

September 13, 2024

Dover Planning Board
(planning@doverma.org)
Jasmin Farinacci, Town Planner
PO Box 250
Dover, MA 02030

Re: **Proposed Site Improvements: Town Garage Property
2 Dedham Street
Additional Site Improvements**

Dear Ms. Farinacci and Members of the Dover Planning Board:

Weston & Sampson and the Town of Dover's (Town) Department of Public Works (the Applicant) have prepared responses to several questions voiced by the Planning Board pertaining to the above-referenced project during the September 9, 2024 public meeting. The Applicant proposes to modify the recently issued Site Plan Approval (the Approval) that permitted site improvements proposed on the Town Garage property at 2 Dedham Street (Map 11, Lot 36). The proposed modification includes the removal of the existing fuel system in front of the property and replacement with a new fueling system in the rear portion of the property. In support of this proposed modification to the Approval, we have prepared the following responses to Board member questions (in **bold** text).

- *In the event of a fuel leak, how can we prevent fuel from spilling into the wetlands?*

To protect the nearby wetlands and groundwater resources near the site, the fuel system design proposes several features. These features, which focus both on spill prevention and response, are expanded upon below.

- *What additional spill prevention measures are present beyond the double walled tank and the positive limiting barriers? Does this reflect the industry standard?*

The proposed system design incorporates a multitude of spill prevention features to meet industry standards and best design practices, which include:

- Electronic leak monitoring system to notify owner when leaks are detected.
- Tanks equipped with overfill prevention valves and high-level alarms that trigger at 90% capacity.
- Submersible pumps capable of in-line leak detection; pumps shut off upon detection of leak(s).
- A fill port housed in a 10-gallon remote fill box to contain minor spills, typically with a small pump to return fuel to the tank.
- Dispenser hoses with shear valves to prevent fuel spills if a vehicle operator happens to drive away while the dispenser nozzle is still attached to the vehicle. Dispensers are to be equipped with emergency shear valves to cut off fuel in the event of an accident.
- Expansion relief valves to reduce pressure in fuel lines exposed to high temperatures.
- Check valves to prevent accidental siphoning from fuel tanks.
- Recommended regular tank inspections to check for corrosion or weak areas.
- A fuel management system which restricts access to authorized personnel.

- *What spill response measures are anticipated to be included?*

A spill kit is included for immediate containment of minor spills. Additionally, spill prevention measures typically include a provision requiring downgradient catch basin(s) to be covered during tank filling operations.

A Spill Prevention, Control, and Countermeasure (SPCC) Plan is to be prepared before the new fuel system's operations commence. The SPCC typically includes facility layout information, a facility diagram charting drainage pathways, oil storage and handling information, spill prevention measures, step-by-step spill response procedures, equipment, inspection forms, and emergency contacts.

- *What MassDEP triggers are there for these types of facilities?*
 - 310 CMR 40 – This regulation is the Massachusetts Contingency Plan (MCP) which governs the cleanup of oil and hazardous materials in the event of releases and/or spills.
 - 310 CMR 22 – These drinking water regulations protect Zone II wellhead protection areas. MassGIS's Mass Mapper indicates that the site is located in a Zone II wellhead protection area. 310 CMR 22 enables the storage of liquid hazardous materials and petroleum products in a Zone II if said storage is above ground, on an impervious surface, and replaces an existing storage facility (provided the replacement is in accordance with other state and local requirements).
 - 310 CMR 80 – These regulations pertain to underground storage tanks (USTs), which are heavily regulated to limit contamination of soil. The proposed design does not include USTs.
 - 527 CMR 9 – These fire prevention regulations require tanks containing more than 10,000 gallons to adhere to additional safety and permitting requirements. The proposed gasoline/diesel split tank is proposed to be below 10,000 gallons.
- *In addition to the fuel system's spill prevention features, what other features on-site may help to reduce the discharge of fuel to the nearby wetland?*
 - The existing stormwater system involves an outlet pipe that discharges stormwater flows directly into the wetland. The proposed design improves this condition in a number of ways:
 - 1. The design includes a deep-sump, hooded catch basin; the sump is designed to capture sediment and other solids, while the hood is designed to trap and contain floatables such as gasoline and diesel.
 - 2. The designed stormwater system includes a hydrodynamic separator structure, which introduces a vortex or swirl pattern to the inflow to separate out sediment (primarily) and floatables (secondarily). Hydrocarbons and other floatable solids rise to the surface where they are captured on the inlet side of the internal bypass weir of the structure.

- *The Chair indicated a concern regarding vehicular circulation and access behind the proposed fuel tank.*

Ten feet of clear space has been provided between the fuel system and the cell tower enclosure, to enable ease of access behind the fuel system for any road-legal vehicle. Importantly, this area is generally not intended to be traversed by any vehicles, other than for snow plows. The DPW does not anticipate the location of the proposed fuel system to create any site maneuverability or access challenges.

- *Please confirm the 14.5' to the bottom of the canopy is compatible with all vehicles that will be driving under the canopy. If the current fleet is compatible, are there any future fleet vehicles that DPW or fire plan to purchase that may require a higher canopy?*

Mr. James W. Wright, interim Fire Chief, has confirmed the tallest ladder truck the Fire Department has is 11' – 6" tall. At this time, the DPW is not aware of any future fleet vehicles that will require a higher canopy than currently designed. We understand the legal height limit for road vehicles (without special permitting) in Massachusetts is 13' – 6" tall.

- *Where do utility workers park when conducting maintenance of the cell tower? Confirm the project will not restrict function of the gate providing access to the cell tower.*

Utility workers typically park in front of the cell tower enclosure, or on the side of the access road along the east side of the enclosure. The design proposes a 10-foot wide path between the enclosure's fence and the proposed fuel tank; this is wide enough to support a parked vehicle. However, the preferred location for utility workers accessing the cell tower enclosure will be on the side of the easterly access road.

- *What is the breakdown of fuel capacity in the existing tanks relative to the proposed tanks?*

The proposed fuel system includes a split tank consisting of approximately 6,000 gallons of gasoline and 4,000 gallons of diesel fuel. The DPW Director has identified the existing fuel tanks to contain approximately 4,000 gallons of gasoline and 4,000 gallons of diesel fuel. Future additions and/or changes to the Town's vehicle fleet are expected to include more hybrid vehicles requiring unleaded gasoline. Therefore, there is not a demand for the proposed fuel system to have an increased diesel capacity relative to the existing fuel system.

Once you have had the chance to review these responses, please do not hesitate to contact me at (781) 649-7073. We look forward to being placed on an agenda at the next available Board meeting to further discuss the proposed modifications to the Approval.

Sincerely,

WESTON & SAMPSON ENGINEERS, INC.



Jesse O'Donnell, P.E.
Senior Project Engineer