

B. Filing with MassDEP – As previously noted, **only** facilities in Massachusetts that were previously unpermitted and discharge to an Outstanding Resource Water (ORW) and High Quality Waters must submit an NOI to MassDEP. In such cases, a completed copy of the NOI must also be sent to:

Massachusetts Department of Environmental Protection
Division of Watershed Management
8 New Bond Street
Worcester, MA 01606

C. Filing with NH DES – All applicants in New Hampshire must also provide a completed copy of their NOI to NH DES at the following address:

New Hampshire Department of Environmental Services
Water Division, Wastewater Engineering Bureau
29 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

III. Suggested Notice of Intent (NOI) Format

A. Facility Information

1. *Indicate applicable General Permit for discharge*

MAG640000

NHG640000

2. *Facility Data*

Facility Name NORTH ANDOVER WATER TREATMENT PLANT

Street/PO Box 420 Great Pond Road City North Andover

State MA Zip Code 01845

Latitude 42 41 25.67N Longitude 71 5 50.29W

SIC Code(s) 4941

Type of Business PUBLIC WATER SUPPLY

3. *Facility Mailing Address (if different from Location Address, above)*

Facility Name _____

Street/PO Box _____ City _____

State _____ Zip Code _____

4. *Facility Owner:*

Legal Name TOWN OF NORTH ANDOVER

Email galt@northandoverma.gov

Street/PO Box _____ City _____

State _____ Zip Code _____

Contact Person Glen Alt Tel # 978-688-9574

Owner is (check one): Federal _____ State _____ Tribal _____ Private _____

Other (describe) Town owned

5. *Facility Operator (if different from above):*

Legal Name _____

Email _____

Street/PO Box _____ City _____

State _____ Zip Code _____

Contact Person _____ Tel # _____

6. *Currently (Administratively) Covered Under the Expired PWTF General Permit? (Please check yes or no):*

Yes No

a) Has a prior NPDES permit (either individual or general permit coverage) been granted for the discharge that is listed on the NOI? Yes No If Yes, Permit Number MAG640078

b) Is the discharge a "new discharger" as defined by 40 CFR Section 122.22? Yes No

c) Is the facility covered by an individual NPDES permit for *other* discharges? Yes No

If yes, Permit Number: _____

d) Is there a pending NPDES application (either individual or general permit) on file with EPA for this discharge? Yes No

If yes, date of submittal: _____ and Permit Number, if available _____

7. *Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water.* **Map attached?**

B. Discharge Information (Attach additional sheets as needed):

1. Name of receiving water into which discharge will occur: Lake Cochichewick
Check Appropriate Box: Freshwater Marine Water
State Water Quality Classification Class A
Type of Receiving Water Body (e.g., stream, river, lake, reservoir, estuary, etc.) LAKE

2. Indicate the frequency of the discharge:

Emergency Only Infrequent (Once/Twice a Year) Intermittent*** Continuous

Other***

***If Intermittent (i.e., occurs sometimes but not regularly as in batch discharge), provide # of days per year the discharge occurs _____

***If Other, explain _____

3. Describe the discharge activities for which the owner/applicant is seeking coverage, including process discharges not specifically authorized in the PWTF GP which need to be authorized for discharge (and which attain the effluent limits and other conditions of the general permit.)

(This description should include all treatment methods used on the wastewater prior to discharge including lagoons, baffles, filter presses, etc. If lagoons are used at the facility, please include the number and size of lagoons; the size and elevation of the entry pipe; the time of travel from the entry point of the discharge into the lagoon to the entry point to the receiving waters; and the length of backwash cycle for any combination of filters.)

Water enters the plant into the raw water wetwell by gravity and pumped to the ozone contact chamber where ozone is added to break down organics. Water flows to the rapid mix tank where PCH-180 (coagulant) is added. Then water travels to slower mixers and then the sedimentation tanks. It is at the end of the sed tanks just before the carbon filters is where the first emergency overflow is located. The water then goes thru the filters and into a clearwell. When needed the filters are backwashed, the backwash water goes into a storage tank. The backwash water settles overnight, the top cleaner water is sent back to the headworks and the sludge is sent to the sewer plant. An emergency overflow is located in the back wash tank. The third emergency overflow is located in the clearwell.
We have not had an overflow in at least the last 5 years.

4. Attach a line drawing or flow schematic showing water flow through the facility including sources of intake water, operations contributing to flow, treatment units, outfalls, and receiving water(s).

Line drawing or flow diagram attached? yes

5. Identify the source of the water being discharged:

Surface water Groundwater Other (describe)

6. Number of Outfalls 3 Latitude and Longitude to the nearest second for each Outfall. Attach additional pages if necessary.

Outfall # 1	Latitude <u>42 41 26.29 N</u>	Longitude <u>71 5 53.27W</u>
Outfall # 2	Latitude <u>42 41 26.29 N</u>	Longitude <u>71 5 53.27W</u>
Outfall # 3	Latitude <u>42 41 27.48 N</u>	Longitude <u>71 5 50.59 W</u>

7. For each outfall, indicate the proposed sampling location(s) for both effluent and ambient water (when applicable) and proposed consistent times of the month for collecting samples:

Outfall # 1 AT THE OUTFALL

Outfall # 2
AT THE OUTFALL

Outfall # 3
AT THE OUTFALL

C. Effluent Characteristics

1. List here and attach additional information (on separate sheet) on any water additives used at the facility. This includes chemicals (including aluminum, iron, or phosphorus-containing chemicals) for pH adjustment, dechlorination, control of biological growth, and control of corrosion and scale in water pipes.

- POLYALUMINUM CHLORIDE

- SODIUM HYDROXIDE

- SODIUM HYPOCHLORITE

- HYDROFLUOSILIC ACID

- ZINC ORTHPHOSPHATE

2. Report any known remediation activities or water quality issues in the vicinity of the discharge

3. Are aluminum compounds or polymers used as coagulants at this facility?*

Yes _x No

*If answer is "Yes" and the facility was *not* covered under the PWTF GP that expired on

10/2/14, additional monitoring data and information is required. **Please complete Item III.C.12.**

4. Does the facility use any alum-based products for algae control?*
- Yes_ No X

*If answer is "Yes" and the facility was *not* covered under the PWTF GP that expired on 10/2/14, additional monitoring data and information is required. **Please complete Item III.C.12.**

5. Are iron-containing coagulants used at this facility? Yes_ No X
6. Does the facility's discharge contain residual chlorine? Yes X No

[If Yes, EPA will calculate a Total Residual Chlorine effluent limit for your facility]

7. Does the facility provide treatment to remove arsenic from the raw water source? Yes No X
8. a. Are phosphorus-containing chemicals added to the treated water at this facility? Yes X No
- b. If answer to 8.a. is Yes, does the facility discharge to Phosphorus-Impaired waters? Yes No X
- c. If answer to 8.b. is Yes, provide name of P-Impaired waterbody: _____
9. Does the facility remove radium or other radioactive substances from raw water sources to comply with drinking water standards? Yes No X

10. Provide the reported or calculated seven day- ten year low flow (7Q10) of the receiving water
7Q10: 0 cfs

NOTE: For facilities that discharge in New Hampshire, the state permitting authority **must** be contacted at the address listed in Appendix VI of the PWTF GP to determine and/or confirm the 7Q10 and/or dilution factor. For facilities that discharge in Massachusetts, it is highly recommended to contact the relevant state authority (MassDEP) to determine and/or confirm the 7Q10 and/or dilution factor.
Attach any calculation sheets used to support the stream flow and dilution factors. See Appendix VII for equations and additional information.

11. For *each* outfall, provide the following discharge information:

Outfall # 1,2,3

a) *Design Flow of Facility (in million gallons per day, MGD):* 10.3
This value will determine the facility's daily maximum flow limit, up to a maximum of 1.0 MGD.

b) *Discharge Flow (in gallons per day, GPD):*

Maximum Daily Flow 0 GPD Average Monthly Flow 0 GPD

c) *TSS (mg/l):* Number of samples: 0 (Minimum of 10 samples)

NPDES Potable Water Treatment Facility General Permit
MAG640000 and NH640000
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Maximum Daily 0 mg/l Average Monthly 0 mg/l

d) pH (s.u.) : Number of samples: 0 (Minimum of 10 samples)
Minimum 0 s.u. Maximum 0 s.u.

e) Total Residual Chlorine (ug/l): Number of samples: 0 (Minimum of 10 samples)
Maximum Daily 0 ug/l

NOTE: TRC is only required for discharges which have been previously chlorinated or contain residual chlorine

12. The following section must be completed for any facility that answered "Yes" to Question III.C.3 or III.C.4 (e.g. adds an aluminum-containing chemical to the water being treated and/or discharged) AND was not covered under the previous PWTF GP (which expired on 10/2/14).

- a) Collect, analyze and submit **12 effluent samples and 10 ambient surface water samples** from a location upstream of and not affected by the discharge. For facilities in New Hampshire and Massachusetts, each sample should be analyzed for total recoverable Al in micrograms per liter. All laboratory results shall be submitted on a separate sheet.
 - a. The samples shall be composite samples consisting of four grab samples taken at approximately equal intervals on a flow weighted basis during the time at which the discharge is entering the receiving water after the start of the backwash cycle.
 - b. For each sampling event, the effluent and surface water samples shall be collected on the same day and during a representative discharge event. The samples shall be no more frequent than weekly and, if time allows in completing the NOI, at monthly intervals and at different flow conditions. If taking the ambient water quality sample from lakes/reservoirs, the 10 samples should be composited vertically.
 - c. Discharge flow at the time of effluent sampling should be recorded. Flow conditions at the time of ambient water sampling should be recorded (or estimated from nearest gaging station).
 - d. Do not include dilution when recording the results.
 - e. See Section 2.1.2.3 and Footnote 12 of Section 2.1.1 for MA facilities (or Section 3.1.2.3 and Footnote 10 of 3.1.1 for NH facilities) for key information on minimum level for analysis and sufficiently sensitive test procedures.
 - f. Sampling data that was collected within one year of the effective date of this general permit AND that adheres to all of the requirements above may be submitted in lieu of new samples. This must be denoted with the submitted data.

- b) Provide a description of control measures, chemical substitutions, waste handling methods, and operational changes evaluated and/or used by the facility to minimize the discharge of aluminum to surface waters. (Include additional sheet(s), if necessary)

E. National Historic Properties Act Eligibility

1. Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? Yes No

2. Have any State or Tribal Historic Preservation Officers been consulted in this determination?
Yes No

If yes, attach the results of the consultation(s). Documentation attached? _____

3. Which of the three National Historic Preservation Act scenarios listed in Appendix II, Section III have you met?

1 2 3

F. Supplemental Information

Please provide any supplemental information, including antidegradation review information applicable to new or increased discharges. Attach any analytical data used to support the application. Attach any certification(s) required by the General Permit.

G. Signature Requirements

The NOI must be signed by the operator in accordance with the signatory requirements of 40 CFR § 122.22 (see below) including the following certification:

I certify under penalty of law that (1) the discharge for which I am seeking coverage under the general permit consists solely of a surface water discharge from a potable water treatment facility; (2) any chemicals used to treat the discharge have been identified in this NOI; and (3) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature Glen C. AET Date 7/6/17

Printed Name and Title Glen C. AET Superintendent

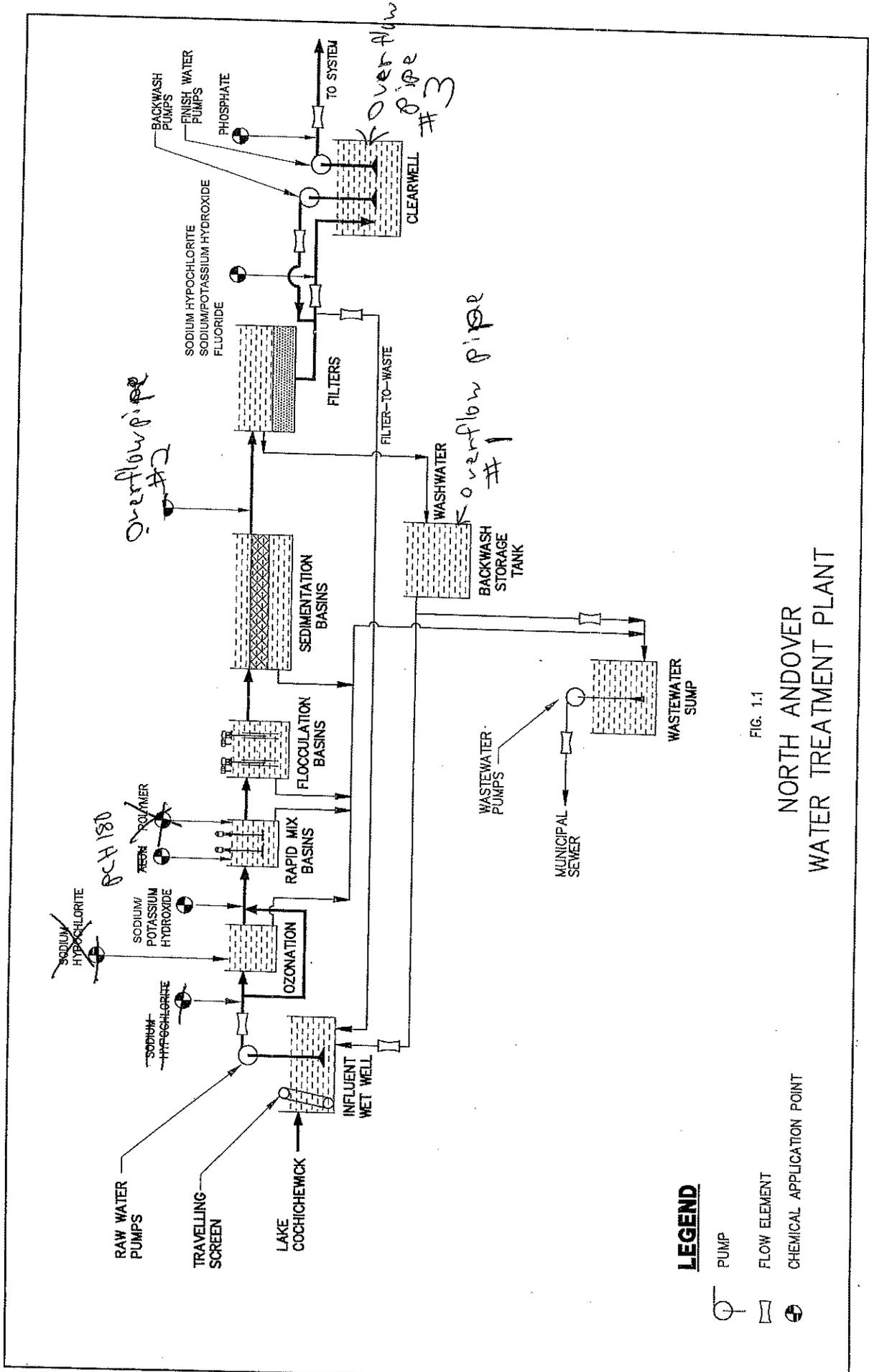
Federal regulations require this application to be signed as follows:

1. For a corporation, by a responsible corporate party;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Note: Permits No. MAG640000 and NHG640000 may be found at <http://www3.epa.gov/region1/npdes/pwtfgp.html>

H. “Opt-Out Request” from NetDMR Requirement

1. Check the box if you are applying for an “opt-out request.”
2. Provide a detailed explanation of the technical or administrative factors that support your request to “opt-out” from the requirement to submit DMRs and reports electronically. (Add additional lines, if necessary.)



LEGEND

-  PUMP
-  FLOW ELEMENT
-  CHEMICAL APPLICATION POINT

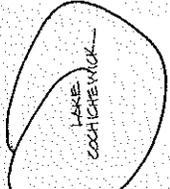
FIG. 1.1

NORTH ANDOVER
WATER TREATMENT PLANT

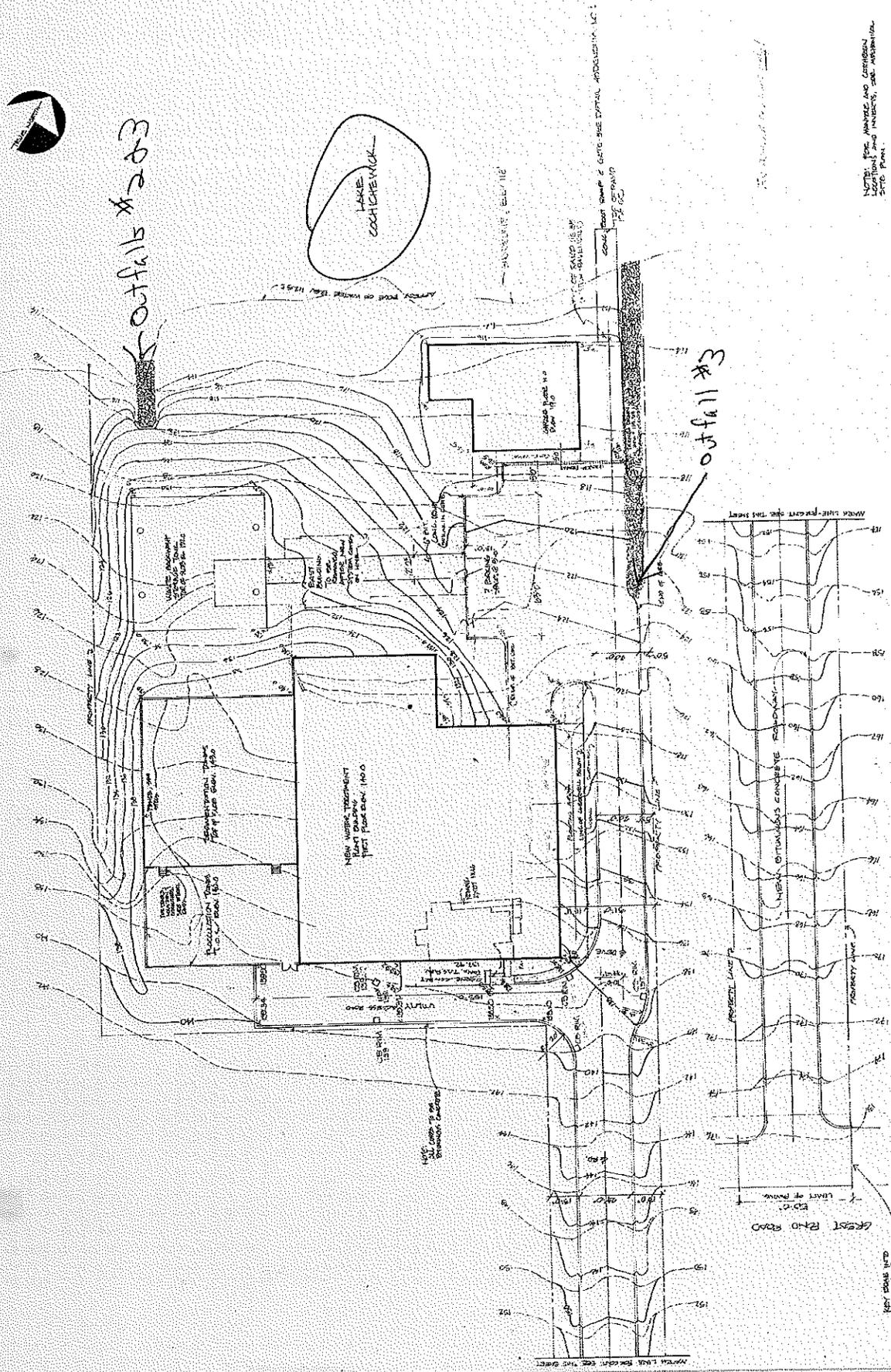
NO.	DATE	DESCRIPTION
1	10/20/03	PRELIMINARY
2	11/10/03	REVISED FOR PERMITS
3	12/15/03	REVISED FOR PERMITS
4	01/20/04	REVISED FOR PERMITS
5	02/10/04	REVISED FOR PERMITS
6	03/05/04	REVISED FOR PERMITS
7	03/15/04	REVISED FOR PERMITS
8	04/05/04	REVISED FOR PERMITS
9	04/15/04	REVISED FOR PERMITS
10	05/05/04	REVISED FOR PERMITS
11	05/15/04	REVISED FOR PERMITS
12	06/05/04	REVISED FOR PERMITS
13	06/15/04	REVISED FOR PERMITS
14	07/05/04	REVISED FOR PERMITS
15	07/15/04	REVISED FOR PERMITS
16	08/05/04	REVISED FOR PERMITS
17	08/15/04	REVISED FOR PERMITS
18	09/05/04	REVISED FOR PERMITS
19	09/15/04	REVISED FOR PERMITS
20	10/05/04	REVISED FOR PERMITS
21	10/15/04	REVISED FOR PERMITS
22	11/05/04	REVISED FOR PERMITS
23	11/15/04	REVISED FOR PERMITS
24	12/05/04	REVISED FOR PERMITS
25	12/15/04	REVISED FOR PERMITS



Outfalls #203



Outfalls #3



NOTE: FOR WAIVER AND CERTIFICATION
 LOCATION AND NUMBER, SEE MEMORANDUM
 DATE PERMITS

RECORD DRAWING
 GRAPHIC SCALE
 0 10 20 30 40 50

2017 North Andover Aluminum Residuals

If either of the first two outfalls have a discharge, the water would have aluminum residual in it.

If outfall 3 were to have a discharge, there would be chlorine, sodium hydroxide and hydrofluosilic acid would be in the water. Chlorine averages 0.8 to 1.4 mg/l, pH would be 7.0 to 7.5, and the fluoride levels would be about 0.7 mg/l.

Month	Test 1	2	3	4	5	Average
January	0.16	0.48	0.15	0.11		0.23
February	0.17	0.11	0.14	0.13		0.14
March	0.16	0.23	0.14	0.21	0.23	0.19
April	0.14	0.15	0.12			0.14
May	0.18					0.18
June	0.19	0.15	0.11	0.14		0.15
						0.17