

WASTOP PREVENTS FLOODING IN MOUNT PLEASANT, SOUTH CAROLINA

Location: South Carolina
Customer: Mount Pleasant

PROBLEM:

Mount Pleasant South Carolina lies on Charleston Harbor within sight of Fort Sumter National Monument. People are drawn to Mount Pleasant by beautiful views of the water, cool breezes and southern charm. Growth in the last 30 years around the cities Old Village historic district has put high value developments right up to tidal creeks and inlets for easy ocean access. The proximity comes with risk for the property owners. Storm water systems funnel run-off through a series of channels and pipes out to these tidal areas. When the tides are high, sea water can fill this system preventing run off from being carried away causing streets, yard and homes to flood. The salt water often damages the roads creating costly repairs for the city and kills lawns and shrubbery frustrating home owners. Backflow preventers are used to stop tidal water from entering the system at the pipe outlet.

Traditional devices such as flap valves can be prevented from working as designed by build-up of debris or shell fish in and around the valve, thus requiring regular maintenance and cleaning. A flap valve was used in an attempt to protect a beautiful cul-de-sac that suffered from tidal flooding. The home owner that was primarily affected by the flooding informed described that during heavy rains the cul-de-sac street would flood completely preventing anyone from parking or accessing the homes with getting wet. Additionally, his grass and ornamental plants were regularly killed by salt water. The frustrated home owner would take his broom out to the flap valve during these storms and stand dangerously on a muddy bank to clean sticks and debris from the flap to help stop this mess.



SOLUTION:

The city heard the residents' complaints and replaced the flap with a WaStop inline check valve. The WaStop is self-cleaning and requires virtually no maintenance. Due to its unique pulsating flow action, the valve is self-cleansing ensuring mud and other debris is kept clear of the outfall enabling the stormwater to run off the road and nearby property whilst stopping tidal backflow. Since the installation the property has not flooded and the over-joyed home owner has a vibrant lawn and does not need to

risk cleaning the outlet. He and his neighbors can now sleep soundly during a rain storm.

Four years post installation, Emily Demore, Assistant Stormwater Manager, confirmed that the valve was still functioning without issues, and does not require maintenance. This saves enormous costs for the Town freeing up resources for other issues facing the Town of Mt Pleasant.

The installation was in fact so successful that another nearby homeowner invested in a WaStop to protect his home and lawn against tidal flooding. The instant protection provided by WaStop, along with the low maintenance was deciding factors. Just four days after order the WaStop the homeowner was protected.