IBEW Renewable Energy/Energy Efficiency/Smart Grid Application Educational Efforts

Harry Ohde

Assistant Director

IBEW 134/INTI

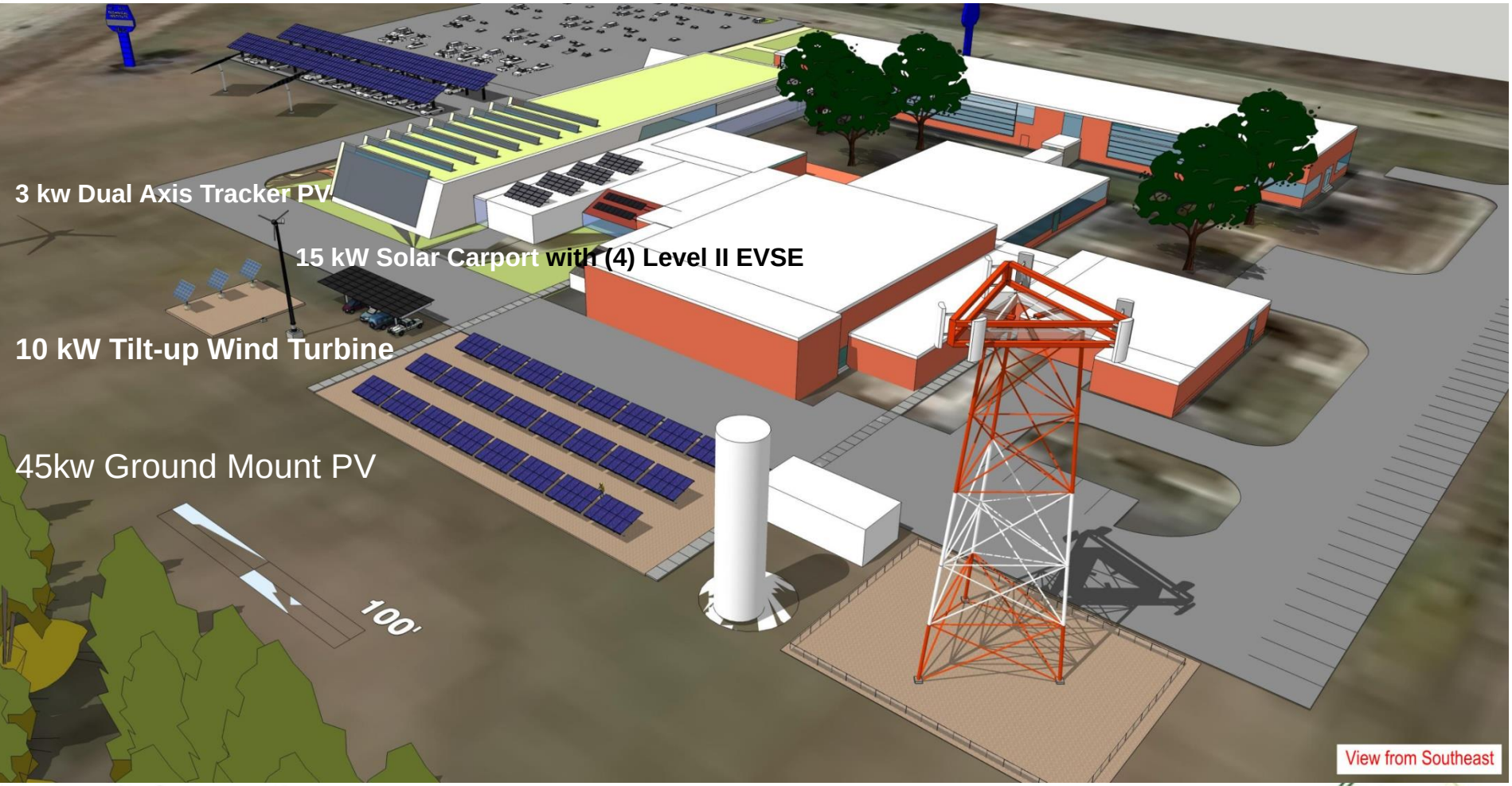
Education and Training

- Local, state and national IBEW
- Instructors
- Contractors, designers and architects
- Building officials
- AHJ's
- Potential customers
- General public

Site Plan for Phase 1 and Phase 2

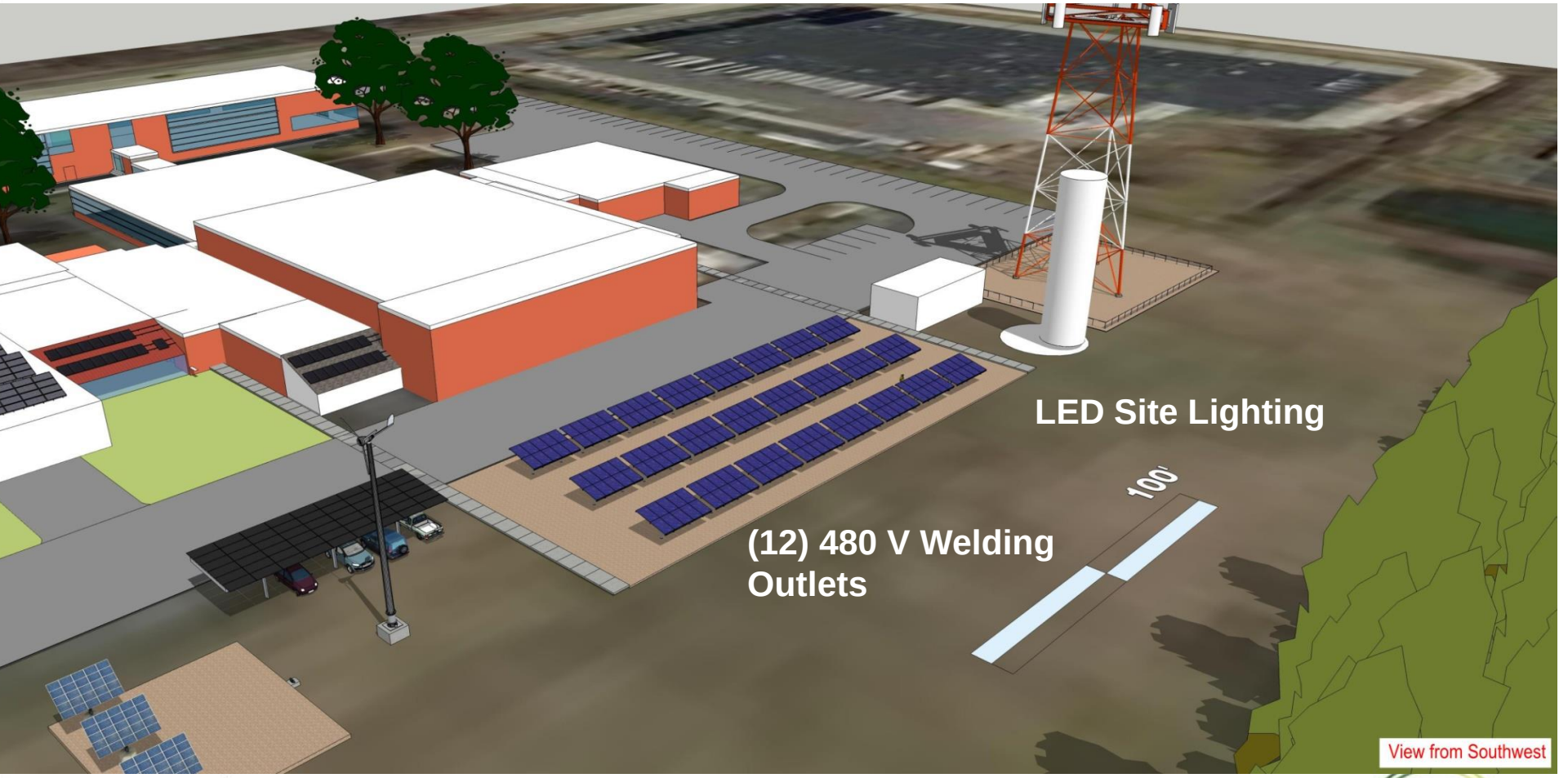
Overall Site Plan

Renewable Energy Training Field Phase 1

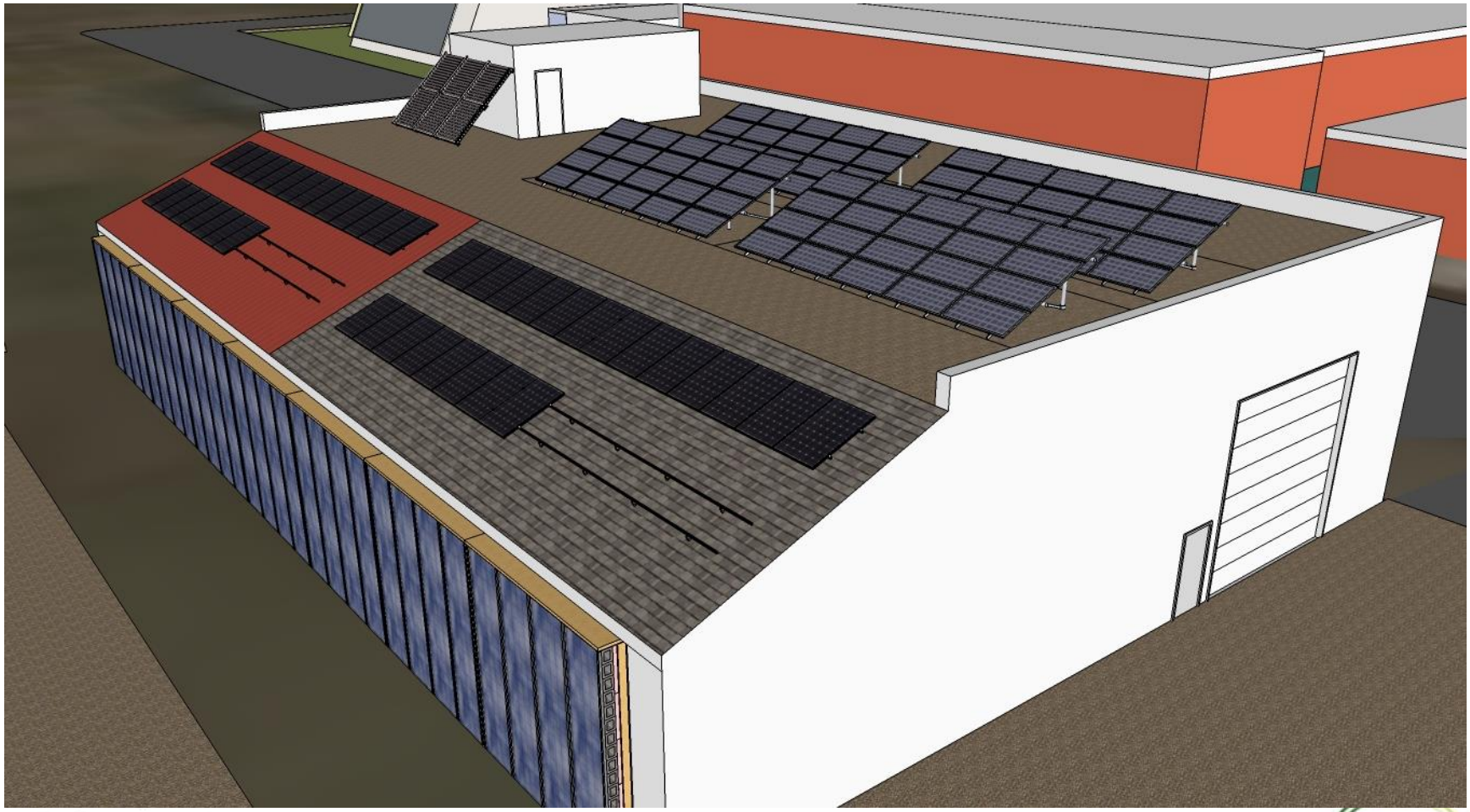


Phase 1 Site Plan

Phase 1 Site Plan



Renewable Energy/Smart Grid Outbuilding

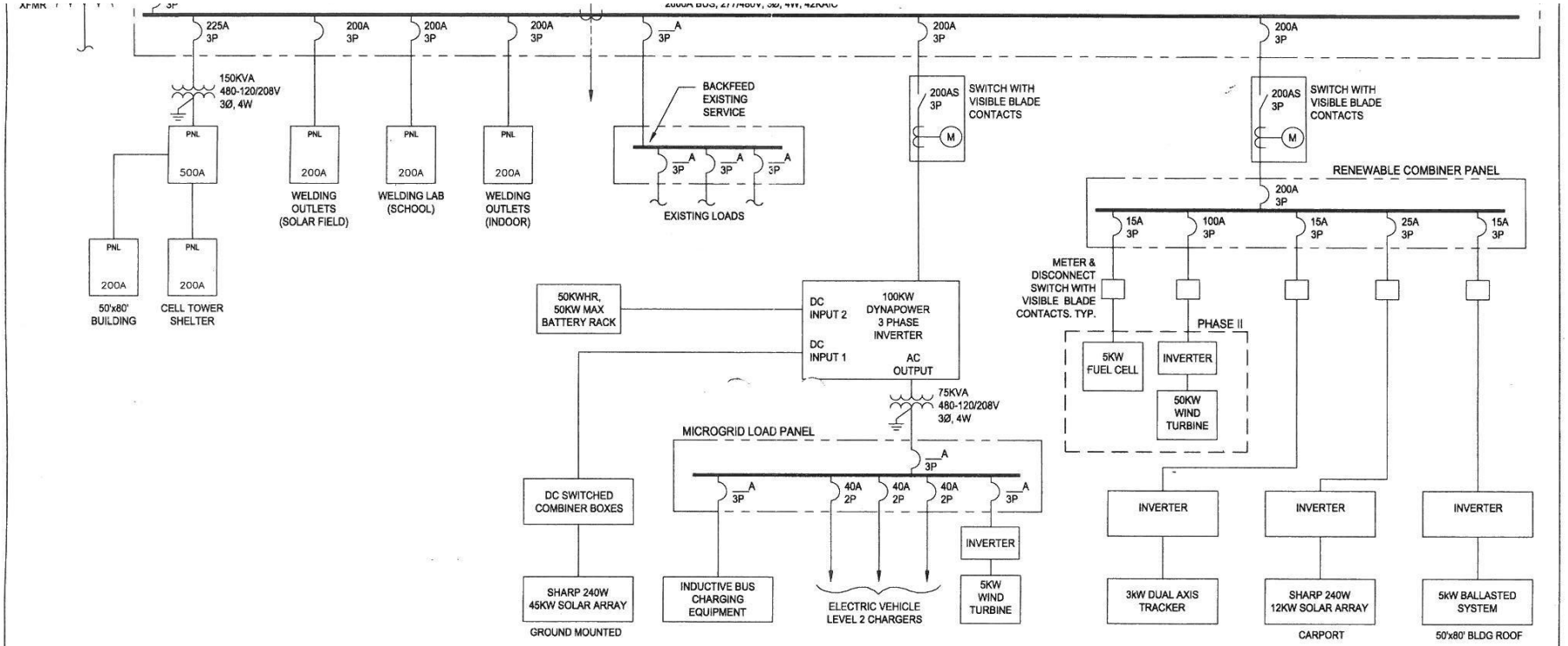


Solar Roof Monitors for Outbuilding

Roof Monitor- 30°PV –Fixed glass on North with east and west windows for ventilation

Smart Outbuilding Components

- 1200 A., 277/480V.,3Ø, 4 W. service
- 100 kW DynaPower Bi-directional inverter
- 50 kW lithium Ion battery energy storage
- 45 kW ground mounted solar array
- 5 kw natural gas fuel cell system
- Microgrid load panel that will feed inductive wireless charging equipment, (4) Level 2 EVSE and 10 kW wind turbine
- Renewable energy load panel that will consists of 3 kW dual axis tracker, 15 kW carport array, and 10 kW outbuilding roof monitor PV
- Smart Metering



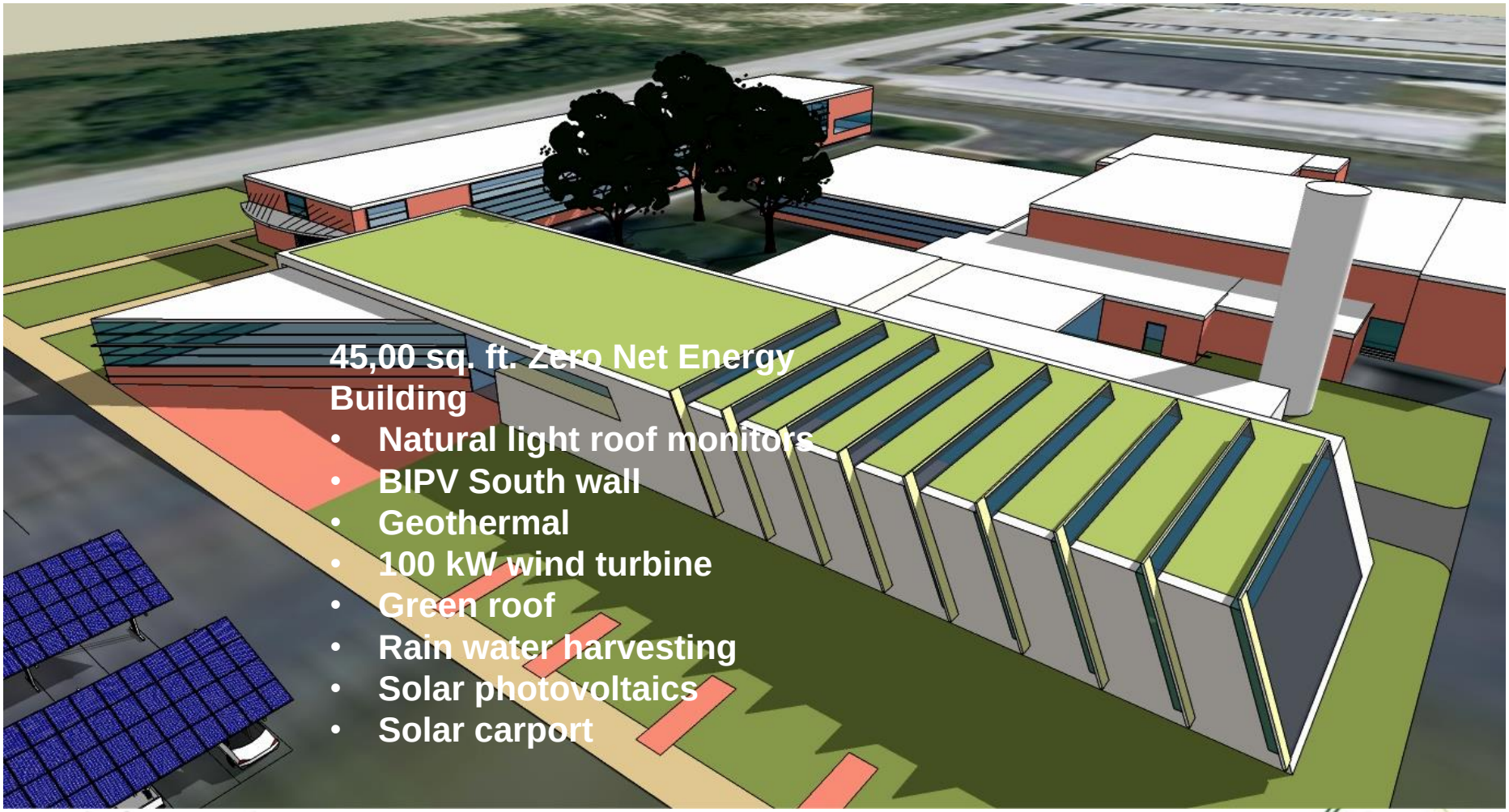
BLDG: - FLR: - AREA: -	PROJECT TITLE: ENERGY STORAGE/MICROGRID INSTALLATION 6201 West 115th Street Alsip, Illinois 60803	CONSULTING ENGINEER: Gausman & Moore Mechanical and Electrical Engineers Suite 205 26415 Carl Boyer Drive Santa Clarita, CA 91350 (661)291-1978 FAX 291-6213 Project No. 82883 ©
JOB NO:		
DATE:		
SHEET: SLD OF: -	SHEET TITLE: SINGLE LINE DIAGRAM	
DRAWN BY:		
CHECKED BY:		
SCALE:		

APPROVAL OF DESIGN	LEAD: PDE Total Energy Solutions 9970 Bell Ranch Dr., Suite 109 • Santa Fe Springs, CA.90670 (562)204-3550 • Fax (562)204-0380 • Cal. Lic. No. C10-620473
DATE:	
APPROVAL FOR CONSTRUCTION	
DATE:	
CONSULTANT:	

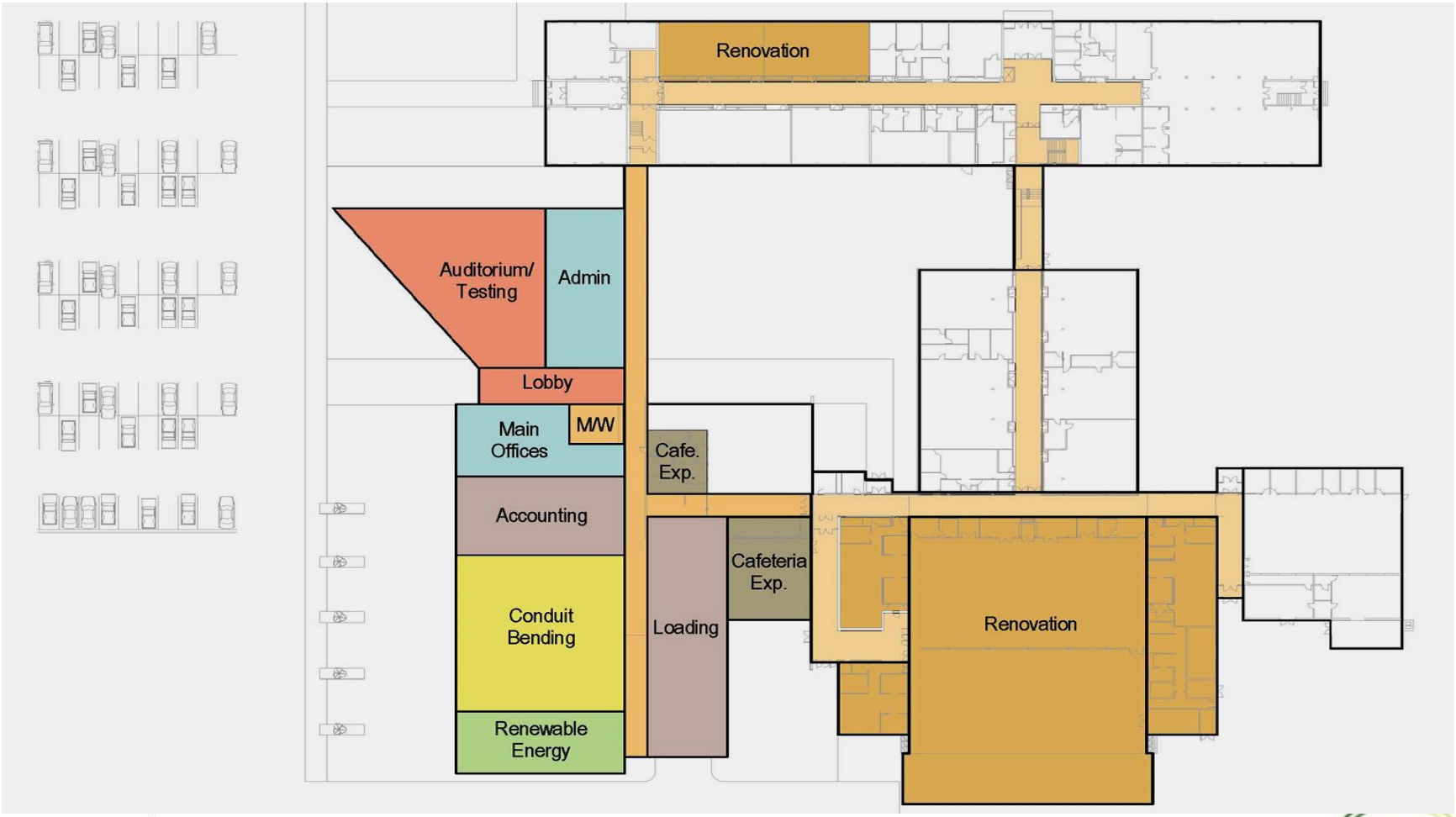
Owner:

IBEW-NECA Technical Institute
6201 West 115th Street
Alsip, Illinois 60803
(708) 389-1340

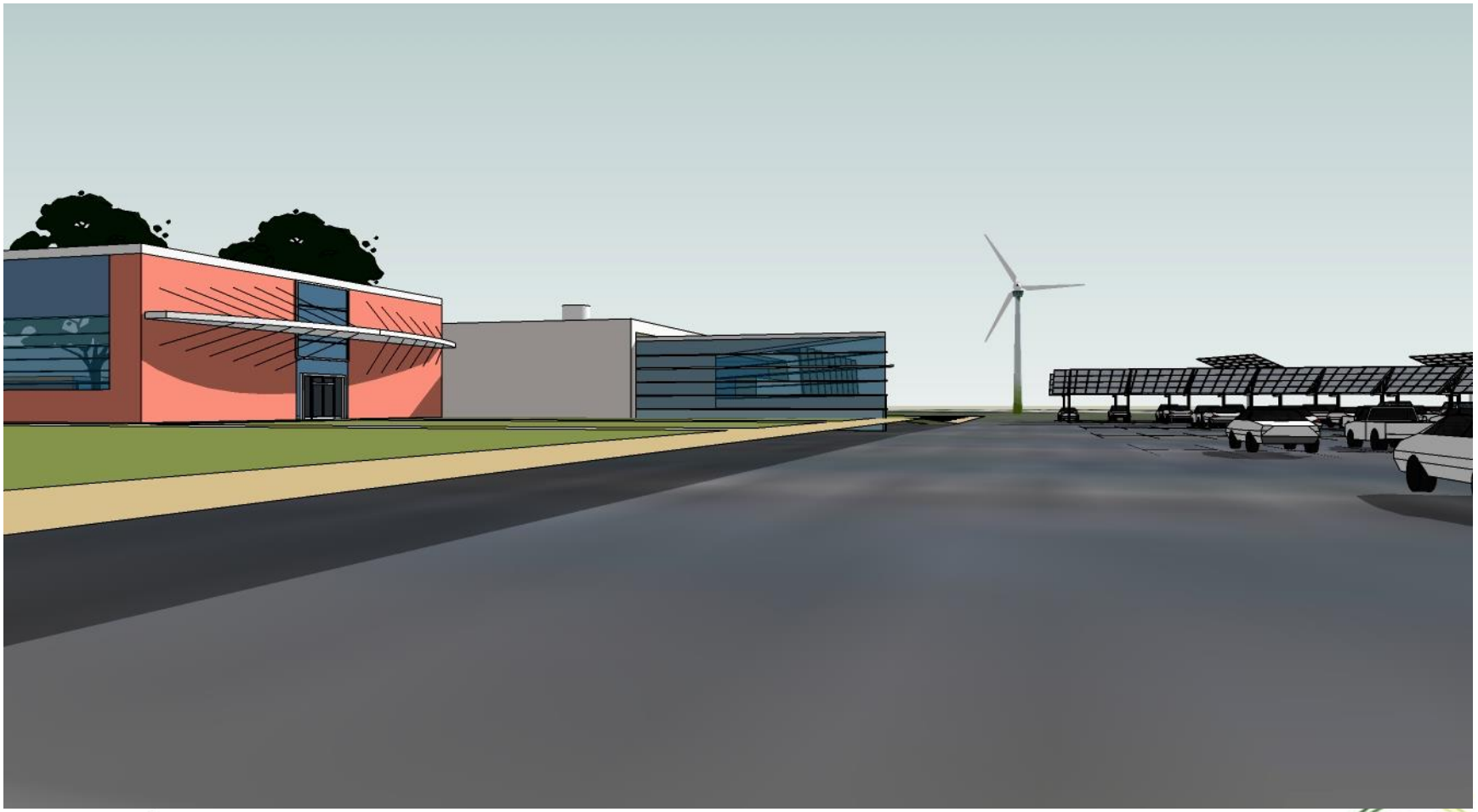
Phase 2 Design Concept



Phase 2 Plan


Renovation
Auditorium/ Testing
Admin
Lobby
Main Offices
MW
Cafe. Exp.
Accounting
Conduit Bending
Renewable Energy
Loading
Cafeteria Exp.
Renovation

Phase 2 Design Concept



Phase 2 Design Concept