PROJECT NARRATIVE

Section 1.0 Introduction

Columbia Gas of Massachusetts is seeking approval for the extension of an existing gas main located within a portion of Seaside Road in Scituate, Massachusetts (the route). Also included are gas service connections to nearby residents. The proposed gas main extension is located within the 100-foot buffer zone to Bordering Vegetated Wetlands, Land Subject to Coastal Storm Flowage and a Barrier Beach. However, since the proposed project occurs within the existing roadway and/or edge of the existing roadway, there will be no impact to wetland resource areas. Further, applicable erosion controls will be implemented during the project to ensure protection of wetland resource areas. This application is being submitted in accordance with the Massachusetts Wetlands Protection Act and the Town of Scituate Wetland Bylaw. This application also serves as notification of the proposed work to the Town of Scituate Conservation Commission.

The proposed gas main extension project will occur within the existing roadway and/or edge of the existing roadway. Prior to the start of work, erosion controls will be installed. The work proceeds so that the trench can be opened, pipe installed, trench backfilled, and the area graded to pre-existing elevations on the same day. For these reasons and additional protective measures followed, we believe that there will be no impact to wetland resource areas.

Section 2.0 Open Trench Method

Approximately 150 linear feet of natural gas pipe is proposed for installation within a portion of Seaside Road. The proposed extension route is within the existing roadway and/or edge of the existing roadway. The pipe will be installed using the **Open Trench Method** as described below.

Open Trench Method

The Open Trench Method consists of digging an excavation approximately 2 - 3 feet wide and approximately 4 feet deep. Trenches will be constructed using backhoes or excavators. The trenching operation will be limited to the length that can be completed in one day (approximately 80 to 300 feet depending on conditions). Approximately one-half of the excavated material will be placed alongside the trench to be re-used as backfill. The remaining excavated material is placed in a truck and disposed of according to all applicable laws. The pipe is then installed in a sand bed inside the trench, backfilled, tamped, swept clean, and if the trench was previously in pavement, it is re-paved. In some cases, depending on traffic and other roadway factors, a small work zone at the end of the pipe may be left unfilled and covered with a steel road plate so that the end of the pipe can be located the next day without re-excavating the area and possibly damaging the new pipe.

Upon completion of the job, any temporary pavement will be removed and permanent paving installed. All non-paved areas will be replaced to a state at which they were prior to the job. Any sod or other plantings shall be replaced in kind, or with reasonable alternative, and maintained for a period of 60 days of growing season to ensure growth thereafter.

Section 3.0 Environmental Conditions

Identifying existing conditions included a review for wetland resource areas, riverfront areas, priority habitat areas, estimated habitat areas, areas subject to flooding, and certified vernal pools. Areas were identified using GIS mapping with data supplied from the Mass GIS web site, as well as a field delineation event on July 27, 2020.

Wetland Resource Areas

A portion of the proposed gas main extension route is located within the 100-foot buffer zone to Bordering Vegetated Wetlands. Environmental Consulting & Restoration, LLC (ECR) delineated the landward limit of a Bordering Vegetated Wetland (BVW) on July 27, 2020 in order to identify the limit of the buffer zone that extends over a portion of the proposed gas main extension route. Wetland delineation was in accordance with the Massachusetts Wetlands Protection Act regulations found at 310 CMR 10.55 pertaining to the delineation of Bordering Vegetated Wetlands. The delineation was performed by analyzing vegetation, hydrology within 12 inches of the surface, and soil conditions within 20 inches of the surface. BVW flags (pink & black striped ribbons) were placed on and near the site to mark the limit of the resource area. Upon completion of the wetland delineation, ECR surveyed the location of each flag placed in the field using a Trimble GPS survey instrument in order to plot the flag locations on top of an aerial photograph. ECR also located the limit of a Salt Marsh located to the north; the Salt Marsh is more than 100-feet from the proposed route. For more information please refer to the Wetland Delineation Overlay Plan attached, which indicates the location of the BVW, buffer zone, catch basins, etc. on and near the proposed gas main extension route.

NHESP Priority and Estimated Habitat Areas

According to the Massachusetts Natural Heritage & Endangered Species Program MassGIS datalayer, there are no Priority or Estimated Habitat Areas located within the work area. Please refer to the Estimated & Priority Habitat Map attached for more information.

Areas Subject to Flooding

According to the FEMA Flood Maps, the proposed gas main extension route is located within an area mapped as Land Subject to Coastal Storm Flowage (FEMA Flood Zone). The proposed gas main extension will be installed within the existing roadway and/or edge of existing roadway and all grades will be maintained; therefore, there will be no change to the flood zone and no impacts to the wetland resource area. Please refer to the FEMA Map attached for more information.

Certified Vernal Pools

There are no certified vernal pools within or near the work area along the project route.

Barrier Beach

A portion of the proposed gas main extension route is located within a mapped Barrier Beach according to the MassDEP Wetlands layer in MassGIS. The proposed gas main extension will be installed within the existing roadway and/or edge of existing roadway and restored to pre-existing conditions; therefore, there will be no impacts to the wetland resource area.

Section 4.0 Proposed Protection Measures

Potential impacts to the resource areas described above would be due to excavation spillage, spoil pile runoff or trench washout during rain conditions. These concerns will be addressed through the use of various work procedures and the placement of protective barriers as follows:

- The project is located within the existing roadway and/or edge of existing roadway.
- Because the pipe will be underground, there will be no permanent alteration of the landscape. All work areas will be returned to their original elevation and condition.
- The work will be limited to the length that can be installed and backfilled in one day.

- No work shall be performed along resource areas during rain conditions to minimize runoff and washout situations.
- Erosion control barriers will be placed between the proposed work and the adjacent wetland resource areas outlined above. The erosion control will be inspected on a regular basis and maintained in working order until all disturbed areas are stabilized. Appropriate erosion controls will consist of strawbales, silt fence, or alternatives (see attached Straw Wattle detail).
- Catch basins will be protected with filter fabric to ensure sediments do not enter the drainage system. Please note, there are no catch basin near the proposed gas main extension route that will require filter fabric protection.
- No soil will be stockpiled overnight within buffer zones during this project. All unused spoils will be removed and disposed of according to all applicable laws.
- In cases where vegetation in the shoulder of the roadway is disturbed, Columbia Gas of MA will
 restore these areas to a state at which they were prior to the job. Any sod or other plantings shall
 be replaced in kind, or with reasonable alternative. If necessary, these areas will be covered with
 a light layer of hay mulch to protect these areas from erosion during rain events and to protect the
 applied seed.

Work described in this Request for Determination of Applicability application will begin as soon as proper authorizations are issued. The start of this work is critical to provide gas service to the residents of Scituate.