



December 13, 2024

Secretary Rebecca Tepper
Massachusetts Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 1020
Boston, MA 02114

and

Tori Kim, MEPA Director
Massachusetts Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Bourne Comprehensive Wastewater Management Plan
MEPA Expanded Environmental Notification Form
Town of Bourne, Massachusetts

Dear Secretary Tepper and Director Kim,

On behalf of the Town of Bourne (Proponent), Apex Companies (formerly Environmental Partners) prepared the enclosed MEPA Expanded Environmental Notification Form (EENF) for the Bourne Comprehensive Wastewater Management Plan, a town-wide 20-year wastewater management planning document.

The first ten years of the CWMP Implementation Plan focuses on Tier 1 watersheds: Phinney's Harbor Watershed and Megansett-Squeteague Watershed, which are both nitrogen-impaired watersheds with Total Nitrogen Total Maximum Daily Limits (TMDLs). Years 11 – 20 of the CWMP Implementation Plan include Tier 2 watersheds, which are the remaining nitrogen-impaired watersheds currently without a Total Nitrogen TMDL (Buttermilk Bay, Pocasset Harbor, and Pocasset River). Alternatives included in the first ten years of implementation include:

- New Core Sewer Area and increasing capacity to an existing Wastewater Treatment Facility.
- General Use Innovative/Alternative (GUIA) Onsite Wastewater Systems
- Stormwater Best Management Practices.
- The final goal of Phase 1 is to implement townwide policy changes including but not limited to additional Stormwater Best Management Practices, updates to applicable Board of Health regulations surrounding use of GUIA systems and investigating the use of Responsible Management Entities (RMEs) to monitor water quality progress of the individual onsite systems.

Tier 3 watersheds including the Buzzards Bay watershed, Cape Cod Canal Watersheds, and Cape Cod Bay Watersheds are not included in this implementation plan as they are not currently nitrogen-impaired but will be reassessed during the implementation plan as part of Adaptive Management Planning.

Under 301 CMR 11.03, the project meets the threshold for an ENF and Mandatory EIR due to the proposed construction of one or more new sewer mains ten miles or more in length (5. a.3.) and proposed expansion in discharge to groundwater of 50,000 or more gallons per day (gpd) of sewage within any other area (5.b.4.c.ii.). The project limits of work have not yet been delineated as final design of the sewer collection system and wastewater treatment facility upgrades have not been completed. However, there are five Environmental Justice (EJ) populations within five miles of the Town-wide area and one EJ population within one mile of the proposed wastewater treatment facility alternative.

The Proponent requests that the Secretary allow a single EIR in accordance with 301 CMR 11.06(8) or establish a Special Review Procedure in accordance with 301 CMR 11.09, as applicable, based on MEPA's interpretation and review of the Bourne CWMP selected alternatives. As stated earlier, Bourne's CWMP includes both traditional sewer alternatives and GUIA onsite systems. While these are both acceptable technologies as a conventional treatment method for nitrogen removal as described by MassDEP, the GUIA systems do not meet a MEPA Review Threshold. Therefore, the Proponent requests that consideration of the Special Review Procedure be enacted if a single EIR cannot be granted.

Agencies and people receiving copies of this submission are listed in Attachment 6.

We greatly value the input and guidance your staff has offered the Town during the preparation of this EENF package. Please feel free to contact us if you have any questions or need clarification with any of the information contained herein.

Sincerely,



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Principal
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CC: Marlene McCollem, Town Administrator, Town of Bourne
Mary Jane Mastrangelo, Chair, Town of Bourne Select Board

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: <u>Bourne Comprehensive Wastewater Management Plan</u>		
Street Address: <u>Various</u>		
Municipality: <u>Town of Bourne</u>	Watershed: <u>Phinney's Harbor, Megansett-Squeteague Harbor and others</u>	
Universal Transverse Mercator Coordinates:	Latitude: Longitude:	
Estimated commencement date: <u>Not Designed Yet</u>	Estimated completion date: <u>Not Designed Yet</u>	
Project Type: <u>Wastewater (Planning)</u>	Status of project design: <u>0</u> %complete	
Proponent: <u>Marlene McColem, Town Administrator</u>		
Street Address: <u>24 Perry Avenue</u>		
Municipality: <u>Bourne</u>	State: <u>MA</u>	Zip Code: <u>02532</u>
Name of Contact Person: <u>Kathryn Roosa, PE and Helen Gordon, PE</u>		
Firm/Agency: <u>Apex Companies, LLC (formerly Environmental Partners, LLC)</u>	Street Address: <u>1900 Crown Colony Dr. Suite 402</u>	
Municipality: <u>Quincy</u>	State: <u>MA</u>	Zip Code: <u>02169</u>
Phone: <u>617-657-0200</u>	Fax:	E-mail: Kathryn.Roosa@apexcos.com Helen.Gordon@apexcos.com
Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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))	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
a Rollover EIR? (see 301 CMR 11.06(13))	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Special Review Procedure? (see 301CMR 11.09)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Phase I Waiver? (see 301 CMR 11.11)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<i>(Note: Greenhouse Gas Emissions analysis must be included in the Expanded ENF.)</i>		
Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)? <u>Wastewater (expansion of existing treatment and construction of new sewer mains).</u>		
Which State Agency Permits will the project require? <u>MESA Project Review* and MassDEP WPA Form 3 – Wetland Notice of Intent* (*to be filed as a Streamlined Notice of Intent), MassDEP WP68 – Treatment Works Plan Approval for New/Modified</u>		

Facility, and MassDEP WP83 – Hydrogeologic Evaluation Report for New/Modified Groundwater Discharge Permit.

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:
Potentially Clean Water Trust (CWT) State Revolving Fund (SRF) as well as Cape Cod and Islands Water Protection Funding (CCIWPF).

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	<0.5		
New acres of land altered		TBD	
Acres of impervious area	<0.25	TBD	TBD
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		TBD	TBD
Number of housing units	0	0	0
Maximum height (feet)	18	TBD	TBD
TRANSPORTATION			
Vehicle trips per day	0	TBD	TBD
Parking spaces	1	TBD	TBD
WASTEWATER			
Water Use (Gallons per day)	UNK	TBD	TBD
Water withdrawal (GPD)	N/A	N/A	N/A
Wastewater generation/treatment (GPD)	35,240	86,100	121,520
Length of water mains (miles)	N/A	N/A	N/A
Length of sewer mains (miles)	3.5	12	15.5
Has this project been filed with MEPA before? <input type="checkbox"/> Yes (EEA # _____) <input checked="" type="checkbox"/> No			
Has any project on this site been filed with MEPA before? <input checked="" type="checkbox"/> Yes (EEA # _____) <input type="checkbox"/> No <u>Bourne Middle School WWTF - EEA No. 11708, Bourne Buzzards Bay WWTF - EEA No. 15514</u>			

GENERAL PROJECT INFORMATION – all proponents must fill out this section

PROJECT DESCRIPTION:

Describe the existing conditions and land uses on the project site:

The Phase 1 Phinney’s Harbor Core Sewer Area would encompass sewer collection expansion in public rights of way to convey flow from 12 miles of new pipeline to the existing Bourne Schools Wastewater Treatment Facility (WWTF) located at the Bourne Public Schools Campus at 77 Waterhouse Road, Bourne, MA. The current WWTF is located on the school campus property and discharges treated wastewater effluent to groundwater discharge beds located also on the Public Schools Campus beneath athletic fields. While final design has not yet been completed, and hydrogeologic modeling is required for proceeding with expansion of groundwater discharge loading, the expansion of the Bourne Schools WWTF is assumed to take place at the same location and expansion of groundwater discharge beds would likely be placed beneath athletic fields at the school campus.

Describe the proposed project and its programmatic and physical elements:

There is currently no centralized, municipally owned and operated wastewater collection systems south of the Cape Cod Canal in Bourne. This project proposes a Phinney’s Harbor Core Sewer Area with the primary purpose of removing nitrogen loading from the Phinney’s Harbor Embayment system and transferring flow outside the watershed to the existing Bourne Schools Wastewater Treatment Facility (WWTF), located in the Cape Cod Canal Watershed. The existing Bourne Schools WWTF will require capacity assessment and discharge assessment, including hydrogeologic modeling of the existing groundwater discharge beds. The proposed Phinney’s Harbor Core Sewer Area will encompass approximately 12 miles of sewer and up to three pump stations to convey wastewater to the existing Bourne Schools Wastewater Treatment Facility (WWTF). The existing WWTF would be expanded for treatment and discharge, subject to permit approval/permitting, and remove nitrogen loading from Phinney’s Harbor watershed. The design is only at the pre-design/conceptual stage, so several factors are subject to change as the design is progressed. This is considered part of Phase 1 of a three Phase Comprehensive Wastewater Management Plan Recommended Plan.

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:

Several alternatives were evaluated as part of the Comprehensive Wastewater Management Plan Alternatives Analysis. The full analysis and results are included in Attachment 11 – Draft Recommended Plan and Attachment 13 – Alternatives Analysis. The current Phinney’s Harbor Core Sewer Area alternative was chosen primarily due to a need for increasing regular wastewater flow to the existing Bourne Schools WWTF and removal requirement for nitrogen under the Phinney’s Harbor Nitrogen TMDL.

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:

While the final design of the collection system layout nor the existing Bourne Schools WWTF Expansion has not been completed it is expected that by utilizing previously developed land adjacent to the existing WWTF building, utilizing existing athletic fields for future groundwater disposal beds, and containing new sewers within Town-owned roadway right-of-ways, additional development outside of previously developed areas will be limited.

If the project is proposed to be constructed in phases, please describe each phase:

The first Phase of the CWMP Implementation Plan (Years 1 – 10) focuses on Phinney’s Harbor Watershed and

Megansett-Squeteague Watershed. The Phinney's Harbor Core Sewer Area and Townwide Stormwater Best Management Practices as well as homeowner-targeted education programs in Megansett-Squeteague Harbor will be the primary focus. For the remaining nitrogen-impaired watersheds in Bourne, (Pocasset Harbor, Pocasset River, Buttermilk Bay), investigation and design of any core sewer area needs will be pursued in Phase 2 (Plan Years 11 – 20). Phase 3 includes revisiting the Buzzards Bay and Cape Cod Canal Watersheds between Plan Years 11 – 20, to reassess whether nitrogen reducing measures need to be taken into consideration. This is considered part of the Adaptive Management Planning.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

- Yes (Specify: Bourne Back River and Headwater Wetlands ACEC)
 No

if yes, does the ACEC have an approved Resource Management Plan? ___ Yes X No;

If yes, describe how the project complies with this plan.

Will there be stormwater runoff or discharge to the designated ACEC? ___ Yes X 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/nhosp/regulatory_review/priority_habitat/priority_habitat_home.htm)

- Yes (Specify: _____) No

While the WWTF Project Area is outside of the Estimated and/or Priority Habitat Areas, the proposed collection system areas may be located near Estimated and/or Priority Habitats of the following State-Listed Rare Species: Osprey, Spotted Turtle, and Diamondback Terrapin. The final design is not completed but consultation with NHESP during the design process will inform the specific route of collection system infrastructure with the goal of avoiding any Estimated or Priority Habitats.

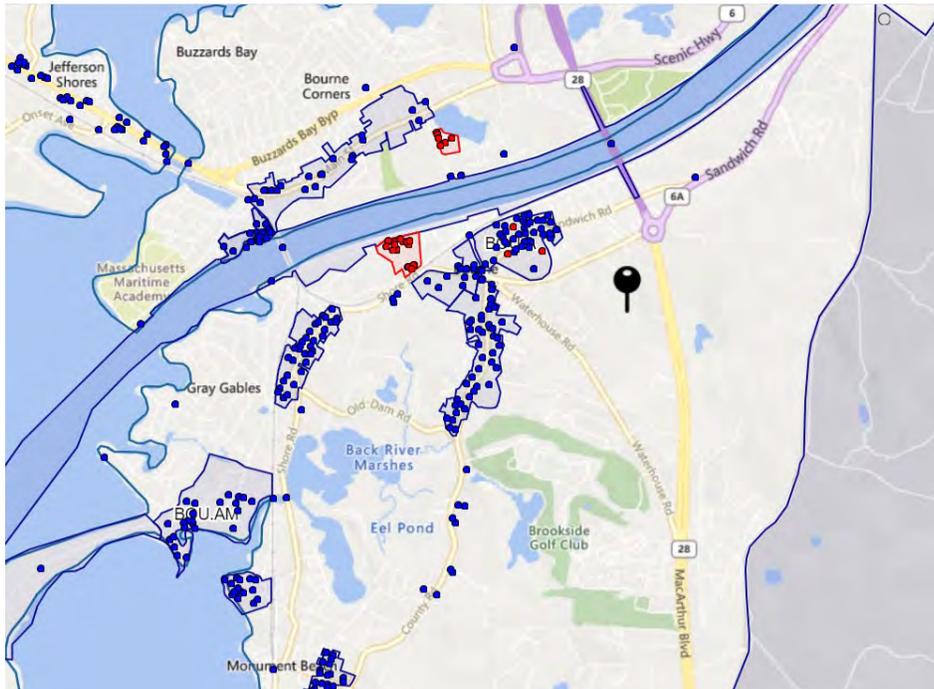
HISTORICAL /ARCHAEOLOGICAL RESOURCES:

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

The Project Area is outside of a Historic/Archaeological Resource District. Sewer Expansion areas are located within Residential Historic Districts, however, work is contained in the Right of Way and permitting associated with work in close proximity to the Residential Historic districts will be adhered to during design and construction.

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes (Specify _____) No



Screenshot: MACRIS Historic District Locations near Phinney's Harbor Core Sewer Area site.

WATER RESOURCES:

Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site? Yes No;

if yes, identify the ORW and its location. Buttermilk Bay (SA, Shellfishing) Pocasset River (ORW - SA, Shellfishing)

(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 No; if yes, identify the water body and pollutant(s) causing the impairment: See Table Below.

Waterbody:	Pollutant:	Nitrogen TMDL
Back River (Phinney's Harbor)	Nitrogen, Bacteria	Yes
Buttermilk Bay	Nitrogen, Bacteria	No
Buzzards Bay	Bacteria	No
Eel Pond (Phinney's Harbor)	Nitrogen, Bacteria	Yes
Megansett Harbor	Nitrogen, Bacteria	Yes
Phinney's Harbor	Nitrogen, Bacteria	Yes
Pocasset River	Nitrogen, Bacteria	No
Red Brook Harbor (Pocasset Harbor)	Nitrogen, Bacteria	Pending

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? Yes No

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:

Prior to construction activities, the Contractor will be responsible for filing a Stormwater National Pollutant Discharge Elimination System (NPDES) General Construction Permit and all activities and monitoring required under the permit. Projects under the CWMP will need a Request for Determination and WPA Form 3, as applicable, to assess construction-specific activities including protection of buffers to Resource Areas through use of best erosion control management practices.

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): _____

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: Any items to be removed or demolished during expansion of the existing Bourne School WWTF will be disposed of in accordance with Local, State, and Federal requirements by the Contractor. Any materials that are suitable for reuse by Bourne School District or the Town of Bourne will be returned to the District/Town for this use by the Contractor.

(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: Contractor and equipment are subject to 310 CMR 7 and MGL Chapter 90, Section 16B limiting vehicle idling on school grounds. As a baseline, the project may also include MassDOT Diesel Retrofit requirements for construction equipment and vehicles to be used onsite (a mandatory requirement for any State Revolving Fund Project).

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 X ; 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 X ; 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.
 8. Printout of output report from RMA Climate Resilience Design Standards Tool, available [here](#).
 9. Printout from the EEA [EJ Maps Viewer](#) showing the project location relative to Environmental Justice (EJ) Populations located in whole or in part within a 1-mile and 5-mile radius of the project site.

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 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:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Footprint of buildings	_____	_____	_____
Internal roadways	_____	_____	_____
Parking and other paved areas	_____	_____	_____
Other altered areas	_____	_____	_____
Undeveloped areas	_____	_____	_____
Total: Project Site Acreage	_____	_____	_____

B. Has any part of the project site been in active agricultural use in the last five years?
 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?

C. Is any part of the project site currently or proposed to be in active forestry use?
 Yes 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 No; if yes, describe:

D. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction?
 Yes No; if yes, does the project involve the release or modification of such restriction?
 Yes No; if yes, describe:

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 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; if yes, describe:

III. Consistency

A. Identify the current municipal comprehensive land use plan
Title: Town of Bourne Local Comprehensive Plan
Date: Certified by Cape Cod Commission December 5, 2019

B. Describe the project's consistency with that plan with regard to:
1) economic development Consistent with Bourne LCP
2) adequacy of infrastructure Consistent with Bourne LCP
3) open space impacts Consistent with Bourne LCP
4) compatibility with adjacent land uses Consistent with Bourne LCP

C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)
RPA: Cape Cod Commission
Title: Cape Cod Area Wide Water Quality Management Plan Update (208 Plan)

Date: June 2015

D. Describe the project's consistency with that plan with regard to:

1) economic development Consistent with 208 Plan; Expansion of wastewater collection system to mitigate existing and any future nitrogen loading from existing residential neighborhoods. Neighborhood zoning or expansion is not anticipated, in alignment with the Local Comprehensive Plan for this area within Bourne.

2) adequacy of infrastructure Consistent with 208 Plan; Infrastructure proposed is to mitigate wastewater nitrogen loading impacts in the impaired Phinney's Harbor.

3) open space impacts Consistent with 208 Plan; Existing developed parcels only to be impacted as part of the Phinney's Harbor Core Sewer Areas project and right of way only to be utilized for new collection System sewer expansion.

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)? X Yes ___ No.

If yes,

1. Have you consulted with the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP)? ___ Yes X 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.

According to preliminary mapping, areas close to the Core Sewer Area appear to be within Priority and/or Estimated Habitats. See Attachment 4, item B for mapping of the areas. As projects have not been designed yet, the design plans have not been submitted to NHESP for an applicability review. Once conceptual design is completed, then the design plans will be submitted for applicability review. For Core Sewer Areas, work will be limited to existing roadways and rights-of-way with construction erosion controls and stormwater compliance. All necessary impacts to schedule, construction practices and mitigation will be adhered to in accordance with permits and NHESP restrictions, as applicable.

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 X 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 X No

	<u>Length (linear feet)</u>	<u>Permanent Impact?</u>
Land Under the Ocean	N/A	
Designated Port Areas	N/A	
Coastal Beaches	N/A	
Coastal Dunes	N/A	
Barrier Beaches	N/A	
Coastal Banks	N/A	
Rocky Intertidal Shores	N/A	
Salt Marshes	N/A	
Land Under Salt Ponds	N/A	
Land Containing Shellfish	N/A	
Fish Runs	N/A	
Land Subject to Coastal Storm Flowage	N/A	
<u>Inland Wetlands</u>		
Bank (lf)	N/A	
Bordering Vegetated Wetlands	100-ft. Buffer Only	Temporary
Isolated Vegetated Wetlands	N/A	
Land under Water	N/A	
Isolated Land Subject to Flooding	N/A	
Bordering Land Subject to Flooding	N/A	
Riverfront Area	N/A	

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) TBD. The project

design has not been finalized, so targeted areas of buffer zone around wetland resource areas has not yet been confirmed.

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 X 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 X ; 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: 0

Area of filled tidelands covered by buildings: N/A

For portions of site on filled tidelands, list ground floor uses and area of each use:

N/A

Does the project include new non-water-dependent uses located over flowed tidelands?

Yes ___ No X

Height of building on filled tidelands N/A

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 X 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 X 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 X No; (NOTE: If yes, then the project will be subject to Public Benefit Review and Determination.)

G. Does the project include dredging? ___ Yes X 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))? ___ Yes X No; if yes, specify, in quantitative terms:

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

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:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Municipal or regional water supply	_____	_____	_____
Withdrawal from groundwater	_____	_____	_____
Withdrawal from surface water	_____	_____	_____
Interbasin transfer	_____	_____	_____

(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

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

D. What is the currently permitted withdrawal at the proposed water supply source (in gallons per day)? _____ Will the project require an increase in that withdrawal? ___ Yes ___ No; if yes, then how much of an increase (gpd)? _____

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 ___ No. If yes, describe existing and proposed water supply facilities at the project site:

	<u>Permitted Flow</u>	<u>Existing Avg Daily Flow</u>	<u>Project Flow</u>	<u>Total</u>
Capacity of water supply well(s) (gpd)	_____	_____	_____	_____
Capacity of water treatment plant (gpd)	_____	_____	_____	_____

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?

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 ___ No
2. a Watershed Protection Act variance? ___ Yes ___ 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 ___ No

III. Consistency

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

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 ___ No; if yes, specify, in quantitative terms: Construction of one or more New sewer mains ten or more miles in length (5.a.3.), expansion of an existing wastewater treatment and/or disposal facility by the greater of 100,000 gpd (5.b.2) and expansion of discharge to groundwater of more than 50,000 gpd within any other area (5.b.4.c.ii).

B. Does the project require any state permits related to **wastewater**? Yes ___ No; if yes, specify which permit: MassDEP WP68 – Treatment Works Plan Approval for New/Modified Facility, and MassDEP WP83 – Hydrogeologic Evaluation Report for New/Modified Groundwater Discharge Permits.

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):

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge of sanitary wastewater	<u>35,420</u>	<u>86,100</u>	<u>121,520</u>
Discharge of industrial wastewater	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	<u>35,420</u>	<u>86,100</u>	<u>121,520</u>
	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Discharge to groundwater	<u>35,420</u>	<u>86,100</u>	<u>121,520</u>
Discharge to outstanding resource water	<u>0</u>	<u>0</u>	<u>0</u>
Discharge to surface water	<u>0</u>	<u>0</u>	<u>0</u>
Discharge to municipal or regional wastewater facility	<u>0</u>	<u>0</u>	<u>0</u>
TOTAL	<u>35,420</u>	<u>86,100</u>	<u>121,520</u>

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:

Existing Bourne Schools WWTF treats about 8,000 – 10,000 gpd during the school year. This amount of flow drops significantly lower during June, July, and August (during Summer Vacation). The goal is to utilize existing available capacity with the first round of sewer

extensions and then to assess the existing facility for increased loading to the existing groundwater discharge beds, expansion of the treatment facility within its current location, and investigate alternative sites for groundwater disposal (if needed). The sewer expansion phasing nor any modifications to the Bourne Schools WWTF have been designed as part of the CWMP process.

	<u>Permitted</u>	<u>Existing Avg Daily Flow</u>	<u>Project Flow</u>	<u>Total</u>
Wastewater treatment plant capacity (in gallons per day)	<u>35,420</u>	<u>10,000</u>	<u>86,100</u>	<u>121,520</u>

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):

Exact quantity of sewage sludge, sewage screenings and sewage grit is unknown at this time as the upgrades to the WWTF have not been designed yet. The current WWTF process produces minimal sludge. Partially digested sludge from the RBCs settles in the clarifiers and is stored in a mudwell tank. Solids backwashed from the filter media are also stored in the mudwell tank. The Mudwell tank is pumped periodically to a settling tank, where solids settle and are pumped periodically and removed offsite. Therefore, existing sludge volumes are based on the capacity of the treatment tank.

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
Storage	<u>20,000 gallons per year.</u>	<u>TBD</u>	<u>_____</u>
Treatment	<u>N/A</u>	<u>TBD</u>	<u>_____</u>
Processing	<u>N/A</u>	<u>TBD</u>	<u>_____</u>
Combustion	<u>N/A</u>	<u>TBD</u>	<u>_____</u>
Disposal	<u>~ 20,000 gallons per year</u>	<u>TBD</u>	<u>_____</u>

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

As final design is not yet completed, it is expected that the design of the proposed wastewater collection system, any associated pump stations, and the WWTF expansion will follow standard best practices and regulations. The wastewater collection system and future WWTF expansion designs will follow technical standards for pipeline design, pumping redundancy, and backup power in accordance with regulatory requirements and building codes. The system will include testing prior to service and will include instrumentation and controls as part of the WWTF expansion, consistent with current design standards. As for consideration of water conservation measures, the Town will consider every opportunity available for using best available water conservation technologies and will consider water reuse options available for the project, as applicable.

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: The Town will take all necessary measures to comply with applicable state, regional, and local plans related to wastewater management including but not limited to working with MassDEP Southeast Regional Office Cape and Islands Wastewater Management division, Cape Cod Commission and EPA.
- B. If the project requires a sewer extension permit, is that extension included in a comprehensive wastewater management plan? X 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: This EENF serves as the draft recommended Comprehensive Wastewater Management Plan for approval by MEPA and stakeholders.

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:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
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?

	<u>Roadway</u>	<u>Existing</u>	<u>Change</u>	<u>Total</u>
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:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
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:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
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:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
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:

	<u>Existing</u>	<u>Change</u>	<u>Total</u>
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 X 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:

CLIMATE CHANGE ADAPTATION AND RESILIENCY SECTION

This section of the Environmental Notification Form (ENF) solicits information and disclosures related to climate change adaptation and resiliency, in accordance with the MEPA Interim Protocol on Climate Change Adaptation and Resiliency (the “MEPA Interim Protocol”), effective October 1, 2021. The Interim Protocol builds on the analysis and recommendations of the 2018 Massachusetts Integrated State Hazard Mitigation and Climate Adaptation Plan (SHMCAP), and incorporates the efforts of the Resilient Massachusetts Action Team (RMAT), the inter-agency steering committee responsible for implementation, monitoring, and maintenance of the SHMCAP, including the “Climate Resilience Design Standards and Guidelines” project. The RMAT team recently released the RMAT Climate Resilience Design Standards Tool, which is available [here](#).

The MEPA Interim Protocol is intended to gather project-level data in a standardized manner that will both inform the MEPA review process and assist the RMAT team in evaluating the accuracy and effectiveness of the RMAT Climate Resilience Design Standards Tool. Once this testing process is completed, the MEPA Office anticipates developing a formal Climate Change Adaptation and Resiliency Policy through a public stakeholder process. Questions about the RMAT Climate Resilience Design Standards Tool can be directed to rmat@mass.gov.

All Proponents must complete the following section, referencing as appropriate the results of the output report generated by the RMAT Climate Resilience Design Standards Tool and attached to the ENF. In completing this section, Proponents are encouraged, but not required at this time, to utilize the recommended design standards and associated Tier 1/2/3 methodologies outlined in the RMAT Climate Resilience Design Standards Tool to analyze the project design. However, Proponents are requested to respond to a [user feedback survey](#) on the RMAT website or to provide feedback to rmat@mass.gov, which will be used by the RMAT team to further refine the tool. Proponents are also encouraged to consult general guidance and best practices as described in the [RMAT Climate Resilience Design Guidelines](#).

Climate Change Adaptation and Resiliency Strategies

- I. Has the project taken measures to adapt to climate change for all of the climate parameters analyzed in the RMAT Climate Resilience Design Standards Tool (sea level rise/storm surge, extreme precipitation (urban or riverine flooding), extreme heat)? ___ Yes No

Note: Climate adaptation and resiliency strategies include actions that seek to reduce vulnerability to anticipated climate risks and improve resiliency for future climate conditions. Examples of climate adaptation and resiliency strategies include flood barriers, increased stormwater infiltration, living shorelines, elevated infrastructure, increased tree canopy, etc. Projects should address any planning priorities identified by the affected municipality through the Municipal Vulnerability Preparedness (MVP) program or other planning efforts, and should consider a flexible adaptive pathways approach, an adaptation best practice that encourages design strategies that adapt over time to respond to changing climate conditions. General guidance and best practices for designing for climate risk are described in the [RMAT Climate Resilience Design Guidelines](#).

A. If no, explain why

This CWMP outlines the implementation plan but has not designed any facilities. Specific sites for pump stations and collection system layout will need to be investigated first to be able to more accurately account for Climate Change Adaptation and Resiliency strategies.

B. If yes, describe the measures the project will take, including identifying the planning horizon and climate data used in designing project components. If applicable, specify the return period and design storm used (e.g., 100-year, 24-hour storm).

C. Is the project contributing to regional adaptation strategies? ___ Yes X No; If yes, describe.

II. Has the Proponent considered alternative locations for the project in light of climate change risks?
___ Yes X No

A. If no, explain why. For Phase 1, the use of the existing Bourne Schools WWTF for the treatment plant is already in service and has capacity to accommodate a portion of the planned sewer expansion. The sewer expansion has not been designed and is still flexible to be able to complete the process.

B. If yes, describe alternatives considered.

III. Is the project located in Land Subject to Coastal Storm Flowage (LSCSF) or Bordering Land Subject to Flooding (BLSF) as defined in the Wetlands Protection Act? ___ Yes X No

If yes, describe how/whether proposed changes to the site's topography (including the addition of fill) will result in changes to floodwater flow paths and/or velocities that could impact adjacent properties or the functioning of the floodplain. General guidance on providing this analysis can be found in the CZM/MassDEP Coastal Wetlands Manual, available [here](#).

ENVIRONMENTAL JUSTICE SECTION

I. Identifying Characteristics of EJ Populations

- A. If an Environmental Justice (EJ) population has been identified as located in whole or in part within 5 miles of the project site, describe the characteristics of each EJ populations as identified in the EJ Maps Viewer (i.e., the census block group identification number and EJ characteristics of "Minority," "Minority and Income," etc.). Provide a breakdown of those EJ populations within 1 mile of the project site, and those within 5 miles of the site.

Upper northwest of the Phinney's harbor sewerage is within 5 miles and 1 mile of the project site. Block Group 1, Census Tract 139 Barnstable County, MA. Minority Population 5%, Median Household Income \$42,569 which is 50% of the MA MHHI and 0% households with language isolation.

Portion of Pocasset Harbor that is GUIA is Block Group 3, Census Tract 140.02 Barnstable County, MA. Minority Population 4%, Median Household Income \$31,266 which is 37% of the MA MHHI and 0% households with language isolation.

- B. Identify all languages identified in the "Languages Spoken in Massachusetts" tab of the EJ Maps Viewer as spoken by 5 percent or more of the EJ population who also identify as not speaking English "very well." The languages should be identified for each census tract located in whole or in part within 1 mile and 5 miles of the project site, regardless of whether such census tract contains any designated EJ populations.

Census Tract 139 is English and Census Tract 140.02 is English

- C. If the list of languages identified under Section I.B. has been modified with approval of the EEA EJ Director, provide a list of approved languages that the project will use to provide public involvement opportunities during the course of MEPA review. If the list has been expanded by the Proponent (without input from the EEA EJ Director), provide a list of the additional languages that will be used to provide public involvement opportunities during the course of MEPA review as required by Part II of the MEPA Public Involvement Protocol for Environmental Justice Populations ("MEPA EJ Public Involvement Protocol"). If the project is exempt from Part II of the protocol, please specify.

II. Potential Effects on EJ Populations

- A. If an EJ population has been identified using the EJ Maps Viewer within 1 mile of the project site, describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

The Phinney's Harbor proposed project is both beneficial and potentially adverse. Beneficial is lowering nitrogen to the watershed and improving environmental health. Adverse could be cost to connect to sewer if in sewerage areas.

The Pocasset Harbor proposed project is both beneficial and potentially adverse. Beneficial is lowering nitrogen to the watershed and improving environmental health. Adverse could be costly to install new GUIA systems.

- B. If an EJ population has been identified using the EJ Maps Viewer within 5 miles of the project site, will the project: (i) meet or exceed MEPA review thresholds under 301 CMR 11.03(8)(a)-

(b) Yes No; or (ii) generate 150 or more new average daily trips (adt) of diesel vehicle traffic, excluding public transit trips, over a duration of 1 year or more. Yes No

C. If you answered "Yes" to either question in Section II.B., describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

III. Public Involvement Activities

A. Provide a description of activities conducted prior to filing to promote public involvement by EJ populations, in accordance with Part II of the MEPA EJ Public Involvement Protocol. In particular:

1. If advance notification was provided under Part II.A., attach a copy of the Environmental Justice Screening Form and provide list of CBOs/tribes contacted (with dates). Copies of email correspondence can be attached in lieu of a separate list.
Provided and attached.

2. State how CBOs and tribes were informed of ways to request a community meeting, and if any meeting was requested. If public meetings were held, describe any issues of concern that were raised at such meetings, and any steps taken (including modifications to the project design) to address such concerns.

3. If the project is exempt from Part II of the protocol, please specify.

B. Provide below (or attach) a distribution list (if different from the list in Section III.A. above) of CBOs and tribes, or other individuals or entities the Proponent intends to maintain for the notice of the MEPA Site Visit and circulation of other materials and notices during the course of MEPA review.

The Public Stakeholder list used for Public Participation throughout the CWMP process is included as an attachment to this section.

C. Describe (or submit as a separate document) the Proponent's plan to maintain the same level of community engagement throughout the MEPA review process, as conducted prior to filing.

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) The Bourne Enterprise, Cape Cod Times (Date) 12/9/24 – 12/23/24

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

Signatures:

<u>12.10.24</u>		<u>12/10/24</u>	
Date	Signature of Responsible/Officer or Proponent	Date	Signature of person preparing ENF (if different from above)

<u>Marlene McCollem</u>	<u>Helen Gordon, PE</u>
Name (print or type)	Name (print or type)

<u>Town of Bourne</u>	<u>Apex Companies, LLC</u>
Firm/Agency	Firm/Agency

<u>24 Perry Avenue</u>	<u>1900 Crown Colony Drive, Suite 402</u>
Street	Street

<u>Bourne, MA 02532</u>	<u>Quincy, MA 02169</u>
Municipality/State/Zip	Municipality/State/Zip

<u>508-759-0600</u>	<u>617-657-0954</u>
Phone	Phone