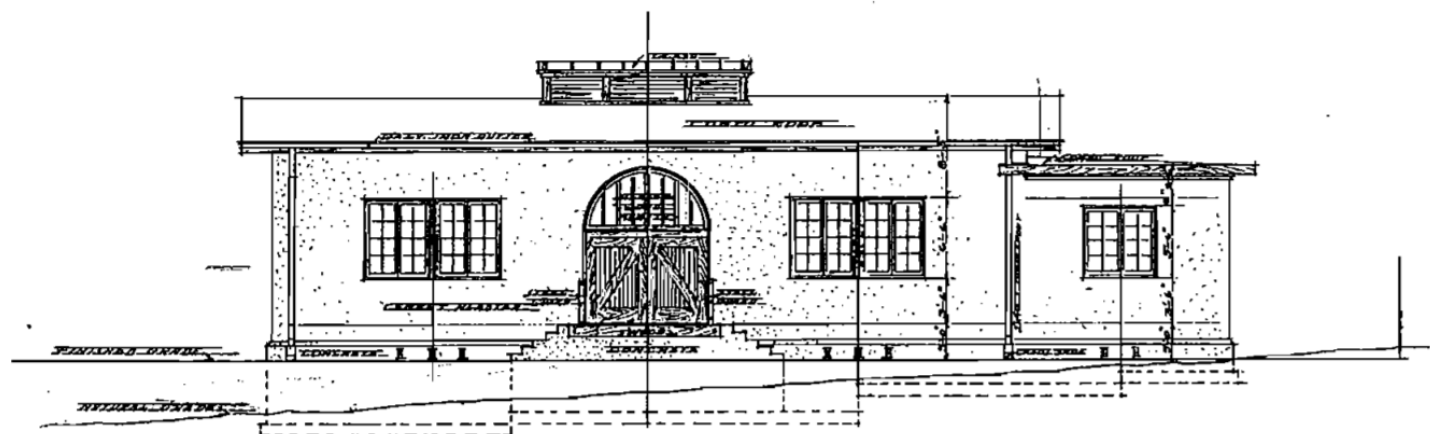


## History of the "Powerhouse"

- Constructed in 1908
- Designed by Nat Ellery
- Used as a Steam Powered electrical distribution system
- Stopped generating power in the 1940's, was abandoned for the first time in 1955
- The school renovated and decided to hold classes in the building for the CAED
- Finally abandoned again in 1990, ordered by the school's administration.
- Was added to the National Historic Places list in 1993



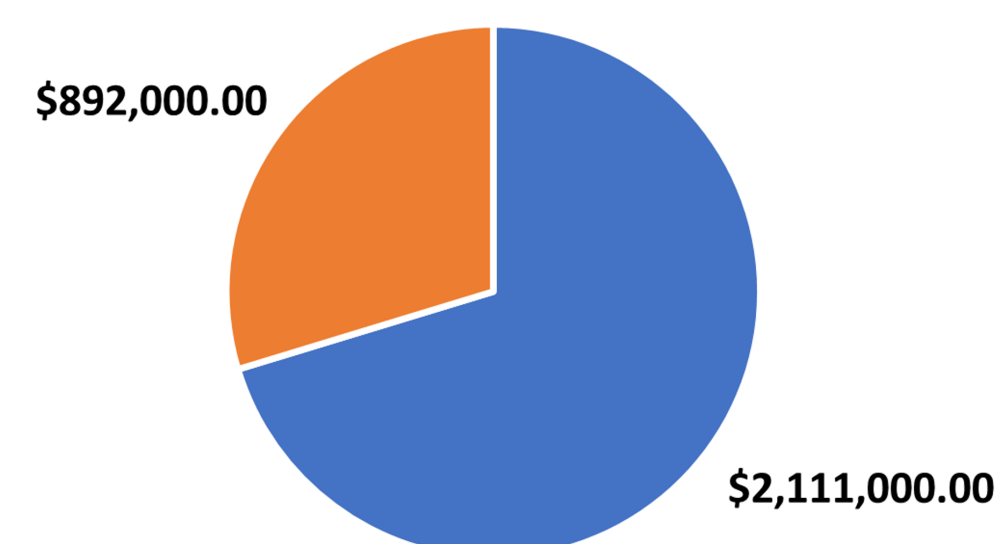
## 2005 Renovation Study/Attempt

In 2005, **rrm design group** had developed a renovation study in order to help Cal Poly decide the feasibility in renovating the abandoned powerhouse building.

RRM Estimate: renovation of structural envelope	\$2,111,000
Cal Poly historical costs: interior renovations (\$175 per square foot)	\$ 892,000
Estimated Total Project Cost	\$3,003,000

Note: Estimate was created in 2005

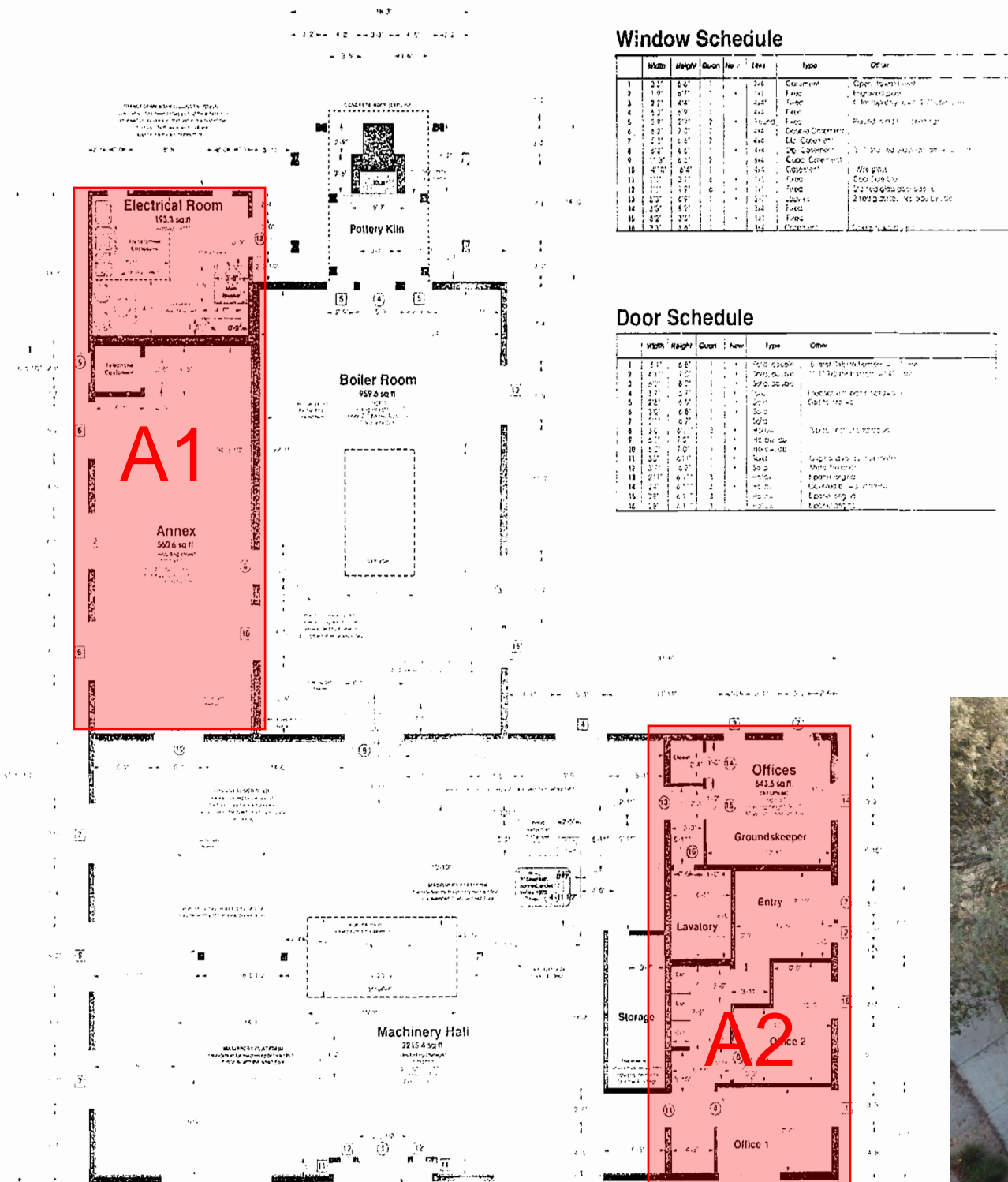
Estimated Cost of Renovation



■ Renovation to Structural Envelope: ■ Renovation to Interiors:

# Feasibility Study: Demolition of Cal Poly's "Powerhouse"

**Abstract:** The "Powerhouse" is currently an abandoned building located next to the Construction Innovations Center on the Cal Poly campus. The building was constructed in 1908 and is currently the oldest standing building located on the Cal Poly campus. Many of Cal Poly's students and faculty have no clue about the building's history, as it has been boarded up and abandoned since 1990. This paper will examine the Powerhouse building's history and analyze how feasible it will be to have the building demolished and replaced. With little to no information of the building's history online, I had to reach out to Cal Poly facilities to find most of my research on the building. Unfortunately, with Cal Poly campus opening back up after more than a year of virtual classes, reaching someone from the facilities department became one of the larger issues of this project. Luckily, those who I was able to contact have given me more than enough information to complete my analysis. By the end of this study, I plan to have an analysis on each step that will be needed to demolish the Powerhouse building, along with the difficulties that come along the way.



Window Schedule									
No.	Height	Width	Area	Notes	Material	Finish	Location	Remarks	Notes
1	4'-0"	6'-0"	24.00	Single Hung	Aluminum	White	Room 101		
2	4'-0"	6'-0"	24.00	Single Hung	Aluminum	White	Room 102		
3	4'-0"	6'-0"	24.00	Single Hung	Aluminum	White	Room 103		
4	4'-0"	6'-0"	24.00	Single Hung	Aluminum	White	Room 104		
5	4'-0"	6'-0"	24.00	Single Hung	Aluminum	White	Room 105		
6	4'-0"	6'-0"	24.00	Single Hung	Aluminum	White	Room 106		
7	4'-0"	6'-0"	24.00	Single Hung	Aluminum	White	Room 107		
8	4'-0"	6'-0"	24.00	Single Hung	Aluminum	White	Room 108		
9	4'-0"	6'-0"	24.00	Single Hung	Aluminum	White	Room 109		
10	4'-0"	6'-0"	24.00	Single Hung	Aluminum	White	Room 110		

Door Schedule									
No.	Height	Width	Area	Notes	Material	Finish	Location	Remarks	Notes
1	6'-8"	3'-0"	20.00	Single	Aluminum	White	Room 101		
2	6'-8"	3'-0"	20.00	Single	Aluminum	White	Room 102		
3	6'-8"	3'-0"	20.00	Single	Aluminum	White	Room 103		
4	6'-8"	3'-0"	20.00	Single	Aluminum	White	Room 104		
5	6'-8"	3'-0"	20.00	Single	Aluminum	White	Room 105		
6	6'-8"	3'-0"	20.00	Single	Aluminum	White	Room 106		
7	6'-8"	3'-0"	20.00	Single	Aluminum	White	Room 107		
8	6'-8"	3'-0"	20.00	Single	Aluminum	White	Room 108		
9	6'-8"	3'-0"	20.00	Single	Aluminum	White	Room 109		
10	6'-8"	3'-0"	20.00	Single	Aluminum	White	Room 110		



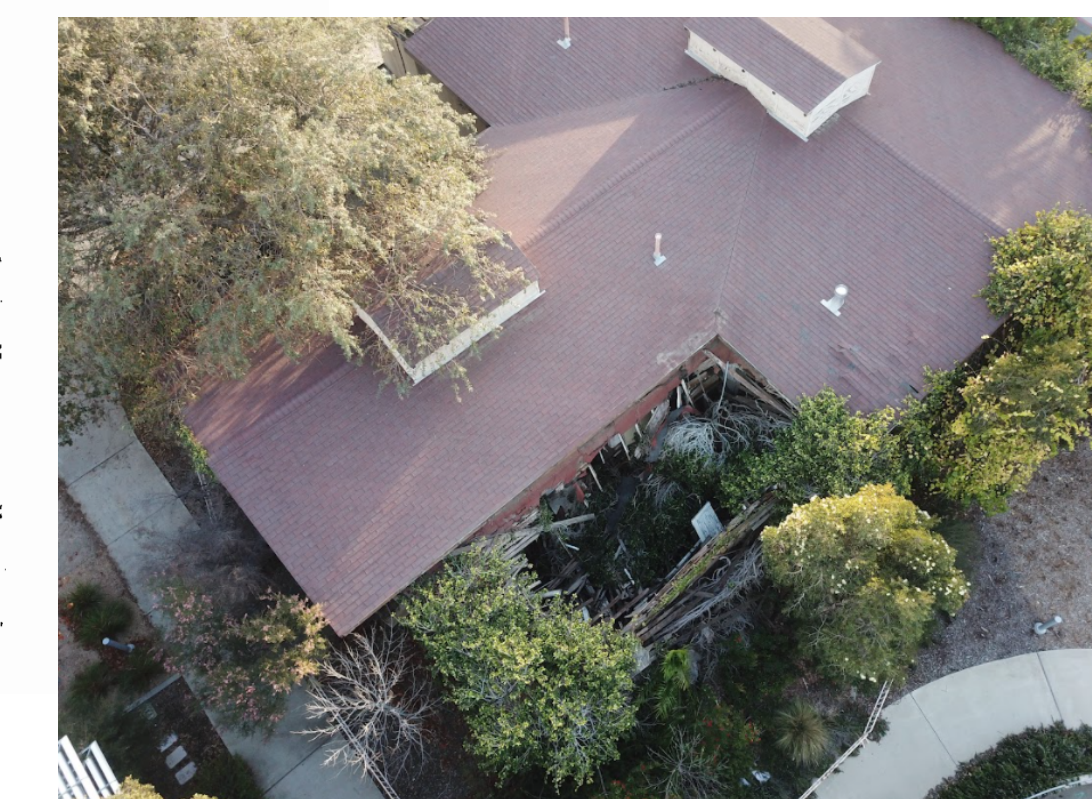
## Demolition Technique

Similar to the demolition of Building 52 on campus, the demolition of the Powerhouse building will most likely need a specialty consultant (Industrial Hygienist). Demolition would require:

- All hand tools for demolition/containment
- Full hazmat suits
- "Piece-by-Piece" demolition for each material to be sent out to different treatment centers.



## Powerhouse Roof Collapse Winter 2018/2019



In winter of 2018/2019, The Roof had held so much water-weight from rain that it eventually was damaged/collapsed in 2 different areas.

A1

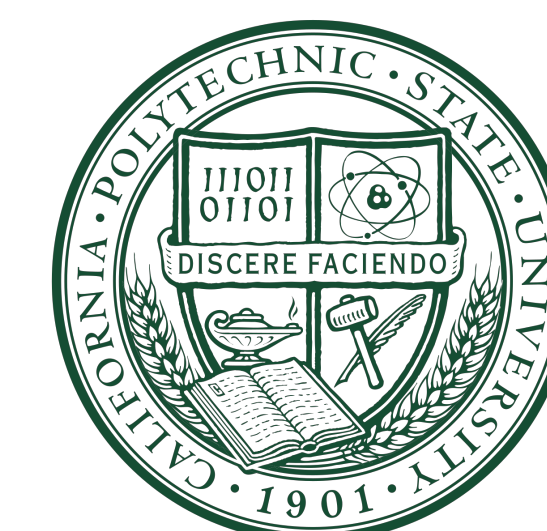


A2

**Evan Tookey:**  
California Polytechnic State University,  
San Luis Obispo

## Main issues pertaining to demolition

- Removal from the National Register of Historic Places
- Resistance from Cal Poly Administration
  - (Oldest standing structure on Cal Poly's campus)
- Cost of specialty demolition or renovation



Office of Historic  
Preservation