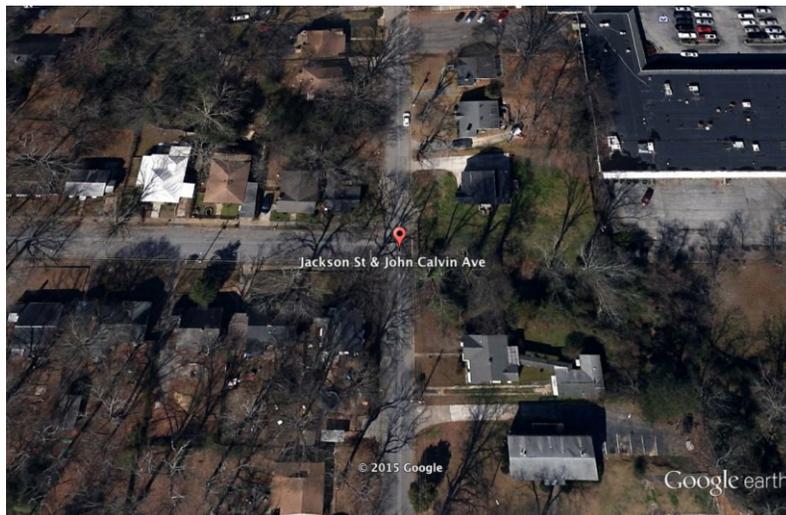


City of College Park:
Jackson Street Storm Water System
Upgrades.

Project:	Design of storm water system upgrades for Jackson Street in College Park.	
Client:	City of College Park	
Location:	Jackson Street, College Park, Georgia	
Completion:	Completed	

Objective: To eliminate flooding at Jackson in College Park



At Jackson Street and John Calvin Avenue, storm water transitions from open channel flow at the northwest side of Jackson Street into two (2) 54-inch concrete arch culvert pipes installed across and under Jackson Street. These twin culvert pipes exit at an open junction box on the southeast side of Jackson Street. From the exposed junction box, storm water runoff entered a single horizontal elliptical corrugated metal pipe, with approximate dimensions of 36 inches high by 65 inches wide. The corrugated metal pipe is approximately 80 feet long and emptied into an unprotected natural channel. The twin concrete arch pipe

culverts installed under Jackson Street are in good structural condition. However, the structural integrity and capacity of the corrugated metal pipe was seriously compromised with signs of extensive corrosion and significant deterioration. These deficiencies resulted in flooding, inconvenience and damage to properties within the project area.

In 2008, the City of College Park engaged MME to undertake a drainage study, and prepare designs, construction grade plans and bid documents to correct these deficiencies. The drainage study included multiple SWMM models to examine the hydraulic capacity, flow rates and water surface elevations along the proposed channel for the 10-year, 25-year and 100-year storm events.

Based on MME's designs, the city of College Park engaged a contractor to install a custom-sized conduit configured for the site conditions to avoid existing underground utilities. For the design 25-year storm event, the ratio of maximum depth to full depth was determined to be 0.66, exceeding the one foot free board desired by College Park and provided a factor of safety to counter any loss in capacity that may be occasioned by the accumulation of debris and other foreign matter that may enter the storm drainage system from time to time.