Notice of Intent (NOI)

A. Facility Information

1. *Indicate applicable General Permit for discharge* MAG640000

   NHG640000

2. *Facility Data*

   Facility Name Gravelly Pond WTF.

   Street/PO Box 2000 Pipeline Road City Manchester By The Sea

   State Massachusetts Zip Code 01944

   Latitude 42.5901 Longitude -70.7926

   SIC Code(s) Not Applicable

   Type of Business See Attached

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

   Facility Name Woodard & Curran

   Street/PO Box 1527 City Manchester By The Sea

   State Massachusetts Zip Code 01944

4. *Facility Owner:*
Legal Name Town of Manchester-by-the-Sea

Email murrayc@manchester.ma.us

Street/PO Box 10 Central Street City Manchester By The Sea

State Massachusetts Zip Code 01944

Contact Person Carol Murray Tel # 978-526-1242

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

Other (describe)
Municipal

5. *Facility Operator (if different from above):*
Legal Name Woodard & Curran

Email gsutson@woodardcurran.com

Street/PO Box 1527 City Manchester By The Sea

State Massachusetts Zip Code 01944

Contact Person Glenn Sutson Tel # 781-858-5348 Cell

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 MAG640003

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: MAG640003

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*: Gravelly Pond

Check Appropriate Box: **Freshwater** Marine Water

State Water Quality Classification Class Fresh

Type of Receiving Water Body (e.g., stream, river, lake, reservoir, estuary, etc.) Reservoir

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 Daily

***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.)

Lead & lag lagoon operation w/controlles discharge & overflow piping
(3) Lagoons w/2 online & 1 always in a freeze thow mode
Size + elevation of entry pipe : 8" @ 67.00
Time of travel : 275GPM = 1,103 min = 18.4hrs
Length of BW cycle : 25min

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?

5. Identify the source of the water being discharged:

Surface water Groundwater Other (describe)

6. Number of Outfalls 1 Latitude and Longitude to the nearest second for each Outfall. Attach additional pages if necessary.

Outfall # Latitude 42.5901 Longitude -70.7926

Outfall # Latitude _____ Longitude _____

Outfall # Latitude _____ Longitude _____

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 #
Weekly
Discharge To Gravelly Pond (GRAB)

Outfall #

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.

Sodium Hydroxide (PH) , Zinc Orthophosphate (CORROSSION) - Finish Water Only - Not Contained In Outfall Discharge

Alum,Polymer, Potassium Permanganate, Flouride and Sodium Hypochlorite

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

None

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

Yes ✓ 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 ✓

*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 ✓

6. Does the facility's discharge contain residual chlorine? Yes ✓ 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

8. a. Are phosphorus-containing chemicals added to the treated water at this facility? Yes No

b. If answer to 8.a. is Yes, does the facility discharge to Phosphorus-Impaired waters? Yes No

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 ✓

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

a) *Design Flow of Facility (in million gallons per day, MGD):* 3 MGD
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 358,581 GPD Average Monthly Flow 74,762 GPD

c) *TSS (mg/l)*: Number of samples: 12 (Minimum of 10 samples)

Maximum Daily 4.8 mg/l Average Monthly 0.9 mg/l

d) *pH (s.u.)* : Number of samples: 12 (Minimum of 10 samples)
Minimum 6.6 s.u. Maximum 7.4 s.u.

e) *Total Residual Chlorine (ug/l)*: Number of samples: 12 (Minimum of 10 samples)
Maximum Daily 170 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)

_____

_____

_____

_____

_____

D. Endangered Species Act Eligibility Information

Using the instructions in Appendix III of the PWTF GP, which of the following criteria apply to your facility?

U.S. Fish and Wildlife Service (USFWS) Criteria: A B C

1. If you selected USFWS criteria B, has consultation with the U.S. Fish and Wildlife Service been completed?

   Yes No

2. If consultation with US Fish & Wildlife Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received?

   Yes No

3. Attach documentation of ESA eligibility for USFWS as required at Part 1.4 and Appendix III of the General Permit. **Documentation attached?** Yes

4. For facilities seeking coverage under the Potable Water Treatment Facility General Permit for the *first* time, respond to the following questions to assist in ESA eligibility for NMFS:

   a) Indicate if the facility discharges into any of the stretches of the following rivers which can support or provide habitat to either Shortnose or Atlantic Sturgeon:

Merrimack River (from Essex Dam in Lawrence, Downstream (including Haverhill) to mouth of River)	Yes	No
Connecticut River (from Turner's Falls, downstream through Holyoke (including Holyoke Dam region)	Yes	No
Taunton River	Yes	No
Piscataqua River (in NH)	Yes	No

   b) Has the facility had any previous formal or informal consultation with NMFS?

   Yes No

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

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 _____ Date 5/4/17

Printed Name and Title Glenn Sutson Plant Manager

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.)

_____

_____

_____

_____

_____

Glenn Sutson

From: Holt, Emily (FWE) <Emily.Holt@MassMail.State.MA.US>
Sent: Thursday, May 4, 2017 10:00 AM
To: Joe Geary
Cc: Glenn Sutson; Benjamin Patten; Medeiros, Daisy M (FWE)
Subject: RE: Manchester by the Sea Water Treatment Facility

Joe,

Thank you for clarifying the location. The Water Treatment Plant adjacent to Gravelly Pond in Hamilton is not within Priority Habitat for Rare Species and therefore does not require any further review pursuant to the MA Endangered Species Act.

Best,

Emily Holt
Endangered Species Review Assistant
Natural Heritage & Endangered Species Program
Massachusetts Division of Fisheries & Wildlife
1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6385 | f: (508) 389-7890
mass.gov/nhesp

From: Joe Geary [mailto:jgeary@woodardcurran.com]
Sent: Thursday, May 04, 2017 7:42 AM
To: Holt, Emily (FWE)
Cc: Glenn Sutson; Benjamin Patten; Medeiros, Daisy M (FWE)
Subject: RE: Manchester by the Sea Water Treatment Facility

Thanks, Emily. We will try to locate a map. In the meantime, can you check this address? 577 Chebacco Road Hamilton, Mass. 01944. Even though it's Manchester's plant, it is actually Hamilton. The coordinates are: Latitude 42.5901, Longitude - 70.7926. Thanks. Joe Geary

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From: Holt, Emily (FWE) [mailto:Emily.Holt@MassMail.State.MA.US]
Sent: Wednesday, May 3, 2017 6:19 PM
To: Joe Geary <jgeary@woodardcurran.com>
Cc: Glenn Sutson <gsutson@woodardcurran.com>; Benjamin Patten <bpatten@woodardcurran.com>; Medeiros, Daisy M (FWE) <daisy.m.medeiros@state.ma.us>
Subject: RE: Manchester by the Sea Water Treatment Facility

Joe,

Could you provide a map showing the property boundaries? I was unable to locate that street address.

Thanks,

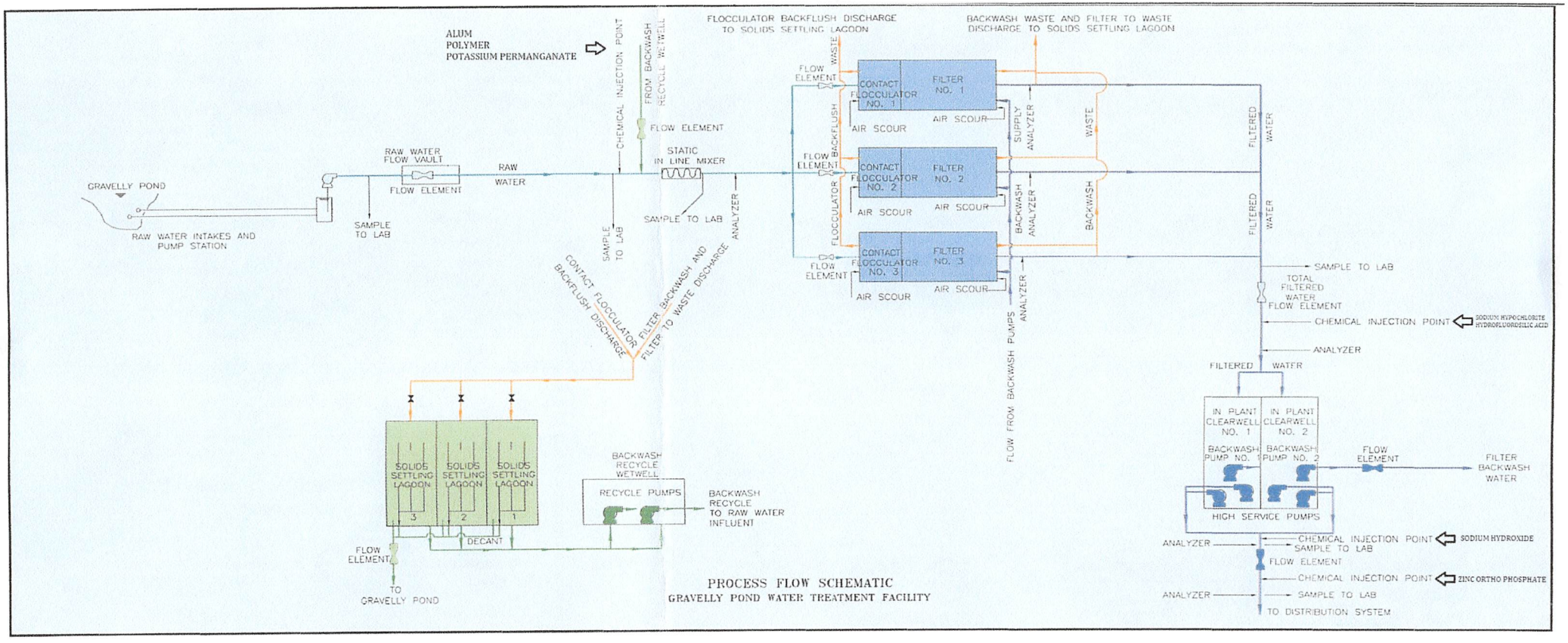
Emily Holt
Endangered Species Review Assistant

Natural Heritage & Endangered Species Program
Massachusetts Division of Fisheries & Wildlife
1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6385 | f: (508) 389-7890
mass.gov/nhesp

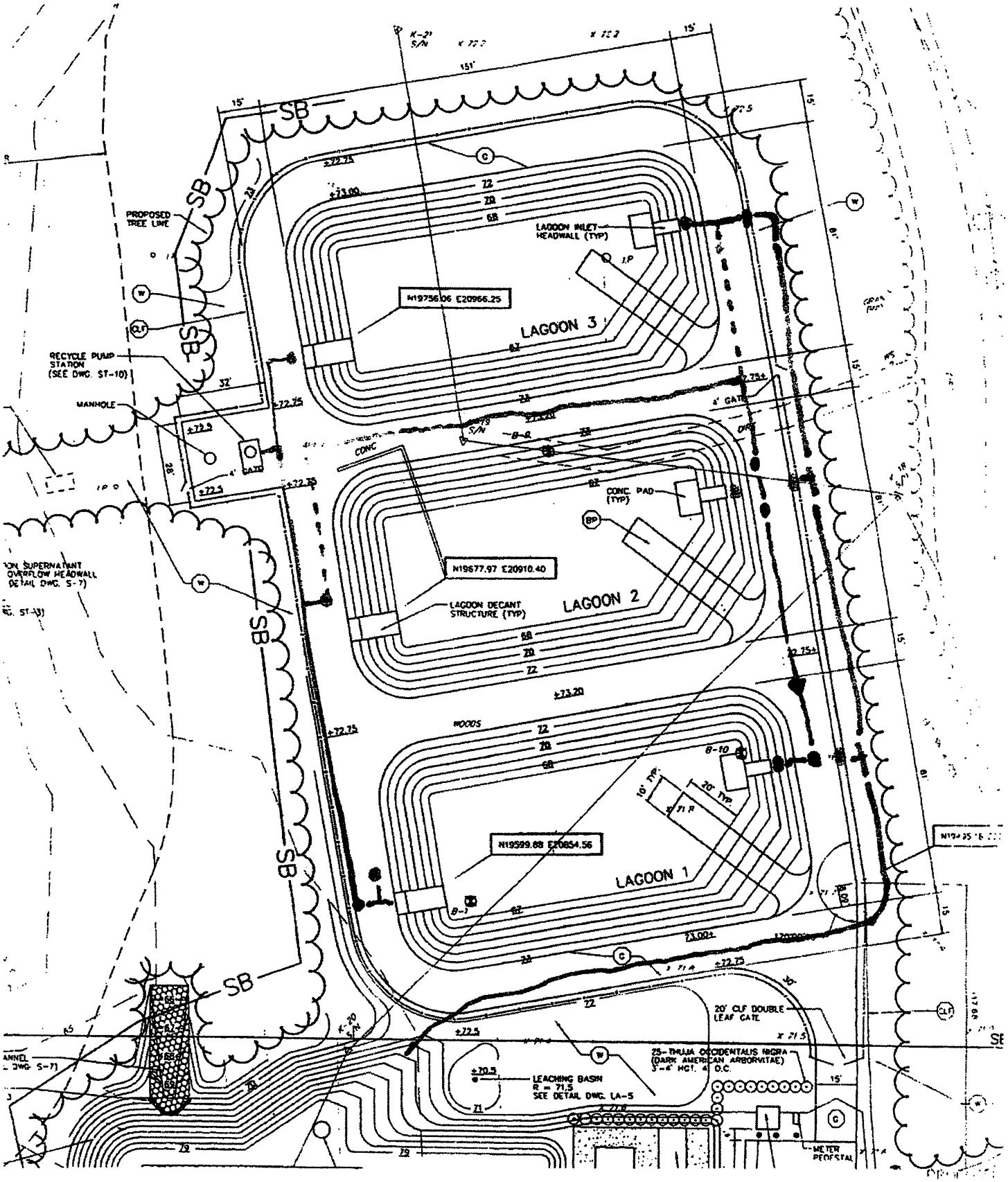
From: Joe Geary [mailto:jgeary@woodardcurran.com]
Sent: Friday, April 28, 2017 11:03 AM
To: Holt, Emily (FWE)
Cc: Glenn Sutson; Benjamin Patten
Subject: Manchester by the Sea Water Treatment Facility

Good morning, Emily. I am in the process of applying for a discharge permit for the Gravelly Pond Water Treatment Facility. As part of this process, I need to check if there are any endangered species in the vicinity of the treatment plant located at 2000 Pipeline Road in Manchester. This plant discharges settled water into Gravelly Pond in Manchester. Would you be able to help me out with this or could you point me in the right direction? Thanks. Joe Geary

M. Joseph Geary
Area Manager / Sr. Principal
Cell – 978-836-9082
Skype – 978-482-7879



PROCESS FLOW SCHEMATIC
GRAVELLY POND WATER TREATMENT FACILITY



WARD, INC.
MASS.
H PORTLAND, MAINE

1/16/95

ORIGINAL FULL SIZE DRAWING=4"
REPRODUCTIONS MAY BE REDUCED SIZE

APPROVED

DESIGNED	DRAWN	CHECKED	SCALE	DATE
STF	STF	EFC	1" = 20'	JAN. 1995

DRAWING NO. LA-4
JOB NO. 93-212
CONTRACT NO. 95-1
SHEET 8 OF 88 SHEETS

WATER TREATMENT
MANCHESTER-BY-
MASSACHUS
LAGOON

Filling Lagoon #3 - Discharging into #1

● Open
● Feed from plant

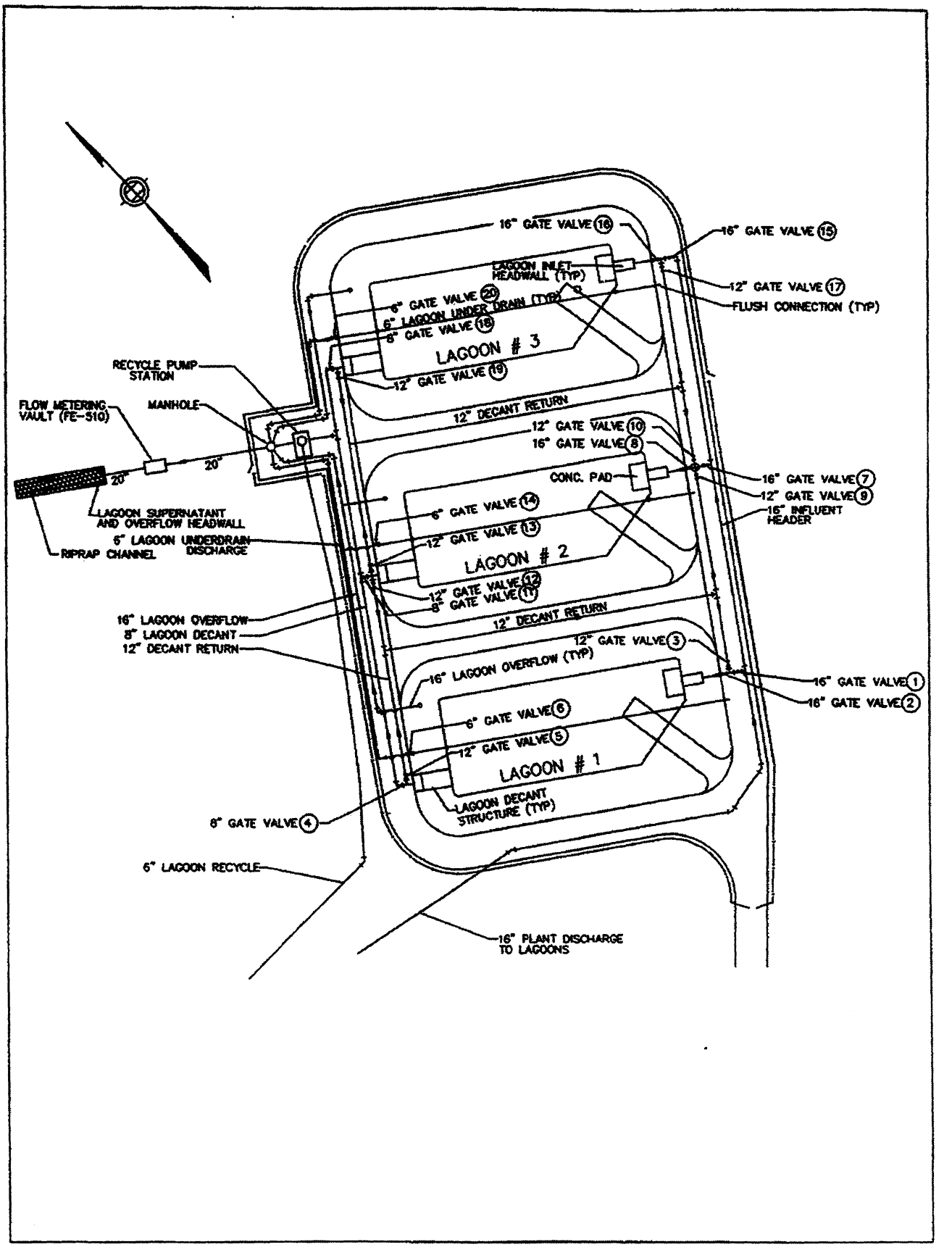
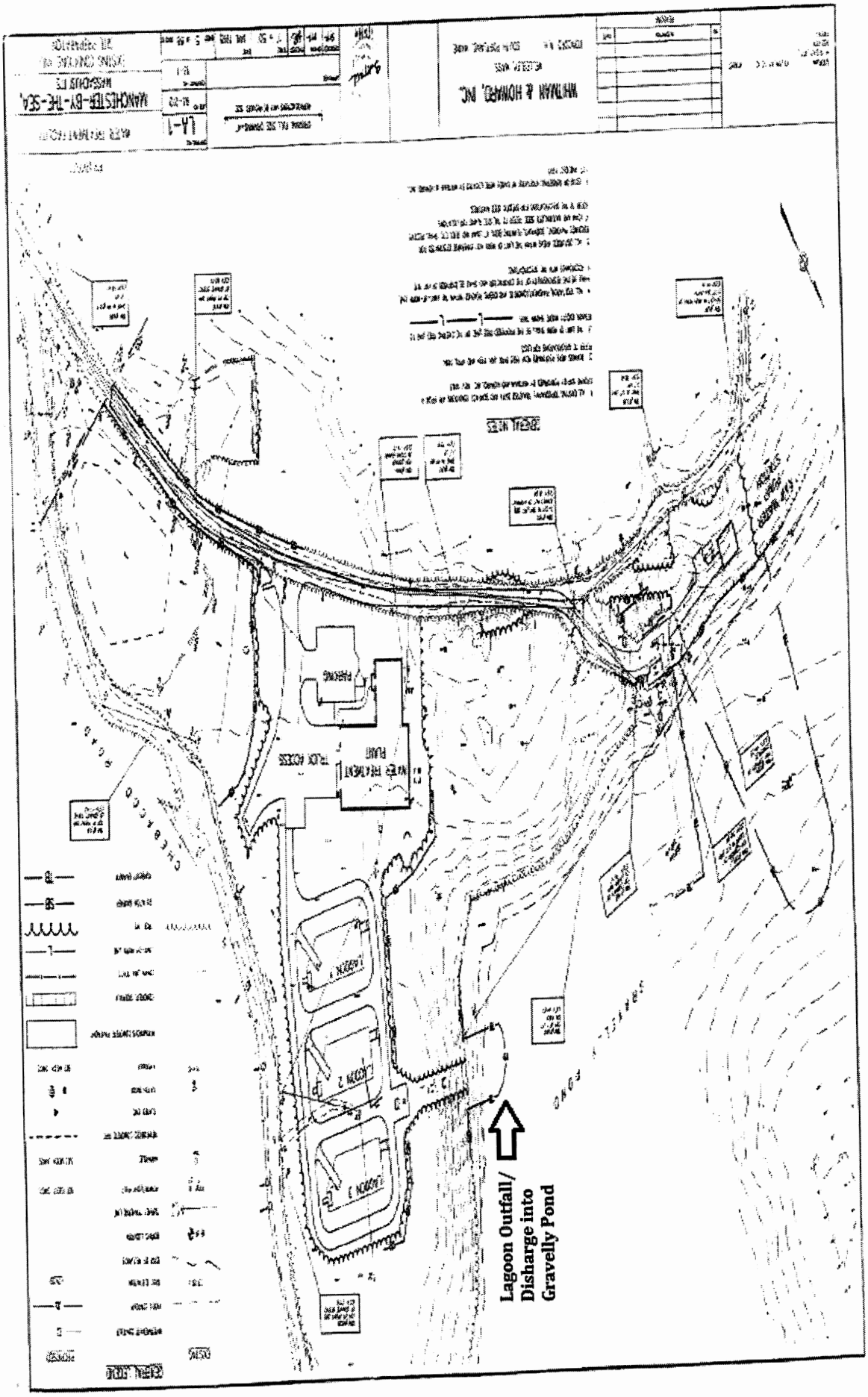


FIGURE NO. 2-20
LAGOON PIPING SCHEMATIC
GRAVELLY POND WATER TREATMENT FACILITY


Lagoon Outfall/
Disharge into
Gravelly Pond