



## COBRA LOCK® FAST CARTRIDGE-STYLE ASSEMBLY PROVIDES RELIABLE WATER SUPPLY AND QUICK RESPONSE TO RICHMOND BOG FIRE

The City of Richmond was tasked with supplying a temporary water source for the city fire department fire crews, within 30 m (98 ft.) of a slow burning bog fire that would require several weeks to extinguish.

**Application:**  
Water Main

**Project Type:**  
Temporary Above-Ground  
Water Servicing

**Owner:**  
City of Richmond

**Product Used:**  
Cobra Lock®

**Contractor:**  
City of Richmond

### CHALLENGE

In the summer of 2018 under hot and dry conditions, the City of Richmond Fire Department was facing a tough situation – attempting to extinguish a slow-burning bog fire near Westminster Highway and Shell Road. The cause of the fire is unknown, however, as a result of surrounding residential development and an increasingly efficient water pumping system in the municipality, water is not saturating the forested bog throughout the year, as it once did, and the bog is now dependent on direct rainwater. The fire was in roughly a 12-hectare (30-acre) area within a local, heavily-wooded nature park on the Department of National Defence lands located 280 m (919 ft.) from the closest fire hydrant on Shell Road. Running a fire hose from the closest hydrant to the fire lead to a significant drop in water pressure, limiting the effectiveness of combating the fire. Upon this realization, the Fire Department reached out to the Public Works Department requesting a temporary water service to reach within 30 m (98 ft.) of the blaze.



### APPLICATION

Providing water to extinguish the fire was critical and a traditional buried watermain pipeline would take weeks to install. A temporary water service solution was needed that could be installed above ground as quickly as possible, given the active fire. Cobra Lock® restrained joint PVC pipe from NAPCO Royal Pipe & Fittings was selected for the 250 m (820 ft.) 200 mm (8 in.) temporary above-ground pipeline to service the fire location.

### SOLUTION

Cobra Lock's self-restrained joint system meant that the pipe could be assembled quickly atop uneven ground without the use



# MUNICIPAL CASE STUDY

of metal restraints, thrust blocks or compacted trench soils. With no time to spare, the city waterworks crew quickly assembled 250 m (820 ft.) of 200 mm (8 in.) Cobra Lock between the closest hydrant and the bog fire. This was accomplished by first clearing a path to the fire, then dragging lengths of Cobra Lock pipe with a bulldozer, stopping every 6 m (20 ft.) to assemble a joint- the Cobra Lock restrained joint can be assembled in less than one minute per joint. With the Cobra Lock pipe in place, high-pressure water could be supplied to the fire location, allowing the fire crews to effectively tackle the blaze.

With the water service in use around the clock for several weeks, the bog fire was extinguished. When the water service was no longer needed, the Cobra Lock PVC pipe was easily disassembled and stored at the city yard for future use.



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