

Cuba City Presidential Plaza

Presented by: Mineral Engineering (Christopher Moore, Dustin Reynolds,
Kyle Samann, and Ryan Schuppie)
CE 4930: Civil and Environmental Engineering Senior Design
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Outline

- Objectives
- Project Constraints
- Existing Conditions
- Research
- Decision Matrix
- Proposed Site Plans & Renderings
- Cost Estimate
- Recommendation



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Objectives

- Develop various seasonal multi-age engagement events and activities.
- Create a design based on decision matrix and public feedback
- Design the Presidential Plaza in phases to increase community support and accommodate further plaza development
- Develop a cost estimate for each phase.

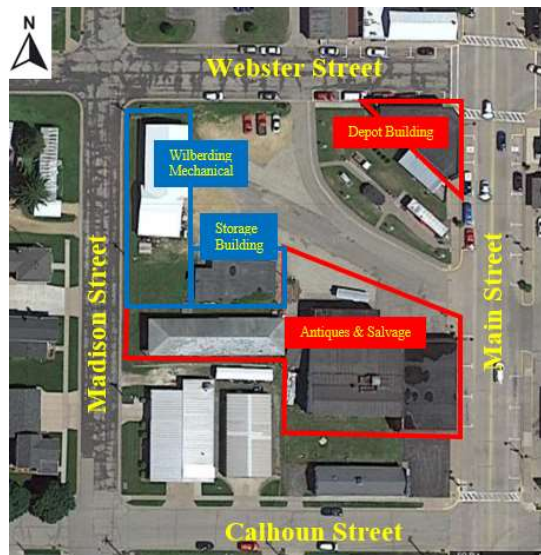
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Project Constraints

- No parking
- Buildings
- Restrooms
- No budget

Source: Google 2020



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Source: Google 2020



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Existing Conditions

- Land Use
- Current site pavement conditions
- Neighboring site concerns
- Utilities
- ADA compliance

Source: City of Cuba City 1999



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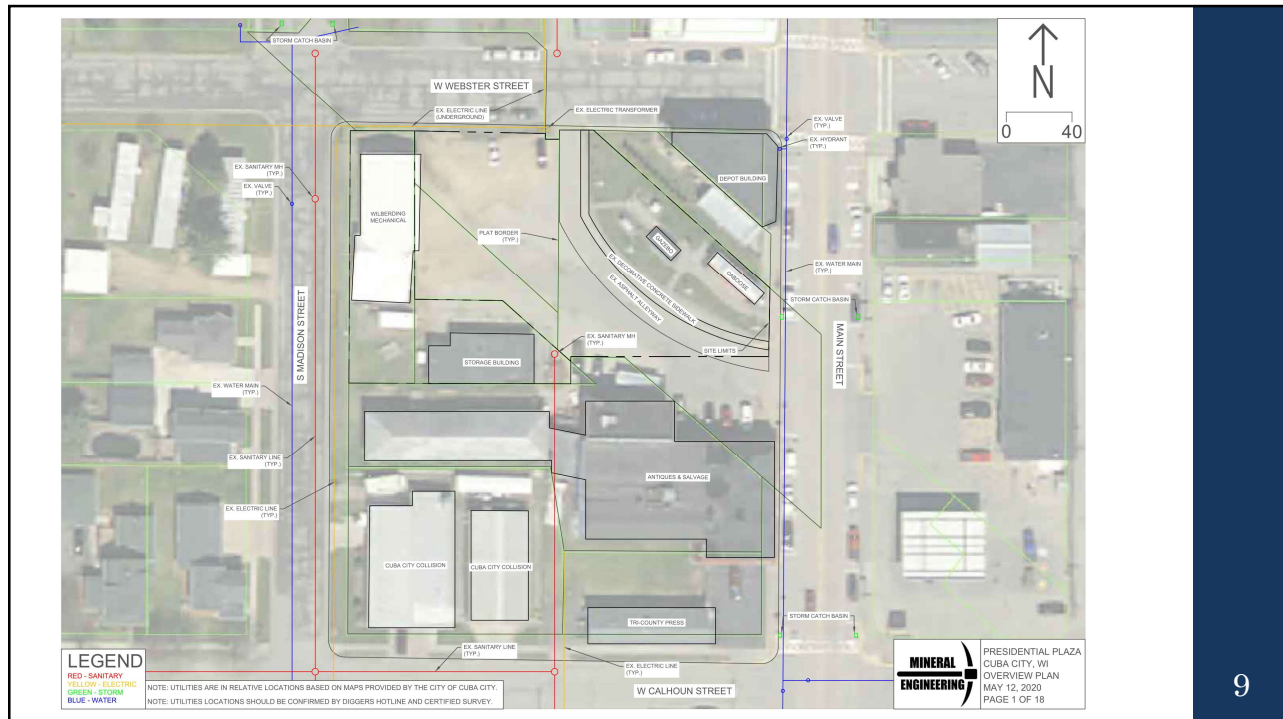
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Research

- Destination Development Association
- Cuba City High School Survey
- Resident Interviews
- Comprehensive Plan Survey

Destination Development Association partnering with ROGER BROOKS International

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Source: Google 2020

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Decision Matrix

- **Criteria**
 - Enjoyment by age group
 - Other uses
- **Events and Activities:**
 - Definitions
 - Season
 - Phase
- **Enjoyment by Age (Scored: 0-5)**
 - Children (0-11)
 - Teenagers (12-19)
 - Young Adults (20-25)
 - Adults (26-60)
 - Senior Citizens (61+)
- **Other Uses (Scored: 0-3)**
 - Ease of Participation
 - Flexibility/Mobility
 - Water Needs
 - Electricity Needs
 - Sanitary Needs
 - Space Occupied
 - Cost
 - Community Involvement

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Top Events

Proposed Event	Season	Phase	Matrix Score
Comedian	Non-Specific	Three-Year	40
Movie	Non-Specific	Three-Year	39
Pumpkin Carving	Fall	One-Year	38
Barbeque	Non-Specific	Five-Year	38
National Night Out	Non-Specific	One-Year	37

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Top Activities

Proposed Activity	Season	Phase	Matrix Score
Ice Cream Stand	Summer	Three-Year	43
Canvas Painting	Non-Specific	One-Year	43
Music/Speakers	Non-Specific	One-Year	41
Lawn Games	Non-Specific	One-Year	41
Cards	Non-Specific	One-Year	41

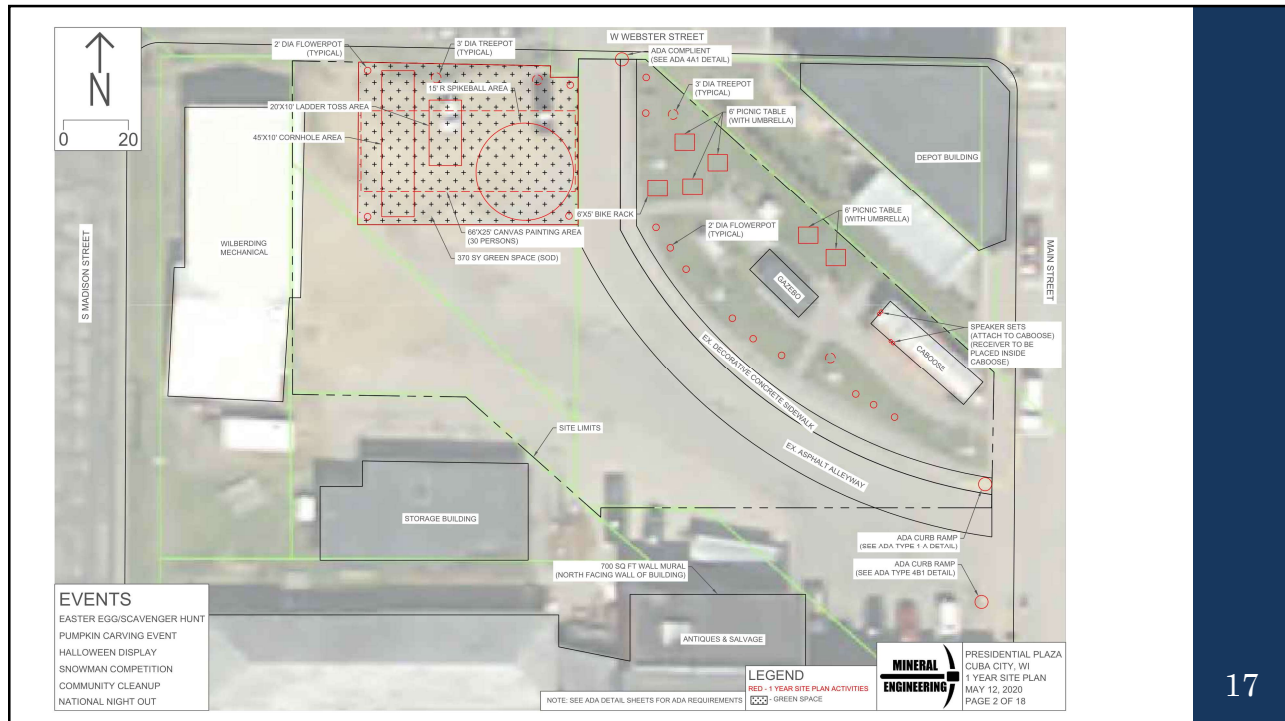
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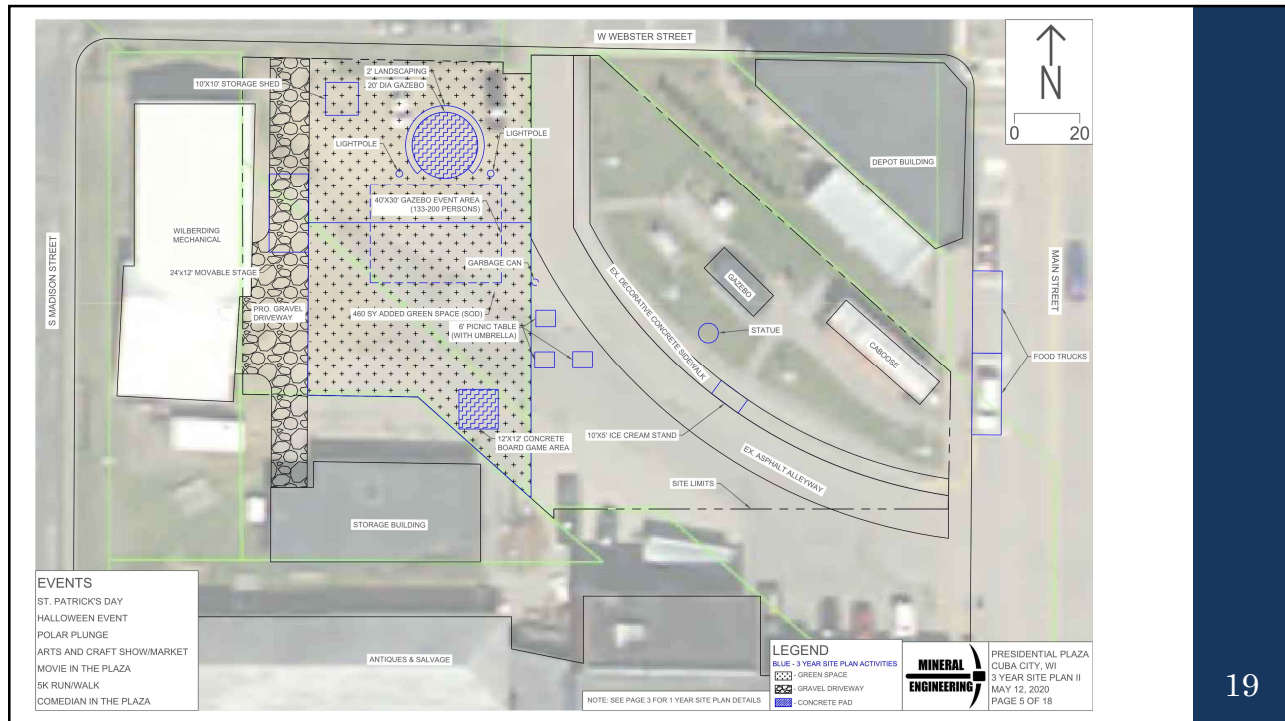
1 Year Site Plan

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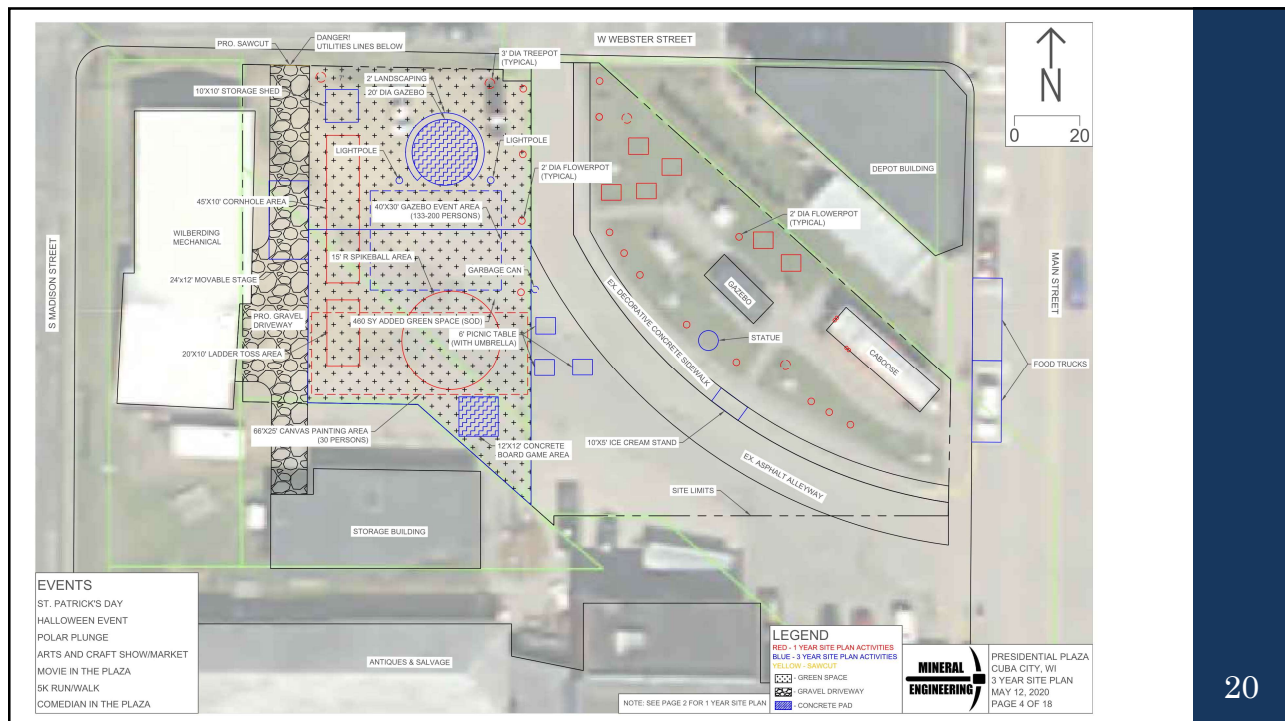
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3 Year Site Plan

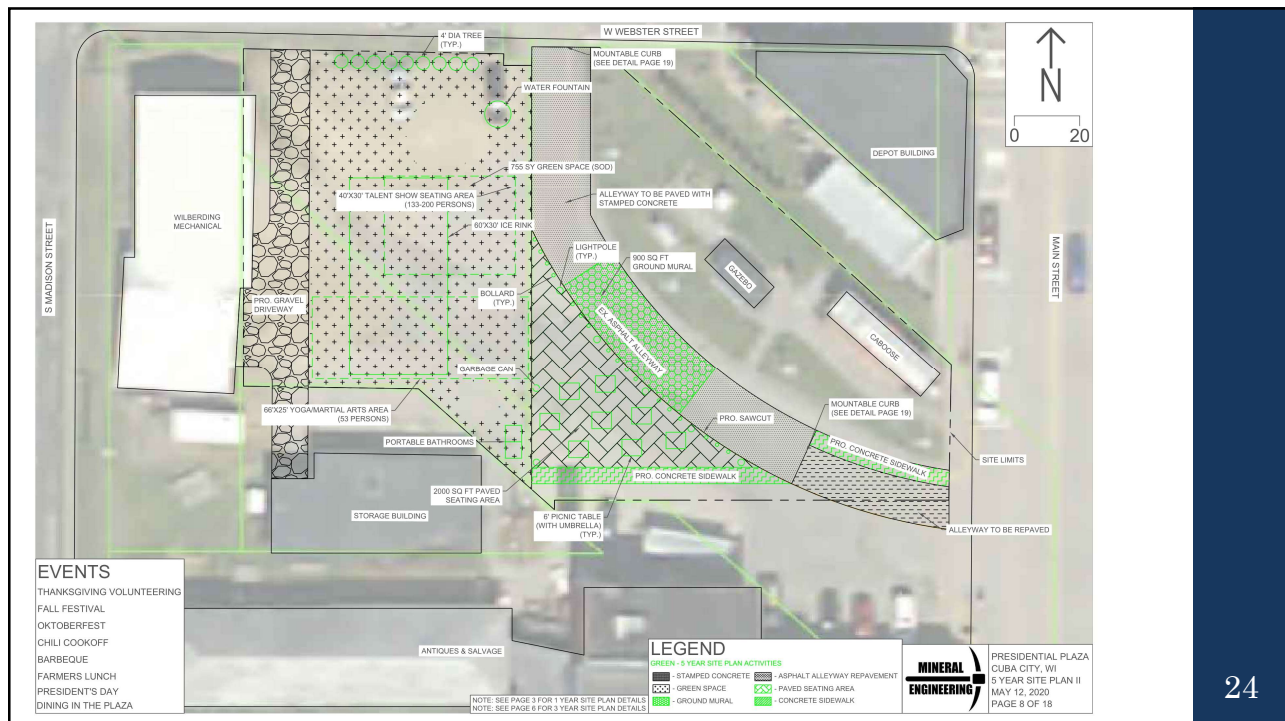


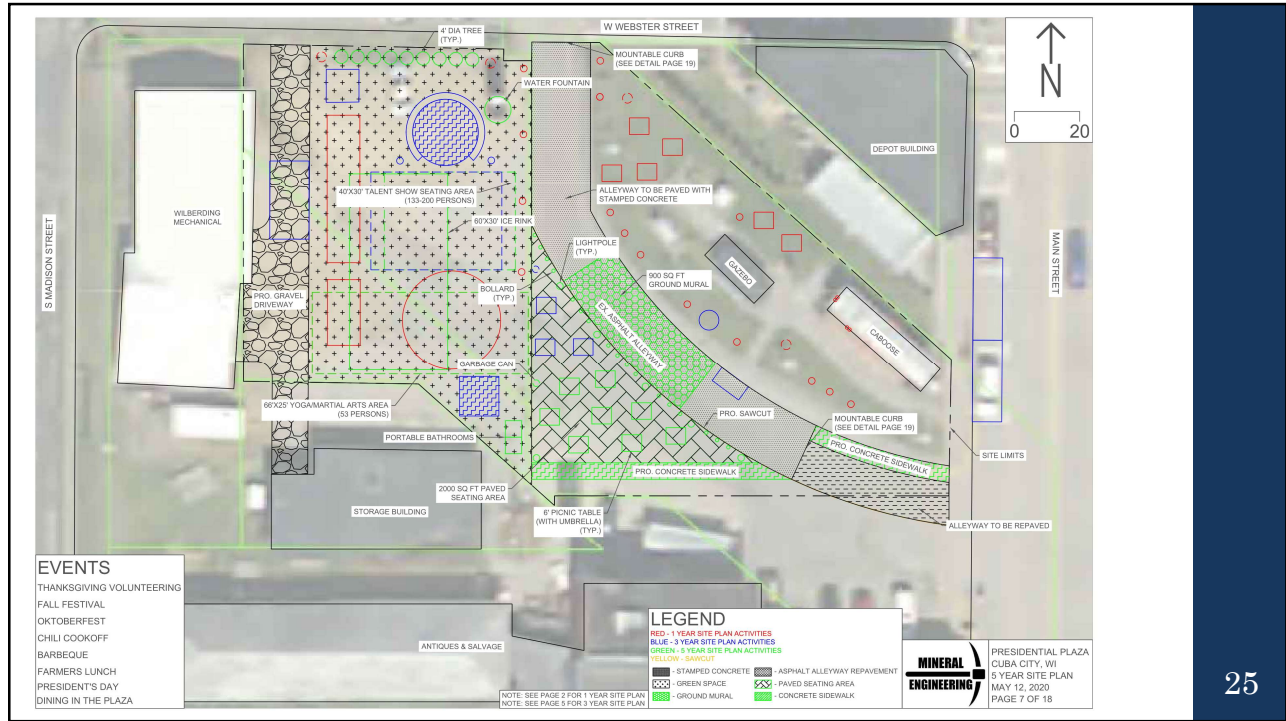
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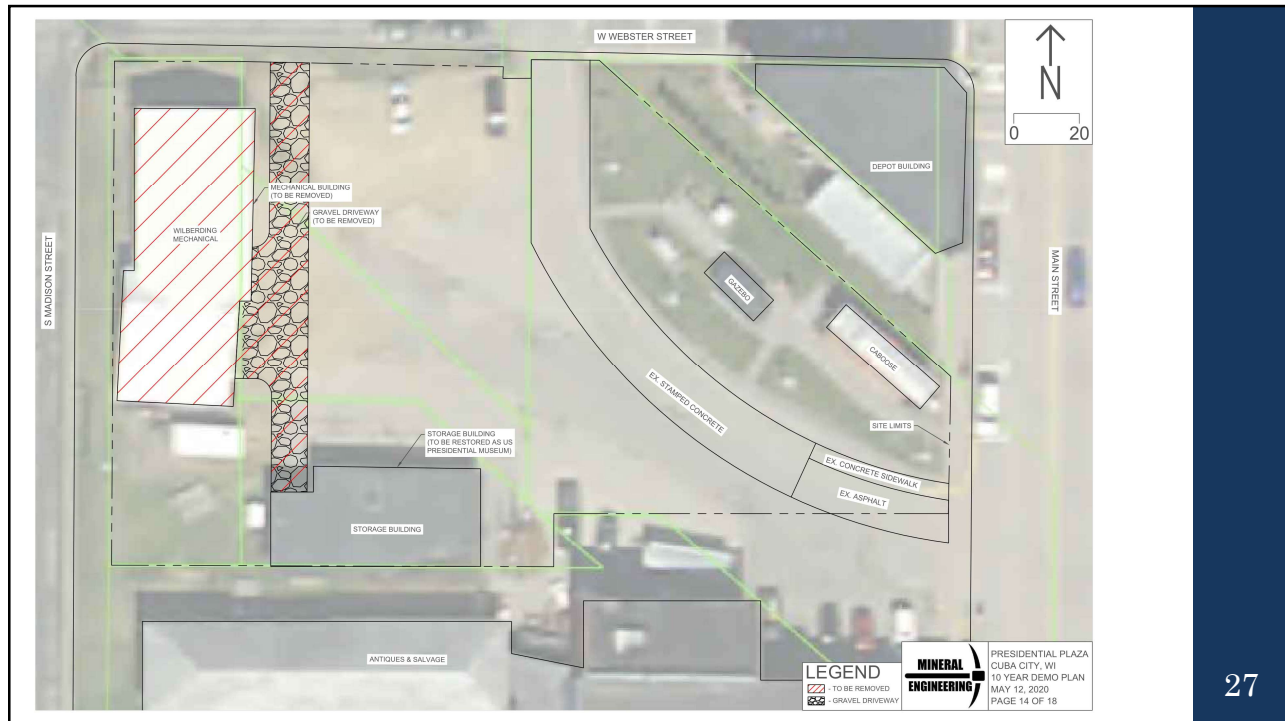
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5 Year Site Plan





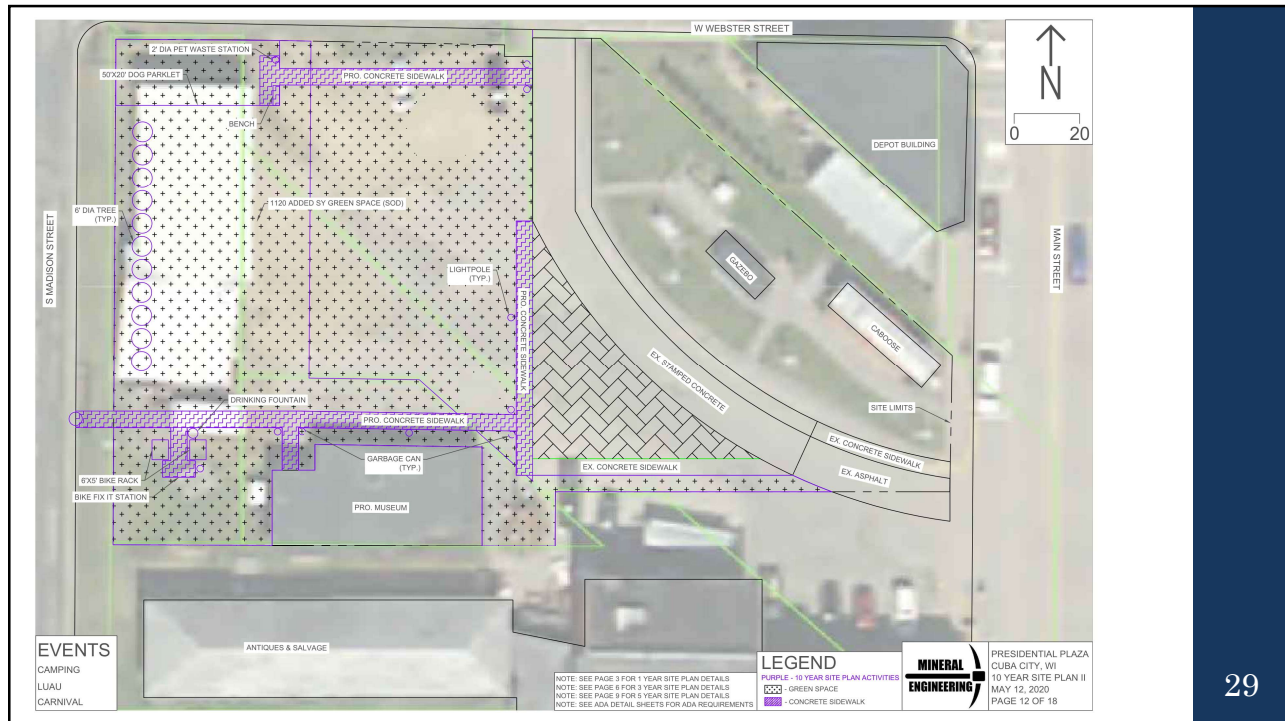
10 Year Demo Plan



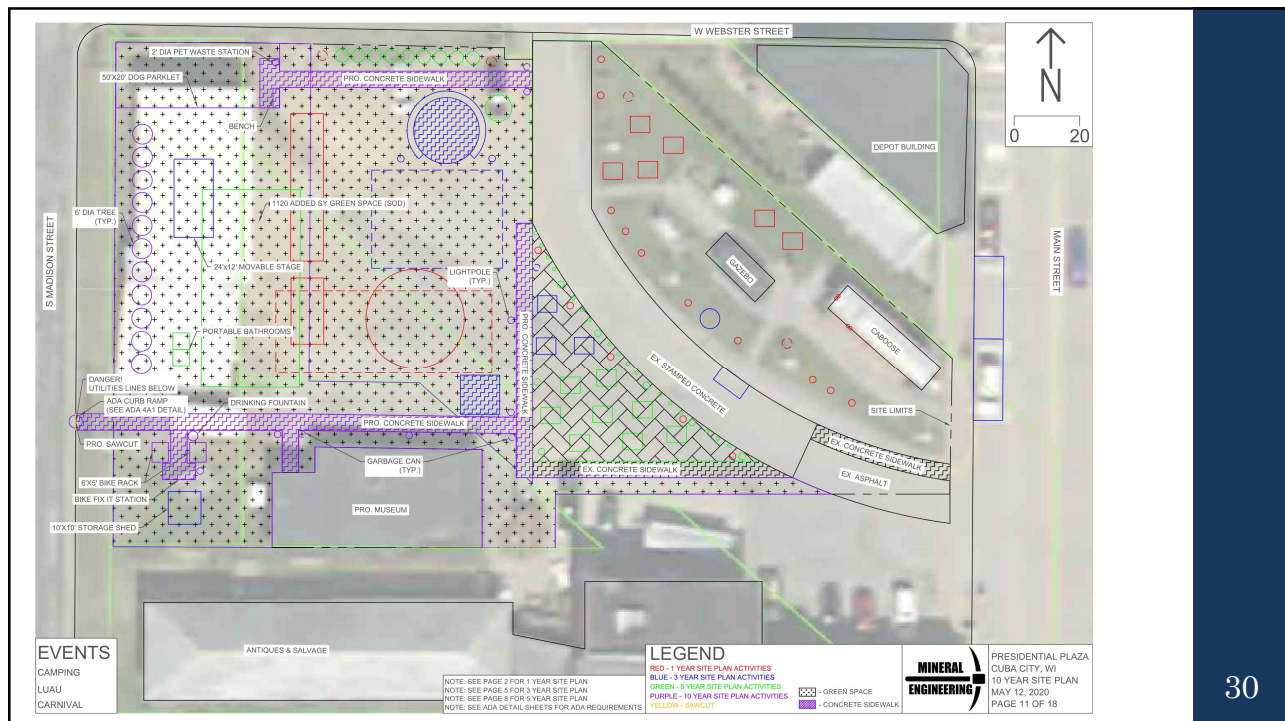
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10 Year Site Plan

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Renderings



View from Main St



View from Webster Street

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Rendering Video



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Cost Estimate

- Contingency
 - 15%
 - Covers tax, and unforeseen additional costs
- Inflation
 - 3% per year
- Does not include cost of:
 - Museum
 - Bike Trail

Phase	Cost
One-Year	\$36,000
Three-Year	\$63,000
Five-Year	\$121,000
Ten-Year	\$178,000
Engineering & Surveying	\$15,000
Total Cost	\$413,000

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Recommendation

- Use the three-dimensional rendering and four phase site plans to increase public support for the Presidential Plaza.
- Complete following surveys:
 - Property
 - Topographic and planimetric
 - Utility
- Further investigate the storm sewer locations near the Presidential Plaza.
- Produce final engineered site plans for each phase.

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Summary

- Identified constraints and existing conditions.
- Research resources, surveys, comprehensive plan, and interviews for background research.
- Decision Matrix used to determine events and activities.
- Site plans and renderings of the plaza were designed based off the events and activities identified in decision matrix.
- Total Project Cost of \$413,000
- Design met the project objectives.

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Acknowledgements

- We would like to thank the following people for their help on this project
 - Mr. Bob Jones, Economic Development Director of Cuba City
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 - Ms. Marisa Mutty
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 - Ms. Jenna Droessler and Ms. Teagan Graber

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References

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- City of Cuba City. (1999). *City of Cuba City Zoning Map* [Paper copy].

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Questions?



Thank You from Mineral Engineering!



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