# Solar Project

Goal: To install infrastructure to handle a solar array of up to 100 KW. A 100 KW system would require approximately 350 feet of 12' panels and provide approximately 20% of the District's electrical use.

Goal: To install a 22 KW solar array to act as a "starter" array for future development.

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|---|---|
| Cost of Infrastructure: | $21,000 |
| Cost of 22 KW Solar Array: | $37,827 |
| Total Cost: | $58,827 |
| Est. Annual KWH Production: | 34,529 |
| Est. Annual $ Production: | $ 2,555 |
| 2017 District Consumption: | 789,213 |
| % of District Consumption: | 4.34 |
| Return on Investment: | 4.34 |

- Based on 22 KW/hr production for 4.35 hours/day for 365 days.
- Future 22 KW units estimated at $37,827 with 6.75 Return on Investment.
- Assumes Excel Energy purchase of electrical production at 7.4 cents per KW.
- Assuming electric cost inflation, the return on investment and savings will increase over time.
- District can construct up to 200 KW unit without state/federal issues. 200 KW unit would cost approximately $340,000 to provide an estimated 313,900 KWH or approximately 40% of total District energy use.