The cabin design is to be a secure and comfortable space for recreational development between students, mentors, teachers, and friends. In regard to material, the cabin will be constructed with wood that is harvested on land. This sustainable practice will be repeated with the numerous cabins built from this standard design. Finally, the cabin is expected to withstand varying and harsh conditions due to the completion of wind loading analysis, heating and cooling analysis, base design and analysis, and more structural calculations to ensure a successful and reliable design. The public welfare is also enhanced by a successful HVAC and lighting design. The cabins and later developed campground may also encourage participation in outdoor activities and lifestyles.

**REFERENCES**

- American Concrete Institute
- American Disabilities Act
- American Society for Testing and Materials
- American Society of Civil Engineers
- American Society of Heating, Refrigerating, and Air Conditioning Engineers
- International Building Code
- International Residential Code
- National Design Specification for Wood Construction
- National Electrical Code
- Ohio Building Code
- Structural Analysis by R.C. Hibbeler (Tenth Edition)