

# COMMUNITY DEVELOPMENT DEPARTMENT

45175 Ten Mile Road Novi, MI 48375 (248) 347-0415 Phone (248) 735-5600 Facsimile www.cityofnovi.org

# ZONING BOARD OF APPEALS STAFF REPORT

FOR: City of Novi Zoning Board of Appeals ZONING BOARD APPEALS DATE: February 12, 2019

REGARDING: 45145 West 12 Mile Road, #50-22-15-126-015 (PZ18-0057)

BY: Larry Butler, Deputy Director Community Development

I. GENERAL INFORMATION:

#### **Applicant**

Somnio Global LLC

#### Variance Type

Use

# **Property Characteristics**

Zoning District: Office Service Technology

Location: East of Taft Road and South of Twelve Mile Road

Parcel #: 50-22-15-126-015

#### Request

The applicant is requesting a variance from the City of Nov Ordinance Section 4.68(2) to allow an exterior bulk Nitrogen Storage tank required for research. Limited warehousing or storage of products used in research is allowed by code. This property is zoned Office Service Technology (OST).

#### **II. STAFF COMMENTS:**

The Nitrogen storage tank has been previously allowed under temporary use permits.

# **III. RECOMMENDATION:**

The Zoning Board of Appeals may take one of the following actions:

1.	1	move	that	we	grant	the	variance	in	Case	No.	PZ18-0057,	sought	by for
		ner has sh	own prac										
	difficulty requiring												
	<ul> <li>(a) Without the variance Petitioner will be unreasonably prevented or lim to use of the property because</li></ul>												spect
		(c) Pe	titioner	did nc	ot create	the c	condition be	caus	se				

		(d)	The relief granted will not unreasonably interfere with adjacent or surrounding properties because																
		(e)	The				sister	nt wit	th th	e sp	oirit a	ind	inter	nt of	the	ord	dinan	ce be	ecause
		(f) The variance granted is subject to:																	
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				2													·		
				3													·		
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2.							_	the										_	nt by
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		(d)						ult in i				n th∈	e adja	acen <sup>°</sup>	t and	surro	oundi	ng pro	perties
		(e)		_				vould						•	and i	nten	t of tl	he ordi	nance

Should you have any further questions with regards to the matter please feel free to contact me at (248) 347-0417.

Larry Butler Deputy Director Community Development City of Novi



45175 Ten Mile Road Novi, MI 48375 (248) 347-0415 Phone (248) 735-5600 Facsimile www.cityofnovi.org

# ZONING BOARD OF APPEALS APPLICATION

RECEIVED

NOV 13 2018

CITY OF NOVI COMMUNITY DEVELOPMENT

### APPLICATION MUST BE FILLED OUT COMPLETELY

I. PROPERTY INFORMATION (Add	Application Fee:	\$300.00						
PROJECT NAME / SUBDIVISION Somnio Global, LLC								
ADDRESS		LOT/SIUTE/SPACE #	Meeting Date:	11/13/18				
45145 West 12 Mile Road	ZBA Case #: PZ_	18-0057						
SIDWELL # 50-22-15 - 126 - 015		obtain from Assessing nent (248) 347-0485	ZBA Case #: PZ_	10 0031				
CROSS ROADS OF PROPERTY 12 Mile Road and Caberel Drive								
	S THE PROPERTY WITHIN A HOMEOWNER'S ASSOCIATION JURISDICTION? REQUEST IS FOR:							
☐ YES 🗹 NO	DMMERCIAL 🗌 VACANT P	PROPERTY SIGNAGE						
DOES YOUR APPEAL RESULT FROM A NOT	TICE OF VIOLATION OR	CITATION ISSUED?	] yes					
II. APPLICANT INFORMATION								
A. APPLICANT	EMAIL ADDRESS		CELL PHONE NO.					
NAME	sannear@somnioglob	oal.com	248 567 9616 TELEPHONE NO.					
Steve Annear			248 574 5508					
ORGANIZATION/COMPANY			FAX NO.					
Somnio Global, LLC ADDRESS		CITY	734 864 5744 STATE	ZIP CODE				
45145 West 12 Mile Road		Novi	Mi	48377				
B. PROPERTY OWNER CHECK HE	ERE IF APPLICANT IS ALS	O THE PROPERTY OWNER						
Identify the person or organization that	EMAIL ADDRESS		CELL PHONE NO.					
owns the subject property:	sannear@somniogl	obal.com	248 567 9616					
NAME Steve Annear	TELEPHONE NO. 248 574 5508							
ORGANIZATION/COMPANY			FAX NO.					
Somnio Domus, LLC			734 864 5744					
ADDRESS 45145 West 12 Mile Road		CITY   Novi	STATE Mi	ZIP CODE 48377				
III. ZONING INFORMATION								
A. ZONING DISTRICT								
□ R-A □ R-1 □ R-2	□ R-3 □ R-4	□ RM-1 □ RM-2	□ MH					
□ I-1 □ I-2 □ RC	□ TC □ TC-1	OTHER _ OST						
B. VARIANCE REQUESTED								
INDICATE ORDINANCE SECTION (S) AND	VARIANCE REQUESTED	);						
1. SectionV	ariance requested	S						
2. SectionVariance requested								
3. SectionVariance requested								
4. SectionV	ariance requested							
IV. FEES AND DRAWNINGS		of Edition School	a a strict a heart will					
A. FEES								
$\square$ Single Family Residential (Existing	3) \$200 🗆 (With Viol	ation) \$250 $\square$ Single Fo	amily Residential (New)	\$250				
☐ Multiple/Commercial/Industrial \$	300 🗌 (With Viol	ation) \$400 🗆 Signs \$3	300 🗆 (With Violation)	\$400				
☐ House Moves \$300	_ `	Meetings (At discretion of	•					
·	TAL COPY SUBMITTED							
Dimensioned Drawings and Plans			sed distance to adjace					
Site/Plot Plan     Existing or proposed buildings or a	ddition on the name	Location of exist  orty - Floor plane 8 - 1-1-1	ing & proposed signs, if	applicable				
<ul><li>Existing or proposed buildings or a</li><li>Number &amp; location of all on-site per</li></ul>			vations lation relevant to the Vo	ariance application				



# **ZONING BOARD OF APPEALS APPLICATION**

V. VARIANCE	
A. VARIANCE (S) REQUESTED	
DIMENSIONAL USE SIGN	
There is a five-(5) hold period before work/action can be taken on variance appro-	vals.
B. SIGN CASES (ONLY) Your signature on this application indicates that you agree to install a Mock-Up Sign meeting. Failure to install a mock-up sign may result in your case not being heard b schedule ZBA meeting, or cancelled. A mock-up sign is NOT to be actual sign. Upor removed within five-(5) days of the meeting. If the case is denied, the applicant is removal of the mock-up or actual sign (if erected under violation) within five-(5) days	n approval, the mock-up sign must be
C. ORDINANCE	,,
City of Novi Ordinance, Section 3107 – Miscellaneous	
No order of the Board permitting the erection of a building shall be valid for a perio building permit for such erection or alteration is obtained within such period and supproceeds to completion in accordance with the terms of such permit.	d longer than one-(1) year, unless a ch erection or alteration is started and
No order of the Board permitting a use of a building or premises shall be valid for a peighty-(180) days unless such use is establish within such a period; provided, however dependent upon the erection or alteration or a building such order shall continue in for such erection or alteration is obtained within one-(1) year and such erection or a completion in accordance with the terms of such permit.	er, where such use permitted is
D. APPEAL THE DETERMINATION OF THE BUILDING OFFICIAL	
PLEASE TAKE NOTICE:	
The undersigned hereby appeals the determination of the Building Official / Inspect CONSTRUCT NEW HOME/BUILDING ADDITION TO EXISTING HOME/BUILDING ACCESSORY BUILDING	□ signage
VI. APPLICANT & PROPERTY SIGNATURES	
A. APPLICANT  Applicant Signature	Tolistzers .
B. PROPERTY OWNER	
If the applicant is not the owner, the property owner must read and sign below.  The undersigned affirms and acknowledges that he, she or they are the owner(s) of application, and is/are aware of the contents of this application and related enclose.  Property Owner Signature	the property described in this
VII. FOR OFFICIAL USE ONLY DECISION ON APPEAL:	The second secon
GRANTED DENIED  The Building Inspector is hereby directed to issue a permit to the Applicant upon the	following and conditions:
	rollowing and containors.

#### Temporary Special Land Use Permit \_\_/TSLU17-0004 **Property Information** 50-22-15-126-015 45145 TWELVE MILE RD Subdivision: SEC 15 **NOVI MI 48377** Lot: Block: **Name Information** Owner: SOMNIO DOMUS, LLC Phone: (248) 574 5508 Occupant: HUSKY INJECTION MOLDING Phone: Applicant: SOMNIO DOMUS, LLC Phone: (248) 574 5508 Contractor: Phone: Licensee: Phone: License Issued:

#### **Permit Information**

Date Issued: 07/22/2017

Date Expires: 07/22/2018

Status: EXPIRED

Work Description:

License Expires:

EXTERIOR NITROGEN STORAGE TANKS AND EQUIPMENT PER THE ATTACHED SITE PLAN AND PRAXAIR LAYOUT.

JULY 22, 2017- JULY 22, 2018

#### Stipulations:

10/03/18 - according to the building clerks, a ZBA packet was picked up this date by Steve Annear 248-574-5508

10/03/18- email to Larry - ' need to inspect. No ZBA application was received as of this date.

\*08/31/18 - \* WAITING FOR PROPERTY OWNER TO APPLY TO ZBA FOR PERMANENT VARIANCE per conversation with Larry Butler to owner

Mr. Annear installed nitrogen storage tanks in 2015 for research projects for Somnio Global. He is unsure how long the tanks will be needed, as he does not know how long they will be conducting the research. He has requested the land use permit for another year, and will reevaluate it necessity next year. In coordination with the Novi Zoning Code, section 7.6.3.a-k Somnio Global can keep their nitrogen storage tanks through July 22, 2018. The granting of the temporary exception or use shall in no way constitute a change in the basic uses permitted in the district nor on the property wherein the temporary exception or use is permitted, and shall not adversely affect the public health, safety, and welfare.

The temporary exemption or use shall be compatible with surrounding uses and shall not adversely affect the surrounding neighborhood or area by means or odor, noise, dust or other nuisance or detrimental condition.

The parking required by the temporary use will be provided on-site, through off-street parking unless adequate street parking is available in the immediate area.

Increased traffic caused by the temporary use shall not adversely affect the surrounding neighborhood or the City at large.

Permanent alterations to the site are prohibited.

Adequate fire protection and access for fire vehicles shall be provided as determined by the Fire Chief, or their design.

The site shall be completely cleared of all trash, debris, signs, sign supports, temporary structures, and electrical service within three (3) days following the date specified for termination of the temporary use.

The granting of the temporary exception or use shall be granted in writing stipulating all conditions as to time, nature of development permitted and arrangements for removing the use at the termination of said temporary permit.

All setbacks, land coverage, off-street parking, lighting and other requirements of the district shall be met; and

In classifying uses as not requiring capital improvement, the Building Official or their designee shall determine that they are either demountable structures related to the permitted use of land; recreation developments, such as but not limited to golf driving ranges and outdoor archery courts; or structures which do not require foundations, heating systems or sanitary connections.

The Building Official may impose reasonable conditions necessary to assure compliance with the standards in this subsection, to ensure that operation and maintenance of the permitted use mitigate potential adverse impacts on existing uses on adjoining properties and in the surrounding area, and to protect the publichealth, safety and general welfare. Conditions may address, but are not limited to, provisions for adequate parking, storage, and lighting; provisions for security, traffic safety, fire and life safety; conditions limiting hours of operation; provision for adequate sewage disposal; and any other health and safety concerns the Building Official may deem necessary to comply with the standards above. In addition, the Building Official may require the posting of a bond to ensure timely removal of structures and materials and restoration of the area.

Comment:



NOV 13 2018

CITY OF NOVI
COMMUNITY DEVELOPMENT



17th October, 2018

Zoning Board of Appeals City of Novi 45175 Ten Mile Road Novi, MI 48375 USA

Re: Somnio Global Application – Zoning Board of Appeals Application

To whom it may concern,

Somnio Global, LLC ("Somnio") is an advanced scientific accelerator dedicated to commercializing innovative technologies with substantive social impact. Somnio develops technology in the areas of energy, environment, education and empathy and in 2012 the principals of the company purchased 45145 W. 12 Mile Road in Novi and located the Company's headquarters to the site. Since that time the facility has been equipped with office and administration space, research and testing facilities, analytical laboratories, and rapid prototyping equipment. The nature of Somnio's research is diverse and includes technologies for the purification of water, plasma coating systems, indoor air cleaning, Bio-Preservation, energy storage and advanced manufacturing systems.

Since locating to Novi, the company now employs 32 full time staff and has attracted over \$40m in investment, primarily from overseas investors. The Company is currently moving two of its technologies to market which will ensure the next level of growth for Somnio with an estimated 20-30 new jobs over the next 18 months. The Company is also in discussions with one of its licensees, Australian public company PuriflOH Ltd, for that company to establish its initial U.S. manufacturing operations on Somnio's site in Novi.

One of Somnio's key research areas involves a patented deposition technique known as Laser Assisted Cold Spray (LACS) which is a breakthrough method of bonding certain metals. The leading application for this technology is the light weighting of automotive brake rotors. The technology is highly promising, has attracted interest from Automotive manufacturers and the company aims to commercialize the technology in the next 2-3 years.

The LACS technology currently uses liquid nitrogen as the carrier gas in the process and for this reason the company installed a bulk nitrogen tank at the rear of the site to support the development of this particular invention. The tank has been subject to Temporary Special Land Use Permits as it was uncertain if the LACS technology would always require Nitrogen gas in the process. Having determined that this will now be the case for the next few years, the company is seeking a more permanent approval for the tanks.

We therefore seek your consideration of this application in respect to the following standards;

### Standard # 1: Cannot be Reasonably Used.

The use of Nitrogen is a critical component of Somnio's LACS research program. This program has been ongoing on the site for over 4 years and the Company forecasts that at least another 3-4 years of development work will be required to maximize the innovation. We expect that Nitrogen will remain the primary carrier gas, particularly for the brake rotor application, however this may change as the LACS system has much potential in other applications including as an improved method of electrical interconnections in electric vehicles.

The safest and most cost effective way for us to use Nitrogen gas is via the storage of bulk liquid nitrogen in a tank that is leased from our vendor Praxair. The liquid nitrogen is then aerated to become gaseous and the installation therefore includes both bulk tanks and aerators.

# Standard # 2: Circumstances or Physical Conditions.

In collaboration with our vendor, Praxair, we installed the tanks and aerators in the rear (south side) of the facility. As per the enclosed photographs, the tanks cannot be seen from any neighboring property and the closest property border is some 40 yards to the south of the installation which is further bordered by the CSX rail line. The tanks are therefore bordered by the building itself and trees to the south and west.

The installation itself is managed and remotely monitored by our vendor Praxair, who ensure the functionality, safety, compliance and cleanliness of the system. The tank is refilled by a supply vehicle and therefore must be located outside of the build to ensure access.

#### Standard # 3: Character of the Neighborhood.

The whole of the Somnio facility cannot be seen from 12 Mile road as it is set back into the 24 acre site which itself is heavily wooded. The tanks were purposefully installed at the rear of the building and cannot be seen by any neighbors. In this respect, the tanks have no influence on the character of the neighborhood however on the site itself, can be seen as consistent with an OST zoning of a Research and Development company.

The following images demonstrate the location and surroundings of the tank installation. All are taken from the rear (south side) of the property.



Looking North West from the rear access road, shows the two aerators.

Looking West shows wooded southern and western boundaries





Looking North East. Shows fenced installation in rear of the property. Liquid Nitrogen tank is the in the foreground, flanked by the aerators.

Looking North to the back of the Somnio Facility.



### Standard #4: Not Self-Created.

This application is by the tenant of the site, Somnio Global to enable that it continues its research program in what is a highly promising advanced manufacturing technology. While the property owner is a related party, the tanks have been installed and maintained by Somnio Global.

I trust that this information adequately supports our application and if any further information is required, we will be happy to provide whatever is needed.

Yours Sincerely,

Steve Annear

Vice President, Somnio Global

An (248) 567 9616 Sannoar @ somninglobal.com

https://somnioglobal.com



