality is included in the definition of local government. Local governments have a right of protest under the regulations. Local governments can tax marijuana or charge fees for municipal licenses or permits.

FAIRBANKS NORTH STAR BOROUGH

Community Planning

- **Zoning Permits**
- **Conditional Use Permits**
- **Driveway Permits**
  809 Pioneer Road
  Fairbanks, AK 99701
  (907) 459-1260
  www.fnsb.us/cp

Road Service Areas

- **Technical Questions on Driveways**
  http://www.fnsb.us/pw/pages/Service-Area-Resident-Resources.aspx
  Department of Rural Services
  Ann Worhatch
  aworhatch@fnsb.us
  (907) 459-1333

CITY OF FAIRBANKS

City of Fairbanks Fire Department

- http://www.fairbanksalaska.us/departments/fire-department/
- **Ernie Misewicz, Assistant Fire Chief**
  edmisewicz@ci.fairbanks.ak.us
  1101 Cushman Street
  Fairbanks, AK 99701
  Phone (907) 450-6615
- **Business Office**
  Phone (907) 450-6600
  Fax (907) 450-6666

City of Fairbanks Building Department

- **Steven Anderson, Building Plans Examiner**
  sranderson@ci.fairbanks.ak.us
  (907) 459-6703

CITY OF NORTH POLE

City of North Pole Building Department

- **William Butler, Building Official**
  Director of City Services
  bill.butler@northpolealaska.org
  Phone (907) 488-8593
  Fax (907) 488-3002

City of North Pole Fire Department

- http://www.northpolealaska.com/fire/custom-contact-page/fire-contact-information
- **Geoffrey Coon, Deputy Fire Chief**
  Gcoon@northpolefire.org
  110 Lewis Street
  North Pole, AK 99705
  Phone (907) 488-2232
  Fax (907) 488-3747

STATE OF ALASKA

Alcohol & Marijuana Control Office (AMCO)

- www.commerce.alaska.gov
- **Anchorage Office (Main)**
  550 West 7th Ave, Suite 1600
  Anchorage, AK 99501
  Phone (907) 269-0350
  Fax (907) 334-2285
- **Amanda Bean, Investigator III**
  Fairbanks Office
  amanda.bean@alaska.gov
  455 3rd Ave, Suite 140.
  Fairbanks, AK 99701
  Phone (907) 451-2748

- **Richard Finney, Investigator III**
  Fairbanks Office
  richard.finney@alaska.gov
  455 3rd Avenue, Suite 140
  Fairbanks, AK 99701
  Phone (907) 451-2030
  Fax (907) 451-2742

State of Alaska Department of Public Safety, Division of Fire & Life Safety

- www.dps.alaska.gov/fire/
- **David Tyler – Alaska State Fire Marshal/Director**
  david.tyler@alaska.gov
  Phone (907) 269-5491
- **Plan Review Bureau – Fairbanks Location**
  David Aden, Building Plans Examiner I
  david.aden@alaska.gov
  1979 Peger Road
  Fairbanks, AK 99709
  Phone (907) 451-5200
  Fax (907) 451-5218
- **Plan Review Bureau – Anchorage Location (Main)**
  Diana Parks, Building Plans Examiner II
  diana.parks@alaska.gov
  (907) 269-2004

State of Alaska Department of Environmental Conservation

- www.dec.alaska.gov
- **Jessica Davidson**
  Jessica.davison@alaska.gov (*NOTE: no second "d" in Davidson)
  Phone (907) 269-5491

State List of Daycare Facilities

https://dpasysops.dhss.alaska.gov/FindProviderVS8/zSearch.aspx

Drug & Alcohol Treatment Facilities:

Alaska Statewide Alcohol Safety Action Program

- **Alaska Statewide Alcohol Safety Action Program**:
  http://dhss.alaska.gov/dbh/Documents/ASAPPrivateReferralList10-20121.pdf
- **Comprehensive Behavioral Health Treatment & Recovery (CBHTR):**
  http://dhss.alaska.gov/dbh/Documents/TreatmentRecovery/Community%20Planning%20and%20Service%20Areas/Community_Planning_and_Service_Areas-TR_Providers.pdf

- **Alcohol and Drug Information Schools**
  (*NOTE: FNA address does not cover all locations – see FNA website link below)
  http://dhss.alaska.gov/dbh/Documents/Prevention/programs/adis/ADISApprovedProgramListOct2013.pdf
- **Fairbanks Native Association (FNA):**
  www.fairbanksnative.org
  Communications Director
  (907) 452-1648
  info@fairbanksnative.org

MARIJUANA INDUSTRY

Coalition for Responsible Cannabis Legislation (CRCL)

- http://www.crclalaska.org/
- **Brandon Emmett, Executive Director**
  crcl13psum@gmail.com
  P.O. Box 80254
  Fairbanks, AK 99708
  Phone (907) 953-7590

Alaska Marijuana Industry Association (AMIA)

- http://www.alaskamarijuanaindustry.org/
- **Contact**
  info@alaskamarijuanaindustry.org
  P.O. Box 93719
  Anchorage, AK 99509
  Phone (907) 632-3318

Post By: 26 July 2017
Date

Instructions to comply with FNSBC 18.104.010.C.3:
1. Post the sign(s) in accordance with #2 below.
2. Take a photograph of the posted sign.
3. Return this affidavit and the photograph to the Department of Community Planning at least 20 days prior to the Planning Commission meeting (see the 'Post By' date). If these items are not received by the 'Post By' date, your application may be postponed to a future meeting.
4. This affidavit must be notarized. The Borough has notaries on staff or you may use your own notary.

PUBLIC NOTICE SIGN POSTING AFFIDAVIT

STATE OF ALASKA)
) ss.
FOURTH JUDICIAL DISTRICT)

I, Monique Daigle, being first duly sworn, depose and state that:

1. I have submitted an application identified as AK Green Bee, Inc..
2. I have posted and will maintain public notice sign # M in accordance with the following provisions:
   a. Sign is posted on the property on which my request for rezone, conditional use or variance has been made.
   b. Sign is clearly visible from streets and roads.
   c. Sign will be maintained free of snow or other materials which impede readability.
   d. Sign is posted between an elevation of 2' and 8' above ground level and no further than 50' from the edge of the road to further ensure readability from streets.
   e. Sign was posted on 23 July 2017 (date) and complies with posting requirements of 20 days prior to the public hearing date.
   f. I shall return the sign to the FNSB Department of Community Planning within 10 days following the final public hearing.
3. I understand a refund check of $200.00 (the amount I have deposited for said sign) will be issued 7-10 days following return of the sign providing that sign is returned in usable condition. I further understand I may receive only partial refund if the sign is damaged when returned to the Borough.
4. This document is null and void when necessary action has been completed as provided in Item #2 f.

Signature

MONIQUE DAIGLE
2374 Badger Rd.
North Pole, AK 99705
(Print Name and Address of Affiant)

SUBSCRIBED AND SWORN TO BEFORE ME on this 25 day of July, 20 17

Tamara Stumpf
Notary Public in and for Alaska

9/22/2018
Commission Expires

TAMARA STUMPF
My Commission Expires
NOTARY PUBLIC
September 22, 2018
STATE OF ALASKA

Meeting Date: 8-15-2017 Case # CU2017-025
Item: Affidavit + Sign Pictures Page Count 4
ACCEPTED REJECTED RECONSIDERED
Taken in By: Ms. Kessler for FNSB Planning Commission

Fairbanks North Star Borough is subject to the Alaska Public Records Act, AS 40.25 et seq. and this document may be subject to public disclosure under state law.
Revised 7/20/2016
W:\Community Planning\$Admin\Forms & Handouts\FYE 2017\Forms\SignAffidavit.docx

Manish Singh

From: Monique Daigle <admin@akgreenbee.com>
Sent: Tuesday, July 25, 2017 11:33 AM
To: Manish Singh
Subject: Fw: Conditional Use sign posted
Attachments: FNSB Sign Affidavit 07-25-2017.pdf

Manish -

It appears that I spelled your last name incorrectly, which is what resulted in non-delivery. Both the pictures and the affidavit are attached. Please let me know if you will need anything else and thank you for contacting me regarding this important need.

Monique

Sent from my iPhone

Begin forwarded message:

From: Monique Daigle <moniquedaigle907@gmail.com>
Date: July 24, 2017 at 8:22:53 AM AKDT
To: msing@fnsb.us
Subject: Conditional Use sign posted

Good morning, Manish -

The conditional use sign has been posted on the SW corner of 2364 Badger Rd., approx 40-50 ft from Badger Rd. Please advise if you need additional pictures or if this is acceptable.

Thank you,
Monique Daigle

View from Badger Rd side:

View from property side to see distance to Badger Rd:

Sent from my iPhone

08/05/2017

08/05/2017

08/05/2017

08/05/2017

08/05/2017

08/05/2017

Backside of
Sign Only
08/05/2017

Public
Hearing
459-1260
CAT
08/07/2017

Public
Hearing
08/09/2017

08/09/2017

08/09/2017

Fairbanks North Star Borough
Department of Community Planning
907 Terminal Street/P.O. Box 71267
Fairbanks, Alaska 99707-1267
(907) 459-1260 Fax: (907) 459-1255
planning@fnsb.us

For Office Use Only
Received By: MS
Receipt No.: 529183
Sign #: M
Date Submitted:
Comm. Planning Dept
JUN 30 2017
RECEIVED

MARIJUANA FACILITY CONDITIONAL USE PERMIT APPLICATION

File No. CU2017-025

FEES:
- [x] $800 conditional use permit application #529183
- [x] $250 verification of sensitive use buffers — #529182
- [x] $200 sign deposit (check or cash only)

Applicant:		Property Owner:
Contact Name: Monique Daigle		Name: Monique Daigle
Business Name: Ak Green Bee, Inc		Mailing Address: 2374 Badger Rd
Mailing Address: 2364 Badger Rd		City, State Zip: North Pole, Ak 99705
City, State Zip: North Pole, Ak 99705		Phone: 907/978-0443
Phone:	Cell: 907/978-0443	Cell: 907/978-0443
E-mail: Admin@AkGreenBee.com		E-mail: MoniqueDaigle907@gmail.com

Property Information:	
Property Description: LOT 2 Block 1 BENSHOOF PHASE 1	
Street Address: 2364 Badger Rd	Lot Size: 55475 sf
Parcel Account Numbers (PAN): 0432431	Zoning District: 2003 Badger East (GU-1)
Existing Use(s): VACANT Land	

Conditional Use Request Information:

Proposed Use(s):
Standard Marijuana Cultivation facility - INDOOR LARGE

Request Description and Reasons for the Request:
40'x60' Building for Cultivation Facility; GU-1 Zoned, Conditional use Required.

I have attached a detailed site plan drawn to scale and to the standards of the Commercial/Industrial Site Plan guidelines.

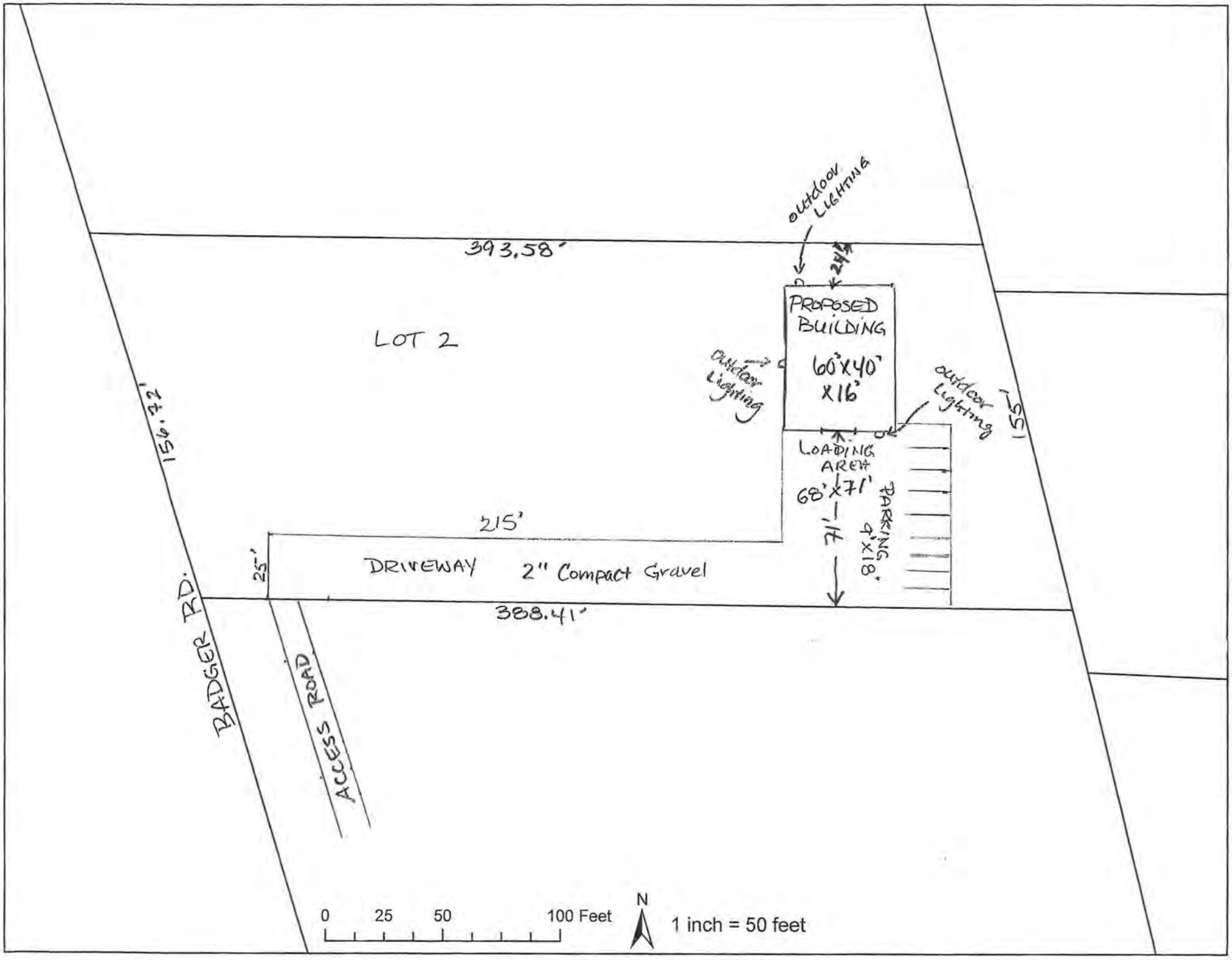
I certify that the information included in this application is to the best of my knowledge true and complete.

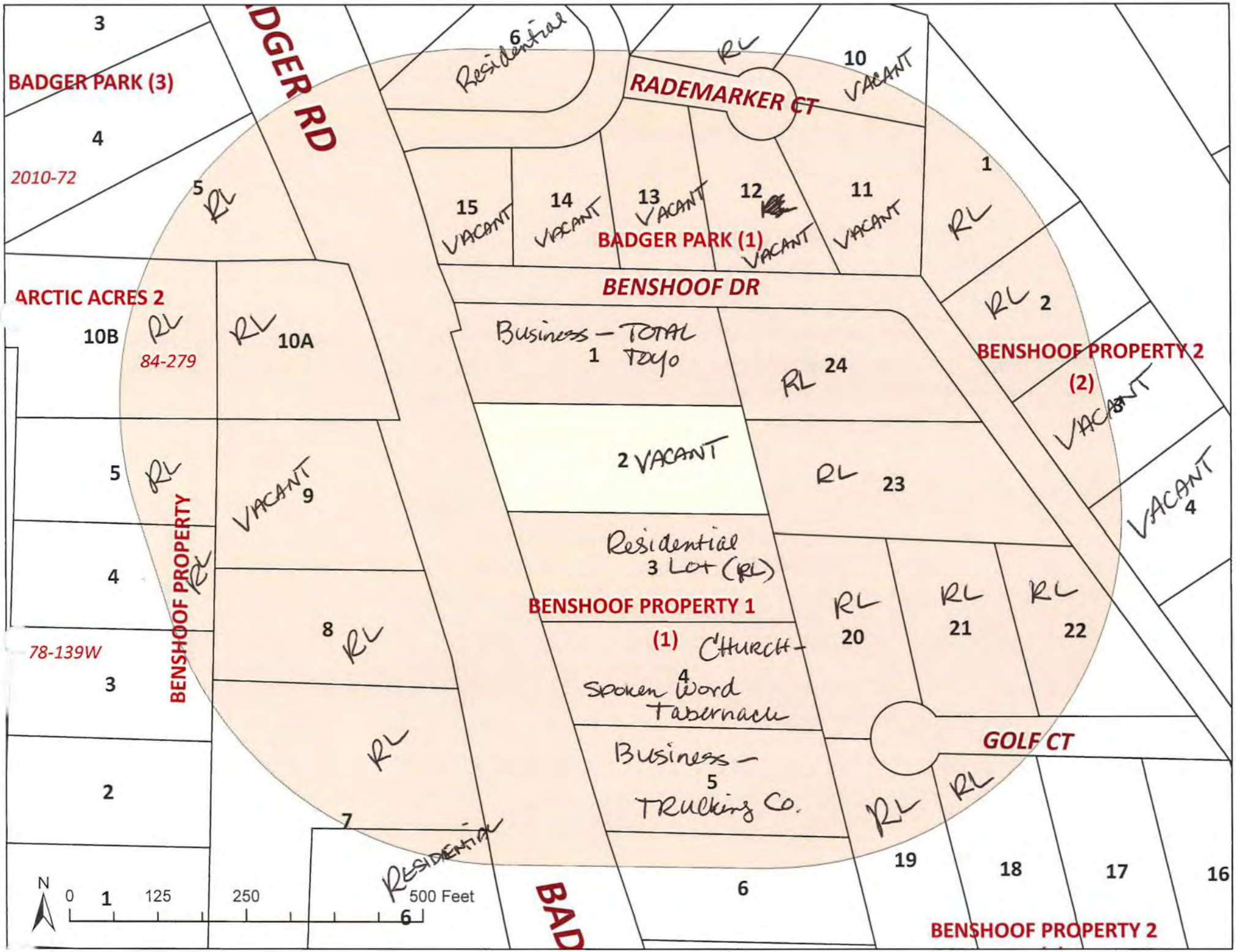
APPLICANT SIGNATURE: M Daigle DATE: 29 June 2017

OWNER SIGNATURE (if different): _____ DATE: _____

If the applicant is not the sole property owner, written consent of all property owners must be provided pursuant to FNSBC 18.104.050(B).

Fairbanks North Star Borough is subject to the Alaska Public Records Act, AS 40.25 et seq. and this document may be subject to public disclosure under state law.


outdoor LIGHTING
393.58'
24'
PROPOSED BUILDING
60'x40' x16'
LOT 2
outdoor Lighting
outdoor Lighting
151'
156.22'
LOADING AREA
68'x71'
71'
PARKING 9'x18'
215'
25'
DRIVEWAY 2" Compact Gravel
388.41'
BADGER RD.
ACCESS ROAD
0 25 50 100 Feet
N
1 inch = 50 feet


BADGER PARK (3)
2010-72
ARCTIC ACRES 2
84-279
78-139W
BENSHOOF PROPERTY
BADGER RD
RADEMARKER CT
BADGER PARK (1)
BENSHOOF DR
BENSHOOF PROPERTY 2 (2)
BENSHOOF PROPERTY 1 (1)
GOLF CT
BENSHOOF PROPERTY 2
Residential
VACANT
Business – TOTAL TOYO
Residential 3 Lot (RL)
CHURCH – Spoken Word Tabernacle
Business – TRUCKING CO.
RESIDENTIAL
N
0 1 125 250 500 Feet

SEPTIC

N

40 ft REAR ENTERANCE / EGR

VEG/ FLOWERING ROOM #2 17X15'

MOTHER / CLONING RM 17' X 15'

VEG/ FLOWERING ROOM #1 17'X15'

VEG/ FLOWERING ROOM #3 17'X15'

60 ft

SECURE STORAGE 10' X 17'

In-Floor DRAIN

BATHROOM 7' X 8'

3' X 8' UTILITIES

SECURE ACCESS ONLY

OFFICE 10' X 10'

DRYING ROOM 8' X 18'

HARVESTING AND PACKAGING AREA 18' X 20'

Security Room 8' X 8'

Garage Door

MAIN ENTERANCE

5 ft , 1" = 5 ft

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (We) hereby certify that I (we) am (are) the owner(s) of the property shown and described hereon and that I (we) hereby adopt this plan of subdivision with my (our) free consent, and dedicate all streets, alleys, walks, parks and other open spaces so dedicated to public use.

Lyman W. Benshoof Aug 12, 1985

Geraldine Benshoof 8-12-85

THE NOTARY'S ACKNOWLEDGEMENT

UNITED STATES OF AMERICA
STATE OF ALASKA } ss.

This is to certify that on this 12 day of August, 1985, before me, a Notary Public, for the State of Alaska duly commissioned and sworn, personally appeared Lyman & Geraldine Benshoof to me known to be the identical individual(s) mentioned and who executed the within plat and he (they) acknowledged to me that he (they) signed the same freely and voluntarily for the uses and purposes therein specified.

Witness my hand and notarial seal the day and year in this certificate first herein written.

NOTARY PUBLIC in and for the State of Alaska
My Commission expires: 7/23/88

CERTIFICATE OF REGISTERED LAND SURVEYOR

I, R.K. Stalder a professional land surveyor registered in the State of Alaska, do hereby certify this plat to be a true and correct representation of lands actually surveyed by me or under my direct supervision and that the distances and bearings are shown correctly and that all monuments required have been set.

R.K. Stalder 8/14/1985
Registration No. 2235-S

CERTIFICATE OF PAYMENT OF TAXES

I, the undersigned, being duly appointed and qualified Tax Collector for the Fairbanks North Star Borough, do hereby certify that, according to the records of the Fairbanks North Star Borough the following described property is carried on the tax records in the name of:
Lyman & Geraldine Benshoof
Description: T-2011 SEC 20 T1S-R2E F.M.

and that, according to the records in my possession, all taxes assessed and due against said land and in favor of the Fairbanks North Star Borough, are paid in full.
Dated at Fairbanks, Alaska, this 13 day of AUGUST, 1985.

TAX COLLECTOR
Fairbanks North Star Borough

CERTIFICATE OF APPROVAL BY THE PLATTING BOARD

I hereby certify that the subdivision plat shown hereon has been found to comply with the regulations of Title 17, Subdivisions, of the Fairbanks North Star Borough Code of Ordinances, and that said plat has been approved by the board on August 14 1985, and that the plat shown hereon has been approved.

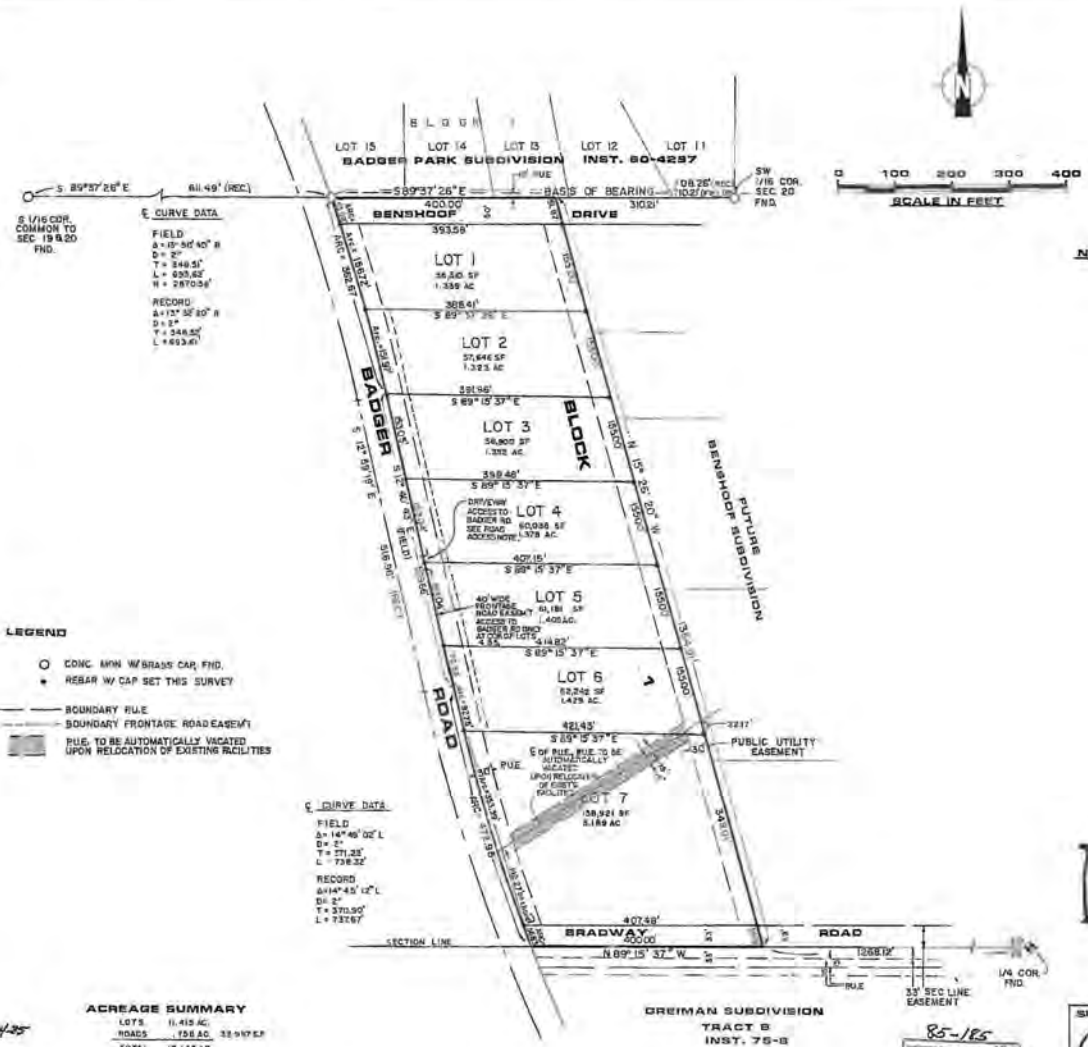
Dated this 15th day of August, 1985, at Fairbanks, Alaska.

Chairman
Fairbanks North Star Borough Platting Board

CERTIFICATE OF APPROVAL BY THE STATE DEPARTMENT OF CONSERVATION

This subdivision has been reviewed in accordance with 18 AAC 72-065 and is approved by the State Department of Environmental Conservation.

Signature Date 08-12-85



LEGEND

- ○ CONC. MON W/BRASS CAP, FND.
- ● REBAR W/ CAP SET THIS SURVEY
- BOUNDARY RULE
- BOUNDARY FRONTAGE ROAD EASEMENT
- P.U.E. TO BE AUTOMATICALLY VACATED UPON RELOCATION OF EXISTING FACILITIES

℄ CURVE DATA

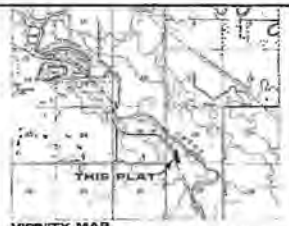
FIELD
Δ = 14° 46' 02" L
D = 2°
T = 271.25'
L = 738.32'

RECORD
Δ=14° 45' 12" L
D= 2°
T = 270.90'
L = 737.67'

ACREAGE SUMMARY

LOTS	11.415 AC.	
ROADS	.758 AC.	33,017 S.F.
TOTAL	12.173 AC.	

8-14-85



VICINITY MAP
FROM USGS QUAD FAIRBANKS D-1
SCALE: 1" = 1 MILE

NOTES:

BASIS OF BEARING
The Basis of Bearing for this plat is from Badger Park Subdivision recorded as Instrument #80-4297 with the Fairbanks Recording District Office, Fairbanks, AK 99701.

SOIL ABSORPTION SYSTEMS
The bottom of the soil absorption system must be a minimum of 4 feet above the seasonal high ground water level. This may require the construction of an alternative wastewater system such as a mound.

A minimum horizontal distance of 100 feet must be maintained between single family residential wells and septic tank/soil absorption systems, including those on adjacent lots. The requirements for residential units larger than single family are different. For more information call 452-1714.

A septic tank and its soil absorption system may not be placed within 100 feet, measured horizontally, of any natural or man-made lake, river, stream, slough or coastal water of the state.
For on-site wastewater system, see the soil report filed with the Fairbanks recording District Office this _____ day of _____, 19____ in Book _____, page _____.

PUBLIC UTILITY EASEMENTS
A 35' radius key (in addition to the platted public utility easement) is granted at each pole location as necessary for supportive device.

The utility companies shall have the right to remove any dead, weak, overhanging or otherwise dangerous trees adjacent to or in the vicinity of the easement. Such trees shall be identified by the utility company.

A 15' wide strip of land is granted (as determined necessary by the utility companies) for the installation, maintenance, repair or removal of yard poles.

Easement is hereby dedicated within all lots for secondary aerial crossings as determined necessary by the utility companies.

FLOOD
This phase (Phase I) of Benshoof Subdivision is between the limits of the 100-year flood and the 500 year flood. This phase was not flooded in the 1967 Fairbanks Flood.

SOIL
Salchaket very fine sandy loam--Area generally consists of gravel alluvial deposits of silt over sand over interbedded sandy gravel, gravelly sand and sand.

Ground water table in area in March, 1985 is 48' below the ground surface

ROAD ACCESS
No direct access to Badger Road shall be permitted. Lots 2 through 6 shall access Badger Road by Frontage Road driveway, at the corner of Lots 4 and 5, only.

RESTRICTIVE COVENANTS
There are no RESTRICTIVE COVENANTS that affect this plat.

BENSHOOF SUBDIVISION – PHASE I

A PORTION OF SW 1/4 SW 1/4 OF SECTION 20, T.1S., R.2E., F.M., AK.

85-185

SURVEYOR
ARCTURUS SURVEYS
R.K. STALDER, R.L.S. 2235-S
PO BOX 55155
(907) 488-3300 NORTH POLE, AK

BENSHOOF SUBDIVISION
PHASE 1

A PORTION OF THE SW 1/4 SW 1/4 SEC. 20, T.1S., R.2E., F.M., AK.

OWNERS LYMAN & GERALDINE BENSHOOF
SR BOX 60753, NORTH POLE, AK. 99705

DRAWN D Shedley

D S J S SERVICES 452-2049

CHECKED	SCALE	DATE	SHEET
	1" = 100'	5/29/85	1 OF 1

FRD1985_185_001 RECORDER

Narrative for AK Green Bee, Inc., 2364 Badger Rd, North Pole, AK 99705

• Total (maximum) number of employees expected to be working on the site, including full and part-time, temporary and seasonal:

The total number of employees expected to be working at this site is 5-10.

• Type and frequency of other vehicle trips to the site such as deliveries, security, product transport, or other visitors:

Expected traffic at this location will be minimal - Daily employee traffic; deliveries are anticipated to be received 3-4 times a month; product transport is anticipated at 3-4 times a month, visitors will be minimal. Traffic at this site will be more significant during set up and prep for initial operations to accommodate initial equipment delivery and required inspections.

• Hours of operation:

Regular hours of operation will be 7 days a week, 8a – 8p.

• Activities occurring on the site on a daily, weekly, monthly, periodic, seasonal, occasional and annual basis:

On-site activity will include daily monitoring and preening of plants; weekly change out of reservoirs, harvesting, packing, transporting, disposal of waste and deliveries; monthly cloning and planting; occasional required inspections.

• Phases of development, if applicable:

Planned phases of development are - construction phase, July – September; prep and inspection stage, September – October; begin cultivating, October/November. (Timeline subject to change based on timing of permits and licenses)

• Impacts of the proposed use that may cross property lines such as odor, noise, dust, light, etc.:

This is an indoor cultivation facility with no windows; noise is not expected to be a factor and lighting impacts will be limited to outdoor security lights. Exterior lights will be pointed down to accommodate maximum lighting for security cameras and ensure minimal light intrusion for neighboring properties. Odor will be controlled via an HRV system with air scrubbers/carbon filter air cleaners.

• Provide a list of the chemicals utilized or stored on the site:

The chemicals to be stored and used at this site are - General Hydroponics Nutrients used in Deep Water Culture/Ebb and flow delivery system and Clonex Rooting Hormone.

• Describe how plant waste and/or product waste materials will be handled and disposed of:

Disposal of plant waste - Excessive trim material and unsalable product will be disposed of according to state regulations. Plant material will be ground up and mixed with an acceptable medium for disposal and will be either composted or taken to the Borough Landfill. Liquid waste - will be used in on-site gardens with DEC approval and/or disposed of onsite via a DEC approved commercial and industrial waste water leach field system.

• Energy source serving the proposed use:

GVEA will provide energy to the site with generator back up.

• Water source serving the proposed use:

There will be a new well dug for this site.

• Method of sewage disposal for the proposed use:

There will be a new DEC approved commercial and industrial septic system placed at this site in compliance with all State regulations.

• Method of wastewater management for the proposed use:

There will be a new DEC approved commercial and industrial waste water leach field system placed at this site in compliance with all State regulations.

• Other public utilities and services to serve the proposed use such as garbage, communications, fire protection, police, etc.:

Other public utilities include: GCI for internet service; North Star Volunteer Fire Dept; AST.

• For a marijuana manufacturing facility, provide information on the type of manufacturing process(es) to be utilized:

N/A

• Compliance with state requirements for facility security:

This facility will comply with all requirements of 3 AAC 306.715 to include - ID badges for all persons on premises, appropriately placed exterior lighting and motion detectors, a security alarm system on all exterior doors, commercial grade door locks on all exterior doors, continuous video monitoring as required in 3 AAC 306.720 and documented policies and procedures designed to prevent diversion of marijuana or marijuana product. This facility will remained locked at all times and will have no public access. All visitors will be required to log their name, address, business affiliation and present valid ID showing that they are 21 or older prior to receiving access into the secured area. All visitors must have an approved escort at all times while in the secure area.

Quitclaim Deed

RECORDING REQUESTED BY Monique Teresa Daigle
AND WHEN RECORDED MAIL TO:
Monique Teresa Daigle, Grantee(s)
2374 Badger Rd.
North Pole, AK 99705
Consideration: $ 1
Property Transfer Tax: $ 0
Assessor's Parcel No.: 0432431
PREPARED BY: Monique Teresa Daigle certifies herein that he or she has prepared this Deed.

Signature of Preparer

30 June 2017
Date of Preparation

Monique T. Daigle
Printed Name of Preparer

THIS QUITCLAIM DEED, executed on 30 June 2017 in the County of FNSB, State of Alaska
by Grantor(s), Janet Marie Daigle,
whose post office address is 2374 Badger Rd,
to Grantee(s), Monique Teresa Daigle,
whose post office address is 2374 Badger Rd,

WITNESSETH, that the said Grantor(s), Janet Marie Daigle,
for good consideration and for the sum of One Dollar
($ 1.00) paid by the said Grantee(s), the receipt whereof is hereby acknowledged, does hereby remise, release and quitclaim unto the said Grantee(s) forever, all the right, title

interest and claim which the said Grantor(s) have in and to the following described parcel of land, and improvements and appurtenances thereto in the County of FNSB, State of Alaska and more specifically described as set forth in EXHIBIT "A" to this Quitclaim Deed, which is attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF, the said Grantor(s) has signed and sealed these presents the day and year first above written. Signed, sealed and delivered in presence of:

GRANTOR(S):

Signature of Grantor	Signature of Second Grantor (if applicable)
Janet Marie Daigle Print Name of Grantor	Print Name of Second Grantor (if applicable)
Signature of First Witness to Grantor(s)	Signature of Second Witness to Grantor(s)
Print Name of First Witness to Grantor(s)	Print Name of Second Witness to Grantor(s)

GRANTEE(S):

Signature of Grantee	Signature of Second Grantee (if applicable)
Monique Teresa Daigle Print Name of Grantee	Print Name of Second Grantee (if applicable)
Signature of First Witness to Grantee(s)	Signature of Second Witness to Grantee(s)
Print Name of First Witness to Grantee(s)	Print Name of Second Witness to Grantee(s)

NOTARY ACKNOWLEDGMENT

State of Alaska

County of FNSB

On 6/30/17, before me, Cynthia Gilbert, a notary public in and for said state, personally appeared, Janet M Daigle and Monique T Daigle

who are known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities, and that by their signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

Affiant Known No Produced ID ADL

Type of ID Driver License

(Seal)

Notary Public
CYNTHIA GILBERT
State of Alaska
My Commission Expires March 10, 2021

Manish Singh

From: Monique Daigle <admin@akgreenbee.com>
Sent: Wednesday, July 19, 2017 3:05 PM
To: Manish Singh
Subject: Conditional Use Permit for AK Green Bee, Inc.

Good afternoon, Manish -

I would like to clarify the disposal of solid waste regarding our Conditional Use Permit request. We expect to have well under 5 tons composted solid waste per day that we will be disposing via the FNSB landfill. This waste will not be sold or given away to any persons or entities.

Please let me know if you need further clarifications or have any additional questions.

Thank you,

Monique Daigle
AK Green Bee, Inc.
2364 Badger Rd.
North Pole, AK 99705
907-978-0443

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

Closing Summary

As a residential neighborhood, we are quite concerned about the impacts of this industrial facility once embedded in our community. We request that the State Marijuana Control Board serious consider denial of this application for license based on our statement of objections.

1. The Public Notice Postings for License Application were made in a manner that falls short of the State Regulations
2. State Marijuana Establishment License Application details are not complete
3. The State & Local Protection of School Grounds are not met by this proposed marijuana business location
4. This facility poses an immediate threat to the health of residents in our community with specific cannabis allergies, and its operation would be a direct violation of DEC standards.
5. AK Green Bee, Inc. has demonstrated blatant disregard for State Fire Marshal Authority by proceeding with construction without submitting plans for review
6. There is no functional plan for Fire Protection
7. This controlled-substance, adult-oriented facility is being proposed in residential neighborhood that many children call home.
8. This use of the land is not congruent with FNSB Regional Comprehensive Plan and will therefore lower property values.
9. The application shows a lack of understanding and planning to prevent pollution of the environment
10. AK Green Bee has not provided a plan for compliance with DEC required Non-Domestic Wastewater Disposal System
11. This facility does not provide an adequate plan for Security & Crime Prevention in our residential neighborhood
12. The FNSB Permit Application for this facility is grossly incomplete and contains false certification statements.

The incomplete planning for this controlled-substance establishment is especially concerning in our residential neighborhood as we look out our living room and kitchen windows to watch construction move forward every day without proper engineering, plan review, and permitting by the authorities having jurisdiction.

The Applicant has demonstrated neither an understanding nor a commitment to meet the requirements applicable to a commercial facility or to a controlled-substance facility. The incomplete State Marijuana Establishment License Application and FNSB Marijuana Facility Conditional Use Permit Application demonstrate that AK Green Bee is not prepared to comply with the required permitting and regulation requirements including:

State Marijuana Control Board
FNSB Codes
Alaska State Building Official / State Fire Marshall
Alaska Department of Environmental Conservation
Alaska Department of Natural Resources
US EPA Groundwater Discharge Requirements
US Department of Fish & Wildlife Approval
Americans with Disabilities Act
International Building Code
International Fire Code
National Electrical Code
Uniform Plumbing Code
International Mechanical Code
International Fuel Gas Code
ASCE 7 Seismic Zone Construction

Statement of Objection to
Standard Marijuana Cultivation Facility License #13603

As a homeowner in the adjoining residential neighborhood, the issues raised in this objection have raised serious concerns regarding the ability of the AK Green Bee, Inc. to consistently monitor and manage the aspects of this controlled-substance business in a manner that will prevent illegal operations, protect the air quality, and ground water quality of our neighborhood. Each of these issues will have an immediate and direct impact the value of our properties and our ability to freely use our own yards.

What recourse do we in the residential community have if the AK Green Bee, Inc. <u>continues</u> to operate in a manner that is non-compliant with local and state statutes, regulations, and codes? The risk of irreparable damage to the safety and health of our residential neighborhood and surrounding environment is significant.

We understand that the State is eager to approve marijuana cultivation facilities for the purpose of meeting the demand for product and to increase revenues to support critical services of the State and local governments. However, this is not a valid reason for approving a permit for this AK Green Bee, Inc. which has not met requirements and is not prepared to conduct business in the legal arena in a manner that is congruent with good stewardship of the local environment.

We request that the State Marijuana Control Board deny this this license application.