The Town of Penfield requested structural and site engineering design to replace an obsolete stone box culvert carrying Baird Road over Hipp Brook. The Town wished to enhance the culvert with addition of new sidewalks. To support the community's architectural character, MRB Group provided a design that incorporated stonework to create the appearance of an older, historic structure.

As part of this project, existing storm sewers needed to be redirected into the culvert barrel, which prompted a concern regarding the possible thermal impacts to Hipp Brook.

MRB Group developed a concept plan to install two sub-surface, thermal mitigation structures into the storm sewer system to address the environmental concerns. The new box culvert included a pre-cast barrel with cast-in-place headwalls and parapets.

MRB Group provided the following services for the project:

- Survey and mapping
- Conceptual planning
- Site design (including sidewalks)
- Preparation of environmental permit applications
- Development and design of environmental mitigation features
- Preparation of plans and specifications
- Bidding services
- Contract administration





Client: Town of Penfield

Location: Penfield, New York

Completion Date: 2000

Engineer: MRB Group

