Swan Point at Lake Elkhorn Condominium Association EVSE Case Study
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This is an interesting installation since the Association has community owned parking spaces and not dedicated spaces owned by each unit. This is an existing Association completed in 1986.

Officially known as Swan Point (SWP) at Lake Elkhorn, the condominium community consists of 150 three-story townhouses in the village of Owen Brown, one of ten villages that comprise Columbia. It is four miles from the Columbia Mall, fifteen miles from the Baltimore Inner Harbor and twenty-two miles from the D.C. mall. Just a block from the Owen Brown shopping center and less than five minutes from major access highways (I-95, MD 32, MD 29 and MD 100), the point covers fifteen acres.

INITIAL CONSIDERATIONS

Survey Information

Based on interest from several SWP unit owners, the SWP Board surveyed residents as to their interest in electric vehicles (EVs) and other issues related to installing EV charging stations in the SWP community. 29 responses to the survey were received, indicating that only two residents currently owned EVs m and one was expected to buy an EV soon. However, another ten residents indicated that may buy an EV in the next five years. This indicated sufficient interest for the board to undertake an in-depth analysis and decide whether and, if so, how to best install EV chargers in SWP.

This study was accomplished with the help of SWPs property management firm, and resulted in a favorable decision by the Board on May 13, 2020. (An unsigned copy of the resolution is attached.)

Key points of the decision include:

- **Site Selection**
  The prime location for installation of the charger (also the cheapest option) would be connecting the charger to the transformer between Buildings 1 and 16, that is between 7249 and 7253 Swan Point Way. This location provides the shortest distance from the transformer to the parking spots where the charger would be installed. (The location is essentially in the midpoint of SWP and is not directly in front of an SWP unit.)

- **Potential Rebates**
  Potential rebates were an important factor in the decision. Both BGE and the State of Maryland are offering rebates *while funds last,* probably “through the winter.” The rebates are substantial, but the fact that the funds could run out means that Swan Point needed to decide quickly. BGE is offering a 50% rebate for installation and hardware costs up to $10K. Maryland offers a 40% rebate for installation and hardware costs up to $4K. There is also some potential for manufacturer rebates.

- **EVSE Manufacturers Proposals**
  After much discussion, the SWP Board concluded that SemaConnect, a Maryland-based company was a better choice. The specifics are:

  SemaConnect provides a dual charger (for 2 cars) with a 5% accounting fee, $8,860 in hardware costs which include 3 years’ service) with a total cost (including installation, drawings, meter

[1] This case study is not an official ZEEVIC report.

installation, etc.) of approximately $22,000. After the third year, they would charge $480 annually for software and maintenance.

ChargePoint would also provide a dual charge capability, charging 10% accounting fee. Their hardware costs of $8,747 include only 1 year of service. Charge Point uses only one installer, Clinton Electric, who charge $8,452 for installation, bringing the total to approximately $23,500. Charge Point's fees begin at year 1, and come to $560 annually for software and $740 per year for maintenance.

Final costs will be reduced substantially if Swan Point qualifies for the BGE and Maryland rebates. There is also a potential revenue stream for Swan Point through two streams: an initial "start-up" fee (residents responded that they would be willing to pay as much as $500), and a fee per KW/hour. This would work as follows:

- Use of the chargers would be limited to Swan Point residents and would be billed through a phone app.
- Swan Point could charge both an account set-up fee and could also charge a certain amount per KW/hour.
- Billing and usage would be managed by the charging company, who would deposit funds back to Swan Point monthly. BGE would also be paid through these funds.

Questions that the Association Board Addressed in its Final Deliberations
There were several questions about how soon Swan Point could recoup the initial installation costs (How many electric vehicles will we really have? How often will owners use the Swan Point chargers? How Much of a rebate can we expect? How much will we charge per KW hour?)

The SWP Board deliberated, voted to proceed, and released "Electrifying News":

From the Swan Point Web Site:
New Electric Vehicle Charging Station Online
Community Residents Can Sign Up for Account Today!
Thursday, May 21, 2020

Two new SemaConnect electric vehicle (EV) charging stations went online today. These stations are for the exclusive use of Swan Point residents. Residents can contact WPM Management for the user agreement and to obtain the access code needed to use the charging station.

Fees
The fees to use the charging station are as follows:

- $250 account setup fee - billed directly and payable through SenEarthCo
- $0.20/kWh electricity usage charges with a $2 minimum session fee
- $2 per hour fee charged after your car has fully charged (30 minute grace period)

How to Use
1. Log into SenEarthCo and click Community Information, then click Property Information.
2. Find and download the Electric Vehicle Charging Station Resident Agreement
3. Sign and submit the agreement to WPM Property Management
4. Pay the $250 account setup fee
5. Sign up for a SemaConnect account or await our invitation to sign up

6. Download the SemaConnect app for your smartphone (required to unlock the station)

Let WPM Property Management know if you have any questions. We will add additional information and a FAQ page to our website as we continue to grow the program.

Attached are the "Policy and Procedures Relative to Electric Vehicle Charging Stations-Electric Vehicle Charging Station Rules and Regulations and Hold harmless Agreement."

CONCLUSION:
The process for existing relatively small to medium size HOAs to study -and determine the feasibility - financially and aesthetically of providing ECVs chargers is not overly burdensome from a logistical or cost standpoint.