ENVIRONMENTAL NOTIFICATION FORM

PROPOSED WELLFIELD AT LYNCH SITE LINEBROOK ROAD
Ipswich, Massachusetts

January 2019

Submitted to:

Executive Office of Energy and Environmental Affairs (EEA)
MEPA Unit
100 Cambridge Street – Suite 900
Boston, Massachusetts 02114

Submitted by:

AECOM
250 Apollo Drive
Chelmsford, Massachusetts 01824

On behalf of:

Ipswich Utilities Department
272 High Street
Ipswich, MA 01938

Project No. 60567459

AECOM
250 Apollo Drive
Chelmsford, MA 01824

978.905.2100 tel
978.905.2101 fax

January 9, 2019

Executive Office of Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Subject: **Proposed Wellfield for Municipal Water Supply**
Lynch Site, Linebrook Road
Ipswich, Massachusetts

Dear MEPA Coordinator:

On behalf of the Ipswich Utilities Department, AECOM is submitting the following Environmental Notification Form (ENF) in accordance with 301 CMR 11.00, Massachusetts Environmental Policy Act Regulations for the construction of four municipal supply wells, associated pumping facilities, electrical power and water transmission main. Two copies of the ENF are included for publication in the Environmental Monitor. A project Locus Map, Site Plan and Proposed Project Layout are included in Attachment A. An Alternatives Analysis is in Attachment B and relevant correspondence is in Attachment C. The ENF Distribution List can be found in Attachment D and a copy of the public notice is in Attachment E. We also include a copy of the New Source Final Report for the Lynch Site, dated December 2018 and a copy of the Water Management Permit Amendment application, also dated December 2018.

If there are any questions regarding this filing, please do not hesitate to contact me at (978) 905-2180 or doug.denatale@aecom.com. Thank you for your time and consideration in this matter.

Very truly yours,

AECOM

Douglas DeNatale, PG
Senior Hydrogeologist/Project Manager

cc: V. Halmen, Ipswich Utilities Department

Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: _____

MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: **Proposed Municipal Supply Well Field, Lynch Site**			
Street Address: **215 Linebrook Road**			
Municipality: **Ipswich MA**		Watershed: **Parker River Basin**	
Well ID	UTM Coordinates:	Latitude: Longitude:	
TW 13-16	345951.814932, 4727882.414949	42° 41′ 16.78″ 70° 52′ 49.63″	
TW 14- 16	345936.462837, 4727880.152888	42° 41′ 16.70″ 70° 52′ 50.30″	
TW 15-16	345968.103492, 4727882.385618	42° 41′ 16.79″ 70° 52′ 48.92″	
TW 16-16	345954.090315, 4727865.115525	42° 41′ 16.22″ 70° 52′ 49.52″	
Estimated commencement date: **2019**		Estimated completion date: **2020**	
Project Type: **Public Water Supply**		Status of project design: 5 %complete	
Proponent: **Ipswich Utilities Department**			
Street Address**: 272 High Street**			
Municipality: **Ipswich**		State: **MA**	Zip Code: **01938**
Name of Contact Person: **Douglas DeNatale**			
Firm/Agency: **AECOM**		Street Address: **250 Apollo Drive**	
Municipality: **Chelmsford**		State: **MA**	Zip Code: **01824**
Phone: **978-905-2180**	Fax:	E-mail: **doug.denatale@aecom.com**	

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☐Yes ☒No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8)) ☐Yes ☒No
a Special Review Procedure? (see 301CMR 11.09) ☐Yes ☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11) ☐Yes ☒No
a Phase I Waiver? (see 301 CMR 11.11) ☐Yes ☒No
(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?
New water withdrawal in excess of 100,000 gpd capacity from new water source

Which State Agency Permits will the project require? **MADEP New Source Approval and Water Management Permit Amendment, MADEP Permits to Construct**

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres: **None**

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	5.87		
New acres of land altered		0.24	
Acres of impervious area	0.00	0.01	0.01
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		0	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	0	480	480
Number of housing units	0	0	0
Maximum height (feet)	0	0	12
TRANSPORTATION			
Vehicle trips per day	2	0	2
Parking spaces	0	0	0
WASTEWATER			
Water Use (Gallons per day)	**0**	**0**	**0**
Water withdrawal (GPD)	**0**	**734,000**	**734,000**
Wastewater generation/treatment (GPD)	**0**	**0**	**0**
Length of water mains (miles) **Transmission main, only**	**0**	**0.72**	**0.72**
Length of sewer mains (miles)	**0**	**0**	**0**

Has this project been filed with MEPA before?
☐ Yes (EEA #_____) ☒No

Has any project on this site been filed with MEPA before?
☐ Yes (EEA # TBD ☒No

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site: see Project Description end of this section.

Describe the proposed project and its programmatic and physical elements: see Project Description end of this section.
NOTE: The project description should summarize both the project's direct and indirect impacts (including construction period impacts) in terms of their magnitude, geographic extent, duration

and frequency, and reversibility, as applicable. It should also discuss the infrastructure requirements of the project and the capacity of the municipal and/or regional infrastructure to sustain these requirements into the future.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative: see Project Description end of this section.

NOTE*: The purpose of the alternatives analysis is to consider what effect changing the parameters and/or siting of a project, or components thereof, will have on the environment, keeping in mind that the objective of the MEPA review process is to avoid or minimize damage to the environment to the greatest extent feasible. Examples of alternative projects include alternative site locations, alternative site uses, and alternative site configurations.*

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative: see end of this section.

If the project is proposed to be constructed in phases, please describe each phase:
Phase I: Gravel-packed wells; Phase II: Pumping facilities, access road, power, transmission main

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:
Is the project within or adjacent to an Area of Critical Environmental Concern?
☐Yes (Specify_____)
☒No
if yes, does the ACEC have an approved Resource Management Plan? ___ Yes ___ No;
If yes, describe how the project complies with this plan.
_____
Will there be stormwater runoff or discharge to the designated ACEC? ___ Yes ___ No;
If yes, describe and assess the potential impacts of such stormwater runoff/discharge to the designated ACEC.
_____

RARE SPECIES:
Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species? (see http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/priority_habitat_home.htm)
☐Yes (Specify_____) ☒No

HISTORICAL /ARCHAEOLOGICAL RESOURCES:
Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?
☐Yes (Specify_____) ☒No
If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? ☐Yes (Specify_____) ☐No

WATER RESOURCES:
Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? _x_Yes __No; if yes, identify the ORW and its location. **Tributaries and wetlands associated with Bull Brook Reservoir**
(NOTE: Outstanding Resource Waters include Class A public water supplies, their tributaries, and bordering wetlands; active and inactive reservoirs approved by MassDEP; certain waters within Areas of Critical Environmental Concern, and certified vernal pools. Outstanding resource waters are listed in the Surface Water Quality Standards, 314 CMR 4.00.)

Are there any impaired water bodies on or within a half-mile radius of the project site? ___Yes _**x**_No; if yes, identify the water body and pollutant(s) causing the impairment:_____.

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? ___Yes ___No **Stressed basin designations no longer valid.**

STORMWATER MANAGEMENT:

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations: **The policy does not apply because there will be no increase in impervious surface.**

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes ___ No __x__; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification):_____ **No**

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes ___ No __x__; if yes, describe which portion of the site and how the project will be consistent with the AUL: _____.

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN? Yes ___ No __x__ ; if yes, please describe:_____

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood: **No solid waste anticipated**
(NOTE: Asphalt pavement, brick, concrete and metal are banned from disposal at Massachusetts landfills and waste combustion facilities and wood is banned from disposal at Massachusetts landfills. See 310 CMR 19.017 for the complete list of banned materials.)

Will your project disturb asbestos containing materials? Yes ___ No __x__ ; if yes, please consult state asbestos requirements at http://mass.gov/MassDEP/air/asbhom01.htm

Describe anti-idling and other measures to limit emissions from construction equipment: The Contractor will comply with Massachusetts anti-idling guidelines with respect to emission controls.

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes ___ No __x__ ; if yes, specify name of river and designation:

If yes, does the project have the potential to impact any of the "outstandingly remarkable" resources of a federally Wild and Scenic River or the stated purpose of a state designated Scenic River? Yes ___ No ___ ; if yes, specify name of river and designation: _____;
if yes, will the project will result in any impacts to any of the designated "outstandingly remarkable" resources of the Wild and Scenic River or the stated purposes of a Scenic River.
Yes ___ No ___ ;
if yes,describe the potential impacts to one or more of the "outstandingly remarkable" resources or stated purposes and mitigation measures proposed.

ATTACHMENTS:

1. List of all attachments to this document.
2. U.S.G.S. map (good quality color copy, 8-½ x 11 inches or larger, at a scale of 1:24,000) indicating the project location and boundaries.
3.. Plan, at an appropriate scale, of existing conditions on the project site and its immediate environs, showing all known structures, roadways and parking lots, railroad rights-of-way, wetlands and water bodies, wooded areas, farmland, steep slopes, public open spaces, and major utilities.
4 Plan, at an appropriate scale, depicting environmental constraints on or adjacent to the project site such as Priority and/or Estimated Habitat of state-listed rare species, Areas of

Critical Environmental Concern, Chapter 91 jurisdictional areas, Article 97 lands, wetland resource area delineations, water supply protection areas, and historic resources and/or districts.

5. Plan, at an appropriate scale, of proposed conditions upon completion of project (if construction of the project is proposed to be phased, there should be a site plan showing conditions upon the completion of each phase).
6. List of all agencies and persons to whom the proponent circulated the ENF, in accordance with 301 CMR 11.16(2).
7. List of municipal and federal permits and reviews required by the project, as applicable.

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1)
___ Yes _**x**_ No; if yes, specify each threshold:

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	Existing	Change	Total
Footprint of buildings	0.0	0.01	0.01
Internal roadways	0.0	0.21	0.21
Parking and other paved areas	0.0	0.00	0.00
Other altered areas (agriculture)*	3.32	0.02	0.02
Undeveloped areas	2.55	0.00	5.63
Total: Lynch Site Acreage	5.87	0.24	5.87

B. Has any part of the project site been in active agricultural use in the last five years?
_x_ Yes __ No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use? ***3.32 acres is currently leased to a local farmer by the Board of Water Commissioners for agricultural use. The acreage of land that will remain in agricultural use has yet to be determined.**

C. Is any part of the project site currently or proposed to be in active forestry use?
___ Yes _**x**_ No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ___ Yes _**x**_ No; if yes, describe:

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction? __ Yes_x_ No; if yes, does the project involve the release or modification of such restriction? ___ Yes __ No; if yes, describe: **The Town acquired the land in 2008 for water-supply protection purposes in accordance with MGL Chapter 40, Sections 39, 41, and 15B and Article 97 of the Amendments to the Massachusetts Constitution. The land is under the control of the Select Board, acting as the Board of Water Commissioners.**

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ___ Yes _**x**_ No; if yes, describe:

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes ___ No _**x**_; if yes, describe:

III. Consistency

Identify the current municipal comprehensive land use plan:

Open Space and Recreation Plan for the Town of Ipswich 2006. The goals of the plan are as follows: "Protect historic, scenic water and other natural resources, preserve open space, provide and enhance recreational opportunities, educate the public on the value of open space, promote cooperative efforts to preserve open space and recreation." The plan goes on to say that the "Specific resources that still require protection are"…. "Both groundwater and surface-water quality threatened by pollution from a variety of point and non-point sources." The Town purchased the 5.87-acre Lynch Site in 2008 for the purposes of water-supply protection, thereby expanding the Town's open space. The Lynch Site is contiguous with approximately 380 acres of open-space used for water-supply protection of the Town's existing Dow Brook/Bull Brook reservoir system, plus the Mile Lane and Browns Wells. The Proposed Lynch Well Field is intended to solve some of

the Town's chronic water-supply problems by: increasing the Town's overall water-supply capacity; alleviating water-supply deficiencies; improving operational flexibility and reliability; and providing much needed drought resiliency.

A. Describe the project's consistency with that plan with regard to:
   1) economic development _____
   2) adequacy of infrastructure _____
   3) open space impacts _____
   4) compatibility with adjacent land uses_____

B. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)
   RPA: Metropolitan Area Planning Council (MAPC), North Shore Task Force (NSTF)

   Title: MAPC Strategic Plan, 2015 - 2020 Date: November 2014

C. Describe the project's consistency with that plan with regard to:
   1) economic development _____
   2) adequacy of infrastructure _____
   3) open space impacts _____

The MAPC Strategic Plan states as one of its goals: "Priority A: Encourage development and preservation consistent with smart growth principles. MAPC believes the best way for the region — and its individual municipalities — to grow is to concentrate development in areas where people, jobs and infrastructure already exist, while preserving natural resources, open space, and critical habitats."

The proposed project achieves the goals of preserving and protecting local drinking water resources that support the health, safety and welfare of the entire Town of Ipswich. A reliable, sustainable, clean source of drinking water is fundamental to economic stability and growth. The proposed project also maintains open space for water-supply protection. The proposed project expands the water-supply infrastructure, thereby increasing reliability. The proposed project will have a low environmental impact in terms of electrical power consumption because the water will be distributed locally and not require water-filtration.

RARE SPECIES SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? ___ Yes _**x**_ No; if yes, specify, in quantitative terms:

(NOTE: If you are uncertain, it is recommended that you consult with the Natural Heritage and Endangered Species Program (NHESP) prior to submitting the ENF.)

B. Does the project require any state permits related to **rare species or habitat**? ___ Yes _**x**_ No

C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? ___ Yes _**x**_ No.

D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Rare Species section below.

II. Impacts and Permits

A. Does the project site fall within Priority or Estimated Habitat in the current Massachusetts Natural Heritage Atlas (attach relevant page)? ___ Yes ___ No. If yes,

1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? ___Yes ___No; if yes, have you received a determination as to whether the project will result in the "take" of a rare species? ___ Yes ___ No; if yes, attach the letter of determination to this submission.

2. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes ___ No; if yes, provide a summary of proposed measures to minimize and mitigate rare species impacts

3. Which rare species are known to occur within the Priority or Estimated Habitat?

4. Has the site been surveyed for rare species in accordance with the Massachusetts Endangered Species Act? ___ Yes ___ No

4. If your project is within Estimated Habitat, have you filed a Notice of Intent or received an Order of Conditions for this project? ___ Yes ___ No; if yes, did you send a copy of the Notice of Intent to the Natural Heritage and Endangered Species Program, in accordance with the Wetlands Protection Act regulations? ___ Yes ___ No

B. Will the project "take" an endangered, threatened, and/or species of special concern in accordance with M.G.L. c.131A (see also 321 CMR 10.04)? ___ Yes ___ No; if yes, provide a summary of proposed measures to minimize and mitigate impacts to significant habitat:

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? ___ Yes _x_ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? _x_ Yes _ _ No; if yes, specify which permit: **Order of Conditions**

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? __x_ Yes ___ No; if yes, has a Notice of Intent been filed? __ Yes _x_ No; if yes, list the date and MassDEP file number: _____; if yes, has a local Order of Conditions been issued? ___ Yes ___ No; Was the Order of Conditions appealed? ___ Yes ___ No. Will the project require a Variance from the Wetlands regulations? ___ Yes _x_ No.

B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site: **No impacts to wetland areas are proposed; project related activities are limited to the Riverfront Area. Permanent impacts include: installation of wells, access roadways, water main. (**The USGS topographic map indicates that Bull Brook is a perennial stream. However, the Ipswich Utilities Department observes that Bull Brook opposite the Lynch Site is often without flow in the summer. Since the Riverfront designation applies only to perennial streams, the Riverfront designation for this reach of Bull Brook is in question.)**

C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

Coastal Wetlands	Area (square feet) or Length (linear feet)	Temporary or Permanent Impact?
Land Under the Ocean		
Designated Port Areas		
Coastal Beaches		
Coastal Dunes		
Barrier Beaches		
Coastal Banks		
Rocky Intertidal Shores		
Salt Marshes		
Land Under Salt Ponds		
Land Containing Shellfish		
Fish Runs		
Land Subject to Coastal Storm Flowage		
Inland Wetlands		
Bank (If)		
Bordering Vegetated Wetlands		
Isolated Vegetated Wetlands		
Land under Water		
Isolated Land Subject to Flooding		
Bordering Land Subject to Flooding		
Riverfront Area (****see note above**)	1,600	Permanent

D. Is any part of the project:

1. proposed as a **limited project**? ___ Yes _x_ No; if yes, what is the area (in sf)?____
2. the construction or alteration of a **dam**? ___ Yes _x_ No; if yes, describe:
3. fill or structure in a **velocity zone** or **regulatory floodway**? ___ Yes _x_ No
4. dredging or disposal of dredged material? ___ Yes _x_ No; if yes, describe the volume of dredged material and the proposed disposal site:
5. a discharge to an **Outstanding Resource Water (ORW)** or an **Area of Critical Environmental Concern (ACEC)**? ___ Yes _x_ No
6. subject to a wetlands restriction order? ___ Yes _x_ No; if yes, identify the area (in sf):
7. located in buffer zones? _x_Yes ___No; if yes, how much (in sf) 6,300_

E. Will the project:
1. be subject to a local wetlands ordinance or bylaw? _x_ Yes ___ No
2. alter any federally-protected wetlands not regulated under state law? ___ Yes _x_ No; if yes, what is the area (sf)?

III. Waterways and Tidelands Impacts and Permits

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? ___ Yes _x_ No; if yes, is there a current Chapter 91 License or Permit affecting the project site? ___ Yes ___ No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:

B. Does the project require a new or modified license or permit under M.G.L.c.91? ___ Yes ___ No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current ___ Change ___ Total ___
If yes, how many square feet of solid fill or pile-supported structures (in sf)?

C. For non-water-dependent use projects, indicate the following:
Area of filled tidelands on the site:_____
Area of filled tidelands covered by buildings:_____
For portions of site on filled tidelands, list ground floor uses and area of each use:
_____
Does the project include new non-water-dependent uses located over flowed tidelands? Yes ___ No ___
Height of building on filled tidelands_____

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

D. Is the project located on landlocked tidelands? ___ Yes ___ No; if yes, describe the project's impact on the public's right to access, use and enjoy jurisdictional tidelands and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations? ___Yes ___ No; if yes, describe the project's impact on groundwater levels and describe measures the project will implement to avoid, minimize or mitigate any adverse impact:

F. Is the project non-water-dependent **and** located on landlocked tidelands **or** waterways or tidelands subject to the Waterways Act **and** subject to a mandatory EIR? ___ Yes ___ No;
(NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

G. Does the project include dredging? ___ Yes ___ No; if yes, answer the following questions:

What type of dredging? Improvement ___ Maintenance ___ Both ____
What is the proposed dredge volume, in cubic yards (cys) _____
What is the proposed dredge footprint ____length (ft) ___width (ft)____depth (ft);
Will dredging impact the following resource areas?

Intertidal Yes__ No__; if yes, ___ sq ft
Outstanding Resource Waters Yes__ No__; if yes, ___ sq ft
Other resource area (i.e. shellfish beds, eel grass beds) Yes__ No__; if yes __ sq ft
If yes to any of the above, have you evaluated appropriate and practicable steps to: 1) avoidance; 2) if avoidance is not possible, minimization; 3) if either avoidance or minimize is not possible, mitigation?
If no to any of the above, what information or documentation was used to support this determination?

Provide a comprehensive analysis of practicable alternatives for improvement dredging in accordance with 314 CMR 9.07(1)(b). Physical and chemical data of the sediment shall be included in the comprehensive analysis.
Sediment Characterization

Existing gradation analysis results? __Yes ___No: if yes, provide results.
Existing chemical results for parameters listed in 314 CMR 9.07(2)(b)6? ___Yes ____No; if yes, provide results.

Do you have sufficient information to evaluate feasibility of the following management options for dredged sediment? If yes, check the appropriate option.

Beach Nourishment ___
Unconfined Ocean Disposal ___
Confined Disposal:
Confined Aquatic Disposal (CAD) ___
Confined Disposal Facility (CDF) ___
Landfill Reuse in accordance with COMM-97-001 ___
Shoreline Placement ___
Upland Material Reuse____
In-State landfill disposal____
Out-of-state landfill disposal ____
(NOTE: This information is required for a 401 Water Quality Certification.)

IV. Consistency:

A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? ___ Yes _x_ No; if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

B. Is the project located within an area subject to a Municipal Harbor Plan? ___ Yes _x_ No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? **_x_** Yes ___ No; if yes, specify, in quantitative terms: **new withdrawal in excess of 100,000 gpd requiring new construction.**

B. Does the project require any state permits related to **water supply**? **_x_** Yes ___ No; if yes, specify which permit: **DEP New Source Approval and Water Management Permit Amendment, DEP Permits to Construct Wells and Pumping Facilities**

C. If you answered "No" to both questions A and B, proceed to the **Wastewater Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Water Supply Section below.

II. Impacts and Permits

A. Describe, in gallons per day (gpd), the volume and source of water use for existing and proposed activities at the project site:

	Existing	Change	Total
Municipal or regional water supply	0	734,000	734,000
Withdrawal from groundwater	0	734,000	734,000
Withdrawal from surface water	0	0	0
Interbasin transfer	0	0	0

(NOTE: Interbasin Transfer approval will be required if the basin and community where the proposed water supply source is located is different from the basin and community where the wastewater from the source will be discharged.)

B. If the source is a municipal or regional supply, has the municipality or region indicated that there is adequate capacity in the system to accommodate the project? __ Yes ___ No **Not applicable**

C. If the project involves a new or expanded withdrawal from a groundwater or surface water source, has a pumping test been conducted? **_x_** Yes ___ No; if yes, attach a map of the drilling sites and a summary of the alternatives considered and the results.
See attached New Source Final Report

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? **_0_** Will the project require an increase in that withdrawal? _x_ Yes ___No; if yes, then how much of an increase (gpd)? **The proposed Lynch Well Field will have a capacity of 0.734 mgd. Ipswich is currently authorized under its WMA Permit/Registration to withdraw 0.98 mgd on average over a calendar year from the Parker River Basin, and will not be requesting an increase in authorized withdrawal.**

E. Does the project site currently contain a water supply well, a drinking water treatment facility, water main, or other water supply facility, or will the project involve construction of a new facility? ____Yes _x__ No. If yes, describe existing and proposed water supply facilities at the project site:

	Permitted Flow	Existing Avg Daily Flow	Project Flow	Total
Capacity of water supply well(s) (gpd)	0	0	734,000	734,000
Capacity of water treatment plant (gpd)	0	0	0	0

Ipswich is not requesting additional withdrawal under its WMA Permit/Registration

F. If the project involves a new interbasin transfer of water, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or proposed? **Not applicable**

G. Does the project involve:

1. new water service by the Massachusetts Water Resources Authority or other agency of the Commonwealth to a municipality or water district? ___ Yes _**x**_ No
2. a Watershed Protection Act variance? ___ Yes _**x**_ No; if yes, how many acres of alteration?
3. a non-bridged stream crossing 1,000 or less feet upstream of a public surface drinking water supply for purpose of forest harvesting activities? ___ Yes _**x**_ No

III. Consistency

Describe the project's consistency with water conservation plans or other plans to enhance water resources, quality, facilities and services:

The proposed Lynch Well Site represents the first, real opportunity for the Town to develop a new source of water supply in nearly 40 years, and will help address the Town's urgent and long-term water-supply needs. The Alternatives Analysis included in Attachment B describes the limitations on the Town's existing water supply, the Town's successful efforts to conserve water, the historical efforts to identify a new source of water supply, and the benefits of the proposed project in solving some of the Town's chronic water-supply challenges.

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ___ Yes _**x**_ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? ___ Yes _**x**_ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wastewater Section below.

II. Impacts and Permits

A. Describe the volume (in gallons per day) and type of disposal of wastewater generation for existing and proposed activities at the project site (calculate according to 310 CMR 15.00 for septic systems or 314 CMR 7.00 for sewer systems):

	Existing	Change	Total
Discharge of sanitary wastewater	_____	_____	_____
Discharge of industrial wastewater	_____	_____	_____
TOTAL	_____	_____	_____

	Existing	Change	Total
Discharge to groundwater	_____	_____	_____
Discharge to outstanding resource water	_____	_____	_____
Discharge to surface water	_____	_____	_____
Discharge to municipal or regional wastewater facility	_____	_____	_____
TOTAL	_____	_____	_____

B. Is the existing collection system at or near its capacity? ___ Yes ___ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

C. Is the existing wastewater disposal facility at or near its permitted capacity? ___ Yes___ No; if yes, then describe the measures to be undertaken to accommodate the project's wastewater flows:

D. Does the project site currently contain a wastewater treatment facility, sewer main, or other wastewater disposal facility, or will the project involve construction of a new facility? ___ Yes ___ No; if yes, describe as follows:

	Permitted	Existing Avg Daily Flow	Project Flow	Total
Wastewater treatment plant capacity (in gallons per day)	_____	_____	_____	_____

E. If the project requires an interbasin transfer of wastewater, which basins are involved, what is the direction of the transfer, and is the interbasin transfer existing or new?

(NOTE: Interbasin Transfer approval may be needed if the basin and community where wastewater will be discharged is different from the basin and community where the source of water supply is located.)

F. Does the project involve new sewer service by the Massachusetts Water Resources Authority (MWRA) or other Agency of the Commonwealth to a municipality or sewer district? ___ Yes ___ No

G. Is there an existing facility, or is a new facility proposed at the project site for the storage, treatment, processing, combustion or disposal of sewage sludge, sludge ash, grit, screenings, wastewater reuse (gray water) or other sewage residual materials? ___ Yes ___ No; if yes, what is the capacity (tons per day):

	Existing	Change	Total
Storage	_____	_____	_____
Treatment	_____	_____	_____
Processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

H. Describe the water conservation measures to be undertaken by the project, and other wastewater mitigation, such as infiltration and inflow removal.

III. Consistency

A. Describe measures that the proponent will take to comply with applicable state, regional, and local plans and policies related to wastewater management:

B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? ___ Yes ___ No; if yes, indicate the EEA number for the plan and whether the project site is within a sewer service area recommended or approved in that plan:

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? ___ Yes _**x**_ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? ___ Yes _**x**_ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Traffic Generation Section below.

II. Traffic Impacts and Permits

A. Describe existing and proposed vehicular traffic generated by activities at the project site:

	Existing	Change	Total
Number of parking spaces	_____	_____	_____
Number of vehicle trips per day	_____	_____	_____
ITE Land Use Code(s):	_____	_____	_____

B. What is the estimated average daily traffic on roadways serving the site?

Roadway	Existing	Change	Total
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____

C. If applicable, describe proposed mitigation measures on state-controlled roadways that the project proponent will implement:

D. How will the project implement and/or promote the use of transit, pedestrian and bicycle facilities and services to provide access to and from the project site?

C. Is there a Transportation Management Association (TMA) that provides transportation demand management (TDM) services in the area of the project site? ____ Yes ____ No; if yes, describe if and how will the project will participate in the TMA:

D. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation facilities? ____ Yes ____ No; if yes, generally describe:

E. If the project will penetrate approach airspace of a nearby airport, has the proponent filed a Massachusetts Aeronautics Commission Airspace Review Form (780 CMR 111.7) and a Notice of Proposed Construction or Alteration with the Federal Aviation Administration (FAA) (CFR Title 14 Part 77.13, forms 7460-1 and 7460-2)?

III. Consistency

Describe measures that the proponent will take to comply with municipal, regional, state, and federal plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services:

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? ___ Yes _**x**_ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **roadways or other transportation facilities**? ___ Yes _**x**_ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Roadways Section below.

II. Transportation Facility Impacts

A. Describe existing and proposed transportation facilities in the immediate vicinity of the project site:

B. Will the project involve any

1. Alteration of bank or terrain (in linear feet)? _____
2. Cutting of living public shade trees (number)? _____
3. Elimination of stone wall (in linear feet)? _____

III. Consistency -- Describe the project's consistency with other federal, state, regional, and local plans and policies related to traffic, transit, pedestrian and bicycle transportation facilities and services, including consistency with the applicable regional transportation plan and the Transportation Improvements Plan (TIP), the State Bicycle Plan, and the State Pedestrian Plan:

ENERGY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))? ___ Yes _**x**_ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **energy**? ___ Yes _**x**_ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Energy Section below.

II. Impacts and Permits

A. Describe existing and proposed energy generation and transmission facilities at the project site:

	Existing	Change	Total
Capacity of electric generating facility (megawatts)	_____	_____	_____
Length of fuel line (in miles)	_____	_____	_____
Length of transmission lines (in miles)	_____	_____	_____
Capacity of transmission lines (in kilovolts)	_____	_____	_____

B. If the project involves construction or expansion of an electric generating facility, what are:

1. the facility's current and proposed fuel source(s)?
2. the facility's current and proposed cooling source(s)?

C. If the project involves construction of an electrical transmission line, will it be located on a new, unused, or abandoned right of way? ___Yes ___No; if yes, please describe:

D. Describe the project's other impacts on energy facilities and services:

III. Consistency

Describe the project's consistency with state, municipal, regional, and federal plans and policies for enhancing energy facilities and services:

AIR QUALITY SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ___ Yes _**x**_ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **air quality**? ___ Yes _**x**_ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Air Quality Section below.

II. Impacts and Permits

A. Does the project involve construction or modification of a major stationary source (see 310 CMR 7.00, Appendix A)? ___ Yes ___ No; if yes, describe existing and proposed emissions (in tons per day) of:

	Existing	Change	Total
Particulate matter	_____	_____	_____
Carbon monoxide	_____	_____	_____
Sulfur dioxide	_____	_____	_____
Volatile organic compounds	_____	_____	_____
Oxides of nitrogen	_____	_____	_____
Lead	_____	_____	_____
Any hazardous air pollutant	_____	_____	_____
Carbon dioxide	_____	_____	_____

B. Describe the project's other impacts on air resources and air quality, including noise impacts:

III. Consistency

A. Describe the project's consistency with the State Implementation Plan:

B. Describe measures that the proponent will take to comply with other federal, state, regional, and local plans and policies related to air resources and air quality:

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ___ Yes _**x**_ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **solid and hazardous waste**? ___ Yes _**x**_ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Solid and Hazardous Waste Section below.

II. Impacts and Permits

A. Is there any current or proposed facility at the project site for the storage, treatment, processing, combustion or disposal of solid waste? ___ Yes ___ No; if yes, what is the volume (in tons per day) of the capacity:

	Existing	Change	Total
Storage	_____	_____	_____
Treatment, processing	_____	_____	_____
Combustion	_____	_____	_____
Disposal	_____	_____	_____

B. Is there any current or proposed facility at the project site for the storage, recycling, treatment or disposal of hazardous waste? ___ Yes ___ No; if yes, what is the volume (in tons or gallons per day) of the capacity:

	Existing	Change	Total
Storage	_____	_____	_____
Recycling	_____	_____	_____
Treatment	_____	_____	_____
Disposal	_____	_____	_____

C. If the project will generate solid waste (for example, during demolition or construction), describe alternatives considered for re-use, recycling, and disposal:

D. If the project involves demolition, do any buildings to be demolished contain asbestos? ___ Yes ___ No

E. Describe the project's other solid and hazardous waste impacts (including indirect impacts):

III. Consistency

Describe measures that the proponent will take to comply with the State Solid Waste Master Plan:

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? ___ Yes _**x**_ No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? ____Yes ____ No; if yes, attach correspondence

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes _**x**_ No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? ___ Yes ___ No; if yes, please describe:

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes _**x**_ No; if yes, does the project involve the destruction of all or any part of such archaeological site? ___ Yes ___ No; if yes, please describe:

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

II. Impacts

Describe and assess the project's impacts, direct and indirect, on listed or inventoried historical and archaeological resources:

III. Consistency

Describe measures that the proponent will take to comply with federal, state, regional, and local plans and policies related to preserving historical and archaeological resources:

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

   (Name) Ipswich Chronicle (Date) January 17, 2019

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing ~~NPC~~ ENF (if different from above)
		1/9/19	

Vicki Halmen, Water & Wastewater Dir.	Douglas DeNatale
Name (print or type)	Name (print or type)
Ipswich Utilities Department	AECOM
Firm/Agency	Firm/Agency
272 High Street	250 Apollo Drive
Street	Street
Ipswich MA 01938	Chelmsford MA 01824
Municipality/State/Zip	Municipality/State/Zip
978-356-6635 x2108	978-905-2180
Phone	Phone

Project Description

Existing Conditions, Land Uses, Programmatic and Physical Elements of the Proposed Project

The Ipswich Utilities Department is proposing to construct a wellfield of four new municipal groundwater supply wells in the Egypt River/Bull Brook sub-basin of the Parker River Basin. The proposed production wells will be constructed at the Lynch Site at test-well sites TW 13-16, TW 14-16, TW 15-16 and TW 16-16. The proposed wells are located on the USGS topographic map of the Georgetown quadrangle at the following coordinates:

Well ID	UTM Coordinates (X,Y)	Latitude (N)	Longitude (W)
TW 13-16	345951.814932, 4727882.414949	42° 41′ 16.78″	70° 52′ 49.63″
TW 14-16	345936.462837, 4727880.152888	42° 41′ 16.70″	70° 52′ 50.30″
TW 15-16	345968.103492, 4727882.385618	42° 41′ 16.79″	70° 52′ 48.92″
TW 16-16	345954.090315, 4727865.115525	42° 41′ 16.22″	70° 52′ 49.52″

The proposed well sites are located approximately 400 feet north of Linebrook Road and 1,000 feet west northwest of the intersection of Mile Lane and Linebrook Road. A Locus Map, Site Plan and a Layout of the proposed wells and related facilities are included in Attachment A.

The wells will be capable of pumping at a combined rate of 510 gallons per minute (gpm), which translates to a maximum daily withdrawal of 0.734 million gallons per day (mgd). The Town is currently authorized under the Water Management Act (WMA) to withdraw a total of 1.18 mgd on average over a calendar year from its sources in the Parker and Ipswich River Basins. The proposed wells are intended to augment the Town's existing water-supply sources and will not result in an overall increase in water withdrawals authorized under the WMA.

The Lynch Site occupies the southern corner of approximately 390 acres of Town-owned land. The Town currently leases the Lynch Site for agricultural use. Bull Brook, which lies directly north of the test wells, drains into Bull Brook Reservoir, one of the Town's surface-water supplies. Surrounding land uses consist largely of undeveloped land (including State Forest) and farm land. Minor residential development exists along Linebrook Road and Mile Lane. The Doyon Elementary School lies directly across the street to the south of the Lynch Site. The area is unsewered. Wetlands border Bull Brook and its tributaries, however, the Lynch Site is largely upland.

The proposed pumping station will consist of a single building, approximately 20- by 24-feet in area and 12-feet in height to house pumping controls, valves, chemical injection and other equipment associated with the wells. Approximately 3,800 feet of transmission water main will be installed to connect the wells to the existing water-distribution system near the Mile Lane Well.

An existing unpaved trail will be reconstructed with gravel or crushed stone along a length of approximately 600 feet to provide operations staff and service crews access to the well sites and pumping station. Crushed stone will be placed around the pumping station, around outdoor components, and around the wells. Fencing will be provided around each well and the pumping station to control access and to protect equipment from vandalism.

The proposed project will result in the development of 0.24 acre of land: 0.01 acre for the pumping station (single building), 0.21 acre for unpaved roadway, and 0.02 acre of land around the four proposed wells. Therefore, approximately 5.63 acres of the 5.87-acre Lynch Site will remain undeveloped once the project is constructed.

Construction and final testing of the wells will take approximately six months. Construction of the pumping station, water main, electrical power and roadway will take approximately six to ten months. Once construction has been completed, official activities will normally be limited to one or two vehicle trips per day to inspect the pumping facilities.

Construction will be subject to the Wetlands Protection Act, as certain activities will be in the buffer zone of wetlands and riverfront. Hay bales and/or silt fencing will be installed along the project perimeter to prevent suspended solids (silt and sand) from entering the wetland area. Hay bales and/or silt fencing will be removed only after these areas are re-vegetated and stabilized. The project will not result in the introduction of any pollutants into surface water or groundwater. There will be no hazardous, particulate or soluble materials used to install the wells, water mains or pumping facilities.

Ipswich is currently seeking regulatory approval of the proposed wells under the Department of Environmental Protection's New Source Approval (NSA) program and WMA permitting process.

Impacts on Bull Brook Due To Pumping

In July 2018, AECOM installed four shallow hand-driven well points in Bull Brook to examine the impacts of pumping on water levels in the brook. Well points were installed to depths of four to seven feet beneath the streambed, in one to two feet of standing water. Water levels were measured in the well points twice daily during a continuous, 15-day pumping test conducted in August 2018. Evidence from the pumping test indicates a weak and indirect hydraulic link between Bull Brook and the Lynch wells under pumping conditions. AECOM estimates that a diversion of 0 to 18 gpm of streamflow might occur in August, depending on rainfall conditions and daily well-field pumping cycles. A diversion of 18 gpm is less than 10% of the August median streamflow of 216 gpm. Bull Brook is often without flow in August, which implies a potential diversion of 0 gpm when the weather is dry. The discussion of streamflow diversion due to pumping should be put in proper perspective. In most cases, any volume of water that is diverted to the wells in dry times is water that would otherwise flow 2,000 feet downstream to recharge the Town's surface-water supply (Bull Brook Reservoir). A more complete discussion of the impacts of pumping on Bull Brook and the potential diversion of streamflow is included in sections 2.7 and 2.8 of the New Source Final Report, included in this submittal.

Infrastructure Requirements, Sustainability and Project Benefits

The proposed project is unlike most development projects because, instead of placing demands on infrastructure, it creates new infrastructure to promote and sustain the health and welfare of the entire community. The addition of the four, new wells is part of Ipswich's broader, on-going strategy to ensure water customers an adequate supply of high-quality water today and well into the future. The Water Department is operated as an enterprise fund, so that the costs of operations, maintenance and capital improvements are paid for through its collections. Enterprise funding promotes the financial sustainability of the water system.

The development of the proposed Lynch Site for water supply will provide the following general benefits to the Town of Ipswich:

1. The proposed water supply at the Lynch Site represents a local, renewable resource. The benefits of local, municipal water-supply are perhaps not so obvious. Compared to out-of-town supplies, local supply enhances water-supply protection because the supply is under local control. In addition, local supply reduces pumping and transmission costs, reduces the overall environmental footprint and improves water quality.

2. The proposed water supply at the Lynch Site will help the Town solve some of its chronic water-supply problems by: increasing the Town's overall water-supply capacity; alleviating water-supply deficiencies; improving operational flexibility and reliability; and providing much needed drought resiliency.

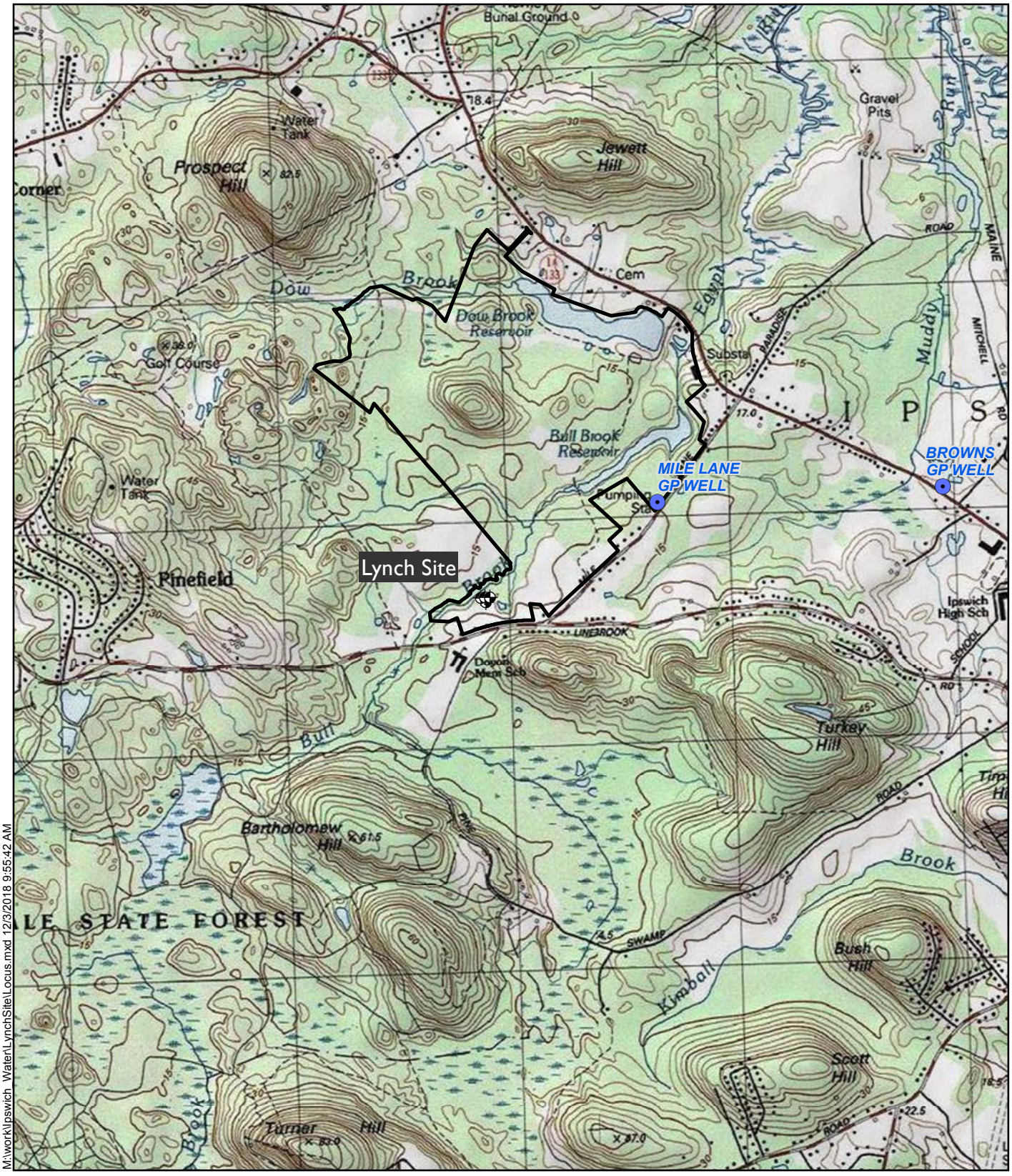
In addition, the proposed water supply at the Lynch Site will provide the following specific benefits:

1. It will relieve stress on the Town's existing Dow Brook/Bull Brook Reservoir system during dry summers, when reservoir storage is often depleted.

2. It will replace the lost yield from the Browns Well, a 0.49-mgd supply that has been reduced to about 0.2-mgd due to water-quality issues.

3. It will help make up for WMA limitations on the Town's three groundwater supplies in the Ipswich River Basin, which are authorized to pump no more than 0.2-mgd on average over the year.

ATTACHMENT A
FIGURES



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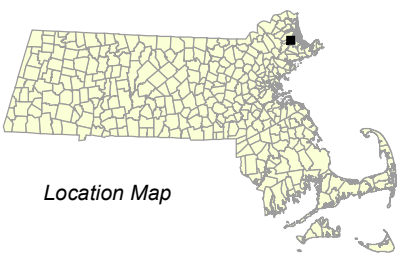
Sources: MassGIS and Esri

Well Locations - Lynch Site

Property Boundary
Town of Ipswich Land

0 1,000 2,000 4,000 Feet



Location Map

Figure 1-1
Locus Map
Lynch Site
Ipswich, MA

November 2018

AECOM

AECOM Imagine it. Delivered.

Property Boundary
Town of Ipswich Land

DEP Wetland

Public Water Supply
Groundwater

Soil Boring by Others

Hand-Driven Well Point

Monitoring Well

Observation Well

8-Inch Diameter
Test Well

Pumping Test
Temporary Discharge

Removed Test Well/
Boring

Proposed 250-Ft
Zone I Boundary
(Four Well Sites)

A A' Line of Geologic
Cross-section
(See Figs: 2-3, 2-4, & 2-5)

Base map data provided by MassGIS and USDA.
Date of photo: 2016

November 2018

Figure 1-2

Site Plan

Lynch Site
Ipswich, MA

0 250 500 1,000 Feet

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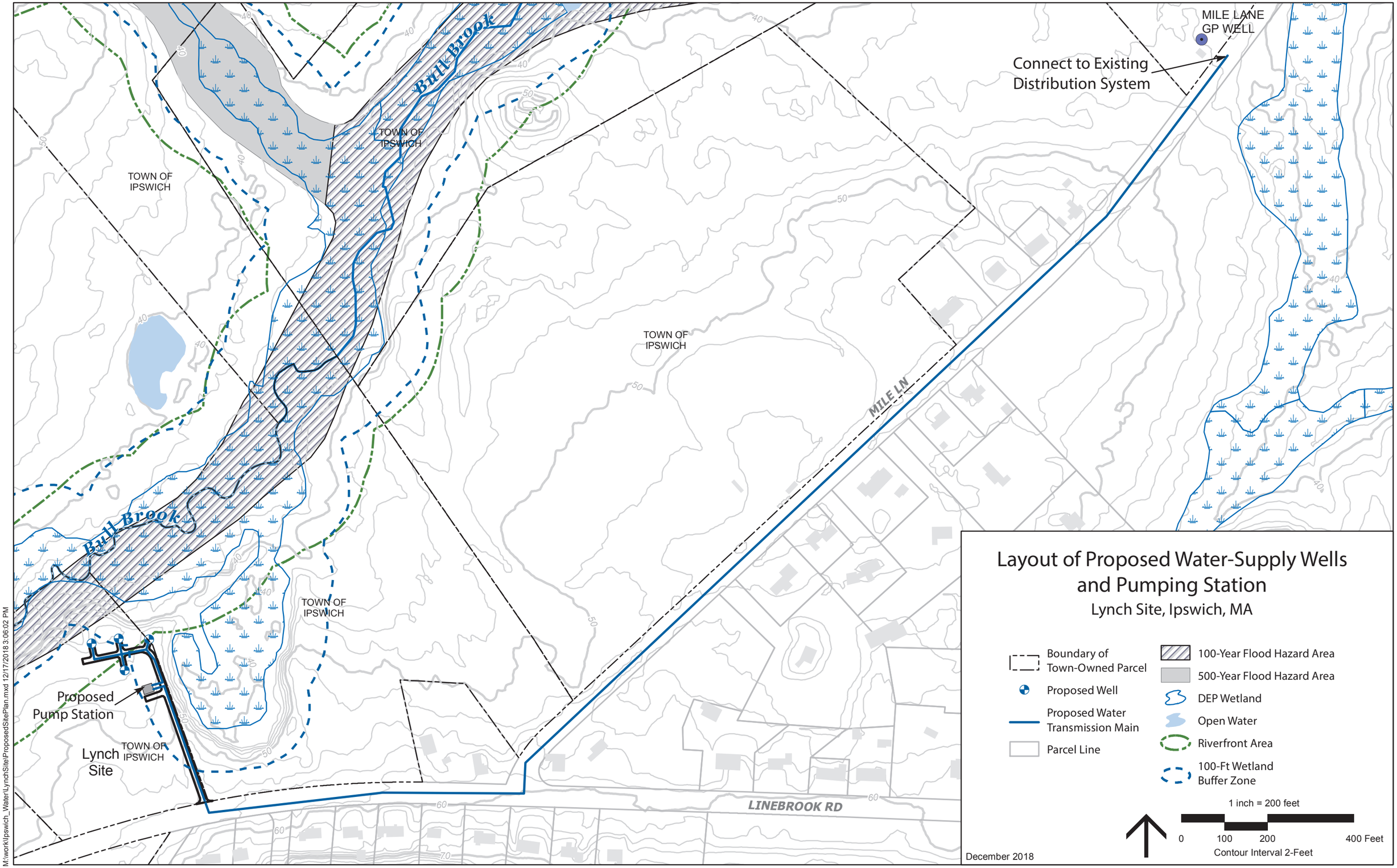
MILE LANE
GP WELL
Connect to Existing
Distribution System
Bull Brook
Bull Brook
TOWN OF
IPSWICH
TOWN OF
IPSWICH
TOWN OF
IPSWICH
TOWN OF
IPSWICH
TOWN OF
IPSWICH
MILE LN
LINEBROOK RD
Proposed
Pump Station
Lynch
Site
Layout of Proposed Water-Supply Wells
and Pumping Station
Lynch Site, Ipswich, MA
Boundary of
Town-Owned Parcel
Proposed Well
Proposed Water
Transmission Main
Parcel Line
100-Year Flood Hazard Area
500-Year Flood Hazard Area
DEP Wetland
Open Water
Riverfront Area
100-Ft Wetland
Buffer Zone
1 inch = 200 feet
0
100
200
400 Feet
Contour Interval 2-Feet
December 2018
M:\work\Ipswich_Water\LynchSiteProposedSitePlan.mxd 12/17/2018 3:06:02 PM

ATTACHMENT B
ALTERNATIVES ANALYSIS

Alternatives Analysis

Proposed Well Field at Lynch Site
Linebrook Road
Ipswich, Massachusetts

Background

The Town of Ipswich Water Department has two active surface-water supplies and five active groundwater supplies. The surface water-supplies, both in the Parker River basin, include Dow Brook (built in 1894) and Bull Brook (1923) Reservoirs, which have a combined storage capacity of about 68 million gallons (MG). The groundwater sources include the Mile Lane Well (built in 1941), Browns Well (1954), both of which are in the Parker River Basin, and the Fellows Road Well (1982), the Essex Road Well (1979) and Winthrop Well 2 (1962), all of which are in the Ipswich River basin. Water from the surface-water reservoirs is treated before being introduced into the distribution system. All other sources are untreated, except for the addition of corrosion-control chemicals, fluoridation and chlorine for disinfection. The Browns Well experiences high levels of manganese (above 1 milligram per liter), if it is pumped heavily and continuously. The Browns Well is a 400-gpm source, which the Water Department now limits to 200 gpm to manage manganese levels. In 2016, the Browns Well was pumped at a rate of less than 0.1-mgd on average due to the manganese. The wells in the Ipswich River basin also experience water-quality issues (either iron or manganese). The overriding constraint on pumping of the Ipswich River basin wells, however, is the Water-Management Act (WMA) registration, which limits pumpage to 0.2 million gallons per day (mgd) collectively, averaged over the year.

Summary of Water-Supply Sources
Ipswich, MA

Water Source	Source Type	Basin	Storage Capacity, million gallons (MG)	Max. Authorized Daily Volume, million gallons per day (mgd)
Dow Brook	Reservoir	Parker	51.7	2.5 (Dow + Bull Brook)
Bull Brook	Reservoir	Parker	16.4	-
Mile Lane GP Well	Well	Parker	-	0.15
Browns GP Well	Well	Parker	-	0.49*
Fellows Rd Well	Well	Ipswich	-	0.31*
Essex Rd Well	Well	Ipswich	-	0.21
Winthrop Tubular Wells 1 (inactive)	Well	Ipswich	-	-
Winthrop Well 2	Well	Ipswich	-	0.23
Winthrop Well 3 (inactive)	Well	Ipswich	-	-

*Current pumping capacity/days of operation restricted due to manganese levels >0.3 milligram per liter

Cost Alternative

At the Lynch Site, the Town of Ipswich owns approximately 5.87 of the 6.49 acres of land, or about 90% of what is required for Zone I water-supply protection. Ipswich, therefore, will need to purchase or gain control of only 0.62-acre of land, largely wetland. Current plans call for the Lynch Site to be connected to the water-distribution system via a transmission main extending about 3,800 feet to the Mile Lane Well. Electrical power is available on Linebrook Road. The Town of Ipswich owns both the water-distribution and electrical-transmission infrastructure. Connection of both water and electrical power to the Lynch Site would therefore be relatively low in cost. The water from the Lynch Site is not expected to require treatment beyond corrosion control, fluoridation and disinfection, which would also limit cost. The Calculated Approvable Yield for the Lynch Site is 510 gpm. Therefore, the wells could provide up to half

of the Town's average-day demand. We should also point out that engineering evaluations indicate that the cost to build treatment plants for manganese control range from $4.5 million (Browns Well, 2018 dollars) to $7.25 million (Fellows Road and Essex Road Wells, 2014 dollars). These solutions are 1.5- to 2.5-times as costly as new wells at the Lynch Property ($3 million, 2018 dollars). Operating costs for the treatment-plant options would be much higher than the costs to operate the Lynch wells. Based on the foregoing, Ipswich believes that development of the Lynch Site is the least-cost alternative with potentially great benefit.

Leak Detection Alternative

In 2017, the Ipswich Water Department completed the annual leak-detection survey of its 93 miles of water main, hydrants and valves. In 2017, leakage accounted for about 12,000 gallons per day in losses. The Town continues to perform annual leak detection and make repairs to water mains as needed to conserve water.

Conservation and Demand Management Alternative

Ipswich is committed to water conservation as a means of reducing consumption. In 2000, the Town instituted monthly billing, and in 2003, a seasonal rate-structure was introduced for its residential customers to manage summertime demands. Both actions dramatically and steadily reduced demands, as shown on the attached graph.

The summer rate for residential customers, which apply from May 1 to September 30 of each year, is 1.5 times the base rate. For 2018, the summer rate is set at $12.99 per hundred cubic feet, nearly four times the winter rate. Since 2006, the average daily demand has been well below the WMA authorized withdrawal volume (sum of registered and permitted volumes in the Parker and Ipswich River Basins) of 1.18 mgd. Ipswich's average residential consumption (in gallons per capita per day, gpcd) reported in 2016 was 46 gpcd, well below the DEP compliance standard of 65 gpcd. Ipswich's unaccounted for water (UAW) reported in 2017 was 15.8%, above the compliance standard of 10%. Ipswich will continue annual leak-detection, and is committed to reducing UAW to meet the compliance standard.

At its Annual Town Meeting in 2017, the Town adopted a Water-Use Restriction Bylaw. The new by-law grants greater authority to the Water Commissioners or their designee to impose restrictions to reduce consumption "at any time that conditions warrant", and includes restrictions on private wells. Information is supplied to customers through the Town web site and social media, through bill stuffers and through annual consumer confidence reports.

Other features that help Ipswich manage demand and promote conservation include the following. The Town is 100% metered. The Town has an on-going program to replace customer and master meters. The master meters are calibrated annually. Public buildings are metered and nearly all have been retrofitted with water-saving devices. The Town of Ipswich continues to enforce the plumbing code for new construction and building rehabilitation where installation of water-saving devices and low-flow toilets are required. Ipswich's water system is operated as a full enterprise account, which covers the costs of operations, maintenance, capital improvements and water conservation. The revenue raised through water rates is used exclusively to support the water system. Customers pay for the actual cost of water.

Water meters for all commercial, industrial, residential, small business and municipal accounts are currently read and billed monthly. Furthermore, Ipswich uses Advanced Metering Infrastructure (AMI), which is an integrated system of smart meters, communications networks, and data management systems that enable two-way communication between the utility and its customers. AMI gives the Water Department the ability, for example, to monitor consumption graphically on an hourly basis, and identify leaks quickly.

As illustrated above, the Town's on-going commitment to water conservation and demand management has and will continue to pay dividends. However, conservation and demand management will not eliminate the need for additional supplies to increase overall capacity, alleviate deficiencies, provide redundancy and operation flexibility, and create drought resiliency.

Withdrawal Points Alternative

The Town's Ipswich River basin wells are limited under the WMA Registration to 0.2-mgd of the Town's 1.0-mgd average-day demand. The Fellows Road Well in the Ipswich River basin is operated sparingly because of increasing levels of manganese. Partly because of the WMA limitation in the Ipswich River Basin, the surface-water and groundwater sources in the Parker River basin must bear the burden of supplying the Town. However, the Mile Lane Well has a capacity of only 105 gpm (0.15 mgd) and the Browns Well is now limited to about 200 gpm (0.29 mgd) to manage high levels of manganese. During the 2016 drought, which lasted from summer through the middle of October, the Town was literally draining the reservoirs of water to meet demand, and was within weeks of running out of water. Water use restrictions, imposed early in the season, were escalated, as necessary. However, by mid-September the Town was forced to request a Declaration of Water Supply Emergency, which DEP granted.

In the past 40 years, the Town has considered a range of new sources of supply:

- 1970s to 1980s: A regional water-supply solution, MWRA water, river diversions, impoundments, purchase of water and desalination;
- Mid-1990s: Investigated the expansion of Bull Brook and Dow Reservoirs;
- Late 1990s: Considered exploration for a new supply of groundwater from bedrock wells;
- 2003: Investigated the feasibility of diverting wastewater to water-supply recharge areas;
- 2005: Investigated the Ross Property for groundwater supply;
- 2015 to 2017: Investigated six geographic areas for potential sources of groundwater supply. The Lynch Site proved to be the most favorable in terms of water-supply capacity, water quality and regulatory approvability. The attached table summarizes the six sites investigated.
- Present: Investigating treatment of Browns Well water to remove manganese, desalination, wastewater reuse, and reservoir expansion.

While there may be other well sites or other possible sources of water supply yet to be identified in Ipswich, the Lynch Site represents the best alternative at the present time.

No Action Alternative

The primary benefits of a new source of water supply at the Lynch Site are as follows:

- The project will increase the Ipswich Water Department's overall water-supply capacity. The Town's existing groundwater supplies have lost capacity due to age and/or water quality, or are limited by permit. During periods of dry weather, the reservoirs are limited due to limited storage capacity.
- The project will improve overall operational reliability and flexibility, in case the existing supplies or the water treatment plant have to be taken out of service for any reason.
- Projected average-day water demands in the year 2040 are 1.39 mgd, with a projected peak day-demand of 4.17 mgd. The project will improve Ipswich's ability to meet these future water demands.
- The Lynch Site is capable of supplying up to 510 gpm (0.73 mgd) of good-quality drinking water that will not require filtration to remove iron and manganese.
- The project will provide much needed drought resiliency.

Under the "No Action" alternative, none of these benefits will be realized.

Comparison of 2016/2017 Test Well Sites
For Potential New Water Supply
Ipswich, Massachusetts

Location	Test Pumping Rate, gpm	Specific Capacity, gpm/ft	Water-Level Recovery	Potential Well Yield, gpm	Iron, mg/L	Mn, mg/L	Sodium/ Chloride, mg/L	Nitrate-N, mg/L	Comments
Browns Well	NA	> 50	NA	400	0.01-0.08	0.10-0.97			2014-15 water quality
TW 1-16, 15 ft SE Browns Well	64 (4 hrs)	54	91% (after 2 hrs)	400	0.04	0.001	70/137	0.6	Possible replacement well location
TW 2-16, 250 ft south of Browns Well	94 (4 hrs)	181	44% (after 2 hrs)	400 sustained yield uncertain	< 0.02	0.0004	60/110	0.7	Sluggish drawdown and recovery. For 2-hr pumping, 2-hr recovery = 81%; Zone I cannot be acquired.
Lynch Property	171 (8 hrs)	50 (interference, 4 wells)	99% (after 8 hrs)	300 - 400	0.03	0.001	104/122	3.0	Pumping test conducted under severe drought conditions; Partial Zone I acquisition required.
Project Adventure	191 (4 hrs)	20 – 30 (interference, 3 wells)	83% (after 4 hrs)	500 + sustained yield uncertain	< 0.02	< 0.002	63/134	1.5	Partial Zone I acquisition required.
Pony Express	125 (3 hrs)	208	77% (after 3 hrs)	700, sustained yield uncertain	1.53	1.97	26/29	< 0.1	Sluggish recovery. Land acquisition or easement required. High Fe and Mn

ATTACHMENT C
CORRESPONDENCE

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

June 27, 2018

Vicki Halmen
Ipswich Water & Sewer Division
P.O. Box 151
Ipswich, MA 01931

RE: City/Town: Ipswich
PWS Name: Ipswich Water & Sewer Division
PWS-ID No.: 3144000
Program: System Modifications
Action: Approval— Lynch Wellfield Site Exam/Pumping Test Proposal
Transmittal No.: X280136

Dear Ms. Halmen:

Please find attached the following information:

Approval of the site examination and pumping test proposal for a proposed public supply wellfield located off of Linebrook Road in Ipswich.

Please note that the signature on this cover letter indicates formal issuance of the attached document. **Please contact this office at least 5 days prior to the start of the prolonged pumping test.** If you have any questions regarding this letter, please contact James Persky at (978) 694-3227.

Sincerely,

James H. Persky
Environmental Analyst
Drinking Water Program

Sincerely,

Thomas Mahin
Drinking Water Section Chief
Northeast Regional Office

cc: DWP/Boston Office (no attachment)
Bruce Bouck, MassDEP, Drinking Water, Boston
Julie Butler, MassDEP, Water Management, Boston
Douglas DeNatale, AECOM, 250 Apollo Drive, Chelmsford, MA 01824

File Name: Y:\DWP Archive\NERO\Ipswich-3144000-System Modifications-2018-06-27

DESCRIPTION OF PROJECT

The Massachusetts Department of Environmental Protection (MassDEP) has reviewed an April 20, 2018 report by your hydrogeologic consultant, AECOM, which contains a site examination request and prolonged pumping test design for a proposed public supply wellfield for the Town of Ipswich Water & Sewer Division.

The Town has been investigating potential locations to supplement or replace its existing supplies, in order to provide redundancy and to minimize the use of two existing municipal wells that have elevated levels of naturally occurring manganese.

Based on 2016 test well drilling, the Town has identified a location off of Linebrook Road to site an additional public water supply source. This location, which is adjacent to Bull Brook upstream from the Town's Bull Brook Reservoir, is called the Lynch site, after a previous property owner. The parcel is now owned by the Town. AECOM estimates that a wellfield of four wells at the site could yield 300 to 400 gallons per minute (gpm). The aquifer at the site is a thin layer of gravel (4 to 6 feet thick) that is 45 to 50 feet below the ground surface. The gravel layer is overlain by a confining layer of glaciomarine clay, with fine sand and silt above that.

MassDEP representatives inspected the wellfield site on June 11, 2018. The Town parcel where the wellfield is located is presently leased for strawberry farming. Roughly 30% of the Zone I protective radius for the wellfield is cultivated fields, though not all of this area is currently in production. Additional farms are located to the north and northwest of the wellfield, outside the Zone I. Bull Brook is about 160 feet north of the nearest proposed well. The land north of Bull Brook is not owned by the Town, and is also leased for farming. This property includes a small portion of the Zone I that includes wetlands and a portion of a farm pond, but no cultivated land. Farming is also being done on Town property about 375 feet east of the wellfield, and on private property 1,000 feet south of the wellfield. A school is located 850 feet southwest of the wellfield, and athletic fields are located 850 feet east of the wellfield.

Preliminary water quality samples were collected from the wellfield at the end of an 8-hour pumping test on August 31, 2016. Total coliform bacteria were detected in the water, which AECOM attributes to contamination of the sample during the sample collection. Iron and manganese levels were below the Secondary Maximum Contaminant Levels for those metals. The water was hard, with a hardness of 134 milligrams per liter (mg/L). The pH was measured in the field as 7.9. The sodium concentration was 104 mg/L, higher than the level in any of Ipswich's current sources of water supply.

Pumping Test Proposal

Subsequent to the submittal of the AECOM April 20, 2018 report, several revisions have been made to the pumping test proposal in electronic mail between AECOM and MassDEP. This description of the pumping test design includes these revisions.

Four 8-inch test wells will be installed at the wellfield site, to serve as production wells during the test. Because the proposed withdrawal rate from the wellfield exceeds 50% of the estimated August median flow in Bull Brook, a 15-day pumping test will be conducted.

For the first 48 hours of the test, a single production well will be pumped at 300 gpm to evaluate the aquifer characteristics. After 48 hours, the pumping rate in that well will be dropped to 75 gpm, and the other three wells will begin pumping at 75 gpm each. The pumping test will then continue for another 13 days. The pumped water will be discharged to Bull Brook roughly 650 feet downstream from the wellfield, outside the Zone I. The four wells will be discharged via separate pipes, so that the pumping rate in each well can be measured, and adjusted as needed (water quality samples will therefore be a composite of samples from the four discharge lines).

After 15 days, the end-of-test water quality samples will be collected. The wells will then be turned off, and recovery measurements will be collected.

Water level measurements will be collected at 15 observation wells, and at 4 drive points along Bull Brook. Seepage meters will be installed at two of the drive points if field conditions permit. The drive point shown as DP-3 in the AECOM report will be moved farther upstream, to Linebrook Road. Two existing wells about 8,000 feet northeast of the wellfield will be used as ambient wells, and real-time data from U.S. Geological Survey groundwater monitoring network wells in Newbury and Wenham will also be used to evaluate ambient groundwater trends. MassDEP had sought to relocate one of the planned observation wells to the north side of Bull Brook, but the land owners did not grant permission for the Town to install a well on that property.

APPROVAL AND REQUIREMENTS

MassDEP **approves** the Lynch wellfield site for further testing for public water supply. MassDEP also **approves** the design of the prolonged pumping test. **Please note that this letter does not constitute approval for water production or use from the site.** Such approval will depend on the results of water quality and water quantity testing of the site, as described in *Guidelines for Public Water Systems*. Pursuant to MassDEP's authority under 310 CMR 22.04(7) to require that each supplier of water operate and maintain its system in a manner that ensures the delivery of safe drinking water to consumers, this permit is made subject to the following conditions:

1. The pumping test must accomplish the work described in AECOM's April 2018 proposal, as amended herein.

2. The pumping test must be conducted within two years of the date of this letter. After this date, a new approval will be required.

3. This office must be informed as to when the pumping test is expected to begin.

4. In addition to the proposed water quality sampling, the wellfield must be sampled at the end of the pumping test for six perfluorinated compounds via EPA Method 537: Perfluorooctanoic acid (PFOA), perfluorooctanesulfonate (PFOS), perfluorononanoic acid (PFNA), perfluorohexanesulfonic acid (PFHxS), perfluoroheptanoic acid (PFHpA) and Perfluorobutane sulfonate (PFBS). MassDEP is requiring that all testing of new and replacement public water supply sources include testing for perfluorinated compounds. MassDEP will accept analyses done by laboratories that were approved by the U.S. Environmental Protection Agency for Method 537 during the Unregulated Contaminant Monitoring Rule UCMR3 testing. A listing of these laboratories can be found at:

   https://www.epa.gov/sites/production/files/2016-10/documents/ucmr3-lab-approval.pdf

5. Sampling and analysis of gross beta particle activity is not required.

6. To avoid complications that have occurred on some pumping tests, please make sure that the laboratory analyzing the water quality samples is aware that 1) the samples are drinking water samples, and must be analyzed using drinking water analytical methods, detection limits, and holding times; and 2) nitrate, nitrite, and perchlorate must be included in the inorganic analyses. All laboratory water quality samples must be analyzed by laboratories certified by the Commonwealth of Massachusetts to perform these analyses.

7. A Source Final Report containing the results of the pumping test must be submitted to this office for approval, in order to continue with the permitting process for the well. Two copies of this document must be submitted, along with a MassDEP transmittal form and an application for MassDEP Permit Category BRPWS19.

8. The Source Final Report must include a surveyed site plan that includes at least the entire Zone I area, at a scale large enough to accurately show the locations of the production and observation wells relative to one another and to the property lines.

9. The Source Final Report must include an evaluation of the corrosivity of the water (using secondary contaminants such as pH, alkalinity, chloride, sulfate, and hardness) to determine the need for corrosion control treatment, including whether changes are needed to any corrosion control strategy that may already be in place for Ipswich's existing water sources.

10. The Ipswich Water & Sewer Division will need to obtain a Water Withdrawal Permit amendment in the Parker River Basin to add the Lynch Wellfield as an authorized withdrawal point on its existing permit. If you will exceed your 0.98 million gallon per day authorized withdrawal volume (average daily withdrawal over a calendar year) in the Parker River Basin as a result of the new wellfield, then a new Water Withdrawal Permit will be needed. The Water Withdrawal Permit or amendment application must be submitted at the same time as the Source Final Report; MassDEP will review the two applications concurrently. **A completed Water Conservation Questionnaire must be**

submitted as part of this application, if it has not been submitted prior to the time of application. If you have questions regarding Water Management Act permitting, please contact Julie Butler at (617) 292-5552.

11. If the final wellfield design will use individual submersible pumps in each well rather than a suction pumping system, then the pump intake depths may be no greater than 28 feet below the ground surface. (In order to be eligible for the 250 foot Zone I radius, a wellfield of wells with submersible pumps must mimic the drawdown limitation of a suction lift system.)

12. The Town does not presently own the entire Zone I protective radius for the wellfield. MassDEP will not approve construction of the permanent pumping facilities for the wellfield until the Town demonstrates that it has obtained ownership or control of the Zone I. Control of the Zone I is generally established via easement and Conservation Restriction, as described in MassDEP Drinking Water Program Policy # 94-03. The Conservation Restriction and easement language must be reviewed by MassDEP. Acquisition of water supply land or rights in land requires MassDEP approval and a public hearing.

13. The Town of Ipswich presently has zoning and non-zoning controls that meet the standards of 310 CMR 22.21(2) to protect the Zone II wellhead protection area for the Mile Lane Well. This Zone II is very similar to the estimated Zone II for the Lynch Wellfield. If the final Zone II delineation for the Lynch Wellfield includes any areas that are not part of the existing Zone II for the Mile Lane Well, then the Town must add these areas to the Zone II Groundwater Protection Areas on its Water Supply Protection District Map. MassDEP will not grant final approval to place the Lynch Wellfield on-line for public water supply until the Town demonstrates that the Zone II for the Lynch Wellfield is protected by zoning and non-zoning controls that meet the standards of 310 CMR 22.21(2).

ATTACHMENT D
DISTRIBUTION LIST

DISTRIBUTION LIST

Secretary of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston MA 02202

Department of Environmental Protection
Attention: MEPA Coordinator
One Winter Street
Boston, MA 02108

Department of Environmental Protection
Attention: MEPA Coordinator
Northeast Regional Office
205B Lowell Street
Wilmington, MA 01887

Massachusetts Historical Commission
The MA Archives Building
220 Morrissey Boulevard
Dorchester, MA 02125

Massachusetts Coastal Zone Management
Attn: Project Review Coordinator
251 Causeway Street, Suite 800
Boston, MA 02114

Massachusetts Division of Marine Fisheries
Attn: Environmental Reviewer
251 Causeway Street, Suite 400,
Boston, MA 02114

Ipswich Conservation Commission
Town Hall
25 Green Street
Ipswich, MA 01938

Ipswich Planning Board
Town Hall
25 Green Street
Ipswich, MA 01938

Ipswich Board of Health
Town Hall
25 Green Street
Ipswich, MA 01938

Ipswich Select Board

Town Hall
25 Green Street
Ipswich, MA 01938

Ipswich Public Library
25 North Main Street
Ipswich, MA 01938

Massachusetts Department of Agricultural Resources
251 Causeway St, Suite 500,
Boston, MA 02114-2151

Massachusetts Department of Transportation
Public/Private Development Unit
10 Park Plaza, Suite 4160
Boston, MA 02116

Massachusetts Department of Transportation
Highway District 4 Office
519 Appleton Street
Arlington, MA 02476

Metropolitan Area Planning Council
60 Temple Place
Boston, MA 02111

Parker River Clean Water Association
PO Box 798
Byfield, Massachusetts 01922

ATTACHMENT E

PUBLIC NOTICE

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs

MEPA Office

100 Cambridge St., Suite 900
Boston, MA 02114
Telephone 617-626-1020

The following should be completed and submitted to a local newspaper:

PUBLIC NOTICE OF ENVIRONMENTAL REVIEW

PROJECT: Wells and Pumping Facilities, Lynch Site

LOCATION: 215 Linebrook Road, Ipswich, MA

PROPONENT: Ipswich Water Utilities Department

The undersigned is submitting an Environmental Notification Form ("ENF") to the Secretary of Energy & Environmental Affairs on or before
January 15, 2019 *(date)*

This will initiate review of the above project pursuant to the Massachusetts Environmental Policy Act ("MEPA", M.G.L. c. 30, s.s. 61-62I). Copies of the ENF may be obtained from:
Douglas DeNatale, AECOM, 250 Apollo Drive, Chelmsford, MA 01824, 978-905-2180

(Name, address, phone number of proponent or proponent's agent)

Copies of the ENF are also being sent to the Conservation Commission and Planning Board of Ipswich, MA *(Municipality)* **where they may be inspected.**

The Secretary of Energy & Environmental Affairs will publish notice of the ENF in the Environmental Monitor, will receive public comments on the project for 20 days, and will then decide, within ten days, if an environmental Impact Report is needed. A site visit and consultation session on the project may also be scheduled. All persons wishing to comment on the project, or to be notified of a site visit or consultation session, should write to the Secretary of Energy & Environmental Affairs, 100 Cambridge St., Suite 900, Boston, Massachusetts 02114, Attention: MEPA Office, referencing the above project.

By _____ 1/9/19 *(Proponent)*