



## PROJECT PROFILE

### City of Royal Oak Green Infrastructure Evaluation Project

**Client:** City of Royal Oak

**Location:** Royal Oak, Michigan

**Service Areas:**

- Green Infrastructure
- Community Planning

**Services Provided:**

- Site Visioning
- Conceptual Stormwater Design
- Hydrologic Modeling
- Cost Estimating



## Project Activities

The City of Royal Oak commissioned an evaluation of using green infrastructure to reduce runoff entering the City's stormwater system and to reduce localized flooding. The project included an analysis of existing conditions at representative pilot locations that could be retrofit with green infrastructure to serve as a planning guide for the City of Royal Oak. The conceptual green infrastructure designs were sized using the runoff curve number approach for the 98-percentil storm event. Green infrastructure techniques considered included rain gardens, bioswales, infiltration trenches, and porous pavement. Finally, the project also included an evaluation of infiltration capability of local soils, the development of a recommended planting list, and identification of potential funding opportunities for green infrastructure.

## Outcomes

The final outcome was the *City of Royal Oak Green Infrastructure Evaluation Report* that described green infrastructure potential in their community organized around land use typology including parks, alleys, parking lots, major roads, and neighborhood subdivisions. The report provides a plan for implementation on the sites evaluated and recommendation for transfer to other areas of the city based on volume of stormwater removed, cost, soil infiltration, social use, and implementation concerns.