Introduction

- In the early 1880s the Schreibers, a British-Canadian family, built three houses: Lislehurt (near Ajiw-G343), Iverholme (Ajiw-G353), and Mount Woodham on the University of Toronto Mississauga (UTM) campus. In 1930 Regional Watkins, a merchant from Hamilton, purchased the land and further modified the landscape (Brand 2020). Several cultural landscape features (LF) from the Schreiber’s and Watkins’ occupations continue to be identifiable including roads and trails.
- In this poster we investigate roadways used by the Schreibers and Watkins. We examined how roadways and trails might have been connected on the property in the past.

Methods

- Surface survey of the study area was conducted to identify old roadbeds and trails. Historical maps, documents, images and data from previous field seasons assisted in determining areas of high potential.
- Sub-surface survey was conducted through test pitting near Ajiw-G354 to compare stratigraphy of known roadbed to non-road locations.
- Tree alignments associated with roadbeds were recorded.
- GPS waypoints of potential and known roads were collected using handheld GARMIN GPSMap 64 Series units.
- Roads and trails in the study area were mapped using ArcGIS Pro; topographic maps, orthophotos, and aerial photos were used as base maps and reference for the two and three-dimensional visualization of the collected waypoints.

Results

We successfully mapped two major roads in the study area:
1. The access road to Iverholme is separated into two segments on the east and west sides of a ravine.
   i. East Iverholme roadbed (LF-9) ranges from 3.4 – 3.6 m in width and runs north-south for ≈150 m descending across the slope of the ravine. At roughly 2/3 of the distance along the road a bridge would have crossed an artificial pond named Shawdowmere (Kim and Lin 2021).
   ii. West Iverholme roadbed (LF-7) is consistently 3 m in width and runs east-west for ≈80 m on an incline that leads to the foundation of Iverholme (Ajiw-G353) (see Figure 2).
2. A concrete curb-lined road (LF-13) measuring 28 m in length and 3.1 m in width curves from Principal’s Road; 2) segments of the original access road paralleling outer circle road including Watkins’ cedar trail bend (LF-01); and 3) a trail that is parallel, but not aligned with the present-day Nature Trail. (See Figures 2 and 3)

Discussion

- Aerial photos dating from 1954 to present show an access road where Principal’s Road is found today.
- Two test pits, one on a known roadbed and one on non-road environment, revealed different stratigraphic characteristics which will form a baseline for future research.
- A trail to the west of the study area (current Nature Trail), previously thought to be a historical road, does not correspond to topographic maps from 1962, which suggest the road present on the west side of the property took a different route (see Figure 3).
- Changes made during Watkins ownership of the property include the addition of a roadbed, lined with cedar trees too young to be associated with the Schreiber occupation, leading to present-day Principal’s Road (see Figure 3).
- Characteristics of the two mapped roads indicate that they are definitive roads:
  - Sub-surface testing of the curb lined road demonstrated highly compact soil indicative of a roadbed.
  - The East Iverholme Roadbed is clearly cut into the natural slope of the ravine indicating intentional creation of a roadbed.
  - The West Iverholme Roadbed contains a filled section and a section cutting into the slope.
  - A bridge once connected the east and west roads as indicated on the top left photo in Figure 1.

Limitations

- Time constraints led to mapping only the Iverholme roadbeds and the abandoned roadway with GPS unit.
- Some published aerial and topographic maps were inaccessible due to vegetation (e.g., poison ivy, dense foliage, standing dead trees).
- Relatively few maps and aerial photos showed roads and trails from the Schreiber period (e.g., 1944 is the earliest known aerial photo from the area).
- The exact location of specific roads is not thoroughly documented in written accounts of the area.
- GPS accuracy was affected due to uneven terrain and overhead tree canopy.

Conclusion

- All of the known roads were mapped through GPS and ArcGIS, however there could be others that have not been identified.
- There are no absolute dates for specific roads that were mapped during the study period.
- The trees surrounding the study areas and artifacts that have been found in previous field school seasons indicate a relative date range that is not connected to specific roads.
- The two test pits associated with the curb will allow us to better identify potential roads in the future.
- Further research should be conducted to better clarify our understanding of historical roadbeds in the property.

References

https://utm.library.utoronto.ca/datagis

University of Toronto Mississauga Library. (2021). Ortho Image)

Figure 2. Aerial view showing the Iverholme access road (Base map 2022 Ortho Image)

Figure 3. Amalgamation of all known roads, including those identified using historic sources.

Figure 1. Photos of landscape features: bridge abutment (left); Iverholme access road roadbed (right)

Figure 4. Birds eye view showing the Iverholme access road (Base map 2022 Ortho Image)