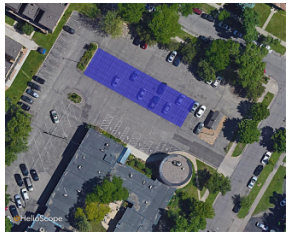
6-9-20 PUBLIC Version of Solar Options.

If you are a member of Hope and would like to view the more **detailed version** of these options (including notes on costs, incentives, and financing), please refer to the link provided in the electronic letter you received on 6-8-20 from ulch@ulch.org

Below are three options for solar installation at University Lutheran Church of Hope. The Vision and Governance Board recommends these three design options and requests that congregational members vote for one of the three options at our June 14, 2020 Congregational Meeting. The Board will honor the congregation's design preferences as much as possible through the engineering and installation stages.

Please note: The ULCH current electrical bill for 2019 was $11,472 and we are projecting costs around $11,500-12,500 for 2020. The savings in electric bills is balanced by the loan payments.

Description of each option	**Helioscope Representation**	**Size of Array** **Percent of ULCH Consumption**	**Pros and Cons of 3 remaining options:** All options are within ULCH electricity budget with the 4%/20 year loan term (you will notice that Option #4 at 5.6% would be higher than this).
Option 1 **Flat roof AND Sanctuary roof** 72 kilowatts For the first 10 years would provide 100% solar production; this would drop over time.		72.2 KW 105%	• Least expensive option with 105% capacity (72.2KW). • 100% solar production would last 10 years or less. • Solar panels are on the sanctuary roof Some favor this (offers visible solar witness), some not. This would complicate the installation of a new roof.

Option 2 **Flat Roof ONLY** 67 kilowatts 92% solar but would drop into the 80% range in 20 years (this was written incorrectly in a previous version).		67 KW 92%	• More expensive, but with less capacity (92%, 67KW) than option #1. • Additional cost of $23,000 (estimated) to move AC units on the flat roof. See note. • There would be no visible solar witness from the ground. Signage or other witness could be added.
~~**Option 3**~~ Option 3 was REMOVED by Vision and Governance Board at 6/7/20 meeting		72 KW 105%	Removed as an option.
Option 4 **Flat Roof AND small Carport Canopy. Adjacent to Building** 91 kilowatts 100% solar for foreseeable future		91KW 126%	• Most expensive but largest capacity (126%, 91KW). • Continues to provide 100% of solar power past 25 years. • Protection of handicapped parking locations. • Strong visible solar witness to the community. • Possible water/snow issues at North entrance.

Note: The ULCH current electrical bill for 2019 was $11,472 and we are projecting costs around $11,500-12,500 for 2020. The savings in electric bills is balanced by the loan payments. 6/13/20