



March 20, 2019

Via Email

Ms. Barbara Wiens,
Director of Community Planning & Development
Pelham Town Hall
20 Pelham Town Square
Pelham, ON L0S 1E0

Dear Barbara Wiens,

**RE: Response to Comments Received from the Town of Pelham, Niagara
Region and Local Residents**

Leviathan has enclosed a list of responses to address comments, questions and concerns regarding the proposal to cultivate cannabis at 770 Foss Road. These responses have been developed through consultation with engineering companies specialized in specific technical disciplines, including:

- Ehvert Engineering – overall design, including odour and light control,
- Gerrits Engineering – municipal waste flow, and,
- IBI Group – traffic impact on Foss Road

Leviathan has also searched for bylaws and ordinances in Canada and the USA that have been implemented in municipal jurisdictions, as well as studies and surveys on the effectiveness of available technology to mitigate odour and light emissions from the proposed facility. The most comprehensive review found was conducted by Amec Foster Wheeler in 2017 for the County of Santa Barbara, USA, part of which is included for your reference.

If you have any further questions or concerns, please do not hesitate to call.

Thank you,



Paul Gri, P.Eng.

Deviathan

CANNABIS



770	20
Foss	March
Road	2019

Responses to comments from Pelham,
Niagara Region &
Local Residents



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RESPONSE TO FEBRUARY 12, 2019 COMMENTS FROM PELHAM

ODOUR CONTROL:

Leviathan acknowledges that there are jurisdictions across North America that have had to address odour complaints due to the cultivation of cannabis in their communities. These complaints are largely due to operations that have begun cultivating in vented greenhouses with inadequate odour control measures. As a result, bylaws (Canada) and ordinances (USA) have been put in place. Most communities do not have the financial resources for exhaustive studies to implement appropriate restrictions, while at the same time allowing for the emergence of a new, legal business, with the consequence that they are “good neighbours” and local communities can benefit economically from their presence.

There are jurisdictions that have placed setback restrictions based on whether or not odour control measures are present. These may be applicable to vented greenhouses, but they do not contemplate a sealed structure.

Leviathan has stated from the outset that it plans to construct a sealed, rather than a naturally vented, greenhouse. This design results in a HVAC system that is more costly, as the structure, from an HVAC design standpoint, has to be considered as a building. All airflows are mechanically controlled.

Essentially, the facility becomes an “indoor grow”.

There are also jurisdictions that have stated in their ordinances, in varying degrees, that an odour control plan must be designed by a licensed Mechanical Engineer, and contingency measures must be incorporated into the design. (See Appendix for Ordinance No. 2018-12, Dechutes County, Oregon).

The County of Santa Barbara commissioned Amec Foster Wheeler to conduct an, “Environmental Impact Report (EIR) for the Cannabis Land Use Ordinance and Licensing Program”. The report was completed in December 2017. A copy of Appendix – F: Cannabis Odor Control from that report is included in the Appendix.

Regarding odours, the Amec report notes from industry experience in the USA that activated carbon filtration is effective, but only for processing and indoor grows. Vapour-phase systems (deodorizing/misting) are effective for greenhouse (naturally vented) facilities.

As a result of this study, Santa Barbara’s Land Use Ordinance for Cannabis (35.42.075 C.6e Odor Abatement Plan) notes that, “approved odor control systems...may include, but are not limited to:

- (1) Activated carbon filtration systems.
- (2) Vapor-phase systems....
- (3) Other odor controls systems...that demonstrate effectiveness in controlling odors.”

The ordinance does not mandate that two or three systems must be used, but only one that is effective is required.

Leviathan has stated that it is not employing one odour control system, but three – carbon filtration, vapour phase (high pressure fog), and bi-polar ionization which is commonly used in building systems.

Leviathan has stated that it wants to build a, “greenhouse facility...completely sealed with state of the art technology”. Both carbon filtration and vapour phase technologies have been used in cannabis facilities successfully. Bi-polar ionization is standard building technology. Leviathan’s facility will employ all three technologies.

Leviathan knows of no company with this level of commitment.

LIGHT MITIGATION:

Cannabis requires 12 hours of darkness to promote flowering. In the vegetative stage, up to 18 hours of light is employed. Blackout curtains at the ceiling and around the inside of perimeter walls will be deployed by 8pm at the latest. The perimeter side walls are constructed of solid polycarbonate “sandwich” panels. That is, they are comprised of a black panel core encapsulated between two white panels.

As both the sidewall perimeter and ceiling utilize blackout curtains which are not opaque, light is prevented from escaping unless there is a tear or misalignment, which can be repaired.

The Appendix includes specifications for the blackout curtains (Obscura 10075 FR AB+B) which state that 99.9% of light transmission is blocked.

SETBACK FROM KEY HERITAGE & HYDROLOGICAL FEATURES

Phase 1 of the proposal is essentially on the existing footprint. These setbacks would be addressed, if required, for Phase 2 – an additional 100,000 sq ft greenhouse. Plans for a building permit for Phase 2 have not been submitted.

ROAD REPAIRS AT DEVELOPER EXPENSE IF REQUIRED DUE TO DRIVEWAY WIDENING

If the driveway is widened, Leviathan will repair, if necessary.

DRIVEWAY ILLUMINATION AND SIGNAGE

Leviathan intends to install a sign on an existing building – the current Head House as noted on the architectural site plan. See drawing A-100 Updated Site Plan in the Appendix.

Leviathan is not planning to install illumination and a sign at the driveway entrance.

DRIVEWAY RESURFACING

The driveway from Foss Road to the entrance gate will be paved as noted on site plan drawing.

LANDSCAPED BUFFER ALONG DRIVEWAY

The property on which the driveway is situated is 20 feet in width. There is insufficient space to add landscaping within that space.

Proposed tree planting has been updated on the site plan drawing A-100 and includes trees in the parking area, north of the parking area and towards the north west (between the facility and the neighbor who uses the driveway. Please advise if additional trees are required.

NORTH PROPERTY LINE LANDSCAPING

As noted above, Leviathan intends to plant additional trees on its property just south of the property line that adjoins with of 760 Foss Road.

Proposed tree planting has been updated on the site plan drawing A-100.

FENCING DETAILS

The fence construction is noted on drawing A-102, which is included in the Appendix. The fence is topped with 3 strands of barbed wire and is 8 feet to the top of the barbed wire.

ARCHITECTURAL DETAILS - EXHAUST FAN LOCATIONS

Fan locations are shown on the updated mechanical drawing M-302 included in the Appendix. None are located on the east side of the greenhouse due to the setback requirement of 25 metres to the property line.

SANITARY SEWER

As requested, drawing SG-1 Site Grading and Servicing Plan has been updated and is included in the Appendix.

Leviathan will have a manhole installed at the property line as requested and if not previously installed.

Condition assessment: Leviathan will inspect the condition of the existing forced main.

The Appendix includes a table titled, “Sewage Demand: Water Fixture Before and After Comparison”, which is a listing of water fixtures comparing the greenhouse operation when growing cucumbers and after the proposed modifications by Leviathan.

According to calculations by Gerrits Engineering, the proposed operation will contribute 0.4 l/s in total based upon the installation of a 25mm forced main as shown on drawing SG-1. For the Town’s downstream pump station, the increase in flow is from 17.0 to 17.4 l/s, well below the capacity of 27 l/s. Please note that Leviathan’s preference would be to utilize the existing 50mm piping and size the entire system accordingly. The flow would increase to 1.6 l/s, and to 18.6 l/s on the Town’s system. This preference assumes that the existing pipe is in good condition. The disturbance and cost of installing a new line would be avoided.

WATER SERVICE (2 INCH LINE AT STREET) AND PROCESS WATER

Leviathan does not intend to apply to connect to the Town water supply. Past practice was to use runoff water and treat with ozone for irrigation and for use as a potable water source.

POND AND 781 CHURCH STREET

It is Leviathan’s understanding that the pond has been in existence for decades. Leviathan is willing to install gabions in the portion that encroaches the neighbour’s property.

DETAILS OF LIGHT STANDARDS

The light standards in the parking area are 25 feet high with dark-sky friendly fixtures. See the Appendix for the description of the fixture ALED4T125. The light is directed within the property limits and the minimum lighting level is utilized that will be compatible with the functionality of the security cameras.

TRAFFIC IMPACT ON FOSS ROAD

Leviathan commissioned IBI Group who have traffic engineers on staff to provide an opinion on the impact of Leviathan's operations on Foss Road. IBI's assessment will be forwarded for addition to the Appendix as soon as it is received.

LIAISON COMMITTEE

Leviathan looks forward to being part of a liaison committee with the purpose of communicating with the community and to address community concerns.

RESPONSE TO JANUARY 31, 2019 COMMENTS FROM NIAGARA REGION

KEY NATURAL FEATURES – FISH, WOODLANDS, HYDROLOGICAL FEATURES

It is Leviathan's understanding that as the development essentially occupies the existing footprint, and the pond does not connect with a fish habitat, an Environmental Impact Study would not be required. (Telephone conversation took place between Jennifer Whittard of Niagara Region, and Paul Gri for Leviathan, on March 1, 2019.

SANITARY SEWER AND WATER SERVICE

Please refer to comments for Pelham above.

RESPONSE TO PUBLIC COMMENTS

Note: Public comments briefly noted followed by Leviathan written response in bold.

- 1: Person 1
If Leviathan is given approval to build, will it agree to shut down if it can't meet odour control?

Ideally, Leviathan would welcome a level playing field where all cannabis cultivators must abide by the same rules. Leviathan is committed to using the best available odour and light controlling technologies available. The controls that Leviathan is proposing are not proto-types and have been successfully used elsewhere as noted in the Amec study. Any installation requires ongoing maintenance. Could there be a breakdown? Yes, there could, and Leviathan is committed to maintaining the installation in top working order.

- 2: Person 2
We are a trusting community and don't like to be fooled.
Okay for medical, zero for recreational.

Did not seem to be an actual question.

- 3: Person 3
How protected is Pelham from lawsuit?

This question was directed to Pelham council.

- 4: Person 4
States that Leviathan's proposals for odour control is, "all theory".

The Amec study surveyed existing cultivation sites in the USA where odour control technologies were successful. These successful technologies were: carbon filtration for indoor grows, and vapour-phase "high pressure fog" for vented greenhouses.

- 5: Person 5
Doesn't believe charcoal filtration will work – should only be used as a last resort.

The Amec study found that for indoor grows carbon filtration is most effective, and for vented greenhouses, vapour-phase systems (high pressure fog) are more effective than carbon filtration.

Leviathan proposes to use three systems, carbon filtration, high pressure fog and bi-polar ionization. See Leviathan's strategy proposals under "Odour Control" above.

6: Person 6

Is there enough capacity for sewage discharge from the property.

Leviathan will recycle water used for irrigation. Waste from water closets and showers will contribute 0.4 l/s according to Gerrits Engineering with the installation of a 25mm forced main and 1.6 l/s using a 50mm forced main. That increases the Foss Road flow under wet events from 17 to 17.4 l/s and 18.6 l/s, respectively. That is well under the capacity of 27 l/s.

7: Person 7

Suggestion is to build a prototype to prove the technology.

The technology is already proven by past installations as surveyed by Amec. The size of the Leviathan's operation is small by comparison to competitors already operating in Pelham. Building a prototype and then building out the full facility would cause further delay in realizing a revenue stream while incurring additional costs. Leviathan has already been delayed at least six months, seen its capital stock lose approximately \$100 million in value, and is losing, by the most conservative of estimates, in excess of \$1.5 million in revenue every month that that there is no cultivation.

8: Person 8: Ms. Rosati

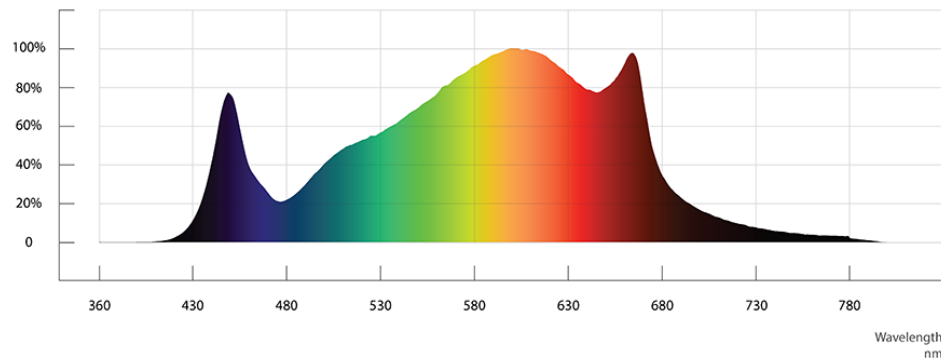
A) Child has weak immune system – sensitive to UV Light.

B) Concerned about buses brought into property.

A) The lighting used for cultivation will mimic to a certain extent the light from the sun. The sidewalls of the greenhouse are constructed of light-blocking material and blackout curtains will be installed around the perimeter walls and overhead. See "Light Mitigation" above. Also, note that the facility is set back 1000 ft from the road.

UV light has a wavelength less than 400nm. The LED lights Leviathan will be using do not emit light with wavelengths less than 400nm as per the graph below.

Measurements of Normalized
Photosynthetic Photon Flux



B) Compared to an operating greenhouse the traffic will not unduly affect Foss Road traffic patterns. There will be employees driving to work and shift start time will be coordinated to avoid the school bus schedule.

9) Person 9

Economics – pay fair share. Businesses in agriculturally zoned areas pay less tax.

Leviathan did not develop the land use and zoning map. The company is willing to work the Town of Pelham regarding land use and zoning, in particular if Leviathan does processing of dried product.

10) Person 10

A) Concerned regarding sewer capacity.

B) Operation should be far from residential areas due to odour and light.

A) See response to comment “6” above.

B) Leviathan received confirmation from the Town of Pelham that cannabis cultivation is applicable for 770 Foss Road. The company is committed to being a good “neighbour” as reflected in the Odour Control strategy described above, and confirmed affective by Amec. Light mitigation will be as described as above. Leviathan is using the best available technologies and in fact is employing three odour control mechanisms, where other companies employ one, or at most, two.

11) Person 11

A) Concerned about light and odour.

B) Value of house decrease.

- A) See response to concerns 1 and 10 above, and proposals under “Odour Control” and “Light Mitigation”
It is also worth noting that the greenhouse has been in existence for 40 years. It has changed hands several times since 2007. The last cucumber crop was at the end of 2017. There normally has been activity at the sight. There should not be a comparison between an undeveloped site and Leviathan’s proposal, but between a fully operationally greenhouse with 300,000 sq ft under cultivation and Leviathan’s proposal for 80,640 sq ft under cultivation.
- B) The cannabis industry has revived real estate values in Smith Falls and Leamington. Leviathan understands and sympathizes with the odour and light issues local residents are facing from existing cannabis operations. Leviathan has stated from the start that it will build a sealed facility to control light and odours. See responses to concerns 5, 10 and 11.
- 12) Person 12: Louis Damm
- A) Why throw others under the bus?
- B) Holland has odour control technology.
- A) Leviathan has committed to controlling odour and light and yet Leviathan is being “punished” for the lack of control employed at competitors’ facilities. Leviathan cannot answer for the actions of others not under Leviathan’s control.
- B) Leviathan is willing to listen to anyone who can provide better available technology. Louis Damm has commented to Leviathan in the fall of 2018 about odour technology available in Holland, but has not brought forward any option.
- 13) Person 13
- A) What is the Health Canada odour number?
- B) Asked about licenses.
- A) The Cannabis Regulations state, “The building, or part of a building, where cannabis is produced, packaged, labeled and stored must be equipped with a system that filters air to prevent the escape of odours.
- B) Did not seem to be a question of concern but of general information.
- 14) Person 14: Lives at Foss and Balfour
- A) Concerned about odours.
- B) Leviathan should have bought property somewhere else.
- A) See “Odour Control” above.
- B) See responses to concerns 1, 9, 10 and 11 above.
- 15) Person 15: Has lived on Foss Road for 50 years
- A) Technology not proven
- B) Will there be paving?

C) Why are you picking on Pelham by threatening a lawsuit.

A) See Leviathan's strategy under "Odour Control" and responses to concerns 1, 5, and 10 above.

B) Leviathan will pave the driveway from Foss Road to the entrance gate. The site plan drawing has been updated accordingly.

C) Leviathan has relied on past communication with the Town in its planning to develop the site to cultivate cannabis. The company has, and continues to suffer financially as a result of the ICBL. There should be no surprise should a lawsuit be launched should the company face continued delays. Leviathan believes it is being responsible and upfront regarding the situation.

16) Person 16

A) Moved to town close to 2 years ago. Leviathan doesn't have integrity if threatening a lawsuit.

D) Not a welding area.

E) Leviathan deaf to our concerns.

A) Did not appear to be an actual question. Woodstock Biomed notified the local authorities and received confirmation of appropriate zoning as per Health Canada requirements. Leviathan purchased Woodstock Biomed and has submitted a responsible plan to address neighbours concerns. See responses to concerns 10, 11 and 15 above.

B) Leviathan proposes to grow an agricultural product in an agriculturally zoned area.

C) Leviathan has stated that it will build a sealed greenhouse to make it easier to control odours and employ three proven odour control technologies. See "Odour Control", "Light Mitigation", and responses to concerns 5, 10 and 11 above.

Leviathan organized a public meeting on November 5, 2018 to present its proposal for 770 Foss Road and listen to concerns from local residents. Due to concerns regarding composting cannabis waste on site that was stated during that public meeting, Leviathan has decided not to compost on site. Waste will be shipped off site for disposal.

Leviathan looks forward to being part of a liaison committee for residents to voice concerns regarding cannabis operations.

Leviathan listens to residents' concerns.

17) Person 17: 755 Church St.

A) How long has Leviathan owned the property?

B) Lenny moved debris – was on my property.

A) The property was purchased by Woodstock Biomed Feb 2018. Leviathan purchased Woodstock Biomed in July 2018.

B) Leviathan was not aware of anything done at the end of the property and apologizes.

- 18) Person 18: Jim Jeffs
Concerned about increased traffic.

There was a greenhouse in operation for decades. The last harvest was November 2017. Leviathan does not expect a significant increase in traffic and has contracted IBI Group to estimate the impact. Their report is included in the Appendix.

- 19) Person 19
Is the greenhouse currently in operation?

No, it is not.

- 20) Person 20: Lives on Balfour St.
Concerned about loss of property value.

**The comparison should be between an operating greenhouse and Leviathan's proposal as per the response to concern 11.
Leviathan cannot and should not be liable for the actions of others.
Leviathan is committed to being a good neighbour and to address odour and light issues as per "Odour Control", "Light Mitigation" and response to concerns 5, 10 and 11 above.**

- 21) Person 21: Phil Glassbergen – Operates greenhouse north of Leviathan

There did not appear to be an actual question.

- 22) Person 22: David Ripley
Purchased home – wants same conditions

**There was an operating greenhouse on the property for decades. See response to concern 20.
To address the odour and light conditions that are different from a cucumber operation, see Odour Control and Light Mitigation strategy and responses to concerns 5, 10, and 11 above.**

- 23) Person 23
Comments directed toward Council to use time to develop vision of the community.

No question directed to Leviathan.

- 24) Person 24
How did they control odours in Barrie? (Referring to Molson plant grow-op).

Leviathan will be using proven technology to control odours. See Odour Control and responses to concerns 1, 5, 10 and 11.

- 25) Person 25: Nancy
Comments directed to the community:
Someone has to be first.
Cannabis is legal.
Give the council time to determine what we should do.

Leviathan was complimented for engaging the community in dialogue. No question was directed to Leviathan.

- 26) Person 26: Brother of Phil Glassbergen
Odour control comments. In Barrie (old Molson plant) the cannabis was grown in large tanks.

Leviathan's proposal for a sealed greenhouse makes the operation very similar to an indoor grow. The main difference is the ability to use natural light through the roof. Thus the HVAC design and odour control is addressed the same as building. See "Odour Control" above.

APPENDIX – LIST OF ATTACHMENTS

- 1. Pelham Letter of Comments of Feb. 12, 2019**
- 2. Niagara Region Letter of Comments of Jan. 31, 2019**
- 3. Oregon - Dechutes County Ordinance No. 2018-12**
- 4. Amec Foster Wheeler Environmental Impact Report –
Appendix F: Cannabis Odor Control**
- 5. Blackout Curtains – OBSCURA 10075 FR AB+B**
- 6. Light Standard Fixtures ALED4T125**
- 7. Sewage Demand: Water Fixtures Before and After Comparison**
- 8. Drawing A-100: Updated Site Plan**
- 9. Drawing A-102: Updated Dimensioned Fence Plan**
- 10. Drawing SG-1: Updated Site Grading and Servicing Plan**
- 11. Drawing M-302: Updated Mechanical - Exhaust Fan Placement**
- 12. IBI Group Traffic Assessment**

February 12, 2019

File No. AM-01-19

EMAIL ONLY (paulgri@zannicengineering.com; wf@friedmans.ca)

Mr. Paul Gri
Zannic Engineering
15 Burnt Log Crescent
Toronto, ON M9C 2J7

Attention: Paul

**RE: Request for Amendment to Interim Control By-law File No. AM-01-19
770 Foss Road**

For your information, the following comments have been received from agencies, utilities and Town staff in response to your request:

General Comments

- Town staff, residents and Council are concerned about the potential for odour impacts from the proposed cannabis production facility. Is it possible to provide an odour impact analysis to address this concern?
- Town staff, residents and Council are concerned about light pollution from the proposed cannabis production facility. Is it possible to provide a light impact analysis? We acknowledge that photometrics have been provided for the building exterior and parking area lighting, however this does not account for light from the production area.

Proposed Site Plan

- The Region requires an Environmental Impact Study prior to development or site alteration within specified distances of Key Natural Heritage and Hydrologic Features. This requirement can be waived if the proposal is contained within the existing footprint or if the addition extends away from the features. The plans should be revised to confirm these setback requirements are met.
- The Growth Plan for the Greater Golden Horseshoe Section 4.2.4 requires a minimum 30 metre vegetated buffer to protect the functions of key features.

Please refer to Regional comments for further details and contact Regional Environmental Planning staff for further information.

- Should the driveway access require widening, any necessary widening is to be completed under a Temporary Works Permit. Any damage caused to the roadway as part of the project construction is to be repaired by the developer at their expense to the satisfaction of the Director of Public Works.
- Please advise whether there are any plans to pave the existing driveway. The existing gravel surface may create dust impacts to neighbouring residences.
- Please advise whether there are any plans to illuminate the driveway or provide signage on Foss Road. If so, please show on site plan and provide details.
- Please advise whether the applicant is willing to provide a landscaped buffer along the driveway on adjacent property? It does not appear that there is sufficient space on the subject property.
- Please add landscape details on the site plan or provide a separate landscape plan. Town staff recommend adding a planting strip along the property line abutting the southern boundary of 760 Foss Road.
- Please provide fencing details.

Architectural Details

- Please provide exhaust fan locations. Note that Section 7.3(e) of Town of Pelham Zoning By-law no. 1136 (1987) requires a minimum side or rear yard for a greenhouse of 15.0 metres, except where ventilating fans exhaust into the respective side or rear yard, the minimum yard shall be 25.0 metres.

Servicing Drawings

- Revise to reflect municipal sanitary servicing.

Civil Servicing Report

- Revise to reflect municipal sanitary servicing.
- Revise to include confirmation from an Engineer detailing the existing and proposed flows from the site to confirm if there will be any additional flows to the Foss Road Sewage Pumping Station and provide the timing of the expected flow to the Foss Road Sewage Pumping Station to determine when the Foss Road Sewage Pumping Station upgrade is required.
- Provide information on what the plan is for the process water.
- The sanitary service will require a manhole at the property line in accordance with the Regional Sewer Use By-law. Sewage composition must be in accordance with the Regional requirements for treatment.
- Condition assessment of the existing sanitary service is required.
- There is currently a 2" water service to the property line. If water demands deviate from the submitted report such as having sprinklers in the building or servicing the structures with municipal water, the water service will need to be upsized and a meter chamber will be required.

- Should a new service be required, the developer shall complete all works through a Temporary Works Permit and be responsible for all costs associated with the installation of a new service within Town right-of-way, as well as removal of the 2" service.
- The Town will model the servicing network and provide comments once an updated report is received.

Lighting Layout

- Provide light standard and fixture details.

In addition to comments received from commenting agencies, utilities and Town departments, we received a phone call from a resident at 781 Church Street, who indicated that a portion of the westerly irrigation pond is located on her property (reflected on the site plan). The resident requested that the pond be removed from her property or that the affected portion of the property be purchased from her.

These comments are being provided to outline the information required to assist Town staff in bringing a timely recommendation report forward for Council's consideration.

If you have any questions or concerns, please contact me.

Sincerely,



Shannon Larocque, MCIP, RPP
Senior Planner

cc: Barbara Wiens, Director of Community Planning and Development

January 31, 2019

VIA EMAIL ONLY

Files: D.11.06.ZA-19-004

Shannon Larocque
Senior Planner
Town of Pelham
20 Pelham Town Square, P.O. Box 400
Fonthill, ON L0S 1E0

Dear Ms. Larocque:

**Re: Regional and Provincial Review Comments
Exemption to Town of Pelham Interim Control By-law 4046
770 Foss Road
Owner: Leviathan Cannabis Group (c/o Friedmans Law Firm)
Town of Pelham**

Regional Development Services staff has reviewed the information circulated with the application for exemption to the Town of Pelham's Interim Control By-law 4046 (ICBL 4046). ICBL 4046, passed on October 15, 2018, restricts the use of all land in the municipality for any cannabis-related land uses for a period of one year. The Town is currently conducting a review on land-use policies and regulations pertaining to cannabis-related uses in order to develop appropriate policies and regulations to manage and control these uses.

The subject application indicates that Leviathan Cannabis Group proposes to construct a hybrid greenhouse facility on an approximately 12 ha property, known municipally as 770 Foss Road in Pelham. The applicant proposes to retrofit the existing 90,000 square foot greenhouse for cannabis cultivation purposes with a separate 30,000 square foot headhouse (to be expanded by 10,000 square feet) that will be used for harvesting and utility infrastructure. A 5,000 square foot office space is also proposed.

The application was received by the Region on January 10, 2019. The following comments are provided from a Regional and Provincial perspective to assist the Town in considering this application.

Regional and Provincial Policies

The subject lands are located in part within a Settlement Area (designated growth area) and primarily within the Prime Agricultural Area as per the Provincial Policy Statement (PPS). The Regional Official Plan (ROP) designates the northerly portion of the subject lands as within the Urban Area (built-up area) and the majority of the subject lands as Good General Agricultural Area. Staff note that only a small portion of the subject land is located in the Urban Area (frontage and part of the driveway). Provincial and Regional policies recognize that agricultural land is a valuable asset that must be properly managed and protected. Permitted uses include agricultural uses, agricultural-related uses and on-farm diversified uses. Therefore, while Region does not object to the proposed exemption to allow the use on the subject lands, the Region does support the Town's efforts to review its policies and regulations related to the use.

It is the Region's position that the growing, processing and distribution of cannabis is considered an agricultural use according to the ROP. In Urban Areas, these facilities may be considered industrial uses and permitted on employment lands. The use may be more closely regulated through local Official Plans and Zoning By-laws.

The following additional comments are provided for information in advance of any other Planning Act applications related to development on the lands.

Core Natural Heritage System (CNHS)

Core Natural Heritage (CNHS) mapping identifies portions of an Environmental Protection Area (EPA) associated with the Upper Coyle Creek Provincially Significant Wetland (PSW) complex located on and adjacent to the southernmost portion of the property, as well as Environmental Conservation Area (ECA) associated with Significant Woodland. In addition, the creek located approximately 30 metres (m) west of the property and adjacent to the PSW onsite is mapped as Important (Type 2) Fish Habitat (see attached map). These same features are also identified by the Growth Plan for the Great Golden Horseshoe (Growth Plan) as part of the Provincial Natural Heritage System (NHS) and are considered Key Natural Heritage and Hydrologic Features respectively. The property is also identified as a Groundwater Protection Area (Highly Vulnerable Aquifer).

Regional Official Plan policies require the completion of an Environmental Impact Study (EIS) prior to development or site alteration within 120 m of a PSW, within 50 m of Significant Woodland, and within 30 m of Fish Habitat. The purpose of the EIS is to demonstrate there will be no negative impact on the features or their ecological function over the long term. However, the Region's EIS Guidelines permit waiving of the EIS requirement provided other criteria are met. In this case, provided the redevelopment is considered small or medium-scale, the requirements for an EIS could be waived if the proposed redevelopment maintains a 30 m setback from these key features. Alternatively, the EIS requirement can also be waived if the proposal is for redevelopment contained within the existing footprint, or if redevelopment includes an addition which extends away from the feature. At the Site Plan stage, the buildout plans should be revised to confirm these setback requirements are met.

In addition, staff advise that the Growth Plan includes policies applicable to a new Provincial NHS, portions of which include the undeveloped areas of the property. The applicant should be advised that currently, according to Section 4.2.4 of the Growth Plan, a minimum 30 m vegetation protection zone (buffer) is required to protect the functions of the adjacent key features. Therefore, prior to any future plans for development or site alteration that trigger *Planning Act* approvals, a natural heritage evaluation would be requested to address the Growth Plan policies and identify both a suitable buffer and any additional restrictions (mitigation measures) that may be required to protect the adjacent natural heritage features and functions. If requested, Regional Environmental Planning staff will provide further explanation at the Site Plan stage.

Servicing

Policy 5.C.5 of the ROP states that development outside of the urban boundary will not be provided with municipal sewer services but instead will be expected to depend on private sewage disposal and private water supply. Regional Staff have received the submitted Civil Servicing Report and Leviathan Presentation for the Zoning By-Law Amendment for Leviathan Cannabis Group Inc. In recent correspondence from the Town, the intent of the owner is to connect to the municipal system.

Regional staff have not reviewed the Civil Servicing Report as the design provided was a septic design. The following information will be required to ensure the current Regional Infrastructure can accommodate the development.

Municipal Servicing Option

The subject land is within the Foss Road Sewage Pumping Station (SPS) and Forcemain. The Region's Master Servicing Plan has indicated an upgrade to the Foss Road SPS and Forcemain, scheduled for 2022-2031. Currently, the Region has scheduled a Forcemain replacement project for

2025 (Design) and 2027 (Construction). The current flows to the Foss Road SPS are on average between 3.5 and 5.5 L/s during dry days and up to 17 L/s during wet weather, the current capacity of the station is 27 L/sec.

- The Region will require that the applicant provide a letter from an engineer detailing the existing flows and proposed flows from the site to see if there will be any additional flows to the Foss Road SPS and provide the timing of the expected flow to the Foss Road SPS to determine when the Foss Road SPS upgrade is required.
- The letter should provide information on what the plan is for the process water
- The service will require a manhole at the property line in accordance with the Regional Sewer Use By-law
- We have attached the link to the Region's Sewer Use By-law so the applicant can ensure the sewage composition is in accordance with our requirements for treatment:
<https://www.niagararegion.ca/living/sewage/sewage-bylaw.aspx>

If for some reason the applicant decides to proceed with an on-site septic system our preliminary comments are as follows (detailed calculations were not reviewed by Regional Staff):

Private Servicing Option

If the property is proposing to privately service the subject lands, Regional Staff provide the following comments:

The proposed location of the septic system does not appear to meet with Building Code minimum setback requirements (pond, structures).

- The indicated size of the septic system may not be sufficient for the sewage flows generated from the new development. A detailed septic system design using OBC Table 8.2.1.3.B. is required to confirm the flow rate calculations.
- If the property is proposing the service the subject lands, Regional staff will review the detailed flow rate calculations and provide further comments during the Site Plan stage.

Conclusion

Regional Development Services staff has no objection to the ICBL exemption request from a Provincial or Regional perspective, however does support the Town's efforts to review its policies and regulations regarding cannabis-related uses. Regional Staff will provide further comments when circulated on any future Planning Act applications.

If you have any questions, please contact me at extension 3518 or Aaron Butler, Senior Planner at ext. 3264.

Please send a copy of the staff report and notice of the Town's decisions on these applications.

Sincerely,



Alexsandria Pasquini
Development Planner

cc: Aaron Butler, Senior Development Planner, Niagara Region
Jennifer Whittard, Manager of Environmental Planning, Niagara Region
Susan Dunsmore, Manager Infrastructure Planning, Niagara Region



Legend

MNR Evaluated Wetlands

- Non-Provincially Significant Wetland
- Provincially Significant Wetland

Wetland Allowance

CNH - Fish Habitat

ECA: Significant Woodlands

Ownership Parcels

Provincial Natural Heritage Systems

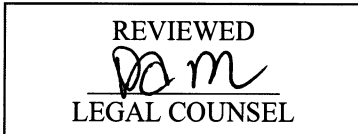
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Notes



For Recording Stamp Only

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF DESCHUTES COUNTY, OREGON

An Ordinance Amending DCC Titles 9, 18, and 22 to
Refine Standards for the Regulation and Enforcement
of Marijuana Production on Rural Lands and
Declaring an Emergency. *

ORDINANCE NO. 2018-012

WHEREAS, the Board of County Commissioners directed the Deschutes County Community Development Department staff to initiate amendments (Planning Division File No. 247-18-000540-TA) to Deschutes County Code (DCC) Title 9, Chapter 9.12, Right to Farm; Title 18, Chapter 18.24, Redmond Urban Reserve Area Combining Zone; Chapter 18.116, Supplementary Provisions; Chapter 18.124, Site Plan Approval Criteria; Title 22, Chapter 22.24, Land Use Action Hearings; and Chapter 22.32, Appeals, refining standards for the regulation and enforcement of marijuana production on rural lands; and

WHEREAS, the Board of County Commissioners considered this matter after a duly noticed public hearing on August 28, 2018 and concluded that the public will benefit from the changes to the Deschutes County Code; now, therefore,

THE BOARD OF COUNTY COMMISSIONERS OF DESCHUTES COUNTY, OREGON, ORDAINS
as follows:

Section 1. AMENDMENT. DCC 9.12, Right to Farm, is amended to read as described in Exhibit "A," attached and incorporated by reference herein, with new language underlined and deleted language set forth in ~~strikethrough~~.

Section 2. AMENDMENT. DCC 18.24, Redmond Urban Reserve Area Combining Zone, is amended to read as described in Exhibit "B," attached and incorporated by reference herein, with new language underlined and deleted language set forth in ~~strikethrough~~.

Section 3. AMENDMENT. DCC 18.116, Supplementary Provisions, is amended to read as described in Exhibit "C," attached and incorporated by reference herein, with new language underlined and deleted language set forth in ~~strikethrough~~.

Section 4. AMENDMENT. DCC 18.124, Site Plan Review, is amended to read as described in Exhibit "D," attached and incorporated by reference herein, with new language underlined and deleted language set forth in ~~strikethrough~~.

Section 5. AMENDMENT. DCC 22.24, Land Use Action Hearings, is amended to read as described in Exhibit "E," attached and incorporated by reference herein, with new language underlined and deleted language set forth in ~~strikethrough~~.

///

Section 6. AMENDMENT. DCC 22.32, Appeals, is amended to read as described in Exhibit "F," attached and incorporated by reference herein, with new language underlined and deleted language set forth in ~~strike through~~.


Section 7. FINDINGS. The Board adopts as its findings Exhibit "G," attached and incorporated by reference herein.

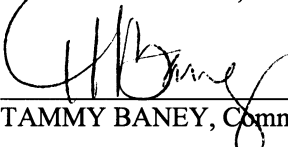
Section 8. EMERGENCY. This Ordinance being necessary for the public peace, health, safety and welfare, an emergency is declared to exist, and this Ordinance becomes effective 30 days from adoption.

Dated this 24 of October, 2018

BOARD OF COUNTY COMMISSIONERS
OF DESCHUTES COUNTY, OREGON


ANTHONY DeBONE Chair


PHIL HENDERSON, Vice Chair


TAMMY BANEY, Commissioner

ATTEST:

Recording Secretary

Date of 1st Reading: 24 day of October, 2018.

Date of 2nd Reading: 24 day of October, 2018.

Record of Adoption Vote:

Commissioner	Yes	No	Abstained	Excused
Anthony DeBone	<u>X</u>	—	—	—
Phil Henderson	<u>X</u>	—	—	—
Tammy Baney	<u>X</u>	—	—	—

Effective date: 23 day of November, 2018.

Chapter 9.12. RIGHT TO FARM

9.12.020. Purpose and Scope.

* * *

9.12.020. Purpose and Scope.

- A. It is the purpose of DCC 9.12 to protect farm and forest-based economically productive activities of Deschutes County in order to assure the continued health, safety and prosperity of its residents. Farm and forest uses sometimes offend, annoy, interfere with or otherwise affect others located on or near farm and forest lands. Deschutes County has concluded in conformance with ORS chapter 30 that persons located on or near farm and forest lands must accept resource uses and management practices.
- B. DCC 9.12 is intended to limit the availability of remedies based on nuisance or trespass, rights of action and claims for relief and issuance of citations for violations over which Deschutes County has jurisdiction, when they otherwise would either have an adverse impact on farm and forest uses that Deschutes County seeks to protect, or would impair full use of the farm and forest resource base within Deschutes County.
- B-C. Scope. DCC Chapter 9.12 (The Deschutes County Right To Farm Ordinance) applies to all crops. does not apply to marijuana production operations whether permitted by Deschutes County, Oregon Liquor Control Commission, Oregon Health Authority, or otherwise However, subject to ORS 475B, Cannabis regulation, the governing body of a county may adopt ordinances that impose reasonable regulations on marijuana production, processing, wholesaling and retailing.
(Ord. 2018-012 §1, 2018; Ord. 2003-021 §21, 2003; Ord. 95-024 §2, 1995)

Chapter 18.24 REDMOND URBAN RESERVE AREA COMBINING ZONE

18.24.030. Conditional Uses Permitted; Prohibition.

* * *

18.24.030. Conditional Uses Permitted; Prohibition.

- A. Subject to the prohibitions provided for in DCC 18.24.030(B), uses permitted conditionally in the RURA-Redmond Urban Reserve Area Combining Zone shall be those identified as conditional uses in the underlying zoning districts. Conditional uses shall be subject to all conditions of those zones as well as the requirements of this chapter.
 - B. The following uses are prohibited and not permitted in the RURAedmond Urban Reserve Area Combining Zone:
 - 1. Marijuana production; and
 - 2. Marijuana processing.
- (Ord. 2018-012 §2, 2018)

Chapter 18.116. SUPPLEMENTARY PROVISIONS

18.116.330 Marijuana Production, Processing, and Retailing

18.116.340 Marijuana Production Registered by the Oregon Health Authority (OHA)

* * *

18.116.330. Marijuana Production, Processing, and Retailing

A. Applicability. Section 18.116.330 applies to:

1. Marijuana Production in the EFU, ~~MUA-10~~, and RI zones.
2. Marijuana Processing in the EFU, ~~MUA-10~~, TeC, TeCR, TuC, TuI, RI, and SUBP zones
3. Marijuana Retailing in the RSC, TeC, TeCR, TuC, TuI, RC, RI, SUC, SUTC, and SUBP zones.
4. Marijuana Wholesaling in the RSC, TeC, TeCR, TuC, RC, SUC, and SUBP zones.

B. Marijuana production and marijuana processing. Marijuana production and marijuana processing shall be subject to the following standards and criteria:

1. Minimum Lot Area.
 - a. In the EFU and ~~MUA-10~~ zones, the subject legal lot of record shall have a minimum lot area of five (5) acres.
2. Indoor Production and Processing.

~~In the MUA-10 zone, marijuana production and processing shall be located entirely within one or more fully enclosed buildings with conventional or post framed opaque, rigid walls and roof covering. Use of greenhouses, hoop houses, and similar non-rigid structures is prohibited.~~

 - a. In the EFU zone, marijuana production and processing shall only be located in buildings, including greenhouses, hoop houses, and similar structures.
 - b. In all zones, marijuana production and processing are prohibited in any outdoor area.
3. Maximum Mature Plant Canopy Size. In the EFU zone, the maximum canopy area for mature marijuana plants shall apply as follows:
 - a. Parcels from 5 acres to less than 10 acres in lot area: 2,500 square feet.
 - b. Parcels equal to or greater than 10 acres to less than 20 acres in lot area: 5,000 square feet. The maximum canopy area for mature marijuana plants may be increased to 10,000 square feet upon demonstration by the applicant to the County that:
 - i. The marijuana production operation was lawfully established prior to January 1, 2015; and
 - ii. The increased mature marijuana plant canopy area will not generate adverse impact of visual, odor, noise, lighting, privacy or access greater than the impacts associated with a 5,000 square foot canopy area operation.
 - c. Parcels equal to or greater than 20 acres to less than 40 acres in lot area: 10,000 square feet.
 - d. Parcels equal to or greater than 40 acres to less than 60 acres in lot area: 20,000 square feet.
 - e. Parcels equal to or greater than 60 acres in lot area: 40,000 square feet.
4. ~~Maximum Building Floor Area. In the MUA-10 zone, the maximum building floor area used for all activities associated with marijuana production and processing on the subject property shall be:~~
 - a. ~~Parcels from 5 acres to less than 10 acres in lot area: 2,500 square feet.~~
 - b. ~~Parcels equal to or greater than 10 acres: 5,000 square feet.~~
54. Limitation on License/Grow Site per Parcel. No more than one (1) Oregon Liquor Control Commission (OLCC) licensed marijuana production or Oregon Health Authority (OHA)

- registered medical marijuana grow site shall be allowed per legal parcel or lot.
65. Setbacks. The following setbacks shall apply to all marijuana production and processing areas and buildings:
- a. Minimum Yard Setback/Distance from Lot Lines: 2100150 feet.
 - b. Setback from an off-site dwelling: 5300400 feet.
 - c. Setback from Federal public lands: 300 feet.
 - b. For the purposes of this criterion, an off-site dwelling includes those proposed off-site dwellings with a building permit application submitted to Deschutes County prior to submission of the marijuana production or processing application to Deschutes County.
 - d. Exception: Any reduction to these setback requirements may be granted by the Planning Director or Hearings Body provided the applicant demonstrates the reduced setbacks afford equal or greater mitigation of visual, odor, noise, lighting, privacy, and access impacts.
6. Separation Distances. Minimum separation distances shall apply as follows:
- a. The use applicant property line shall be located a minimum of 1000-1,320 feet from:
 - i. A public elementary or secondary school for which attendance is compulsory under Oregon Revised Statutes 339.010, et seq., including any parking lot appurtenant thereto and any property used by the school;
 - ii. A private or parochial elementary or secondary school, teaching children as described in ORS 339.030(1)(a), including any parking lot appurtenant thereto and any property used by the school;
 - iii. A licensed child care center or licensed preschool, including any parking lot appurtenant thereto and any property used by the child care center or preschool. This does not include licensed or unlicensed child care which occurs at or in residential structures;
 - iv. A youth activity center; ~~and~~
 - v. State, local, and municipal parks, including land owned by a parks district;
 - vi. Public lands; and
 - vi. Redmond Urban Reserve Area;
 - vii. The boundary of any local jurisdiction that has opted out of Oregon's recreational marijuana program; and
 - viii. Any other lot or parcel approved by Deschutes County for- marijuana production.
 - b. For purposes of DCC 18.116.330(B)(76), all distances shall be measured from the lot line of the affected properties listed in DCC 18.116.330(B)(76)(a) to the closest point of the ~~buildings and land area~~ applicant's property line of land occupied by the marijuana producer or marijuana processor.
 - c. A change in use of another property to those identified in DCC 18.116.330(B)(76) shall not result in the marijuana producer or marijuana processor being in violation of DCC 18.116.330(B)(76) if the use is:
 - i. Pending a local land use decision;
 - ii. Licensed or registered by the State of Oregon; or
 - iii. Lawfully established.
87. Access. Marijuana production ~~over 5,000 square feet of canopy area for mature marijuana plants sites~~ shall comply with the following standards.
- a. Have frontage on and legal direct access from a constructed public, county, or state road; or
 - b. Have access from a private road or easement serving only the subject property.
 - c. If the property takes access via a private road or easement which also serves other properties, the applicant shall obtain written consent to utilize the easement or private

road for marijuana production access from all owners who have access rights to the private road or easement. The written consent shall:

- i. Be on a form provided by the County and shall contain the following information;
- ii. Include notarized signatures of all owners, persons and properties holding a recorded interest in the private road or easement;
- iii. Include a description of the proposed marijuana production or marijuana processing operation; and
- iv. Include a legal description of the private road or easement.

98. Lighting. Lighting shall be regulated as follows:

- a. Inside building lighting, including greenhouses, hoop houses, and similar structures, used for marijuana production shall not be visible outside the building from ~~sundown~~~~sunset to sunup~~~~sunrise~~ 7:00 p.m. to 7:00 a.m. on the following day.
- b. Lighting fixtures shall be fully shielded in such a manner that all light emitted directly by the lamp or a diffusing element, or indirectly by reflection or refraction, is projected below the horizontal plane through the lowest light-emitting part.
- c. Light cast by exterior light fixtures other than marijuana grow lights shall comply with DCC 15.10, Outdoor Lighting Control.

109. Odor. The building shall be equipped with an effective odor control system which must at all times prevent unreasonable interference of neighbors' use and enjoyment of their property. As used in DCC 18.116.330(B)(9), building means the building, including greenhouses, hoop houses, and other similar structures, used for marijuana production or marijuana processing. Odor produced by marijuana production and processing shall comply with the following:

~~Standard. To prevent unreasonable interference of neighbors' use and enjoyment of their property, no adverse or noxious odors shall be detectable beyond the property line.~~

- a. Odor control plan. To ensure that the standard stated in DCC 18.116.330(B)(9) is continuously met, the applicant shall submit an odor control plan prepared and stamped by a mechanical engineer licensed in the State of Oregon that includes the following:
 - i. The mechanical engineer's qualifications and experience with system design and operational audits of effective odor control and mitigation systems;
 - ii. A detailed analysis of the methodology, including verified operational effectiveness, that will be relied upon to effectively control odor on the subject property;
 - iii. A detailed description of any odor control systems that will be utilized, including operational schedules and maintenance intervals;
 - iv. Contingence measures if any aspect of the odor control plan fails or is not followed, or if it is otherwise shown that the standard stated in DCC 18.116.330(B)(9) is not met;
 - v. Testing protocols and intervals; and
 - vi. Identification of the responsible parties tasked with implementing each aspect of the odor control plan.

~~Compliance. On going compliance with the odor control plan is mandatory and shall be ensured with a permit condition of approval, but compliance with the odor control plan does not supersede required compliance with the standard set forth in DCC 18.116.330(B)(9). If provided in applicable state statutes, private actions alleging nuisance or trespass associated with odor impacts are authorized.~~

- b. Modifications. Significant Mmodifications to the odor control plan, including but not limited to replacement of one system for another or a change in odor control methodology shall be approved in the same manner as a modification to a land use action pursuant to DCC 22.36.040.

- c. The system shall at all times be maintained in working order and shall be in use.
 - a. ~~The building shall be equipped with an effective odor control system which must at all times prevent unreasonable interference of neighbors' use and enjoyment of their property.~~
 - b. ~~An odor control system is deemed permitted only after the applicant submits a report by a mechanical engineer licensed in the State of Oregon demonstrating system design and operational audit of effectively , operationalC is authorized system will effectively and continuously control odor so as not to unreasonably interfere with neighbors' use and enjoyment of their property.~~
 - e. ~~Private actions alleging nuisance or trespass associated with odor impacts are authorized, if at all, as provided in applicable state statute.~~
 - d. ~~The odor control system shall:~~
 - i. ~~Consist of one or more fans. The fan(s) shall be sized for cubic feet per minute (CFM) equivalent to the volume of the building (length multiplied by width multiplied by height) divided by three. The filter(s) shall be rated for the required CFM; or~~
 - ii. ~~Utilize an alternative method or technology to achieve equal to or greater odor mitigation than provided by (i) above.~~
 - e. ~~The system shall at all times be maintained in working order and shall be in use.~~
1110. Noise. Noise produced by marijuana production and marijuana processing shall comply with the following:
- a. ~~Sustained noise from mechanical equipment used for heating, ventilation, air condition, odor control, fans and similar functions shall not exceed 30 dB(A) measured at any property line between 10:00 p.m. and 7:00 a.m. the following day~~
 - b. ~~Sustained noise from marijuana production is exempt from protections of DCC 9.12 and ORS 30.395, Right to Farm. Intermittent noise for accepted farming practices is permitted.~~
 - a. Standard. To prevent unreasonable interference of neighbors' use and enjoyment of their property, sustained noise including ambient noise levels shall not be detectable beyond the applicant's property line above 3045 dB(A) in total between 10:00 pm and 7:00 am the following day.
 - i. For purposes of DCC 18.116.330(B)(10), "sustained noise" shall mean noise lasting more than ~~twofive~~ continuous minutes or ~~twofive~~ total minutes in a one hour period from mechanical equipment used for heating, ventilation, air condition, odor control, fans and similar functions associated with marijuana production and processing.
 - b. Noise control plan. To ensure that the standard stated in DCC 18.116.330(B)(10) is continuously met, the applicant shall submit a noise control plan prepared and stamped by a mechanical engineer licensed in the State of Oregon that includes the following:
 - i. The mechanical engineer's qualifications and experience with system design and operational audit of effective noise control and mitigation systems;
 - ii. A detailed analysis of the methodology that will be relied upon to effectively control noise on the subject property;
 - iii. A detailed description of any noise control systems that will be utilized, including operational schedules and maintenance intervals;
 - iv. Contingence measures if any aspect of the noise control plan fails or is not followed, or if it is otherwise shown that the standard stated in DCC 18.116.330(B)(10) is not met;
 - v. Testing protocols and intervals; and
 - vi. Identification of the responsible parties tasked with implementing each aspect of the noise control plan.

~~Compliance. On-going compliance with the noise control plan is mandatory and shall be ensured with a permit condition of approval, but compliance with the noise control plan does not supersede required compliance with the standard set forth in DCC 18.116.330(B)(1). If provided in applicable state statutes, private actions alleging nuisance or trespass associated with odor impacts are authorized.~~

- c. ~~Modifications. Significant modifications to the noise control plan, including but not limited to replacement of one system for another or a change in noise control methodology shall be approved in the same manner as a modification to a land use action pursuant to DCC 22.36.040. Modifications to the noise control plan shall be approved in the same manner as a modification to a land use action pursuant to DCC 22.36.040.~~

1211. Screening and Fencing. The following screening standards shall apply to greenhouses, hoop houses, and similar non-rigid structures and land areas used for marijuana production and processing:

- a. All marijuana uses, buildings, structures, fences, and storage and parking areas, whether a building permit is required or not, in the Landscape Management Combining Zone, shall comply with and require Subject to DCC 18.84, Landscape Management Combining Zone approval, if applicable.
- b. Fencing and screening shall be finished in a muted earth tone that blends with the surrounding natural landscape and shall not be constructed of temporary materials such as plastic sheeting, hay bales, tarps, etc., and shall be subject to DCC 18.88, Wildlife Area Combining Zone, if applicable.
- c. Razor wire, or similar, shall be obscured from view or colored a muted earth tone that blends with the surrounding natural landscape.
- d. The existing tree and shrub cover screening the development from the public right-of-way or adjacent properties shall be retained to the maximum extent possible. This provision does not prohibit maintenance of existing lawns, removal of dead, diseased or hazardous vegetation; the commercial harvest of forest products in accordance with the Oregon Forest Practices Act; or agricultural use of the land.

1312. Water. Applicant shall state the anticipated amount of water to be used, as stated on the water right, certificate, permit, or other water use authorization, on an annual basis. Water use from any source for marijuana production shall comply with all applicable state statutes and regulations. The applicant shall provide:

- a. A copy of a water right permit, certificate, or other water use authorization from the Oregon Water Resource Department; or An Oregon Water Resources Department (OWRD) Certificate(s), permit, or other water use authorization proving necessary water supply of proper classification will be available for intended use during required seasons, regardless of source; or
- b. A will serve statement that water is supplied from a public or private water provider, along with a will haul statement, including the name and contact information of the water provider/hauler; or A source water provider Will Serve statement referencing valid Water Right to be utilized, if any, as well as a Will Haul statement, including the name and contact information of the water hauler; or
- c. Proof from the Oregon Water Resources Department that the water to be used is from a source that does not require a water right. In the alternative to (a) and (b) above, proof from Oregon Water Resources Department that the water supply to be used does not require a Water Right for the specific application use classification, volume, and season of use (i.e., roof-collected water).
- d. For production sites with 5,000 square feet or more of mature canopy, a dedicated water meter for the marijuana production facility shall be required. If the applicant is proposing a year-round production facility, the water right, certificate, permit, or other

water use authorization must address all permitted sources of water for when surface water is unavailable.

- e. In the event that the water source for the facility changes from the use of an OWRD certificate, permit, or other water use authorization to the use of a water hauler, or from the use of a water hauler to another source, a modification to a land use action pursuant to DCC 22.36.040 notification to the Community Development Department is required.

- d. If multiple sources of water are being proposed during the year, the applicant shall provide proof from the controlling entity that the water can be applied to marijuana production.

1413. Fire protection for processing of cannabinoid extracts. Processing of cannabinoid extracts shall only be permitted on properties located within the boundaries of or under contract with a fire protection district.

1514. Utility Verification. Utility statements identifying the proposed operation, or operational characteristics such as required electrical load and timing of such electrical loads and Aa statement from each utility company proposed to serve the operation, stating that each such company is able and willing to serve the operation, shall be provided. The utility shall state that it has reviewed the new service or additional load request and determined if existing capacity can serve the load or if a system upgrade is required. Any new service request or additional load request requiring an upgrade shall be performed per the serving utility's stated policy.

1615. Security Cameras. If security cameras are used, they shall be directed to record only the subject property and public rights-of-way, except as required to comply with requirements of the OLCC or the OHA.

1716. Secure Waste Disposal.

- a. Marijuana waste shall be stored in a secured waste receptacle in the possession of and under the control of the OLCC licensee or OHA Person Responsible for the Grow Site (PRMG).
- b. A statement is also required describing how any water runoff is being addressed. Wastewater generated during marijuana production and/or processing shall be disposed of in compliance with applicable federal, state, and local laws and regulations.

18. Residency. In the MUA 10 zone, a minimum of one of the following shall reside in a dwelling unit on the subject property:

- a. An owner of the subject property;
- b. A holder of an OLCC license for marijuana production, provided that the license applies to the subject property; or
- e. A person registered with the OHA as a person designated to produce marijuana by a registry identification cardholder, provided that the registration applies to the subject property.

1917. Nonconformance. All medical marijuana grow sites lawfully established prior to June 8, 2016 by the Oregon Health Authority shall comply with Ordinance 2016-015 and with the provisions of DCC 18.116.330(B)(9) by September 8, 2016 and with the provisions of DCC 18.116.330(B)(10-12, 16, 17) by December 8, 2016.

2018. Prohibited Uses.

- a. In the EFU zone, the following uses are prohibited:
 - i. A new dwelling used in conjunction with a marijuana crop;
 - ii. A farm stand, as described in ORS 215.213(1)(r) or 215.283(1)(o), used in conjunction with a marijuana crop;
 - iii. A commercial activity, as described in ORS 215.213(2)(c) or 215.283(2)(a), carried on in conjunction a marijuana crop; and

- iv. ~~Agri-tourism and other commercial events and activities in conjunction with a marijuana crop.~~
- b. ~~In the MUA-10 Zone, the following uses are prohibited:~~
 - i. ~~Commercial activities in conjunction with farm use when carried on in conjunction with a marijuana crop.~~
- eb. In the EFU, MUA-10, and Rural Industrial zones, the following uses are prohibited on the same property as marijuana production:
 - i. Guest Lodge.
 - ii. Guest Ranch.
 - iii. Dude Ranch.
 - iv. Destination Resort.
 - v. Public Parks.
 - vi. Private Parks.
 - vii. Events, Mass Gatherings and Outdoor Mass Gatherings.
 - viii. Bed and Breakfast.
 - ix. Room and Board Arrangements.

19. Compliance.

- a. Odor. On-going compliance with the odor control plan is mandatory and shall be ensured with a permit condition of approval. The odor control plan does not supersede required compliance with the standard set forth in DCC 18.116.330(B)(9). If provided in applicable state statutes, private actions alleging nuisance or trespass associated with odor impacts are authorized.
 - b. Noise. On-going compliance with the noise control plan is mandatory and shall be ensured with a permit condition of approval. The noise control plan does not supersede required compliance with the standard set forth in DCC 18.116.330(B)(10). If provided in applicable state statutes, private actions alleging nuisance or trespass associated with odor impacts are authorized.
- C. Marijuana Retailing. Marijuana retailing, including recreational and medical marijuana sales, shall be subject to the following standards and criteria:
1. Hours. Hours of operation shall be no earlier than 9:00 a.m. and no later than 7:00 p.m. on the same day.
 2. Odor. The building, or portion thereof, used for marijuana retailing shall be designed or equipped to prevent detection of marijuana plant odor off premise by a person of normal sensitivity.
 3. Window Service. The use shall not have a walk-up or drive-thru window service.
 4. Secure Waste Disposal. Marijuana waste shall be stored in a secured waste receptacle in the possession of and under the control of the OLCC licensee or OHA registrant.
 5. Minors. No person under the age of 21 shall be permitted to be present in the building, or portion thereof, occupied by the marijuana retailer, except as allowed by state law.
 6. Co-Location of Related Activities and Uses. Marijuana and tobacco products shall not be smoked, ingested, or otherwise consumed in the building space occupied by the marijuana retailer. In addition, marijuana retailing shall not be co-located on the same lot or parcel or within the same building with any marijuana social club or marijuana smoking club.
 7. Separation Distances. Minimum separation distances shall apply as follows:
 - a. The use shall be located a minimum of 1,000 feet from:
 - i. A public elementary or secondary school for which attendance is compulsory under Oregon Revised Statutes 339.010, et seq., including any parking lot appurtenant thereto and any property used by the school;
 - ii. A private or parochial elementary or secondary school, teaching children as described in ORS 339.030(1)(a), including any parking lot appurtenant thereto and any property used by the school;

- iii. A licensed child care center or licensed preschool, including any parking lot appurtenant thereto and any property used by the child care center or preschool. This does not include licensed or unlicensed family child care which occurs at or in residential structures;
 - iv. A youth activity center;
 - v. National monuments and state parks; and
 - vi. Any other marijuana retail facility licensed by the OLCC or marijuana dispensary registered with the OHA.
 - b. For purposes of DCC 18.116.330(CB)(7), distance shall be measured from the lot line of the affected property to the closest point of the building space occupied by the marijuana retailer. For purposes of DCC 18.116.330(CB)(7)(a)(vi), distance shall be measured from the closest point of the building space occupied by one marijuana retailer to the closest point of the building space occupied by the other marijuana retailer.
 - c. A change in use to another property to a use identified in DCC 18.116.330(CB)(7), after a marijuana retailer has been licensed by or registered with the State of Oregon shall not result in the marijuana retailer being in violation of DCC 18.116.330(CB)(7).
- D. Inspections and Annual Reporting.
- 1. An annual report shall be submitted to the Community Development Department by the real property owner or licensee, if different, each February 1, documenting all of the following as of December 31 of the previous year, including the applicable fee as adopted in the current County Fee Schedule and a fully executed Consent to Inspect Premises form:
 - a. Documentation demonstrating compliance with the:
 - i. Land use decision and permits.
 - ii. Fire, health, safety, waste water, and building codes and laws.
 - iii. State of Oregon licensing requirements.
 - b. An optional statement of annual water use.
 - b. ~~Failure to timely submit the annual report, fee, and Consent to Inspect Premises form or to demonstrate compliance with DCC 18.116.330(DC)(1)(a) shall serve as acknowledgement by the real property owner and licensee that the otherwise allowed use is not in compliance with Deschutes County Code; authorizes permit revocation under DCC Title 22, and may be relied upon by the State of Oregon to deny new or license renewal(s) for the subject use.~~
 - c. Other information as may be reasonably required by the Planning Director to ensure compliance with Deschutes County Code, applicable State regulations, and to protect the public health, safety, and welfare.
 - d. As a condition of approval, the applicant must consent in writing to allow Deschutes County to, randomly and without prior notice, inspect the premises and ascertain the extent and effectiveness of the odor control system(s), compliance with the Deschutes County Code, and applicable conditions of approval. Inspections may be conducted by the County up to fourthree (43) times per calendar year, including one inspection prior to the initiation of use. ~~for inspecting the premises and to ascertain the extent and effectiveness of odor control system(s).~~ Marijuana Control Plan to be established and maintained by the Community Development Department.
 - e. Conditions of Approval Agreement to be established and maintained by the Community Development Department.
 - e.f. Documentation that System Development Charges have been paid.
 - g. This information shall be public record subject to ORS 192.502(17).
 - h. Failure to timely submit the annual report, fee, and Consent to Inspect Premises form or to demonstrate compliance with DCC 18.116.330(D)(1)(a) shall serve as acknowledgement by the real property owner and licensee that the otherwise allowed

use is not in compliance with Deschutes County Code; authorizes permit revocation under DCC Title 22, and may be relied upon by the State of Oregon to deny new or license renewal(s) for the subject use.

(Ord. 2018-012 §3, 2018; Ord. 2016-015 §10, 2016)

18.116.340. Marijuana Production Registered by the Oregon Health Authority (OHA)

A. Applicability. Section 18.116.340 applies to:

1. All marijuana production registered by OHA prior to June 1, 2016; and
2. All marijuana production registered by OHA on or after June 1 2016 until the effective date of Ordinances 2016-015, 2016-16, 2016-17, and 2016-18, at which time Ordinances 2016-015 through Ordinance 2016-018 shall apply.

B. All marijuana production registered by OHA prior to June 1, 2016 shall comply with the following standards by September 15, 2016:

1. **Lighting.** Lighting shall be regulated as follows:
 - a. Inside building lighting, including greenhouses, hoop houses, and similar structures, used for marijuana production shall not be visible outside the building from ~~7:00 p.m. to 7:00 a.m.~~ sunset to sunrise on the following day.
 - b. Lighting fixtures shall be fully shielded in such a manner that all light emitted directly by the lamp or a diffusing element, or indirectly by reflection or refraction, is projected below the horizontal plane through the lowest light-emitting part.
 - c. Light cast by exterior light fixtures other than marijuana grow lights shall comply with DCC 15.10, Outdoor Lighting Control.

C. All marijuana production registered by OHA prior to June 1, 2016 shall comply with the following standards by December 15, 2016:

1. **Odor.** As used in DCC 18.116.3430(~~CB~~)(10), building means the building, including greenhouses, hoop houses, and other similar structures, used for marijuana production or marijuana processing.
 - a. The building shall be equipped with an effective odor control system which must at all times prevent unreasonable interference of neighbors' use and enjoyment of their property.
 - b. An odor control system is deemed permitted only after the applicant submits a report by a mechanical engineer licensed in the State of Oregon demonstrating that the system will control odor so as not to unreasonably interfere with neighbors' use and enjoyment of their property.
 - c. Private actions alleging nuisance or trespass associated with odor impacts are authorized, if at all, as provided in applicable state statute.
 - d. The odor control system shall:
 - i. Consist of one or more fans. The fan(s) shall be sized for cubic feet per minute (CFM) equivalent to the volume of the building (length multiplied by width multiplied by height) divided by three. The filter(s) shall be rated for the required CFM; or
 - ii. Utilize an alternative method or technology to achieve equal to or greater odor mitigation than provided by i. above.
 - e. The system shall be maintained in working order and shall be in use.
2. **Noise.** Noise produced by marijuana production and marijuana processing shall comply with the following:
 - a. Sustained noise from mechanical equipment used for heating, ventilation, air condition, odor control, fans and similar functions shall not exceed 30 dB(A) measured at any property line between 10:00 p.m. and 7:00 a.m. the following day.
 - b. Sustained noise from marijuana production is not subject to the Right to Farm protections in DCC 9.12 and ORS 30.395. Intermittent noise for accepted farming

- practices is however permitted.
3. Screening and Fencing. The following screening standards shall apply to greenhouses, hoop houses, and similar non-rigid structures and land areas used for marijuana production and processing:
 - a. Subject to DCC 18.84, Landscape Management Combining Zone approval, if applicable.
 - b. Fencing shall be finished in a muted earth tone that blends with the surrounding natural landscape and shall not be constructed of temporary materials such as plastic sheeting, hay bales, tarps, etc., and shall be subject to DCC 18.88, Wildlife Area Combining Zone, if applicable.
 - c. Razor wire, or similar, shall be obscured from view or colored a muted earth tone that blends with the surrounding natural landscape.
 - d. The existing tree and shrub cover screening the development from the public right-of-way or adjacent properties shall be retained to the maximum extent possible. This provision does not prohibit maintenance of existing lawns, removal of dead, diseased or hazardous vegetation; the commercial harvest of forest products in accordance with the Oregon Forest Practices Act; or agricultural use of the land.
 4. Water. The applicant shall provide:
 - a. A copy of a water right permit, certificate, or other water use authorization from the Oregon Water Resource Department; or
 - b. A statement that water is supplied from a public or private water provider, along with the name and contact information of the water provider; or
 - c. Proof from the Oregon Water Resources Department that the water to be used is from a source that does not require a water right.
 5. Security Cameras. If security cameras are used, they shall be directed to record only the subject property and public rights-of-way, except as required to comply with requirements of the OLCC or the OHA.
 6. Secure Waste Disposal. Marijuana waste shall be stored in a secured waste receptacle in the possession of and under the control of the OLCC licensee or OHA Person Responsible for the Grow Site (PRMG).
 7. Inspections and Annual Reporting. All marijuana production registered by OHA prior to June 1, 2016 shall comply with DCC 18.116.340(D)(8) when site locations are identified or otherwise disclosed by the State of Oregon.
- D. All new marijuana production registered by OHA on or after June 1, 2016 shall comply with DCC 18.116.340330(A-, B, and DC), ~~and the following standards:~~
- ~~1. Shall only be located in the following zones~~
 - ~~a. EFU;~~
 - ~~b. MUA 10; or~~
 - ~~c. Rural Industrial in the vicinity of Deschutes Junction.~~
 - ~~2. Minimum Lot Area.~~
 - ~~a. In the EFU and MUA 10 zones, the subject property shall have a minimum lot area of five (5) acres.~~
 - ~~3. Maximum Building Floor Area. In the MUA 10 zone, the maximum building floor area used for all activities associated with medical marijuana production on the subject property shall be:~~
 - ~~a. Parcels from 5 acres to less than 10 acres in area: 2,500 square feet.~~
 - ~~b. Parcels equal to or greater than 10 acres: 5,000 square feet.~~
 - ~~4. Setbacks. The following setbacks shall apply to all marijuana production areas and buildings:~~
 - ~~a. Minimum Yard Setback/Distance from Lot Lines: 1200 feet.~~
 - ~~b. Setback from an off site dwelling: 5300 feet.~~

For the purposes of this criterion, an off-site dwelling includes those proposed off-site dwellings with a building permit application submitted to Deschutes County prior to submission of the marijuana production or processing application to Deschutes County.

- c. ~~Exception: Reductions to these setback requirements may be granted at the discretion of the Planning Director or Hearings Body provided the applicant demonstrates that the reduced setbacks afford equal or greater mitigation of visual, odor, noise, lighting, privacy, and access impacts.~~

5. ~~Indoor Production and Processing.~~

- a. ~~In the MUA 10 zone, marijuana production shall be located entirely within one or more fully enclosed buildings with conventional or post framed opaque, rigid walls and roof covering. Use of greenhouses, hoop houses, and similar non-rigid structures is prohibited.~~
- a. ~~In the EFU zone, marijuana production shall only be located in buildings, including greenhouses, hoop houses, and similar structures.~~
- b. ~~In all zones, marijuana production is prohibited in any outdoor area.~~

6. ~~Maximum Mature Plant Canopy Size. In the EFU zone, the maximum canopy area for mature marijuana plants shall apply as follows:~~

- a. ~~Parcels from 5 acres to less than 10 acres in lot area: 2,500 square feet.~~
- b. ~~Parcels equal to or greater than 10 acres to less than 20 acres in lot area: 5,000 square feet. The maximum canopy area for mature marijuana plants may be increased to 10,000 square feet upon demonstration by the applicant to the County that:~~
 - i. ~~The marijuana production operation was lawfully established prior to January 1, 2015; and~~
 - ii. ~~The increased mature marijuana plant canopy area will not generate adverse impact of visual, odor, noise, lighting, privacy or access greater than the impacts associated with a 5,000 square foot canopy area operation.~~
- c. ~~Parcels equal to or greater than 20 acres to less than 40 acres in lot area: 10,000 square feet.~~
- d. ~~Parcels equal to or greater than 40 acres to less than 60 acres in lot area: 20,000 square feet.~~
- e. ~~Parcels equal to or greater than 60 acres in lot area: 40,000 square feet.~~

7. ~~Separation Distances. Minimum separation distances shall apply as follows:~~

- a. ~~The use shall be located a minimum of 1000 feet from:~~
 - i. ~~A public elementary or secondary school for which attendance is compulsory under Oregon Revised Statutes 339.010, et seq., including any parking lot appurtenant thereto and any property used by the school;~~
 - ii. ~~A private or parochial elementary or secondary school, teaching children as described in ORS 339.030(1)(a), including any parking lot appurtenant thereto and any property used by the school;~~
 - iii. ~~A licensed child care center or licensed preschool, including any parking lot appurtenant thereto and any property used by the child care center or preschool. This does not include licensed or unlicensed child care which occurs at or in residential structures;~~
 - iv. ~~A youth activity center; and~~
 - v. ~~National monuments and state parks;~~
 - vi. ~~Public lands; and~~
 - vii. ~~Redmond Urban Reserve Area~~
 - viii.

- ix. ~~approved by Deschutes County for b. For purposes of DCC 18.116.3430(DB)(7), all distances shall be measured from the lot line of the affected properties listed in DCC 18.116.3430(DB)(7)(a) to the closest point of the buildings~~

- and land area occupied by the marijuana producer or marijuana processor.
- c. ~~A change in use of another property to those identified in DCC 18.116.3430(DB)(7) shall not result in the marijuana producer or marijuana processor being in violation of DCC 18.116.330(B)(7) if the use is:~~
 - i. ~~Pending a local land use decision;~~
 - ii. ~~Registered by the State of Oregon; or~~
 - iii. ~~Lawfully established.~~
8. ~~Access. Marijuana production over 5,000 square feet of canopy area for mature marijuana plants shall comply with the following standards.~~
- a. ~~Have frontage on and legal direct access from a constructed public, county, or state road; or~~
 - b. ~~Have access from a private road or easement serving only the subject property.~~
 - c. ~~If the property takes access via a private road or easement which also serves other properties, the applicant shall obtain written consent to utilize the easement or private road for marijuana production access from all owners who have access rights to the private road or easement. The written consent shall:~~
 - i. ~~Be on a form provided by the County and shall contain the following information;~~
 - ii. ~~Include notarized signatures of all owners, persons and properties holding a recorded interest in the private road or easement;~~
 - iii. ~~Include a description of the proposed marijuana production or marijuana processing operation; and~~
 - iv. ~~Include a legal description of the private road or easement.~~
9. ~~Residency. In the MUA 10 zone, a minimum of one of the following shall reside in a dwelling unit on the subject property:~~
- a. ~~An owner of the subject property; or~~
 - b. ~~A person registered with the OHA as a person designated to produce marijuana by a registry identification cardholder, provided that the registration applies to the subject property.~~
10. ~~Inspections and Annual Reporting. An annual report shall be submitted to the Community Development Department by the real property owner or licensee, if different, of marijuana production registered by OHA, each February 1, documenting all of the following as of December 31 of the previous year, including the applicable fee as adopted in the current County Fee Schedule and a fully executed Consent to Inspect Premises form:~~
- a. ~~Documentation demonstrating compliance with the:~~
 - i. ~~Land use decision and permits.~~
 - ii. ~~Fire, health, safety, waste water, and building codes and laws.~~
 - iii. ~~State of Oregon licensing requirements.~~
 - b. ~~Failure to timely submit the annual report, fee, and Consent to Inspect Premises form or to demonstrate compliance with DCC 18.116.3430(C)(8) shall serve as acknowledgement by the real property owner and licensee that the otherwise allowed use is not in compliance with Deschutes County Code; authorizes permit revocation under DCC Title 22, and may be relied upon by the State of Oregon to deny new or license renewal(s) for the subject use.~~
- ~~Other information as may be reasonably required by the Planning Director to ensure compliance with Deschutes County Code, applicable State regulations, and to protect the public health, safety, and welfare.d. — Marijuana Control Plan to be established and maintained by the Community Development Department. As a condition of approval, the applicant must consent in writing to allow Deschutes County to randomly and without prior notice, up to four (4) times per calendar year, inspect the premises to ascertain the extent and effectiveness of for odor control.~~

~~Conditions of Approval Agreement to be established and maintained by the Community Development Department.~~

~~Documentation that System Development have been paid.~~

~~This information shall be public record subject to ORS 192.502(17). 11. Prohibited Uses.~~

~~a. In the EFU zone, the following uses are prohibited:~~

- ~~i. A new dwelling used in conjunction with a marijuana crop;~~
- ~~ii. A farm stand, as described in ORS 215.213(1)(r) or 215.283(1)(o), used in conjunction with a marijuana crop;~~
- ~~iii. A commercial activity, as described in ORS 215.213(2)(c) or 215.283(2)(a), carried on in conjunction a marijuana crop; and~~
- ~~iv. Agri-tourism and other commercial events and activities in conjunction with a marijuana crop.~~

~~b. In the MUA 10 Zone, the following uses are prohibited:~~

- ~~i. Commercial activities in conjunction with farm use when carried on in conjunction with a marijuana crop.~~

~~c. In the EFU, MUA 10, and Rural Industrial zones, the following uses are prohibited on the same property as marijuana production:~~

~~Guest Lodge.~~

~~i. Guest Ranch.~~

~~ii. Dude Ranch.~~

~~iii. Destination Resort.~~

~~iv. Public Parks.~~

~~v. Private Parks.~~

~~vi. Events, Mass Gatherings and Outdoor Mass Gatherings.~~

~~vii. Bed and Breakfast.~~

~~viii. Room and Board Arrangements.~~

~~(Ord. 2018-012 §3, 2018; Ord. 2016-019 §1, 2016)~~

Chapter 18.124. SITE PLAN REVIEW

18.124.060. Approval Criteria.

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18.124.060. Approval Criteria.

Approval of a site plan shall be based on the following criteria:

- A. The proposed development shall relate harmoniously to the natural and man-made environment and existing development, minimizing visual impacts and preserving natural features including views and topographical features.
- B. The landscape and existing topography shall be preserved to the greatest extent possible, considering development constraints and suitability of the landscape and topography. Preserved trees and shrubs shall be protected.
- C. The site plan shall be designed to provide a safe environment, while offering appropriate opportunities for privacy and transition from public to private spaces.
- D. When appropriate, the site plan shall provide for the special needs of disabled persons, such as ramps for wheelchairs and Braille signs.
- E. The location and number of points of access to the site, interior circulation patterns, separations between pedestrians and moving and parked vehicles, and the arrangement of parking areas in relation to buildings and structures shall be harmonious with proposed and neighboring buildings and structures.
- F. Surface drainage systems shall be designed to prevent adverse impacts on neighboring properties, streets, or surface and subsurface water quality.
- G. Areas, structures and facilities for storage, machinery and equipment, services (mail, refuse, utility wires, and the like), loading and parking and similar accessory areas and structures shall be designed, located and buffered or screened to minimize adverse impacts on the site and neighboring properties.
- H. All above-ground utility installations shall be located to minimize adverse visual impacts on the site and neighboring properties.
- I. Specific criteria are outlined for each zone and shall be a required part of the site plan (e.g. lot setbacks, etc.).
- J. All exterior lighting shall be shielded so that direct light does not project off-site.
- K. Transportation access to the site shall be adequate for the use.
 - 1. Where applicable, issues including, but not limited to, sight distance, turn and acceleration/deceleration lanes, right-of-way, roadway surfacing and widening, and bicycle and pedestrian connections, shall be identified.
 - 2. Mitigation for transportation-related impacts shall be required.
 - 3. Mitigation shall meet applicable County standards in DCC 17.16 and DCC 17.48, applicable Oregon Department of Transportation (ODOT) mobility and access standards, and applicable American Association of State Highway and Transportation Officials (AASHTO) standards.

(Ord. 2018-012 §4, 2018; Ord. 2010-018 §2, 2010, Ord. 93-043 §§21, 22 and 22A, 1993; Ord. 91-038 §1, 1991; Ord. 91-020 §1, 1991)

Chapter 22.24. LAND USE ACTION HEARINGS

22.24.030. Notice of Hearing or Administrative Action.

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22.24.030. Notice of Hearing or Administrative Action.

A. Individual Mailed Notice.

1. Except as otherwise provided for herein, notice of a land use application shall be mailed at least 20 days prior to the hearing for those matters set for hearing, or within 10 days after receipt of an application for those matters to be processed administratively with notice. Written notice shall be sent by mail to the following persons:
 - a. The applicant.
 - b. Owners of record of property as shown on the most recent property tax assessment roll of property located:
 1. Within 100 feet of the property that is the subject of the notice where any part of the subject property is within an urban growth boundary;
 2. Within 250 feet of the property that is the subject of the notice where the subject property is outside an urban growth boundary and not within a farm or forest zone, except where greater notice is required under DCC 22.24.030(A)(4) for structures proposed to exceed 30 feet in height; or
 3. Within 750 feet of the property that is the subject of the notice where the subject property is within a farm or forest zone, except where greater notice is required under DCC 22.24.030(A)(4) for structures proposed to exceed 30 feet in height.
 4. Within 1000 feet of the property that is subject of a marijuana production or processing notice where the subject property is within a farm zone.
 - c. For a solar access or solar shade exception application, only those owners of record identified in the application as being burdened by the approval of such an application.
 - d. The owner of a public use airport if the airport is located within 10,000 feet of the subject property.
 - e. The tenants of a mobile home park when the application is for the rezoning of any part or all of a mobile home park.
 - f. The Planning Commission.
 - g. Any neighborhood or community organization formally recognized by the board under criteria established by the Board whose boundaries include the site.
 - h. At the discretion of the applicant, the County also shall provide notice to the Department of Land Conservation and Development.
2. Notwithstanding DCC 22.24.030(A)(1) (b)(1), all owners of property within 250 feet of property that is the subject of a plan amendment application or zone change application shall receive notice.
3. The failure of a property owner to receive mailed notice shall not invalidate any land use approval if the Planning Division can show by affidavit that such notice was given.
4. For structures proposed to exceed 30 feet in height that are located outside of an urban growth boundary, the area for describing persons entitled to notice under DCC 22.24.030(A)(1)(b) shall expand outward by a distance equal to the distance of the initial notice area boundary for every 30 foot height increment or portion thereof.

B. Posted Notice.

1. Notice of a land use action application for which prior notice procedures are chosen shall be posted on the subject property for at least 10 continuous days prior to any date set for receipt of comments. Such notice shall, where practicable, be visible from any adjacent public way.

2. Posted notice of an application for a utility facility line approval shall be by posting the proposed route at intervals of not less than one-half mile. The notice shall be posted as close as practicable to, and be visible from, any public way in the vicinity of the proposed route.
 3. Notice of a solar access application shall be posted as near as practicable to each lot identified in the application.
- C. Published Notice. In addition to notice by mail and posting, notice of an initial hearing shall be published in a newspaper of general circulation in the County at least 20 days prior to the hearing.
- D. Media Notice. Copies of the notice of hearing shall be transmitted to other newspapers published in Deschutes County.
- (Ord. 2018-012 §5, 2018; Ord. 99-031 §6, 1999; Ord. 96-071 §1D, 1996; Ord. 95-071 §1, 1995; Ord. 95-045 §12, 1995; Ord. 91-013 §7-8, 1991; Ord. 90-007 §1, 1990)

Chapter 22.32. APPEALS

22.32.015. Filing Appeals.

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22.32.015. Filing appeals.

- A. To file an appeal, an appellant must file a completed notice of appeal on a form prescribed by the Planning Division and an appeal fee.
- B. Unless a request for reconsideration has been filed, the notice of appeal and appeal fee must be received at the offices of the Deschutes County Community Development Department no later than 5:00 PM on the twelfth day following mailing of the decision. If a decision has been modified on reconsideration, an appeal must be filed no later than 5:00 PM on the twelfth day following mailing of the decision as modified. Notices of Appeals may not be received by facsimile machine.
- C. Unless a request for reconsideration has been filed for a marijuana production or processing administrative decision, the notice of appeal and appeal fee must be received at the offices of the Deschutes County Community Development Department no later than 5:00 PM on the fifteenth day following mailing of the decision.
- ~~C~~D. If the Board of County Commissioners is the Hearings Body and the Board declines review, a portion of the appeal fee may be refunded. The amount of any refund will depend upon the actual costs incurred by the County in reviewing the appeal. When the Board declines review and the decision is subsequently appealed to LUBA, the appeal fee may be applied toward the cost of preparing a transcript of the lower Hearings Body's decision.
- ~~D~~E. The appeal fee shall be paid by method that is acceptable to Deschutes County.
(Ord. 2018-012 §6, 2018; Ord. 2015-017 §3, 2015; Ord. 99-031 §15, 1999; Ord. 98-019 §2, 1998; Ord. 96-071 §1G, 1996; Ord. 95-045 §32, 1995; Ord. 94-042 §2, 1994; Ord. 91-013 §11, 1991; Ord 90-007 §1, 1990)

FINDINGS

I. BACKGROUND

A. Deschutes County Process

Following the passage of Ballot Measure 91 (2014), legalizing the sale and recreational use of marijuana, and HB 3400 (2015), refining the implementation of marijuana legalization, the Deschutes County Board of Commissioners adopted marijuana regulations in June 2016 (Ordinance Nos. 2016-013, 2016-014, 2016-015, 2016-017, 2016-018, and 2016-019). Throughout the adoption process, the Board committed to evaluating the regulations after they had been in place for a year to determine if they were working as intended. The Board reiterated this commitment to the 2017 Legislature. Since the release of the Marijuana Regulatory Assessment on April 2, 2018, the Board conducted eight work sessions to discuss changes to the regulation and enforcement of marijuana production on rural lands.

Based on the issues discussed during the work sessions, the Planning Commission and the Board of Commissioners considered substantive changes to certain sections of Deschutes County Code (DCC), specific to marijuana production. The proposed amendments are more restrictive than Deschutes County's existing marijuana regulations.

B. Deschutes County Distinguishing Land Use Characteristics

As summarized in the findings to the 2016 ordinances listed above, agricultural land in Deschutes County has a history of challenges unique to the area, owing to its low rainfall, high elevation, relatively poor soil quality, short growing season, and distance to major markets. As a result, Deschutes County utilizes smaller lot size requirements for agricultural land than the general State requirement; this unique set of farm sub-zones has been acknowledged by the Land Conservation and Development Commission (DLCD). Nevertheless, the inherent difficulties of commercial farming in Deschutes County combined with rapid population growth make for considerable pressure to convert agricultural land to residential or other uses when possible.

The introduction of marijuana production into these agricultural lands—particularly those areas of smaller lotting patterns—highlights the compatibility concerns expressed by both farm and nonfarm property owners. The unique conditions and development patterns present in Deschutes County only amplify the challenge of balancing the mitigation of potential impacts with the “reasonable time, place, and manner” regulation of marijuana production.

II. PROPOSAL

This is a legislative text amendment to Deschutes County Code (DCC), Title 9, Public Peace and Welfare, Title 18, County Zoning, and Title 22, Development Procedures. The proposal clarifies the regulation and enforcement of marijuana production in Deschutes County based on work sessions with the Board of County Commissioners.

The proposed amendments are to:

- DCC Chapter 9.12, Right to Farm;
- DCC Chapters 18.24, Redmond Urban Reserve Area Combining Zone, 18.116, Supplementary Provisions, and 18.124, Site Plan Review;
- DCC Chapters 22.24, Land Use Action Hearings, and 22.32, Appeals.

Substantive elements of the proposal:

- Excludes marijuana production and processing in the Multiple Use Agricultural Zone.
- Increases minimum separation distances to one-quarter mile from state, local, and municipal parks, local governments that opted out of regulating marijuana, Redmond Urban Reserve Area, and other approved marijuana production sites.
- Increases requirements for odor and noise mitigation.
- Increases requirements for documentation of water usage.

List of Preliminary Modified Amendments

The following list summarizes amendments to Deschutes County Code (DCC) Chapter 9.12, Right to Farm, DCC Chapter 18.24, Redmond Urban Reserve Area Combining Zone, DCC Chapter 18.116, Supplementary Provisions, DCC Chapter 18.124, Site Plan Review, DCC Chapter 22.24, Land Use Action Hearings, and DCC Chapter 22.32, Appeals. The full text amendments will be available in their entirety at www.deschutes.org/marijuana.

DCC Chapter 9.12, Right to Farm

DCC 9.12.020 - Clarified the scope of the Right to Farm Ordinance does not apply to marijuana production operations per ORS 475B.

DCC Chapter 18.24, Redmond Urban Reserve Area Combining Zone

DCC 18.24.030 – Prohibited marijuana production and processing in the Redmond Urban Reserve Area Combining Zone.

DCC 18.116.330. Marijuana Production, Processing, and Retailing

DCC 18.116.330(A)(1) and (2) – Removed MUA-10 zone from zones permitting marijuana production and processing.

DCC 18.116.330(B)(1) – Removed MUA-10 zone from marijuana production and processing standards.

DCC 18.116.330(B)(2) – Removed MUA-10 zone from indoor production and processing standards.

DCC 18.116.330(B)(4) – Removed Maximum Building Floor Area standards for MUA-10 zone.

DCC 18.116.330(B)(5)(a) - Increased setback distances from lot lines for marijuana production and processing from 100 feet to 150 feet.

DCC 18.116.330(B)(5)(b) - Increased setback distances from an off-site dwelling for marijuana production and processing from 300 feet to 400 feet.

DCC 18.116.330(B)(5)(d) - Added setback distance of 400 feet from Federal public land.

DCC 18.116.330(B)(6)(a) - Applied a 1/4 mile separation distance from Redmond Urban Reserve Area, state, local, and municipal parks, including land owned by a parks district, local governments that have opted out of regulating marijuana and approved marijuana production sites. Separation distances are to be measured from the applicant's property line.

DCC 18.116.330(B)(7) – Removed 5,000-foot canopy size threshold for access requirement standards.

DCC 18.116.330(B)(8)(a) - Clarified indoor lighting shall not be visible outside a building from sunset to sunrise.

DCC 18.116.330(B)(9) - Strengthened odor control measures, requiring odor control methodology to show verified operational effectiveness.

DCC 18.116.330(B)(10) - Strengthened noise control measures.

DCC 18.116.330(B)(11)(a) – Clarified all marijuana uses, buildings, structures, fences, and storage and parking areas, whether a building permit is required or not, in the Landscape Management Combining Zone, shall comply with and require Landscape Management Combining Zone approval.

DCC 18.116.330(B)(12) - Strengthened water use requirements.

DCC 18.116.330(B)(14) - Strengthened utility requirements.

DCC 18.116.330(B)(16) – Added a requirement to Secure Waste Disposal for wastewater to be disposed of in compliance with applicable federal, state, and local laws.

DCC 18.116.330(B)(18) – Removed subsection outlining residency requirements for MUA-10 zone.

DCC 18.116.330(B)(18)(b) and (c) – Removed references to MUA-10 in Prohibited Uses.

DCC 18.116.330(D) – Added Inspections to Annual Reporting.

DCC 18.116.330(D)(1)(b) – Added statement of annual water use measured at the facility to requirements for annual reporting.

DCC 18.116.330(D)(1)(d) – Added condition of approval that an applicant must consent in writing to allow Deschutes County to randomly and without prior notice, up to three (3) times per calendar year, inspect the premises to ascertain the extent and effectiveness of odor control and compliance with applicable conditions of approval. One of the three allowable inspections must be prior to initiation of use.

DCC 18.116.330(D)(f) – Added documentation that System Development Charges have been paid.

DCC 18.116.340. Marijuana Production Registered by OHA

DCC 18.116.340(B)(a) – Clarified indoor lighting shall not be visible outside a building from sunset to sunrise.

DCC 18.116.340(C)(7) – Added condition to clarify that properties licensed before June 1, 2016 are subject to the annual inspection regulations from 18.116.330(D)(8).

DCC 18.116.340(D) – Refers new marijuana production registered by OHA on or after June 1, 2016 to the requirements of DCC 18.116.330(A, B, and D), and deleted remainder of section for clarity.

DCC Chapter 18.124. Site Plan Review

DCC 18.124.060 – Added a provision that proposed development shall relate harmoniously to the natural and man-made environment and existing development, minimizing visual impacts and preserving natural features including views and topographical features.

DCC Chapter 22.24. Land Use Action Hearings

DCC 22.24.030(A)(1)(b)(4) – Added required notice to property owners within 1,000 feet of marijuana production or processing.

DCC Chapter 22.32. Appeals

DCC 22.32.015(C) – Added provision allowing 15 days for an appeal of a marijuana production or processing decision.

III. REVIEW CRITERIA

Deschutes County lacks specific criteria in DCC Titles 18, 22, or 23 for reviewing a legislative plan amendment. Nonetheless, since Deschutes County is initiating one, the County bears the responsibility for justifying that the amendments are consistent with Statewide Planning Goals and its existing Comprehensive Plan.

A. HB 3400 and ORS 475B

Following the 2014 adoption of Measure 91, legalizing the production, possession, distribution, and use of recreational marijuana in certain amounts, in 2015 the Oregon State Legislature passed HB 3400, which allows local governments to adopt reasonable regulations on the production, processing, and wholesale and retail sale of marijuana. Subsequently, this bill, along with several others, have been codified into ORS 475B and OAR 845-025-2000 to 845-025-2080.

In 2016, the Legislature clarified that marijuana is a farm crop, which allows marijuana to be grown on land zoned for exclusive farm use (EFU), subject to local time place and manner restrictions.¹ ORS 475B.340 (since renumbered to ORS 475B.486) specifies that cities or counties may impose restrictions on elements such as hours of operation, location, public access, and manner of operation. The OLCC (Oregon Liquor Control Commission), which controls the licensing of recreational marijuana, does place some limited restrictions on the location of recreational production sites—for example, on federal property or at the same address as a liquor license. Ultimately, however, the source of authority to operate a marijuana production business derives from state law; local code—and the proposed text amendments—is the mechanism by which the county may impose reasonable restrictions and conditions on the operator.

B. Local Restrictions

The Deschutes County Board of Commissioners adopted marijuana regulations in June 2016. Throughout the adoption process, the Board committed to evaluating the regulations after they had been in place for a year to determine if they were working as intended. The Board reiterated this commitment to the 2017 Legislature. Based on its experience with the ensuing proposals, applications, and hearings, the Board concluded that further refinements to the regulation and enforcement of marijuana production were needed. The proposed amendments acknowledge that marijuana production is authorized, but additional restrictions are necessary to maintain compatibility with neighboring land uses. Therefore, Deschutes County seeks to regulate the impacts of recreational marijuana, which by law, it is permitted to do in a “reasonable time, place, and manner.”

Contributing factors include:

Parcel Size. As noted above, the unique conditions of Deschutes County’s rural agricultural land have resulted in smaller than average parcels zoned for Exclusive Farm Use. As such, landowners have the potential to be exposed to the effects of neighboring uses more than they would if minimum lot sizes were larger. Light, noise, and odor all have the potential to be more noticeable at closer distances. The proposed amendments address this in two ways: by strengthening and clarifying the light, noise, and odor mitigation requirements, as well as increasing setbacks and separation distances from certain types of uses.

Oversaturation of Market. As with any newly emerging industry, the marijuana market has not always been predictable. The market has shifted since regulations were first introduced, and it has become oversaturated, resulting in lower prices and in some cases, difficulty for smaller growers to survive. This could be attributed to a number of factors: the complexities of the ever-changing state and local laws; the manner in which lawmakers first structured the program, allowing businesses to apply for multiple licenses, with low fees and no caps on

¹ <https://www.orcities.org/Portals/17/Library/2016LocalRegulationofMarijuanaInOregon12-09-16.pdf>

licenses;² the ability of jurisdictions to opt out of the program entirely, thereby concentrating the industry into certain areas; and the inability to move or distribute marijuana across state lines all are contributors to an oversaturation of the marijuana production market in Oregon.³ With the oversaturation of product comes the potential of the surplus being sold into the illegal market (for instance, to out-of-state sales channels), thereby exacerbating the problems that the creation of a legal market was intended to avoid.

Medical Marijuana. According to the Oregon Health Authority's (OHA) Medical Marijuana Statistical Snapshot from July 2018, Deschutes County currently contains 791 medical marijuana grow sites.⁴ By current law, these are all sites that are not subject to local land use regulations, nor can a list of grow site locations be provided to local law enforcement, as discussed in correspondence between OHA and the Deschutes County Sheriff's Office, dated April 19, 2018 (see Attachment A). In correspondence dated June 12, 2018 (see Attachment B), the Oregon Health Authority has acknowledged that of the 18,000 medical grow sites across the state, approximately 6,000 of these are registered for two or more patients; OHA is in the process of determining the priority of compliance inspections. For sites serving fewer than two patients, inspections are complaint-based only. The County recognizes that locations of medical marijuana grow sites may only be revealed to the County via individual complaints; however, it is necessary to ensure that adequate regulations are utilized to mitigate the potential impacts of these sites—which greatly outnumber recreational production sites in Deschutes County—in the event that their locations have been disclosed, as well as those of recreational production sites.

C. Statewide Planning Goals and Guidelines

Goal 1: Citizen Involvement: The amendments do not propose to change the structure of the County's citizen involvement program. Notice of the proposed amendments were provided to the *Bulletin* for the Board public hearing. Since the release of the Marijuana Regulatory Assessment on April 2, 2018, the Board conducted seven work sessions open to the public to discuss programmatic changes to the regulation and enforcement of marijuana production on rural lands.

In addition, In the November 1998 general election, Oregon voters approved Ballot Measure 56 (BM 56). The measure requires cities and counties to provide affected property owners with notice of a change in zoning classification; adoption or amendment of a comprehensive plan; or adoption or change of an ordinance in a manner that limits or prohibits previously allowed uses. Amendments to Deschutes County's marijuana regulations triggered BM 56 notice to approximately 5,000 property owners with properties larger than five acres in the Exclusive Farm Use and Multiple Use Agricultural zones. A notice was sent to those property owners on August 8, 2018. To supplement the information provided in the Measure 56 notice, a dedicated website and phone line were created to provide opportunities for the County to answer questions or issue clarifications to the public concerning the regulations.

Goal 2: Land Use Planning: This goal is met because ORS 197.610 allows local governments to initiate post acknowledgments plan amendments (PAPA). An Oregon Land Conservation and Development Department 35-day notice was initiated on July 24, 2018. The Board of County Commissioners will hold a public hearing on August 28, 2018. The Findings document provides the adequate factual basis for the amendments.

Goal 3: Agricultural Lands: House Bill 3400 specifies that marijuana is a crop for purposes of the definition of farm use in ORS 215.203 and clearly permits the production and small-scale processing of marijuana in Exclusive Farm Use zones. House Bill 3400 also prohibits marijuana-related farm dwellings, farm stands and commercial activities in conjunction with farm use. The proposed amendments to the County Code are consistent with these provisions of state law and are therefore consistent with Goal 3.

² <https://www.denverpost.com/2018/05/31/easy-entry-into-oregons-legal-pot-market-means-huge-surplus/>

³ <https://oregoneconomicanalysis.com/2018/02/08/marijuana-falling-prices-and-retailer-saturation/>

⁴ https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/CHRONICDISEASE/MEDICALMARIJUANAPROGRAM/Documents/O-MMP-Statistic-Snapshot-07-2018_Final.pdf

Goal 4: Forest Lands: House Bill 3400 specifies that marijuana is a crop for purposes of the definition of farm use in ORS 215.203 and explicitly provides for marijuana production on land zoned for farm or forest use in the same manner as the production of marijuana is allowed in exclusive farm use zones. The proposal prohibits marijuana related uses in the forest use zones (F-1, F-2).

Goal 5: Open Spaces, Scenic and Historic Areas, and Natural Resources: Complies because the text amendment does not propose to change the County's Plan policies or implementing regulations for Goal 5 open spaces, scenic and historic areas, and natural resources.

Goal 6: Air, Water and Land Resources Quality: The proposed text amendments do not propose to change the County's Plan policies or implementing regulations for compliance with Goal 6, and therefore are in compliance. In addition, the proposed amendments serve to strengthen criteria regarding reporting of water usage as well as water runoff as they relate to marijuana production on rural lands.

Goal 7: Areas Subject to Natural Disasters and Hazards: The proposed text amendments do not propose to change the County's Plan or implementing regulations regarding natural disasters and hazards; therefore, they are in compliance.

Goal 8: Recreational Needs: Complies because the text amendment does not propose to change the County's Plan or implementing regulations regarding recreational needs.

Goal 9: Economy of the State: Goal 9 and its implementing regulations focus on economic analysis and economic development planning required in urban Comprehensive Plans. The proposed amendments apply to rural lands but do not propose to amend the Comprehensive Plan. Goal 9 does identify land use controls and ordinances as one of a suite of economic development tools. The proposed text amendments continue to allow marijuana production in certain rural zones; however, these uses are already permitted in these zones as part of other more general use categories (e.g., farming). Therefore, the text amendments comply with Goal 9.

Goal 10: Housing: This goal is not applicable because, unlike municipalities, unincorporated areas are not obligated to fulfill certain housing requirements.

Goal 11: Public Facilities and Services: Complies because the text amendments do not propose to change the County's Plan or implementing regulations regarding public facilities and services.

Goal 12: Transportation: Goal 12 is implemented by Oregon Administrative Rules Chapter 660, Division 12. Local governments are required to adopt a Transportation System Plan and land use regulations to implement the TSP. This proposal does not include amendments to the County's TSP or transportation-related land use regulations. However, Plan and land use regulation amendments must be evaluated under OAR 660-012-0060. The proposal includes allowing specified marijuana related uses in certain zones; however, these uses are already permitted in these zones as part of other more general use categories (e.g., growing of crops). There is no greater impact to the transportation system by more specifically identifying these uses in the zones where they are permitted. The text amendments do not propose any changes to the functional classifications, performance standards, or access management standards of any County roads or State highways. The text amendments are consistent with Goal 12.

Goal 13: Energy Conservation: Complies because the text amendments do not propose to change the County's Plan or implementing regulations regarding energy conservation.

Goal 14: Urbanization: Complies because the text amendments do not propose to change the County's Plan or implementing regulations regarding urbanization.

Goals 15 through 19 are not applicable to the proposed text amendments because the County does not contain these types of lands.

D. Deschutes County Comprehensive Plan

Chapter 1, Comprehensive Planning: This chapter sets the Goals and Policies of how the County will involve the community and conduct land use planning. As described above, the proposed regulations were discussed at several work sessions with the Board of County Commissioners, as well as presented to the Planning Commission, which is the County's official committee for public involvement. The Board of County Commissioners will receive oral and written testimony. County staff also created and updated a webpage specifically for the proposed marijuana text amendments. As part of the required Measure 56 notice, described above, County staff created and mailed a flyer summarizing the proposed amendments as well as the public process to all landowners within the affected districts. All of these actions demonstrate compliance with Section 1.2, Community Involvement. Goal 1 of this section, Community Involvement, is to maintain an active open community involvement program and are consistent specifically with Policies 1.2.3 through 1.2.5.

These actions also satisfy the Goals and relevant Policies of Section 1.3, Land Use Planning Policies. Goal 1 of this section is to "maintain an open and public land use process in which decisions are based on the objective evaluation of facts." Staff, the Planning Commission, and the Board reviewed state rules and regulations as well as those of other local governments when refining the County's reasonable regulations for time, manner, and place of marijuana production. The above work sessions, staff reports, and public hearings comply with Section 1.3, Goal 1, but also its policies, specifically 1.3.1-1.3.4, and 1.3.6.

Chapter 2, Resource Management: This chapter sets the Goals and Policies of how the County will protect resource lands, including but not limited to, Agriculture and Forest as well as Water Resources and Environmental Quality.

Section 2.2, Agricultural Lands Policies, states that Goal 1 is to "preserve and maintain agricultural lands and the agricultural industry." Marijuana is considered an agricultural crop, grown on land zoned for farm use. The proposed amendments strive to achieve balance between maintaining agricultural lands—by allowing marijuana production—and mitigating any negative impacts, such as odor and noise.

Goal 2 promotes a diversified, sustainable, revenue-generating agricultural sector. Policy 2.2.10 calls for the promotion of economically viable opportunities and practices while Policy 2.2.11 encourages small farming enterprises including but not limited to, niche markets and organic farming and valued-added projects. The proposed text amendments continue to diversify agriculture in the County by adding a revenue-generating crop. By definition, the marijuana grown for recreational uses is a niche market.

Goal 3 specifies the Exclusive Farm Use (EFU) policies, classifications, and codes are consistent with local and emerging agricultural conditions and markets. The regulation of time, place, and manner of growing marijuana are consistent with this goal. The County has spent extensive staff time, reviewed testimony of experts in the industry and concerned citizens, irrigation districts, and State agencies to arrive at reasonable regulations to ensure the viability of this emerging agricultural crop while mitigating potential land use conflicts.

Section 2.3 addresses Forest Land, which includes the F-1 and F-2 zones, neither of which are proposed as possible locations for any marijuana-related land use activities. In terms of resource-zoned lands, the marijuana-related land uses are only permitted in the EFU zone. Therefore, the Goals and Policies of this section are inapplicable.

Section 2.4 addresses Goal 5 (Natural Resources, Scenic and Historic Areas, Open Spaces, and Aggregate, i.e., surface mining) resources. Goal 1 of this section of the Comprehensive Plan is to protect Goal 5 resources. The County has an acknowledged list of significant and protected Goal 5 properties and sites. The proposed amendments would not repeal those protections or Goal 5 listings, therefore the text amendment is consistent with this portion of the Comprehensive Plan.

Section 2.5 concerns Water Resources; Goal 1 is to develop regional, comprehensive water management policies while balancing the diverse needs of water users and recognize Oregon water law. Policy 2.5.1 calls for working

cooperatively with stakeholders. Goal 6 of this section calls for coordinating land use and water policies. Oregon Water Resources Department (OWRD) will be invited to share its perspective on the proposed amendments to DCC 18.116.330 and DCC 18.116.340, which addresses the reporting of annual water usage as well as the source of the water to be utilized. Furthermore, applicants will continue to be required to demonstrate that they have a legal source of water under State law. Thus, the proposed regulations comply with the relevant Comprehensive Plan policies.

Section 2.6 addresses Wildlife goals and policies. The proposed regulations will not modify the County's Goal 5 inventory, its various wildlife area combining zones, nor its seasonal travel restrictions. Thus, the proposed amendments are consistent with the goals and policies of this section.

Section 2.7 focuses on Open Spaces, Scenic Views, and Sites. The proposed regulations will not modify the Goal 5 inventory nor lands zoned for Open Space and Conservation (OSC). Any property used for marijuana production must conform to the setback, screening, lighting, and allowable colors of building and fencing materials requirements. In many cases, the proposed amendments increase the setback distances from the previous iteration of the code. Thus, the proposed amendments are consistent with the relevant goals and policies of this section.

Section 2.8 devotes its energy to Energy Policies. Goal 1 is to promote energy conservation and applicable Policies 2.8.2 and 2.8.4 look at reducing energy demand through efficiency and conservation, respectively. Goal 2 promotes affordable, efficient, reliable, and environmentally sound energy systems for individual home and business consumers. In terms of growing operations, the combination of Central Oregon's numerous sunny days, greenhouses, and modern building technologies make for highly energy efficient operations. Utilities serving the county's recreational production sites will be invited to share their perspective on the proposed amendments, which requires that a statement from each utility company proposed to serve the operation be provided, stating that each such company is able and willing to serve the operation, and noting if upgrades to the system will be necessary to serve the proposed use. Taken together, the marijuana regulations thus comply with these goals and their relevant policies.

Section 2.9 consists of Environmental Quality Policies. Goal 1 is to maintain and improve the quality of air, water, and land with Policy 2.9.2 to maintain County noise and outdoor lighting codes and revise as needed. The marijuana amendments will not repeal the County's applicable ordinances regarding noise and lighting. Goal 2 promotes sustainable building practices and Goal 3 encourages recycling. Marijuana waste continues to be required to be stored in a secured waste receptacle in the possession of and under the control of the OLCC licensee or OHA Person Responsible for the Grow Site. Additionally, modern greenhouses are energy efficient and thus sustainable and the unused portions of marijuana can be recycled under a secured system. Finally, the proposed amendments require applicants to document the manner in which water runoff will be addressed. Taken together, the proposed amendments comply with the applicable goals and policies.

Section 2.10 regards Surface Mining Policies. As the regulations will not change the Goal 5 inventory of surface mining sites and the County code requires properties with a quarter-mile of an SM zone to sign a waiver of non-remonstrance, the regulations are consistent with the applicable goals and policies of this section.

Section 2.11 focuses on cultural and historic resources. The proposed regulations will not modify the County's Goal 5 inventory for cultural and historic resources. Thus, the proposed amendments are consistent with the relevant goals and policies of this section.

Chapter 3, Rural Growth Management: This chapter sets the goals and policies on who the County will manage the development of the lands outside of urban unincorporated communities such as Terrebonne and Tumalo.

Section 3.3 consists of Rural Housing Policies. Given the regulations are for non-residential uses, the goals and policies of this section are not applicable.

Section 3.5 is Natural Hazards with Goal 1 being to protect people, property, infrastructure, the economy and the environment from natural hazards. The goals and policies are not directly applicable with the possible exception of Policy 3.5.3, which requires coordination with emergency service providers when new development is proposed. When a property is proposed to develop, the County sends a transmittal notice to the fire agency that would respond in an emergency. As the marijuana land uses cannot occur in F-1 or F-2 zoned lands, wildfire is not an issue. The County code does not allow development in the 100-year floodplain, which is consistent with Policy 3.5.10. The amendments comply with the applicable goal and policies of this section.

Section 3.6 addresses Public Facilities and Services; Goal 1 is to support the orderly, efficient, and cost-effective siting of rural public facilities and services. As these proposed regulations are for private development, the goal and policies of this section do not apply.

Section 3.7 is Transportation and is covered under the findings for Goal 12.

Section 3.8 is Rural Recreational Policies, which deal with access to public lands, planning for public parks and recreation, trail design, etc. The goal and policies are not applicable.

Section 3.9 is Destination Resort Policies and is not applicable as the regulations will not amend the County's Destination Resort Overlay map nor change the criteria for siting a Goal 8 destination resort.

Section 3.10 Area Specific Policies describe the following geographic areas: South Deschutes County (which was completed and ultimately became the following Section 3.11), Oregon Military Site south of the fairgrounds, Crooked River Ranch, and Deschutes Junction. The underlying zoning in these areas remains unchanged and these proposed amendments will not change the zoning.

Section 3.11 Newberry Country: A Plan for Southern Deschutes County. The vast majority of this area is zoned either F-1, F-2, RR-10, or Flood Plain, which are not being amended by this proposal.

Chapter 4, Urban Growth Management: These policies deal with urban, rural and resort unincorporated communities of Sunriver, Terrebonne, and Tumalo, Black Butte Ranch and Inn of the 7th Mountain/Widgi Creek, and various Rural Service Centers, which are not being amended by this proposal.

Section 4.3, Unincorporated Communities, has no goals or objectives, with the exception of Tumalo and Terrebonne, which are discussed in Sections 4.5 and 4.6 below. The proposed text amendments comply with OAR 660-022, which identifies and lists the types of unincorporated communities in the State, including those in Deschutes County, and the uses allowed in each type. The proposed regulations are consistent with OAR 660-022.

Appendix - F

Cannabis Odor Control

Supplemental Odor Control Technology Research Summary

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Supplemental Odor Control Technology Research

Introduction and Overview

Effective technologies exist to suppress cannabis malodors. Activated carbon filtration systems have been proven to be effective for indoor cannabis facilities by Denver's Department of Environmental Health. Vapor-phase systems have been proven to be effective for outdoor odor mitigation by the City of San Diego's Department of Environmental Services, Air Pollution Control District, and Solid Waste Local Enforcement Agency, as well as greenhouse cultivation by established greenhouse growers in Carpinteria. These technologies could be implemented to effectively reduce cannabis malodors in Santa Barbara County.

Additionally, counties have implemented agriculture buffer requirements which serve in part to reduce land use conflicts which arise from odors. Buffer requirements may be a useful strategy for cannabis odor mitigation within the County where neighboring land uses are far apart. Anecdotal evidence suggests that strong cannabis odors can still be detected large distances away from the source. Thus, buffers may be utilized but are likely to be more effective remote areas of the County where larger buffer distances could be implemented. In more urban areas, odor mitigation technologies would be more appropriate as they would significantly reduce odors over a shorter distance.

Activated Carbon Filtration

Ventilation System

In this system, odor causing agents are adsorbed and filtered through activated carbon (Pennsylvania State University 2002). Odorous gas from the operation facility is collected via a ventilation system. Blowers then direct the gasses to the distribution system which uniformly delivers the gas to the filter. The filter sorbs and degrades the odors resulting in relatively odor-free exhaust.

Supporting Information and Current Usage

The City of Denver's Department of Environmental Health regulates nuisance odors under Denver Revised Municipal Code, Chapter 4 – Air Pollution Control, Section 4-10. Under this rule, an odor control plan must be submitted 1) describing any odors anticipated to originate from the premises of marijuana growing, processing, and manufacturing facilities and 2) describing control technologies that will be used to prevent odors from leaving the premises (City and County of Denver 2017). The Department of Environmental Health states the, "rule recognizes carbon filtration as the current best control technology for marijuana cultivation and marijuana infused product facilities" (Denver Department of Environmental Health 2017). However, other odor control technologies are permitted so long as it can be demonstrated that the technology can effectively mitigate odors.

The Director of the Environmental Quality Division of Denver's Department of Environmental Health (Denver Director) was contacted by phone on November 30, 2017 to discuss how effective carbon filtration is, where it has been applied, and if it had the potential to impact product quality. The Denver Director stated that approximately 60 percent of indoor grow operations in Denver had installed odor mitigation control prior to the rule, and that 98 percent of those who installed odor mitigation had utilized carbon filtration. In creating the rule, input from indoor grow operators and HVAC control technicians was included to ensure the regulations would reflect technical and economic feasibility.

City officials toured the cultivation facilities to determine the effectiveness of the carbon filtration technology. City officials determined that carbon filtration was effective in removing odors. However, the Denver Director stated that carbon filtration is only effective for processing facilities and indoor grows, which was the only type of cultivation facility in Denver at the time of the ruling. The Denver Director noted that the initial cost of investment for a carbon filtration system is \$10,000-\$15,000 for a medium-sized 10,000 square foot indoor facility with an additional \$2,000-\$3,000 per year in operation and management costs. The Denver Director also stated that the carbon filtration technology would not impact the quality of the cannabis. Finally, the Denver Director stated that the quality of cannabis would only be impacted if the HVAC system, not the carbon filtration system, malfunctioned and humidity was not properly controlled.

A grower in Carpinteria was contacted by phone on November 19, 2017. The grower utilizes vapor-phase technology (discussed below) to mitigate cannabis odors from his greenhouse in Carpinteria. He had considered carbon filtration, but stated that he did not use it because he would not have been able to control the internal environment of his greenhouse. The grower noted that carbon filtration would be appropriate for manufacturing, indoor grows, drying rooms, and packaging.

A Code Compliance Officer for the Portland Cannabis Program (Portland Officer), stated that there is no specific odor requirement for the City of Portland. If odor complaints are made, then an action plan is required to reduce odors. Portland's Zoning Code Section 33.262.070 simply states that "continuous, frequent, or repetitive odors may not be produced" (City of Portland 2017a). Portland's code guide for cannabis businesses states that "all exhaust and relief air should be filtered or scrubbed" in order to comply with the zoning code (Portland Bureau of Development Services 2017). The Portland Officer stated that retailers, wholesalers, and processors use countertop carbon systems in order to mitigate odors. Large ventilation systems with activated carbon filters are used for indoor cultivation. These systems are scaled proportionately to the size of the facility. However, Portland does not currently have any greenhouses and the Portland Officer does not know of any odor mitigation strategies for greenhouses.

Canisters

Activated carbon ventilation systems which are supported by activated carbon gas canisters.

Supporting Information and Current Usage

The Director of the Planning and Development Department of the City/County of Pueblo, Colorado (Pueblo Director), was contacted by phone on December 1, 2017. The Pueblo Director stated that Pueblo only regulates odor for cannabis in industrial zones and that agricultural zones is exempt from cannabis odor mitigation. Pueblo County Code Title 17 Chapter 17.120.190 requires that all cannabis establishments in the central business zoning district (B-4) have odor mitigation. "The building (term includes buildings, greenhouses, and hoop houses) shall be equipped with a ventilation system with carbon filters sufficient in type and capacity to eliminate marijuana odors emanating from the interior to the exterior discernable by a reasonable person..." (County of Pueblo 2017).

The Pueblo Director stated that mitigate odors in greenhouses, some growers are using canisters with activated carbon inside to filter the air. This works similarly to the ventilation activated carbon systems used in indoor grows but can be used for greenhouses. The Pueblo Director and officials from the Department of Public Health and Environment plan to use an olfactometer to test the effectiveness of this technology in greenhouses on December 21st.

Vapor-Phase System

A manufacturer of this technology as it specifically applies to cannabis was contacted. As described, a deodorizing liquid comprised of essential oils in the citrus and pine family are placed inside a vaporizing mechanism. The vapor travels through a distribution pipe that is suspended high up in the greenhouse and runs along its entire perimeter. The vapor escapes from holes in the distribution pipe and a curtain a vapor along the perimeter is produced. The vapor interacts with and changes the chemistry of cannabis malodors. Because of this chemistry change, the olfactory receptors in the human nose no longer interprets the smell as a malodor. The result is an odor-neutralizing, not an odor-masking technology. The interviewed manufacturer had a third-party consultant perform a public health and safety assessment for their specific cannabis deodorizer. Acute inhalation studies were performed and the product was evaluated against health criteria developed by regulatory agencies such as the USEPA. This particular manufacturer's cannabis deodorizer met all applicable health criteria thresholds (CPF Associates, Inc. 2017).

In Pueblo Colorado, some growers are using this technology to mitigate the cannabis odor emitted from greenhouse fan exhaust. The Pueblo Director and officials from the Department of Public Health and Environment plan to use an olfactometer to test the effectiveness of this technology in neutralizing the odors from greenhouse fan exhaust on December 21st.

The Landfill Operations Program Manager for the City of San Diego's Department of Environmental Services (San Diego Manager), was contacted by phone on November 30, 2017. The San Diego Manager stated that the City of San Diego uses the technology produced by the interviewed manufacturer, but uses a different blend of the same essential oils that is specific to the malodors resulting from landfills. The San Diego Manger, along with the San Diego Air Pollution Control District (APCD) and the Solid Waste Local Enforcement Agency (LEA), performed a pilot study of the technology's effectiveness at the Miramar landfill. The San Diego Manger noted that he, along with the officials from APCD and LEA, could not smell the landfill within 25-30 feet of the device and that the technology was effective in reducing odor in nearby communities. These communities are the nearest sensitive receptor and are located one mile away from the landfill on the other side of a highway. The San Diego Manager stated that the odor mitigation technology is only effective when the device was downwind of the source of the malodors and between the source of the malodor and sensitive receptors. Because wind direction changes during the day, the landfill uses other odor mitigation strategies (e.g., covers) in addition to the vapor-phase technology. The San Diego Manager mentioned that the technology would be more effective in an enclosed area (e.g., greenhouse), because wind direction would not have to be considered and the vapor would be closer to the odor source, and therefore, would have a greater likelihood of interacting with and neutralizing the malodors. Like the grower in Carpinteria, the San Diego Manager stated that the vapor had a pine scent, but that this scent was only noticeable when too much vapor is being produced. He stated that reducing the amount of vapor leaving the system was effective in reducing the pine scent.

A grower in Carpinteria was contacted by phone on November 29, 2017, and stated that the scent of cannabis is no longer noticeable at a distance of 50 feet from the greenhouse when this technology is used. However, the grower stated that the liquid and resulting vapor has a pine/citrus scent, which can be noticeable if too much vapor is being produced. If this occurs, it was stated that the amount of vapor produced by the system can be reduced.

Buffer Zones

Odors dissipate with increasing distance away from the odor source. Therefore, buffer zones are sometimes utilized as a strategy to mitigate odors. Other jurisdictions have implemented buffer zones for cannabis. The State of Washington has buffer requirements that apply to all cannabis businesses and protect sensitive receptors. Such buffer requirements could be applied to protect residential areas in the County of Santa Barbara. The State of Washington requires a 1,000-foot buffer zone between any type of cannabis business and sensitive uses such as an elementary or secondary school, playground, recreation center or facility, child care center, public park, public transit center, or game arcade (Washington State Liquor and Cannabis Board 2017). However, recent legislation allows local governments, like the City of Seattle, to reduce the buffer to 100 feet, except for elementary and secondary schools and public playgrounds (Washington State Liquor and Cannabis Board 2017).

The City of Seattle has buffer requirements for both retail and non-retail cannabis businesses such as cannabis cultivators. The City of Seattle requires a buffer zone of 1,000 feet from sensitive receptors such as elementary schools, secondary schools, and playgrounds for all cannabis businesses (Seattle City Council 2016). A 500-foot buffer from child care centers, game arcades, libraries, public parks, public transit centers, or recreation centers or facilities is required for cannabis retail businesses while a 250-foot buffer is required for non-retail cannabis businesses. Additionally, a 350-foot buffer must be maintained between cannabis retail businesses. Meanwhile, the City of Portland only requires buffers for cannabis retailers and retail couriers, which does not include cannabis cultivators (City of Portland 2017b). For cannabis retailers, a 1,000-foot buffer is required from schools, retailers, and dispensaries. For cannabis retail couriers, a 1,000-foot buffer is required from schools.

Like the State of Washington, the State of California also requires buffer zones for both retail and non-retail businesses such as cannabis cultivators. California state law requires cannabis businesses, including cannabis cultivators, to not be located within a 600-foot radius of any school providing instruction for kindergarten or any grades 1-12, day care center, or youth center. However, an exception may be made if the cannabis business has a valid license or permit from a local jurisdiction, is compliant with local ordinances and regulations, and the cannabis business is not located such that people must pass through a business that sells alcohol or tobacco to access the cannabis business. Other cities within California, such as the City of Oakland, have followed the state's direction. In the City of Oakland, cannabis businesses, including cannabis cultivators, are required to have a 600-foot buffer for schools (City of Oakland 2017).

In addition to meeting state requirements, Santa Barbara County may consider proximity to sensitive areas, local climatic conditions, and local topography and barriers when establishing buffers (Pennsylvania State University 2002). Odor impact assessments used to establish robust buffer requirements for odors in general rely on complex mathematical models that involve 1) odor flow from the source 2) odor dilution in the atmosphere 3) peak concentrations that mimic odor detection by the human nose and 4) the probability that the odor exceeds an odor impact threshold at various distances from the odor source (Schauburger, G. and Piringir, M. 2012). However, such information is not available for the County of Santa Barbara.

In the absence of such detailed information, established buffer zones within the County of Santa Barbara and County of San Luis Obispo for similar land uses may serve as an example of effective buffer distances. Similarly to cannabis, agricultural crops are grown outdoors and in greenhouses and some have been noted for their disagreeable odor (e.g., garlic, cauliflower, broccoli). In the County of San Luis Obispo, buffer distance for agricultural uses depends on the type of crop and proximity to

dwellings (County of San Luis Obispo 2010). The buffer distance ranges from 100 feet to 300 feet for greenhouses, 100 feet to 400 feet for irrigated forage and field crops, 100 feet to 500 feet for wholesale nurseries outdoors, and 200 feet to 600 feet for irrigated vegetables and berries. For Santa Barbara County's 2013 Agricultural Buffer Ordinance was established to "minimize potential conflicts between agricultural and adjacent land uses that result from noise, dust, light, and odor incidental to normal agricultural operations as well as potential conflicts originating from residential and other non-agricultural uses" (County of Santa Barbara 2013). In commercial and industrial zones, the minimum buffer width is 100 feet and maximum buffer width is 300 feet. In residential not located on a small lot located within an urban area, the minimum is 200 feet and maximum 300 feet. In residential located on a small lot located within an urban area, the minimum is 100 feet and maximum 200 feet. For sensitive non-agricultural uses, the minimum is 300 feet and maximum 400 feet.

These agricultural buffers are not specific to cannabis. Anecdotal evidence suggests that strong cannabis odors can still be detected at least 600 feet away, though it has also been stated that the odor can be noticed from one to two miles away from the source. Thus, buffers may be utilized but are likely to be more effective remote areas of the County where larger buffer distances could be implemented. In more urban areas, odor mitigation technologies may be more appropriate as they would significantly reduce odors over a shorter distance (e.g., 50 feet for vapor-phase technologies).

Appendix Citations:

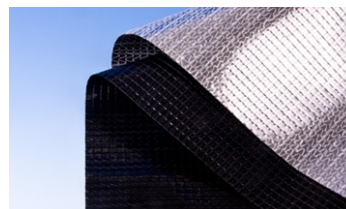
- City and County of Denver. 2017. *Denver Revised Municipal Code, Chapter 4 – Air Pollution Control, Section 4-10*. Accessed: 30 November 2017. Retrieved from: https://library.municode.com/co/denver/codes/code_of_ordinances?nodeId=TITIIREMUCO_C44AIPOCO_ARTIAD_S4-10NU
- City of Oakland. 2017. *Map of Permitted Zones for Cannabis Facilities*. Accessed: 5 December 2017. Retrieved from: <http://www2.oaklandnet.com/government/o/CityAdministration/OAK064043>
- City of Portland. 2017a. *Zoning Code Section 33.262.070*. Accessed: 5 December 2017. Retrieved from: <https://www.portlandoregon.gov/bps/article/53319>
- . 2017b. *Delivery of Cannabis in Portland*. Accessed: 5 December 2017. Retrieved from: <https://www.portlandoregon.gov/oni/article/629355>
- Claessen, E. L. 2009. *University of Gothenburg. Widely Used Fragrance Ingredients In Shampoos And Conditioners Are Frequent Causes Of Eczema*. Accessed: 29 November 2017. Retrieved from: <https://www.medicalnewstoday.com/releases/144041.php>
- County of Pueblo. 2017. *Pueblo County Code Title 17 Chapter 17.120.190*. Accessed: 4 December 2017. Retrieved from: <http://county.pueblo.org/government/county/code/title17/chapter17-120>
- County of San Luis Obispo. 2010. *Agriculture Element*. Accessed: Retrieved from: <https://www.slocounty.ca.gov/getattachment/72316c5b-f626-456c-8cd6-e81e6d6baf47/Agriculture-Element.aspx>
- County of Santa Barbara. 2013. *Agricultural Buffer Ordinance Attachment 2*. Accessed: 5 December 2017. Retrieved from: http://longrange.sbcountyplanning.org/programs/ag_buffer/AgBufferOrdCLUDC%20Board%20Reso4851.pdf
- CPF Associates, Inc. 2017. *Screening Health Assessment of Waterless Vapor Phase Odor Control Technology*.

- Denver Department of Environmental Health. 2017. *Denver's Odor Control Plan Frequently Asked Questions*. Accessed: 30 November 2017. Retrieved from: <https://www.denvergov.org/content/dam/denvergov/Portals/771/documents/EQ/Odor/Odor%20FAQ%20Final.pdf>
- Gertsch J, Leonti M, & Raduner S. 2008. *Beta-caryophyllene is a dietary cannabinoid*. *Proceedings of the National Academy of Sciences of the United States of America*. 105 (26): 9099-104. doi: 10.1073/pnas.0803601105.
- Kent James, A. 1983. *Riegel's Handbook of Industrial Chemistry. Eighth Editions (ISBN 0 442 20164 8)*.
- Kim YW, Kim MJ, Chung BY, Bang du Y, Lim SK, Choi SM, Lim DS, et al. 2013. *Safety evaluation and risk assessment of d-Limonene*. Accessed: 28 November 2017. Retrieved from: <https://www.ncbi.nlm.nih.gov/pubmed/23573938>
- Passosa, G. F., & Fernandes, E. S. 2007. *Anti-inflammatory and anti-allergic properties of the essential oil and active compounds from Cordia verbenacea - Journal of Ethnopharmacology*. 110 (2): 323-333. doi: 10.1016/j.jep.2006.09.032.
- Pennsylvania State University. 2002. *Odor Management in Agriculture and Food Processing: A Manual of Practice for Pennsylvania*. Accessed: 30 November 2017. Retrieved from: <http://www.agriculture.pa.gov/Protect/StateConservationCommission/OdorManagementProgram/Documents/PSU%20Odor%20Management%20in%20Ag%20and%20Food%20Processing%20brochure.pdf>
- Portland Bureau of Development Services. 2017. *Portland Code Guide for Cannabis Businesses*. Accessed: 5 December 2017. Retrieved from: <https://www.portlandoregon.gov/bds/article/637883>
- Schauberger, G. and Piringer, M. 2012. *Assessment of Separation Distances to Avoid Odour Annoyance: Interaction Between Odour Impact Criteria and Peak-to-Mean Factors*. *Chemical Engineering Transactions*, 30. DOI: 10.3303/CET1230003
- Seattle City Council. 2016. *Marijuana Zoning Ordinance*. Accessed: 5 December 2017. Retrieved from: <http://www.seattle.gov/dpd/vault/marijuanazoning/documents/default.htm>
- Vazquez-Araujo, L., Rodriguez-Solana, R., Cortes-Dieguez, S. M., & Dominguez, J. M. 2013. *Use of hydrodistillation and headspace solid-phase microextraction to characterize the volatile composition of different hop cultivars*. *Journal of the Science of Food and Agriculture*. 93 (10): 2568-74. doi:10.1002/jsfa.6078.
- Washington State Liquor and Cannabis Board. 2017. *Distance from Restricted Entities*. Accessed: 5 December 2017. Retrieved from: https://lcb.wa.gov/mjlicense/distance_from_restricted_entities

Data Acquisition Contact List

Netherlands - Office of Medicinal Cannabis
UC Vegetable Research & Information Center
Penn State University & PA Department of Agriculture
City and County of Denver, Department of Environmental Health
Denver Department of Environmental Health
City of Denver
Marijuana Business Daily
International Code Council
City of Boulder
City of Boulder Planning and Development Services
City of Denver
CBS News
Cannabis Practice Group
President of Byers Scientific and Manufacturing Company
Byers Scientific & Manufacturing
Director of Environmental Quality Division, Denver Department of Environmental Health
City/County of Pueblo Colorado Environmental Health and Emergency Preparedness Division
City/County of Pueblo Planning and Development Department

City/County of Pueblo Director of Planning and Development Department
City of San Diego Department of Environmental Services
City of San Diego Waste Management Company
Landfill Operations Program Manager, City of San Diego, Environmental Services Department
Oregon Health Authority, Oregon Medical Marijuana Program
San Diego Air Pollution Control District
City of Portland Cannabis Program
City of Boulder Finance Department Licensing Division
County of Boulder Marijuana & Liquor Licensing
SCS Engineers consulting firm, President of SCS Tracer Environmental and SCS Engineers
Puget Sound Air Agency
Portland Bureau of Development Services
Portland Zoning Code Helpdesk
County of Santa Barbara
State of Washington Liquor and Cannabis Board
City of Portland
City of Seattle
City of Oakland
California Bureau of Cannabis Control



OBSCURA 10075 FR AB+B

Product information

Main Function	From light restriction to total blackout
System	Sliding, Hanging
Flame retardant	Yes
Warranty	Warranty five (5) years under all types of greenhouse covering, see Svensson's limited warranty for all terms, conditions, and exclusions in writing.

Properties	Value	Unit	Test methods
Weight	244	g/m ²	
Shading level in direct light, PAR**	99.9	%	Integrated sphere
Shading level in diffused light, PAR**	99.9	%	Integrated sphere
Energy saving	75	%	Svensson method

* Width 50 mm

** PAR = 400 - 700 nm, accuracy +/- 1%

*** UV-light = 300 - 400 nm

This product image is for illustrative purposes only and may vary in appearance and design from the delivered product. Although the information in this data sheet has been composed with care, Svensson does not accept any liability in respect of its accuracy. Further information concerning the product and its installation may be obtained from Svensson and its authorized distributors. Svensson's products and name are protected by patent and other intellectual property rights. Products marked FR are flame retardant. No other products delivered by Svensson are flame retardant. AB Ludvig Svensson is an ISO 14001/90001 certified company.



Color: Bronze

Weight: 32.2 lbs

Project:

Type:

Prepared By:

Date:

Driver Info

Type	Constant Current
120V	1.12A
208V	0.70A
240V	0.61A
277V	0.52A
Input Watts	134.8W

LED Info

Watts	125W
Color Temp	5000K (Cool)
Color Accuracy	70 CRI
L70 Lifespan	100,000
Lumens	16,328
Efficacy	121.1 LPW

Technical Specifications

Listings

UL Listing:

Suitable for wet locations

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

DLC Product Code: P0000177P

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

Dark Sky Conformance:

Conforms to (allows for conformance to) the IDA's fully shielding requirement, emitting no light above 90 degrees (with the exclusion of incidental light reflecting from fixture housing, mounts, and pole).

LED Characteristics

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

LEDs:

Multi-chip, high-output, long-life LEDs

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5-year period

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

IES Classification:

The Type IV distribution (also known as a Forward Throw) is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semiCircular distribution with essentially the same candlepower at lateral angles from 90° to 270°.

Effective Projected Area:

EPA = 0.75

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F)

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Thermal Management:

Superior thermal management with external "Air-Flow" fins

Lens:

Tempered glass lens

Housing:

Die-cast aluminum housing, lens frame and mounting arm

Mounting:

Universal mounting arm compatible for hole spacing patterns from 1" to 5 1/2" center to center. Round Pole Adaptor plate included as a standard. Easy slide and lock to mount fixture with ease. Round pole diameter must be >4" to mount fixtures at 90° orientation.

Reflector:

Specular vacuum-metallized polycarbonate

Gaskets:

High-temperature silicone gaskets

IP Rating:

Ingress Protection rating of IP66 for dust and water

Technical Specifications (continued)

Construction

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Electrical

Surge Protection:

4kV

Driver:

One Driver, Constant Current, Class 2, 1800mA 100-277V, 50-60Hz, Power Factor 99%

THD:

5.3% at 120V, 15.4% at 277V

Power Factor:

99.4% at 120V, 92.1% at 277V

Optical

BUG Rating:

B1 U0 G2

Other

BAA Compliance:

Click www.rablighting.com/product/ALED4T125 USA for BAA compliance.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at www.rablighting.com/legal#warranty

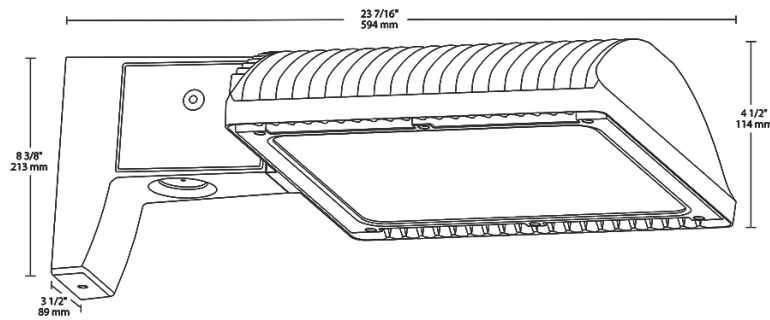
Equivalency:

Replaces 350W Metal Halide

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Dimensions



Features

- 66% energy cost savings vs. HID
- 100,000-hour LED lifespan
- 5-year warranty

Ordering Matrix

Family	Optics	Wattage	Mounting	Color Temp	Finish	Driver Options	Options	Other Options
ALED	4T	125						
	4T = Type IV	50 = 50W 78 = 78W	Blank = Pole mount SF = Slipfitter	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Bronze RG = Roadway Gray W = White K = Black	Blank = 120-277V /480 = 480V /BL = Bi-Level /D10 = 0-10V Dimming	Blank = No Option /LC = Lightcloud® Controller /PCS = 120V Swivel Photocell /PCS2 = 277V Swivel Photocell /PCT = 120-277V Twistlock Photocell /PCS4 = 480V Swivel Photocell /PCT4 = 480V Twistlock Photocell /WS2 = Multi-Level Motion Sensor 20 ft. /WS4 = Multi-Level Motion Sensor 40 ft.	Blank = Standard USA = BAA Compliant
	3T = Type III	105 = 105W						
	2T = Type II	125 = 125W 150 = 150W 150W						

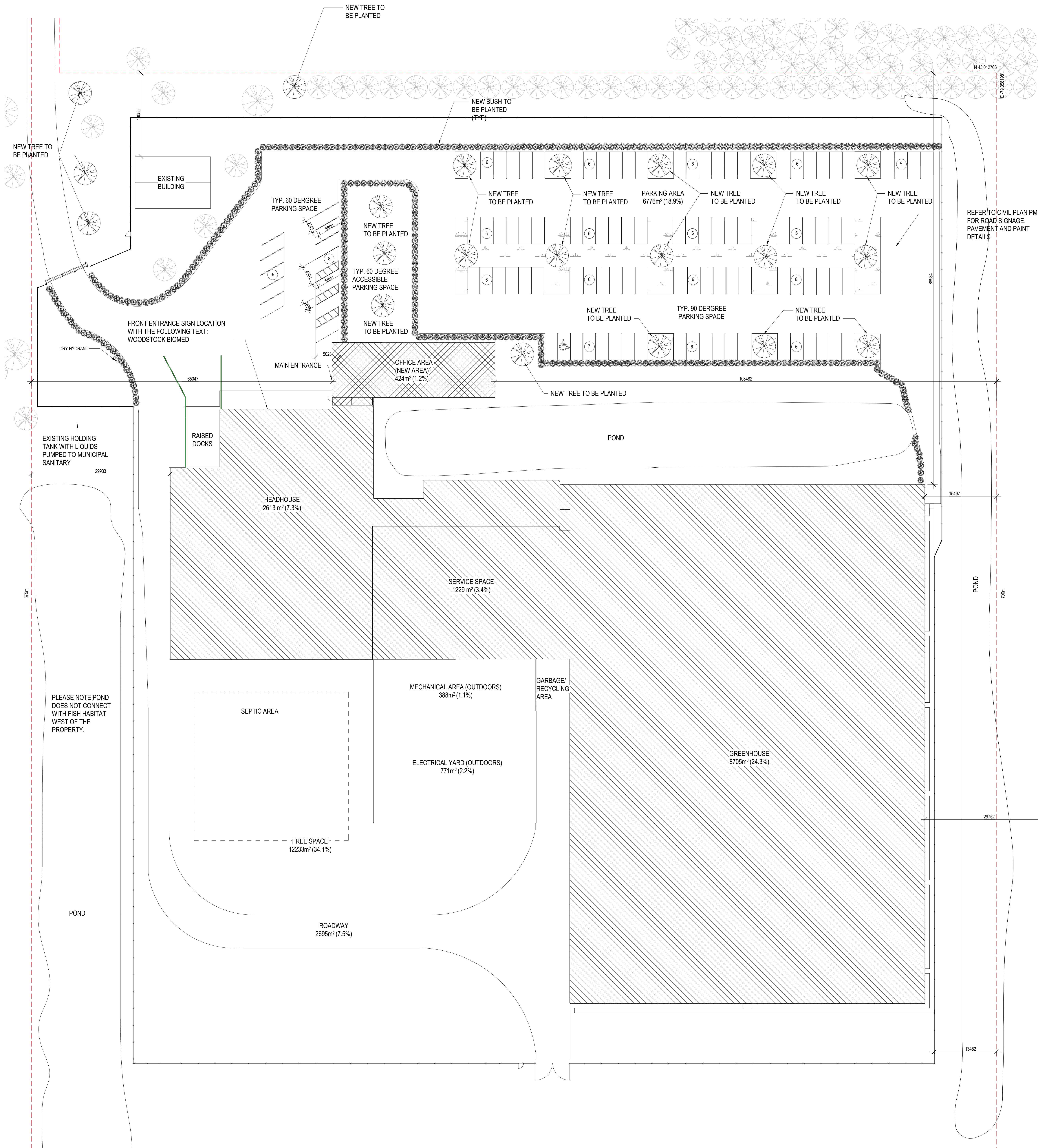
SEWAGE DEMAND: WATER FIXTURE BEFORE AND AFTER COMPARISON

PRIOR TO RETROFIT OF FACILITY

	TOILETTE	URINAL	SHOWER	KITCHEN/CAFETERIA (SINK)
RESIDENCE	1	0	1	1
TRAILER 1	2	0	2	1
TRAILER 2 (RENTED)	2	0	2	1
HEADHOUSE	0	0	0	1
CORRIDOR TO HEADHOUSE	2	1	0	0
TOTAL FIXTURES	7	1	5	4

AFTER RETROFIT OF FACILITY

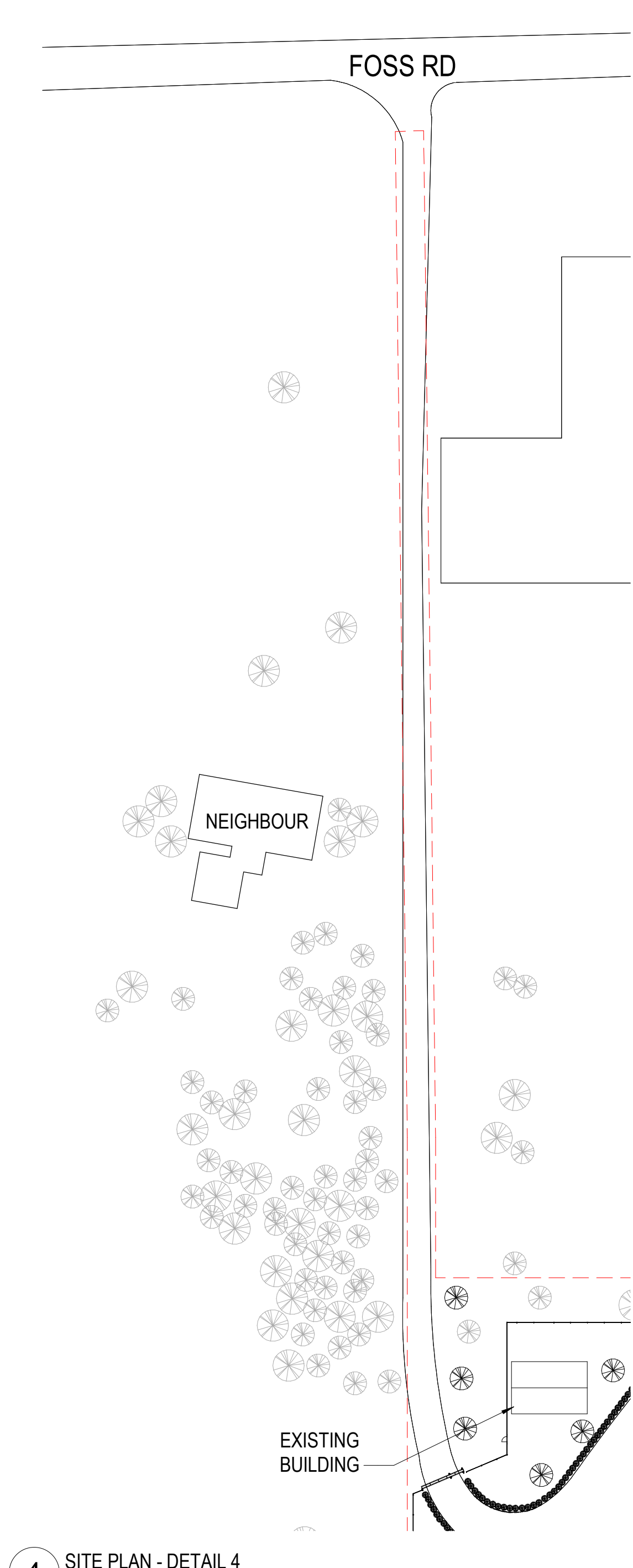
	TOILETTE	URINAL	SHOWER	KITCHEN/CAFETERIA (SINK)
RESIDENCE	1	0	1	1
TRAILER 1 -TO BE DISCONNECTED	0	0	0	0
TRAILER 2 (RENTED) -REMOVED	0	0	0	0
HEADHOUSE	5	2	4	0
CORRIDOR TO HEADHOUSE -DEMOLISH	0	0	0	0
OFFICE	2	0	0	1
TOTAL FIXTURES	8	2	5	2



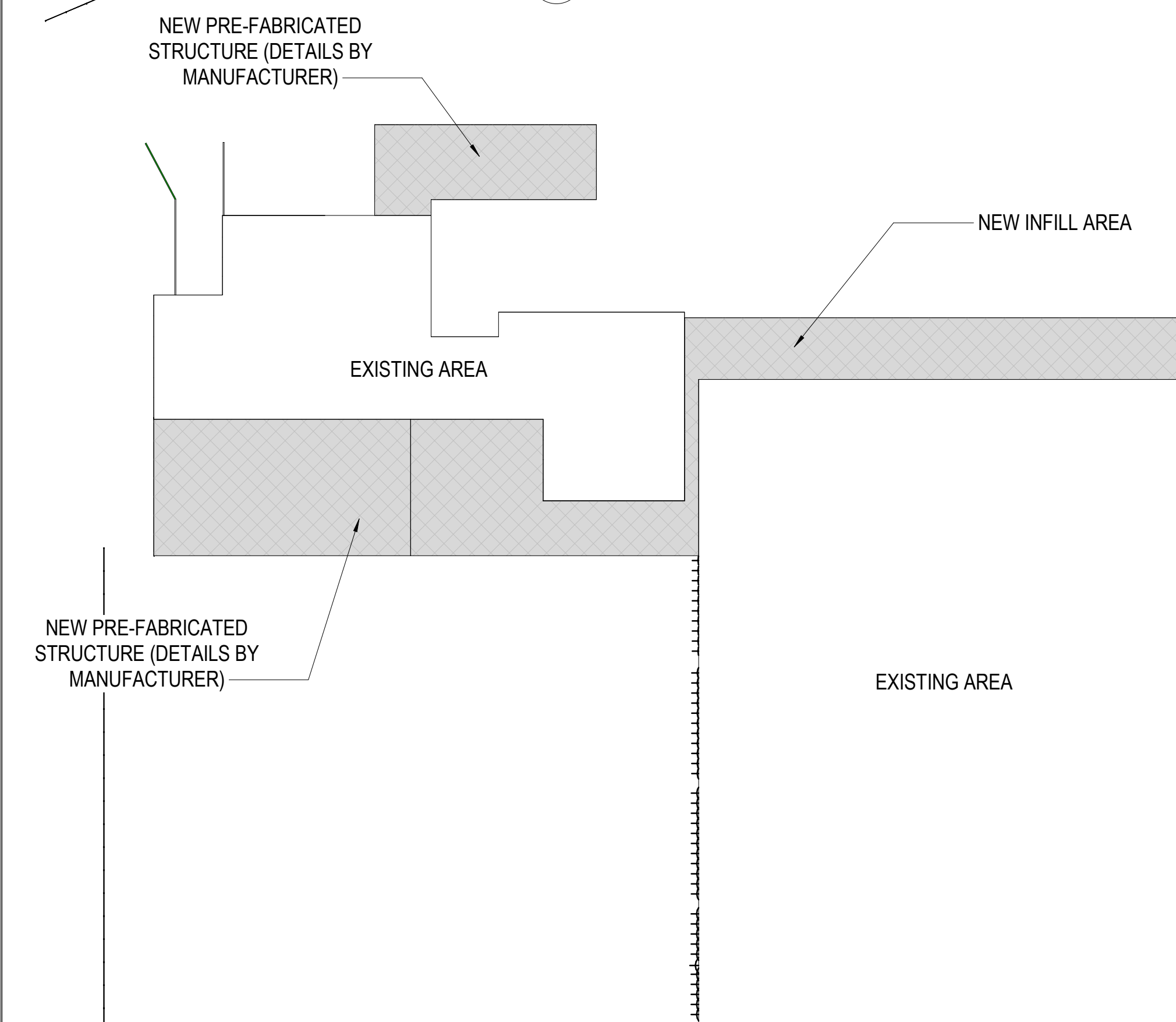
1 SITE PLAN.
SCALE: 1 : 300

LEGEND	
	PROPERTY LINE

COVERAGE TABLE (FENCED AREA ONLY)		
NAME	AREA, M²	PART, %
GREENHOUSE	8705	24.3
HEADHOUSE	2613	7.3
SERVICE SPACE	1229	3.4
ELECTRICAL YARD	771	2.2
OFFICE AREA	424	1.2
MECHANICAL AREA	388	1.1
PARKING AREA	6776	18.9
ROADWAY	2695	7.5
FREE SPACE	12233	34.1



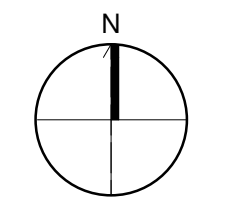
4 SITE PLAN - DETAIL 4
SCALE: N.T.S.



2 EXISTING AND NEW AREAS
SCALE: N.T.S.

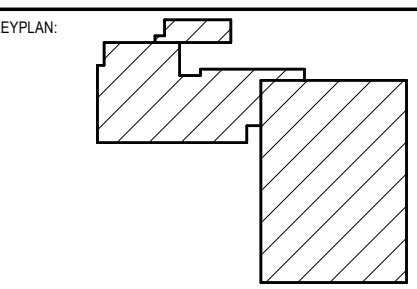
ISSUED		
NO.	DATE	DESCRIPTION
1	10 AUG 2018	ISSUED FOR PROPOSED REVIEW
2	12 NOV 2018	ISSUED FOR COORDINATION
3	13 DEC 2018	ISSUED FOR REVIEW
4	20 DEC 2018	ISSUED FOR ARCHITECT REVIEW
5	21 DEC 2018	ISSUED FOR PERMIT
6	24 MAR 2019	ISSUED FOR FINAL REVIEW

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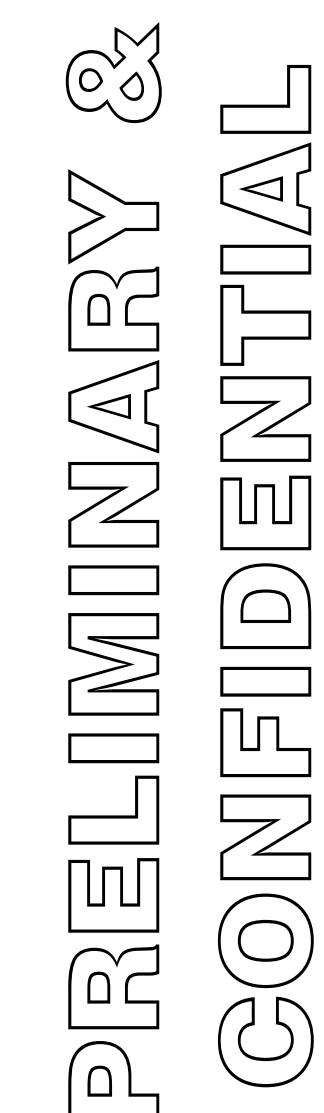
PROJECT NAME: LOCATION
WOODSTOCK BIOMED
770 Foss Rd., Fenwick, On

DRAWING TITLE
SITE PLAN

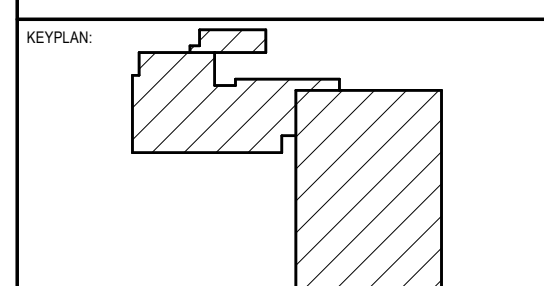
DRAWN BY: YS	PROJECT NO: 18216
CHECKED BY: EA	SCALE: As Indicated
SHEET NO: ARCH E	DATE: 10/25/18
DRAWING NO:	

A-100

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NOT FOR
CONSTRUCTION



DRAWING TITLE:

**DIMENSIONED FENCE
PLAN**

DRAWN BY:		PROJECT NO:	
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YS	18216
CHECKED BY: EA	SCALE: As indicated

SHEET SIZE:	ARCH E	DATE:	11/01/18
PREPARED BY:			

A-102

GENERAL NOTES

1. FENCE CONSTRUCTION: COMMERCIAL GRADE CHAIN LINK FENCE SYSTEM WITH 50 MM HESH 4.8 M HIGH GALVANIZED STEEL WIRE, CHAIN LINK FENCE SYSTEM TO BE 1.83 M HIGH FROM GRADE TO TOP RAIL AND WITH 1 M INTERMEDIATE POST SIZE: 63.5 MM X 3.91 MM. MAIN POST TO BE 88.9 MM X 5.49 MM.
2. EMERGENCY EXIT DOORS: NO EXTERIOR DOOR HARDWARE. DOORS ARE TO BE EQUIPPED WITH RIM EXIT DEVICE AND CLOSER. DOORS TO BE MONITORED VIA SURFACE MOUNTED CONTACT C.W. AUDIBLE ALARM TO SOUND ON OPENING OF THE DOOR. EXTERIOR HARDWARE BY OTHERS.
3. EMERGENCY EXIT GATES: NO EXTERIOR GATE HARDWARE. DOORS ARE TO BE EQUIPPED WITH RIM EXIT DEVICE AND CLOSER. METAL PANELS ON EXTERIOR FACE OF GATE AND ADJUSTMENT FEEDBACK TO PREVENT TAMPERING WITH HARDWARE.
4. FENCE TO BE EQUIPPED WITH 24 HOURS OF BARBED WIRE. HIGHEST STRAND OF BARBED WIRE TO FINISH AT 2.4M. FENCE TO BE COMPLETED IN 2 PHASES, FINAL PHASE WITH CONSTRUCTION SAVING GATES AT MAIN ENTRANCE AND PAD LOCK GROSS MAIN GATES. FINAL PHASE TO INCLUDE MOTORIZED VEHICLE ENTRY GATE AND RIM EXIT DEVICES ON MAIN GATES.



1. DRAWINGS

- A. THE NOTES ON THIS SHEET APPLY TO ALL WORKS UNDER THIS CONTRACT UNLESS OTHERWISE NOTED ON THE SPECIFIC DETAIL DWGS.
- B. THE STANDARD DRAWINGS OF THE TOWN OF PELHAM, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS (OPSS) AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) CONSTITUTE PART OF THE PLANS OF THIS CONTRACT.
- C. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY THE TOWN OF PELHAM AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS.
- D. THE STANDARD DRAWINGS INCLUDED WITH THESE PLANS ARE PROVIDED FOR CONVENIENCE ONLY AND ARE NOT TO BE CONSTRUED TO BE A COMPLETE SET FOR THE PURPOSE OF THE CONTRACT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL RELEVANT STANDARD DRAWINGS AND SPECIFICATIONS AS REQUIRED FOR THIS CONTRACT.

2. MEASUREMENTS

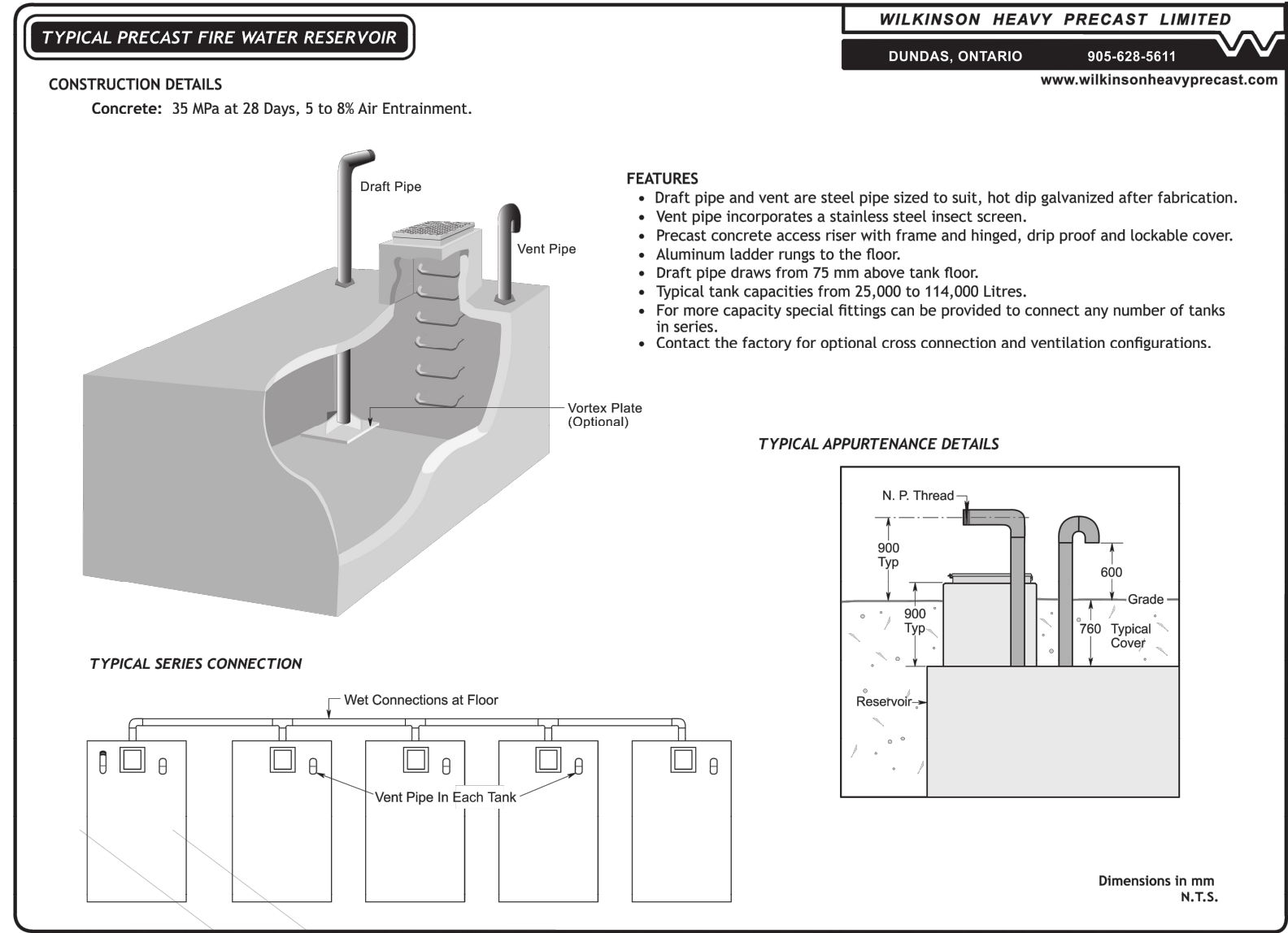
- A. ALL DIMENSIONS ARE IN METRES, EXCEPT PIPE DIAMETERS, WHICH ARE IN MILLIMETRES, UNLESS SPECIFIED OTHERWISE.
- B. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION, AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.

3. GENERAL

- A. EXISTING SERVICES AND UTILITIES SHOWN ON THESE CONTRACT DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE AND THEIR LOCATIONS ARE NOT GUARANTEED. THE CONTRACTOR SHALL INTERPRET THIS INFORMATION AS HE WISHES WITH THE UNDERSTANDING THAT THE OWNER DISCLAIMS ALL RESPONSIBILITY FOR ITS ACCURACY AND/OR SUFFICIENCY. THE CONTRACTOR IS REQUIRED TO NOTIFY THE VARIOUS UTILITY COMPANIES 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
- B. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- C. GRANULAR MATERIAL, USED FOR BACKFILL, SHALL BE PLACED IN LAYERS 150mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- D. ALL DISTURBED AREAS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION OR BETTER, AS DETERMINED BY THE ENGINEER. ALL GRASS AND VEGETATION COVERED AREAS SHALL BE RESTORED BY PLACING 200mm OF APPROVED TOPSOIL AND NURSERY SOD UNLESS NOTED OTHERWISE.

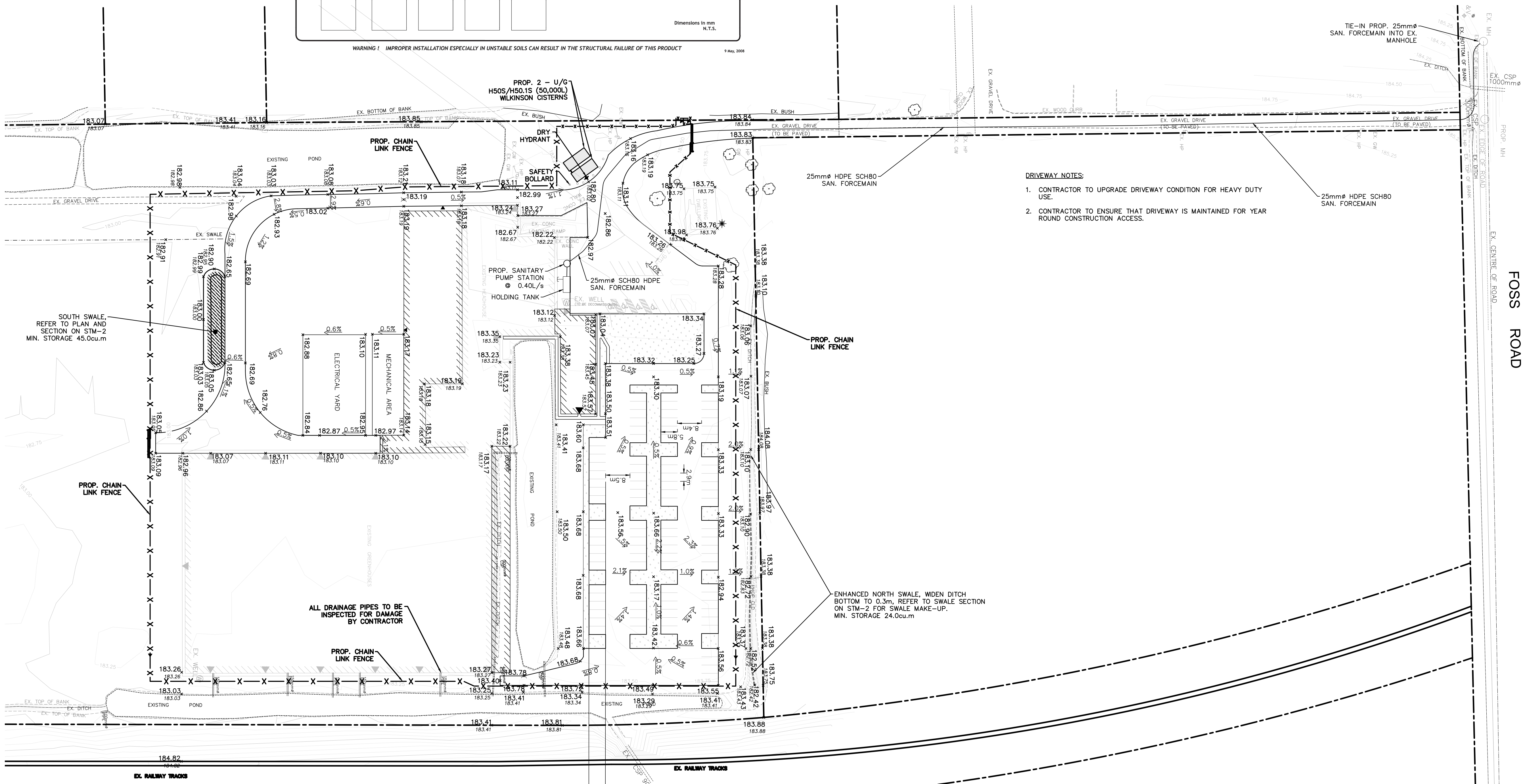
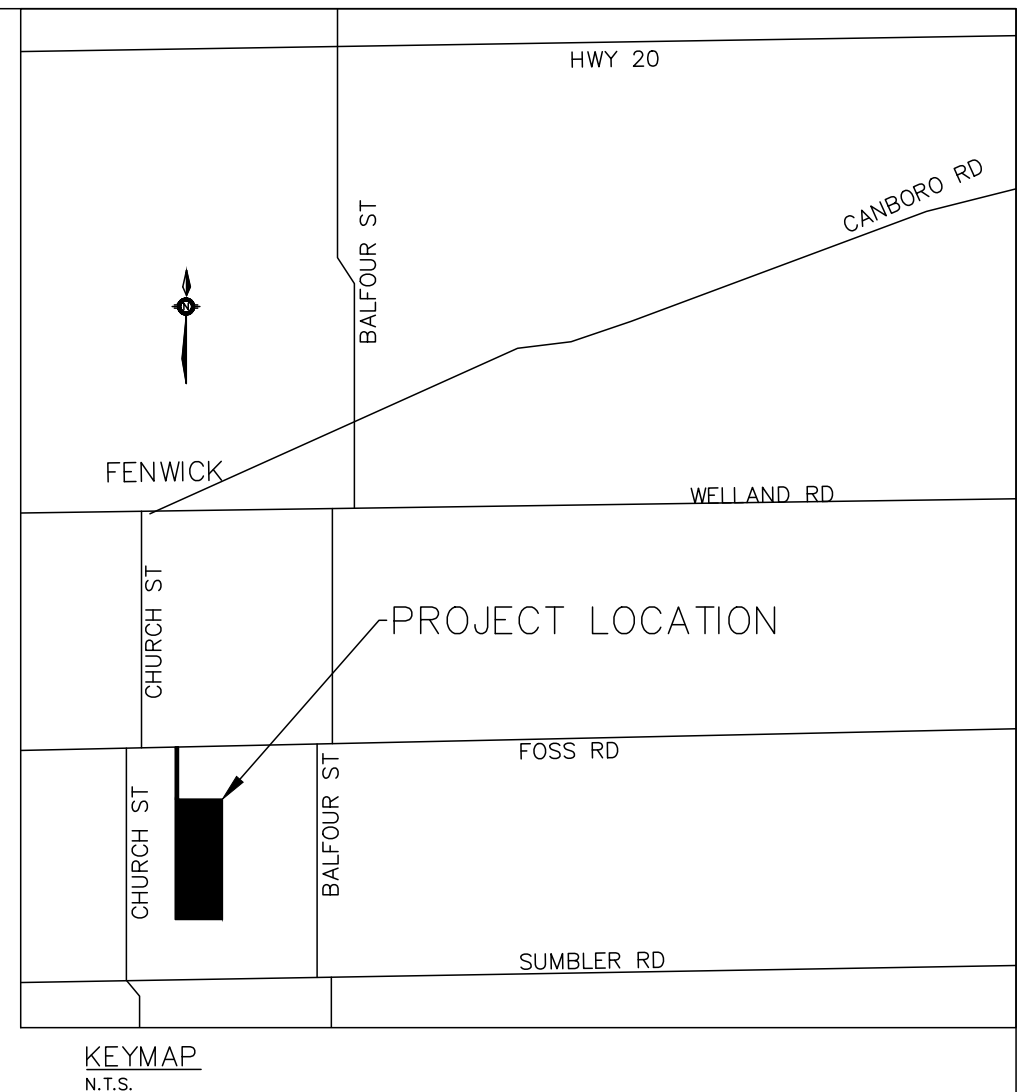
4. PARKING LOT

- A. THE PARKING LOT PAVEMENT STRUCTURE SHALL BE DETERMINED BY A GEOTECHNICAL ENGINEER.
- B. DRIVEWAY ENTRANCE PAVEMENT STRUCTURE SHALL BE CONSTRUCTED AS PER THE TOWN OF PELHAM ENGINEERING DESIGN MANUAL (NOVEMBER, 2017):
- | COMMERCIAL | INDUSTRIAL |
|--------------------|--------------------|
| 40mm HL3 ASPHALT | 70mm HL8 ASPHALT |
| 50mm HL8 ASPHALT | |
| 375mm GRANULAR 'A' | 450mm GRANULAR 'A' |
- C. NATIVE SUBGRADE TO BE COMPACTED TO MINIMUM 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- D. PAVEMENT STRUCTURE TO BE CONFIRMED BY GEOTECHNICAL ENGINEER PRIOR TO START OF CONSTRUCTION



LEGEND

- CHAIN LINK FENCE
- SILT FENCE
- EXISTING GUY WIRE
- EXISTING HYDRO POLE
- MANDOOR
- OVERHEAD DOOR
- PROPOSED ELEVATION
- EXISTED ELEVATION
- PROPOSED GRADE
- 3:1 SLOPE
- HIGH POINT



This drawing has been created electronically.
Handwritten or manual revisions to the drawing are only valid when accompanied by the design engineer's initials.

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This drawing may have been reduced.
0 5 10 20 30 40 50mm
0' 1/4" 1/2" 1' 1 1/2" 2'

No.	Issuance Description	YY/MM/DD
1.	BUILDING PERMIT	18/12/21
2.	ISSUED FOR PELHAM REVIEW	19/03/20

Issued For:
BUILDING PERMIT

Client
Ehvert

Project
LEVIATHAN RENOVATION

770 FOSS RD., FENWICK, ON

Drawing:
SITE GRADING & SERVICING PLAN

Project No.	498-006-18	Designed by: SAS	Checked by: RCC
Scale:	1:750	Drawn by: SAS	Approved by: JDM
Orientation		Stamp	

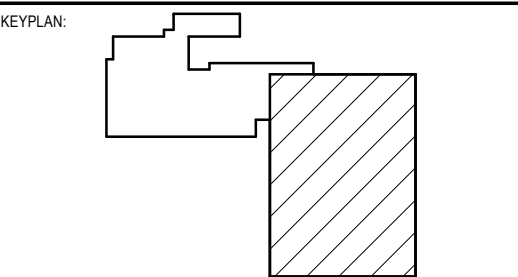


Drawing No.
SG-1

[illegible]

A circle with a vertical line segment from the center to the top edge, labeled 'N'.

NOT FOR
CONSTRUCTION



Stamp: _____

770 Foss Rd., Fenwick, On

DRAWN BY:	NP	PROJECT NO.:	18216
CHECKED BY:	EA	SCALE:	As indicated
SHEET SIZE:	ARCH E	DATE:	03/20/19

M-302



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March 20, 2019

Woodstock Biomed
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TRANSPORTATION BRIEF FOR PROPOSED REDEVELOPMENT - LEVIATHAN CANNABIS GREENHOUSE, 770 FOSS ROAD, PELHAM, ON

IBI Group is working on behalf of the owners (Leviathan Cannabis) of the property municipally known as 770 Foss Road, in the Town of Pelham. This property is situated in the southeast area of the Foss Road / Church Street intersection.

It is our understanding that three of the four existing cucumber greenhouses will be removed, with the remaining one to be retrofitted and expanded to grow cannabis. The purpose of this brief is to provide a traffic operations assessment of the retrofitted greenhouse.

The proposed net decrease in total greenhouse area is 17,936 sq. m. (193,061 sq. ft), which is a 68% reduction, resulting in a remaining grow area is 7,490 sq. m. (80,640 sq. ft). A staff size of 70 employees will operate the greenhouse over three shifts (two primary for 90% of staff, and one smaller for 10% of staff) year-round. A parking lot with a 108 space capacity is proposed on the site of the northernmost removed greenhouse.

Leviathan Cannabis will schedule work shifts to avoid school pick-up and drop-off times, with the morning shift (i.e. 32 staff) tentatively set from 6:30 AM to 3:00 PM, and the evening shift (i.e. 31 staff) set for 3:00 pm to 11:30 PM. The third smaller shift (day time, 9:00 AM to 5:00 PM) will be fulfilled by 10% of the total greenhouse staff size (i.e. 7 staff).

Site servicing truck traffic volumes are also expected to be low, with up to 5 trips daily. Based on the planned staff size, staff shift schedule, and servicing truck traffic, site traffic is expected to cause minimal traffic impacts to Foss Road during the road's morning and afternoon peak traffic activity hours.

The hour where the primary shift change occurs will result in up to 63 automobile trips (32 outbound and 31 inbound), based on the conservative assumption that every worker will individually drive themselves. This trip volume is regarded to be minor (i.e. under 100 trips during the peak hour).

Therefore, traffic impacts to Foss Road caused by the property is expected to be minimal during the weekday peak traffic hours, based on the proposed staff size and shift scheduling

Yours truly,

Hugo Chan, P.Eng.
IBI Group