



## FINANCE AND CORPORATE SERVICES

# Golden Pheasant Solar Generation Net Metering Project

FCS-1-2020-3

January 22, 2020

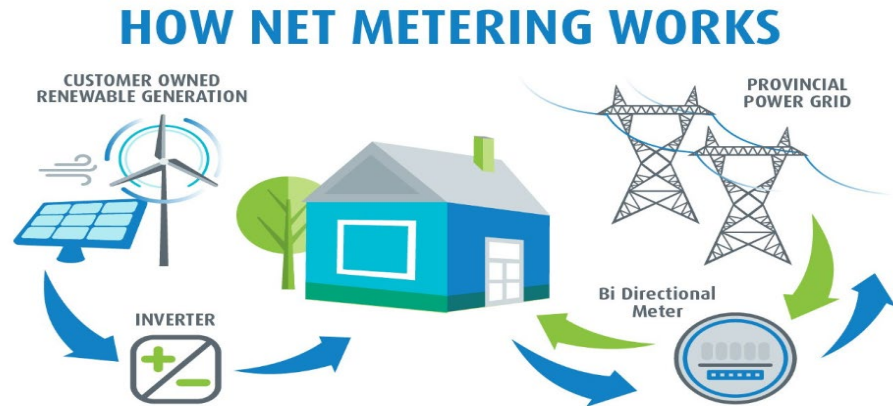
# Project Background

- In October of 2017, District Council approved a staff recommendation to initiate a request for proposal to develop solar generation net metering projects on suitable District properties.
- A request for proposal to develop a solar net metering system on the Golden Pheasant Clean Water Treatment plant property was awarded in April 2018 to AMP Solar Group Inc.
- Final system design and location on the property along with applications, studies and agreements necessary for the development were completed by late fall of 2018.
- Site preparations and construction started in spring of 2019.



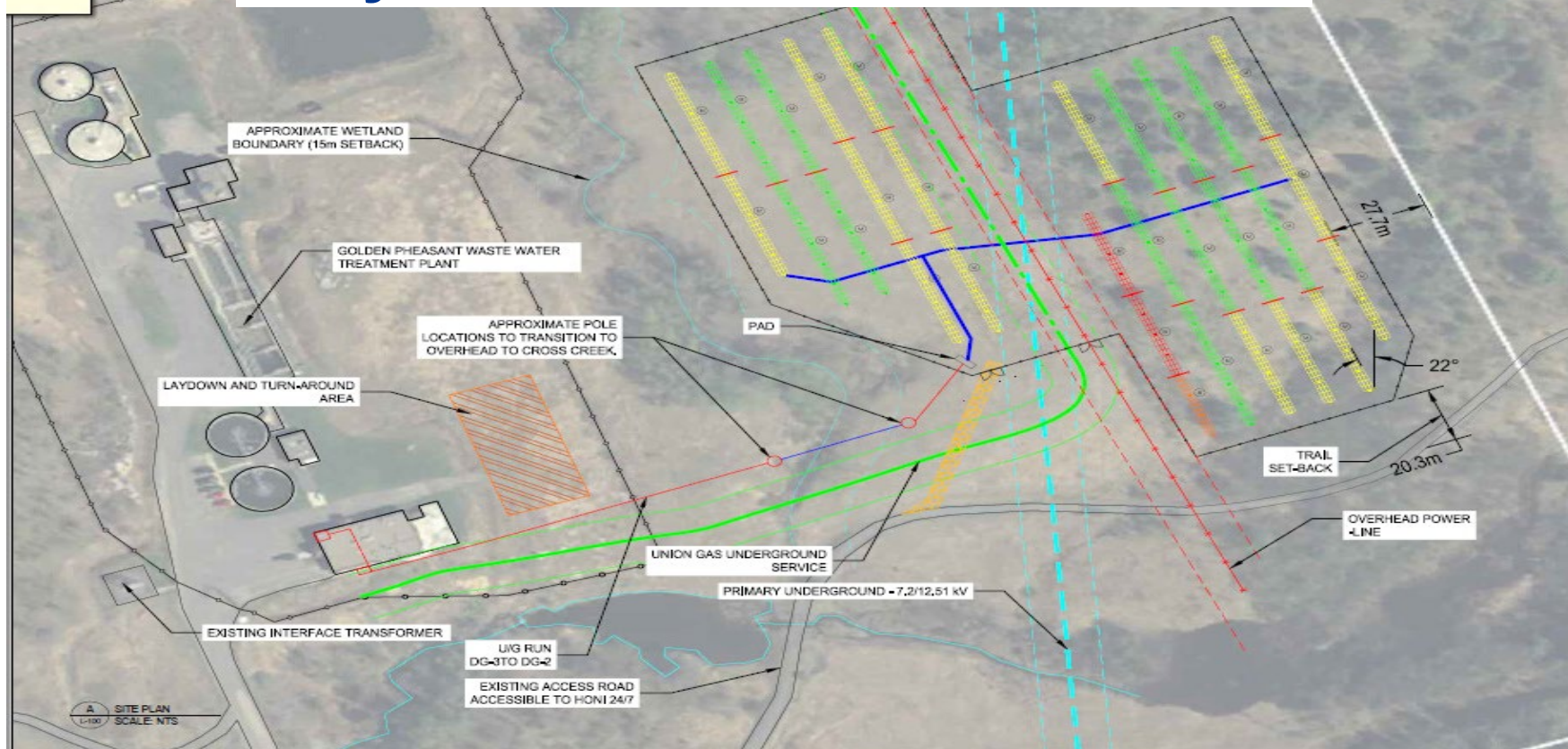
# Net Metering Regulation

- Under the Net Metering Regulation, a potential generator can construct and connect a system with the generation potential equal or less than the size of the connected electricity service.
- Electricity produced by the electricity generation system is payable to the generator at the same rate for consumed electricity for the volumetric based electricity charges.
- An amendment to the Net Metering Regulation (O.Reg. 541/05) came into effect on July 1, 2017 which removed the maximum project size of 500kW.





# System Installation Site Plan



# System Information and Benefits

- System area of approximately 3 acres
- 652 kWDC output
- 1,470 Hanwha Q Cell solar panels on a single axis tracking system with a Sungrow Invertor
- System performance base on 25 year operations:

Generation Potential (kWh)	Potential Revenue (A)	Capital Cost (B)	Operations and Maintenance Costs (C)	10 Year Financing Costs (D)	Estimated Net Revenue (E) A-B-C-D=E
21,892,312	\$4,813,127	\$1,880,000	\$554,184	\$391,946	\$1,986,997

- System will generate electricity from a renewable source equivalent to approximately 5% of the District's annual electricity in 2018.
- Offset of approximately 80 tonnes of CO<sub>2</sub>e annually.
- System expected to be commissioned in spring of 2020.



# Project Progress



Tree removal,  
site clearing  
and grubbing  
started in  
January 2019



# Project Progress



Access road  
and perimeter  
fence  
construction  
started in  
spring 2019

# Project Progress



Helical pile installation and site grading work  
proceeded in summer 2019



# Project Progress



Racking system and solar panel installation  
commenced in early fall 2019



# Project Progress



All electrical, inverter and actuator installations were completed in fall 2019

# Remaining Work



- Commissioning of solar system
- System tie-in at Golden Pheasant Clean Water Treatment Plant

