Designing a Sustainable Field

INTRODUCTION

Why is it important?

ming Sun Field Station at Stanford University’s Jasper

Climate Analysis:

conduct our climate analysis. The model generated a “comfort zone” to describe a comfortable

Natural Ventilation

Solar Thermal Radiant Floor Heating

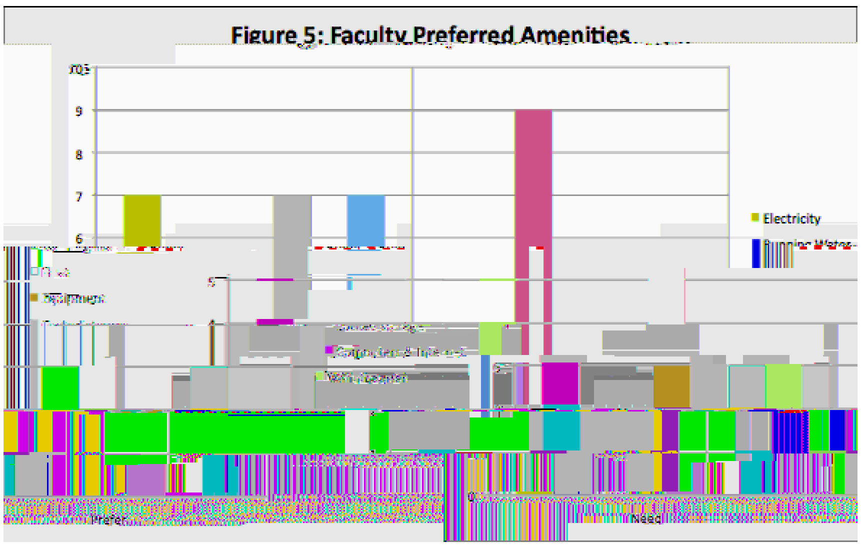


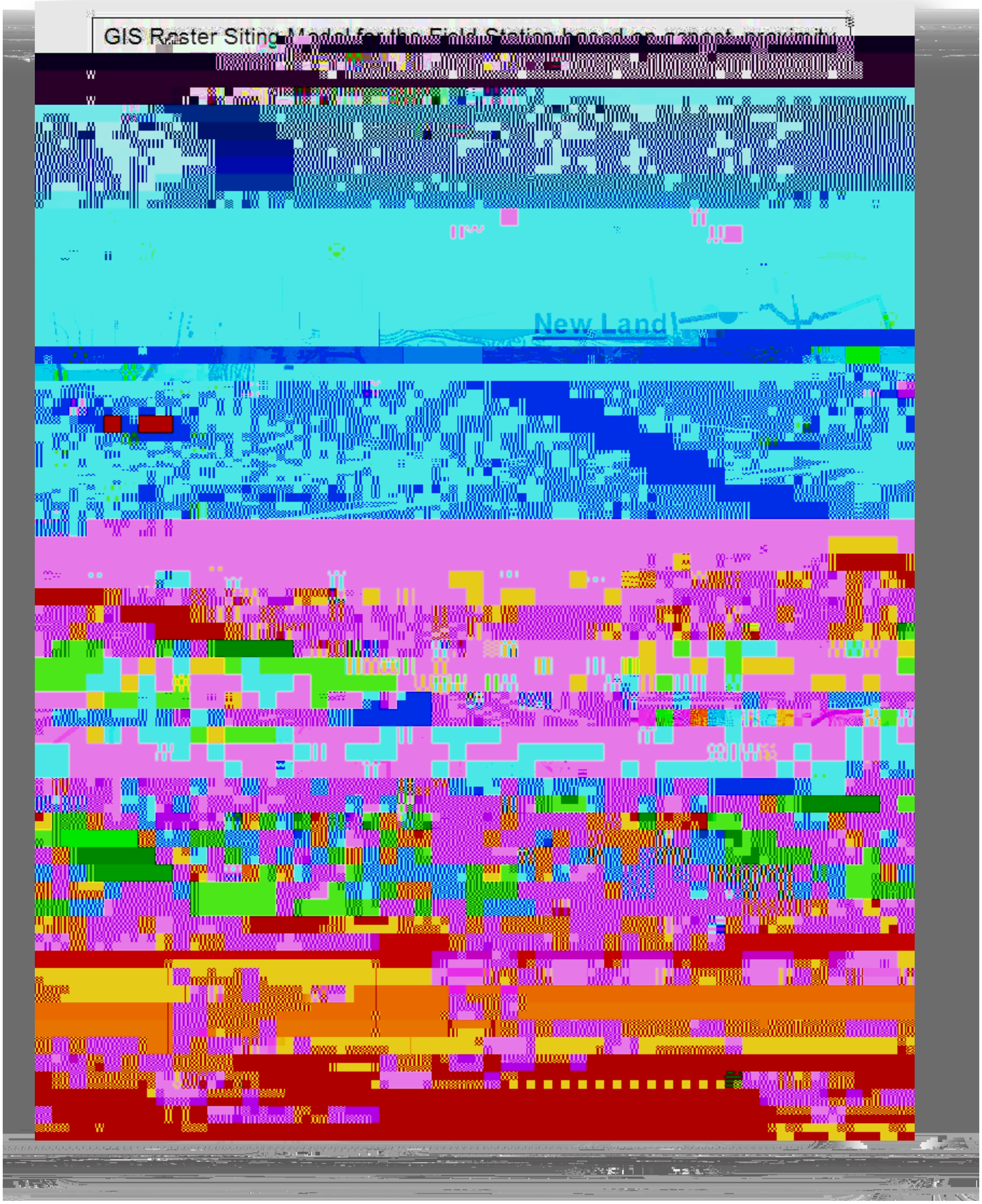
Figure 5: Faculty Preferred Amenities
9
8
7
6
Electricity
Prefer
Need

Student Surveys

“preferred” certain amenities instead of “needing” them, and even then equipment was the top preference, rather

,

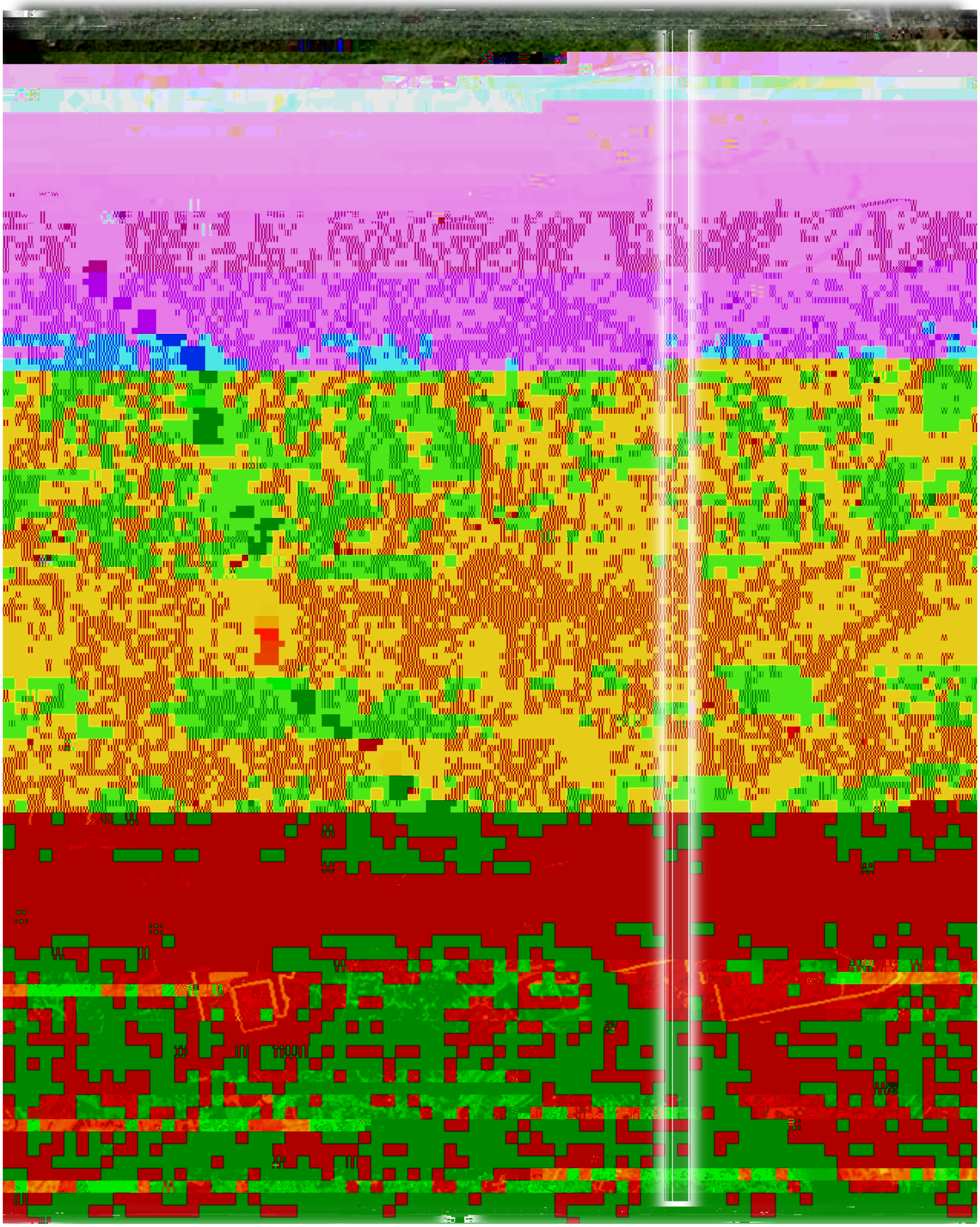
Climate Analysis


GIS Raster Siting
New Land

energy capacity by maximizing the sun's season

s reflection and refraction off of the large water bodies' surface that

Figure 12. Site 1's Google Earth photo with the implemented field research Google



Google Earth satellite surveillance at 19,100 feet of Skidmore's Properties,

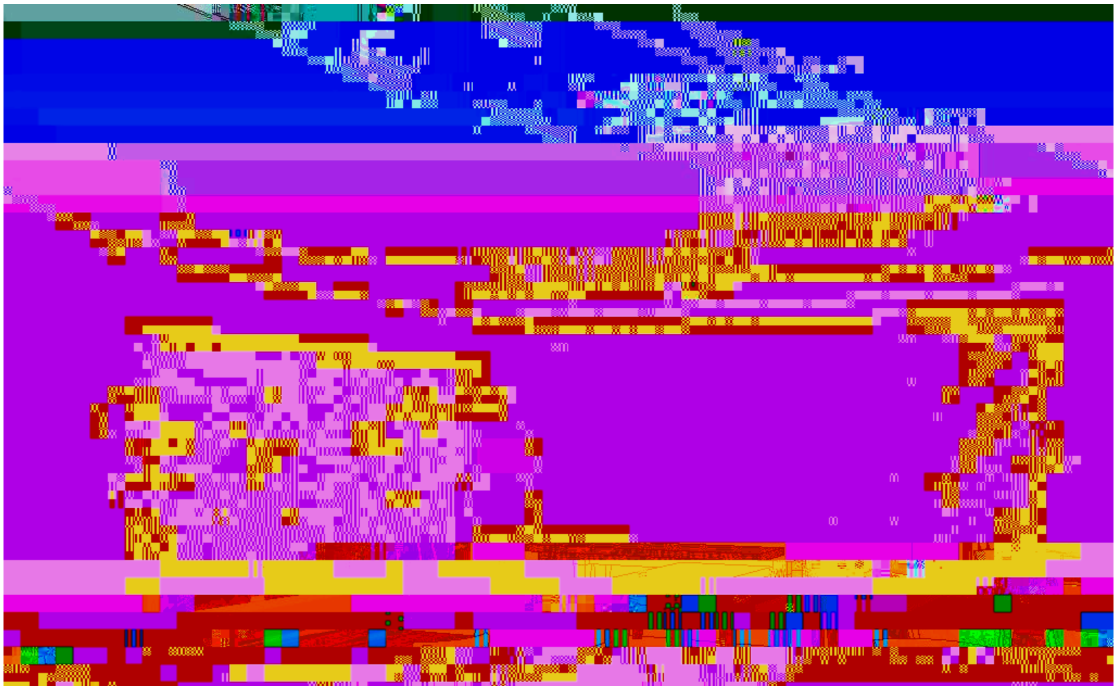
Solar Electric & Solar Thermal Analysis:

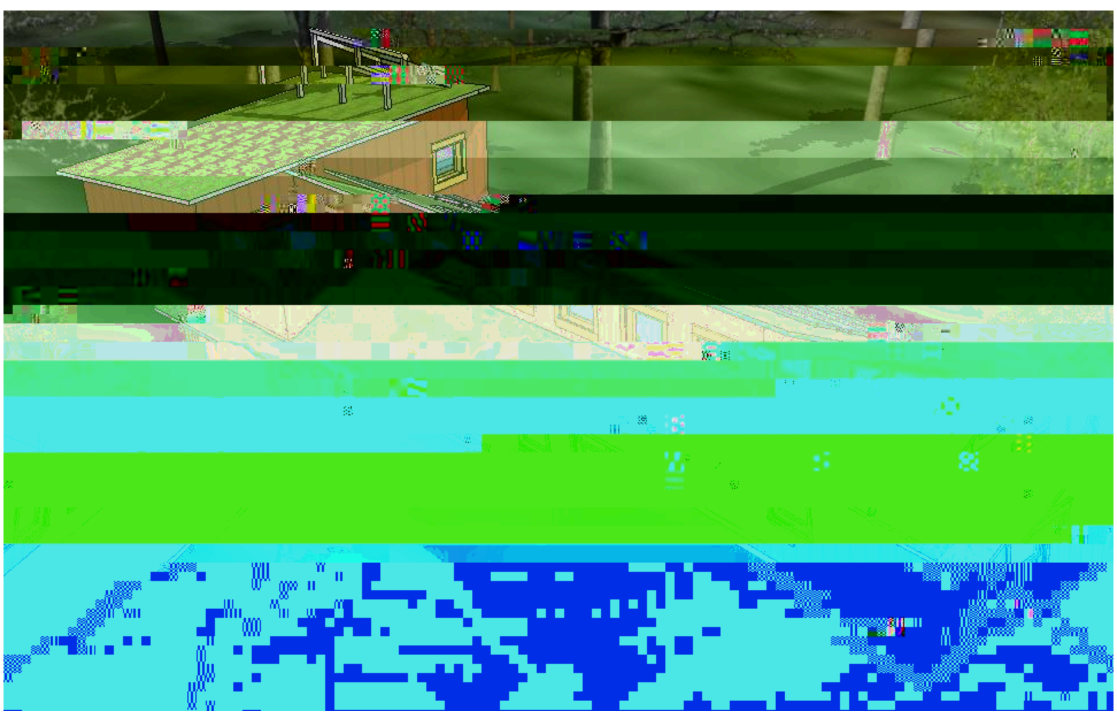
43º 07’ 53.04” W latitude due to the identified GPS locations. In ue to magnetic declination and the sun's azimuth angle. Each panel, together creating an solar system during all of New York's four seasons and their the sun's altitude

Radiant Flooring

Under floor material total costs	*$2,031.00*
Mechanical component total	*$1,313.00*

The Final Design





Would you use…

Please indicate the importance of the following amenities… (Need/Prefer/Doesn’t matter)

REFERENCES

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Eco Plan Architecture

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Ecological Engineering

Green Roofs for Healthy Cities

Urban Design Tools