John Milczanowski Professor Rozwadowski MAST 2101 12/9/2021

Since its founding in 1899, the General Dynamics Electric Boat Company has been a staple of the Thames River and the greater area around Groton. Operating on the Thames for more than a hundred years and supplying the United States Navy with hundreds of vessels, it is an absolutely essential asset to the Navy and the people of Groton. Electric Boat and the nearby submarine base just upriver are the reason why Groton, Connecticut is called "the submarine capital of the world". The sprawling facility is Groton's single largest employment site, employing more than 14,000 workers to build, repair, and refit naval submarines, providing huge income to the surrounding area. Electric Boat's Groton facility takes up a whopping 118 acres along the East bank of the Thames River, absolutely dwarfing many of the smaller businesses and industrial sites on the crowded bank. Recently the CEO of General Dynamics stated that the Electric Boat facility could double in size over the next 5 years, possibly with plans to purchase large areas of land from adjacent businesses as they did with one of Pfizer's plants in 2010. As one of the most impressive and important shipbuilding operations in the world, as well as one of Groton's most important defining aspects, Electric Boat isn't going anywhere soon. However, what's around the facility might be.

As huge industrial facilities continue to expand, that growth comes at the cost of other people's property and businesses.

The East bank of the Thames River has been littered with various small structures and businesses since the mid to late 1600s, even before Groton was recognised as a separate city from New London. Small businesses for shipbuilding, smithing, ferry use and fishing were everywhere along the Thames River in the following years. This variety in work and production on the East Bank of the Thames River helped establish Groton as an official town, and set up the building blocks for the town's eventual growth into an industrial hub. The Sanborn Company's fire insurance map of Groton from 1884 shows a variety of small sheds for various purposes, as well as the Merritt Grey & Co. Granite Yard, a ferry slip, and numerous small docks. The Electric Boat Company was founded in 1899, after the purchase of several smaller companies, two of which were the Electric Launch Company and Electric Dynamic Company, which were involved in building ferries, barges, and various tenders and smaller boats in the late 19th century. As we see from an article from the *Norwich* Bulletin on August 4, 1910, the actual Electric Boat facility location that we know today was set up in 1910, taking over the Fig Shipyard previously used by the Eastern Shipbuilding Company of Groton. At this time, the Electric Boat Company was still a relatively small operation. However, the Navy's need for submarines in the upcoming World Wars would soon change this for good.

Before it became the manufacturing staple that it is today, EB was originally founded to build one submarine, rather than dozens. The Electric Boat Company was established to complete the construction of the *Holland* in 1900, a 54 foot submersible vessel that was considered the first practical submarine, and after being accepted by the Navy, became the beginning of the Submarine Force. A handful of boats of the same type were built until World War 1, when orders for submarines from the US Government would explode. The United States poured large sums of money and high expectations into Electric Boat, bringing rapid expansion. A *Norwich Bulletin* article from 1915 states that the Electric Boat facility would be expanding by a significant amount, although the extent of this expansion is not stated. At the time, a total of 100 submarines were ordered by the US government, and the facility was growing rapidly to keep up with the huge demand.

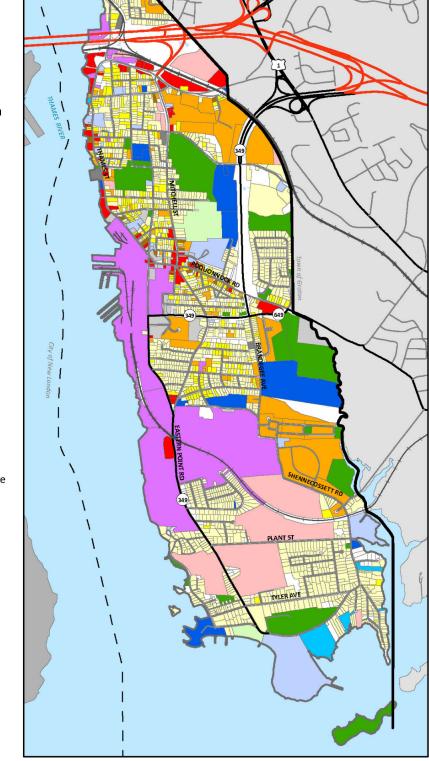
A similar demand for various vessels would surge orders to Electric Boat in World War 2, although their primary operation was still centered around submarines. It was during this period that the facility and the area became world renowned for its industrial capacity, constructing vessels for both the European and Pacific Theaters, as well as refitting submarines for various allied nations. Over the course of World War 2, in the years 1941 to 1945, The Electric Boat Company would produce 74 submarines and 398 PT boats. In the 1960s, Electric Boat and Pfizer would be expanding their riverside facilities by huge margins, swallowing up acres of land around them. As Town Historian Michael Spellmon pointed out, looking at maps from before this period shows

roads such as Bill Avenue, which no longer exist. Electric Boat would begin building a \$150 million dollar submarine construction building in 1975, which would become fully operational in 1977. Recently in 2010, Electric Boat took over a building previously owned by Pfizer, where the two huge facilities have bumped up against each other. With the new contract for a huge new class of submarine from the US government, EB is expanding again, and it was announced that this expansion will double the facilities size in the next 5 years, which is a lot of land in a relatively short period of time.

Almost all of the space surrounding the current facility is taken up by housing and small civilian businesses. These are people who don't have the resources to stand up to Electric Boat, and will most likely take what money they are offered or will be forced out through aggressive practices. Unfortunately, this is not new to the New London area, as a recent instance of such action could be seen in the New London Development Corporation's takeover of the area around Fort Trumbull. These small civilian properties might be taken forcibly through use of eminent domain, if the groups threatened by this expansion choose to resist, or refuse the initial offers that would be issued.

## Existing Land Use Map City of Groton

Legend





This map shows the Town of Groton, along the Eastern bank of the Thames River. The large purple section on the left side is made up of Pfizer and Electric Boat, each one occupying more land than all other businesses in the city combined. As you can see, nearly one and a half miles of waterfront is purely industrial, the vast majority of which is owned by Electric Boat and Pfizer. The sheer volume of the industrial area is in the neighborhood of 200 acres, and makes up almost a tenth of the entire town. Surrounding both facilities and making up the majority of Groton's land, residential buildings are marked with tones of light yellow to orange, and red areas mark small commercial businesses. With Electric Boat's expansion supposedly going to double its size, and Pfizer butting up against the facility from the South, the only way the facility can go to expand is North and East, areas occupied by small, civilian owned businesses and housing. With ridiculous amounts of capital, and the strategic importance of the facility and its product, there will be very little if anything at all to stand in the way of EB's imminent growth. The economic diversity and employment opportunities of an area is rooted in its small businesses. With more variety, comes a higher chance that someone will find a business that could employ them. If EB expands into these civilian areas, it threatens to replace many of Groton's employment opportunities with one huge block of very exclusive employment. Those who don't have the skills Electric Boat needs will be ignored, and many will have to look farther away for jobs, creating an unemployment issue for the people already living here. To man the enormous project, EB's expansion will bring in scores of trained employees and already limited local housing will fill up quickly. Those who can't find housing in Groton will simply

commute in from somewhere else, diverting more of that income away from the immediate area, and doing nothing to help the state of the Groton residents who have lost their livelihoods.

The average Joe is not going to complete massive, state of the art submarines for the Navy, and will likely be ruled against in favor of the government backed EB project. Many people could be displaced with no hope of standing their ground. After the land is taken from the people and developed for industrial use, it's almost useless for anything else afterwards. The only groups with the resources needed to repurpose such pieces of land are other industrial organizations, so there is little chance for the affected land to return to being used for housing or small commercial applications. Huge warehouses and sprawling complexes are followed only by huge warehouses and sprawling complexes.



All may not be lost however, as a recent announcement for the facility's newest growth spurt shows an interesting possibility. This image shows a rendering of a plan for an entirely waterborne addition to the facility, taking up no land outside of the current EB property. The black oval outline is a huge submersible platform, large enough to possibly build and launch multiple submarines all in the same place. Not only could this revolutionize the rate at which EB produces its vessels, but also promises continued expansion of the facility without encroaching on existing properties. Known as the Submarine Capital of the World, Groton owes much of its prosperity to the Electric Boat Company and the Federal Government's profuse application of taxpayer resources. A Groton without EB would be like a peanut butter and jelly sandwich except with a handful of crushed up pharmaceuticals instead of jelly. Heavy industry is vital to Groton, both in terms of identity and income. However, a healthy local economy and variety of commerce is vital to any area's quality of life and enrichment. The current state of Groton's industrial waterfront is a prime example of the latter trampling the former. Continued industrial expansion will crowd out smaller local businesses, strangling the diversity of the town's commerce and occupations. There's just a little too much jelly on this PB&J, and if we keep globbing it on the bread's going to get soggy. "To Build Submarines at Groton" The Norwich Bulletin. August 1910

"Enlargement of Groton Plant" The Norwich Bulletin. September 1915

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