Community Value

The SW 52\textsuperscript{nd} Street Flood Relief project is valuable to the community in normal circumstances and in natural disasters because it mitigates flooding in the area. The SW 52\textsuperscript{nd} Street project site lies completely within the Priority Focus Area for Silver Springs. Flooding may occur as a result of natural disasters such as tropical cyclones, or as a result of normal seasonal weather patterns. Currently, there are no constructed drainage retention areas (DRAs) along SW 52\textsuperscript{nd} Street to accept and store stormwater. During Hurricane Irma (2017), SW 52\textsuperscript{nd} Street flooded and remained impassable for several weeks. By constructing new DRAs, stormwater conveyance infrastructure, and raising the road elevation, the County will increase the resiliency of the area and offer greater protection to the surrounding subdivisions.

The community lifelines served by this project include: (1) safety and security; (2) health and medical; (3) energy; (4) communications; and (5) transportation. Flooding from severe storms and tropical cyclones poses a risk to the safety and security of the residents within the area. By improving the flooding scenario, the County will increase the safety and security of its residents and property owners during natural disasters. Additionally, this project will improve the stormwater management system which will increase the road level of service within the area. By improving drainage, the County will alleviate road flooding thus allowing access and transportation to continue safely before, during, and after a storm.

Flooded roads can result in significant increases in time to respond for emergency vehicles and residents may be detoured several miles for days or weeks. This project directly improves the ability of the health and medical, energy, and communication lifelines to provide a quicker response time by preventing detours (ambulances, fire rescue, police, etc.) and allows access to critical infrastructure (water lines, sewer lines, electrical power lines, internet, telephone, etc.). This increases community resiliency because if roads do not become impassable, as they have historically, critical infrastructure repair crews will be able to restore services much quicker and residents will be able to return to their homes sooner.

In addition to the issues of access by emergency vehicles and service industry repair crews, repeated inundation will reduce the effective life span of the roadway base and components. Water and moisture damage decrease the strength and durability of the asphalt due to the loss of the bond between the asphalt and the road base. Extended durations and frequencies of moisture penetration accelerate the deterioration of the roadway base. This underlying deterioration is reflected by cracking, stripping, rutting, bleeding and ultimately failure of the top asphalt surface. The drainage improvements proposed will help to prolong the lifespan of the rebuilt roadway resulting in less disruptions to transportation due to asphalt repair. The SW 52\textsuperscript{nd} Street Flood Relief project completion will increase the resiliency of this area within Marion County by serving these community lifelines. This project does not propose to impact an area of cultural or historical significance.