NSP Meeting Notes
Wednesday, May 4, 2022
Virtual Meeting Via Zoom

NepRWA Participants: Rory McGregor, Kerry Malloy Snyder, Ian Cooke, Sean McCanty, Declan Devine, Suzanna Sullivan

Wayne Chouinard, Town Engineer – Arlington

NSP members/ Consultants Attending

- Norwood: Holly Jones
- Medfield: Bobby Kennedy
- Dedham: Jason Mammone
- Stoughton: Laurence Langlois
- BETA (Randolph/Westwood): Melissa Recos, Katelyn Burke, Phil Paradis
- MAPC: Martin Pilla
- Boston Water and Sewer: Adriana Ciloa, Amy Schofield, John Sullivan
- Foxborough: Lance DelPriore
- Randolph: Chris Pellitteri
- Ristano J
- Bill Clark

Presentation: Innovative Nutrient Removal: Infiltration Trench Retrofits in Arlington
Wayne Chouinard, Town Engineer, Town of Arlington. Presentation covered a case study of right of way infiltration trench retrofit program. The BMP is a relatively easy, inexpensive, flexible and efficient installation being implemented throughout the Mystic Watershed. Recoding of presentation can be found here.

Q and A

- How does it the BMP work?
    - Catchbasins with shallow outlets have an 8 inch perforated pipe installed 3 inches below the standard outlet. This pipe serves as the inlet to the infiltration trench.
    - 90% of storms do not go out the standard outlet. Most of them go into storage and infiltration of trench. The original outlet of the catchbasin functions as an overflow.
    - Inspection port at end of trench goes to bottom of stone. Check it 24-48 hours after big storm to make sure it infiltrates

- Why backfill the whole trench with washed stone, though much of the storage doesn't get used.
    - Because it is cheaper, easier and quicker for the contract to fill all with gravel rather then having two or more mediums.

- What are the requirements for the sump when a retrofit is added?
    - Should be 4 ft ideally, should be cleaned if 50% full. Would not use these trenches with a gutter inlet

- Could the invert to the trench be dropped another 6 inches to increase storage in the pipe itself?
    - Possibility, but only if there is a good catch basin cleaning program. Could work with a deeper sump.
    - If in well infiltrating storage, adding storage in the pipe would not be a big benefit

- How much P removal?
    - Don't have an exact figure at this point
    - For 90% of storms, all of the first flush is taken care of
    - Probably more P removal than the calculation spreadsheet is saying because capturing the first flush

- Could this be used with a tree trench?
    - Yes, Arlington developed modification with 1 ft deep trench, that can be future tree well
    - Important to have flexibility for different scenarios

- What is the Maintenance and expected lifespan?
    - Main maintenance is catch basin cleaning
    - Lifespan depends on the soils, with good soils could function indefinitely

- Are there issues with groundwater? Could these trenches be installed with 1 ft depth to seasonal high groundwater in spite of the recommended regs requiring 2ft?
    - Depends on geology, topography. Try to stay above by 2 ft.
    - Don't do test pits, just assume ground water is 2 ft above river if you are near the river.
    - In house staff can easily do design
    - Interns from MYRWA can do site selection to help avoid groundwater issues. There is a cheat sheet that can help.

- How frequent are the inspection ports?
    - One port for every five trenches if in street.
    - Put one inspection well per off street structure because cast iron isn't needed, so cost pre port is decreased.
    - If conditions the are same for multiple trenches, can only put in one port to represent all the trenches

- Are other places doing this?
    - Philadelphia and the Chesapeake Bay have similar approaches but the goal was to make this simpler and easier then some of the existing systems.

- Are there any issues with the gravel or soils becoming saturated with pollutants?

    - The stone does not do treatment, the soil does (phisycal and chemical absorption). At some point the soil filter will clog, it is unknown when that will happen
    - In 10 years if soil is at capacity for removal would need to restart and replace the soil, which would be challenging.
    - Could consider putting a media (filter cartridge) in the pipe that could be replaced

Individual Town Update
Towns shared information on progress and challenges on MS4 and related issues.

NSP Updates and News

- School and outreach messaging
    - All schools are scheduled (excluding Foxborough)
    - Update was provided on the spring facebook campaign. In addition, two mailers targeting the construction/developer audience and the industrial audience are expected to go out in the next few weeks. NepRWA will be reaching out to NSP, Building Department, and ConComm leads to establish an e-brochure where necessary for construction/developers who are applying for permits online. Last, brochures will be passed out to the necessary departments for those coming in for permits.
- GI bylaw review is in progress for towns who have requested assistance
- An update was provided on the state stormwater policy
- NepRWA has IDDE training available for field staff of any interested towns