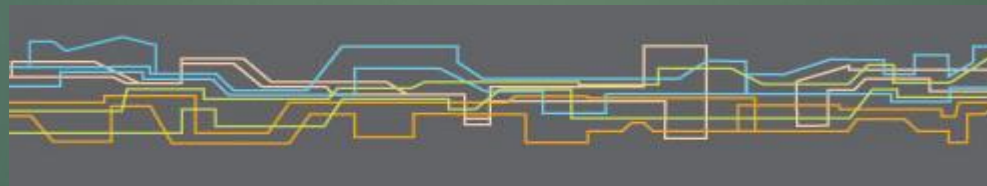




## **SOBOBA BAND OF LUISEÑO INDIANS**

**Developer**

## **OPTIMUM GROUP**



**Optimum Group LLC  
215 N. Marengo Avenue, Suite 362  
Pasadena, CA 91101**

**May 6<sup>th</sup>, 2015**

# Soboba History

- ▶ Tribal members of Cahuilla and Luiseno Ancestry
- ▶ Recognized as established Indian community since 1815
- ▶ Formally organized in 1883 by executive order of President Chester Arthur



# Soboba History

- ▶ Tribe consisting of 1200 members
- ▶ 7000 acres of land
- ▶ 400 acres of residential developments



# Economic Development



- ▶ Resource Planning
  - ▶ Environmental Assessment & Planning
  - ▶ Economic & Real Estate Development
- 

# Master Planning & Sustainability



- ▶ Land
  - ▶ Land Planning & Development
  - ▶ Schools
  - ▶ Hydrology & Flood Control
- ▶ Renewables & Sustainability
  - ▶ Wastewater Treatment For Irrigation Of Golf Course
  - ▶ Solar Energy
  - ▶ Battery Storage

# Solar Feasibility Study



- ▶ Carry out geographical research & analysis
  - ▶ Perform site evaluation
  - ▶ Conduct preliminary research on available solar programs
  - ▶ Perform economic analysis
  - ▶ Propose strategy
- 



# Geographical Research & Analysis





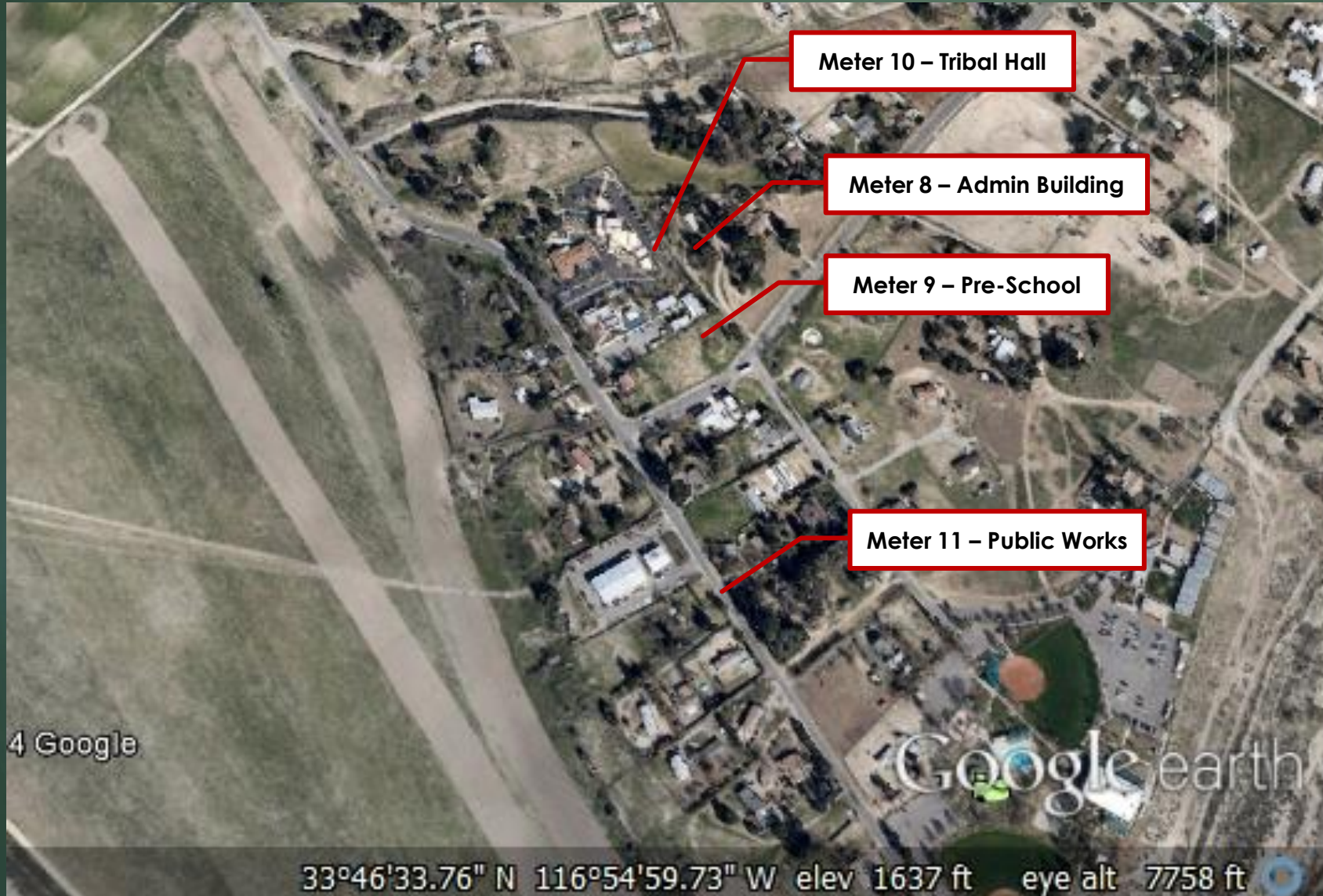
# Planning Area A



## Accounts

- 1) Noli High
- 2) Ball Field #1 & Sports Complex
- 3) Ball Field # 2
- 4) D.W. # 4 (water pumps)
- 5) D.W. # 3 (water pumps)
- 6) I.W. # 2 (water pumps citrus)
- 7) D.W. # 1 (water pumps)

# Planning Area B



## Accounts

- 8) Administration Building
- 9) Pre-School
- 10) Tribal Hall
- 11) Public Works a & b

# Planning Area C



## Accounts

- 12) Casino Meter # 1
- 13) Casino Meter # 2

# Planning Area D



## Accounts

- 14) Oaks Meter #1 a,b & c
- 15) Oaks Meter #2
- 16) S.W. # 1 oaks

# Energy Evaluation

# Energy Consumption

Planning Areas & Meters	2 Year kwh Usage	Average Annual kwh Usage	MW DC PV Size For 100% Offset	MW AC PV Size For 100% Offset
<b>Planning Area A</b>	<b>3,178,190</b>	<b>1,589,095</b>	<b>1.059</b>	<b>0.848</b>
Ball Filed # 1 a	135,295	67,648	0.045	0.036
Ball Filed # 1 b	394,301	197,151	0.131	0.105
Ball Filed # 2	34,469	17,235	0.011	0.009
D.W. # 1	76,020	38,010	0.025	0.020
D.W. # 3	847,589	423,795	0.283	0.226
D.W. # 4	547,086	273,543	0.182	0.146
I.W. # 2	739,336	369,668	0.246	0.197
Noli High	404,094	202,047	0.135	0.108
<b>Planning Area B</b>	<b>991,397</b>	<b>495,699</b>	<b>0.330</b>	<b>0.264</b>
Administration Building	647,596	323,798	0.216	0.173
Pre-School	135,222	67,611	0.045	0.036
Public Works a	82,706	41,353	0.028	0.022
Public Works b	25,630	12,815	0.009	0.007
Tribal Hall	100,243	50,122	0.033	0.027
<b>Planning Area C</b>	<b>22,199,558</b>	<b>11,099,779</b>	<b>7.400</b>	<b>5.920</b>
Casino Meter # 1	15,998,039	7,999,020	5.333	4.266
Casino Meter # 2	6,201,519	3,100,760	2.067	1.654
<b>Planning Area D</b>	<b>500,471</b>	<b>250,236</b>	<b>0.167</b>	<b>0.133</b>
Oaks Meter # 1 a	33,265	16,633	0.011	0.009
Oaks Meter # 1 b	92,043	46,022	0.031	0.025
Oaks Meter # 1 c	254,008	127,004	0.085	0.068
Oaks Meter # 2	41,927	20,964	0.014	0.011
S.W. # 1 Oaks	79,228	39,614	0.026	0.021

# Solar Programs & Regulations

- ▶ Net Energy Metering (NEM)
- ▶ Virtual Net Energy Metering (VNEM)
- ▶ Re-MAT PPA with Edison

# Overall Solar Footprint





# Financial Incentives

- ▶ Federal Investment Tax Credit up to 30% of the cost of solar project for qualified investors
- ▶ Department Of Energy grant available for Native American solar projects
  - a) For communities up to \$1m
  - b) For facilities up to \$0.5m for



Strategy

# Strategy

## Step 1 – Immediate Opportunity

- ▶ System 1 – 1.257 MW DC (1 MW AC) VNEM for planning areas A,B & D

## Step 2 – Further Studies, Planning & Negotiation With Edison

- ▶ System 2 – 2.626 MW DC (2.1 MW AC) stand alone system for planning area C

Or

- ▶ System 3 – 5+ MW microgrid in conjunction with storage