

# Proposed Telecommunication Towers Facility 3612 Trulls Road

You do not need to turn on your camera.

This meeting is being recorded, which may include messages sent via chat between participants.

#### CANADIAN WIRELESS INDUSTRY

- 33.2 million wireless subscriptions
- More Canadians have wireless than wired services
- 85% of wireless subscribers have more than IGB of data
- 81% of Ontario households
- 50% of 18-34 y.o. households have no landline (wireless only)
- 280 million text messages/day
- More than 73% of Canadians have a smartphone
- 60% of 911 calls made from a wireless device
- Data usage is increasing at 34% per a year

- Subscribers increasing
- Consumption increasing
- Experiencing unavailable service, dropped calls and incomplete data requests
- Increasing reliance on service
- Work from home changing how network is used
- Adding new antenna sites to significantly improve service availability and reliability

#### SIGNAL STRENGTH CONSIDERATIONS

A degraded signal can result in dropped calls and slow data speeds.



A high number of users accessing network on the same antenna installation can also reduce the quality of the connection.

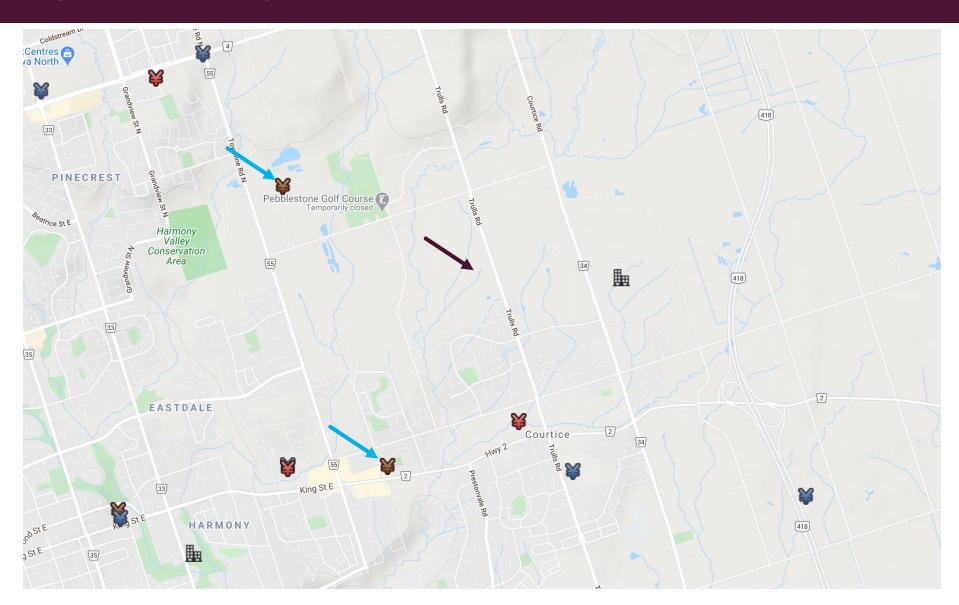
#### **HEALTH AND SAFETY**

Health Canada regulates electromagnetic and microwave emissions for antenna installations (known as "Safety Code 6"). Cellular antenna tower installations commonly emit significantly lower levels than are considered safe by Health Canada. These emission level calculations include those already in the area from other existing installations.

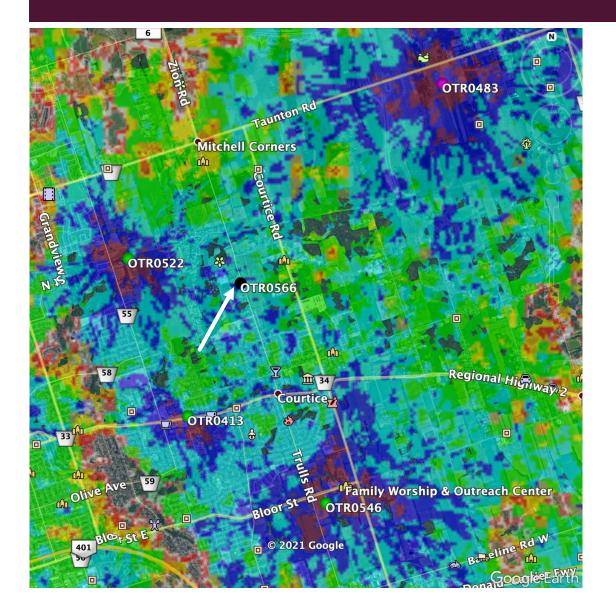
Health Canada limits are calculated at a height of 2m in the vicinity of the installation, where measurements would be highest

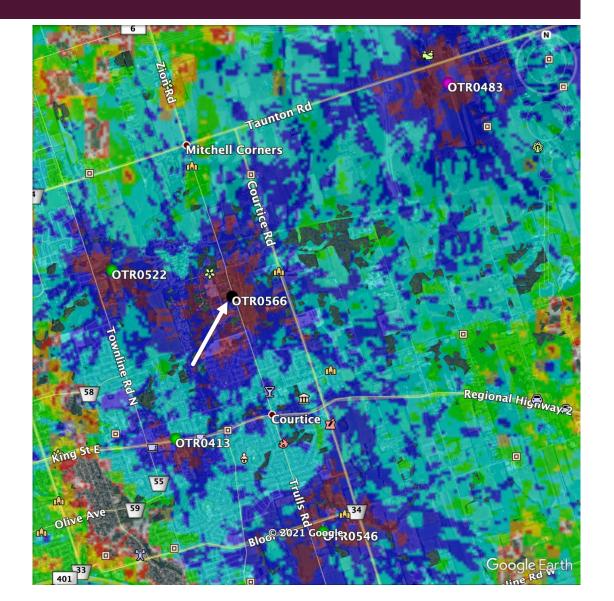
By the time the signal reaches the nearest residence, emissions are typically around 10% (or lower) of allowable Safety Code 6 limits

# **EXISTING ANTENNAS**



#### **EXISTING ANTENNAS**



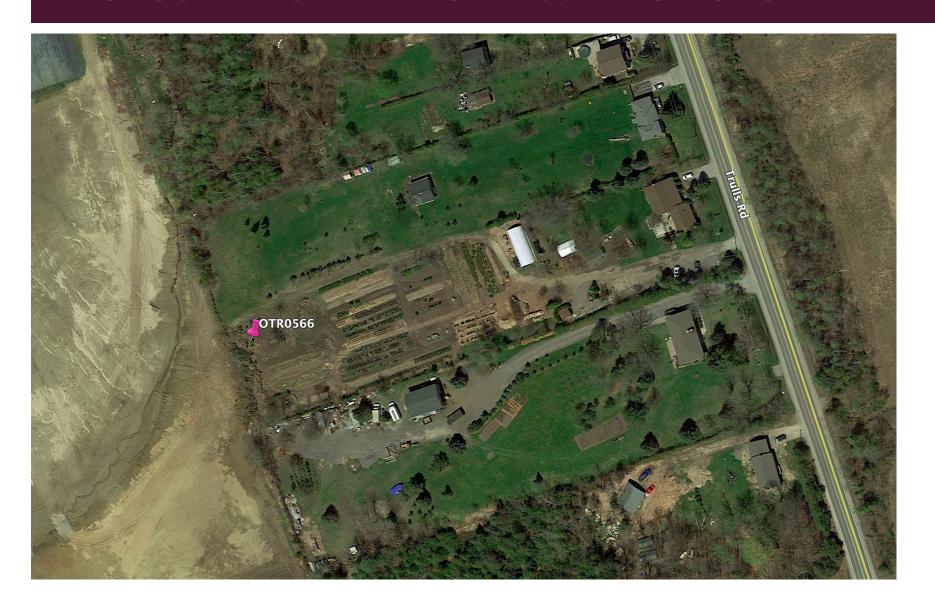


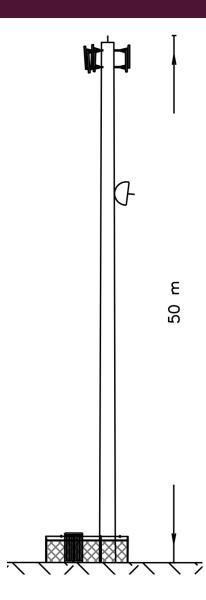
# CO-LOCATION: NORTHWEST OF PROPOSED SITE (TOWNLINE RD)



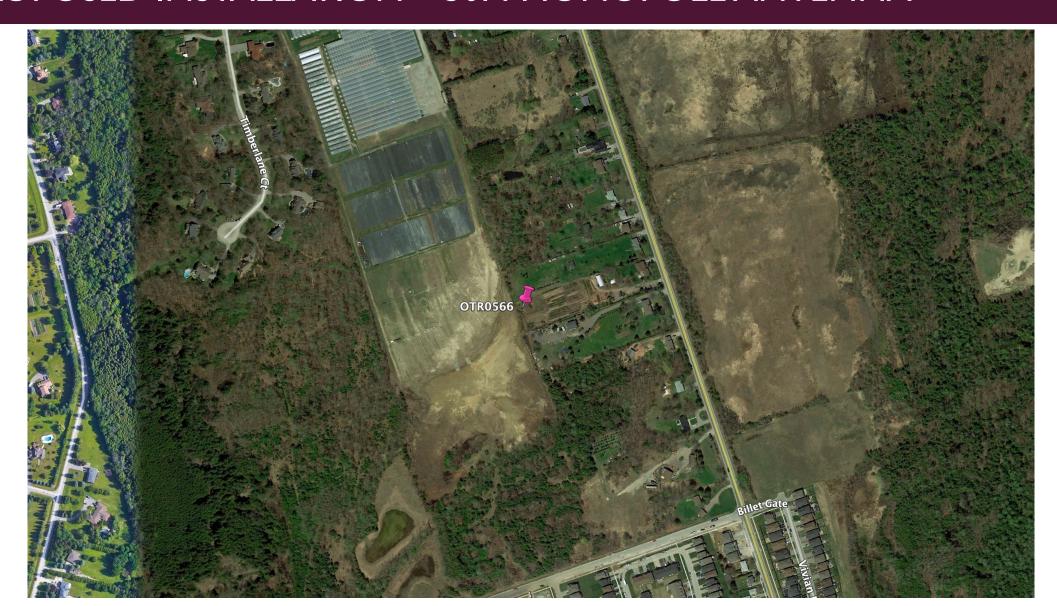


#### PROPOSED INSTALLATION – 50M MONOPOLE ANTENNA

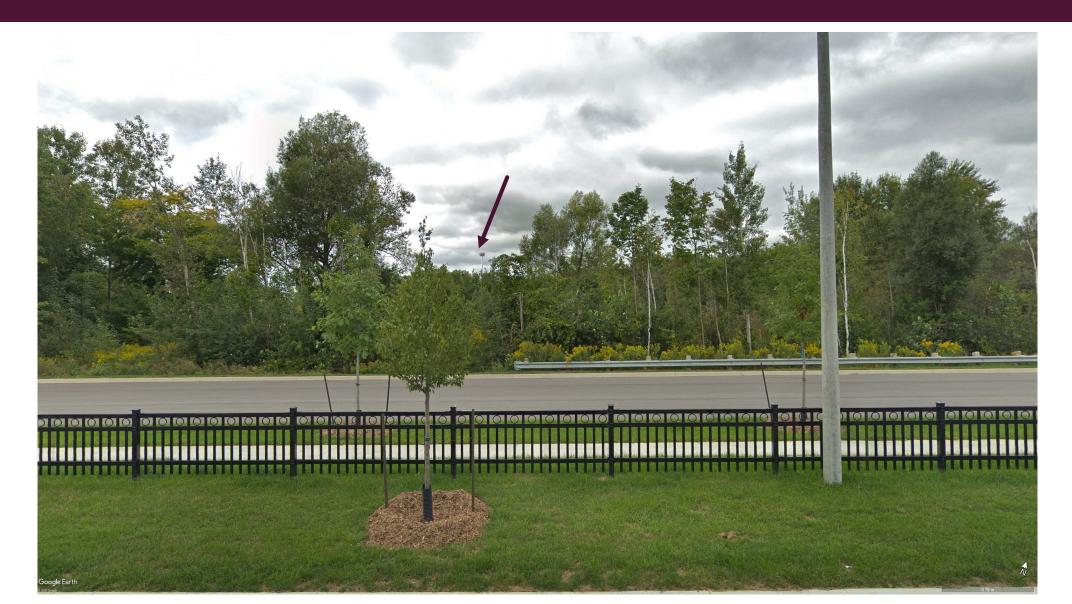




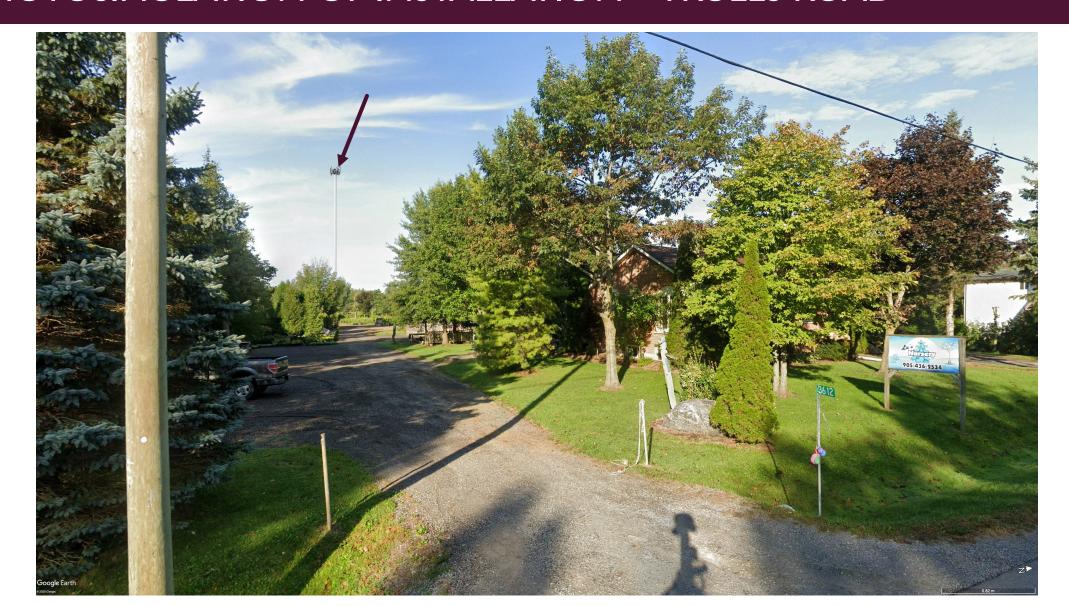
## PROPOSED INSTALLATION – 50M MONOPOLE ANTENNA



## PHOTOSIMULATION OF INSTALLATION – ADELAIDE AVE.



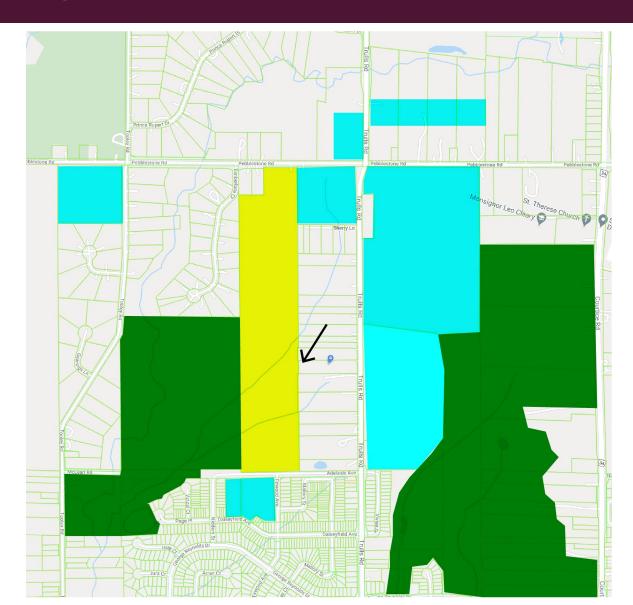
# PHOTOSIMULATION OF INSTALLATION – TRULLS ROAD



## PHOTOSIMULATION OF INSTALLATION – PEBBLESTONE ROAD



## OTHER PROPERTIES IN THE AREA



## SC6 REVIEW

#### Location of Towers Relative to Points of Interest



Point	Location	Distance from the Tower (m)
Α	House 1	87
В	House 2	67
С	Garden Centre	173
D	Ground (Tower Base)	0 - 200

#### **SC6 REVIEW**

#### **Emissions Levels at Points of Interest**

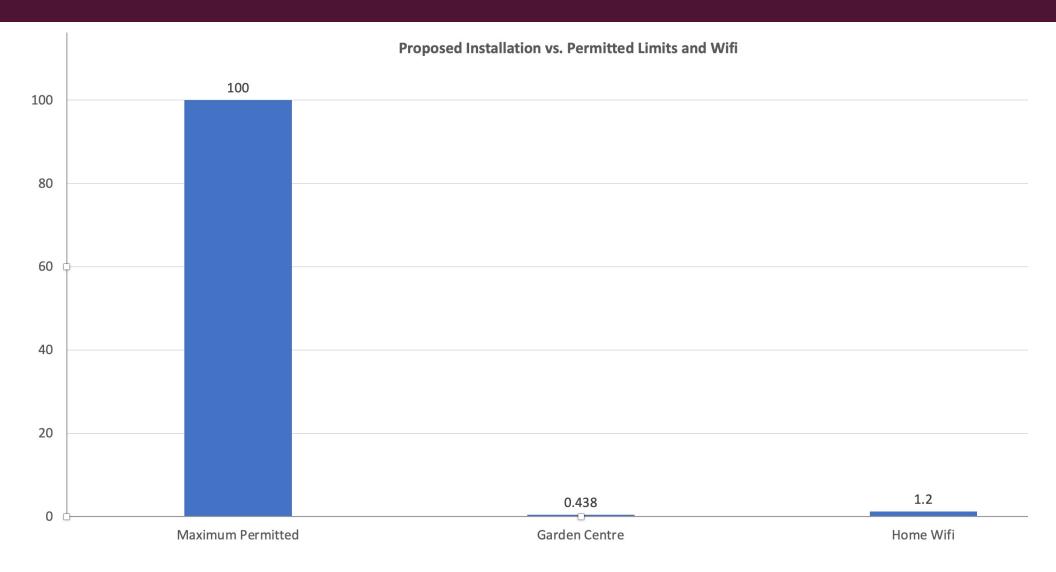
Point	Location	Distance from the Nearest Tower (m)	Reference Height	Emi W/m²	ssion Level % SC6 Limit
А	House 1	87	2m above roof	0.004703	0.203766
В	House 2	67	2m above roof	0.004647	0.192861
С	Garden Centre	173	2m above roof	0.016837	0.438056
D	Ground (Tower Base)	0 - 200	2m above ground	0.012363	0.324358

As a comparison, WiFi emissions levels 6ft from the access point is shown at right:

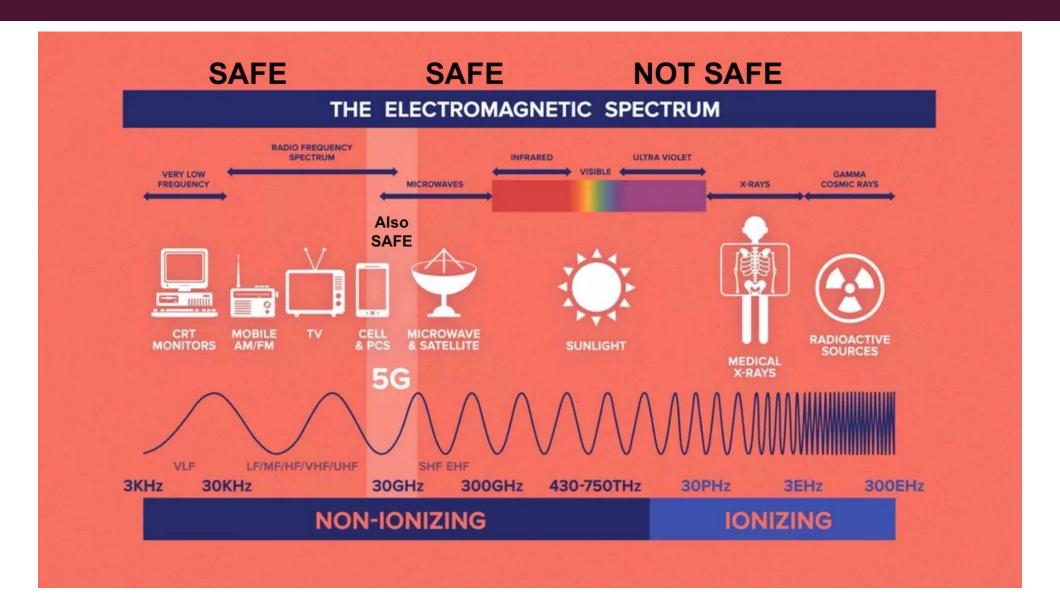
WiFi Emissions 6ft from AP			
(W/sq-m)	% SC6 Limit		
0.061	1.2%		



#### SC6 REVIEW



#### **ELECTROMAGNETIC SPECTRUM**



#### PUBLIC HEALTH AGENCY VIEWS ON CELLULAR NETWORKS



"a clear majority of high-quality studies and expert panel reviews concluded there is no clear or consistent evidence of health risks from RF below the current exposure guidelines and particularly where it concerns exposures at the levels emitted from cell towers."



"the weight of evidence has not identified that Safety Code 6 is inappropriate, in protecting the public from exposure to RF fields".



"the installation of cellular antennas in the community do not pose an adverse health risk and Safety Code 6 provides an appropriate level of protection".



"there is no scientific basis to support a conclusion that individuals living in communities with more stringent exposure standards, than those in Safety Code 6, receive a greater level of protection"



"there is still no conclusive evidence of adverse effects on health at exposure levels below current Canadian guidelines." [Safety Code 6]



"Based on a recent in-depth review of the scientific literature, the WHO concluded that current evidence does not confirm the existence of any health consequences from exposure to low level electromagnetic fields."







"With respect to cell phone towers, as long as exposures respect the limits set in Health Canada's guidelines, there is no scientific reason to consider cell phone towers dangerous to the public."

#### COMMENTS RECEIVED – "RESIDENTIAL AREA"



Clarington Fire Station, Trulls Road and Sandringham Drive

## COMMENTS RECEIVED – "RESIDENTIAL AREA"







# COMMENTS RECEIVED – "AGRICULTURAL AREA"



