

To: Township Committee  
From: Stormwater Infrastructure Subcommittee  
Date: September 27, 2022  
Subject: Memo No. 2

- I. **GRANTS**. The Township has been active in pursuing, evaluating, and exploring available NJDEP grants:
- On 9/16/22 Submission the Township submitted competitive grant application with NJDEP regarding **impervious surface mitigation** through the agency's Natural Climate Solutions grant program. If successful, this grant will provide funding for reduction of impervious surface at Orange Avenue Pool lot, Centennial Ave. Pool's far lot and potential use of pervious pavement for certain lengths of the shoulders on Retford, Chestnut and Lincoln for proof of concept. The Subcommittee identified this opportunity and members participated with township personnel and Topology on the development of the application's demonstration projects at the two pool lots.
  - The deadline for filing an application for monies to perform **a Stormwater Utility Feasibility Study** has been extended from 9/23/22 to November 1. The Township has resolved to apply for the grant. Thank you to the members of this Subcommittee who identified this grant opportunity. The Subcommittee will support the application including forwarding a "Community-Based Organization" letter as and if required by NJDEP.

II. **DESNAGGING**

As pointed out by Cranford's engineers, backflow is a significant issue regarding stormwater and flooding. There is currently no maintenance model in place to remove trees, branches and large garbage items from the river. This should be addressed at the township and county level. The County may have jurisdiction within the banks and/or riparian land and, therefore the responsibility to prepare and execute such a maintenance plan but the Township must encourage and assist the County to both develop the plan and perform it or seek permissions to do so itself within the Township's borders.

Our engineer confirms that even the natural dams downriver of Cranford's southeastern border are problematic to Cranford.

**Recommendations:**

- a. Survey river for areas which require immediate attention.
  - i OEM has deployed its drone to do so earlier this month and the relevant photos should be available shortly.

- ii Visually inspect areas that the drone could not access such as bridge abutments and culverts, Orchard Brook flume, footbridge stanchions or dense canopy areas.
  - iii This Subcommittee's members are familiar with certain obstructions and can direct or accompany the township engineer to those locations that are not obvious from roadways. (See photos attached of some problem areas between the Conrail bridge on the Hillside Ave. side along the river to Mohawk Playground).
  - iv Request Union County deploy manpower to survey from Cranford's southern border at Raritan Road to Rahway River Park's Jackson Pond.
  - v Union County has drone technology for mapping its parks and other properties. Request that they deploy the drone to survey river's course downstream of Cranford once all autumn leaves have dropped.
  - vi Combined, drone footage can give us a near complete view of problem areas for clearance prioritization by the township and/or the County.
  - vii This Subcommittee is well versed in the location of potential problem areas downstream in Winfield Park section of Rahway River Park if our assistance would be beneficial. Some photos are attached to this memo.
- b. Remove all trees, branches and debris from the river and outfalls causing backflow.

- i. Request County support with particular emphasis for immediate downstream (Winfield Park, Rahway, Clark, Rahway River Park) effort. (See photos attached below re Winfield Park.)  
Convene a meeting with County and Township engineers, parks, and public works department, County Manager and Township Administrator to develop: (a) immediate action plan to prioritize problem areas and clear the backflow hazard; (b) establish framework to develop a semiannual maintenance plan.

It is understood that the County has recently purchased equipment for easier access to the river for the purpose of removing downed trees and branches. Communicate with County to leverage the use of that equipment for this purpose.

- ii. Develop an immediate community driven approach toward removal of trees and other backflow hazards within Cranford's borders:
  - o Similar to the river cleanup, organize twice a yearly river desnagging events before the hurricane season begins and in autumn;
  - o Work with local tree companies and DPW to support; and/or

- Request County deploy its volunteer chainsaw team;
    - Form, train and insure Cranford volunteer chainsaw team modeled after the County's program to supplement DPW resources and budget limitations.
  - iii. Seek to negotiate and enter into a joint river-way maintenance agreement with the County. This may also open the door for more grant money the benefit of both Cranford and the County
  - iv. Beginning with 2023's operation budget, budget annually for vendors to perform large removal of large downed-trees creating waterflow impediment as part of the "to be developed" overall Stormwater and River Maintenance plan.
- c. Address stormwater sewer pipe in the river near Riverside Dr./Balmier foot bridge.
- i. Understand the purpose of the storm sewer pipe (see picture below) 200 yards upriver of the Riverside Drive/Balmier Footbridge; and
  - ii. Include the removal or burying the storm drain which is causing snagging and backflow within the Pump Station/Phase 2B Scope of work.



Cranford – Hillside Ave, Crane Parkway to Mohawk Playground













Winfield Park











### **III. Coda**

- This subcommittee is currently finalizing a memo regarding de-silting.