FUSS & O'NEILL

M E M O R A N D U M

TO: Landis Hershey, Conservation Agent, Town of Walpole

FROM: Stefan Bengtson, MS; William Guenther, MS

DATE: June 30, 2020

RE: Dry-Weather Outfall Screening Results

This memo summarizes the results of dry-weather outfall screening inspections Fuss & O'Neill has conducted to assist the Town in its compliance with the 2016 Massachusetts Municipal Separate Storm Sewer System (MS4) permit. Inspections occurred during dry-weather conditions, as defined by the MS4 permit, on multiple dates between October 2018 and June 2020. Dry-weather conditions were defined as 24 hours without 0.1 inches of precipitation and without snowmelt. Antecedent conditions were determined from Norwood Memorial Airport, approximately 4 miles to the east of the Town of Walpole.

Based on the Town's stormwater system mapping, Fuss & O'Neill staff assessed each outfall for dry-weather flow and any visual or olfactory evidence of illicit discharges. Where outfalls were inaccessible or inundated by the receiving water, the first upstream structure was assessed, where feasible.

A total of 303 outfalls were assessed, with an additional 49 outfalls not accessible or not found (Table 1). The results of these screenings are included as a file geodatabase. For each outfall, information was collected on visual and olfactory indicators of non-stormwater discharges and outfall physical dimensions, including images of the outfalls and any notes on unique conditions or needed maintenance. Further investigation may be needed to locate the 49 structures listed as "not found." It should be noted, some of these structures may be mapped incorrectly or be the result of past mapping inaccuracies.

Table 1: Annual breakdown of outfalls assessed. Totals do not
include outfalls visited but not accessible or not found

Year	Number of Outfalls Assessed
2018	125
2019	65
2020	113

Out of the 303 outfalls screened, 86 were determined to have evidence of flow under dry-weather conditions. Attachment 1 details the outfalls with observed flow and the flow conditions experienced at the time of inspection. No evidence of illicit discharge was observed at the vast majority of outfalls with dry-weather discharge. Table 2 highlights those outfalls where some evidence of a potential illicit discharge was observed. Follow-up sampling should prioritize these outfalls. Educational material regarding disposal of pet waste may also be effective in eliminating discharges related to pet waste.

Table 2: Outfalls with potential evidence of illicit discharges

Outfall ID	Receiving Water	Visual Evidence	Olfactory Evidence
05-0000-0001	Bubbling Brook	Oily Sheen	None
05-0000-0003	Unnamed Tributary to Bubbling Brook	Oily Sheen	None
06-0000-0002	Bubbling Brook	None	Sewage Odor
17-0000-0011	Unnamed Tributary to Cobbs Pond	None	Sewage Odor
33-0000-0003	Neponset River	Pet Waste (bags)	None
39-0000-0003	Cedar Swamp	Pet Waste (bags)	None
46-0000-0002	Cedar Swamp	Foam, Sanitary Waste	Sewage Odor
46-0000-0009	Cedar Swamp	Sanitary Waste	None
55-0000-0002	Cedar Swamp	Pet Waste (bags)	None

Outfalls 46-0000-0002 and 46-0000-0009 had potential evidence of a non-stormwater discharge (Figures 1 and 2). These outfalls are close to each other west of the intersection of Industrial Road and Production Road. Additional investigation is recommended at these outfalls prior to initiating source tracking protocols.

Figure 1: Evidence of potential non-stormwater discharge at outfall 46-0000-0002
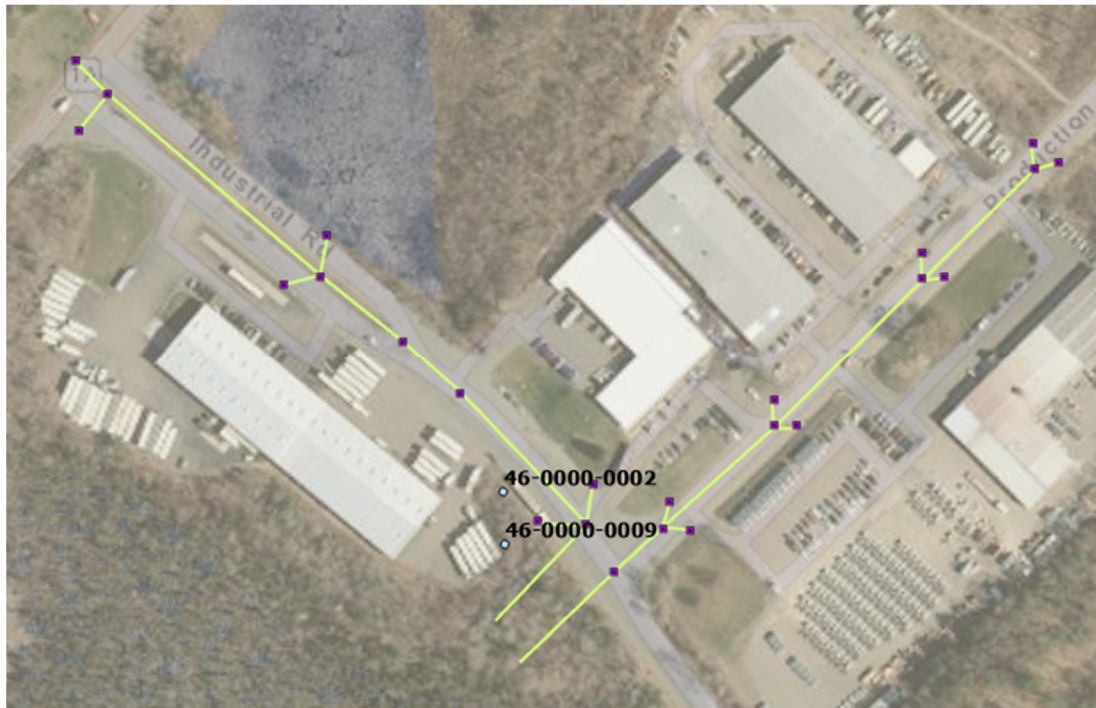
Figure 2: Location of outfalls 46-0000-0002 and 46-0000-0009 in Walpole Industrial Park

Town of Walpole
Outfalls with Dry-Weather Discharge

OUTFALL ID	Flow Present	Flow Description	Visual Evidence	Olfactory Evidence
02-0000-0002	Yes	Damp	None	None
02-0000-0003	Yes	Moderate	None	None
04-0000-0001	Yes	Damp	None	None
05-0000-0001	Yes	Moderate	OilSheen	None
05-0000-0003	Yes	Damp	OilSheen	None
05-0000-0004	Yes	Trickle	None	None
06-0000-0002	Yes	Trickle	None	Sewage
07-0000-0001	Yes	Trickle	None	None
08-0000-0006	Yes	Trickle	None	None
09-0000-0001	Yes	Trickle	None	None
09-0000-0007	Yes	Trickle	None	None
09-0000-0008	Yes	Trickle	None	None
10-0000-0003	Yes	Trickle	None	None
12-0000-0007	Yes	Trickle	Foam	None
12-0000-0013	Yes	Damp	None	None
12-0000-0017	Yes	Moderate	None	None
12-0000-0019	Yes	Moderate	None	None
13-0000-0001	Yes	Trickle	Foam	None
13-0000-0002	Yes	Moderate	None	None
13-0000-0003	Yes	Moderate	None	None
14-0000-0006	No	Damp	None	None
16-0000-0005	Yes	Moderate	None	None
17-0000-0010	Yes	Moderate	None	None
17-0000-0011	Yes	Trickle	None	Sewage
17-0000-0018	Yes	Trickle	None	None
17-0000-0020	Yes	Moderate	None	None
18-0000-0001	Yes	Trickle	None	None
18-0000-0002	No	Damp	None	None
18-0000-0007	Yes	Moderate	None	None
18-0000-0013	No	Damp	None	None
19-0000-0001	Yes	Trickle	None	None
19-0000-0002	Yes	Heavy	None	None
19-0000-0003	Yes	Damp	Algae	Musty
19-0000-0008	Yes	Damp	None	None
20-0000-0007	Yes	Moderate	None	None
20-0000-0019	No	Damp	None	None
20-0000-0023	Yes	Moderate	None	None
24-0000-0002	Yes	Trickle	None	None
24-0000-0013	Yes	Moderate	None	None
24-0000-0014	Yes	Damp	None	None
25-0000-0001	No	Damp	None	None
26-0000-0008	Yes	Moderate	None	None
26-0000-0010	Yes	Moderate	None	None
26-0000-0013	No	Damp	None	None
26-0000-0019	Yes	Trickle	None	None
26-0000-0019A	Yes	Trickle	None	None
26-0000-0023	Yes	Trickle	None	None
26-0000-0027	Yes	Trickle	None	None
27-0000-0003	Yes	Trickle	None	None
27-0000-0004	No	Damp	None	None
27-0000-0005	Yes	Damp	None	None
27-0000-0008	Yes	Damp	None	None
27-0000-0009	Yes	Damp	OilSheen	None
28-0000-0003	No	Damp	None	None
28-0000-0004	Yes	Moderate	None	None
29-0000-0001	Yes	Trickle	None	None
31-0000-0004	No	Damp	None	None

Town of Walpole
Outfalls with Dry-Weather Discharge

31-0000-0006		Damp	None	None
32-0000-0001	Yes	Trickle	None	None
32-0000-0005	No	Damp	None	None
32-0000-0011	No	Damp	None	None
33-0000-0007	Yes	Moderate	None	None
33-0000-0011	Yes	Trickle	None	None
34-0000-0001a	Yes	Moderate	Algae	None
34-0000-0005	No	Trickle	None	None
34-0000-0006	Yes	Moderate	Algae	None
34-0000-0008	Yes	Trickle	None	None
34-0000-0011	Yes	Moderate	None	None
34-0000-0017	Yes	Trickle	None	None
34-0000-0019	No	Damp	None	None
38-0000-0004	Yes	Damp	None	None
39-0000-0001	No	Damp	None	None
39-0000-0002	No	Damp	None	None
39-0000-0003	Yes	Damp	PetWaste	None
40-0000-0006	No	Damp	None	None
41-0000-0001	Yes	Moderate	Foam	None
42-0000-0004	Yes	Damp	None	None
44-0000-0004	Yes	Trickle	None	None
46-0000-0002	Yes	Moderate	Foam, SanitaryWaste	Sewage
46-0000-0009	No	Damp	SanitaryWaste	None
47-0000-0006	Yes	Moderate	None	None
48-0000-0002	No	Damp	None	None
53-0000-0008	Yes	Heavy	None	None
55-0000-0002	Yes	Damp	PetWaste	None
56-0000-0003	Yes	Damp	None	None
57-0000-0001	Yes	Damp	None	None