

City of Alexandria, Virginia

MEMORANDUM

DATE: APRIL 9, 2003

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: PHILIP SUNDERLAND, CITY MANAGER *PS*

SUBJECT: BUDGET MEMO # 16: COMBINED SEWER OVERFLOWS  
(COUNCILWOMAN EBERWEIN'S REQUEST)

The City of Alexandria is authorized by Virginia Department of Environmental Quality (DEQ) permit to operate a combined sanitary and stormwater sewer system in accordance with United States Environmental Policy Administration (EPA) guidelines. This combined system is present in only a portion of Old Town (see attached map), as this system design was the norm when sewer systems were built in older cities. By operating the combined sewer system according to accepted best practices, the City is able to avoid the expensive and disruptive construction that would be necessary to replace it with a separated sanitary sewer system. The DEQ permit includes an allowance for the discharge of system overflows at the City's four combined sewer outfalls during periods of wet weather only. The permit was granted in 1995, renewed in 2001, and due to expire in 2006. The City is eligible to reapply in 2006.

Under the terms of the permit, the City must implement measures prescribed by the DEQ to minimize the environmental impact of operating such a system. The measures include standards for operations, storage, inspections and maintenance to minimize the volume and impact of the wet weather overflows, monitoring and reporting requirements, and public information efforts. The City is in complete compliance with these requirements.

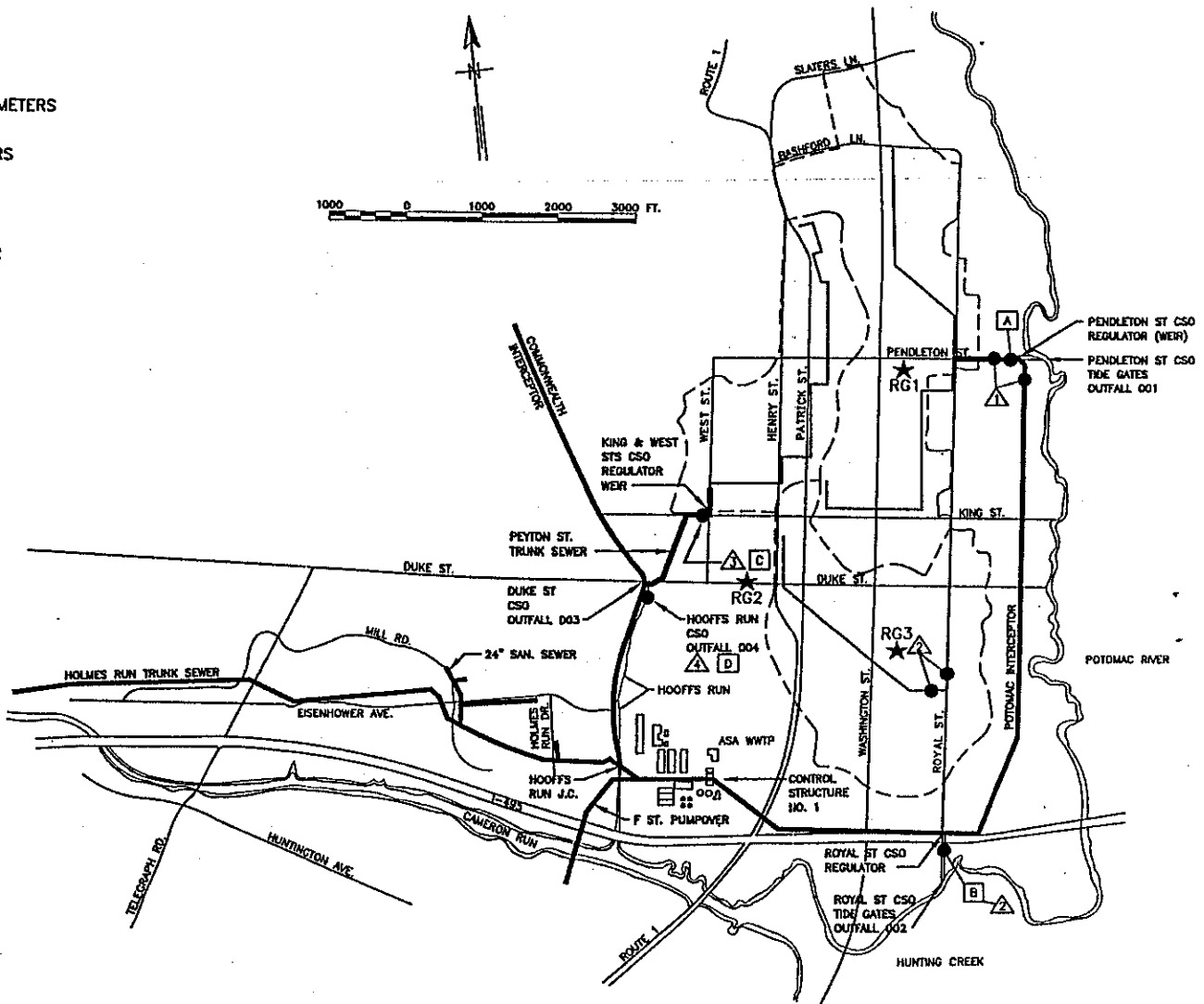
On 47 wet weather occasions in calendar year 2002, the Royal Street outfall discharged overflow. On 19 of those occasions, it was the only outfall to overflow. On 28 of those occasions, the Pendleton Street outfall also overflowed, and on 24 of those occasions both the Pendleton Street and Duke Street outfalls overflowed. The Hooffs Run outfall did not overflow in 2002. None of the overflows at Royal Street, Pendleton Street, or Duke Street occurred during dry weather conditions.

Even though the overflows are permitted by the DEQ, the City continues to make efforts to minimize their occurrence and environmental impact through the mitigation efforts mentioned, through the sanitary sewer capital projects, and by separating portions of the combined system as the opportunity is presented through Old Town redevelopment, such as the upcoming redevelopment of the Samuel Madden Homes Downtown with its 152 residential units.

Attachment: Map Showing Location of Combined Sewer System

**LEGEND**

- INTERCEPTORS AND TRUNK SEWERS
- - - COMBINED SEWER DRAINAGE AREA BOUNDARY
- ① FLOW MONITORING FOR PENDLETON ST. CSO, 2 - METERS
- ② FLOW MONITORING FOR ROYAL ST. CSO, 4 - METERS
- ③ FLOW MONITORING FOR DUKE ST. CSO, 1 - METER
- ④ FLOW MONITOTING OF HOOFFS RUN CSO, 1- METER
- A SAMPLING STATION FOR PENDLETON ST. CSO
- B SAMPLING STATION FOR ROYAL ST. CSO
- C SAMPLING STATION FOR DUKE ST. CSO
- D SAMPLING STATION FOR HOOFFS RUN CSOS
- ★ RG -- RAIN GAUGE LOCATION



**LOCATION OF FLOW MONITORS, SAMPLING LOCATIONS AND RAIN GAUGES**

CITY OF ALEXANDRIA  
 TRANSPORTATION AND ENVIRONMENTAL SERVICES  
 COMBINED SEWER SYSTEM  
 2002 ANNUAL REPORT