

Secure Bike Storage Facility for Downtown Regina

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Problem Statement

North American cities are continuing to grow. Environmental and social issues such as roadway congestion and air pollution are only going to get worse as urban sprawl increases. Local municipalities are looking for ways to limit these negative impacts and improve the quality of life for people in their city. One investment that the City of Regina is making is increasing the amount of bike lanes. Bike lanes provide a safe space for bikers to use away from motor vehicles, which has proven to drive bike demand. We believe that the City must also provide secure storage facilities for cyclists to commute more regularly. Regina has a high rate of bike theft in many areas, and people may feel insecure leaving their bikes locked up outside with minimal security. Our project looks to address this issue with a pilot project located in the downtown area that provides bikers with an area to store their bikes in a secure space, which will hopefully further drive demand.

Design Components

- 38 Bike Capacity (2 spots for accessible bikes)
- Fob access & internal/external video surveillance
- Located in a spot that is convenient/visible
- Adds aesthetic to location
- Provides space for artistic flare
- Building materials are sourced & trusted in N.A.

Fig. 1: Victoria Park Bike Shelter Location



Fig. 2: CAD Drawing: Facility Plan View

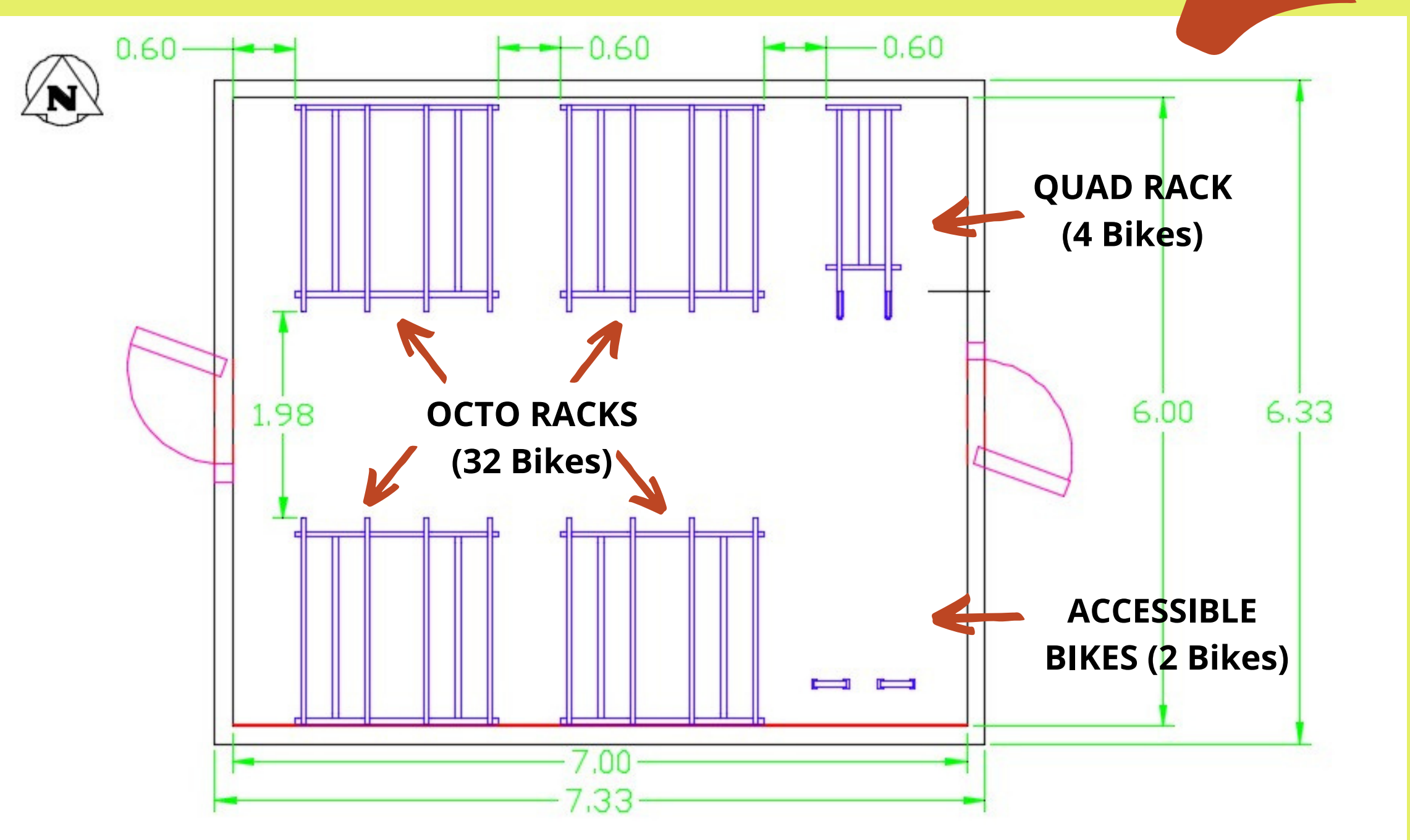


Fig. 3: Octo Rack

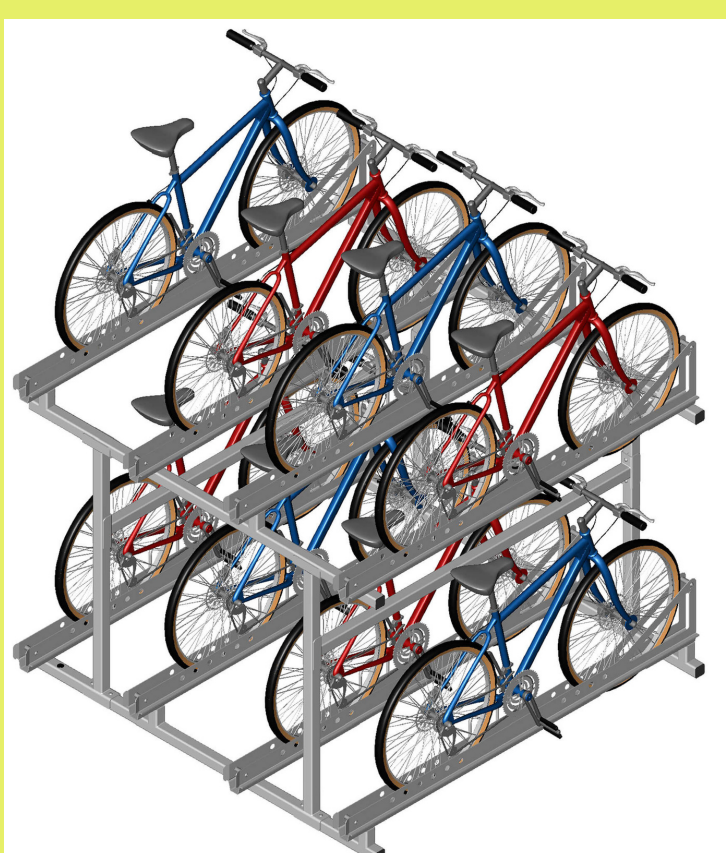


Fig. 4: Quad Rack

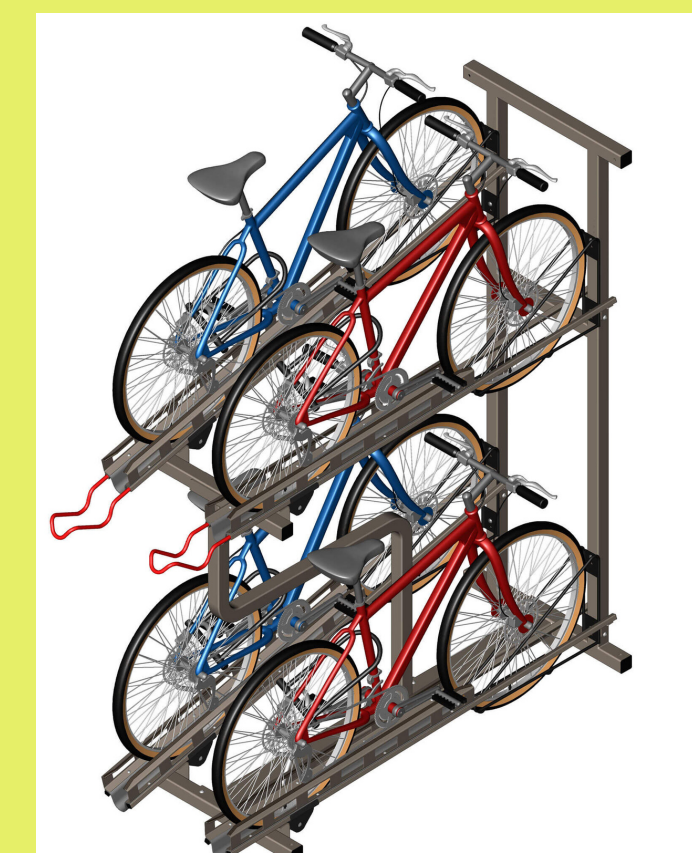
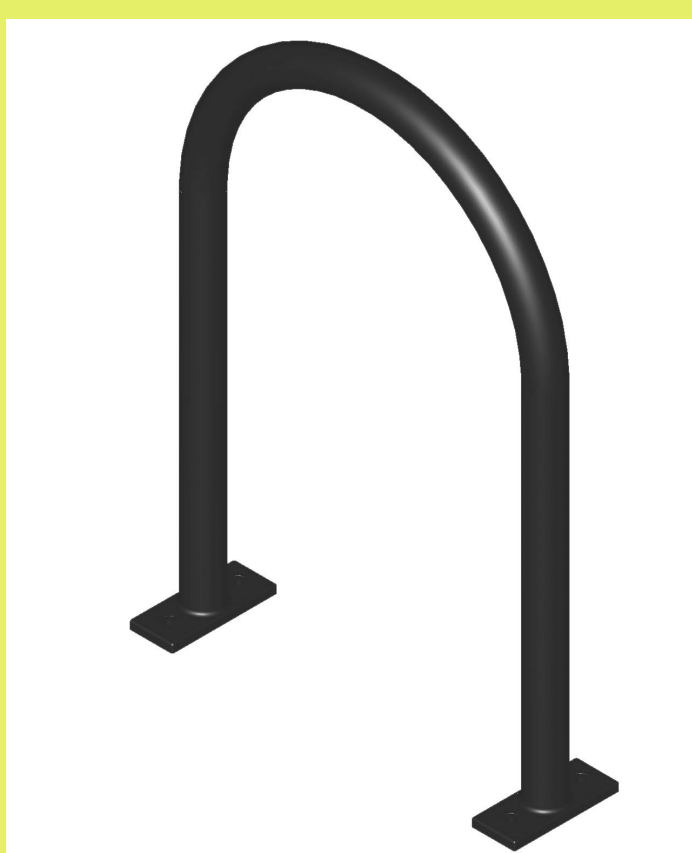


Fig. 5: Accessible Rack



User Experience

For a monthly fee, users can register to get fob access to use the facility. Users must register their bikes and collect their fobs from the Transit Information Centre.

Exterior Walls

Fig. 7: North and South Facing Walls

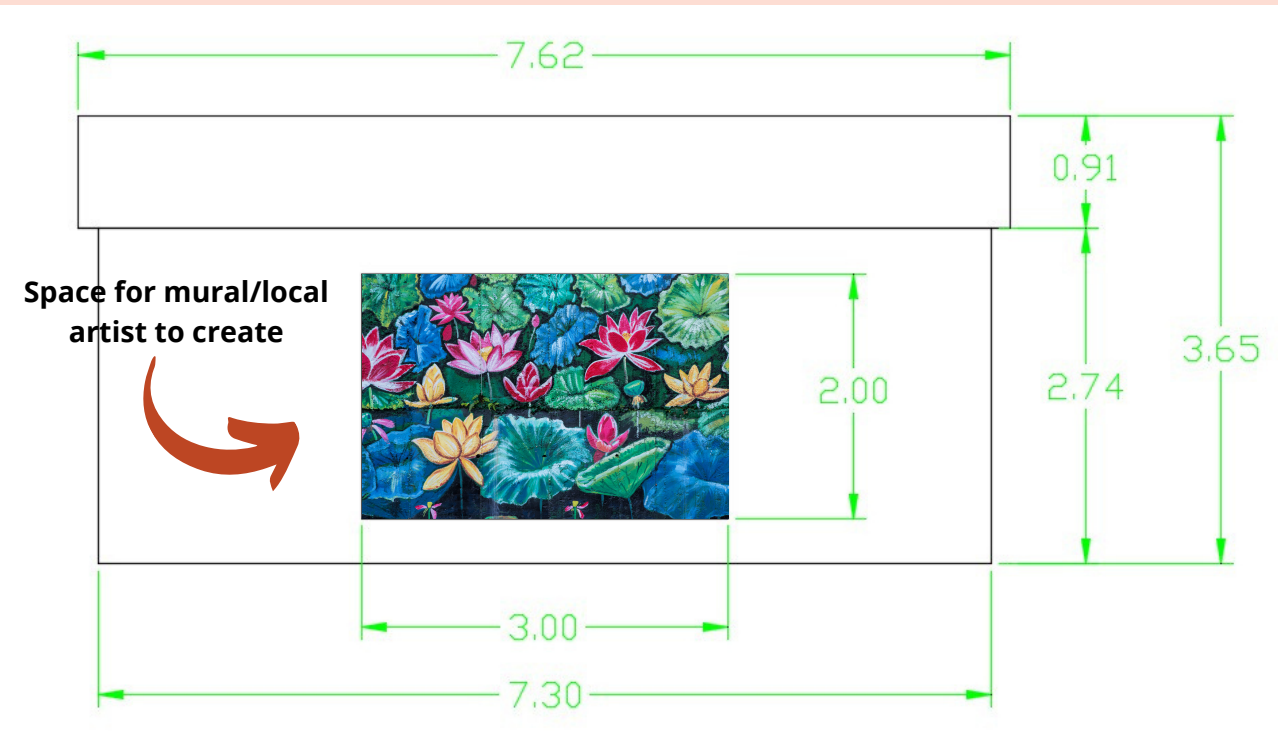
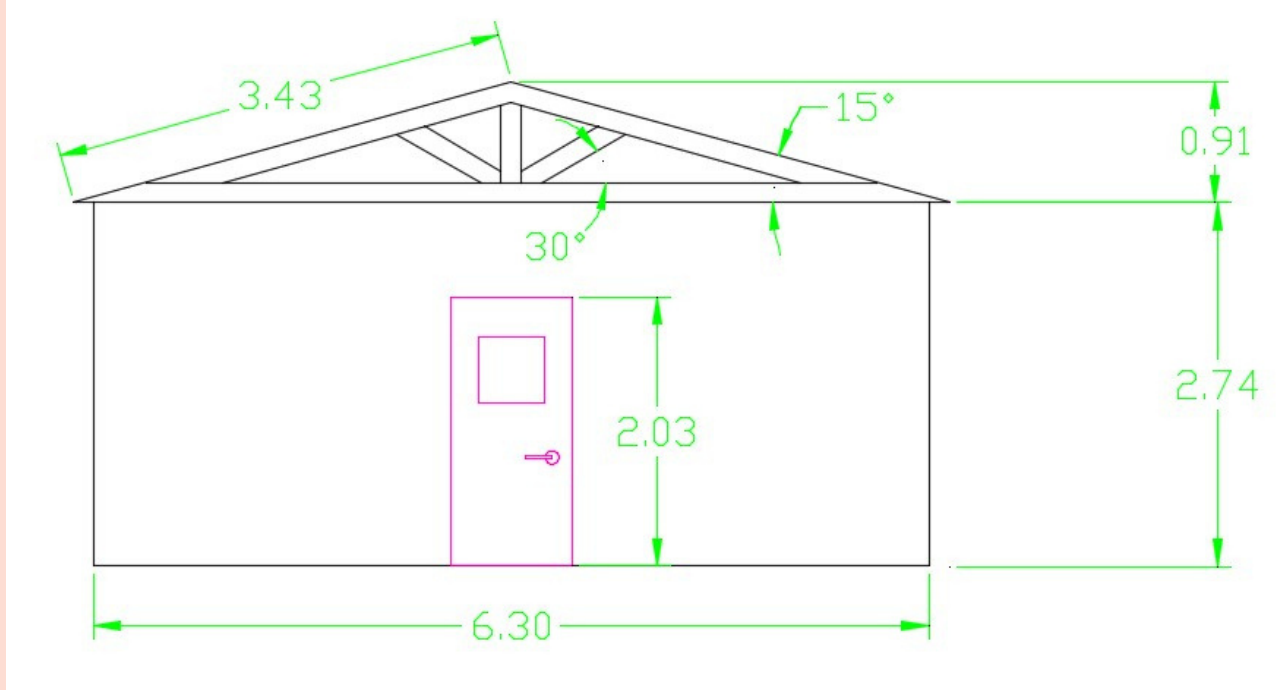


Fig. 8: West and East Facing Walls (Exit to East only)



Cost Analysis

| ITEM | PRICE |
|-------------------|----------------------------|
| Structure | \$20,000 |
| Foundation | \$10,000 |
| Ventilation | \$7,000 |
| Lighting | \$4,000 - \$5,000 |
| Bike Racks | \$30,000 - \$35,000 |
| Exterior Finishes | \$15,000 |
| TOTAL | \$86,000 - \$92,000 |

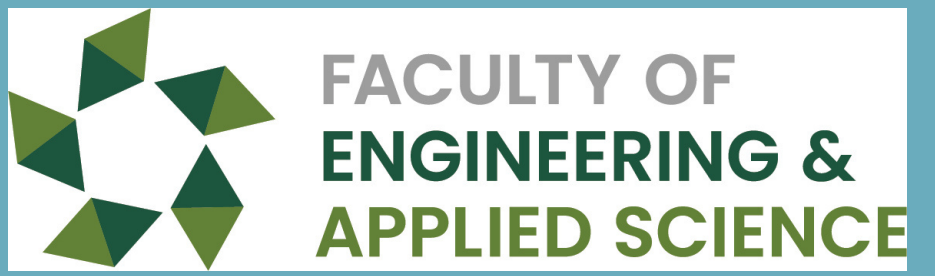


Figure References
Figure 1: Google Maps, <https://www.google.com/maps>
Figure 3, 4, 5: Cycle Safe, <https://cyclesafe.com/>