

Objectives

This land use plan provides the City of Maquoketa with a zoning plan, street and trail network, water main and sanitary sewer, as well as stormwater management for the 335 acres of undeveloped land to the south of the city. The goal of this land use plan is to provide an efficient and aesthetically pleasing use of the area, allowing the city to grow with minimal impact on existing residents and provide economic prosperity and sense of community.

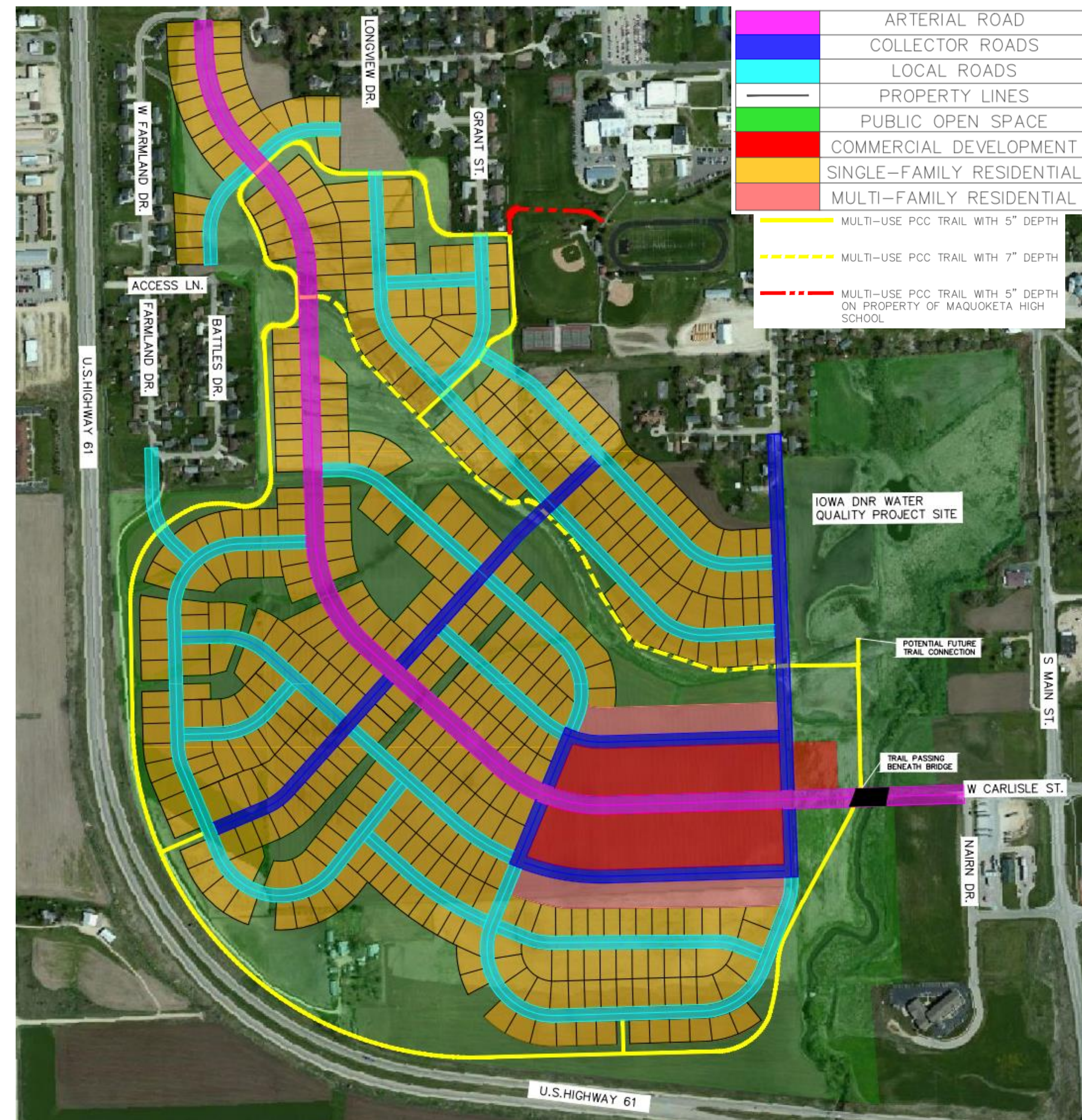


Figure 1: Proposed zoning and street and trail networks.

Stormwater

Regional stormwater management will be in the Iowa DNR Water Quality Project Site. All drainage corridors are located within greenspace with a main drainage channel through the center of the site which will comprise of native grasses, providing aesthetics for the neighborhood. A 160-foot span bridge will be required over Prairie Creek for the arterial road.

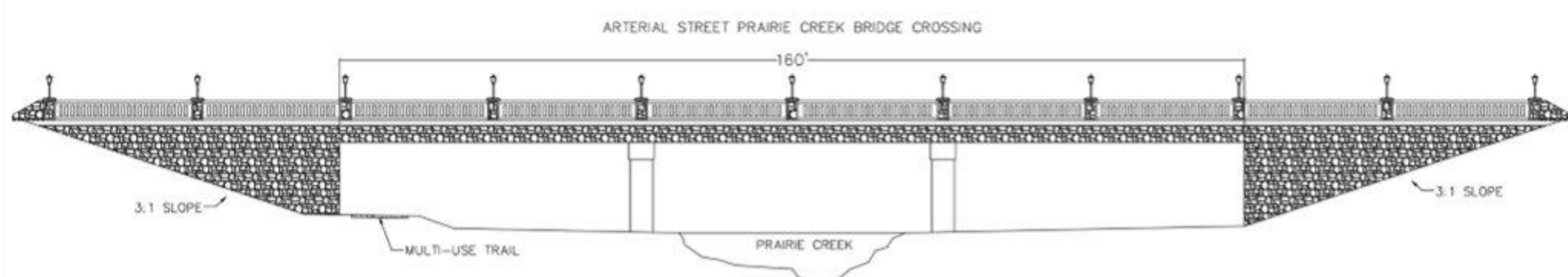


Figure 2: Proposed Prairie Creek bridge aesthetics and geometry.

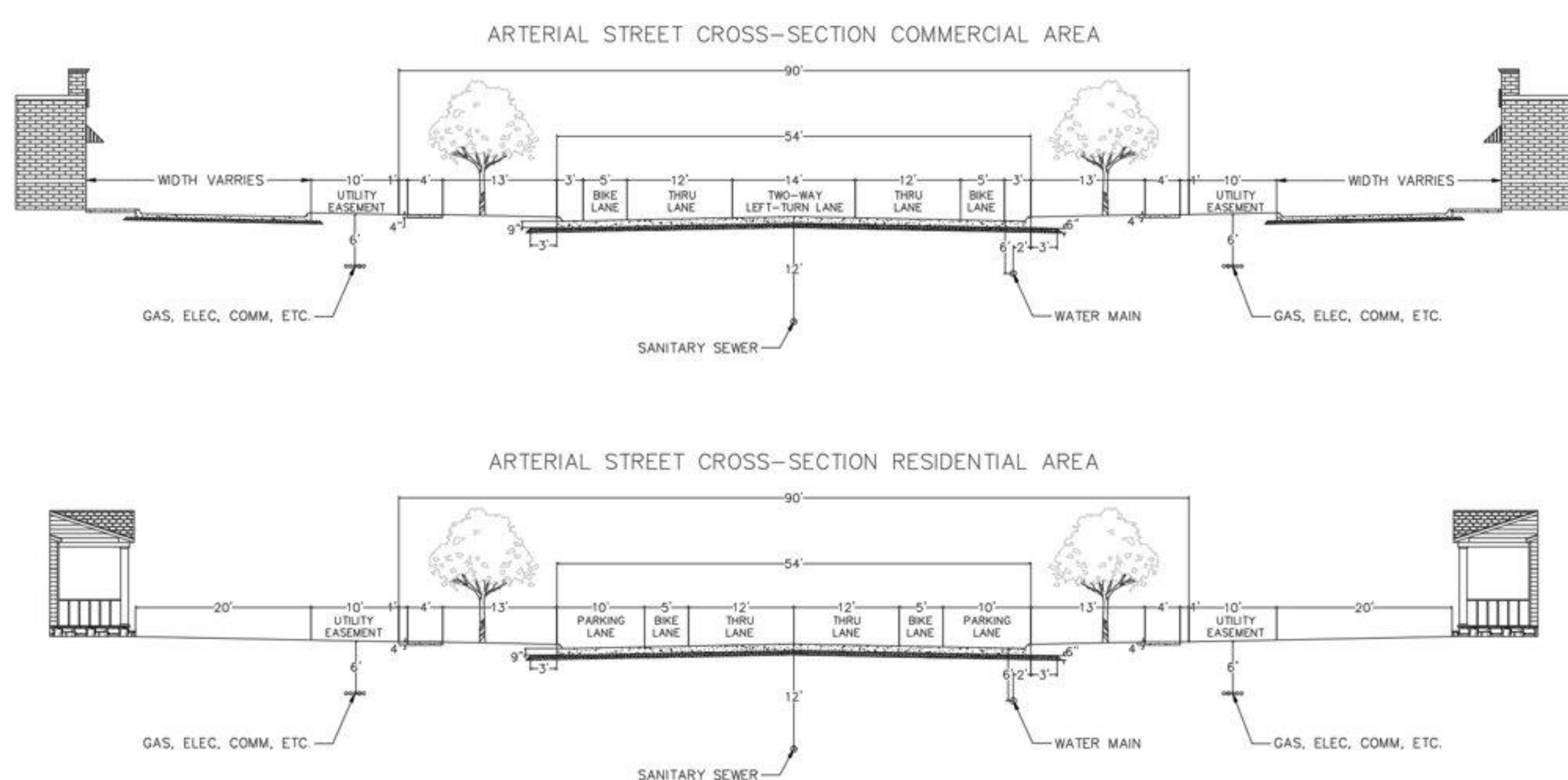


Figure 3: Proposed cross-sectional layout of arterial street.

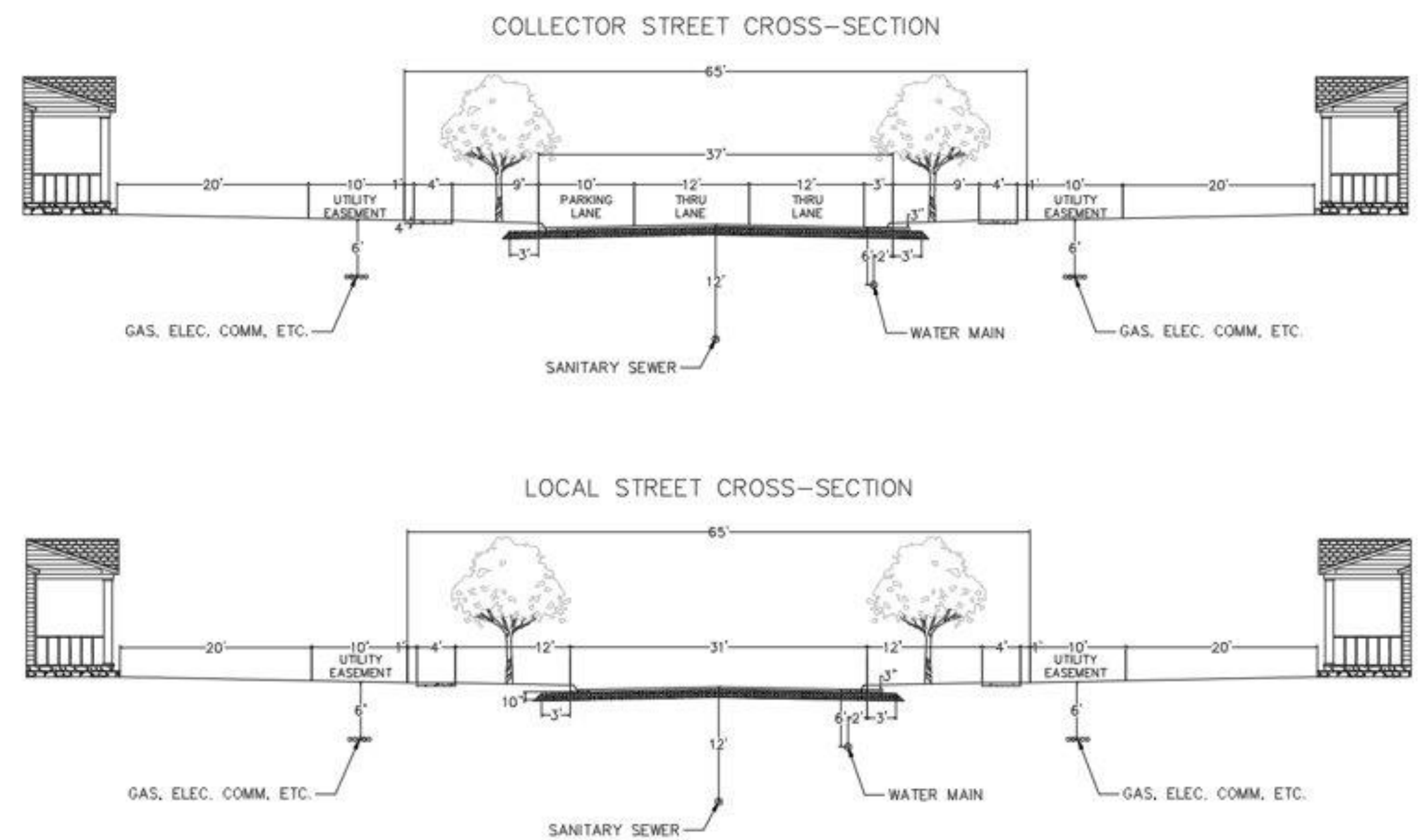


Figure 4: Proposed cross-sectional layout of collector and local streets.

Water Main and Sanitary Sewer

The existing water main and sanitary sewer located adjacent to the site as well as within it are adequate for the proposed development. Upon full development the City of Maquoketa should expect an increase of 0.15 MGD on the water system and 0.24 MGD on their sanitary system. It is recommended that the existing lift station be monitored during development as the capacity was unable to be determined.

Trail Network

3.12 miles of multi-use trail is provided within this plan providing interconnectivity and a recreation/fitness asset for the community. There are proposed links to connect the high school and Iowa DNR Water Quality Site to the trail system. The portion along U.S. HWY 61 will serve as a natural buffer for the neighborhood using native trees such as white pines and red oaks.

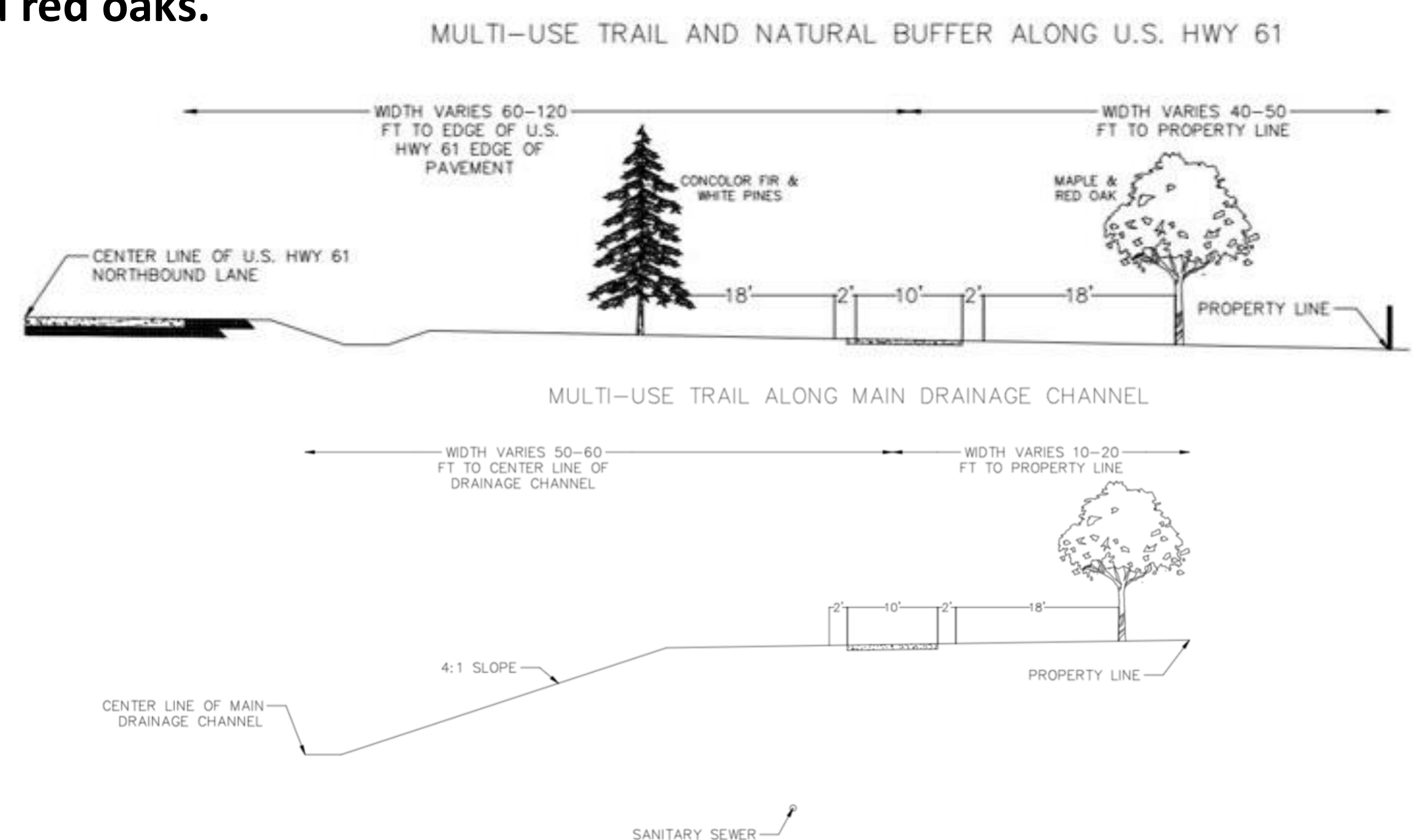


Figure 5: Proposed cross-sectional layout of trail network.

Increased Tax Base and Infrastructure Value

Following full development, the tax base for the City of Maquoketa is expected to increase by \$134.3 million and the added infrastructure will provide the city with an additional \$20.1 million in infrastructure assets.

Conclusions

The land use plan focuses mainly on single-family residential housing, providing 490 new single-family lots, 8 acres of multi-family housing, and 15 acres of commercial space. The commercial space will support the neighborhood by providing dining and childcare facilities within the area, helping make this a highly desirable neighborhood. This addition will allow Maquoketa to grow by 20% in the years to come while also providing the community with large amounts of green space and trails, both a recreational asset to the community. The interconnectivity within this neighborhood and surrounding areas will allow this area to prosper in the many years to come as the city continues to grow.

References

- Iowa Department of Transportation Design Manual
- Iowa Statewide Urban Design and Specifications (SUDAS)
- Iowa Stormwater Management Manual (ISWMM)
- Maquoketa Iowa City Code