



Heritage Sculpture
Final Design
Clark and Sons Construction



Project Purpose/Goals

- Construct a sculpture to symbolize the 1932 & 1980 Olympic Games
- Provide enhancement of community pride, admiration and representation of local Olympic athletes
- Capture the artists vision of the Heritage Ring Sculpture
- Achieve sustainability goals
 - SITES v2 for Sustainable Land Design and Development
- Create a project schedule to mitigate inconveniences to the public
- Provide Construction Cost Estimate

Location 2 - Post Office/Main Street

Pros	Cons
Visible from a multitude of areas	Potentially dangerous viewing area for public
Confirmed water line in vicinity	Risk of damaging historic fountain
Easy public access	Require regular maintenance and will face rapid corrosion due to close proximity to traffic
	May have to scale down size of sculpture
	May have to remove trees
	Minimal area to display additional art or history
	Complicated construction will affect traffic
	Sculpture may distract drivers
	Decreased green space in central village area



Location 1 - Crowne Plaza/Olympic Drive

Pros	Cons
Visible from a multitude of areas	Additional engineering design for slope stability
Safe surrounding area for public	Possible increased cost for slope stability
Attract viewers to Crowne Plaza vicinity, potentially increasing business	Lack of water line knowledge for water feature
Minimal external factors contributing to additional maintenance	
Grand appearance and large approach area	
Additional options to incorporate local history	

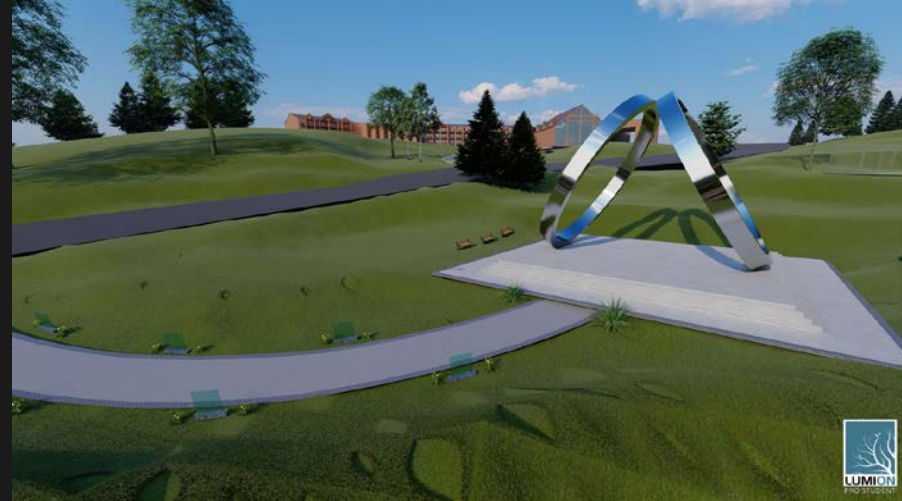
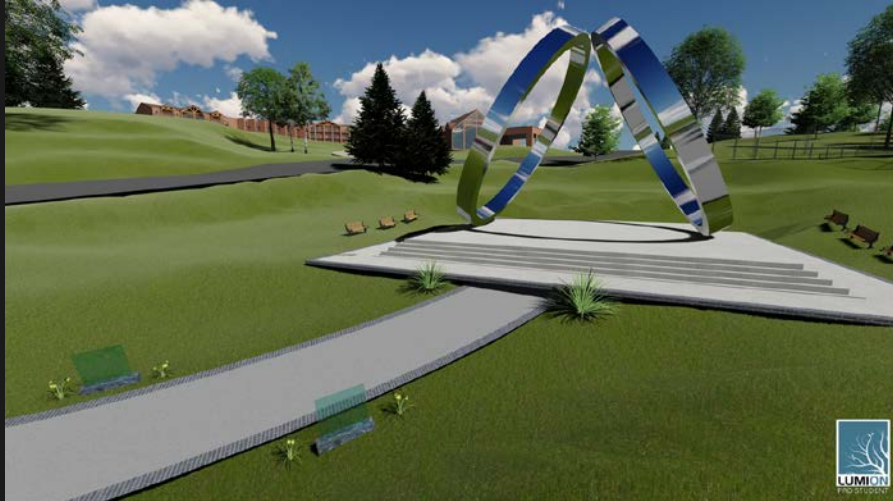


Location-Crowne Plaza/Olympic Drive



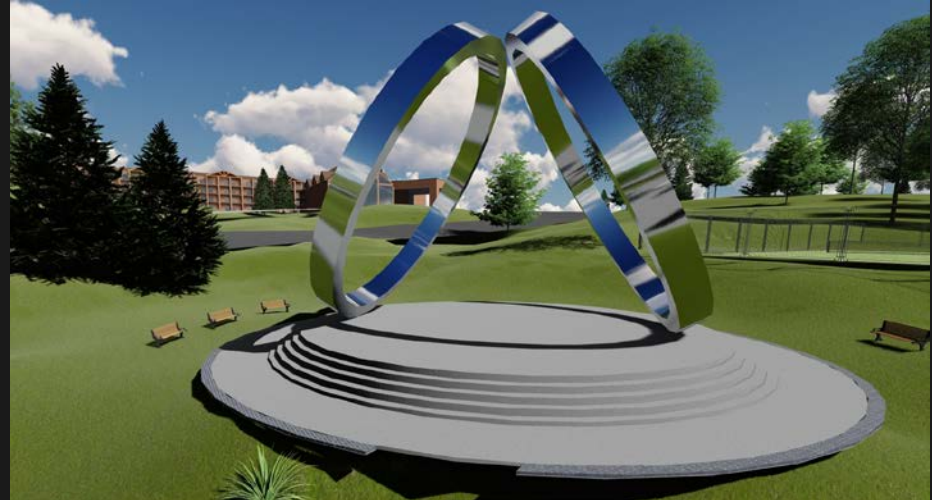
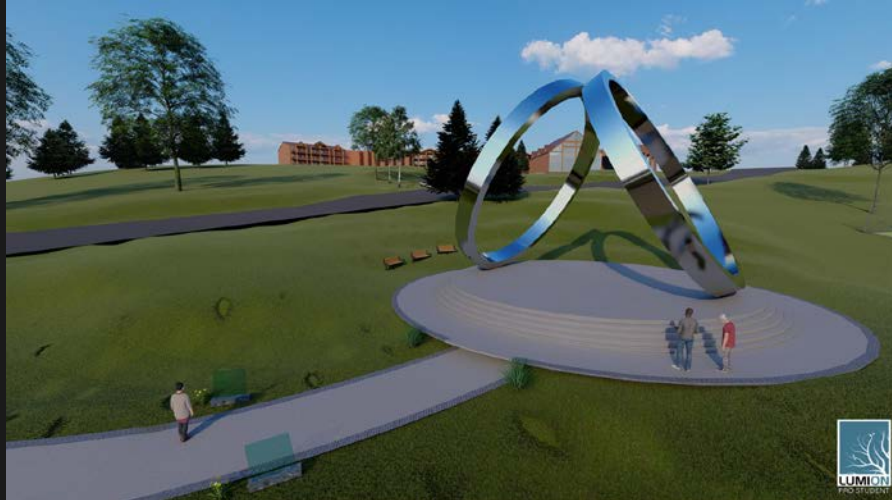
Foundation Design 1

- Square base with a 57'-4" x 57'-4" footprint
- 5 stairs with 7" rise and 11" run
- Total Height of 2'-11"



Foundation Design 2

- Circular base with a 59'-4" diameter footprint
- 5 stairs with a 7" rise and 11" run
- Total height of 2'-11"

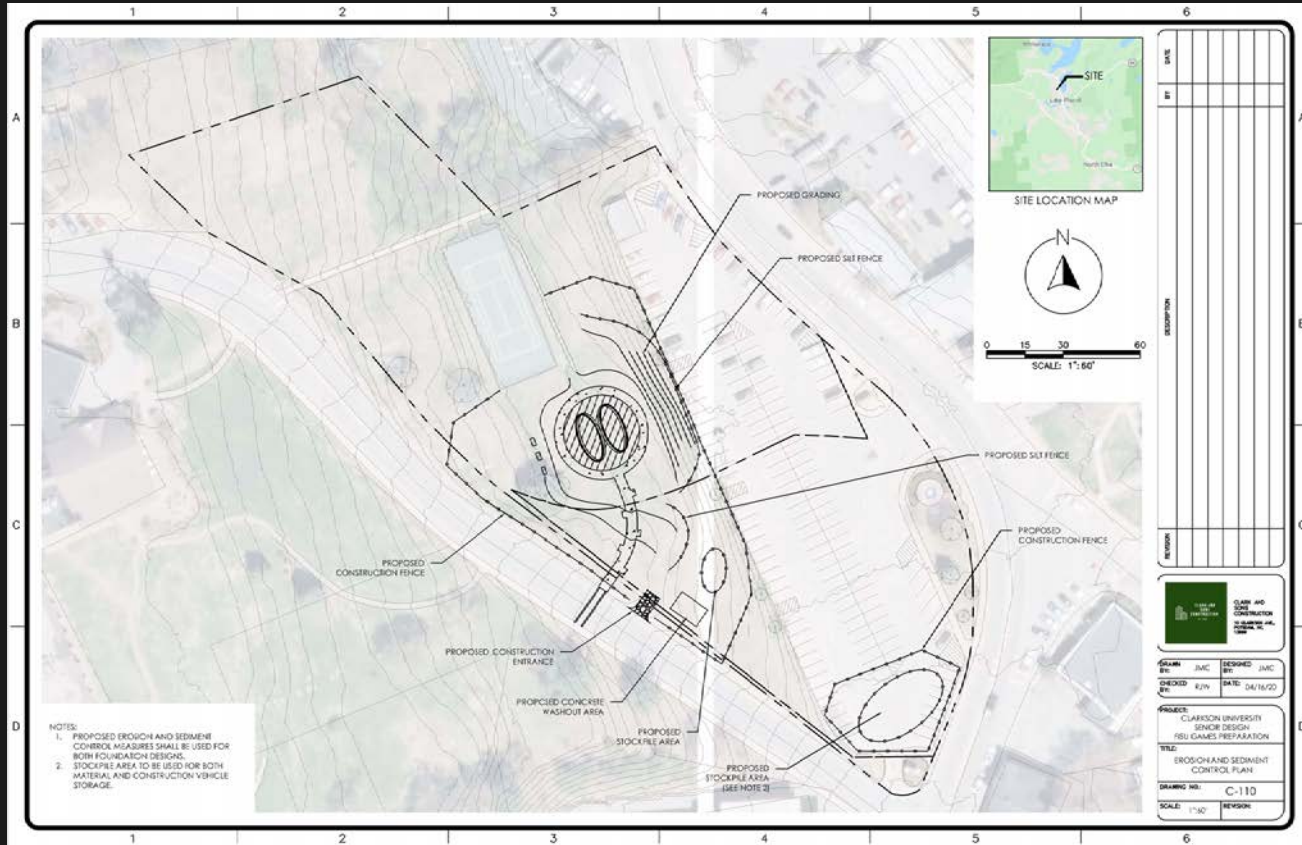


Design 1 Video



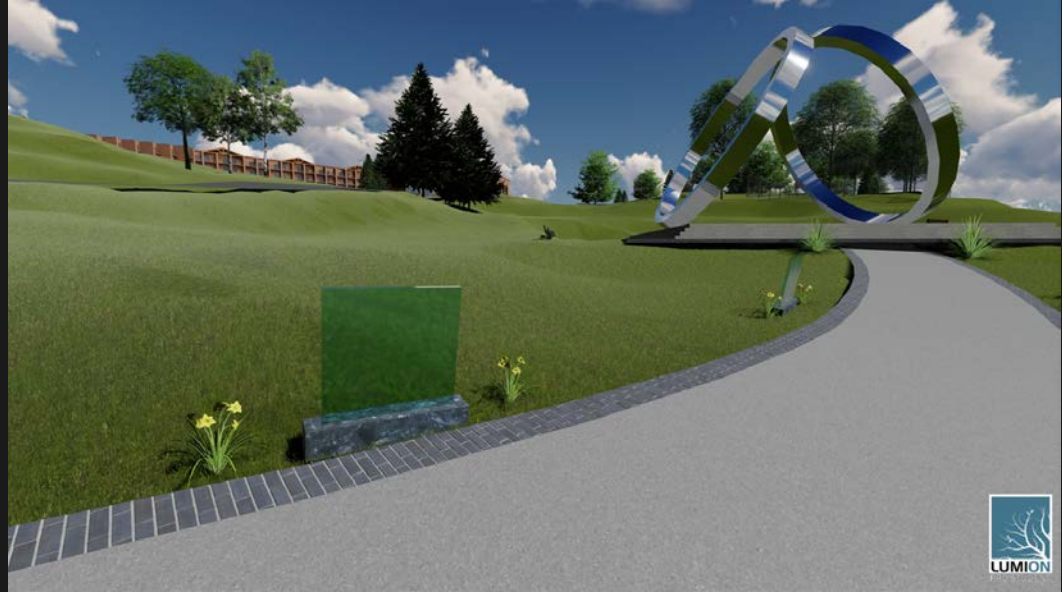
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Site Plans



Amenities

- Concrete walkway with gray etched brick
- Etched glass plaques with Au Sable Blue granite base



Cost Estimate



Design 1: \$290,000

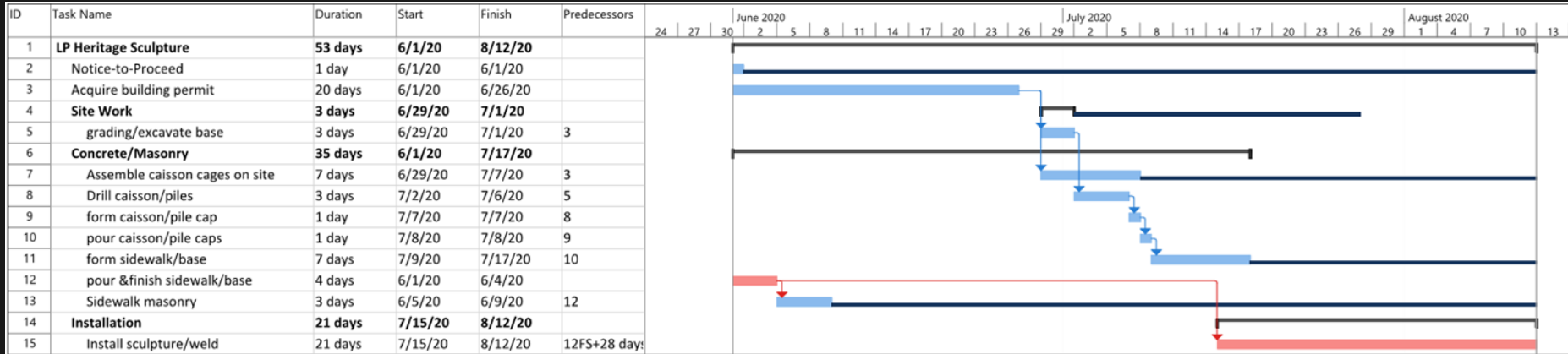


Design 2: \$270,000

Construction Cost Only – Need to add 25% for Design, Permitting, and other Soft Costs

Schedule

- 53 day construction schedule (optimistic, if all is in place, with extensive pre-construction prep)



Project Team



Riley White
Project Manager



Seamus Manning



Ryan Buckley



Mary Donsbach



Emily Denman



James Clark



Alison Vermeulen



Cassidy O'Brien



Good Knight: Emily Denman

- “Emily Denman '20, Engineering and Management Major/Project Management Minor, started working with Target Distribution as an operations manager almost six weeks ago while completing her degree. With COVID-19 disrupting normal supply chains, her role at Target is working hard to keep shelves stocked with essentials for the public. In addition, she has also been working at her father’s Domino’s Pizza store to help fill the schedule. The family business has been busier than it’s ever been before with sales up 40% from last year. Between the two jobs, she is working upwards of 60 hours a week and trying to finish out the last five classes of her undergraduate experience. A Good Knight who needeth not to be ashamed for sure.” – April 30, 2020



Fabrication

- Exterior to be made of stainless steel
- Galvanized steel truss system interior
- Physical Vapor Deposition to be used for gold finish
- HDPE Coating on side for Olympic colors

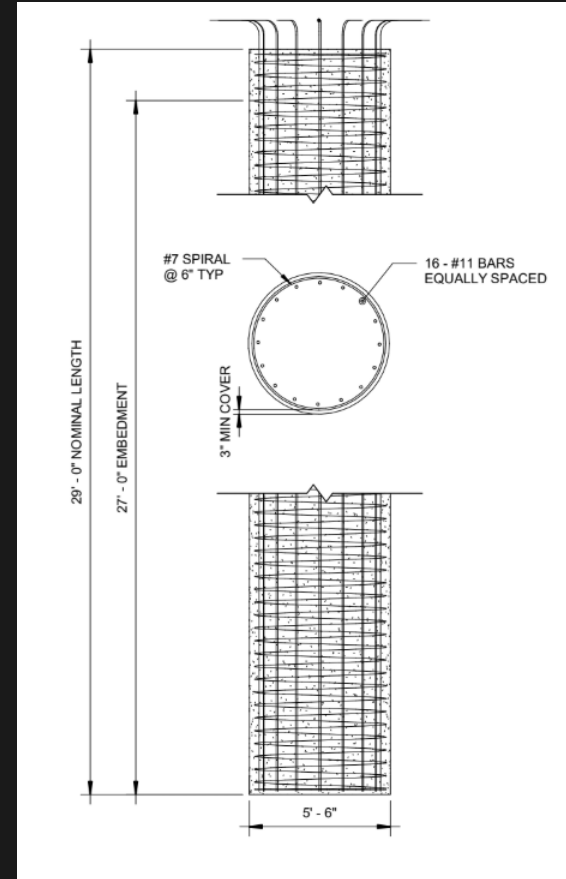


Subsurface Details

- SPT test data collected in 1973 at the adjacent Olympic Arena utilized
- In-situ soil consists of multiple layers of compact to very compact silty sand
- Traces of gravel and interspersed boulders
- SPT blow counts used to estimate soil properties
 - Elastic modulus
 - Friction angle
- Low groundwater table assumed
- Recent, site pertinent subsurface data should be collected

Drilled Shaft Design

- Two drilled shafts used to support rings, one for each ring
 - 5'-6" diameter
 - ~29'-0" length with 27'-0" embedment
 - #7 spiral reinforcing bar used with 6" loop spacing
 - 16 #11 equally spaced longitudinal reinforcing bars used
 - 3" concrete cover



Sustainability

- Lake Placid certified Gold for LEED for Cities and Communities
- LEED not applicable for the project
- SITES v2 for Sustainable Land Design and Development
 - Definitely possible for this project
 - Requires documentation and specific design specs outside of the sculpture itself



CSI Specifications

- 003132 - Geotechnical Data
- 023313 - Underground Utility Locate Service
- 032100 - Steel Concrete Reinforcement
- 055000 - Metal Fabrications
- 310000 - Earthwork
- 312513 - Erosion and Sediment Control
- 316400 - Caissons
- 321600 - Sidewalks, Curbs and Gutters

Questions?