

City of Broken Arrow

Drainage Advisory Committee



PROJECT REPORT

DATE:	10/15/19
NAME:	Mr. Jorge Rodriguez and others
ADDRESS / LOCATION:	2935 N Lions Dr., Broken Arrow, OK 74012 – Stonewood Crossing
WATERSHED:	Haikey Creek – Middle Branch
ESTIMATE:	\$25,000.00
CASE:	No. 19-002

DESCRIPTION

The property immediately north of Mr. Rodriguez is vacant and has a pool of water that is constantly present. In addition, Mr. Rodriguez' backyard and the backyard of the property to his neighbor immediately to the south are constantly wet. The ground is so saturated that neither property owner are able to mow their yards. His neighbor has installed a French drain that is always running water to the gutter of the street. Other neighbors have seepage from their yards into the gutter as well.

Staff has investigated the site and believes that an underground interception system may help mitigate the groundwater issue by capturing it and conveying it to a nearby public stormwater sewer system. Examination of the vacant lot to the north of the property reveals what appears to be a spring. Based upon the initial observations, it appears that the groundwater is fed by a spring.

According to the property owners, the water did not surface until Mr. Rodriguez' home was constructed about two plus years ago. This can be explained due to the increased loading that any residential dwelling structure will impose on a vacant lot. The load forces the saturated water to the surface much in the same manner as pressing down on a nearly saturated sponge. The water is forced up and out from the increased load.

Our observations also revealed an edge drain installed along the south side of Juniper Court behind the curb line by the developer. This is strong evidence of the presence of water discovered during the construction of the roadway network. Staff estimates that \$25,000 could help design and construct a network to mitigate the situation.

BENEFIT

Remove the water from the sidewalk eliminating the potential pedestrian hazard and eliminate constant running water into the gutters of the public transportation system.

RECOMMENDATION

Install an underground groundwater interception and diversion system to convey waters to the stormwater system

COMPLETED BY: PPW

DATE: 10/17/19