

International Dark Sky Community

Annual Designation Update 2016



Bon Accord has maintained the schedule of projects within the original designation application submitted in 2015.

In 2016, the street lighting retrofit was completed in full as well as the park lighting, arena lot and the public parking lot in the downtown area. For our Town Arena, since the arena is not a public roadway, our electric utility provider allowed the wattage to go from 100-watt farm lights to 70-watt full cut-off cobra heads. Additionally, the public parking lot and downtown park went from carriage lamps to shoebox heads, further reducing light emissions to preserve our dark sky.

Information and awareness to residents and businesses on the transition to full cut-off lighting and other conditions has been ongoing since the approval by Town Council of the Light Efficient Community Standards Bylaw 2015-07. The bylaw allows for business and residents to comply to the bylaw by 2023. Bon Accord Town Council also approved a policy in 2016 to provide a town sponsored grant to assist in ratepayer retrofitting. This policy was established to develop guidelines and procedures for granting funds to residents and businesses to retrofit non-compliant lighting with Dark Sky Friendly lighting.



Current information for the site IDA contact(s):

1. **Steve Madden**
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2. **Vicki Zinyk**
Chief Administrative Officer
Town of Bon Accord
780-921-3550
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Community Lighting

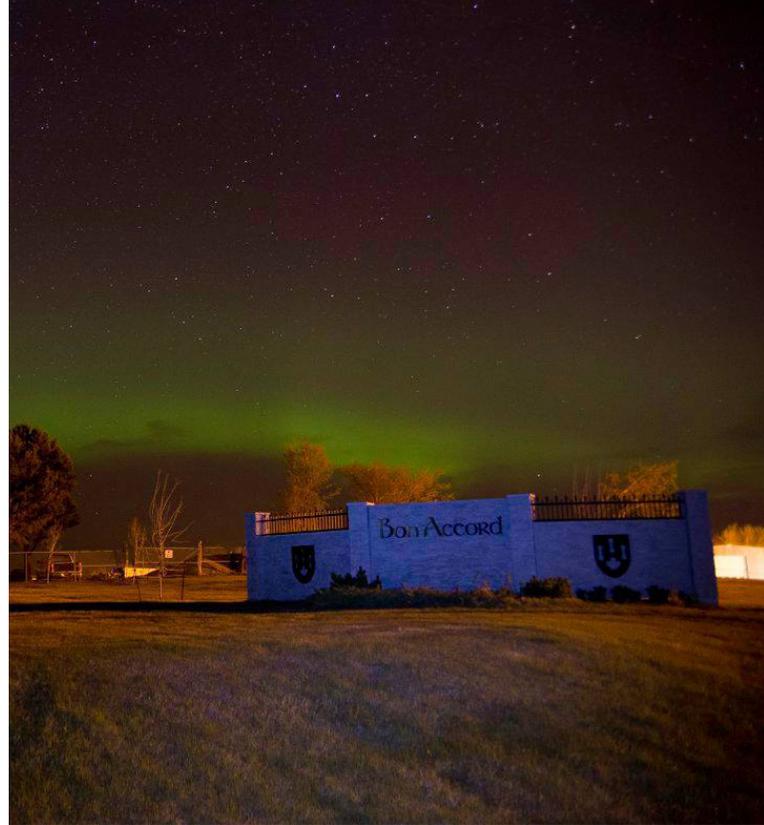
Were any changes made to local/municipal outdoor lighting policy in the past year? If so, describe and include text of any code language added or changed.

No changes were required for Bon Accord's Light Efficient Community Policy or Light Efficient Community Standards Bylaw 2015-07. Both were reviewed by Town Administration to ensure that they both remain up to date with best lighting practices. Reviews and comparisons are ongoing in order that Bon Accord is continually served by best practices.

In 2016 Town Council approved the Dark Sky Friendly Lighting Retrofit grand funding Policy. This policy provides up to \$500 with 50/50 cost shared reimbursement to residents to retrofit outdoor lighting with Dark Sky Friendly lighting within the Town of Bon Accord.

Were there any new municipal lighting installations (or similar, large-scale installations on commercial property) built in the last year to show as examples built to your dark sky-friendly code?

Since the designation was approved Bon Accord has done a full retrofit of all municipal lighting for streets and municipal buildings. As a project piece of the designation application process, Bon Accord retrofitted all lighting within the details of that project element. Conversations with FortisAlberta, Bon Accord's electricity provider have begun in order that a conversion of current High Pressure Sodium (HPS) bulbs to Light Emitting Diodes (LEDs) can take place. FortisAlberta has indicated that this conversion is ongoing as they work to source an LED which meets the colour temperatures outlined in Bon Accord's Light Efficient Community Standards Bylaw 2015-07.



Sky Quality

Were sky quality data taken in the past year? If possible, include a table or figure showing the information.

The Town works to obtain regular readings of the sky. During the application process, baseline readings were obtained during the application process. We have attached the readings that we were able to obtain. For 2017 Administration has requested Council provide approval of funds to pay assistants to take light meter readings on a consistent basis.

tables on following page

Did sky brightness increase over the previous year? Decrease?

Sky brightness has decreased slightly in some areas, most noticeably in the downtown area.

Is a permanently mounted sky monitor installed, or are there plans to install one?

A permanently mounted sky monitor is not currently installed but we do have plans to install one. The Town currently owns a portable sky monitor. We have plans to put solar powered viewing areas around Town and we would like to install a sky monitor at one of these viewing areas.

	A	B	C	D	E	F
	Location	Date	Reading	Weather Conditions	Moon Luminosity	
2	Public Works Yard	May 5/6 2016	20.23 / 21.06	clear sky	1%	
3	BACS Field		20.33 / 20.32	clear sky	1%	
4	46 st.s/ 51 Avenue		20.5 / 20.15	clear sky	1%	
5	Springbrook Park		20.29 / 20.18	clear sky	1%	
6	Downtown		19.78 / 19.69	clear sky	1%	
7	Highway Frontage		20.25 / 20.04	clear sky	1%	
8	Roseglen Park		19.16 / 19.62	clear sky	1%	
9	LS Sports Grounds		19.9 / 19.8	clear sky	1%	
10	Arena Grounds		20.16 / 20.17	clear sky	1%	
11	Bon Acres MR		20.39 / 19.94	clear sky	1%	
12	Prairie Gardens		20.2 / 20.3	clear sky	1%	
13	Highway 28 Corner		20.07 / 20.19	clear sky	1%	
14	Swamp				1%	
15	Liquor Store		17.2 / 19.6	clear sky	1%	
16			DSM / IPHONE			

Time 00:51 MDT 07:52 UTC

Location	Date	Reading	Weather Conditions	Moon Luminosity
Public Works Yard	SEPT. 7/16	20.44	CLEAR	NONE - 20.7
BACS Field		20.49		
5104 51 Avenue		20.5		
Springbrook Park		20.43		
Downtown		19.97		
Highway Frontage <i>WEST SIDE</i>		20.46		
Roseglen Park		19.95		
LS Sports Grounds		20.44		
Arena Grounds		20.25		
Bon Acres MR		20.47		
Prairie Gardens		20.54		
Highway 28 Corner <i>WEST SIDE</i>		20.5		
Swamp				
Liquor Store		17.7		

Funding

Currently administering any grants related to dark-skies programming? If so, describe.

Bon Accord Council has budgeted for and implemented a policy which will grant residents and businesses reimbursement of a portion of the costs they incur to become compliant with the Light Efficient Community Standards Bylaw 2015-07.

Were any new grants won this year?

A grant was applied for and approved for marketing funding from Travel Alberta, the province's tourism marketing organization for Bon Accord's 4th Annual Equinox festival in 2015. As well marketing and event sponsorship is obtained for the event each year. In 2016, additional media sponsorship was also obtained with regional television, radio and newspapers further educating media on Bon Accord's designation and the Equinox event.

Are there plans to apply for any future grants?

Yes, Dark Sky is a high priority to our town, therefore, grants to assist in marketing message and assist in further retrofits due to the Town's growth will be applied for wherever possible.

Arts and Culture

Is any programming ongoing or planned blending the arts/culture with dark skies? If so, describe.

Our Economic Development Manager has an ongoing commitment to speak with Grade 6 students at Lilian Schick School once per school year. Our annual Equinox event was held on September 24 featuring Keynote Speaker Col. Chris Hadfield which attracted approximately 3500 people. We will have a Community Art Project happening to create a dark sky image as well as dark sky photography so people

can learn to use their cameras to capture the dark sky. This event occurs every year in September.

In partnerships with the Bon Accord Library and other community organizations and schools, Bon Accord will continue to promote educational and cultural programming related to the night sky and light pollution abatement messaging and understanding.

Outreach

Were any new programs begun this year? If so, are they complete or ongoing?

No, there were not any new programs added this year but there are plenty of ideas for future programming. When we complete the viewing areas we plan to have local astronomers teach during large events like the Perseid Meteor Shower.

The Town also continues to be an ambassador and support to other communities looking at light pollution and preservation of the night sky through policy and programs. The Town also educates on the difference between the RASC national designations and the IDA designations. There is confusion in the media about the importance of the difference.

Are statistics available (e.g., how many visitors served, donations, etc.)

At this years Equinox we are hoping to collect data from the participants including how many, where they are from, and where they heard about our event. This data will be able to be used year after year as we continue to expand our programming around the night sky.

Community and Media Relations

Any new media coverage you would like us to know about? May include e.g., PDFs as attachments

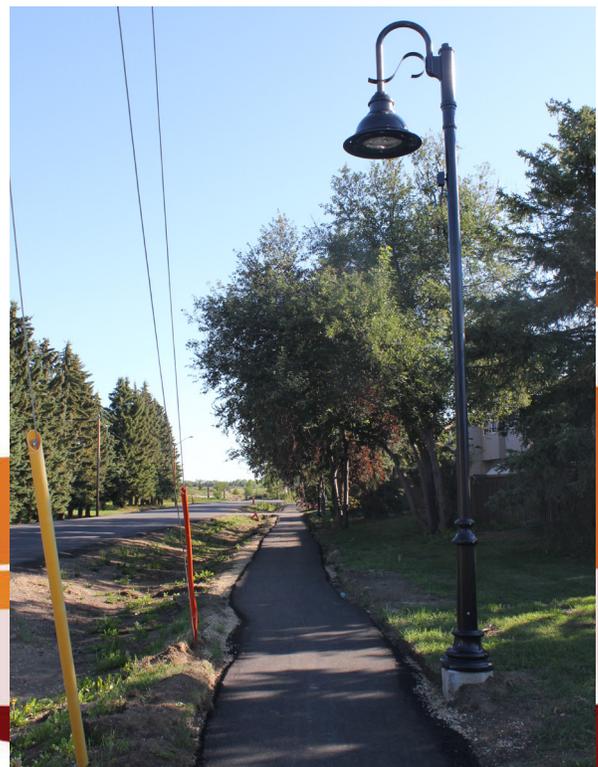
With Equinox growing larger each year we have had four main media sponsors for the event for the 2016 event. Global TV Edmonton, Post Media, Pattison Outdoor Billboards and Corus Entertainment. This provided the event with television, radio, print, outdoor print ads and broader social media exposure through the other media outlets. Some examples are attached. We also issued a press release (attached) to announce Col. Chris Hadfield's presence at the event. With the attendance of Hadfield, a Canadian astronaut who gained fame during his time as commander of the International Space Station and media frenzy of his talents as a musician and outgoingness. Commander Hadfield has been a draw for any event he attends across the county and the world. He is a published author with inspirational books on his life and experience as an astronaut.

Any engagement with local governments, community organizations, or private landowners in the past year to report?

We have many new and existing community relationships especially pertaining to the Equinox Festival. The local businesses involved are Liquid Therapy and Century 21. We have the Bon Accord and District Agricultural Society that sponsored the event at a Gold Sponsor Level. Here is a list of Community Groups involved in the 5th Annual Equinox: 4-H Sew and Sos, The Father's House Church, 524 Air Cadets, Undergraduate Astrophysics Astronomy Students Society, Morinville Farmers Market, Sturgeon County Bounty, Bon Accord and District Fire Department, and the Bon Accord Community School. We have invited the Prime Minister, Alberta's Premier, our Member of Parliament and our Member of the Legislative Assembly. Unfortunately, the Prime Minister and Premier were unable to attend our event this year but supplied letters of congratulations which we have attached to this report.

Related to landowners, the Town has embarked on a municipal lands annexation from the surrounding County. The annexation, if approved will double the size of the existing land are of the Town to allow for future development. Since the new area will fall under the governance of Bon Accord the expanded area will also fall under the Bylaws and Policies of Bon Accord. Compliance of the Light Efficient Community Stands Bylaw will be enforced and will apply to all development in the new areas. The approved annexation would then account for twice the area initially applied for in the designation application further controlling lighting across a larger geographic area.

With the long term partnership with Travel Alberta, the provincial tourism marketing agency is looking at the Town and the RASC designated National Parks as product development into markets in Asia and Europe for dark sky experiences. This is a growing market and Travel Alberta sees it as a product unique to western and northern Canada as pristine rural experiences and further north for aurora. Japan has been a target market for northern Alberta and the Northwest Territories since the 1980's. China is the new market for night rural product development due to the less light polluted night skies of northwestern Canada. Bon Accord is well positioned for this growth market with close proximity to an international airport in Edmonton and municipal infrastructure for tourism accommodation and new products and programming that Travel Alberta can market.



5th Annual equinox

#BAequinox2016

VENUE & EVENT TIMES



- 5pm - 6pm**
Geocaching 101
- 5pm - 7pm**
Space Place
- 5pm - 8pm**
Morinville
Farmer's Market
Mobile Planetarium
Orbs Bubble Soccer
- 5pm - 9pm**
Twilight Tea
Airbrush Tattoos
Moon Walk
- 5pm - 10pm**
Century 21 Bouncy Castle
- 5pm - 11pm**
Art Marathon
Community Art Project
Drones/Quadcopters
Food Trucks
Sidewalk Astronomy
Stargazing
- 6pm**
Model Rocket Launch
- 6pm - 10pm**
Caricatures
Paint Night
(6pm Start & 8pm Start)
Yoga
(6pm Start & 8pm Start)
- 7pm**
Keynote Speaker
Col. Chris Hadfield
- 8pm - 11pm**
Dark Sky Photography
- 8:30pm**
Dot to Dot in the Sky
- 8:10pm - 11pm**
Remi Noel Little Big Band
- 11pm**
Fireworks



5th Annual equinox

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Keynote Speaker
Col. Chris Hadfield
- 8pm - 11pm**
Dark Sky Photography
- 8:30pm**
Dot to Dot in the Sky
- 8:10pm - 11:00pm**
Remi Noel Little Big Band
- Fireworks at 11pm**



5th Annual equinox

#BAequinox2016

September 24th, 2016 | 5pm - 11pm

Featuring Keynote Speaker
Col. Chris Hadfield



Come & experience
Bon Accord's
5th Annual Equinox
celebrations.

Music, artists,
stargazing, food
& family fun
- all under the
night skies
of Bon Accord.





PRIME MINISTER · PREMIER MINISTRE

September 22, 2016

Dear Friends:

I am delighted to extend my warmest greetings to everyone taking part in the fifth annual autumnal equinox celebration in the Town of Bon Accord, Alberta, Canada's first International Dark Sky Community, with special guest speaker Colonel Chris Hadfield.



The Town of Bon Accord is an ideal place from which to observe the full magnificence of the night sky during the autumnal equinox, when the sun crosses the celestial equator going south and day and night are of equal length. The community has earned recognition for its commitment to preserving the night sky for future generations by reducing the impact of artificial light on viewing conditions.

Who better to lead this exploration of the planets and stars above than astronaut Chris Hadfield, first Canadian space mission specialist, spacewalker, Canadarm operator in orbit, and International Space Station commander. Colonel Hadfield is one of only a few Canadians who have had the privilege of viewing the earth from the perspective of space. I am certain that you will find his remarks enlightening.

Please accept my best wishes for an evening filled with wonder.

Sincerely,

The Rt. Hon. Justin P.J. Trudeau, P.C., M.P.
Prime Minister of Canada



Premier of Alberta

Office of the Premier, 307 Legislature Building, Edmonton, Alberta T5K 2B6 Canada

Message from Honourable Rachel Notley Premier of Alberta

On behalf of the Government of Alberta, it is my pleasure to send greetings to the Bon Accord Equinox Celebration.

I commend Bon Accord for being one of 14 communities around the globe—the first and only Canadian city—dedicated to preserving our exceptional dark skies and the beauty of the natural lights within it.

This event is a wonderful opportunity to revel at the vastness of Alberta's night sky and learn about what lies beyond our atmosphere. I hope you take in all there is to offer at this celebration of dark skies with family and friends.

My deepest thanks to the organizers, volunteers, and sponsors of the Equinox; your commitment and hard work show each of us just how much there is to celebrate in Alberta.

A handwritten signature in blue ink, appearing to read "R Notley".

Rachel Notley

September 24, 2016

Local Festival Features a Canadian Icon World renowned astronaut Chris Hadfield part of Bon Accord's Equinox 2016

BON ACCORD, AB (June 8, 2016) Celebrate the night sky at the Equinox Festival with a world famous Canadian astronaut. Colonel Chris Hadfield, who has logged 2600 orbits of earth, and lived in space and on the ocean floor, will join festival goers on September 24 in Bon Accord as the keynote speaker.

The Equinox 2016 Festival will celebrate Bon Accord becoming the first International Dark Sky Community in Canada. Celebrating this prestigious designation along with the attendance of Colonel Hadfield will be highlights at this year's annual event that focuses on the sky, the arts, and their cultural significance. Now in its fifth year, the festival has steadily gained popularity, drawing tourists and visitors alike to the vibrant community just 20 minutes north of Edmonton.

"We're a small community doing unique things. We're thrilled to have Colonel Hadfield, a former Commander of the International Space Station, at this year's festival," explained Randolph Boyd, Mayor of Bon Accord. "Colonel Hadfield will headline Equinox 2016, as we celebrate the night sky and our designation as Canada's first International Dark Sky Community, and ensure the festival is a can't miss event for our town's residents and the visitors from afar who make it a destination every September."

The festival is a free weekend-long town wide event that highlights the summer into autumn equinox. New additions to the festival include nighttime yoga, a paint night and social event with locally produced wines, and the opportunity for autographs and book signings with Colonel Hadfield.

Popular activities from previous years will be back again. This includes the Twilight Tea, Sidewalk Astronomy, Stories of the Sky, and Dark Sky Photography.

"Our team is in the midst of finalizing many of the details including performers, food vendors, and local business involvement," explains Vicki Zinyk, Chief Administrative Officer of Bon Accord. "A full schedule of activities, maps, and information will be available on Bon Accord's website, on our Facebook page, and at the Town Office in the near future."

Thank you to the following confirmed sponsors for this year's event: the Bon Accord and District Agricultural Society, Town of Gibbons, and RC Strategies. Additional sponsorship opportunities are still available by contacting Don Berner, Equinox Fundraising Manager, at (780) 952-2473, or equinox@bonaccord.ca.

For more information on Equinox 2016 or to volunteer at the event, visit www.bonaccord.ca or phone Bon Accord Town Office at 780-921-3550.

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External Media Links

Minister Rona Ambrose Interview with Chris Hadfield -
<http://ronaambrose.com/?p=1182>

Canadian Broadcast Corporation (CBC) interviews -
<http://www.cbc.ca/news/canada/edmonton/bonaccord-dark-sky-1.3777924>

Col. Chris Hadfield Twitter
https://twitter.com/Commandr_Hadfield?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor

Jeff Wallace Twitter during Equinox Event
<https://twitter.com/Wherezjeff/status/779930092785037312>