Prepared for:

City of Takoma Park
Department of Public Works

Illicit Discharge Tracking Memo

April 2020

Prepared by:

BayLand Consultants & Designers, Inc.

"Integrating Engineering and Environment"

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1. INTRODUCTION

1.1. Project Description

The City of Takoma Park (City) has coverage under the Maryland Department of the Environment (MDE) National Pollutant Discharge Elimination System (NPDES) General Permit for small municipal separate storm sewer system (MS4). The conditions of the permit require the City to develop, implement and enforce a program to detect and eliminate illicit discharges. The City has contracted BayLand Consultants & Designers, Inc. (BayLand) to provide illicit discharge tracking at three outfalls in the City of Takoma Park.

Illicit discharge detection and elimination (IDDE) is a comprehensive task to determine what pollutants are making its way into the waterway, where the pollutants are coming from, and creating and implementing a way to eliminate and control current and future contamination. Stormwater drainage systems have no filtration, therefore any pollutants that make their way into the system are not filtered and drain directly into the nearby waterways (IDDE). There are many ways to detect illicit discharge, the most practical method for the City of Takoma Park was to collect samples from each manhole displaying water flow leading to three outfalls with high levels of pollutants that were detected during outfall screening conducted in 2019.

The purpose of this project was to provide the City with quantitative data on non-stormwater discharges into Sligo Creek from three outfalls which eventually drains to the Northwest Branch of the Anacostia River. Dry weather flows in stormwater drainage systems has been found to contribute significant pollutant loadings (IDDE). The main sources are ones that typically come from sanitary wastewater, industrial and commercial pollutants, failing septic tanks and vehicle maintenance activities (IDDE). BayLand performed dry weather screening for 78 outfalls within the City for illicit discharge and analyzed the surface water samples collected. From that screening three outfalls were selected by the City, Outfall #80, Outfall #212 and Outfall #1106. Illicit discharge tracking took place after 72 hours of antecedent dry weather.

Water samples will be collected at the outfall and every preceding manhole that shows water flow after 72 hours of dry weather. Water sample collection was conducted on March 18th. The collected water samples were then sent to Australian Laboratory Services (ALS) Environmental for analysis. Chlorine, E. coli and enterococci were analyzed for Outfall #80. E. coli and enterococci were analyzed for Outfall #212. Enterococci, color, chloride and chlorine were analyzed for Outfall #1106. These parameters exceeded EPA standards at each of the associated outfalls (Table 1 – Conductivity through Total Phosphorus).

1.2. Study Area Description

Sligo Creek is a perennial tributary of the Northwest Branch of the Anacostia River. The Creek is one of the most urbanized in the Anacostia Watershed (Montgomery County

Government, 2019). The Sligo Creek Watershed (USGS 01650800) is approximately 6.45 square miles and contains four major tributaries: Wheaton Branch, Comstock Branch, Takoma Park Branch and Long Branch (USGS, 2019).

The drainage area is a mix of high density commercial and urban residential land uses. The neighborhoods were developed rapidly in the 1950s and 1960s, before modern environmental standards were put into place, which has led to degraded water quality in receiving streams. Montgomery County has begun installing several stormwater management (SWM) and stream restoration projects in the watershed to help improve water quality (George, 2012). Over the last few years, the City has installed SWM facilities and has several bioretention facilities, a modular wetland and a stream restoration project targeted for completion in 2019 (Takoma Park, 2019).

Outfall #80 is located in the woods bordering Poplar Avenue and Fourth Avenue. This area is surrounded by residential properties. Outfall #80 flows into a small tributary that eventually leads into Sligo Creek. The structure is a ten-foot wide by four-foot tall concrete box culvert. The flow type was substantial. Outfall #212 is in the wooded area between Poplar Ave, Spring Ave, and Cockerille Ave. This two-foot square box culvert has a moderate flow which drains into a small tributary that flows into Sligo Creek. Outfall #1106 is located at the intersection of New Hampshire Road and Sligo Creek Parkway. New Hampshire road is a major four lane road. This outfall flows directly into Sligo Creek. Outfall #1106 is a concrete two-foot diameter pipe with substantial orange colored flow.

1.3. Stormwater Regulatory Requirements

The U.S. Environmental Protection Agency's (EPA) stormwater regulations define "illicit discharge" as "any discharge to municipal separate storm sewer that is not composed entirely of stormwater" (except for discharges from firefighting activities and a few other categories). Municipalities operating under a Phase II MS4 permit must develop and implement a plan to detect and address non-stormwater discharges. Sources of illicit discharges include, but are not limited to, sanitary wastewater, effluent from septic tanks, car wash wastewaters, improper oil disposal, radiator flushing disposal, laundry wastewater, spills from roadway accidents, and improper disposal of auto and household toxics. EPA guidance recommends that the plan to detect and address illicit discharges include the following four components:

1. Sample the main outfalls – Procedures for collecting priority areas that have illicit discharges.
2. Find the Source – Procedures for tracing the source on an illicit discharge.
3. Remove/Correct Illicit Connections – Procedures for removing the source of the discharge.
4. Document Actions Taken – Procedures for program evaluation and assessment.

The EPA recommends visually screening outfalls during dry weather and conducting field tests of selected pollutants as part of the procedures for identifying priority areas.

1.3.1. Federal & State Water Quality Criteria Tables

Water quality criteria can be applied to both the local and national levels. The purpose of assigning water quality criteria a numeric value is for the protection of aquatic life and human health. The freshwater values for water criteria defined by the Code of Maryland Regulations (COMAR) can be found in Table 1.

The EPA sets the standards for the national recommended water quality criteria (Table 2). This table is the most up-to-date criteria for aquatic life ambient water quality criteria. Maryland uses these values as a guide and therefore both sets of criteria are listed and used as a part of this study.

For the purpose of applying Escherichia coli (E. coli) and Enterococci criteria levels, the more stringent Recreational Water Quality Criteria (RWQC) for primary contact were used due to Sligo Creek's easy water access and proximity to multiple parks and bike paths. The EPA defines primary contact as "activities where immersion and ingestion are likely and there is a high degree of bodily contact with the water, such as swimming, bathing, surfing, water skiing, tubing, skin diving, water play by children, or similar water-contact activities."

Table 1 – Maryland Water Criteria Specific to Designated Uses

Parameter	Criteria
E. coli (MPN/100ml)	235[1]
Enterococci (MPN/100ml)	61[2]
Chloride	No existing criteria
Chlorine (mg/L)	< 0.10 mg/L
Color	Maximum of 75 units as a monthly average

1 and 2: Bacteria Indicator Criteria for Recreational Full Body Contact. Source: COMAR 26.08.02.033 http://www.dsd.state.md.us/comar/SubtitleSearch.aspx?search=26.08.02.

Table 2 – U.S. EPA Recreational Water Quality Criteria

Parameter	Criteria
E. coli (MPN/100ml)	126[2]
Enterococci (MPN/100ml)	35[2]
Chloride	Chronic 230, Acute 860
Chlorine (mg/L)	Chronic 0.011, Acute 0.019
Color	75

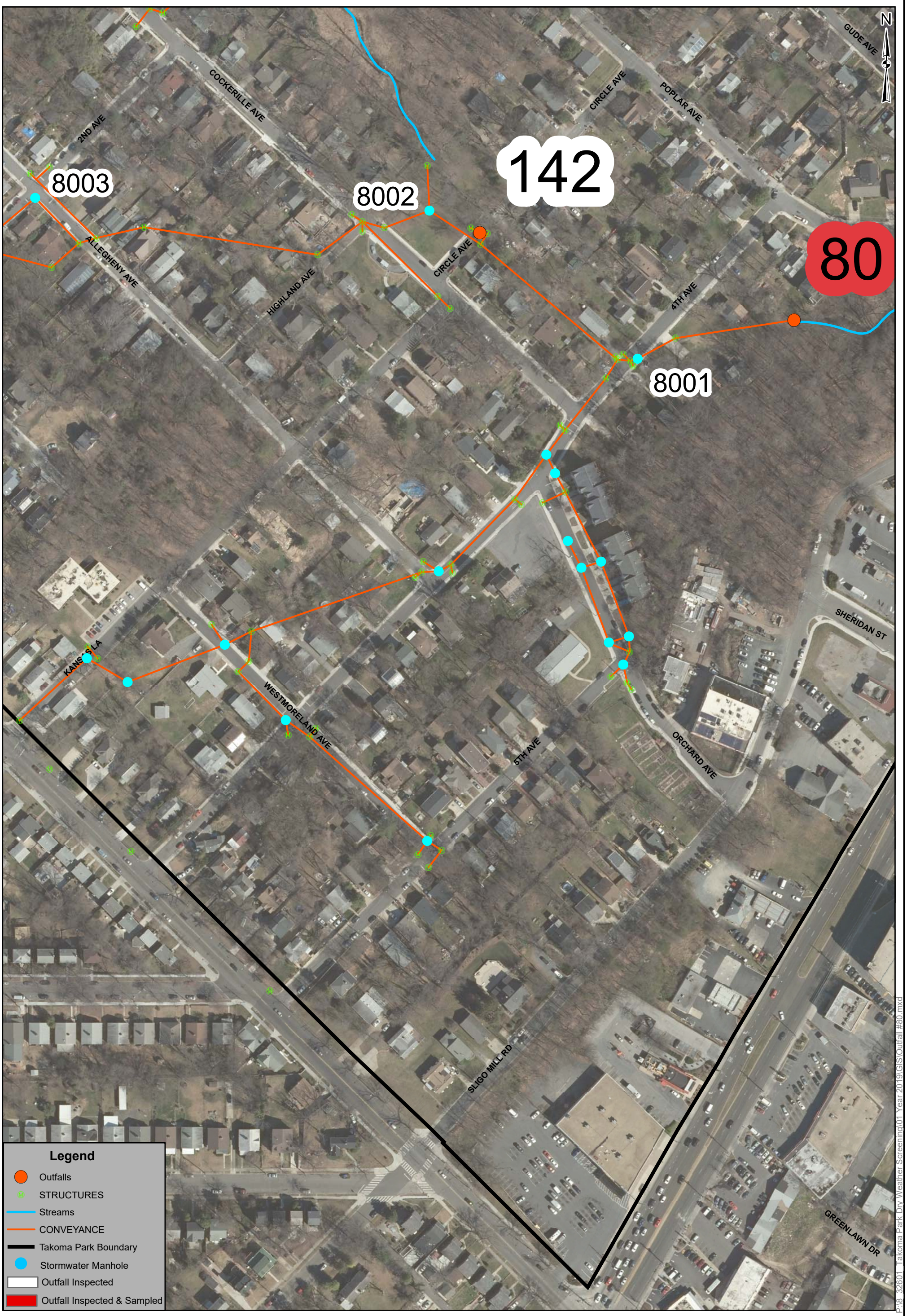
1: 2013 Aquatic Life Ambient Water Quality Criteria for Ammonia Freshwater (EPA)
2: 2012 Recreational Water Quality Criteria (EPA)
Source: EPA Current Water Quality Criteria http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm

Table 3 – Parameters Measured & Significance	
Parameter	**Significance**
Escherichia coli (E. coli)	A species of fecal coliform bacteria that is specific to fecal material from humans and other warm-blooded animals. The EPA recommends E. coli as the best indicator of health risk from water contact in recreational waters. Elevated levels may be an indicator of wastewater migration into a storm drain system. Threshold limits are based on water use and contact.
Enterococci	A subgroup of fecal streptococcus bacteria that are human-specific and used as a best indicator of health risk in saltwater because of their ability to survive, and as a useful indicator in freshwater too. Elevated levels may be an indicator of wastewater migration into a storm drain system. Threshold limits are based on water use and contact.
Chloride	Chloride ions are naturally occurring and may be present in groundwater baseflow. Large concentrations increase the corrosiveness of water and present acute and chronic toxicity to aquatic organisms. Sources of anthropogenic chlorides include road salt, sewage contamination, and water softener discharges.
Chlorine (Total)	Chlorine is a chemical commonly used as a biocide in drinking water and wastewater treatment, as well as numerous other industrial applications. Excess levels of chlorine can have acute and chronic toxicity on aquatic organisms. It can be used as an indicator of wastewater, and potable water migration into a storm drain system, and/or illicit industrial discharges.
Color	A measure that indicates the amount of photosynthetically active light available to primary producers at lower depths. Color can be used as an indicator of sewage, grey water, and industrial discharges.

2. DISTRIBUTION MAP OF INSPECTED & SAMPLED OUTFALLS

Visual inspections of three outfalls were conducted throughout the Sligo Creek watershed within the City of Takoma Park following 72 hours of dry weather (Figure 1). BayLand collected surface water samples at the three outfalls and the preceding manholes where active flow was observed.

The spatial distribution of the three outfalls where dry weather flow was observed. BayLand conducted more advanced methods of tracking illicit discharges to determine the upstream sources.



150 75 0 150 Feet

1 " = 150 Feet

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Takoma Park Outfall #80

150 75 0 150 Feet

1 " = 150 Feet

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Takoma Park Outfall #212

P:\8_32601_Takoma Park Dry Weather Screening\01 Year 2019\GIS\Outfall #212.mxd

150 75 0 150 Feet

1 " = 150 Feet

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Takoma Park Outfall #1106

3. METHODS

Storm drain or "trunk" investigations narrow the problem discharge to a single segment of storm sewer (EPA, 2004). The investigation starts with sampling the outfall. From there, the field crew conducts sampling upstream in the pipe network. Once the crew begins to move up the pipeline the manholes will be visually inspected for flowing water. If there is flowing water the manhole will be sampled and sent off to the lab for analysis. This process will continue up the pipeline, away from the outfall until no water is observed.

4. SAMPLING RESULTS

There were surface water samples collected at three distinct outfall locations and all preceding manholes where active water flow was observed following 72 hours of antecedent dry weather. Outfall testing results are summarized in Tables 4 through 6 and the laboratory data sheets are provided in Appendix A.

Outfall #80 had substantial flow and was tested for E. coli, Enterococci, and chlorine because they exceeded EPA standards during the 2019 outfall screening. Outfall #212 was tested for E. coli and enterococci as they both exceeded EPA standards during the 2019 outfall screening. Outfall #1106 was tested for enterococci, color, chloride, and chlorine as the levels were above EPA standards. Outfall #1106 displayed orange staining in both the pipe and outfall channel.

4.1. Result Tables of Structures Sample

Table 4 – Structure #80 Results

Parameter	2020 Illicit Discharge Results	Maryland COMAR Standard	EPA Standard
E. coli (MPN/100ml)	205	235	126[2]
Enterococci (MPN/100ml)	63	61	35[2]
Chlorine (mg/L)	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019

Table 5 – Structure #8001 Results

Parameter	2020 Illicit Discharge Results	Maryland COMAR Standard	EPA Standard
E. coli (MPN/100ml)	114	235	126[2]
Enterococci (MPN/100ml)	38	61	35[2]
Chlorine (mg/L)	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019

Table 6 – Structure #8002 Results			
Parameter	**2020 Illicit Discharge Results**	**Maryland COMAR Standard**	**EPA Standard**
E. coli (MPN/100ml)	248	235	126[2]
Enterococci (MPN/100ml)	23	61	35[2]
Chlorine (mg/L)	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019

Table 7 – Structure #8003 Results			
Parameter	**2020 Illicit Discharge Result**	**Maryland COMAR Standard**	**EPA Standard**
E. coli (MPN/100ml)	122	235	126[2]
Enterococci (MPN/100ml)	378	61	35[2]
Chlorine (mg/L)	0.44	< 0.10 mg/L	Chronic 0.011, Acute 0.019

Table 8 – Structure #212 Results			
Parameter	**2020 Illicit Discharge Result**	**Maryland COMAR Standard**	**EPA Standard**
E. coli (MPN/100ml)	3	235	126[2]
Enterococci (MPN/100ml)	3	61	35[2]

Table 9 – Structure #21201 Results			
Parameter	**2020 Illicit Discharge Result**	**Maryland COMAR Standard**	**EPA Standard**
E. coli (MPN/100ml)	2	235	126[2]
Enterococci (MPN/100ml)	1	61	35[2]

Table 10 – Structure #21202 Results			
Parameter	**2020 Illicit Discharge Result**	**Maryland COMAR Standard**	**EPA Standard**
E. coli (MPN/100ml)	4	235	126[2]
Enterococci (MPN/100ml)	70	61	35[2]

Table 11 – Structure #21203 Results			
Parameter	**2020 Illicit Discharge Result**	**Maryland COMAR Standard**	**EPA Standard**
E. coli (MPN/100ml)	ND	235	126[2]
Enterococci (MPN/100ml)	4	61	35[2]

Table 12 – Structure #21204 Results			
Parameter	**2020 Illicit Discharge Result**	**Maryland COMAR Standard**	**EPA Standard**
E. coli (MPN/100ml)	ND	235	126[2]
Enterococci (MPN/100ml)	2	61	35[2]

Table 13 – Structure #1106 Results			
Parameter	**2020 Illicit Discharge Result**	**Maryland COMAR Standard**	**EPA Standard**
Enterococci (MPN/100ml)	4	61	35[2]
Chloride	297	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	70	Maximum of 75 units as a monthly average	75

Table 14 – Structure #110601 Results			
Parameter	**2020 Illicit Discharge Result**	**Maryland COMAR Standard**	**EPA Standard**
Enterococci (MPN/100ml)	NT*	61	35[2]
Chloride	285	No existing criteria	Chronic 230, Acute 860
Chlorine (mg/L)	ND	< 0.10 mg/L	Chronic 0.011, Acute 0.019
Color	125	Maximum of 75 units as a monthly average	75

*NT- Enterococci was unable to be tested due too much of an orange stain and solids present in the sample.

4.2. Evaluation of Results

Outfall #80 and three manholes: 8001, 8002, and 8003 were sampled for E. coli, Enterococci, and chlorine. Directly at Outfall #80 E. coli exceeded EPA standards and enterococci exceeded both the Maryland and EPA standards. The first manhole up the stormwater system (8001) exceeded the EPA standards in enterococci. The second manhole (8002) exceeded both Maryland and EPA standards for E. coli. The third manhole (8003) exceeded both Maryland and EPA standards for enterococci and chlorine.

Outfall #212 and five manholes: 21201, 21202, 21203, 21204, 21205 were sampled for E. coli and enterococci. 21205 was the last sample taken and it was cancelled by the lab. The outfall and most of the manholes showed low levels of E. coli and enterococci, apart from 21202 which exceeded both Maryland and EPA standards for enterococci.

Outfall #1106 and one manhole 110601 were sampled for enterococci, chloride, chlorine, and color. EPA standards for chloride were exceeded at both 1106 and 110601. Chlorine was not detected for either sample. Manhole 110601 had a distinct odor and exceeded both EPA and Maryland standards for color. Manhole 110601 was not able to be tested for enterococci due to the water having a very distinct orange stain and contained too many solids in the sample.

Table 15 – Evaluation of Field and Laboratory Test Results (2020 Illicit Discharge)

Outfall System/ Flow Type	Exceedance Parameters	Conclusions
#80 and manholes Substantial	E. coli Enterococci Chlorine	Manhole 8003 was high in chlorine which can be an indication of possible wastewater, potable water migration into the storm drain system, and/or illicit industrial discharges. Results also suggest possible sanitary wastewater contamination or septic migration into the storm drain system.
#212 and manholes Moderate	E. coli Enterococci	Results suggest possible sanitary wastewater contamination or septic migration into storm drain system from manhole 21202.
#1106 and manhole Substantial	Enterococci Chloride Chlorine Color	Results suggest the elevated chloride could be a result of sewage contamination and water softener discharges. At manhole 110601 the exceeded color could be an indication of sewage, grey water and industrial discharges.

4.3. Photo Documentation of Sampled Outfalls

Photo 1 – Structure #80

Photo 2 – Structure #212

Photo 3 – Structure #1106

5. RECOMMENDATIONS

E. coli and Enterococci are indicators of fecal material contamination for illicit discharge detection. We recommend the City should first contact Washington Suburban Sanitary Commission to see if any sewer pipe rehabilitation is on schedule near the three outfall systems that BayLand tracked. If sewer pipe rehabilitation has not occurred or is not on schedule in these locations, BayLand recommends closed-circuit television (CCTV) pipe inspection services that can be accessed at the outfalls, manholes, inlets or other underground structures. This will allow the City to see the condition of the pipes and determine if exfiltration is occurring. BayLand recommends the following for the individual systems that were tracked:

Outfall #80:

- CCTV beginning at the outfall and upstream of manhole 8003.
    - This will help determine if exfiltration is occurring from the sewer system.

- If chlorine results at outfall #80 for the 2020 outfall screening are high in concentration a hot spot study may be needed at the shopping plaza on Laurel Avenue.

Outfall #212:

- CCTV beginning at the outfall and upstream to manhole 21203.
    - This will help determine if there has been septic migration into the storm drain system around manhole 21202

Outfall #1106:

- CCTV beginning at the outfall and upstream of manhole 110601.
    - Manhole 110601 had a strong sewage odor and the water was heavily stained with orange and contained some solids.
    - This will help determine if exfiltration is coming from the sewer system into manhole 110601.
    - Manhole 110601 could not be tested for enterococci as the lab considered the results unreadable due to the color and solids in the sample.

We consider the recommendations for outfall #1106 to be of highest priority and outfall #212 to be the lowest priority.

6. CONCLUSION

The Sligo Creek Watershed has been significantly influenced by commercial and residential land uses, particularly relating to the stormwater system within Takoma Park. Water sampling results during the outfall screenings over the years continue to indicate possible sanitary wastewater contamination or septic migration into storm drain system. Chloride exceeded EPA standards at outfall #1106 as well as at manhole 110601. Color exceeded the standards at manhole 110601 and was near the EPA standard at outfall #1106. E. coli and enterococci levels were low in the outfall #212 system with the exception for manhole 21202. The system for outfall #80 displayed high levels of both E. coli and enterococci. Levels of chlorine at manhole 8003 exceeded both chronic and acute EPA standards.

Tracking and locating the illicit discharges will reduce toxic pollutants which are threatening to aquatic life and human health. Outfall screening and evaluation will continue for 2020 and will follow the same methodologies used in 2019. These results will be used in conjunction with the illicit discharge tracking results.

7. REFERENCES

"Chapter 8: Isolating and Fixing Individual Illicit Discharges." Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, by Edward Brown et al., Water Permits Division, Office of Water and Wastewater, U.S. Environmental Protection Agency, 2004, pp. 69–74.

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APPENDIX A

Laboratory Data Sheets

ALS Environmental

301 Fulling Mill Road - Middletown, PA 17057 - Phone: 717-944-5541 - Fax: 717-944-1430 - www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

March 26, 2020

Mr. Zachary Tate
BayLands Consultants & Designers, Inc.
7455 New Ridge Rd. Suite T
Hanover, MD 21076

Certificate of Analysis

Project Name:	**2019-MS4 TESTING - MD SITE**	Workorder:	**3092934**
Purchase Order:		Workorder ID:	**Takoma Park Dry Weather**

Dear Mr. Tate:

Enclosed are the analytical results for samples received by the laboratory on Wednesday, March 18, 2020.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Ms. Shannon Butler (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Spring City: 10 Riverside Drive, Spring City, PA 19475 610-948-4903

CC: Mr. Bill Heckert

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Shannon Butler

Ms. Shannon Butler
Project Coordinator

ALS Environmental

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SAMPLE SUMMARY

Workorder: 3092934 Takoma Park Dry Weather

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collected By
3092934001	80	Water	3/18/2020 09:05	3/18/2020 20:30	Collected by Client
3092934002	8001	Water	3/18/2020 09:15	3/18/2020 20:30	Collected by Client
3092934003	8002	Water	3/18/2020 10:30	3/18/2020 20:30	Collected by Client
3092934004	1106	Water	3/18/2020 11:30	3/18/2020 20:30	Collected by Client
3092934005	110601	Water	3/18/2020 12:30	3/18/2020 20:30	Collected by Client
3092934006	212	Water	3/18/2020 13:00	3/18/2020 20:30	Collected by Client
3092934007	21201	Water	3/18/2020 13:00	3/18/2020 20:30	Collected by Client
3092934008	21202	Water	3/18/2020 13:10	3/18/2020 20:30	Collected by Client
3092934009	21203	Water	3/18/2020 13:20	3/18/2020 20:30	Collected by Client
3092934010	21204	Water	3/18/2020 13:30	3/18/2020 20:30	Collected by Client
3092934011	21205	Water	3/18/2020 13:45	3/18/2020 20:30	Collected by Client
3092934012	8003	Water	3/18/2020 10:45	3/18/2020 20:30	Collected by Client

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SAMPLE SUMMARY

Workorder: 3092934 Takoma Park Dry Weather

Notes

-- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
-- All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
-- All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
-- Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
-- The Chain of Custody document is included as part of this report.
-- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
-- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
-- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
-- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
-- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

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PROJECT SUMMARY

Workorder: 3092934 Takoma Park Dry Weather

Sample Comments

Lab ID: 3092934011 **Sample ID:** 21205 **Sample Type:** SAMPLE

Analysis cancelled. No sample bottle recieved. SB 03/24/2020.

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID:	**3092934001**	Date Collected:	3/18/2020 09:05	Matrix:	Water
Sample ID:	**80**	Date Received:	3/18/2020 20:30		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Chlorine, Total Residual	ND	1	mg/L	0.10	SM4500-Cl G-2011			3/24/20 07:10	R2B	A
MICROBIOLOGY										
E. Coli	205	3	MPN/100mL	1	S9223B-04	3/19/20 16:51	TDB	3/20/20 17:18	MBR	B
Enterococcus	63	4	MPN/100mL	1	Enterolert	3/19/20 16:40	TDB	3/20/20 17:04	MBR	B

Shannon Butler

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Project Coordinator

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State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID:	**3092934002**	Date Collected:	3/18/2020 09:15	Matrix:	Water
Sample ID:	**8001**	Date Received:	3/18/2020 20:30		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Chlorine, Total Residual	ND	1	mg/L	0.10	SM4500-Cl G-2011			3/24/20 07:10	R2B	A
MICROBIOLOGY										
E. Coli	114	3	MPN/100mL	1	S9223B-04	3/19/20 16:51	TDB	3/20/20 17:18	MBR	B
Enterococcus	38	4	MPN/100mL	1	Enterolert	3/19/20 16:40	TDB	3/20/20 17:04	MBR	B

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID:	**3092934003**	Date Collected:	3/18/2020 10:30	Matrix:	Water
Sample ID:	**8002**	Date Received:	3/18/2020 20:30		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Chlorine, Total Residual	ND	1	mg/L	0.10	SM4500-Cl G-2011			3/24/20 07:10	R2B	A
MICROBIOLOGY										
E. Coli	23	3	MPN/100mL	1	S9223B-04	3/19/20 16:51	TDB	3/20/20 17:18	MBR	B
Enterococcus	248	4	MPN/100mL	1	Enterolert	3/19/20 16:40	TDB	3/20/20 17:04	MBR	B

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID: **3092934004** Date Collected: 3/18/2020 11:30 Matrix: Water

Sample ID: **1106** Date Received: 3/18/2020 20:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Chloride	297		mg/L	5.0	EPA 300.0			3/25/20 05:53	MBW	A
Chlorine, Total Residual	ND	1	mg/L	0.10	SM4500-Cl G-2011			3/24/20 07:10	R2B	A
Color, Apparent	70	2	CU	5	SM2120B-2011			3/20/20 09:18	R2B	A
MICROBIOLOGY										
Enterococcus	4	3	MPN/100mL	1	Enterolert	3/19/20 16:40	TDB	3/20/20 17:04	MBR	C

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID: **3092934005** Date Collected: 3/18/2020 12:30 Matrix: Water

Sample ID: **110601** Date Received: 3/18/2020 20:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Chloride	285		mg/L	5.0	EPA 300.0			3/25/20 06:10	MBW	A
Chlorine, Total Residual	ND	1	mg/L	0.10	SM4500-Cl G-2011			3/24/20 07:10	R2B	A
Color, Apparent	125	2	CU	5	SM2120B-2011			3/20/20 09:18	R2B	A

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID: **3092934006** Date Collected: 3/18/2020 13:00 Matrix: Water

Sample ID: **212** Date Received: 3/18/2020 20:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
MICROBIOLOGY										
E. Coli	3	1	MPN/100mL	1	S9223B-04	3/19/20 16:51	TDB	3/20/20 17:18	MBR	A
Enterococcus	3	2	MPN/100mL	1	Enterolert	3/19/20 16:40	TDB	3/20/20 17:04	MBR	A

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID: **3092934007** Date Collected: 3/18/2020 13:00 Matrix: Water

Sample ID: **21201** Date Received: 3/18/2020 20:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
MICROBIOLOGY										
E. Coli	2	1	MPN/100mL	1	S9223B-04	3/19/20 16:51	TDB	3/20/20 17:18	MBR	A
Enterococcus	1	2	MPN/100mL	1	Enterolert	3/19/20 16:40	TDB	3/20/20 17:04	MBR	A

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID: **3092934008** Date Collected: 3/18/2020 13:10 Matrix: Water

Sample ID: **21202** Date Received: 3/18/2020 20:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
MICROBIOLOGY										
E. Coli	4	1	MPN/100mL	1	S9223B-04	3/19/20 16:51	TDB	3/20/20 17:18	MBR	A
Enterococcus	70	2	MPN/100mL	1	Enterolert	3/19/20 16:40	TDB	3/20/20 17:04	MBR	A

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID: **3092934009** Date Collected: 3/18/2020 13:20 Matrix: Water

Sample ID: **21203** Date Received: 3/18/2020 20:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
MICROBIOLOGY										
E. Coli	ND	1	MPN/100mL	1	S9223B-04	3/19/20 16:51	TDB	3/20/20 17:18	MBR	A
Enterococcus	4	2	MPN/100mL	1	Enterolert	3/19/20 16:40	TDB	3/20/20 17:04	MBR	A

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID: **3092934010** Date Collected: 3/18/2020 13:30 Matrix: Water

Sample ID: **21204** Date Received: 3/18/2020 20:30

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
MICROBIOLOGY										
E. Coli	ND	1	MPN/100mL	1	S9223B-04	3/19/20 16:51	TDB	3/20/20 17:18	MBR	A
Enterococcus	2	2	MPN/100mL	1	Enterolert	3/19/20 16:40	TDB	3/20/20 17:04	MBR	A

Shannon Butler

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID:	**3092934011**	Date Collected:	3/18/2020 13:45	Matrix:	Water
Sample ID:	**21205**	Date Received:	3/18/2020 20:30		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
ADMINISTRATIVE										
Sample Cancelled	Cancelled							3/24/20 12:00	SB	

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

Lab ID:	**3092934012**	Date Collected:	3/18/2020 10:45	Matrix:	Water
Sample ID:	**8003**	Date Received:	3/18/2020 20:30		

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
WET CHEMISTRY										
Chlorine, Total Residual	0.44	3	mg/L	0.10	SM4500-Cl G-2011			3/24/20 07:10	R2B	C
MICROBIOLOGY										
E. Coli	122	1	MPN/100mL	1	S9223B-04	3/19/20 16:51	TDB	3/20/20 17:18	MBR	A
Enterococcus	378	2	MPN/100mL	1	Enterolert	3/19/20 16:40	TDB	3/20/20 17:04	MBR	A

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ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

PARAMETER QUALIFIERS

Lab ID	#	Sample ID	Analytical Method	Analyte
3092934001	1	80	SM4500-Cl G-2011	Chlorine, Total Residual
The chlorine analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.				
3092934001	3	80	S9223B-04	E. Coli
Analyte was analyzed past the 8 hour holding time.				
3092934001	4	80	Enterolert	Enterococcus
Analyte was analyzed past the 8 hour holding time.				
3092934002	1	8001	SM4500-Cl G-2011	Chlorine, Total Residual
The chlorine analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.				
3092934002	3	8001	S9223B-04	E. Coli
Analyte was analyzed past the 8 hour holding time.				
3092934002	4	8001	Enterolert	Enterococcus
Analyte was analyzed past the 8 hour holding time.				
3092934003	1	8002	SM4500-Cl G-2011	Chlorine, Total Residual
The chlorine analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.				
3092934003	3	8002	S9223B-04	E. Coli
Analyte was analyzed past the 8 hour holding time.				
3092934003	4	8002	Enterolert	Enterococcus
Analyte was analyzed past the 8 hour holding time.				
3092934004	1	1106	SM4500-Cl G-2011	Chlorine, Total Residual
The chlorine analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.				
3092934004	2	1106	SM2120B-2011	Color, Apparent
The color analysis was performed on a sample aliquot with a pH of 6.667.				
3092934004	3	1106	Enterolert	Enterococcus
Analyte was analyzed past the 8 hour holding time.				
3092934005	1	110601	SM4500-Cl G-2011	Chlorine, Total Residual
The chlorine analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.				
3092934005	2	110601	SM2120B-2011	Color, Apparent
The color analysis was performed on a sample aliquot with a pH of 6.593.				
3092934006	1	212	S9223B-04	E. Coli
Analyte was analyzed past the 8 hour holding time.				
3092934006	2	212	Enterolert	Enterococcus
Analyte was analyzed past the 8 hour holding time.				
3092934007	1	21201	S9223B-04	E. Coli
Analyte was analyzed past the 8 hour holding time.				
3092934007	2	21201	Enterolert	Enterococcus
Analyte was analyzed past the 8 hour holding time.				

ANALYTICAL RESULTS

Workorder: 3092934 Takoma Park Dry Weather

3092934008	1	21202	S9223B-04	E. Coli
Analyte was analyzed past the 8 hour holding time.				
3092934008	2	21202	Enterolert	Enterococcus
Analyte was analyzed past the 8 hour holding time.				
3092934009	1	21203	S9223B-04	E. Coli
Analyte was analyzed past the 8 hour holding time.				
3092934009	2	21203	Enterolert	Enterococcus
Analyte was analyzed past the 8 hour holding time.				
3092934010	1	21204	S9223B-04	E. Coli
Analyte was analyzed past the 8 hour holding time.				
3092934010	2	21204	Enterolert	Enterococcus
Analyte was analyzed past the 8 hour holding time.				
3092934012	1	8003	S9223B-04	E. Coli
Analyte was analyzed past the 8 hour holding time.				
3092934012	2	8003	Enterolert	Enterococcus
Analyte was analyzed past the 8 hour holding time.				
3092934012	3	8003	SM4500-Cl G-2011	Chlorine, Total Residual

The chlorine analysis is an "analyze immediately" analysis. Parameters identified as "analyze immediately" require analysis within 15 minutes of collection, and are therefore analyzed outside of the method holding time when analyzed in the laboratory.

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ANALYSIS - PREP METHOD CROSS REFERENCE TABLE

Workorder: 3092934 Takoma Park Dry Weather

Lab ID	Sample ID	Analysis Method	Prep Method
3092934001	80	Enterolert	Enterolert
3092934001	80	S9223B-04	S9223B-04
3092934001	80	SM4500-Cl G-2011	
3092934002	8001	Enterolert	Enterolert
3092934002	8001	S9223B-04	S9223B-04
3092934002	8001	SM4500-Cl G-2011	
3092934003	8002	Enterolert	Enterolert
3092934003	8002	S9223B-04	S9223B-04
3092934003	8002	SM4500-Cl G-2011	
3092934004	1106	EPA 300.0	
3092934004	1106	Enterolert	Enterolert
3092934004	1106	SM2120B-2011	
3092934004	1106	SM4500-Cl G-2011	
3092934005	110601	EPA 300.0	
3092934005	110601	SM2120B-2011	
3092934005	110601	SM4500-Cl G-2011	
3092934006	212	Enterolert	Enterolert
3092934006	212	S9223B-04	S9223B-04
3092934007	21201	Enterolert	Enterolert
3092934007	21201	S9223B-04	S9223B-04
3092934008	21202	Enterolert	Enterolert
3092934008	21202	S9223B-04	S9223B-04
3092934009	21203	Enterolert	Enterolert
3092934009	21203	S9223B-04	S9223B-04
3092934010	21204	Enterolert	Enterolert
3092934010	21204	S9223B-04	S9223B-04
3092934012	8003	Enterolert	Enterolert
3092934012	8003	S9223B-04	S9223B-04
3092934012	8003	SM4500-Cl G-2011	

SB

Revised COC attached

ALS Environmental

34 Dogwood Lane
Middletown, PA 17057
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F. 717-944-1430

CHAIN OF C
REQUEST FOR

ALL SHADED AREAS MUST BE
SAMPLER. INSTRUC

3092934

COC #: 3092934 | 1 of 1

ALSI Quote #: 701680

Client Name: BayLand Consultants & Designers Inc.

Address: 7455 New Ridge Road, Suite T
Hanover, MD 21076

Contact: Zach Tate

Phone#: 410-694-9401

Project Name/#: Takoma Park Dry Weather Screening

Bill To: Same

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.

Date Required: _____ Approved By: _____

Email? [x] -Y ztate@baylandinc.com

Fax? [ ] -Y No.:

ANALYSES/METHOD REQUESTED

Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	200.7TB, 200.7THA, 200.7TK	300_WCHL, ~~300_WFLU~~	365.1WTP	NH3_IC	S2120BCOLR, ~~S2130BTURB~~	S2510WCOND, S4500CTKNW	S4500TCL, ~~S5540WMBAS~~	TOTALN, TRMD200.7	S9223ECOLM	S9230COLM, S9223MD_TC
Container Type					Plastic jar	P								P
Container Size						~~250~~			500		250		125	125
Preservative						—			—		—		ST	ST
80	3/18	9:05	Provided	Surface Water							1		1	1
8001	3/18	9:15									1		1	1
8002	3/18	10:30									1		1	1
1106	3/18	11:30				1			1		1			1
110601	3/18	12:30				1			1		1			1
212	3/18	1:00											1	1
21201	3/18	1:00											1	1
21202	3/18	1:10											1	1
21203	3/18	1:20											1	1
21204	3/18	1:30											1	1
21205	3/18	1:45											1	1
8003											1		1	1

Enter Number of Containers Per Sample or Field Results Below.

1 bottle total

Sample/COC Comments

sample not received COM 3/18

half a sample was collected

3 samples ID 8003 received as well COM 3/18

Receipt Information (completed by Receiving Lab)

Cooler Temp: 2°C Therm ID: 444

No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			
(If present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment oOther: _____

Project Comments: 3/19/2020

LOGGED BY(signature): Julie McCarthy DATE 3/18/20 TIME 2:40

REVIEWED BY(signature): DATE TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1 BayLand Consultants & Designers, Inc.	3/18/2020	2:40 PM	2 ALS Courier		
3 ALS Courier			4 COM	3/18/2020	2030
5			6		
7			8		
9			10		

Data Deliverables: [x] Standard [ ] CLP-like [ ] USACE [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [ ] PA [ ] NC [x] MD WV

Reportable to PADEP? Yes [ ]

PWSID # _____

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type-

* G=Grab, C=Composite **Matrix - AI=Air, DW=Drinking Water, GW=Groundwater, OI=Oil, OL=Other Liquid, SL=Sludge, SO=Soil, WI=Wipe, WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER MAILING PINK - FILE GOLDENROD - CUSTOMER COPY Rev 8/04

301 Fulling Mill Road
Middletown, PA 17057
P: (717) 944-5541
F: (717) 944-1430

Condition of Sample Receipt Form

Client:	Work Order #:	Initials:	Date:
Bayland	3092934	gD	3/19/2020

1. Were airbills / tracking numbers present and recorded?	NONE	YES	NO	
Tracking number:				
2. Are Custody Seals on shipping containers intact?	NONE	YES	NO	
3. Are Custody Seals on sample containers intact?	NONE	YES	NO	
4. Is there a COC (Chain-of-Custody) present?		YES	NO	
5. Are the COC and bottle labels complete, legible and in agreement?		YES	NO	*
5a. Does the COC contain sample locations?		YES	NO	
5b. Does the COC contain date and time of sample collection for all samples?		YES	NO	
5c. Does the COC contain sample collectors name? collected by client		YES	NO	
5d. Does the COC note the type(s) of preservation for all bottles? added to coc		YES	NO	
5e. Does the COC note the number of bottles submitted for each sample?		YES	NO	
5f. Does the COC note the type of sample, composite or grab? not provided		YES	NO	
5g. Does the COC note the matrix of the sample(s)?		YES	NO	
6. Are all aqueous samples requiring preservation preserved correctly?[1]	N/A	YES	NO	
7. Were all samples placed in the proper containers for the requested analyses, with sufficient volume?		YES	NO	**
8. Are all samples within holding times for the requested analyses? Tc/EC received past hold - 8 hr		YES	NO	
9. Were all sample containers received intact and headspace free when required? (not broken, leaking, frozen, etc.)		YES	NO	
10. Did we receive trip blanks (applies only for methods EPA 504, EPA 524.2 and 1631E (LL Hg)?	N/A	YES	NO	
11. Were the samples received on ice?		YES	NO	
12. Were sample temperatures measured at 0.0-6.0°C		YES	NO	
13. Are the samples DW matrix ? If YES, fill out Reportable Drinking Water questions below		YES	NO	
13a. Are the samples required for SDWA compliance reporting?	N/A	YES	NO	
13b. Did the client provide a SDWA PWS ID#?	N/A	YES	NO	
13c. Are all aqueous unpreserved SDWA samples pH 5-9?	N/A	YES	NO	
13d. Did the client provide the SDWA sample location ID/Description?	N/A	YES	NO	
13e. Did the client provide the SDWA sample type (D, E, R, C, P, S)?	N/A	YES	NO	

Cooler #:								
Temperature (°C):	2							
Thermometer ID:	441							
Radiological (µCi):								

COMMENTS (Required for all NO responses above and any sample non-conformance):

* received extra set 8003, collected 3/18/2020 @ 1045, added to coc
did not receive 1 sample 110601 - P 125 ST, per coc half a sample collected

** limited volume received for MBAS - P 250 UNP

[1]Final determination of correct preservation for analysis such as volatiles, microbiology, and oil and grease is made in the analytical department at the time of or following the analysis

Rev 1/20/2020

ALS Environmental
301 Fulling Mill Road
Middletown, PA 17057
P. 717-944-5541
F. 717-944-1430

CHAIN OF CUSTODY/ REQUEST FOR ANALYSIS

Generated by ALSI

ALL SHADED AREAS MUST BE COMPLETED BY THE CLIENT / SAMPLER. INSTRUCTIONS ON THE BACK.

COC #: 3092934

ALSI Quote #: 701680

Client Name: BayLand Consultants & Designers Inc.
Address: 7455 New Ridge Road, Suite T
Hanover, MD 21076
Contact: Zach Tate
Phone#: 410-694-9401
Project Name/#: Takoma Park Dry Weather Screening
Bill To: Same

TAT [x] Normal-Standard TAT is 10-12 business days.
[ ] Rush-Subject to ALS approval and surcharges.
Date Required: _____ **Approved By:** _____
Email? [x] -Y ztate@baylandinc.com
Fax? [ ] -Y No.:

	Container Type	Plastic	Plastic	Plastic	Plastic						
	Container Size	125 mL	125 mL	250 mL	500 mL						
	Preservative	ST	ST	none	none						
		ANALYSES/METHOD REQUESTED									
		Total Coliform, E. Coli SS 3/19/2020	Enterococci	Residual Chlorine	Color, Chloride						

	Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Total Coliform, E. Coli SS 3/19/2020	Enterococci	Residual Chlorine	Color, Chloride							Sample/COC Comments
						Enter Number of Containers Per Sample or Field Results Below.										
1	80	3/18/20	905			1	1	1								Revised COC prepared by
2	8001	3/18/20	9015			1	1	1								Shannon Butler @ ALS per
3	8002	3/18/20	1030			1	1	1								phone conversation w/ Zach
4	1106	3/18/20	1130				1	1	1							Tate @ Baylands SS 3/19/2020
5	110601	3/18/20	1230					1	1							half samlpes collected - No micro
6	212	3/18/20	1300			1	1									
7	21201	3/18/20	1300			1	1									
8	21202	3/18/20	1310			1	1									
9	21203	3/18/20	1320			1	1									
10	21204	3/18/20	1330			1	1									

Receipt Information (completed by Receiving Lab)
Cooler Temp: _____ **Therm ID:** _____
No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			
(If present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment oOther: _____

Project Comments:

LOGGED BY(signature): DATE TIME
REVIEWED BY(signature): DATE TIME

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1			2		
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [x] Standard [ ] CLP-like [ ] USACE [ ]
Special Processing: USACE [ ] Navy [ ]
State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] NC [ ] MD [ ] WV
Reportable to PADEP? Yes [ ]
PWSID # _____
Sample Disposal: Lab [ ] Special [ ]
EDDS: Format Type- _____

* G=Grab; C=Composite **Matrix - Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

Copies: WHITE - ORIGINAL CANARY - CUSTOMER MAILING PINK - FILE GOLDENROD - CUSTOMER COPY

Rev 8/04

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[ ] Rush-Subject to ALS approval and surcharges.
Date Required: _____ Approved By: _____
Email? [x] -Y ztate@baylandinc.com
Fax? [ ] -Y No.:

	Sample Description/Location (as it will appear on the lab report)	Sample Date	Time	*G or C	**Matrix	Total Coliform, E. Coli	Enterococci	Residual Chlorine	Color, Chloride						
	Container Type					Plastic	Plastic	Plastic	Plastic						
	Container Size					125 mL	125 mL	250 mL	500 mL						
	Preservative					ST	ST	none	none						
	ANALYSES/METHOD REQUESTED														
	Enter Number of Containers Per Sample or Field Results Below.														
11	21205	3/18/20	1345			1	1								
12	8003	3/18/20	1045			1	1	1							

Receipt Information (completed by Receiving Lab)

Cooler Temp: _____ Therm ID: _____
No. of Coolers: _____

	Y	N	Initial
Custody Seals Present?			
(if present) Seals Intact?			
Received on Ice?			
COC/Labels Complete/Accurate?			
Cont. in Good Cond.?			
Correct Containers?			
Correct Sample Volumes?			
Correct Preservation?			
Headspace/Volatiles?			

Courier/Tracking #:

Sample/COC Comments

ALSI Field Services: oPickup oLabor oComposite Sampling oRental Equipment oOther:_____

Project Comments:

LOGGED BY(signature): DATE: TIME:
REVIEWED BY(signature): DATE: TIME:

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
1			2		
3			4		
5			6		
7			8		
9			10		

Data Deliverables: [x] Standard [ ] CLP-like [ ] USACE [ ]

Special Processing: USACE [ ] Navy [ ]

State Samples Collected In: [ ] NY [ ] NJ [x] PA [ ] NC [ ] MD [ ] WV

Reportable to PADEP? Yes [ ]
PWSID # _____

Sample Disposal: Lab [ ] Special [ ]

EDDS: Format Type- _____

* G=Grab; C=Composite **Matrix - Al=Air; DW=Drinking Water; GW=Groundwater; Ol=Oil; OL=Other Liquid; SL=Sludge; SO=Soil; WP=Wipe; WW=Wastewater

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Rev 8/04

PROJECT SUMMARY

Workorder: 3095672 Takoma Park Dry Weather Screen

Sample Comments

Lab ID: 3095672001 **Sample ID:** 110601 **Sample Type:** SAMPLE

Sample was run for total coliform and e. coli, but a result could not be determined due to the color of the sample. This method is a color metric method and samples are results are determined from a yellow color spectrum. This sample was brownish/orange and could not be determined on the yellow color spectrum. SB 04/10/2020.

ALS Environmental

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NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

ANALYTICAL RESULTS

Workorder: 3095672 Takoma Park Dry Weather Screen

Lab ID: **3095672001** Date Collected: 4/6/2020 14:10 Matrix: Water

Sample ID: **110601** Date Received: 4/6/2020 20:45

Parameters	Results	Flag	Units	RDL	Method	Prepared	By	Analyzed	By	*Cntr*
ADMINISTRATIVE										
Sample Cancelled	Cancelled							4/10/20 14:30	SB	A

Shannon Butler

Ms. Shannon Butler
Project Coordinator