

Project Narrative

Project: Falcon Marketplace – Modification to 96” storm drainpipe to address groundwater pressure burdening the pipe

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Based upon onsite observations of Jehn Engineering professionals, as well as a review of the project documents, it was determined that an elevated water table surrounds the 96” storm drainpipe and is infiltrating the pipe via the joints.

This storm line carries offsite flows around the development and does not intercept on site flows.

Reinforced concrete pipe is not considered water-tight and is subject to infiltration when exposed to hydrostatic water pressure. Jehn Engineering developed a plan for reducing the hydrostatic pressure surrounding the pipe by lowering the water table immediately surrounding the pipe, which in turn will substantially reduce, if not eliminate, the infiltration into the pipe thru the joints. The introduction of the valves will relieve pressure by giving the ground water another (less resistant) path to enter the pipe.

Multiple valves will be installed at strategic locations throughout the length of the pipe and thru the downstream headwall.

Groundwater will continue in the same tributary and not be diverted.

If successful, these modifications will serve to ensure long term viability of the storm line.