

c a m b r i d g e

CITY OF CAMBRIDGE • EXECUTIVE DEPARTMENT

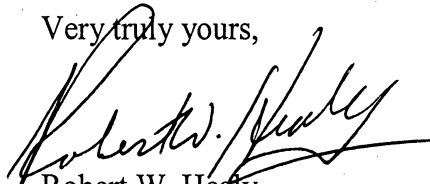
Robert W. Healy, City Manager Richard C. Rossi, Deputy City Manager

July 2, 2001

To The Honorable, The City Council:

Please find attached information requested at the June 18, 2001 City Council meeting, concerning the status of the Cherry Street/School Street sewer/stormwater project, received from Public Works Commissioner Lisa Peterson.

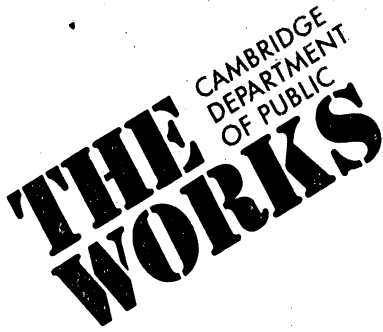
Very truly yours,


Robert W. Healy
City Manager

RWH/mec
Attachment

Cc: City Clerk





June 22, 2001

To: Robert W. Healy,
City Manager

Lisa Peterson
Commissioner

From: Lisa C. Peterson,
DPW Commissioner

147 Hampshire Street
Cambridge, MA 02139
617-349-4800
TTD 617-349-4805

Re: Cherry Street/School Street Area
Sewer/Stormwater Management Project.

The City Council requested a Status report on the Cherry Street/School Street Sewer/Stormwater project. I am please to provide the following;

Summary:

All illicit sewer to stormwater system connections have been removed and both the existing sewer and storm water systems have been thoroughly cleaned and portions of the sewer system on School Street and at Newtowne Court have been replaced.

New developments in the Kendell Square/Binney Street area have incorporated significant underground stormwater retention facilities on their sites.

Over the next several years as a part of the South Massachusetts Avenue/Cherry Street drainage project substantial work will be completed to improve storm water management and sanitary flow conveyance in the area.

Please see below for details:

There are a number of distinct problems that impact the existing stormwater and sanitary system in the Cherry Street area, namely

- (1) Storm water capacity in the existing system
- (2) Sanitary capacity in the existing system
- (3) Illicit connections
- (4) System maintenance

(1) The ongoing construction project on South Massachusetts Avenue is the first phase in a multiphase project to improve the conveyance capacity of the systems that discharge stormwater from the Cherry Street/School Street Area. The present system discharges stormwater



from the area into the Binney Street combined sewer system, which for stormwater has a very limited capacity. We are proposing as part of our 5-year capital plan to design a storage system and pump system in FY02 for the parking lot at the intersection of Columbia and Bishop Allen with the expectation that we will go to construction in FY03. This system will transfer that flow which presently discharges overland down into the School Street/Cherry Street intersection and store and pump it to the Massachusetts Avenue drainage system. In FY 04 another storage system and pump station will be constructed on the other side of this intersection. These systems will more effectively capture and discharge water from the area and provide, when all is complete, protection from the 25 year 24 hour storm event in this particular area.

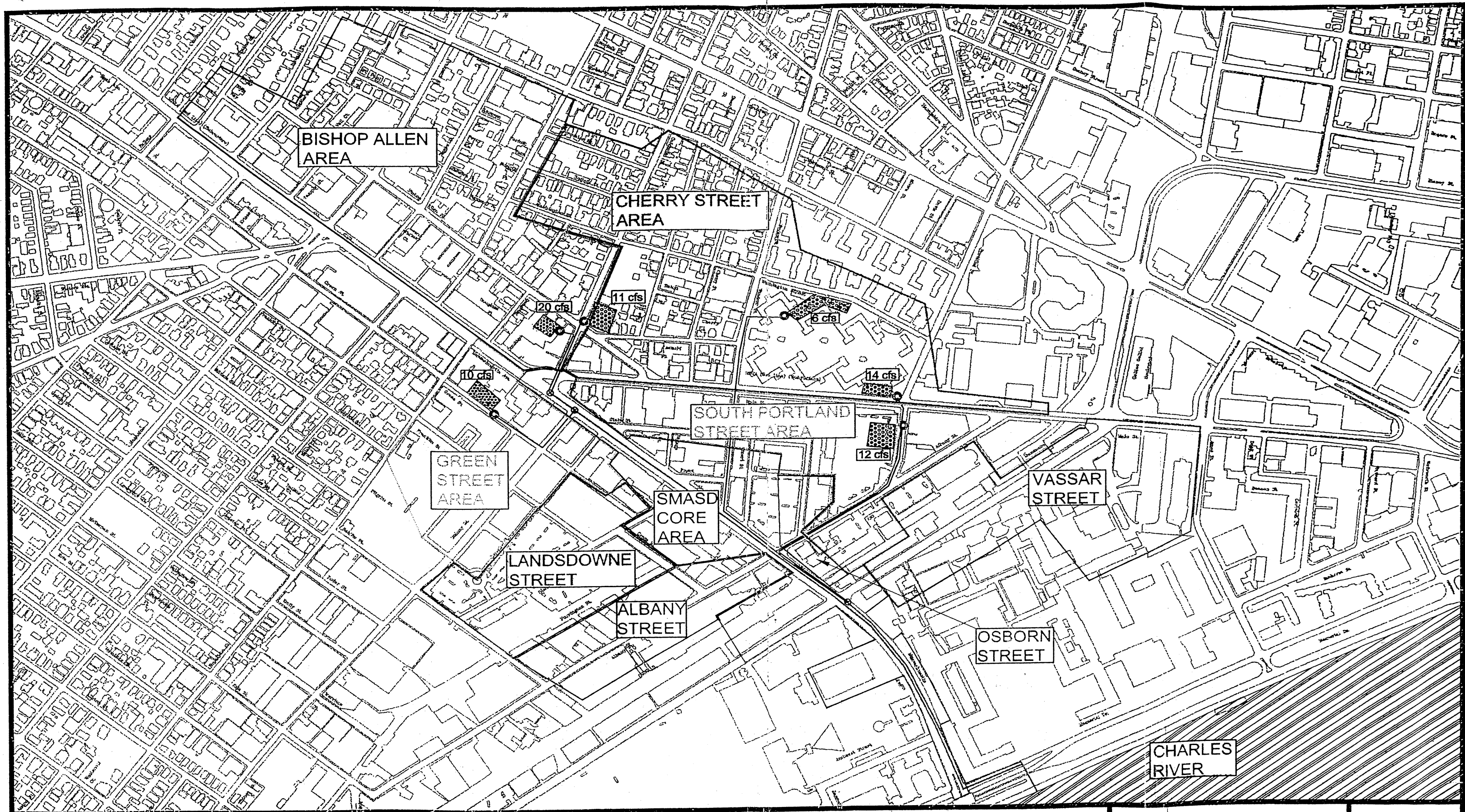
(2) The sanitary system in the Cherry Street area presently discharges sanitary flow into the MWRA interceptor system as it conveys flow north on Portland Street, onto Cardinal Madieros, across Cambridge Street onto Warren Street and into Somerville and eventually it makes its way via the MWRA system to Deer Island. This line surcharges to a very significant extent during intense rainfall events, thereby causing the system to backflow into the Cherry Street area, thereby causing back-ups. We are presently proposing to transfer some of this sanitary flow from our systems into the combined sewer system as it conveys water towards Binney Street, Land Boulevard and MWRA pump station and storage facility at Prism Point. Similarly we are working with the MWRA to seek to transfer more of the Somerville flow away from the Cardinal Madieros System and into the system that eventually discharges to Prism Point via Monsignor O' Brien Highway. Work will proceed this winter to construct the control-transfer structure to the Binney Street system and we will continue to work with the MWRA and Somerville to expedite their review of our recommendations concerning their interceptor system. And the transfer of flow to the Monsignor O' Brien system.

(3) An illicit connection tied to the storm system will cause back-ups into the private sanitary system during storm events. We have identified and removed all illicit sanitary to storm illicit connections in the Cherry Street area over the past 3 years.

(4) The storm and sanitary systems were both thoroughly cleaned during our recent design investigations. Furthermore, portions of the sanitary system in the School Street, Newtowne Court area were replaced within the last two years. Finally, catch basins in the area have been cleaned and checked within the past 18 months.

(5) Finally, all of the various new developments in the Kendell Square, Binney Street area have incorporated in their development plans significant retention systems for stormwater, thereby reducing the runoff from these area and ultimately increasing the available capacity for the residential dwellings in the area.

We have met with the community on three separate occasions over the past two years so as to share with them our findings and our proposals. When our design solutions are at a more definite stage we will again meet with the community to again solicit their input and support. It is our expectation that the sanitary and storm systems will begin to function in a more adequate way once the immediate tasks articulated above have been completed. We will continue to work with the community and with the MWRA and development in the area so as to ensure that we achieve the maximum benefit possible in the shortest time possible.



SEA Consultants Inc.
Science/Engineering/Architecture



MONTGOMERY WATSON

PROPOSED STORAGE/PUMPING
FACILITY LOCATIONS

FIGURE NO.

10

S-280

Information concerning the status
of the Cherry Street/School Street
sewer/stormwater project.

July 2, 2001