Engineers Report

Buffalo Biodiesel, Inc.

Used Cooking Oil (UCO) and Yellow Grease Processing Facility

March 13, 2026

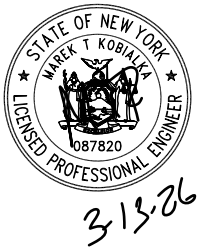
Rev.0.1

Prepared for:

Buffalo Biodiesel, Inc.

225 Sawyer Avenue

Tonawanda, NY 14150



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1 INTRODUCTION

This **Engineers Report** is submitted on behalf of Buffalo Biodiesel Inc. (BBD) to the New York State Department of Environmental Conservation (NYSDEC) to accompany their application to operate a 6 NYCRR Part 360 Permitted Used Cooking Oil and Yellow Grease Processing facility located at 225 Sawyer Avenue Tonawanda, NY 14150. This plan follows the outline of the technical requirements of 6 NYCRR Part 360, specifically §360.16(c)(3) (Engineers Report) and 6 NYCRR §361.8 for Used Cooking Oil (UCO) and Yellow Grease Processing, describing the general processes employed, a discussion on procedures used to operate the facility (O&M Manual) and details of the safeguards, secure operations, waste control training, and emergency response.

1.1 FACILITY OVERVIEW

BBD is a privately owned UCO and Yellow Grease processing company located on an approximately 2.5-acre parcel leased from a 5.4-acre lot located at 225 Sawyer Avenue Tonawanda, New York 14150 (Refer to certified site survey presented in Appendix K). BBD's focus is to collect used cooking oil from customers throughout the Western New York area, the surrounding counties, and neighboring states in the Northeast. In addition to collecting from the surrounding communities, BBD operates six temporary depots where UCO and grease is collected prior to being hauled to the main plant in Tonawanda, NY for processing (refer to Table 4 in Section 5.3 for the list and addresses of all BBD facilities within and outside of New York State). BBD's recycling process includes screening and refinement through phase separation. The refined product is then sold to transesterification facilities to produce biodiesel. The wastewater from the facility is discharged to the Town of Tonawanda's sewer system (refer to Appendix F for Discharge Permit). Sludge waste which is removed from the UCO and Yellow Grease is sent to digesters locally for additional processing (Refer to Section 5.2.4(b) for additional information on sludge processing).

1.2 SITE DESCRIPTION

The facility is situated on Sawyer Avenue and wholly in the area of the town identified on the Town of Tonawanda Comprehensive Plan as zoned as General Industrial (GI) (Refer to Appendix H for Town Zoning and Use confirmation on BBD operations at the Sawyer Avenue facility). Relevant maps and figures related to the property, zoning, land use, watershed and wetlands have been included in Appendix A.

The GI zoning category allows for manufacturing, processing, or fabrication, and transportation/shipping of food items as an anticipated action of which the environmental impacts associated with that level of business have been previously evaluated and predetermined by the Town of Tonawanda prior to zoning. Under GI zoning in the Town of Tonawanda, operations of a storage facility is also permitted as well as truck or rail terminal or storage facility; all of which are related to the operations of BBD (processing). According to the Town of Tonawanda building code the purpose of the GI district is to accommodate industrial activities, which may be more intensive than light industrial operations, and that

supports the goals from the content contained in the Comprehensive Plan. The GI district provides opportunities for a wide range of manufacturing activities, which have greater potential for impacts on the surrounding properties. Uses permitted in GI district shall be in areas where public utilities, and adequate transportation facilities, (rail, tractor trailer, etc.) are available or can be made available. Prior to issuance of a Certificate of Occupancy (CO) these facilities have demonstrated that they employ techniques to minimize negative impacts (traffic, parking, clean- air, noise, odor, or soil, contamination, etc.) to non-industrial uses, especially established residential districts and environment and sensitive areas. BBD has operated as a good neighbor on this site since 2005.

1.3 Occupancy and Structural Assessment

The BBD facility, located at 225 Sawyer Ave, Tonawanda, NY, was an existing permitted industrial facility prior to BBD moving in circa 2005. The original main building structure was erected circa 1960 (per Erie County Building Records) and constructed of concrete masonry unit block walls (CMU) with corrugated metal deck and steel bar joists roofing. All interior floors are reinforced concrete with a minimum thickness of 4", sloped to drain. There are several overhead doors within the facility for tow motor access, deliveries and maintenance, along with man doors for egress throughout the perimeter. In addition to the CMU block structure which is used for the processing of the UCO and Yellow Grease, there is a pre-engineered steel framed ancillary structure used for maintenance and welding of oil disposal totes which measure approximately 40' x 80' and is located along the western property border. These facilities are designated as an F-1 Occupancy- Factory/Industrial with a total square footage of 17,500 SF for the main facility and 3,275 SF for the ancillary structure/weld shop. Both structures and operations are in compliance with the NYS Building and Fire Code as demonstrated by the Town of Tonawanda Occupancy, Operating and Hot Works Permits issued to BBD in December 2025 and located in Appendix H.

A structural inspection was conducted in September of 2025 by Lakeside Design Engineering, DPC (LDE) to review the onsite buildings, tanks, and structures (a copy of the report Is located in Appendix O). During the inspection all interior and exterior structural framing and supports, along with existing USTs and ASTs constructed of reinforced concrete, were visually inspected. The overall condition of the facility is noted as good with all structural support elements intact, without major cracking, listing (lateral movement) or deterioration which would put the facility at risk. All block walls were free of major cracking, spalling or other defects. Steel framing and bar joists were structurally sound with no major rusting, signs of overstress or damage and no leaks were present in the roofing deck or membrane. The concrete floor was found to be continuous without large cracks or delamination's which ensures the proper function as a solid surface for secondary containment for spill prevention as described in Milestone #1 Rev. 4 dated November 24, 2025.

In addition to the facility structures, all reinforced concrete ASTs and previous USTs were visually inspected. The tank sizes and locations have been provided in the as-built and engineering drawings (See Figures 1-3 in Appendix A and Drawings in Appendix N). A size

chart listing the total holding capacity is posted on all the tanks and referenced in Figure 6 in Appendix A.

Below is a summary of the tanks by use, size and history of installation:

HEAT TANKS

There is a total of five (5) heat tanks in the plant. Heat tanks 1-3 were constructed in 2007. Heat tanks 1-3 have the same specifications, size and volume with an approximate holding capacity of 8,000 gallons (30,000 L). The tanks are constructed on a 10-inch reinforced concrete slab with an equivalent wall thickness of 10 inches. The concrete walls are reinforced by steel reinforcing bars (rebar) which are embedded in the concrete slab. The walls are reinforced to resist tensile stress from liquid pressure and thermal loads from the heating process. Heat tanks 4-5 were constructed in 2014. Heat tank 4-5 have an approximate holding capacity of 9,300 gallons (35,200 L) each. Heat tanks 4-5 were constructed on a reinforced 10-inch-thick slab on grade with a reinforced concrete wall thickness of 12-inches. All tanks have also been coated with epoxy resin to prevent any leaks through the cracks in the walls.

SLUDGE TANKS

There are two (2) sludge tanks located indoors in the main plant. The first tank (Sludge Tank #1) was constructed in 2005 to refine the sludge and food particles. Sludge Tank #1 and the indoor screen tank are both constructed on an 8-inch slab on a grade concrete pad. The screen tank is connected to Sludge Tank #1 which has the capacity to store approximately 9000 gallons (34,000 L) of product. The Second Tank (Sludge Tank #2) was constructed in 2019 to deal with excess sludge due to the company growth. Sludge Tank #2 is constructed on a 10-inch concrete slab on grade foundation with wall thickness of 13 inches. Sludge tank 2 has a total holding capacity of approximately 11,000 gallons (41,000 L).

WATER TANKS

Along with the first three (3) heat tanks, the two (2) water tanks were also constructed in 2007. As the facility started refining larger quantities of UCO, the production of process/wastewater increased significantly. The water tanks are constructed on an 8-inch concrete slab on grade with a wall thickness of 10 inches. The water tanks have a holding capacity of 10,700 gallons (40,500 L) for Water Tank #1 and approximately 17,000 gallons (64,300 L) for Water Tank #2. Refer to Figure 6 in Appendix A for tank location, size and layout.

GREASE TRAP/OWS TANK

The grease trap is located just North of the main office entrance of the Plant as shown on Figure 4 in Appendix A. As the facility's operations expanded and the volume of process water increased, BBD constructed an inground grease trap/OWS. The grease trap was built in 2007 to intercept grease and solids before they enter the Town of Tonawanda's Sewer System. The two chambers of the grease trap have a total capacity to hold approximately 5,000 gallons (19,000 L) of water and solids.

ABOVE GROUND STORAGE TANKS

The BBD Plant has a total of twenty-six (26) ASTs installed and connected with the manifold in the oil storage area (Refer to Figure 6 in Appendix A for additional details on layout). The 4,000-gallon, single walled, above ground vertical storage tanks were installed in 2007 to ensure significant storage space is available in the event the oil cannot be delivered to the biodiesel synthesizing facilities. Out of the twenty-six (26) storage tanks, the middle six (6) tanks are used to store the non-refined filter press/sludgy oil. All the storage tanks are connected with the heat tanks and the sludge tanks. In the event of catastrophic failure of a tank the UCO can be pumped into the storage tanks.

In addition to the twenty-six (26) ASTs located in the plant, twelve (12) new 17,000-gal (64,300 L) ASTs were installed in accordance with Milestone #1 Rev 4 dated November 24, 2025. These new ASTs will serve to replace the previous use of the USTs, and the UST will function as secondary containment for the new ASTs. Refer to Appendix A for figures on the layout and use of these ASTs and Appendix G for the retrofit plans to repurpose these USTs for containment and oil processing.

PREVIOUS UNDERGROUND STORAGE TANKS

The two (2) existing underground concrete tanks were constructed circa 2015. The reported installation included excavation, compaction of the subgrade, placement of a liner and installation of a 10-inch reinforced concrete slab. A proper keyway was installed to provide joint stability and interlock between the slab on grade and the 12-inch (+/-) thick reinforced concrete wall. In addition to traditional reinforcement, fiber reinforcement was added to the concrete mix to control cracking. Additionally, a water stop was placed within the wall to slab joint to prevent leakage or ground water infiltration. Upon completion of the concrete installation, an epoxy sealer was placed on the interior surfaces of the USTs to provide further protection from leakage.

The two (2) re previous underground storage tanks have the capacity of approximately 55,000 gallons (208,000 L) for UST #1 closest to the building and 68,200 gallons (258,000 L) of UCO for UST #2. As noted in Milestone #1 Rev. 4 dated November 24, 2025, these two previous underground storage tanks have been repurposed as secondary containment for new ASTs as depicted in Figures 6-9 in Appendix A. They will no longer function to hold liquids for processing but have been designed to include a proper floor slope and sump for any potential leakage from the new ASTs, spill cleanup and storm water management. Refer to Milestone #1 Rev 4 dated November 24, 2025, for additional information on the use characteristics of these USTs.

TANK ASSESSMENT

Visual inspections of the USTs and ASTs yielded no major concerns structurally. Minor staining from the processing environment and hairline cracks were observed although no leakage was present from these cracks. The owner was instructed to clean the exterior of all tanks, maintain visibility of all vertical surfaces and epoxy paint seal the exteriors of the tanks to ensure water tightness.

Refer to Appendix N for additional information on the reinforced concrete tanks prepared by the previous BBD engineer. This report was not prepared by LDE, however the analysis using Finite Element Analysis is appropriate for this type of installation. In addition, the reinforcement of the tanks as reported by the drawing in Appendix N is consistent with standard design practices using keyways, double wall reinforcement, hooks into the base slab and water stops at joints. Refer to Appendix O for a structural assessment report prepared by Lakeside Design Engineering, DPC for additional information.

1.4 PERMITTING HISTORY

The BBD facility has been operating at 225 Sawyer Ave. since 2005. Most recent operations were of the same nature as described herein, but due to a series of internal communication issues, BBD failed to respond timely to the NYSDEC to complete their application for a Part 360 Permit. As such, they have been operating since Q-4 2025 under NYSDEC consent Order # R9-20250902-59 which will continue until revoked or until BBD completes the full permitting process.

With NYSDEC's revision of the State's Solid Waste regulations in late 2017, the management of waste vegetable oil is now regulated and will now require a Part 360 Solid Waste Permit. BBD is applying for the Part 360 Permit to continue the facilities operations in accordance with the regulatory requirements. In accordance with 6 NYCRR §361.8.4, a Part 360 permit is required rather than just registration because BBD proposes to process more than 500,000 gallons annually. This facility will handle more than that threshold.

The permitting process is governed by NYSDEC's uniform permitting process (Part 621), but the contents of the permit application are governed by Part 361, §360.16, and §360.19. Among other components, this application includes a report describing the processes employed, a detailed operation manual that includes procedures used to operate the facility and additional plans for waste control, inspections, hazardous and unacceptable waste identification, training, recordkeeping, reporting, and emergency response and closure.

This current facility and operations of BBD as a UCO processing facility predates the inclusion of this operation under the NYSDEC Part 360 regulations in 2017, and the Site's location and BBD's Town of Tonawanda Main Plant operations is considered by the owners of BBD to be vested property right. However, to achieve compliance with the NYSDEC's regulations which were revised in 2017 to include UCO and Yellow Grease Processing, BBD have attempted to comply with all sections of the UCO processing regulations as indicated herewith in.

This facility has operated at the current location since 2005 and has been operating as a Used Cooking Oil processing facility, and has been granted a series of Industrial Sewer Discharge Permits over the past years with the most recent renewal of the Town of Tonawanda Industrial Sewer Connection Permit being reissued in January 2, 2025 with the permit being issued for (3) years and expiring on December 31, 2027. This permit allows BBD to discharge 8000 gallons a day to the Sewer connection and 500 gallons a day for Drum cleaning. The permit limits discharges to the hours of 7:00 am and 5:00 PM every day. Monitoring of

Discharges is as noted in Table 5 of section 6.3 below (see Appendix F for the details of the Permit # 646).

1.5 APPLICATION AND CONTACT INFORMATION

This Permit application is submitted on behalf of Buffalo Biodiesel Inc. to apply for and operate a 6 NYCRR Part 360 Permitted Used Cooking Oil and Yellow Grease Processing facility located at 225 Sawyer Avenue Tonawanda, NY 14150. BBD's application for a Part 360 Permit includes this engineering report describing the general processes employed, a discussion on procedures used to operate the facility (O&M Manual) and details the safeguard, secure operations, waste control training, and emergency response (among other items required by 6 NYCRR §361.8 .

2 STATE ENVIRONMENTAL QUALITY REVIEW

The proposed facility is subject to the New York State Environmental Quality Review Act (SEQR) in accordance with Article 8 of the Environmental Conservation Law and its implementing regulations at 6 NYCRR Part 617. As a solid waste management facility regulated under 6 NYCRR Part 360, the project requires environmental review prior to approval by the New York State Department of Environmental Conservation (NYSDEC).

NYSDEC serves as Lead Agency for the SEQR process associated with the Part 360 permit application. The project is classified under SEQR based on its type, scale, and potential environmental impacts. A Full Environmental Assessment Form (FEAF) has been prepared to evaluate potential impacts to land use, geology and soils, surface water and groundwater resources, air quality, noise, traffic, ecological resources, and community character.

Information developed as part of the Part 360 engineering report, including site design, operational controls, mitigation measures, and compliance with applicable regulatory standards, is incorporated into the SEQR review to support the impact analysis. Where potential adverse environmental impacts are identified, appropriate avoidance, minimization, or mitigation measures are identified and evaluated.

Upon completion of the SEQR review, NYSDEC will issue either a Negative Declaration, determining that the project will not result in significant adverse environmental impacts, or a Findings Statement following completion of an Environmental Impact Statement, prior to making a final determination on the Part 360 permit application.

3 SITING EVALUATION

3.1 LAND USAGE

The BBD plant facility is located at 225 Sawyer Ave. Tonawanda, NY 14150. The Town of Tonawanda is located in Erie County, immediately north of the City of Buffalo (Appendix I - Map 1). It is bounded on the east by the Town of Amherst, on the north by the Cities of Tonawanda and North Tonawanda, and on the west by the Niagara River. Buffalo is the second-most populous city located in western New York on Lake Erie. The city has a population of approx. 250,000 people with an estimated population density of 6,400 people/mile^2. The Buffalo- Niagara Falls metropolitan area has a combined population of about 1.3 million. Tonawanda encompasses 21.4 square miles of land, with an approximate population of 72,000 and population density of 4,000 people/mile^2 (Appendix I - Map 2). The industrial area of the Town of Tonawanda has a scientifically low population due to the various industries with limited to low residential dwellings present. BBD is located in the towns zoning area known as General Industrial (GI). This is the ideal area for a plant collecting UCO from the surrounding community as the road is connected to major roads and highways: the New York State Thruway Niagara Section (I-190) and the Youngman Memorial Highway (I-290). The Thruway lies in the industrial corridor occupying the western quarter of the town.

Along the Niagara River waterfront the town has divided the area into three (3) sectors. BBD is located in the Central Sector (Appendix I - Map 3). Much of the area in this sector is occupied by major industrial facilities and utilities, including Peroxy Chem LLC, Tonawanda Coke, tank farms, scrapyards, truck terminals, rail lines, power lines, and the Niagara Mohawk Fly-Ash Disposal site. At the northeast corner of Sawyer Avenue and River Road lies the small residential enclave known as the Sawyer-Kaufman community which is surrounded by heavy industry (Appendix I – Map 4).

3.2 SOIL CHARACTERISTICS

The US Geological Survey drilled five test holes in 1982 to obtain data on the subsurface geology of the Town of Tonawanda area. The information obtained from these test borings and other data allowed USGS to characterize the geology of the area in general terms. The Tonawanda study area consists of unconsolidated deposits of clay, sand and glacial till of Pleistocene and Holocene age overlaying bedrock of Upper Silurian and the Middle and Upper Devonian Periods. The various formations of rock are in bands that have an east-west orientation (Appendix I - Map 9).

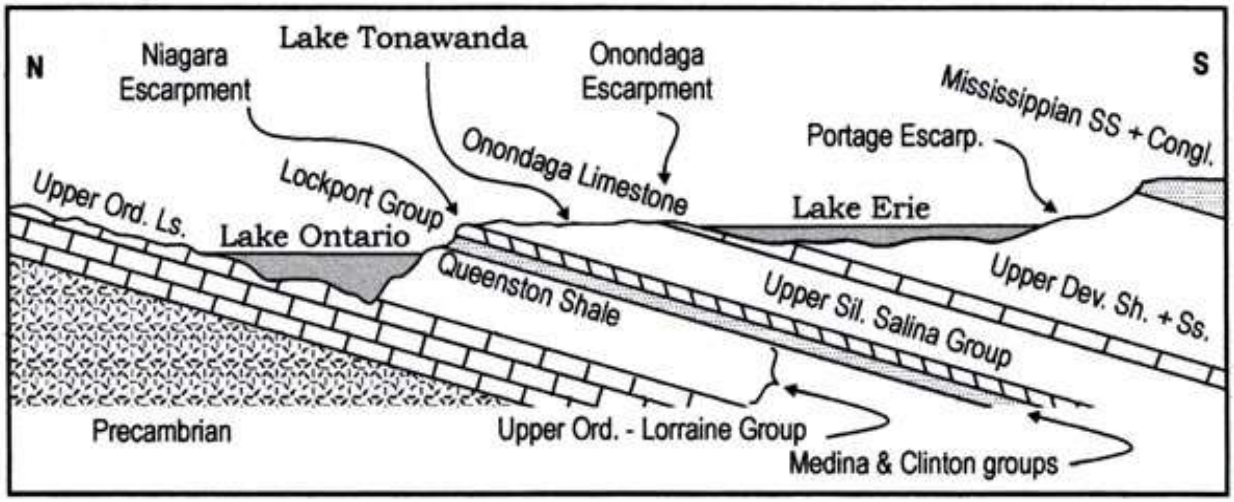


Figure 1. Geological Cross Section

This figure (Figure 1) represents a schematic geological cross section through the western end of the Lake Ontario basin to the eastern end of the Lake Erie basin, showing the locations of the lakes relative to the southward dipping Ordovician to Mississippian stratigraphic succession.

The surficial materials comprise Pleistocene glacial and lacustrine deposits and recent alluvium. They were formed under widely different conditions and occur in different parts of the area, and although their general order of deposition has been ascertained they do not form a continuous sequence of superposed beds and cannot well be represented in a columnar section. The clays throughout the town vary in thickness and it is highly dependent on the depth to the bedrock, ranging from 18.5 to 63 ft (Appendix I – Map 11).

The soils deposited in the town formed in glacial till deposits. Some areas have a thin mantle of clayed sediments with slopes less than 3 %. Silt loam on top 8 inch is yellowish-gray or grayish-brown mellow neutral or slightly acid silt loam. Beneath this is a light grayish-yellow silt loam which, at a depth ranging from 13 to 18 inches. Below this layer is yellowish-brown sandy loam. The top layer is silty clay loam.

3.3 FLOODING FREQUENCY OF THE PROJECT AREA

When rain falls over land, a portion of it runs off into stream channels and storm water systems while the remainder infiltrates into the soil or returns to the atmosphere directly through evaporation.

Physical properties of soil affect the rate that water is absorbed, and the amount of runoff produced by a storm. Hydrologic soil group provides an index of the rate that water infiltrates a soil and is an input to rainfall-runoff models that are used to predict potential stream flow.

The Tonawanda series consists of very deep, somewhat poorly drained soils that formed in silty estuarine or glacial deposits on glacial lake plains and terraces. Saturated hydraulic

conductivity is moderately high or high. Slopes range from 0 to 12 percent (Appendix I – Maps 9 and 11).

The overlaying aquifer consists of unconsolidated morainal and clay deposits. The morainal material is generally a clayey till whose permeability is as low as that of the lacustrine clays. The low permeability of the deposits causes a seasonal perched water table during the periods of high precipitation. This water eventually discharges into areas of low topography and eventually into nearby surface-water bodies. The proximity of the Niagara River, and the elevation contours both the surface and the groundwater discharge into the Niagara River through surface run off or collection through stormwater features associated with the towns MS4 permit.

The banks along the Niagara River are generally 5 to 8 feet above normal river levels. Bluffs along River Road's western edge in the Southern and Northern Sectors are approximately 20 feet in height. Therefore, no flood plains are found east of the River Road. Although BBD is located only 2,000 ft. (0.38 miles) from the banks of Niagara River (Appendix I - Maps 5, 6 and 7) due to the topography of the area BBD has very minimal chances of flooding. As such, erosion along the Niagara River shoreline of the town is not a major problem, and no erosion hazard areas have been designated pursuant to the Coastal Erosion Hazard Area Act (Environmental Conservation Law, Article 34).

In addition to the towns flood management plan, Federal Emergency Management Agency (FEMA) produces Flood Insurance Rate maps and identifies Special Flood Hazard Areas as part of the National Flood Insurance Program's floodplain management. According to the data provided by FEMA BBD is not located on the Niagara River's floodplain. BBD Inc. is located on the Erie-Ontario Lake plain province. The Erie-Ontario plain has little significant relief, except in the immediate vicinity of the major drainageways. The Erie-Ontario Plain typifies the topography of an abandoned lakebed. The elevation near Sawyer Ave ranges from 600 feet above sea level to 570 feet above sea level at the southern banks of Niagara River. Although the topography changes quiet drastically, majority of the slope occurs within 300 ft of the Niagara River. The maps in Appendix I show BBD is located on a very stable and flat land with only a few inches of terrain change.

3.4 HYDROGRAPHY OF THE PROJECT AREA

The main sources of water in Erie County are Lake Erie (and the Niagara River), wells (both dug and drilled) and surface water from streams and small impoundments. Buffalo, Grand Island, and most of the communities along the northwest edge of the county adjacent to Lake Erie obtain their water from the lake. Large amounts of water for industrial use in the Buffalo area also come from Lake Erie. Water for the rural areas of the county is obtained largely from drilled bedrock wells and a minor amount from dug wells.

The hydrologic system of the Tonawanda area is similar to that of the Buffalo area. Two bands of carbonate-rock aquifers— limestones and dolostones—extend from Buffalo to Batavia and from Niagara Falls to Rochester; interbedded shale, dolostone, and evaporites crop out in the area between the carbonate-rock aquifers (Appendix I - Map 10). Water within the

bedrock aquifer flows through the joints, fractures and solution cavities within the unit. Regionally, under non pumping conditions, groundwater in the shale moves west and south. Groundwater in shallow bedrock discharges into the Tonawanda Creek, Ellicott Creek and the Niagara River.

The Niagara River/Lake Erie Watershed represents the western watershed of the state and outlets to Lake Erie and the Niagara River. At its mouth the Niagara River drains an area encompassing more than 265,000 square miles in the north central United States and south-central Canada. The Niagara River/Lake Erie Watershed is largely made up of eighteen smaller sub-watersheds.

Most of the waterways in the Niagara River Sub-watershed drain directly to the upper Niagara River. The nearest creek to the property is the Two Mile Creek which drains into the Niagara River. Like many of the creeks in the region, Two Mile Creek has been channelized and turned into drainage ditches receiving runoff from industries, landfills and storm sewer systems.

According to the Natural Resources and the Environmental Protection Maps Locations and attributes for water wells in New York State are mapped in Appendix I - Map 10. There are no active water wells in the vicinity of BBD that may be impacted by BBD operations.

3.5 WETLANDS

A 13-acre inland Class II wetland (BW-8) is located 2000 ft northeast of BBD. The wetland is classified as Class II by the NYS Department of Environmental Conservation's Final Freshwater. Wetlands are necessary for flood control, surface and groundwater protection, and wildlife habitat. Certain human activities on or around wetlands can adversely affect the wetlands, however BBD and the plant operations are not conducted on the wetlands and have minimal chance to impact the wetland. Appendix I - Maps 6 and 8 shows the location of the wetland near the BBD Plant.

Several areas within miles from BBD are considered floodplains for the Niagara River. Floodplains can support particularly rich ecosystems, both in quantity and diversity. A floodplain can contain 100 or even 1,000 times as many species as a river. According to the report published by Erie County, a total of 338 bird species were documented in the Niagara River Watershed as part of the Niagara River Corridor A master list of bird species is provided in Annex A. BBD also acquired the avian species list from NYDEC website and verified all the SAR species with the probable occurrence in the area (Table 2 below). Several species flock to this area and rely on the resources it provides for both wintering and breeding activities. The sensitive bird areas that exist along the Niagara River corridor are detailed in the Table 1. BBD is not located adjacent to the river, nor discharges any effluent into the river.

3.6 ENDANGERED SPECIES

The watershed in the area is characterized by the Erie/Ontario Lake Plan ecoregion. The physiography of this ecoregion consists of flat lake plain bounded inland by Pleistocene beach ridges. Streams empty into the Niagara River and Lake Erie and host a variety of Great

Lakes migratory fish species. Historically the area had natural vegetation types including beech-maple forest along with chestnut and oak, however the land is now dominated by mainly Industrial, some residential and other urban land uses.

A list of all the possible Species at Risk birds was compiled to assess if BBD operations may have a direct or indirect impact on these species.

Table 1. Sensitive Bird Areas along the Niagara River Corridor.

Location	Type of Bird Species
Buffalo Harbor: Donnelly's Wall, South Breakwall and Short Breakwall	Approximately 1,300 pairs of Common Tern
Former Bethlehem Steel Site	Gulls: Ring-billed, Herring, Great Black Backed
Motor Island	Great Egret, Black-crowned Night Heron, Great-blue Heron, Double-crested Cormorant
Strawberry Island	Cormorant and Great-blue Heron
Tonawanda and North Tonawanda Intake	12-75 pairs of Common Tern
Buckhorn Weir	Historical Tern colony, abandoned c. 1988. Ring-billed and Herring gulls, Double-crested Cormorants
Near Crib/Far Crib (NYPA-owned parcels)	2-80 pair of Common Tern
Tower Island	Historical Tern colonies, abandoned c. 1998.
Goat Island	Ring-billed gulls, Herring Gulls, Double-crested Cormorants, Peregrine Falcon nest.

Source: NYSDEC, 2006 (HAB43)

Due to the site being in the industrial zone of Town of Tonawanda and lacking any vegetation, tall trees and water features, BBD offers very poor foraging or nesting site. For this reason, BBD has not conducted an endangered species survey.

Although, the site offers very little if any habitat for the SAR, there are several areas supporting SAR habitats within the 5-mile radius (Appendix I - Maps 12 and 13). BBD's property is not listed as a sensitive site for the avian species or within proximity of such sites. Additionally, the BBD site does not have significant water resources or vegetation to support avian species.

Table 2. List of Possible SAR and their Habitat on or near BBD property

Species Name	Status	Habitat Preference	Species and their Habitat Observation, rationale, and justification	Probability of breeding and/or overwintering
Short-eared owl *Asio flammeus*	Endangered	Short-eared Owls prefer grasslands and open areas, where they perch in low trees or on the ground.	BBD has some open areas, however due to the vehicular traffic and human activity, it very unlikely for the Short-eared owl to next or forage on BBD property.	Short-eared owls usually stay in the area throughout the year.
Common NightHawk *Chordeiles minor*	Threatened	Nests in open areas with little ground cover including lakeshores, forest clearings, pastures, open forests, marshes, railways, airports, rock barrens, gravel shoulders	Although the species have been observed in Erie county, based on the Common Night Hawks habitat preference, BBD site doesn't offer suitable habitat.	Common Nighthawk migrate to southern USA and South America.
Least Bittern *Ixobrychus exilis*	Threatened	Marshes dominated by emergent vegetation surrounded by areas of open water. The species also prefer large wetlands	There are no sources of open water, or wetlands on or near the property. The nearest wetland that can possibly support Least Bittern is on the Niagara River, and several islands located within the river (i.e. Grand Island)	American Bittern migrate to southern USA and South America during winter.
Bald Eagle *Haliaeetus leucocephalus*	Special Concern	Forested areas with large canopy or super-canopy trees in close proximity to large, open bodies of water.	While the BBD property is located within 2 miles of Niagara River, the probability for Bald Eagles to utilize BBD property remains low. There is no canopy cover, and the site is very commercialized.	Bald Eagles usually stay in the area throughout the year.
Northern Harrier *Circus hudsonius*	Special Concern	Communal flocks roost on the ground during winter and migratory periods in agricultural fields, abandoned fields and salt marshes. Breeding occurs in both freshwater and brackish marshes, tundra, fallow grasslands, meadows, and cultivated fields.	The species have been observed in Erie County. BBD offers no habitat for nesting, roosting or foraging.	Northern Harriers usually stay in the area throughout the year.
Red-headed woodpecker *Melanerpes erythrocephalus*	Special Concern	Presence of dead trees for nest sites, snags for roosting, and open ground for foraging. Prefers river bottoms, wooded swamps, and open grasslands with scattered trees.	The species have been observed in Erie County and near to BBD. Although the population has declined over the year the species can still be observed in the area. BBD offers no habitat for nesting, roosting or foraging.	Red-headed woodpeckers usually winter in the southern States.
American Bittern *Botaurus lentiginosus*	Special Concern	In early spring establish breeding territories in interior freshwater wetlands and coastal salt marshes.	American Bittern have been observed in Erie County, NY (NYS Breeding Bird Atlas). However, the probability of American Bittern occurring on BBD property is very low due to unavailability of suitable habitat.	American Bittern migrate to southern USA and South America during winter.

3.7 REMEDIAL PROGRAM SITES

BBD is located in the general industrial zone of the Town of Tonawanda and is surrounded by various industries which have their land classified as brownfield/superfund sites. 3M, located adjacent to BBD to the Northeast, is classified as a NYSDEC Superfund Site and a NYS DEC Class 4 Inactive Waste Disposal Site (Appendix I - Map 15 and 16). According to site topography it is assumed that subsurface flow of water/contaminants may flow towards BBD property (as discussed in Section 3.4 describing groundwater moving generally west to south). BBD is not aware of any contamination, type of contamination, spills, spill cleanup/remediation that has occurred on the adjacent property. No monitoring wells exist on the BBD property or are known to be within 800 feet of the BBD property. BBD's operations have not been impacted by 3M operations.

4 ENVIRONMENTAL JUSTICE

The permitting of Buffalo Biodiesel, Inc. is governed by several New York State environmental regulatory programs designed to protect public health, natural resources, and disadvantaged communities. Because the facility is located within a CLCPA-designated Disadvantaged Community (DAC), enhanced Environmental Justice (EJ) review and public participation requirements apply. Below are an outline of the relevant sections and their application to this permit (The complete EJ analysis is submitted under separate cover).

Environmental Justice Regulations

i. NYSDEC Commissioner Policy 29 (CP-29)

CP-29 governs Environmental Justice in permitting, requiring:

- Enhanced public participation for facilities in DACs
- An Environmental Justice Impact Analysis
- Evaluation of environmental burdens such as air, odor, noise, wastewater and ground water.

This policy triggers the EJ review and requires additional transparency for communities already experiencing cumulative environmental stressors.

ii. Climate Leadership and Community Protection Act (CLCPA) §7(3)

CLCPA §7(3) requires NYSDEC to:

- Evaluate whether a permitting action may create disproportionate burdens in a DAC
- Consider cumulative impacts from emissions, wastewater, noise, and land use Document findings as part of the agency's decision

This law directly applies to the facility's boiler emissions, truck/mobile-source emissions, noise modeling, and any potential environmental releases.

iii. CLCPA Disadvantaged Communities Mapping Tool

The mapping tool identifies census tracts meeting DAC criteria.
The parcel at 225 Sawyer Avenue falls within a DAC, requiring:

- Enhanced PPP
- Disproportionate Burden Assessment (DBA)

EJ screening and documentation under CP-29 and CLCPA

iii. PPP Public Participation Plan

This PPP outlines the steps Buffalo Biodiesel, Inc. will take to notify the community, share project information, and engage interested stakeholders throughout the permit review period. The objective of the PPP is to promote transparency, facilitate communication between BBD, NYSDEC, and the public, and document how public input will be received and considered as part of the regulatory decision-making process.

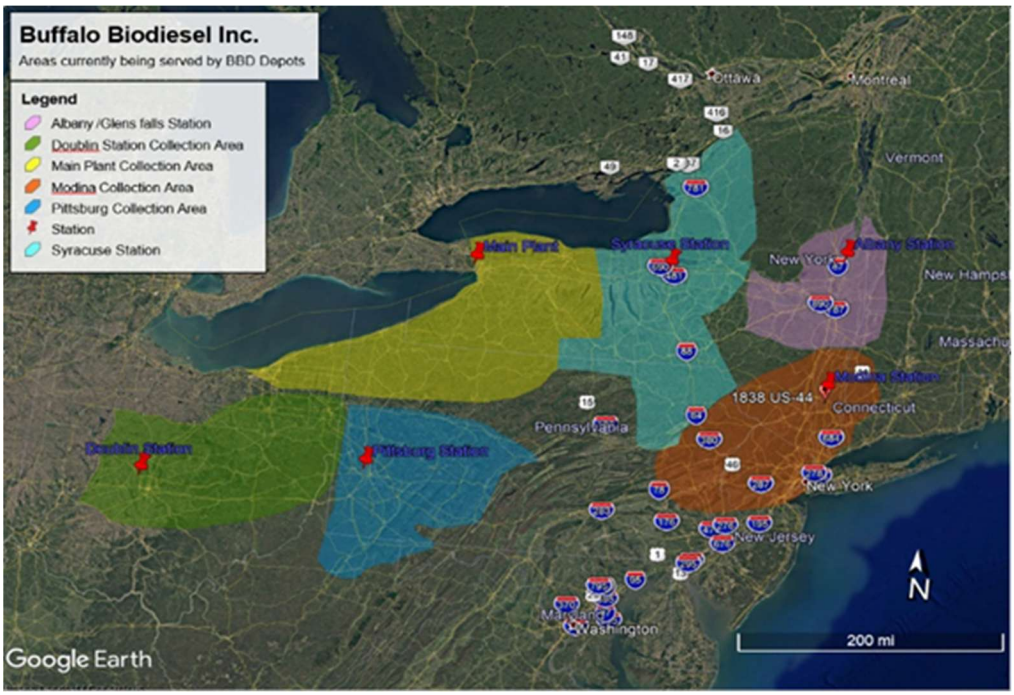
5 WASTE CONTROL PLAN

The perimeter of the BBD facility is secured against unauthorized vehicles entry by a metal fence and slide gates. Access to the facility is monitored by the facility personnel and limited through lockable gates at the entrance/exits. Signs attached to the entrance gate and mounted at the office entrance identify the approved materials for acceptance as well as emergency contact numbers and hours of operations.

5.1 FACILITY SERVICE AREA – SEE FIGURE BELOW

Material received at BBD is collected from its drivers in 10 states, including New York, Pennsylvania, Ohio, New Jersey, Vermont, Connecticut, Massachusetts, Maryland, West Virginia, and Michigan. In New York, BBD services Albany County, Allegheny County, Broome County, Cattaraugus County, Cayuga County, Chautauqua County, Chemung County, Chenango County, Clinton County, Columbia County, Cortland County, Delaware County, Dutchess County, Erie County, Essex County, Franklin County, Fulton County, Genesee County, Greene County, Hamilton County, Herkimer County, Jefferson County, Lewis County, Livingston County, Madison County, Monroe County, Montgomery County, Niagara County, Oneida County, Onondaga County, Ontario County, Orange County, Orleans County, Oswego County, Otsego County, Putnam County, Rensselaer County, Rockland County, Saint Lawrence County, Saratoga County, Schenectady County, Schoharie County, Schuyler County, Seneca County, Steuben County, Sullivan County, Tioga County, Tompkins County, Ulster County, Warren County, Washington County, Wayne County, Westchester County, Wyoming County, Yates County.

Figure 2. Facility Service Area



5.2 UCO Processing Flow and Waste Handling

BBD deals almost exclusively (99%) with restaurants and fast-food chains through contracts that use BBD provided totes/containers which are picked up by BBD drivers when full. BBD does not currently accept UCO from residential and household producers. UCO and Yellow Grease are the only products accepted for processing at the BBD Tonawanda Facility. UCO and Yellow Grease products are accepted during the posted operating hours from 7:00 am to 1:00 am, Monday through Sunday in accordance with the town zoning allowance for GI. Material is only accepted during posted operating hours and only from qualified, trained BBD drivers. BBD drivers are trained in the corporate material handling program and will not accept brown or green grease, and BBD's contracts with customers state the same in acceptance criteria. Signs are posted at the main entrance stating the hours of operation, authorized material accepted, and nonacceptable materials. Locking gates are installed at the entrance drive and connected by fencing to control access during non-operational hours.

5.2.1 Unloading From Tankers, Vac Trucks

UCO and Yellow Grease is collected both locally and throughout the Northeast as noted in Section 5.1 above. Local (dispatched out of Tonawanda, NY) BBD UCO collection drivers collect UCO and Yellow Grease from customers and pump out full vats using vacuum trucks. Transfer station depots are strategically located near large population centers in the northeastern United States. Employees working at the depots load collected UCO from vacuum trucks to tractor trailer tankers after their daily runs. Transfer Stations have no on-site bulk storage tanks, or ability to process UCO. Drivers with CDL Class A license are assigned to drive the tankers back to Buffalo Biodiesel's processing center in Tonawanda, NY.

BBD drivers are trained in the handling, inspection and acceptance criteria for waste material for which they can process. Drivers are assigned a route per shift that determines the expected volumes, waste type and customer addresses. UCO and Yellow Grease are collected from restaurants or the Transfer Depots and the truck is brought back to the Tonawanda processing plant for unloading. Once the truck is parked on the concrete unloading pad, the plant operator collects a sample to ensure FFA content prior to attaching a 3-inch hose to the tanker and offloads the UCO from the tractor trailer into the screening trough which is part of the newly retrofit underground storage tank (UST) arrangement (Refer to Milestone #1 Rev 4, dated November 24, 2025). Large foreign objects are removed through the primary screening process. All tankers are unloaded on a paved concrete pad and a bucket is placed under the tanker connection to ensure oil doesn't drip onto the ground when connecting and disconnecting hoses.

BBD is currently in the process of taking out of service and upgrading two (2) large USTs. These storage tanks were determined by the department to be USTs which required secondary containment. It is noted; this activity will have limitations on production rates during the retrofitting activity at facility. As such, the facility is anticipating that their production will be slightly reduced during the retrofit activities.

During the retrofit of UST #2, BBD will have the reduced capacity of between 22,000 – 25,000 gal/day of UCO for processing. However, due to market demand and labor constraints BBD will be handling less than capacity at 18,000 – 22,000 gal/day of UCO. It is noted however, that in any one day they may process up to the capacity of 25,000 gal/day with no impact to onsite processing once received.

During the retrofit of UST #1, BBD will have a reduced capacity of 30-35,000 gal/day; however, due to market demand and labor constraints, BBD will be handling less than capacity at 20,000 – 28,000 gal/day of UCO. It is noted, however, that in any one day they may process up to the capacity of 40,000 gal/day with no impact to onsite processing once received. The capacity of the new (6) six above ground storage tanks (ASTs) is in excess of 101,000 gal of fluid, some of which will be water, sludge or oil due to phase separation during the preheating.

BBD has documented the reduction in capacity and handling volume while conducting the retrofitting of the UST #2 followed by UST #1 in Milestone #1 Rev 4 dated November 24, 2025. The retrofitting requires the installation of a six new ASTs on the interior floors of the former USTs with the large USTs now proposed to serve as Secondary Spill Containment for the new ASTs. The secondary containment will have a newly installed concrete floor with a sump for collection of stormwaters (see Appendix G for UST retrofit details and drawings submitted to the NYSDEC on November 24, 2025 in response to Consent order R9-20250902-59 under Milestone #2, Rev 3).

5.2.2 Unloading From BBD Trailers and Pickup Truck Drivers

BBD's fleet of box trucks and large trailers bring drums, carboys, vats, totes and bags loaded with used cooking oil to plant. These containers are offloaded via fork truck and stored inside the plant. Plant labor empties the drums of oil directly into heat tanks (See section 5.2.3 below for additional details). Carboys and buckets are offloaded into 250-gal troughs and then pumped into the heat tanks. Often the plant receives shortening, and animal fats mixed with liquid vegetable oils which are solid at room temperature. Employees preheat the grease to be melted prior to pumping into the heat tanks (refer to AST #29 on Figure 6 in Appendix A). These materials could be transferred to other facilities under the Part 361-8 permit through vehicle-to-vehicle transfer should the operations of the processing portion of the facility be taken offline. The processing, storage, loading, and unloading areas are constructed of concrete and meet the requirements of the Part 360 regulations. Daily cleaning and recording of the cleaning effort is consistent with the requirements of the Part 360 regulations.

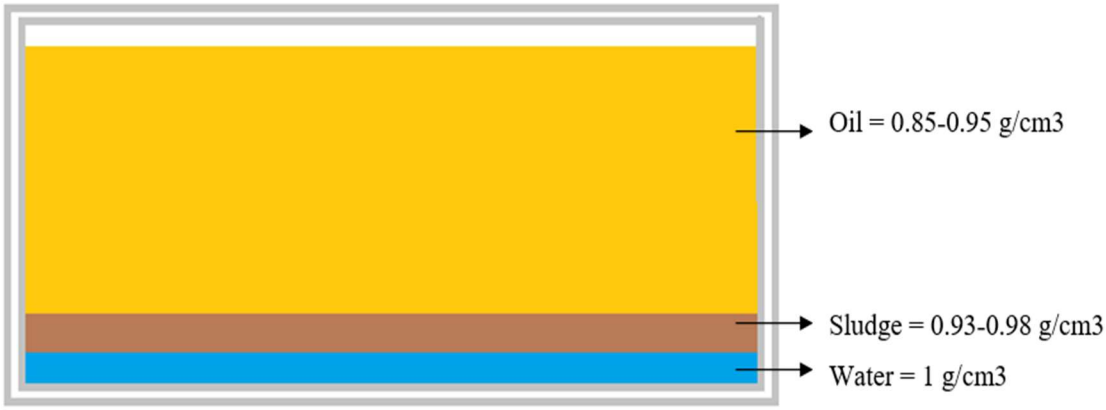
5.2.3 Oil Refining Process

The process of isolating and thus removing substances from the UCO is called purification. UCO purification is done by the process of phase separation, separating

the UCO into 3 separate mixtures. (Refer to the Process Flow Diagram - Figure 5 in Appendix A).

Temperature has a strong influence on the viscosity of fluid products with viscosity generally decreasing with increase in temperature. The reduction in oil viscosity increases the mobility of the fluid thereby improving the separation of sludge and water. Due to the difference in densities of oil, food particles (sludge) and water, these materials settle into 3 distinct layers (See Figure 3 below for depiction of phase separation). UCO is only heated to 160°F (74°C) for 10 – 20 hrs to speed up the phase separation process and refinement of the oil.

Figure 3. Settling Diagram



5.2.3(a) Details of Refining of Used Cooking Oil in the Heat Tanks

Upon receipt of UCO at the BBD main processing plant in Tonawanda, NY, the oil is unloaded into the outdoor screening trough (as proposed retrofit in Milestone #1 Rev 4 submittal, dated November 24, 2025). The offloaded oil passes immediately through a screen to remove foreign objects such as bones, rags, utensils etc. Once solids are separated from the oil an employee then pumps the oils into the new ASTs which are anchored and placed on the floor of the old UST (See Appendix A for Plant Figures & Appendix G for UST Retrofit Plans). Each AST is fitted with two ports, one at the top with a fill pipe running to the bottom of the tank and one at the bottom of the tank. BBD intends on utilizing the port with a line to the top of the tank for filling purposes and the port at the bottom for transfer of UCO from the AST to the Heat Tanks for processing.

The selection of which AST to fill is determined by the operators based on the tank levels at time of receipt (managed by sensors). During the filling process the ASTs will be filled one by one, monitored by the level sensors. Once a tank is full the transfer pump will be turned to the off position and the fill hose will be disconnected and reconnected to another AST. These twelve new AST's have a capacity of over 200,000 gal of UCO storage, while the daily maximum processing

output is only 50,000 gallons. This reserve capacity ensures no oil will be left in the unloading trough without a storage tank to pump the remainder of the oil into. At the end of each day all oil in the screening trough drained and the slab and sump area will be free of any standing oil.

The twelve (12) new ASTs located outdoors will be retrofit with heat exchangers as weather permits to be used as preprocessing tanks. Once the oil is heated to 160 F and phase separation has been accomplished, the sludge and water are pumped to the sludge processing tank, and the refined oil only will be pumped into the heat tanks noted on Figure 6 for further refinement. All transfer of UCO or refined oil from the new ASTs will occur under the supervision of plant operators to detect when the transfer is complete or the intended product has successfully been transferred to the next step in the process. Pumps will be shut down upon visual inspection of completion of transfer (Water, Sludge or Refined Oil).

During the retrofit of the USTs noted in Milestone #1 rev 4 dated November 24, 2025, the outdoor ASTs will not be used until they are retrofit with heat exchangers. The UCO will be screened through the unloading trough and immediately pumped into one of the five (5) heat tanks indoors. The capacity of these five heat tanks is more than 42,000 gallons which exceeds the maximum daily operating capacity during the retrofit of the tanks (the operating capacity of the plant during retrofit, as reported above in Section 5.2.1 and in Milestone #1, is limited to a daily maximum of 25,000 gal/day during the retrofit of UST #2, and 40,000 gal/day during the retrofit of UST #1). The UCO is heated in the tanks to 160°F (74°C) and is maintained at that temperature for 10 – 20 hrs. Samples from all the heat tanks are taken every morning (daily) at ten (10) inches of depth (approximately 1,000 gallons) to ensure consistency and product quality. These tests check the refined oil sample for Free Fatty Acids (FFA), clarity and water content prior to issuing the approval to load the Refined UCO ASTs with clean oil for pumping to tankers for sale. Refined oil will only be pumped into the Clean UCO tanks noted on Figure 6 (Tank # 13-22 and 30-39).

5.2.3(b) Tanker Loading Procedure

Prior to parking the empty truck and trailer in position, the driver ensures the area around the truck and trailer is clear of any debris. The driver then conducts a walk around inspection of the tanker to visually check for leaks, defective equipment (i.e. broken springs, misalignment of axles, tires etc.). The driver then parks the tank, sets the downrigger legs, sets the parking brake and places wheel chocks to ensure the tanker doesn't move during the loading process. The loader opens the top hatch/vent prior to hooking up the airline and pump to the tanker. Opening of the hatch allows the tanker to be at atmospheric pressure.

Upon proper venting being achieved BBD drivers attach the air supply to the tanker. BBD has multiple pressurized air hoses that can be attached to the

tanker. A 3-inch fill line is attached to the tanker and secured by locking pins to ensure the hose doesn't become loose during the loading process. Refined UCO is pumped from one of the Clean UCO tanks noted on Figure 6 in Appendix A. Once the pumping has commenced the driver conducts another inspection to make sure there are no leaks at any point in the process and that all connections are secured, so that the cam locks are locked down so that they can't vibrate, move, and cause a spill.

The loader periodically checks the tank level indicator to prevent overloading of the tanker. Loading is stopped when there is approx. 3 inches of space (500 gallons) of room is left in the tanker. The driver then stops the pump, closes and secures the hatch, and notifies the dispatcher. The dispatcher completes the bill of lading (BOL) form and provides a copy of the BOL to the driver. The driver removes the air, wheel chocks, retracts the tanker outrigger legs prior to driving the load to one of BBD customers.

5.2.3(c) Storage of Oil

Refined oil is stored in clean AST's as noted on figures in Appendix A. Any unrefined oil, processed out on the same day, is pumped into the Raw UCO ASTs for next day use (these are tanks #23-28 on Figure 6 in Appendix A). This process ensures the screening trough in the retrofit UST can be cleaned up by the end of the day with no standing oil or sludge overnight. Although BBD doesn't store oil for an extended period, if BBD stores oil, BBD will add to the inventory tracking section of the daily log and keep track of storage date to ensure it does not exceed 30 days.

Clean Oil tanks are cleaned routinely and visually inspected each day. Secondary spill containment has been proposed in Milestone Response #1 Rev 4 to the NYSDEC submitted November 24, 2025 as well as overfill protection devices as noted Milestone Response #2 Rev 3 to the NYSDEC submitted November 24, 2025 (Refer to Figures 6 through 10 in Appendix A for Tank volumes/layout and secondary containment plans).

5.2.3(d) Storage Tanks

The BBD plant has a total of (26) 4,000 gal ASTs for oil storage located in the Clean Storage Building noted on Figure 6 in Appendix A (tanks are not interconnected however they connect via one way valve to the same discharge line to the heat tanks). These 4,000-gallon, single walled, above ground vertical storage tanks were installed in 2007 to ensure significant storage space is available in the event oil cannot be delivered to the biodiesel synthesizing facilities. Out of the 26 storage tanks, 20 are for Clean/Refined Oil (Figure 6 tanks #13-22 & 30-39) and the 6 tanks located in the center of the Clean Storage Building are used to store the non-refined unfiltered oil (Figure 6 tanks #23-28). In the event of a catastrophic failure of any AST, the UCO can be pumped into these storage tanks. See Figures 6 in Appendix A for indoor and outdoor tank layout plan and

capacities. The 26 storage tanks are provided with Secondary Containment via the proposed containment plan consisting of berms as presented in Milestone Response # 1 Rev 4 submitted to the NYSDEC on November 24, 2025.

5.2.4 Wastewater and Sludge Handling

5.2.4(a) Wastewater

Approximately 15-25% of UCO is comprised of water, which can increase or decrease depending on the quality of UCO being received from the suppliers. Water is removed from all the tanks and pumped into the water tank during the separation process. Once the refined oil has been pumped out of the tank, water is pumped out of the heat tanks and into the water tank. This water is tested to the permit conditions of the Town of Tonawanda Discharge Permit prior to passing through the grease trap and discharging to sewer which connects to the municipal treatment plant. A description of each portion of the water handling and treatment process follows in Sections 5.2.4(b)-(e). It is anticipated that the amount of water incorporated into the current UCO processing will significantly dimmish now that the UCO will only be exposed for a very short time to the environment (rain/snowfall) during offloading and will now be stored in closed top ASTS instead of the open-air previous design. This will eliminate the impact of major portion of the 37 inches of rainfall per annum that the UCO was previously exposed to.

5.2.4(b) Sludge Processing Tanks

In addition to water and UCO, approximately 5-10% of the UCO is made up of sludge. Sludge (in the case of UCO and for discussion here) is comprised of tiny food particles (e.g. breadcrumbs, meat, bones, etc.). Sludge is known to absorb oil and water; however, since it will undergo a similar process as the UCO, water and oil are released to be processed leaving the sludge behind.

Sludge is pumped from all the heat tanks and the offloading ASTs from preheating (ASTs will be fitted with heating coils ties to the boilers similar to the previous use of the USTs to created phase separation) into the sludge processing tank. Sludge is then run through a filter press to further release any residual water and oil before transport for disposal. Once the sludge processing tank is full (denoted by high level alarm and detection device) a vac truck is used to pump out the tank and the waste is trucked to the Generate Niagara Digester, LLC facility in Niagara Falls or their Generate Buffalo Digester, LLC facility in West Seneca. It should be noted that the capacity of the sludge tanks and the number of decanting cycles before the tanks are required to be taken offline and cleaned ultimately determines the operating capacity of the facility.

5.2.4(c) Filter Press

BBD use the M.W. Watermark Filter Press machine (Model No: FP800G32L-40-20AXX; Serial No: FP00815) to separate thick sludge from the oil. Sludge is pumped from the heat tanks and offloading ASTs into the filter press and dewatered under pressure. A single cycle can take up to four (4) hrs. to complete, filtering approximately 3,000-gal liquid from the sludge. The filtered liquid is pumped into the two (2) water holding tanks, located in the Water Tank Building, noted on Figure 6 in Appendix A, for sampling prior to discharge to municipal sewer connection. The solids are collected and trucked to digesters as noted in section 5.2.4(b) above.

5.2.4(d) Water Tanks

Water is the densest of all liquid media processed by BBD and therefore settles at the bottom of the tanks. Water from the AST's, heat tanks, and sludge tanks is pumped into the temporary holding water tank. Once the water tank is full, the operator treats the water tank by adding caustic (99 % NaOH – Sodium Hydroxide beads) into the water. The water tank is fitted with an air bubbler to agitate the water and speed up the mixing process evenly throughout the tank.

Prior to discharging the water, BBD pretreats the wastewater to bring the pH to average 6 pH and settles particulates out of the water. To ensure the water meets the permit requirements for discharge, a water sample is taken to measure the pH. Once the desired pH has reached (7 optimal), the water is allowed to settle for an additional 16-24 hrs to separate solids (Refer to Appendix F for permit conditions for additional requirements). Prior to discharging the water, another sample is collected to measure the pH and visually analyze for particulate matter. The sample is also spun in a centrifuge to ensure the particulate concentration is below 5 % of the total sample. After the final quality control check the wastewater is discharged into the grease trap. The wastewater discharge rate is controlled to be slow enough to prevent the agitation of settled particles in the grease trap. Additional wastewater quality analysis is required, pursuant to the permit conditions, which are described in Appendix F.

Water tanks are cleaned at least once per month to remove any settled sludge particles. The heavy sludge is pumped into the sludge processing tank. The tanks have a design capacity of 8,000-9,336 gal as noted in Figure 6 of Appendix A. Once the sludge processing tank is full, approximately 3-4 days, the sludge is still mixed with wastewater and UCO. The sludge is heated up again at 150°F to further separate oil and water. Once sludge is fully processed, then it is quarantined in the sludge processing tank, and scheduled to transport to digester within 1-2 days and no more than 7 days. The sludge is then pumped into a vac truck and trucked to the digesters as described in 5.2.4(b).

5.2.4(e) Grease Trap

The grease trap is located in front of the main office entrance of the plant. The grease trap was built in 2007 to intercept grease and solids before they entered the Town of Tonawanda Sewer System. The chambers of the grease trap hold approximately 5,000 gallons of water/scum/ and solids.

Once the water in the water tank has been pretreated and settled as described 5.2.4(a), BBD discharges the wastewater to the grease trap. Wastewater is pumped at slow but constant rate to avoid agitating and mixing. The grease trap is divided into two tanks with an opening in the middle that connects the two tanks. The grease trap has two chambers which are used to separate oil from water for skimming and removal and settling solids out prior to discharge. Settled out particles are pumped out of the grease trap once a monthly basis.

5.2.4(f) Hot Water Pipes and Boilers

The tanks are constructed to efficiently refine the UCO through phase separation. The tanks have heated copper pipes installed to heat the oil via direct contact and heat diffusion through the pipes. The pipes are connected to a series of boilers placed strategically within the plant to maximize coverage and minimize heat loss. BBD uses three (3) Weil-McClain Model LGB Series boilers powered by natural gas. The boilers heat the water to 170°F (77°C) and a series of pumps attached to the water pipes circulate the hot water through the tanks. The cooled water is cycled back to the boiler and reheated to complete the circuit.

5.2.4(g) Compressors and Pumps

Compressors store the compressed gas inside the three compressed gas holding tanks. The pressure and stored potential energy of the compressed gas is used to power the ARO Pro Series air operated diaphragm pumps. BBD operates air-operated pumps manufactured by Ingersoll Rand Company Ltd. These pumps offer high volume delivery and compatibility with UCO. The pumps utilize a pressure differential in the air chambers to ultimately create suction and positive fluid pressure in the fluid chambers; Flap checks ensure a positive flow of fluids. Due to their pneumatic motor, these pumps can be used in potentially explosive areas. There are a series of pumps installed all over the plant to pump water, sludge and UCO into and out of the tanks.

BBD also operates Ingersoll Rand compressors. Eight of the ten compressors are stored in the compressor room and two are installed in the oil storage tank areas.

5.2.5 Waste Process Volumes

BBD currently processes approximately (on average) 18,000-22,000 gallons of UCO per day during normal operating hours due to labor and market constraints. Under stable market conditions and full staff, BBD can process up to 50,000 gal/day of

UCO. A summary of BBD design processing quantities is included in Table 3 below. In any given batch the recovery of refined oil from UCO results in approximately 70% of the total material processed. The remainder of the product results in water and sludge which is processed as defined above. Refer to Section 6.3 for additional details on Wastewater discharge processes and permit conditions.

Table 3. Production of Refined Used Cooking Oil (UCO)

Time		Unprocessed UCO Amount		Processes Oil Amount		Waste Generated at the Plant (wastewater -sludge)	
		(gallons)	(tons)	(gallons)	(tons)	(gallons)	(tons)
Daily	Average	30,000	115	25,000	100	8,000	34
	Max	50,000	192	35,000	140	15,000	64
Weekly	Average	200,000	770	150,000	600	60,000	258
	Max	300,000	1,155	210,000	840	90,000	384
Monthly	Average	800,000	3,080	600,000	2,400	250,000	1,075
	Max	1,200,000	4,620	840,000	3,360	360,000	1,548
Yearly	Average	10,000,000	38,500	7,500,000	30,000	3,000,000	12,900
	Max	14,400,000	53,900	10,800,000	43,200	4,320,000	18,576

** Weekly process consists of 7 days (average)
** Monthly Process consists of 20 days (average) (excluding weekends, statutory holidays and missed operational days.
** Yearly process consists of 240 days (average) (excluding, weekends, statutory holidays, team building, others)

5.3 UCO AND YELLOW GREASE COLLECTION AND TRANSFER FACILITIES

BBD utilizes a series of temporary depots where oil and grease can be stored until it is hauled to the Tonawanda New York Plant. The depots are strategically located to allow BBD to serve high population areas within their collection area. Depot locations and addresses are listed below:

Table 4. Transfer Depot Locations

Main Plant- Appointment Only 225 Sawyer Avenue Tonawanda, NY 14150	Syracuse Station- Appointment Only 506 Gordon Avenue Syracuse, NY 13208
Pittsburgh Station – Appointment Only 3800 Neville Road Neville Island, PA 15225	Albany Station- Appointment Only 22 Hudson Falls Road Suite 2 South Glens Falls, NY 12803
Dublin Station- Appointment Only 6728 Hyland-Croy Road Dublin, Ohio 43016	Modena Depot – Appointment Only 1838 US-44 Modena, NY 12548

These locations operate as transloading operations only. Empty semi-trailers are parked at the regional depots. Local UCO collection trucks travel throughout the area collecting UCO which is then transloaded into the waiting semi-trailer. New empty semi-trailers are exchanged as needed or on routine schedule and the full semi-trailer is taken to the Main Plant in Tonawanda or one of the pre-arranged back-up processing facilities where it is off-loaded and processed. There is no other storage or processing that occurs at any of the depots. The transfer depot only accepts waste from transporters under its control from rigid, leak-proof, closed, mobile containers and no containers are placed on the ground.

5.4 Unacceptable or Unauthorized Materials

This facility currently only collects and processes UCO and Yellow Grease. “Brown” Grease and “Green” Grease are currently an “Unacceptable Material” for the proposed operations of this Facility (>500,000 gallons annually). Due to the method by which both Yellow and Brown Grease are produced, it is highly unlikely that Yellow and Brown Grease are collected and or stored together. Although there are facilities which accept both Yellow and Brown Grease, the collection, storage and refining methods of both types of waste differ drastically. BBD has controls in place to avoid accidental collection of anything other than UCO and Yellow Grease, including contractual language and providing recognition training to the BBD drivers who pick up the product. Hazardous materials are not accepted at the facility and are not expected; however, the facility employees are trained on the identification of hazardous materials and proper procedures for notification of the authorities and management of all unacceptable materials, including hazardous waste.

5.5 Segregation and Management of Unauthorized Waste.

Effective segregation of unauthorized materials starts with driver education and the ability to recognize non-compliant waste streams. BBD employs a number of Quality Assurance (QA) and Quality Control (QC) steps to ensure that their drivers only collect UCO from the UCO oil generators. BBD utilizes the following series of checks and safeguards to assure that the generators are aware of the limitations as to what can be placed in the UCO containers provided by BBD.

1. All generators must enter a contract with BBD that specifies the acceptable material (UCO) that BBD will collect and accept.
2. BBD’s drivers are trained in identifying and distinguishing between Yellow and Brown Grease and they will not accept Brown Grease at time of pick up.
3. Prior to accepting and collecting oil, BBD’s drivers visually check and smell the oil. If the oil looks contaminated with Brown Grease, doesn’t pass the olfactory test, or smells like it is contaminated with gasoline byproducts, the driver must then have the generator verify the contents of the oil before picking up and/or mixing the contents into their delivery truck.

4. The final check is conducted by trained employees at the time of off-loading. The UCO arriving at the Main Plant undergoes a QA test to verify the free fatty acid and moisture content of the oil. Oil containing impurities, such as Brown Grease, is rejected, separated, and sampled for waste characterization and disposal. (Refer to Item #6 below). BBD inspects all incoming loads for unacceptable and hazardous materials and BBD management makes routine checks and a record is kept of the inspections.
5. BBD's policy states materials and not be collected from private citizens who intend to bring oil to the BBD facility. UCO is only collected from business entities incorporated in the manufacturing, sales and cooking of food products with existing and active contracts. This policy ensures that customers are bound by contract as to providing UCO and Yellow Grease, only.
6. Unauthorized waste (in the case of UCO refers to Brown Grease most commonly), if received at the Main Plant is left in the tankers/leak proof drums, labeled as Unauthorized Waste (labeled by type). Brown Grease typically refers to heavy, partially solidified fats, often from trap grease, sewer grease, or restaurant grease traps. To prevent leaks and odors, the tanker/leak proof drum is securely sealed, appropriately labeled, and sampled for waste characterization prior to disposal at a permitted landfill within 5 days of receipt. . It is not anticipated, based on the market which BBD operates in, that hazardous waste would arrive on site. In the event of receipt of a suspicious load, BBD employees will communicate the suspicion and perform the proper inspection, sampling, characterization for disposal. For all unauthorized waste disposal, transport for disposal shall be performed by authorized transporters only, and only to facilities which accept the waste as characterized. Records of the type, chain of custody, receipt and disposal of unauthorized waste will be maintained and included in the annual report by BBD.
7. Records of the volume, generator if known, sample analysis, waste acceptance documentation, transporter, BOL and facility number, and final approved disposal location will be kept at the facility for seven years. A record will be kept, in the daily log of the receipt of any unauthorized materials, if found, and the handling disposal details.
8. All putrescible waste is removed from the facility by the end of the next business day after the container is full and always within seven calendar days of receipt. This waste is placed in roll off containers provided by the vendor and records are kept of all dates/ tonnage of pickup and disposal. (No friable or non-friable asbestos-containing materials/waste are accepted.

5.6 RECYCLABLES HANDLING PROCEDURES

BBD has an internal policy to recycle all the plastics, metals, and glass bottles generated at the facility. Recycling bins are strategically placed in the lunchrooms, at the outdoor patio, and inside the plant to encourage employees to recycle their bottles and plastics.

5.7 SCRAP METAL RECYCLING

Scrap metal recycled from BBD consists of damaged 55-gallon drums and damaged vats. A 20 cubic yard roll-off container, located in the back of the plant, is used to store all scrap metal pending removal off-site. The container is serviced on a bi-weekly basis or when full (whichever comes first).

BBD has contracted Metalico Buffalo, Inc. for scrap metal recycling. Metalico also certifies that 100% of the products and metals received by Metalico Buffalo, Inc. from Buffalo Biodiesel, Inc. are recycled and/or destroyed via physical damage (crushing, shredding, etc.) or melting at mills, foundries, or smelting facilities for reuse.

6 OPERATIONS AND MAINTENANCE PLAN

The following describes the operations and maintenance plan for BBD. BBD engages in a program of training and monitoring employees and customers for compliance with the regulations pertaining to the facility. The general manager and the plant manager monitor and inspect the facility for malfunctions, deteriorations, and possible environmental discharges.

Areas to be inspected daily include but will not be limited to: material handling areas, mobile equipment, vehicle and trailer parking areas, ASTs, processing areas, piping, and floors near processing equipment.

Other areas that are subject to routine and minimum monthly inspections include but will not be limited to: air ventilation systems; fire extinguisher and emergency spill equipment, unauthorized material control program, and containers.

Records will be kept of inspections or actions taken in respect to: dust control, vector, odor control, site drainage, access roads, structural components, readiness of firefighting equipment, and the integrity of the security system, including fences, signage and gates. Refer to Section 6.7 for specific information regarding inspections.

Any deficiencies noted during an inspection will be promptly addressed, and remedial action will be taken when necessary. A logbook will be maintained for inspections, identifying the specific equipment and structures inspected, and record keeping observation as well as data and nature of any remedial actions or repairs implemented. Inspections and corrective actions completed will require the inspector's name, date and time, area inspected, and description of the findings or actions taken. (See Appendix B for examples of daily, monthly and routine Inspection sheets).

6.1 FACILITY OPERATIONS

The Main Plant operates Monday through Sunday from 7:00am to 1:00am (7 days a week). Loading of trailers is performed during regular operating hours. Attendants are on duty during all hours of operation. The facility entrance gate will be closed when the facility is not open for operations. The gate contains signage which indicates the hours of operation, emergency contact numbers in case of an emergency and type of waste accepted.

Trucks access the facility via the driveway off Sawyer Ave. There are a variety of highways including Interstate I-190 that many BBD vehicles take on their trip to the various depots and on their return to the Main Plant.

Currently, BBD utilizes gravel driveways and gravel parking lots. Gravel parking lots can be a source of dust generations, which may cause nuisance for the neighboring properties when the lots are dry and or when dust is whipped by the winds. BBD employees spray water on the gravel parking lot to minimize dust when dry or when dust is noted from trucks entering or exiting the facility. A record of the dust control activities is recorded routinely. Inside the facility and in off-loading areas covered by concrete, a sweeper is used to control dust as needed. A record of these activities is recorded in the daily log when completed.

Refer to Appendix A – Figure 6 which shows the processing areas within the Processing Plant along with tank volumes by use.

6.2 STORAGE AND PROCESSING AREA EQUIPMENT

BBD's UCO refinement process includes a number of steps to process the UCO to refine it for sale for Biodiesel. Refer to the Process Flow in Appendix A – Figure 5 for additional details. Equipment used in the process includes: unloading tanks (currently USTs however being retrofitted to ASTs per Milestone #1 response), heat tanks, sludge processing tanks, water tanks, grease trap/oil water separator, refined oil storage tanks (AST's), hot water pipes and boilers, compressors, transfer pumps, filter press and yellow grease melt troughs. Refer to Appendix A – Figure 6 which shows the processing areas within the plant along with tank volumes by use.

Refer to Section 5.2 above for detailed descriptions of equipment noted, utilized in the process.

6.3 WASTEWATER DISCHARGE

Currently BBD's Main Plant is authorized to discharge industrial wastewater to the Town of Tonawanda sewer system in compliance with the Town's Sewer Use Ordinance #2-2000.

This permit has limitations as to the discharge Point(s), effluent limitations, monitoring frequency and requirements, and other conditions the town may require. The most recent (3) year permit was issued on January 2, 2025, and it expires December 31, 2027. The permit allows for discharge to the Sewer 8,000 gallons per day, and 500 gallons per day of wash water from drum cleaning operations. The permit requires monitoring at the discharge pipe from the oil/water separator twice a month and limits discharges to the sewer system outside of the hours of 7:00am to 5:00pm daily. Self-Monitoring Reports (SMRs) are required along with sampling location, chain of custody, laboratory results, and signed by company officials. (See appendix F for a copy of the Discharge Permit # 646.)

Under the discharge permit BBD shall comply with locally derived effluent limitations for the following parameters. See Table 5 below of effluent discharge thresholds.

Table 5. Wastewater Discharge Permit Thresholds

Parameter	Sample Frequency	Limit	Purpose
pH	2 X Monthly*	5.0-9.5 SU	Compliance
Oil and grease	2 X Monthly	300 mg/l	Compliance
Biological Oxygen Demand	2 X Monthly	250 mg/l	Surcharge
Total Suspended Solids	2 X Monthly	250 mg/l	Surcharge
Total Phosphorus	2 X Monthly	6.0 mg/l	Surcharge
Total Arsenic	2 X Monthly	.5 mg/l	Compliance
Total Zinc	2 X Monthly	4.4 mg/l	Compliance
Total Copper	2 X Monthly	2.6 mg/l	Compliance
Total Chrome	2 X Monthly	1.5 mg/l	Compliance
Total Cyanide	2 X Monthly	1.1 mg/l	Compliance
Total Mercury	2 X Monthly	0.001 mg/l	Compliance
Total Nickel	2 X Monthly	5.0 mg/l	Compliance
Flow	Monthly		

**Two Times per month at least 14 days apart*

In accordance with the discharge permit BBD collects a wastewater sample to be analyzed by an independent laboratory. BBD collects a grab sample from the grease trap discharge pipe and places the samples in the laboratory provided bottles. As the name implies 'Grab samples' are simple scoops of the wastewater being sampled. Grab sampling technique is appropriate for our facility as the conditions for the water being discharged are constant and the water is usually well mixed by the time it leaves BBD premises. The samples are delivered to the Alpha Analytical Lab's Service Center at 275 Cooper Ave, Tonawanda, NY. In accordance with the proper chain of custody's standards.

Sludge and particulate matter left in the tanks is processed through the filter press to remove excess wastewater (which is pumped into water tanks), and any remaining solid waste is sent to Generate Niagara Digester, LLC for processing using digesters as described in Section 5.2.4(b).

6.4 EQUIPMENT NOISE GENERATION

Equipment will be maintained at the facility at all times for the proper functioning of the Main Plant operations. Examples of the potentially noise generating equipment and machinery utilized in the BBD process is provided below and previously noted in Section 5.2 above. Fueling of equipment occurs at offsite filling stations for the facilities vehicles. All equipment will be maintained in good working order.

The facility will seek to minimize sound resulting from operations that could exceed the allowable levels at or beyond the property line. Most of the noise generated during operations

such as operating heavy mobile and processing equipment, is designed to take place during plant operational hours. None of these activities generate excessive noise. Any noise produced from facility operations is reduced significantly either by the walls of the building or the buffer between the operations and vegetation surrounding the properties. Historically noise levels have not been an issue at the facility.

All equipment owned by BBD is regularly maintained and serviced and records of maintenance are on file. The mufflers for internal combustion powered equipment are maintained and serviced as needed so the original noise control features installed on the equipment are not degraded. The facility is therefore capable of complying with §360.19(J) as is demonstrated in the noise survey section and provided in Appendix E.

Figure 4. Major Mechanical Equipment on Site

Compressor

Transfer Pump

List of all the Mechanical Equipment's Used in the Plant for the Refining of UCO

Name	*Picture*	*Location*	*Use:*
Ingersoll Rand UP6-7.5-125 BM, 7.5 HP Rotary Screw Air Compressor 28 CFM @ 125 PSI, 230-Volt 1-Phase Model: UP6-7.5 BM		Air Compressor Room Storage Tanks Room	The air compressors are used to compress air which is stored in the air storage units under pressure. Once the valve to a pump is opened the air flows through the air pipe to turn on the pump. BBD has multiple compressors onsite to ensure these compressors have minimal load on the compressors. This also allows BBD to isolate and service the compressors.
ARO Pumps 666250-9C9-C Diaphragm Pump, 2" Metallic Pro Series		Rear Tank Sludge Tanks Heat Tanks Storage tanks	High pressure pumps with 2-inch diameter. These pumps are used to pump the sludge, oil and water from the rear tank into the sludge tanks, heat tanks and the water tanks. These pumps can also transfer the oil/water/sludge into the storage tanks. These pumps are also used to pump the clean oil into the tankers. The pumps can be turned on/off via opening or closing the air circulating valve. These pumps require minimum maintenance. These pumps are serviced once/month to remove any large particles that get stuck in the pump

Boiler

Filter Press

Weil-McLain LGB Series 2 Gas-Fired Boilers Model: 133054304		Main Plant	The boilers are used to heat the hot water (170 F) that is pumped and circulated through the sludge tanks, rear tank and the heat tanks. The cooler water is returned to the boiler through the return pipes and reheated back to 170 F. Boiler were installed by a certified plumber. The boilers require minimum maintenance. The boilers are inspected daily by the management to ensure gas isn't leaking from the boilers and the temperature is maintained at 170 F.
M.W. Watermark Filter Press machine (Model No: FP800G32L-40-20AXX; Serial No: FP00815)		Main Plant	The filter press machine is used to filter and remove food particles (sludge) from the oil. A pump is connected to the filter press which pumps Oily sludge through the filter press. As the only oily sludge passes through the filter press, heavy food particles are trapped in the filter plates and the liquid with finer sludge particles is pumped out. The liquid is then pumped into the sludge tanks which is cooked to separate the oil from the sludge.

6.5 SITE DRAINAGE

The BBD facility is located on an approximately 5.3 Acre parcel owned by Empire State Property Management Ltd, located at 225 Sawyer Avenue in the Town of Tonawanda, New York. The site drainage characteristics include a combination of sheet flow and pipe flow with discharge to the roadside swale. Refer to the drainage map depicted in Appendix A - Figure 4 attached for flow directionality across the site. The site plan and survey indicate surface run off flows from the rear of the property to the front (South to North/Northwest) where the runoff intercepts drainage inlets with pipes channeling to an OWS which discharges to the roadside swale. Facility features and operational procedures are designed to prevent introduction of materials onto surface or groundwater. Material is unloaded, processed, and loaded onto trailers over a concrete paved pad with care making sure not to release refuse or waste material into the environment.

Exterior paved areas are observed during the course of the daily operations and are swept as necessary to remove any accumulated litter or other refuse. As discussed in the Emergency Response Plan (Appendix D), sufficient means will be available to handle actual spills of refuse or unauthorized liquid material. In addition, proper reporting guidelines will be followed for all surface spills per the NYSDEC guidelines, as demonstrated by past reports to the NYSDEC for spills. All floors and spill containment areas are cleaned at the end of each day, and a record of cleaning/inspection is maintained.

6.6 HOUSEKEEPING

A record of daily cleaning will be kept in a daily log along with the date, time, areas cleaned and name of the person completing the cleaning. All employees are trained in proper was segregation and disposal procedures.

6.7 MONITORING MAINTENANCE AND INSPECTION PROTOCOL

All equipment, processes and facilities are visually inspected for defects during each day. The majority of the processing activities take place within an enclosed building (except the initial processing/separation that is done within the old UST's which are now acting as Spill Containment System for the new AST's, elevated and isolated from the ground surface by a concrete slab. All concrete surfaces are maintained in good condition and replaced with appropriate in-kind concrete as needed. Concrete surfaces are swept clean daily. A record of daily maintenance is kept as part of the daily log in format as described in Section 3.6 above.

The retrofit to the UST in the rear of the facility includes a screening trough to remove bulk solids from UCO delivered for refinement. The prescreening trough is equipped with stainless steel screens which allow the UCO to pass through while removing sludge from the oil prior to pumping into the ASTs. The prescreening trough is shown on the plans submitted with Milestone #1Rev 4 dated November 24, 2025 as well as in Appendix A of this document. The trough separates the unloading activities from the AST with a new reinforced concrete wall and has a sloped floor to a precast drainage inlet used for pumping UCO which has been

screened to the ASTs. A transfer pump is placed on grade outside of the UST and pumps the oil from the screening trough to the AST. At the end of each shift the screening trough is inspected for no standing oil or sludge in the screens. Sludge material is shoveled off the screens and the concrete floor is squeegeed to the drainage inlet for transfer to the ASTs.

BBD shall inspect daily the cleaning and draining of the screening trough and document these activities. Additionally, these troughs will be drained and cleaned annually for inspection and maintenance. All maintenance activities (such as crack repair, sealers, etc.) will be documented and the date and time of the drainage and inspection will be logged by BBD.

In addition to visual inspections, all ASTs will be equipped with Overfill Protection Devices as noted in the Milestone #2 Rev 3 submission to the NYSDEC dated November 24, 2025. These monitors are currently being installed to ensure compliance with regulations with installation scheduled to be completed prior to December 31, 2025.

6.8 EMERGENCY OR OPERATIONS INTERRUPTION

The plant is required to shut down from time to time either for holidays, staff development or routine maintenance. In the event of plant is shut down, all pumps are disengaged, refined oil is stored in the storage tanks, tanks are inspected one last time, lights are turned off, and the doors are closed, and perimeter fences are locked to prevent unauthorized access to the plant. If this event happens a record of the change in operations will be made in the daily operating log.

BBD has built-in redundancies to prevent unscheduled shutdown. BBD has a capacity that exceeds operational demands. The facility is equipped with adequate capacity of pumps, boilers, tanks, storage spaces, and compressors to prevent shutting down a plant operation. If BBD needs to shut down for a planned repair, maintenance or replacement activities, the area/equipment is isolated following a Lockout/Tagout (LOTO) procedure, see Appendix C for an example of BBD's LOTO procedure form. After isolation of equipment, all oil is drained from the lines/pumps/tanks and then the necessary work is conducted.

If a mechanical problem, fire, or other unforeseen circumstance requires an unscheduled shutdown, BBD will relocate all materials which can be removed from the area surrounding the location which the issue has occurred. Incoming material will remain in self-contained containers or vehicles or be rerouted to emergency vendors, if the facility cannot offload oil from tankers or totes. If shutdown is for an extended period of time BBD will transfer the products coming into the facility in single axel trucks to the larger tanker trucks by pumping directly from the smaller tanker to the larger tankers. A record of incoming and outgoing materials will be maintained as per the reporting requirements of §361.8.

Emergency coordinators will organize personnel to secure the material, stop leaks (if possible), and shut down all equipment, unless dangerous conditions prohibit such actions. The emergency coordinators will advise emergency responders, as appropriate.

Recommended spare parts for the mobile and mechanical equipment will be kept available to facilitate repairs and bring facility back online in the event of mechanical difficulties. An Emergency Response Plan outlines the appropriate procedures to be followed during the unscheduled shutdowns caused by fire or other non-equipment-related emergencies. (See Appendix D for Emergency Response Plan).

6.9 SCHEDULE OF OPERATIONS

BBD operates 7 days a week from the hours of 7:00am to 1:00am EST, in accordance with the GI zoning regulations of the Town of Tonawanda. Prior to the initiation of daily processing activities, all mechanical equipment is inspected each day and the record of the inspection made in the daily log. Equipment operators will engage machinery and establish that it is functioning properly prior to start up. During off hours the office and the maintenance building and all doors and gates are locked.

6.10 DAILY LOG ENTRY REQUIREMENTS.

Daily Log Entries and inspection activities will be recorded in concert with the requirements of entry as specified in 6 NYCRR §360.19(e) and §360.19(k)(2)(ii) (See Appendix C – Routine Inspection Report). The facility will conduct both routine and daily inspections as outlined above and below. The Daily Log or inspection sheet will contain the following information and be kept on site for a minimum of Seven (7) years from the initial date recorded.

- Date and time of the inspection.
- Name of the Inspector.
- Description of the nature of the inspection, area, structure or equipment number of the inspection.
- Observations recorded.
- Date or nature of any remedial actions implemented, or repairs made (corrective actions)
- To whom or what Department will handle the corrective actions.
- Followed by the Date the Corrective Action was completed.

6.11 TRAFFIC CONTROL PLAN

BBD is located at 225 Sawyer Ave in the Town of Tonawanda, approximately .5 miles away from multiple primary highways which can accommodate large volume of traffic during the morning and evening rush-hours. Refer to Live Traffic Map in Figure 2 below depicting flow taken around the facility. The image in Figure 2 was taken around 7:00am to represent morning traffic flows as the employees are driving to work at numerous businesses located on Sawyer Ave. The map also shows green zone (no traffic congestion) around BBD.

BBD has posted hours of operations between 7:00am –1:00am, seven (7) days a week, consistent with the industrial zoning regulations for which the site is located on. BBD has approximately six (6) Vac trucks, ten (10) tankers of various sizes (6,000 – 10,000 gal), four (4) box trucks, one (1) pickup, and six (6) haul trucks for the tankers. BBD also has approximately eight (8) fleet vehicles (cars, Jeeps, and Pickup trucks) parked at the facility at any given time. BBD's workforce fluctuated with market demand, with an average of approximately 25 fulltime employees, majority of whom work during the morning shift. Most of the employees coming to work use their personal vehicles. BBD has adequate parking for all the company and the employee vehicles on site within their fenced yard. Additionally, BBD has all solid surfaces onsite constructed of various building materials to ensure all roads within and accessing the plant are passable. A DOT vehicle identification chart is provided below in Table 6 below.

Table 6. Vehicle Matrix

DOT Class Group	Quantity	Description	No. of Axles	Purpose/Use
1	0-2	Motorcycles	2	Personal mode of transportation used by the employees
2	20	Cars Weight: 3,000 to 5,500 lbs	2	Personal mode of transportation and company cars
3	5	Pick-Ups and Vans – 5,500 to 6,500 lbs. empty Loaded pick-up truck average weight – 10,000 lbs	2-4	Personal mode of transportation and Company vehicles to pick up oil drums and or respond to complaints
6	8	Vac Truck – BBD has vac trucks ranging from 1,000-gal to 4,000-gal volume tanks.	2-3	Vac trucks are used to suck oil from client sites (restaurants, café, etc.)
7	4	Box trucks 26 ft box trucks with average maximum gross weight of 25,000 lbs	4-Axle Single Unit	Pick up and drop of vats and drums from various customers
9 & 10	6	Tractors with Single Trailer – 48 ft trailers with gross weight of 50,000 lbs	5 & 6	Pick up vats and drums from depots and drop off supplies
9 & 10	10	Tractors with Single Tanker – BBD has tanker with volume ranging from 6,000-gal to 10,000-gal.	5 & 6	Pick up oil from BBD depots and haul it to BBD's oil processing facility

The access to the facility and traffic flow is controlled by a fence and slide gate with posted signage preventing unauthorized entry to the facility. The access to the gate and the access road is shared by BBD and Empire Property Management and their respective employees.

When entering the facility vehicles must reduce their speed to 5 mph to avoid accidents and reduce dust generated pollution.

The maximum traffic flow to and from the facility occurs during the morning and afternoon rush-hours. The maximum daily traffic is the maximum amount of BBD owned and associated vehicles (employees driving to and from the facility) over the course of the day. BBD surveyed the vehicles arriving to and leaving the facility for the duration of a week (Oct 21, 2019 – Oct 27, 2019). The survey showed approx. 20 – 25 employees arrive at BBD between 6:30am and 8:30am. However, the maximum daily and hourly traffic flow occurs around 6:45am, fifteen (15) minutes before the start of the morning shift. Employees arriving between 8:00 – 8:30am are the box and vac truck drivers who don't return to the plant until later at night. With the exception of vac and box truck drivers, most of the plant employees leave the site between 4:00 - 04:30pm. BBD tankers leave the site around 11:00am – 1:00pm and return back to the later at night. Tankers and trailers generally don't leave the site during peak traffic flows/rush hours on local highways and roads.

BBD also has fleet tracking program to improve fleet operations, increase productivity and encourage safe driving. The Verizon Connect fleet management software allows BBD to monitor vehicle location in real-time, track speed, idling and harsh driving. In addition to driver safety and public safety, this program is often used to identify ideal times for tankers to travel to and from the plant to avoid high traffic times.

Figure 5. Live Traffic Map (Typical Traffic at 7:00am (typical day))

6.12 6 NYCRR §361-8 Operating Requirements (Used Cooking Oil and Yellow Grease Processing Facilities)

6.12.1 Secondary Containment System and Planned Modifications

Currently no on-site tanks have secondary containment systems as all, but two, were constructed prior to 2017. One (1) heat tank for UCO was constructed after the new regulations that classified UCO as solid waste. BBD has made a request from the Department to allow them to temporarily operate UST #1 while they retrofit UST #2, which was constructed after 2017. The plan is to retrofit and repurpose the UST #1 and UST #2 so that the initial processing and screening as well as the installation of a series of ASTs all are placed within inside what was formally known as the UST which is being repurposed as the containment for the interior ASTs. The first (pre) screening operations that take place during the initial dumping (off-loading of the Vac trucks) will be separated from the containment portion of the former UST via newly constructed and sealed concrete wall and the filtered oils will be pumped from the processing area to a series of ASTs constructed on the interior of the former UST. This retrofit will allow for the former UST(s) to be the secondary spill containment system for the twelve (12) proposed AST's that will be installed on the clean floor, and which now will be separated from the initial processing filter screen trough. Both activities will be conducted on the interior and floor of the former USTs. The spacing of the ASTs in each of the former USTs, now repurposed for spill containment, allows for daily inspections beneath each AST, cleaning, and periodic maintenance, if needed. These proposed changes were submitted to the NYSDEC under Milestone #1 Rev 4 dated November 24, 2025. (See Retrofitting Design Plans in Appendix G).

Stormwater that falls within the UST #1 and 2 containments will be collected in the drainage sump inlet at the Northeast corner of the slab in each containment area. Clean Stormwater will be pumped into the drainage inlet on the West side of UST #1. This drainage inlet is connected to the onsite stormwater OWS located at entrance of the facility, off Sawyer Avenue, and gravity discharged to the swale at Sawyer Avenue. The stormwater only OWS will be routinely inspected and maintained to ensure that the OWS is functioning as designed. The Stormwater discharge pump from the ASTs is only operated under manual switch to ensure that no impacted stormwater is inadvertently sent to the OWS with UCO from a tank leak or malfunction. If a leak of any of the AST’s results in UCO spilling on the spill containment pad, the tank will be isolated and the spilled UCO and water will be pumped into one of the remaining ASTs and water and UCO will be separated as per the facility’s normal operations and the AST in question will be repaired.

The proposed plan for addressing the ASTs located inside the Clean Storage Building, is to utilize the elevations of the concrete floor and the positive pitched former drain trenches along with new berms to contain the spill for 110 % of the largest single non-connected tank (Refer to Appendix A – Figure 10 for Secondary Containment Plan). BBD has completed a LIDAR 3-D scan of the interior and exterior of the facility to determine the as built floor slopes and exterior grade elevations around the facility.

This data was used to determine the proposed berm heights along the perimeter of the facility at Overhead Door and Man Doors to provide containment inside the process facility for Secondary Containment.

To ensure the spill containment is functioning appropriately, daily inspections are performed to confirm that no spill or AST failure is observed; and to address corrective actions if necessary. Records of the daily inspection of the Spill Containment Systems shall be maintained for review upon request (Refer to Appendix C – Routine Inspection Form and Appendix D Emergency Response/Spill Response Plan for additional information).

6.12.2 Overfill Protection System

BBD currently has thirty-nine (39) ASTs within their facility and two existing USTs. In addition to the existing 39 AST's, BBD proposes to install an additional twelve (12) ASTs with six (6) planned to be located within each in the two USTs. Refer to Milestone #2 Rev 3 submitted to the NYSDEC on November 24, 2025 for additional details on the proposed AST's and reuse of the existing USTs for secondary containment. Per the requirements of 6 NYCRR Part 360, 40 CFR Part 112, and Milestone # 2 Rev 3 submittal to the NYSDEC dated November 24, 2025, each AST is currently being retrofit with a high-level alarm and remote wireless sensing.

In addition to overfill protection devices, BBD employees are trained and directed to "stand-by" and observe the filling activities whenever a tank is being filled to assure the tanks are not overfilled. Direct observation and alarm monitoring are used every time these tanks are filled. Logs of personnel training will be held on site for the entirety of the employment of each BBD worker.

6.12.3 Inventory Procedures

BBD has an operational database where information is entered and saved on daily basis. All BBD trucks are equipped with GPS trackers and software that allows the driver to input data such as total UCO collected per facility and per day. BBD also keeps track of total UCO hauled to the main Plant and the UCO sold to the vendors. Waste disposal records are maintained to keep track of all the sludge and wastewater produced during the processing operations. This information is stored on BBD cloud servers and can be accessed and provided upon request.

Concurrently with the collection and databasing of records, BBD utilizes best management practices (BMPs) to ensure that no unprocessed oil or grease is stored at the facility for more than 30 days, no processed oil or grease is stored for more than 12 months, and no residual is stored for more than 7 days. This inventory tracking is facilitated by noting on a tracking tag attached to the tanks the start fill date each time the materials are placed in holding and are stored for over 48 hours. In any event, due to the high demand for UCO, BBD does not anticipate any long-term storage or processed oil but retains significant storage capacities.

6.12.4 Fire Prevention and Detection

Used Cooking Oil (UCO) is Class K (Occupational Safety and Health Administration (OSHA), National Fire Protection Association (NFPA) Fire Safety Standards Hazard Classification). The Class K Hazard classification is used primarily in fire safety regulations, building codes, and extinguisher classifications. It refers to cooking oil flammable liquids that can catch fire easily.

Fire extinguishers designed for Class K fires contain a specialized extinguishing agent, typically a potassium acetate, potassium carbonate, or potassium citrate solution, which is released as a fine mist. These fire extinguishers are placed off the ground and are within 25 feet of each fire risk area and are clearly visible with OSHA compliant signage, indicating extinguisher.

6.12.5 Recordkeeping and Reporting

BBD will maintain a copy of this report, the spill and emergency response training and records, waste management records, daily inspections and logs, and any other pertinent information submitted as part of this application process. BBD will make the records available during any inspections by the Department or the Town of Tonawanda throughout the life of the facility including the post/ closure care period and the custodial care period.

BBD saves electronic record files for all the BBD purchases of raw oil and the sales of refined oil. The records will be saved for at least seven years and made readily available for inspection period. BBD will maintain the following operating records:

- Daily log of waste received identifying the waste type, quantity, date received, and planning unit where the waste was generated, and the quantity and destination of any waste products or recyclables that are removed from the facility.
- Routine and daily inspection logs that must include, at a minimum, the following information: the date and time of the inspection, the name of the inspector, a description of the area or equipment subject to the inspection including the identity of the specific equipment and structures inspected, the observation recorded, and the date nature any remedial or corrective actions implemented, or repairs made that resolved the inspection issue.
- All monitoring information necessary for compliance with the requirements of this part and requirements applicable to permit facilities in 6 NYCRR §361-8.3.
- All incoming load inspections for unacceptable materials and all shipments of putrescible waste documenting that the duration of time at the facility to be no longer than seven (7) calendar days. As well as the total tons of weight of shipments from the facility.

In accordance with 6 NYCRR §361-8.3(d) and Part §360.19k, BBD will keep a record of the following:

BBD's has procedures in place to ensure that no unauthorized waste (brown grease, motor oil, etc.) or hazardous materials are received at the facility. If received, BBD will place this material in a leak-proof container, on concrete, and properly labeled as unauthorized material, and if hazardous in nature; notify the proper authorities and segregate from non-hazardous unacceptable materials. The date and time of placing the material in the proper container will be noted on the container and in the Daily Log. The waste will be sampled and properly characterized for proper transport and disposal. The unauthorized material will be disposed of within 5 days of receiving the waste, or as soon as the approval for disposal is received by the permitted facility. BBD will document such occurrences should they occur, and the steps taken to dispose of the waste including the shipment records, and disposal location. In the special case that hazardous waste is received, segregated and sampled, BBD will, after proper authorities are notified, and permission given to properly package, ship and dispose of the material; a record of proper disposal at an approved hazardous waste facility will be maintained at the Facility.

The current capacity for processing the oil exceeds the sales. BBD doesn't typically store any oil at the premises for more than two to three days (i.e. long weekends). In the event BBD must store the oil residue (process water, sludge) for more than 7 days, BBD will document the cause which required them to store oil or waste on the premises and steps taken to remove the oil/waste from the site. Causes for delay can include but are not limited to breakdown equipment, maintenance of pumps, tanks, expiration of permits, market slowdown, or closure of biodiesel or digestive facilities.

6.12.6 Vector Inspection and Mitigation

Due to the extended hours of operation and staffing from 7:00am – 1:00am, pest control has been limited. BBD manages pest control through an in-house program consisting of continually baiting both nuisance bugs and rodents using commercially available traps and baits. If BBD cannot, for any reason, properly contain and control a pest or pests, BBD will retain a professional vector control company to ensure that the pests are controlled and contained. Records of the vector control activities or inspections will be made in the daily or routine logs.

6.12.7 Spill Prevention and Management

The plant's Spill Prevention and Management Plan is located under Appendix D.

6.12.8 Procedures for disposition of wastewater and process waste

Please see Section 6.3 for the appropriate wastewater and process waste disposal procedures.

6.13 TRAINING PROGRAM

A Training Plan has been created to ensure the new employees working at BBD receive the proper training to ensure they have demonstrated competence to complete their assigned tasks without jeopardizing their own safety and safety of others around them. The training program is conducted by the competent trainers listed in the Table 7 below.

Table 7. Trainer List

Position	Name	Trainer Designation
President	Sumit Majumdar	Primary Health and Safety
General Manager	Tom Wiley	Secondary Health and Safety POC
Compliance Engineer	Md Tanzim Ahsan	HazCom
Foreman	Josh Joseph	Fab Shop Equipment
Head Loader	Thomas Kaczynski	Internal Plant Operations Training
Equipment Management	Michael Moran	Heavy Equipment Training – Vac Truck, Box Truck, Fork Truck

The training documents developed include General Awareness, Task Specific Training, Job Hazard Analysis and Environmental Health and Safety for each job category including plant operations workers, fabrication shop workers, truck drivers (box truck, vac trucks, and tankers), and office personnel. Plant personnel are provided technical guidance on OSHA Part 1910 General Industry health and safety requirements and verify by signature of their willingness to contribute to a safe workplace environment. Once training is complete, all employees are paired with a senior employee to shadow the work and understand the Plant layout, safe operating procedure for the mechanical devices (i.e. pumps, filter press etc.).

All competent employees shall perform pre-work walk-downs to ensure equipment is in working order, no leaks are present in tanks, bins, totes and troughs and no hazards are present preventing daily work to commence. Drivers are trained to inspect and notify the management of regular maintenance issues (oil change, tire pressure, etc.) and perform corrective maintenance, as necessary, or tag equipment out of service. BBD Fleet Safety Manager will go over all the pre- and post-trip inspection requirements with every single driver to ensure the drivers understand their job duties. Fleet Safety Manager will also randomly and periodically inspect vehicles and vehicle logs to ensure the drivers are completing their logs and notifying the management of the issues that arise in the company vehicles.

Additional training may be required if it is observed by management that employees are acting in an unsafe manner. One example is an employee violating the tanker unloading procedure or bypassing safeguards. These violations will lead to a disciplinary action,

followed by showing the employee the correct procedure to load the tanker and the employees file will document the violation. Excessive violations will result in termination.

Upon completion of the training, new hires are required to carry out the plant processes while in the supervision of the senior employee. The employee is tested on all equipment, pumps, filling of tanks, storage of oil, spill response, etc. Once the senior employee determines the new hire is competent and can carry out the task without continuous supervision, only then is the new hire assigned to carryout independent tasks.

Plant Management will be trained in hazardous material recognition, reporting and segregation, daily and routine inspection and recording, documenting all spill cleanup, sludge removals, water volume discharges to ensure they are logged accurately. Records will be kept both in printed and electronic formats to ensure records can readily be provided to DEC or another regulatory authority. These records will assist BBD in preparing and submitting the annual report to DEC.

See Job Descriptions, Job Titles and Job Specific Training for all employees attached in Appendix J. A summary of Job Specific Training is listed below in Table 8 below:

Table 8. Job Specific Training Program

Document Name	Document Format	Date Delivered	Intended Audience	Storage Location
Forklift Operator Training Course	Online	Within one week of hire	Management and Employees operating Forklift	Online
Occupational Health and Safety	Printed document	Within 2 days of hire	All Employees	Main Office
Sexual Harassment Training	Online	Within one week of hire	All Employees	Online
Plant/Fab shop Employees on job training	In Practice	Within 2 days of new hire	All employees	On the Job Training
First Aid and CPR	Online	Within 2 days of new hire	All employees	Online

7 PREVIOUS NOISE SURVEYS AND RESULTS

BBD hired Barton & Loguidice of Rochester New York to conduct a noise monitoring survey on June 10, 2022. Refer to Appendix E for a copy of the Noise Study which indicates locations of equipment, calibration of equipment and results of recordings. The weather conditions on this day were fair to partly cloudy with temperature, wind speed, humidity, and precipitation as shown in the figures below obtained from historical weather data listed on Weather Underground. Weather present during the survey is consistent with average conditions in late spring in Western New York with mild temperatures and light winds.

Figure 6. Daily Summary of Meteorological Conditions During Noise Survey (June 10, 2022)

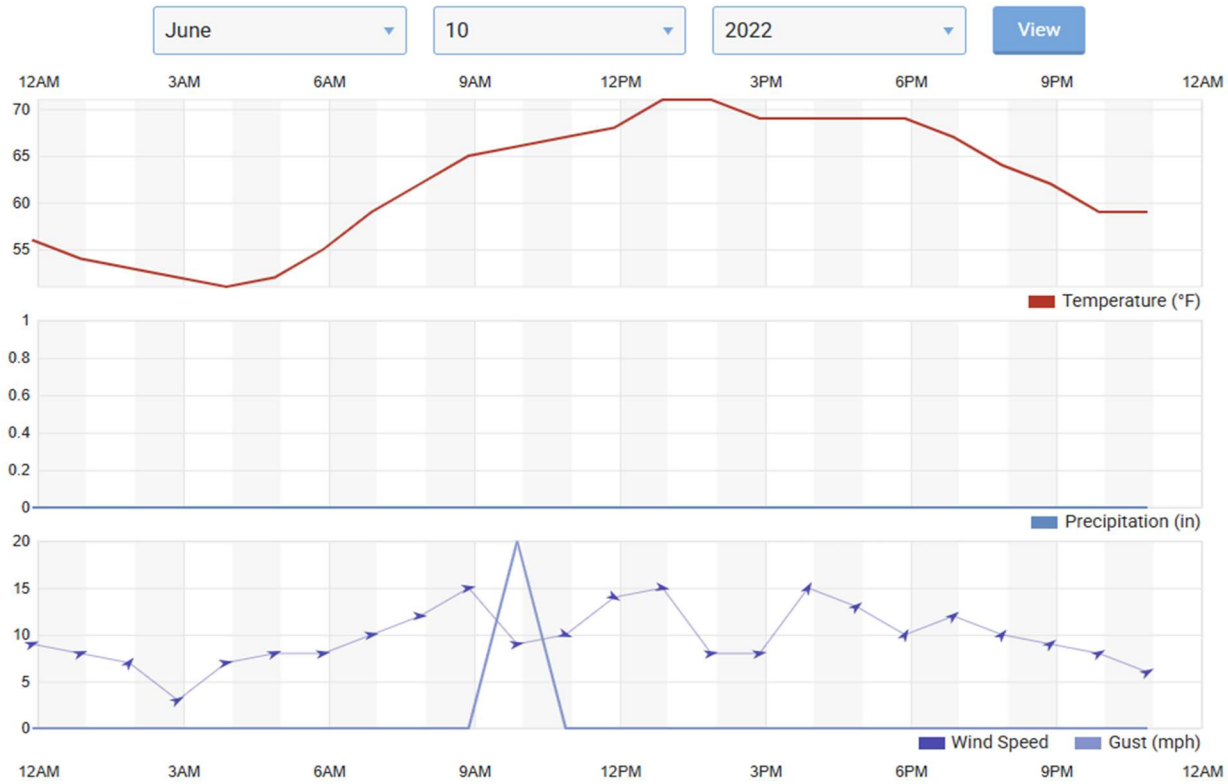


Figure 7. Hourly Climatological Meteorological Conditions (June 10, 2022)

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Precip.	Condition
11:53 PM	56 °F	50 °F	80 %	WSW	9 mph	0 mph	29.20 in	0.0 in	Fair
12:53 AM	54 °F	51 °F	90 %	WSW	8 mph	0 mph	29.20 in	0.0 in	Fair
1:53 AM	53 °F	51 °F	93 %	SW	7 mph	0 mph	29.20 in	0.0 in	Fair
2:53 AM	52 °F	50 °F	93 %	WSW	3 mph	0 mph	29.19 in	0.0 in	Fair
3:53 AM	51 °F	48 °F	89 %	W	7 mph	0 mph	29.20 in	0.0 in	Fair
4:53 AM	52 °F	48 °F	86 %	WSW	8 mph	0 mph	29.20 in	0.0 in	Fair
5:53 AM	55 °F	51 °F	86 %	W	8 mph	0 mph	29.21 in	0.0 in	Fair
6:53 AM	59 °F	51 °F	75 %	W	10 mph	0 mph	29.22 in	0.0 in	Fair
7:53 AM	62 °F	50 °F	65 %	W	12 mph	0 mph	29.24 in	0.0 in	Fair
8:53 AM	65 °F	52 °F	63 %	W	15 mph	0 mph	29.25 in	0.0 in	Fair
9:53 AM	66 °F	50 °F	56 %	W	9 mph	20 mph	29.25 in	0.0 in	Partly Cloudy
10:53 AM	67 °F	50 °F	54 %	WNW	10 mph	0 mph	29.25 in	0.0 in	Partly Cloudy
11:53 AM	68 °F	46 °F	45 %	WNW	14 mph	0 mph	29.24 in	0.0 in	Partly Cloudy
12:53 PM	71 °F	51 °F	49 %	W	15 mph	0 mph	29.24 in	0.0 in	Mostly Cloudy
1:53 PM	71 °F	49 °F	45 %	W	8 mph	0 mph	29.23 in	0.0 in	Fair
2:53 PM	69 °F	55 °F	61 %	W	8 mph	0 mph	29.23 in	0.0 in	Mostly Cloudy
3:53 PM	69 °F	54 °F	58 %	SSW	15 mph	0 mph	29.23 in	0.0 in	Partly Cloudy
4:53 PM	69 °F	53 °F	57 %	SW	13 mph	0 mph	29.23 in	0.0 in	Fair
5:53 PM	69 °F	53 °F	57 %	SSW	10 mph	0 mph	29.23 in	0.0 in	Fair
6:53 PM	67 °F	52 °F	59 %	SW	12 mph	0 mph	29.23 in	0.0 in	Fair
7:53 PM	64 °F	52 °F	65 %	SW	10 mph	0 mph	29.25 in	0.0 in	Fair
8:53 PM	62 °F	51 °F	67 %	SW	9 mph	0 mph	29.26 in	0.0 in	Fair
9:53 PM	59 °F	50 °F	72 %	WSW	8 mph	0 mph	29.26 in	0.0 in	Fair
10:53 PM	59 °F	51 °F	75 %	WSW	6 mph	0 mph	29.26 in	0.0 in	Fair

The noise monitoring event recorded the one-hour steady state equivalent sound levels (LEQ-1 hour) for daytime monitoring resulted in 60.7 A-weighted decibels (dB(A)) at location M-1 from 8:27am - 10:00am, and nighttime monitoring resulted in 61.5 dB(A) at M1 from 5:45am to 7:00am, which as noted earlier is the peak noise causing time for the facility. The nighttime monitoring exceeds 6 NYCRR §360.19(j) noise levels limit however due to operating hours from 7:00am – 1:00am, almost none of the noise was the BBD facility, rather traffic due to surrounding business/industries. These nighttime ambient noise levels captured by monitoring resulted from approximately 8 tractor trailers and 150 passenger vehicles of non-facility traffic passing down Sawyer Ave as observed by B&L. During the one-hour monitoring period in the daytime, in comparison, only 14 vehicles (facility trucks and passenger vehicles for the start of shift) of facility traffic were observed which demonstrates the nighttime is not the result of Buffalo biodiesel's operation.

Based on the results of the Noise Survey and observations during collection of data the daytime and nighttime ambient noise is found to be in compliance with the §360.19(j) noise regulations for urban areas. There have been no changes in the facilities operations or activities since the noise survey was completed in 2022, and BBD does not anticipate changes to daily activities or processes in the future. In the event changes to operations or equipment BBD will update their Noise Survey accordingly.

8 CLOSURE PLAN

8.1 PURPOSE

This Facility Closure Plan is prepared as a stand-alone section of the Buffalo Biodiesel, Inc. (BBD) 6 NYCRR Part 360, §361.8 Operating Permit for the Used Cooking Oil and Yellow Grease Processing Facility located at 225 Sawyer Avenue, Town of Tonawanda, NY. The purpose of this plan is to outline the procedures and responsibilities for the safe, environmentally compliant, and orderly closure of the facility, ensuring protection of public health and the environment in accordance with applicable New York State Department of Environmental Conservation (NYSDEC) regulations.

8.2 CLOSURE TRIGGER EVENTS

- Permanent cessation of operations at the facility
- Revocation, expiration, or non-renewal of the operating permit
- Other circumstances requiring facility decommissioning as directed by NYSDEC

8.3 CLOSURE NOTIFICATION

BBD will notify NYSDEC in writing at least 30 days prior to the intended facility closure date. The notification will include the proposed schedule, reasons for closure, and contact information for the responsible personnel.

8.4 CLOSURE ACTIVITIES

8.4.1 Removal of Materials

- All used cooking oil, yellow grease, and associated residuals will be removed from tanks, containers, and processing equipment.
- Due to the current documented and assumed value of Used Cooking Oil (UCO) and Yellow Grease, it is anticipated that any product (i.e. UCO or Yellow Grease) remaining on site will be sold directly from the site. If any of the product cannot be sold, it will be disposed of with a company approved and authorized to receive and process UCO waste
- Materials will be managed and transported off-site for recycling, reuse, or disposal at authorized facilities.

8.4.2 Cleaning and Decontamination

- All process equipment, storage tanks, piping, floors, and containment areas will be cleaned to remove residues.

- Decontamination by steam pressure washing will be performed using appropriate methods to ensure no hazardous residue remains.
- Equipment (hoses, fittings, pumps, etc.) not sold or salvaged will be disposed of as solid waste.
- Any containers, shipping and storage will be sold directly from the Site.
- Any vehicles, tank trucks, vans, trailers, or other mobile equipment will be sold directly from the Site

8.4.3 Waste Management

- All solid and liquid wastes generated during closure will be handled in accordance with applicable federal, state, and local regulations.
- Documentation of waste characterization and disposal will be maintained for regulatory review.

8.4.4 Equipment and Infrastructure Removal

- Non-essential equipment, tanks, and infrastructure may be removed or decommissioned as required by the Property Owner or as directed by NYSDEC.
- Utility connections (water, electricity, gas) will be terminated in coordination with service providers.

8.4.5 Site Restoration

- All areas affected by facility operations will be inspected and restored to pre-operation conditions, to the extent practicable.
- Any soil or groundwater contamination identified during closure will be reported immediately and remediated in accordance with NYSDEC guidance.

8.5 Cost Breakdown

Rosalin Enterprise maintains an active contract with Buffalo Biodiesel, Inc. (BBD), evaluated as of December 1, 2025, which states that they will remove all materials listed in the agreement at no cost to BBD. The contract is included in Appendix M. Although the primary removal activities are covered under the Rosalin Enterprise contract, BBD has identified several ancillary activities required to ensure a complete, safe, and compliant facility closure. These additional tasks fall outside the scope of the existing contract and therefore require dedicated budgeting. Table 9 presents the estimated costs associated with these additional closure-related activities.

Table 9. **Closure Cost Summary (Ancillary Activities)**

Cost Item	Description	Estimated Cost (USD)
Cleaning Crew (Supervisor + 4 Workers for 2 Weeks)	Oversight of contractor activities and cleaning of any materials, equipment, or areas not included in the Rosalin Enterprise contract.	**$10,000**
Licensed HVAC Technician & Electrician Services	Disconnecting utilities, de-energizing equipment, securing electrical/HVAC systems, and ensuring all work meets NYS codes and safety requirements.	**$5,000**
Legal Fees	Legal review, contract support, closure documentation compliance, and regulatory coordination.	**$5,000**
Miscellaneous Costs	Unanticipated supplies, small equipment needs, PPE, disposal fees not covered under the existing contract.	**$5,000**
Total Estimated Additional Cost	—	**$25,000**

To ensure efficient and uninterrupted implementation of the Closure Plan, Buffalo Biodiesel, Inc. will set aside a dedicated Closure Contingency Fund of $25,000. This fund represents the total estimated cost of ancillary closure activities and is intended to cover the full scope of tasks not included in the Rosalin Enterprise contract.

8.6 Post-Closure Monitoring

If required by NYSDEC, BBD will implement post-closure monitoring for a period specified by the agency to confirm the effectiveness of closure activities and ensure continued protection of human health and the environment.

8.7 Recordkeeping and Reporting

- Comprehensive records of closure activities, waste disposal, cleaning, and site restoration will be maintained and made available to NYSDEC upon request.
- A final closure report will be submitted to NYSDEC within 60 days of completion of closure activities.

8.8 RESPONSIBLE PARTIES

BBD will designate a Closure Coordinator to be responsible for implementing this plan, coordinating with regulatory agencies, and ensuring compliance with all closure requirements.

8.9 CONTINGENCY MEASURES

Should unforeseen conditions arise during closure (e.g., discovery of contamination or structural issues), BBD will promptly notify NYSDEC and implement corrective actions in accordance with regulatory guidance.

8.10 REVISION AND UPDATES

This Facility Closure Plan will be reviewed and updated as necessary to remain consistent with regulatory requirements and operational changes. Any amendments will be submitted to NYSDEC for approval.

This Closure Plan is submitted as part of the 6 NYCRR Part 360/§361.8 Operating Permit Application for BBD and will be implemented upon facility decommissioning.

9 ANNUAL REPORTING

BBD will submit an annual report to the NYSDEC no later than March 1st of each year for the previous calendar year meeting the requirements of §360.19k. The annual report can be downloaded from the following link.

https://www.dec.ny.gov/docs/materials_minerals_pdf/ucoprocannrt.pdf.

The report will include a summary of the sources and quantities of unprocessed UCO and yellow grease. The report will highlight the daily, weekly and monthly averages of UCO and yellow grease collected from every zone. BBD operations have been divided into depots and zones. The drivers from each depot drive through their respective zones and haul oil back to the depot. If the NYSDEC requires BBD will provide a copy of oil pickup receipts/records for all oil pickups from the customers (i.e. restaurants, cafe, factories). The report will not contain any discussion of any radioactive waste detection equipment as the facility will only handle UCO and Yellow Grease.

In addition to documentation of UCO and yellow grease processed through the site, BBD shall have the following records in their report:

- Record of oil sold to the BBD clients.
    - BBD can also provide summary of total oil sold to BBD clients.
- Summary of all the other waste generated and disposed of offsite.
    - BBD will provide a volume of wastewater discharged to the Town of Tonawanda Sewer, the sludge hauled to the anaerobic digesters, and the solid waste pick-up by a third party (i.e. Republic Services Inc.)
- Record of all spills.
    - In the event of spill exceeding department thresholds for report, BBD will provide a detailed report on the actions taken to clean up the spill and preventative measures (training, change of process, equipment) implemented.

The president of the BBD, under the terms of the permit issued under Part 360 Regulations, will prepare, sign, and submit with the report the following certification:

"I certify, under penalty of law, that the data and other information identified in this report have been prepared under my direction and supervision in compliance with the system designed to ensure that qualified personnel properly and accurately gather and evaluate this information. I am aware that any false statement I make in such report is punishable pursuant to section 71-2703(2) of the Environmental Conservation Law and section 210.45 of the Penal Law."

10 POSITION STATEMENT (6 NYCRR §361-8)

BBD's application to operate a Used Cooking Oil (UCO) and Yellow Grease Processing Facility under NYSDEC Subpart 361-8 at 225 Sawyer Avenue, Town of Tonawanda, Erie County, New York, is consistent with the goals and objectives of New York State's Solid Waste Management Policy as identified in Environmental Conservation Law (ECL) §27-0106, the New York State Solid Waste Management Plan, and applicable Local Solid Waste Management Plans (LSWMPs).

10.1 Advancement of ECL §27-0106 Solid Waste Management Policy

The proposed facility directly supports the State's policy to reduce the volume of solid waste requiring disposal, with a strong emphasis on diversion from thermal treatment and landfilling. By collecting and processing UCO and yellow grease into renewable biodiesel, the facility prevents these materials from entering the waste stream and instead channels them into beneficial reuse, consistent with the hierarchy of waste reduction, reuse, and recycling outlined in ECL §27-0106.

10.2 Alignment with the NYS Solid Waste Management Plan

BBD's operations contribute to the goals of the New York State Solid Waste Management Plan by:

- Supporting organics recovery and material reuse strategies.
- Reducing greenhouse gas emissions through the production of low-carbon biofuels.
- Enhancing infrastructure for non-disposal alternatives to manage organic waste streams.
- Promoting private-sector innovation in sustainable waste management.

10.3 Consistency with Erie County's Department-Approved LSWMP

The facility's location in Erie County ensures its operations are aligned with the county's approved LSWMP, which prioritizes:

- Diversion of organic materials from disposal.
- Development of regional processing capacity.
- Support for environmentally responsible waste handling and transportation practices.

10.4 Support for Municipal LSWMPs Across New York State

BBD services municipalities throughout New York State. In areas where a department-approved LSWMP is in effect, the facility's operations are consistent with local goals to divert organic waste, reduce reliance on disposal, and promote sustainable reuse. In municipalities where no LSWMP is currently in effect, the application remains consistent

with a NYSDEC-approved Comprehensive Recycling Analysis (CRA), ensuring that the facility's activities meet the State's minimum recycling and diversion standards.

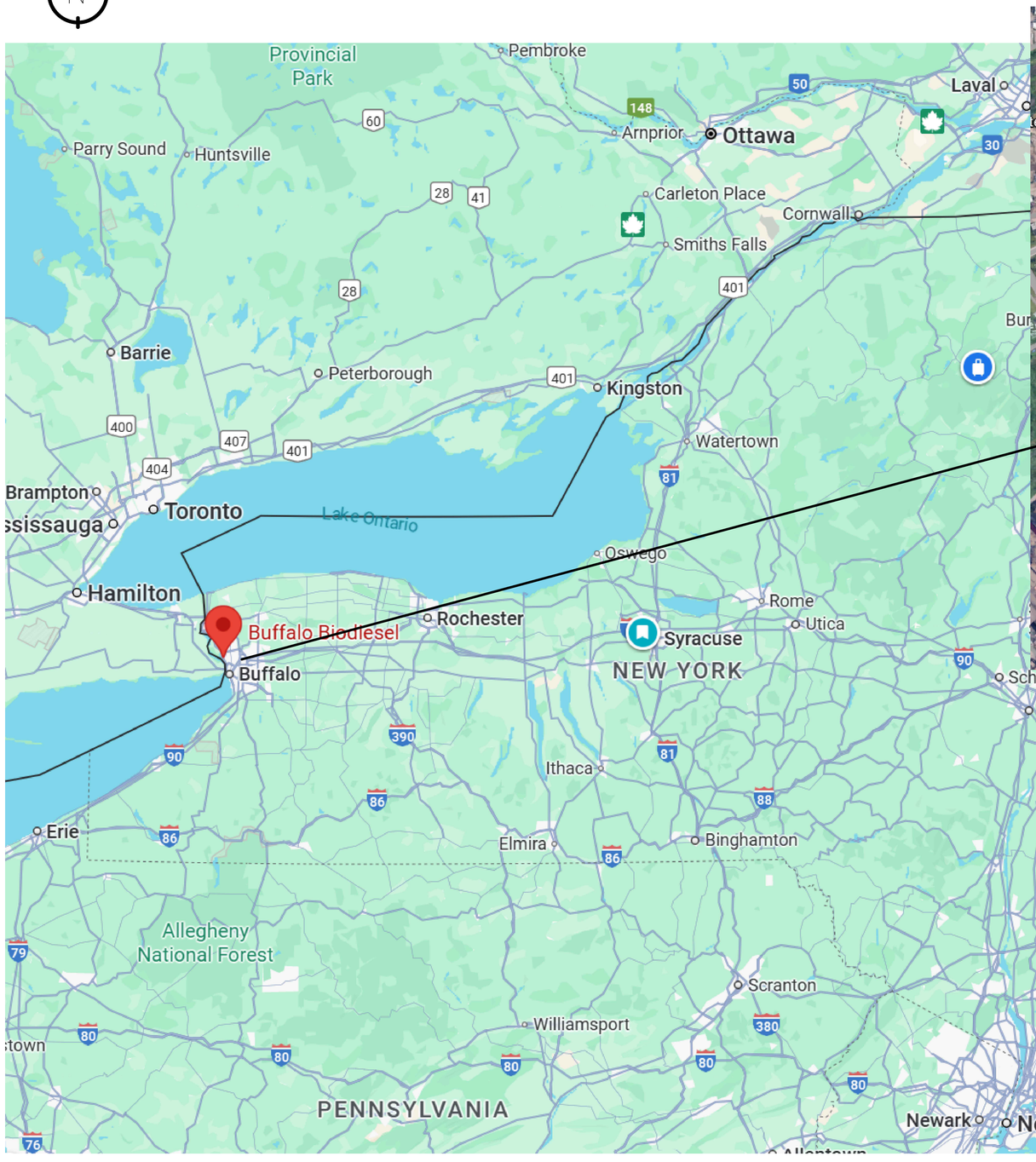
10.5 Contribution to Statewide Diversion and Climate Goals

By transforming UCO and yellow grease into biodiesel, the facility:

- Reduces the environmental burden of waste disposal.
- Supports New York's Climate Leadership and Community Protection Act (CLCPA) goals.
- Enhances statewide resilience through decentralized waste processing infrastructure.

This position statement affirms that BBD's proposed facility is not only compliant with regulatory requirements but also strategically aligned with New York State's environmental, economic, and climate objectives.

APPENDIX A
FIGURES 1-13



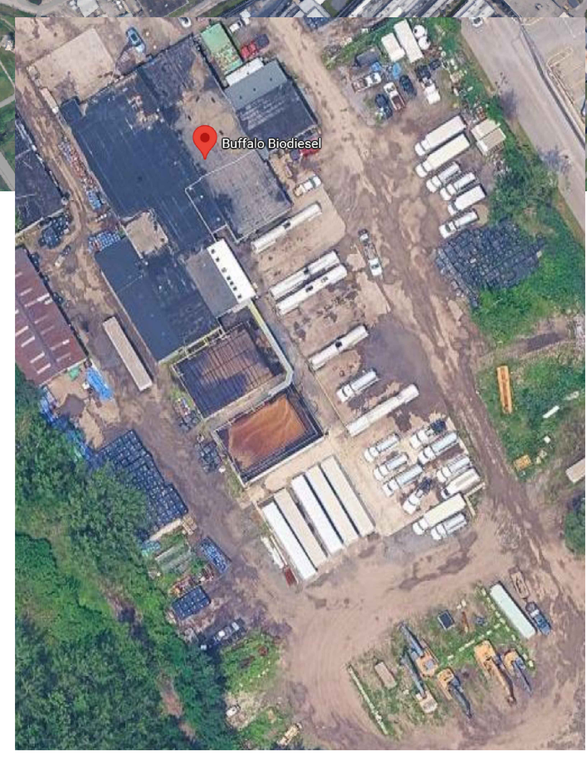


FIGURE 1
REGIONAL LOCATION PLAN
SCALE: NTS

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

LAKESIDE DESIGN ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120

LDE Civil / Structural Engineering

AFI ENVIRONMENTAL

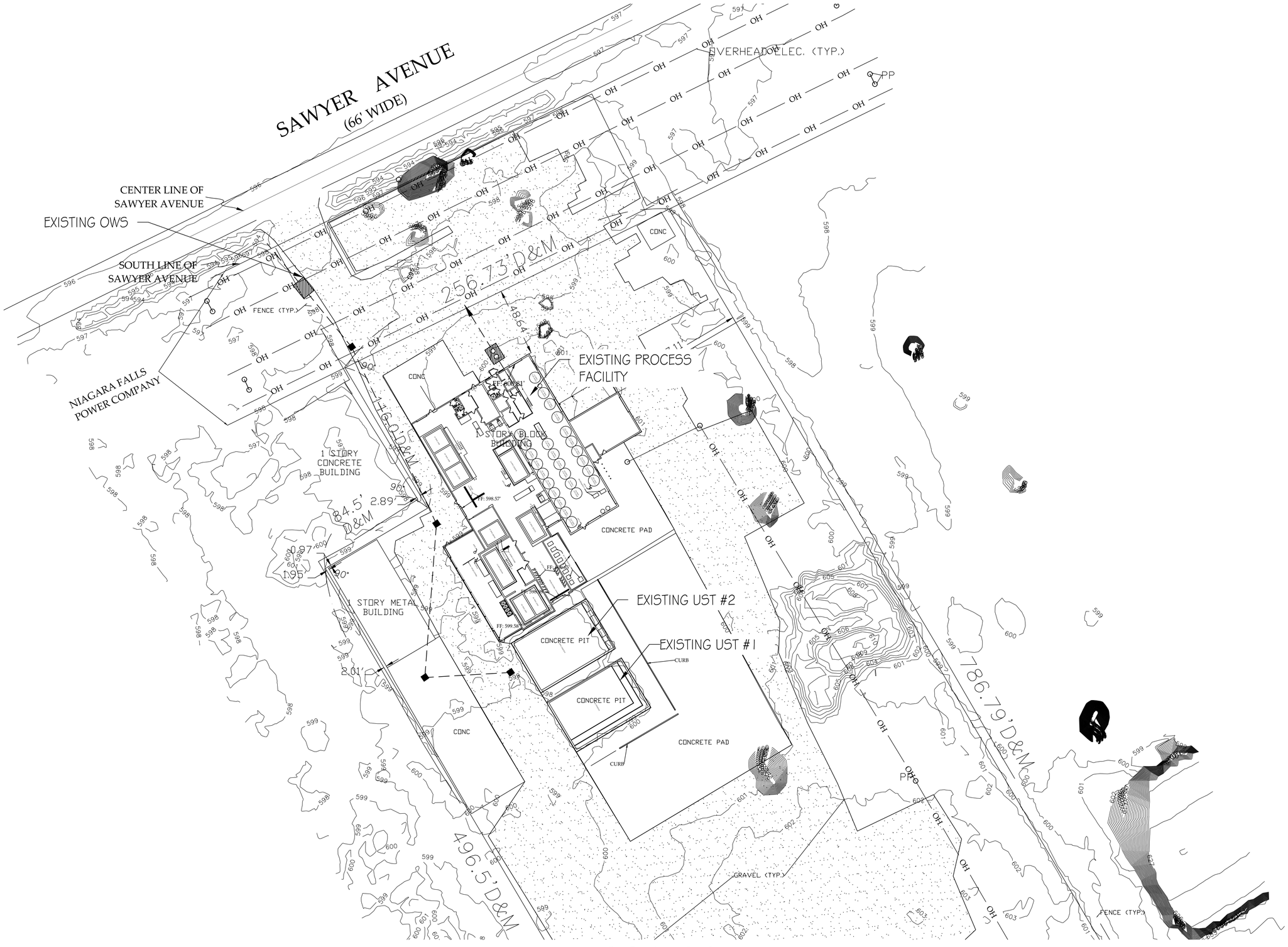


FIGURE 2
EXISTING SITE PLAN
SCALE: NTS

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

LAKESIDE DESIGN
ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120

LDE Civil / Structural Engineering

AFI ENVIRONMENTAL

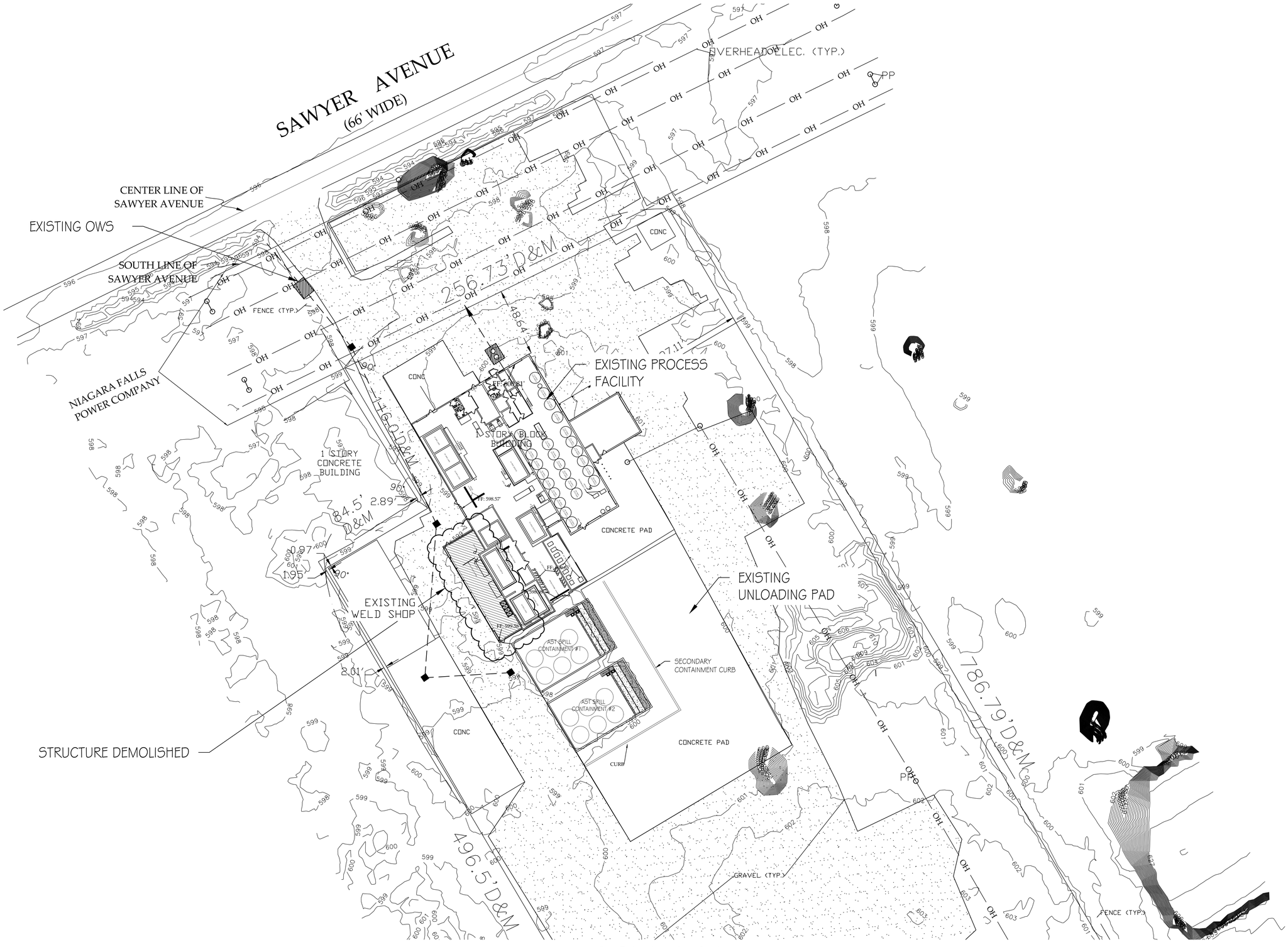


FIGURE 2A
PROPOSED SITE PLAN
SCALE: NTS

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

LAKESIDE DESIGN
ENGINEERING, DPC
2891 PEARCE RD
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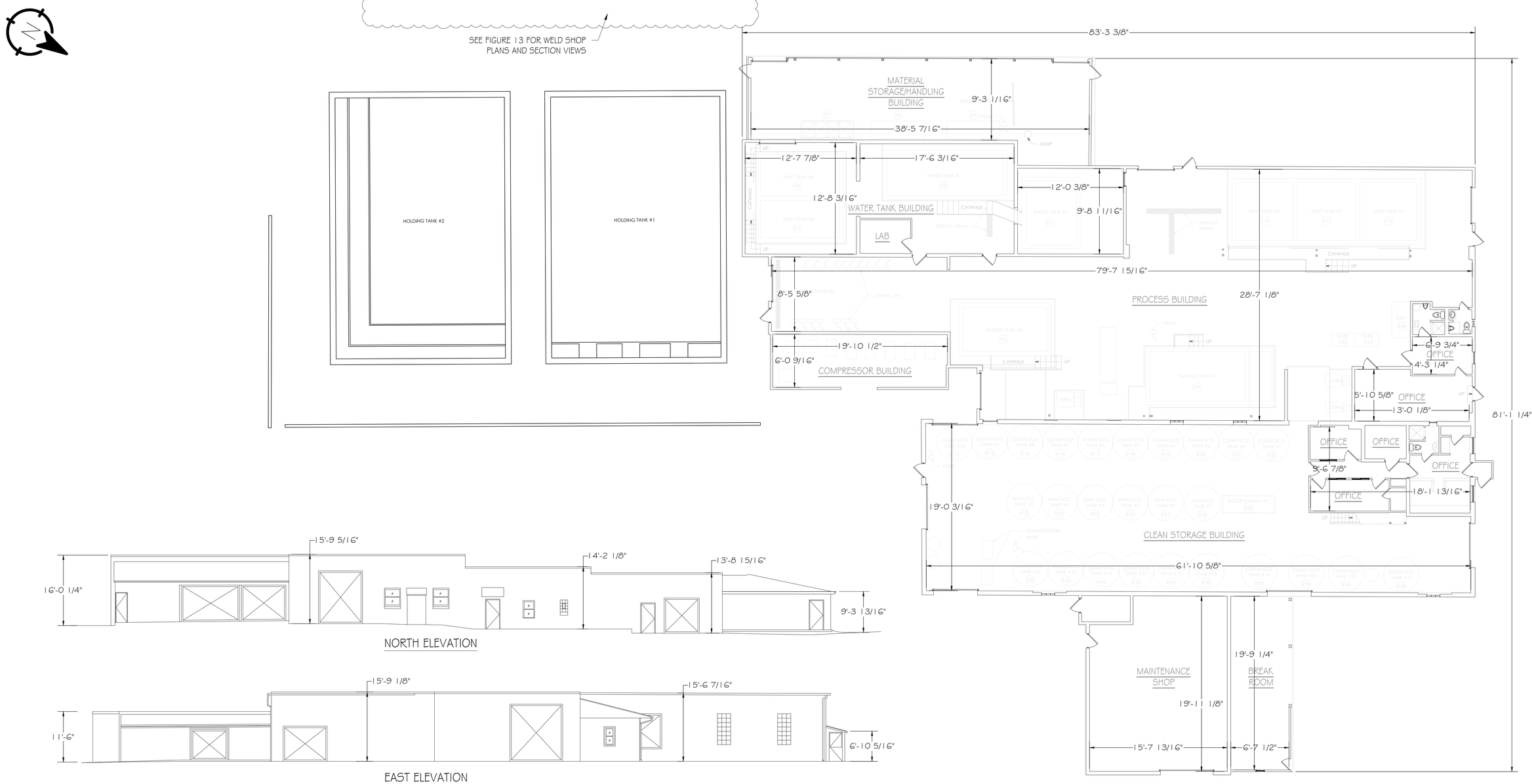

FIGURE 3
EXISTING MAIN PROCESSING PLANT BUILDING PLANS

SCALE: 3/32"= 1'-0"

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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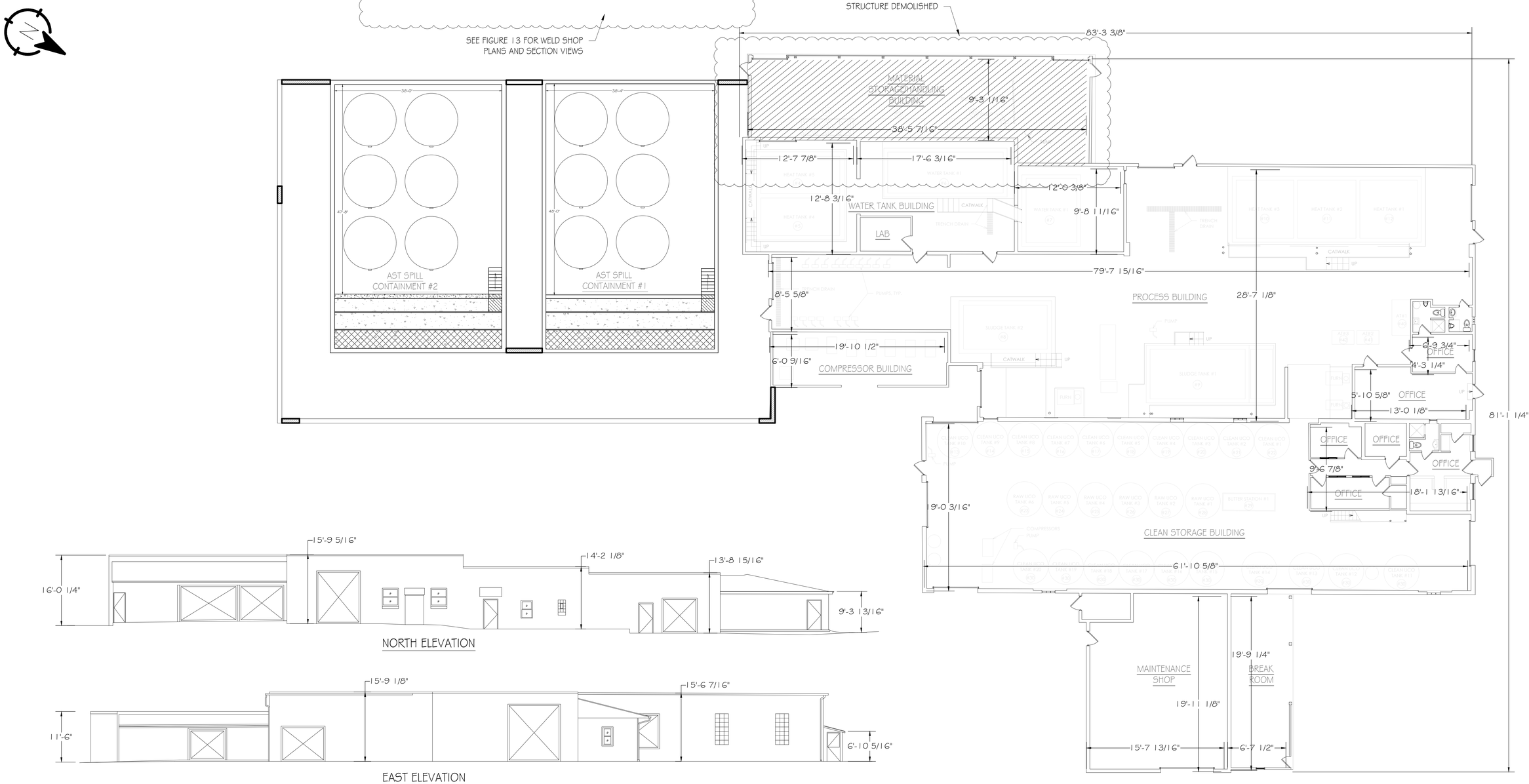

FIGURE 3A
PROPOSED FACILITY LAYOUT PLAN
SCALE: 3/32"= 1'-0"

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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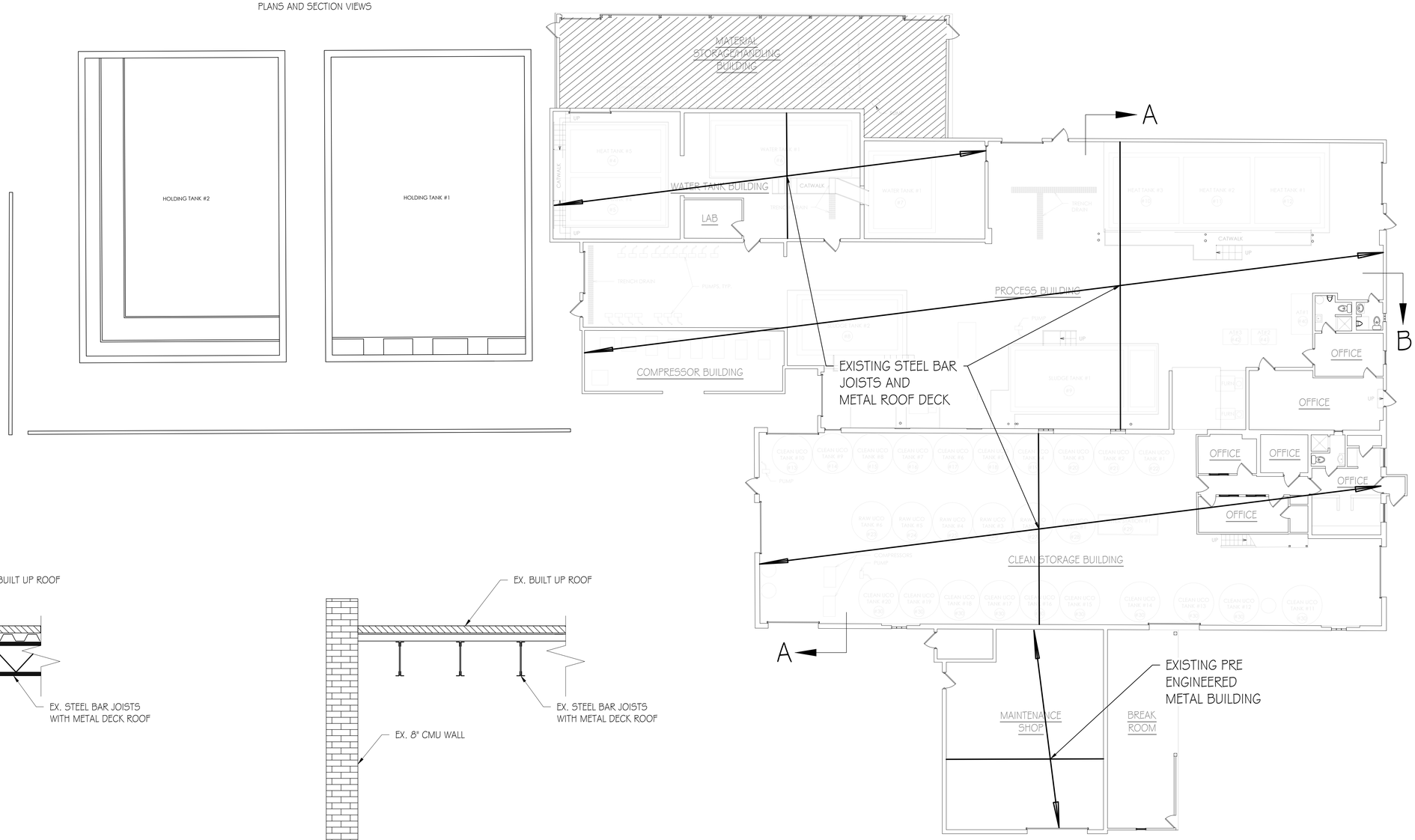
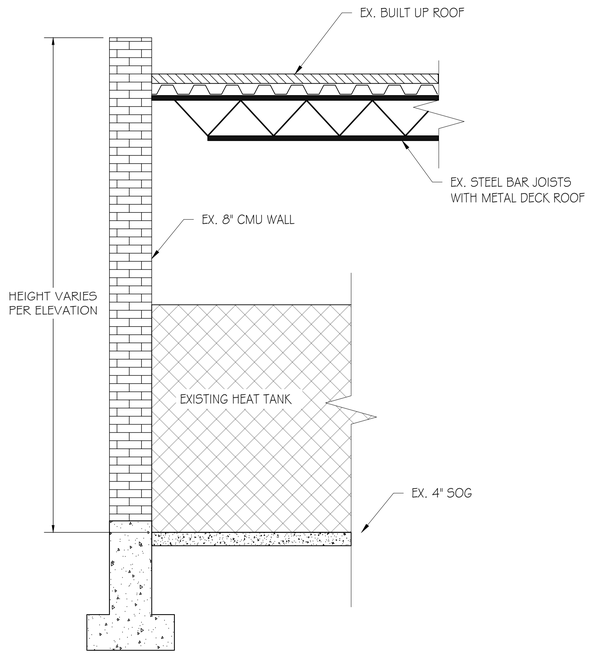
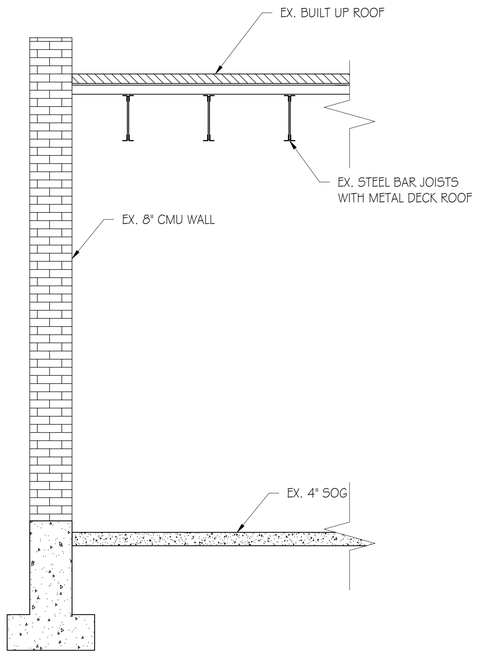
SEE FIGURE 13 FOR WELD SHOP
PLANS AND SECTION VIEWS





SECTION "A"
SCALE: NTS



SECTION "B"
SCALE: NTS

FIGURE 3B
EXISTING STRUCTURAL FRAMING PLAN
SCALE: 3/32"= 1'-0"

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

LAKESIDE DESIGN ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120

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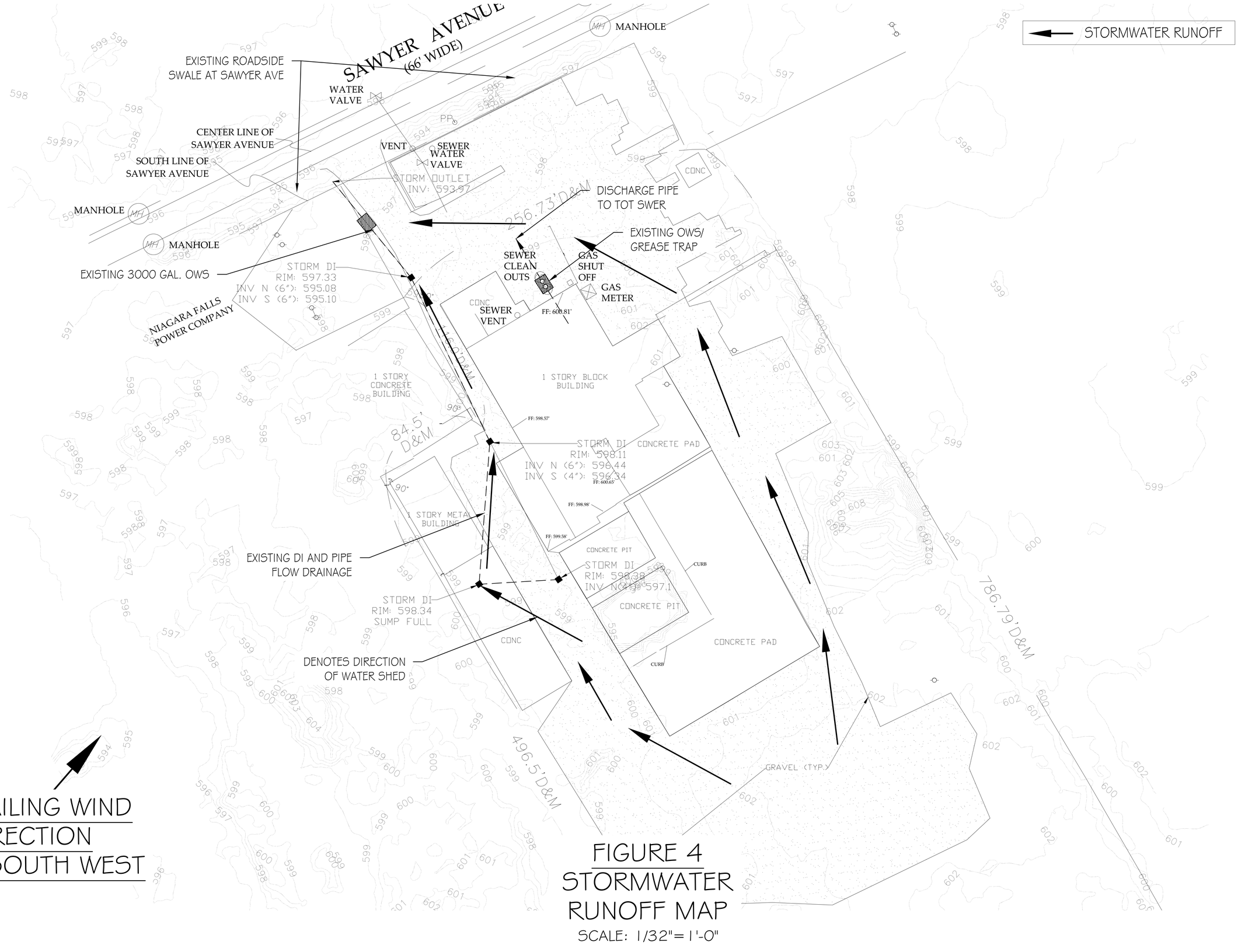

FIGURE 4
STORMWATER RUNOFF MAP

SCALE: 1/32"=1'-0"

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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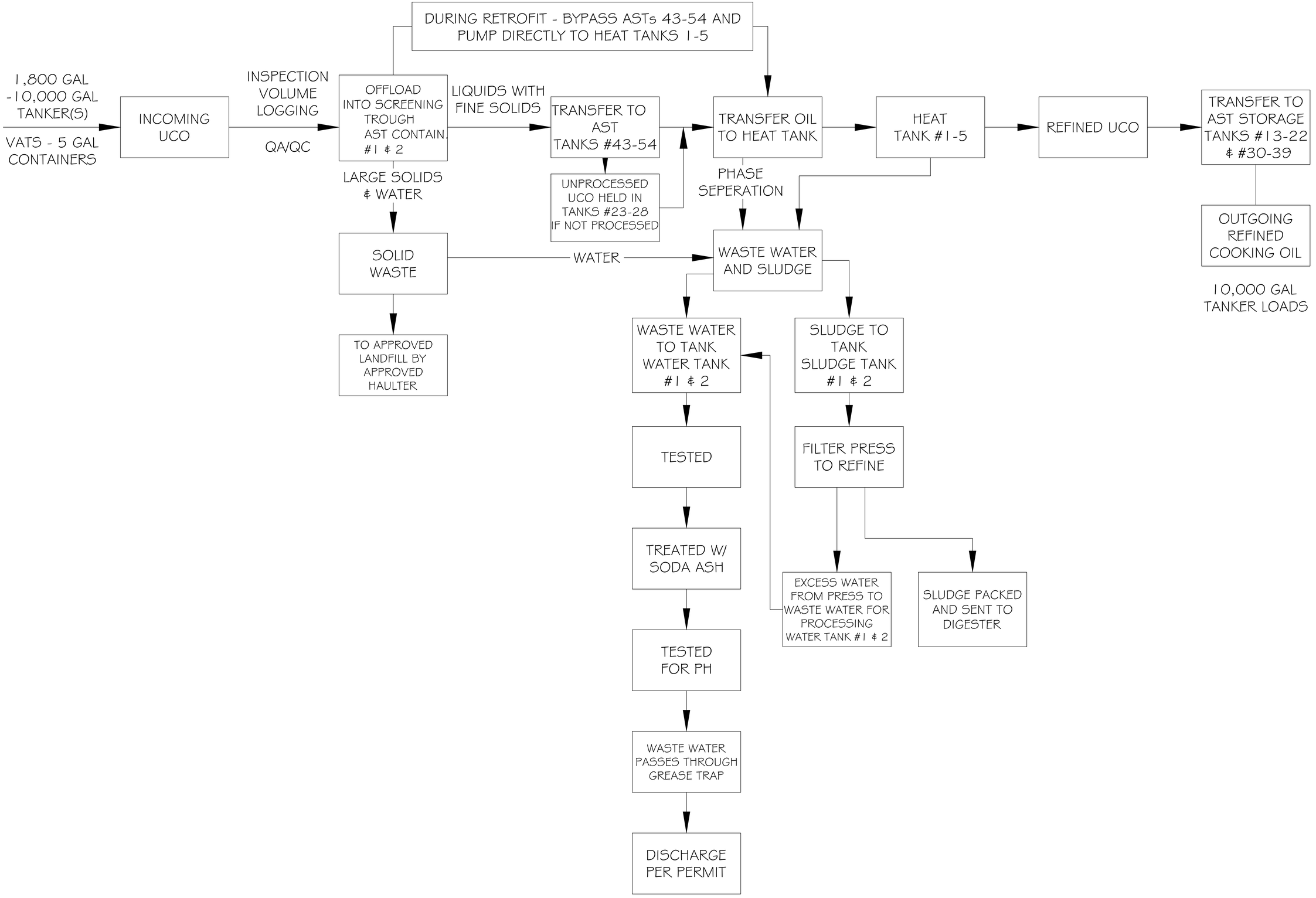

FIGURE 5
PROCESS FLOW

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

LAKESIDE DESIGN ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120

LDE Civil / Structural Engineering

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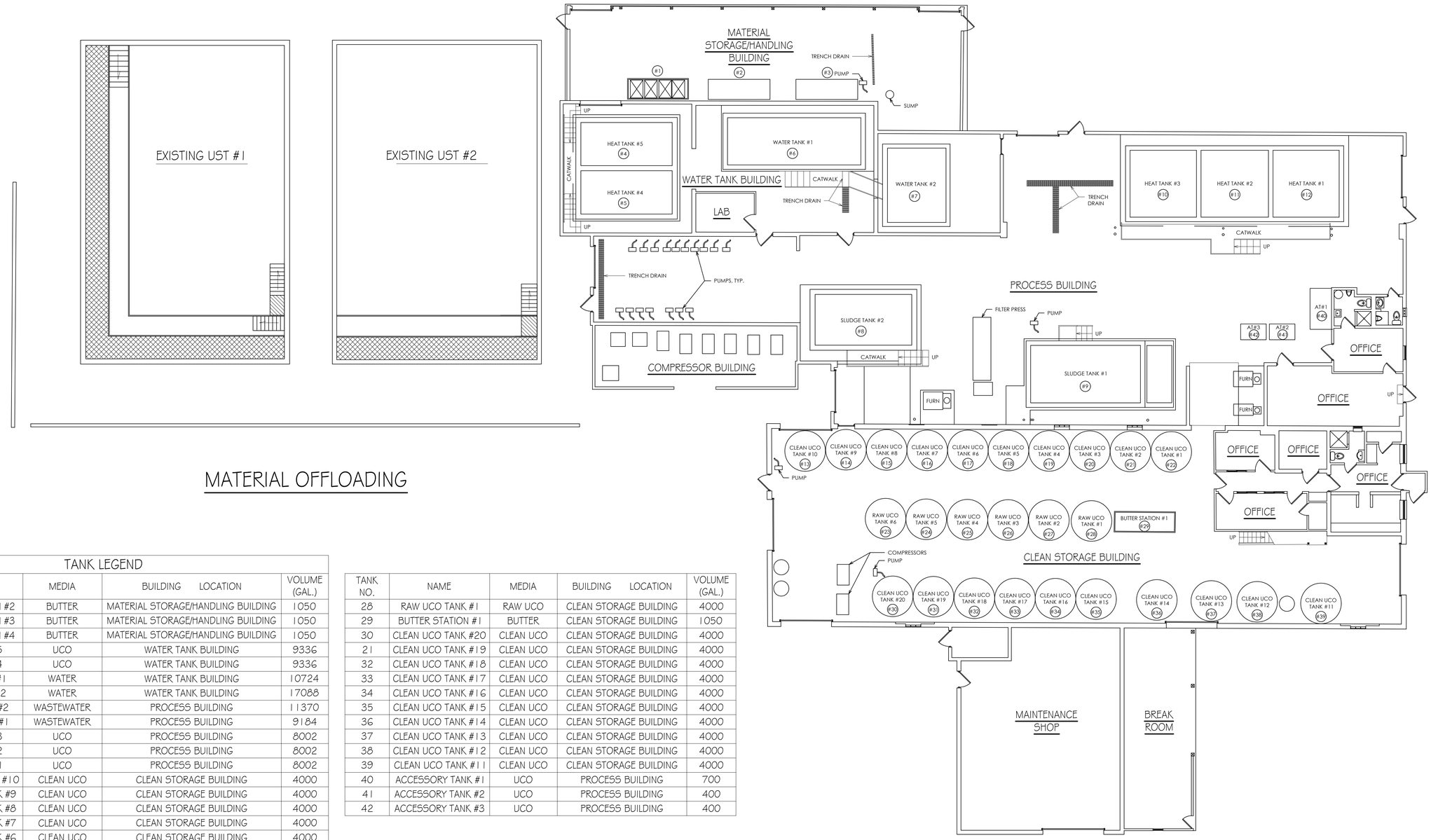

MATERIAL OFFLOADING

TANK LEGEND

TANK NO.	NAME	MEDIA	BUILDING LOCATION	VOLUME (GAL.)
1	BUTTER STATION #2	BUTTER	MATERIAL STORAGE/HANDLING BUILDING	1050
2	BUTTER STATION #3	BUTTER	MATERIAL STORAGE/HANDLING BUILDING	1050
3	BUTTER STATION #4	BUTTER	MATERIAL STORAGE/HANDLING BUILDING	1050
4	HEAT TANK #5	UCO	WATER TANK BUILDING	9336
5	HEAT TANK #4	UCO	WATER TANK BUILDING	9336
6	WATER TANK #1	WATER	WATER TANK BUILDING	10724
7	WATER TANK #2	WATER	WATER TANK BUILDING	17088
8	SLUDGE TANK #2	WASTEWATER	PROCESS BUILDING	11370
9	SLUDGE TANK #1	WASTEWATER	PROCESS BUILDING	9184
10	HEAT TANK #3	UCO	PROCESS BUILDING	8002
11	HEAT TANK #2	UCO	PROCESS BUILDING	8002
12	HEAT TANK #1	UCO	PROCESS BUILDING	8002
13	CLEAN UCO TANK #10	CLEAN UCO	CLEAN STORAGE BUILDING	4000
14	CLEAN UCO TANK #9	CLEAN UCO	CLEAN STORAGE BUILDING	4000
15	CLEAN UCO TANK #8	CLEAN UCO	CLEAN STORAGE BUILDING	4000
16	CLEAN UCO TANK #7	CLEAN UCO	CLEAN STORAGE BUILDING	4000
17	CLEAN UCO TANK #6	CLEAN UCO	CLEAN STORAGE BUILDING	4000
18	CLEAN UCO TANK #5	CLEAN UCO	CLEAN STORAGE BUILDING	4000
19	CLEAN UCO TANK #4	CLEAN UCO	CLEAN STORAGE BUILDING	4000
20	CLEAN UCO TANK #3	CLEAN UCO	CLEAN STORAGE BUILDING	4000
21	CLEAN UCO TANK #2	CLEAN UCO	CLEAN STORAGE BUILDING	4000
22	CLEAN UCO TANK #1	CLEAN UCO	CLEAN STORAGE BUILDING	4000
23	RAW UCO TANK #6	RAW UCO	CLEAN STORAGE BUILDING	4000
24	RAW UCO TANK #5	RAW UCO	CLEAN STORAGE BUILDING	4000
25	RAW UCO TANK #4	RAW UCO	CLEAN STORAGE BUILDING	4000
26	RAW UCO TANK #3	RAW UCO	CLEAN STORAGE BUILDING	4000
27	RAW UCO TANK #2	RAW UCO	CLEAN STORAGE BUILDING	4000

TANK NO.	NAME	MEDIA	BUILDING LOCATION	VOLUME (GAL.)
28	RAW UCO TANK #1	RAW UCO	CLEAN STORAGE BUILDING	4000
29	BUTTER STATION #1	BUTTER	CLEAN STORAGE BUILDING	1050
30	CLEAN UCO TANK #20	CLEAN UCO	CLEAN STORAGE BUILDING	4000
21	CLEAN UCO TANK #19	CLEAN UCO	CLEAN STORAGE BUILDING	4000
32	CLEAN UCO TANK #18	CLEAN UCO	CLEAN STORAGE BUILDING	4000
33	CLEAN UCO TANK #17	CLEAN UCO	CLEAN STORAGE BUILDING	4000
34	CLEAN UCO TANK #16	CLEAN UCO	CLEAN STORAGE BUILDING	4000
35	CLEAN UCO TANK #15	CLEAN UCO	CLEAN STORAGE BUILDING	4000
36	CLEAN UCO TANK #14	CLEAN UCO	CLEAN STORAGE BUILDING	4000
37	CLEAN UCO TANK #13	CLEAN UCO	CLEAN STORAGE BUILDING	4000
38	CLEAN UCO TANK #12	CLEAN UCO	CLEAN STORAGE BUILDING	4000
39	CLEAN UCO TANK #11	CLEAN UCO	CLEAN STORAGE BUILDING	4000
40	ACCESSORY TANK #1	UCO	PROCESS BUILDING	700
41	ACCESSORY TANK #2	UCO	PROCESS BUILDING	400
42	ACCESSORY TANK #3	UCO	PROCESS BUILDING	400

FIGURE 6
EXISTING TANK LAYOUT PLAN
SCALE: NTS

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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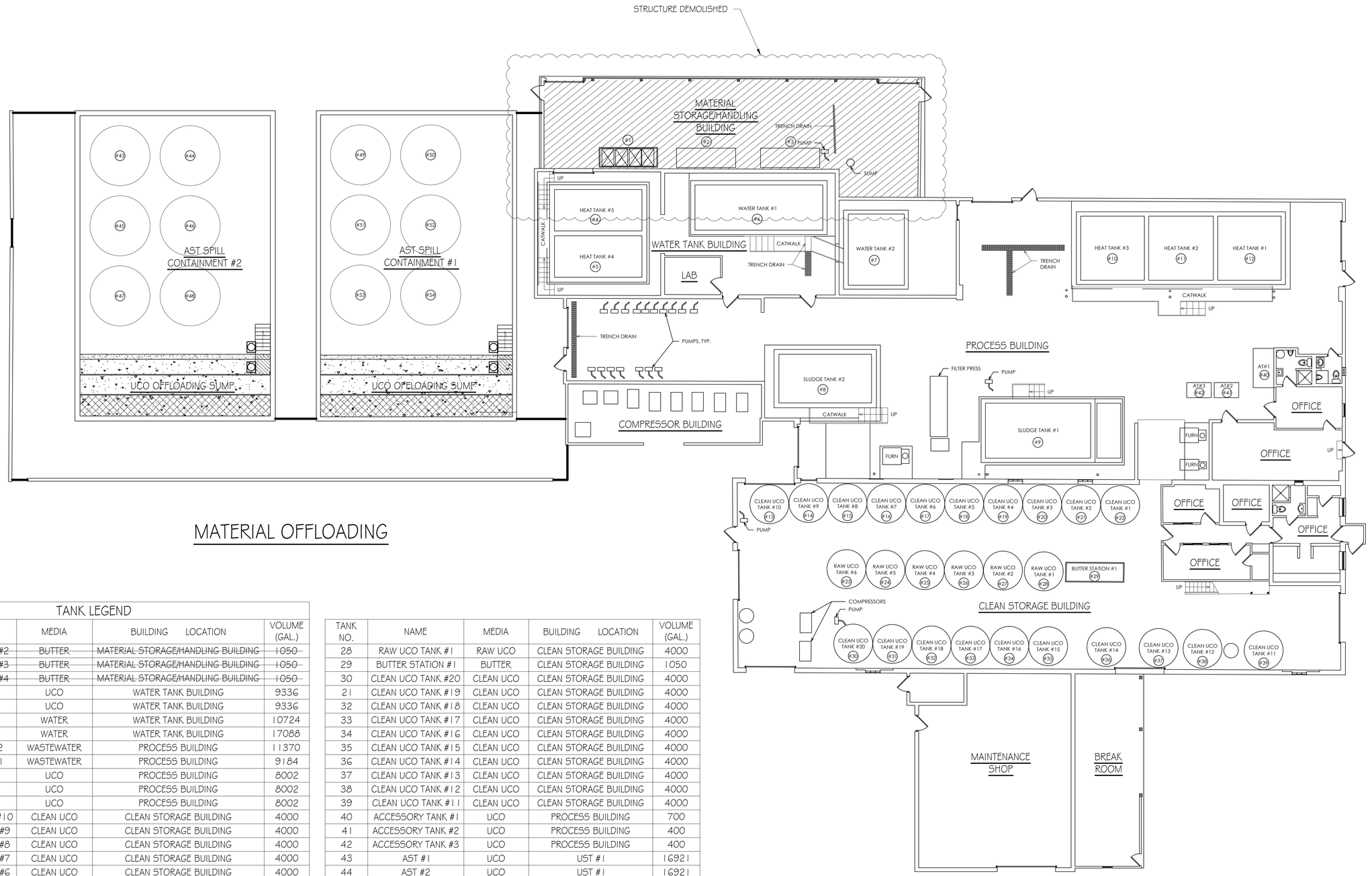

MATERIAL OFFLOADING

TANK LEGEND

TANK NO.	NAME	MEDIA	BUILDING LOCATION	VOLUME (GAL.)
1 *	~~BUTTER STATION #2~~	~~BUTTER~~	~~MATERIAL STORAGE/HANDLING BUILDING~~	~~1050~~
2 *	~~BUTTER STATION #3~~	~~BUTTER~~	~~MATERIAL STORAGE/HANDLING BUILDING~~	~~1050~~
3 *	~~BUTTER STATION #4~~	~~BUTTER~~	~~MATERIAL STORAGE/HANDLING BUILDING~~	~~1050~~
4	HEAT TANK #5	UCO	WATER TANK BUILDING	9336
5	HEAT TANK #4	UCO	WATER TANK BUILDING	9336
6	WATER TANK #1	WATER	WATER TANK BUILDING	10724
7	WATER TANK #2	WATER	WATER TANK BUILDING	17088
8	SLUDGE TANK #2	WASTEWATER	PROCESS BUILDING	11370
9	SLUDGE TANK #1	WASTEWATER	PROCESS BUILDING	9184
10	HEAT TANK #3	UCO	PROCESS BUILDING	8002
11	HEAT TANK #2	UCO	PROCESS BUILDING	8002
12	HEAT TANK #1	UCO	PROCESS BUILDING	8002
13	CLEAN UCO TANK #10	CLEAN UCO	CLEAN STORAGE BUILDING	4000
14	CLEAN UCO TANK #9	CLEAN UCO	CLEAN STORAGE BUILDING	4000
15	CLEAN UCO TANK #8	CLEAN UCO	CLEAN STORAGE BUILDING	4000
16	CLEAN UCO TANK #7	CLEAN UCO	CLEAN STORAGE BUILDING	4000
17	CLEAN UCO TANK #6	CLEAN UCO	CLEAN STORAGE BUILDING	4000
18	CLEAN UCO TANK #5	CLEAN UCO	CLEAN STORAGE BUILDING	4000
19	CLEAN UCO TANK #4	CLEAN UCO	CLEAN STORAGE BUILDING	4000
20	CLEAN UCO TANK #3	CLEAN UCO	CLEAN STORAGE BUILDING	4000
21	CLEAN UCO TANK #2	CLEAN UCO	CLEAN STORAGE BUILDING	4000
22	CLEAN UCO TANK #1	CLEAN UCO	CLEAN STORAGE BUILDING	4000
23	RAW UCO TANK #6	RAW UCO	CLEAN STORAGE BUILDING	4000
24	RAW UCO TANK #5	RAW UCO	CLEAN STORAGE BUILDING	4000
25	RAW UCO TANK #4	RAW UCO	CLEAN STORAGE BUILDING	4000
26	RAW UCO TANK #3	RAW UCO	CLEAN STORAGE BUILDING	4000
27	RAW UCO TANK #2	RAW UCO	CLEAN STORAGE BUILDING	4000

TANK NO.	NAME	MEDIA	BUILDING LOCATION	VOLUME (GAL.)
28	RAW UCO TANK #1	RAW UCO	CLEAN STORAGE BUILDING	4000
29	BUTTER STATION #1	BUTTER	CLEAN STORAGE BUILDING	1050
30	CLEAN UCO TANK #20	CLEAN UCO	CLEAN STORAGE BUILDING	4000
21	CLEAN UCO TANK #19	CLEAN UCO	CLEAN STORAGE BUILDING	4000
32	CLEAN UCO TANK #18	CLEAN UCO	CLEAN STORAGE BUILDING	4000
33	CLEAN UCO TANK #17	CLEAN UCO	CLEAN STORAGE BUILDING	4000
34	CLEAN UCO TANK #16	CLEAN UCO	CLEAN STORAGE BUILDING	4000
35	CLEAN UCO TANK #15	CLEAN UCO	CLEAN STORAGE BUILDING	4000
36	CLEAN UCO TANK #14	CLEAN UCO	CLEAN STORAGE BUILDING	4000
37	CLEAN UCO TANK #13	CLEAN UCO	CLEAN STORAGE BUILDING	4000
38	CLEAN UCO TANK #12	CLEAN UCO	CLEAN STORAGE BUILDING	4000
39	CLEAN UCO TANK #11	CLEAN UCO	CLEAN STORAGE BUILDING	4000
40	ACCESSORY TANK #1	UCO	PROCESS BUILDING	700
41	ACCESSORY TANK #2	UCO	PROCESS BUILDING	400
42	ACCESSORY TANK #3	UCO	PROCESS BUILDING	400
43	AST #1	UCO	UST #1	16921
44	AST #2	UCO	UST #1	16921
45	AST #3	UCO	UST #1	16921
46	AST #4	UCO	UST #1	16921
47	AST #5	UCO	UST #1	16921
48	AST #6	UCO	UST #1	16921
49	AST #7	UCO	UST #2	16921
50	AST #8	UCO	UST #2	16921
51	AST #9	UCO	UST #2	16921
52	AST #10	UCO	UST #2	16921
53	AST #11	UCO	UST #2	16921
54	AST #12	UCO	UST #2	16921

* INDICATES TANK TO BE REMOVED FROM SERVICE 11-18-2025

FIGURE 6A
PROPOSED TANK LAYOUT PLAN
SCALE: NTS

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

LAKESIDE DESIGN ENGINEERING, DPC
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NOTES:

1.) REFER TO SITE PLAN DWG-002 LOCATION.

2.) REFER TO GENERAL NOTES DWG-003 FOR ADDITIONAL INFO.

3.) REFER TO DETAILS ON DWG-006 FOR ADDITIONAL INFO.

4.) ALL NEW AST'S SHALL BE RETROFIT WITH THE FOLLOWING DEVICES FOR OVERFILL PROTECTION PER EACH TANK:
A. CONTINUOUS WIRE LEVEL MONITORING (ME 201W)
B. VEVOR SS-SWA01 LOCAL HIGH-LEVEL ALARM UNITS WITH FLOAT SWITCHES.

AST#1 CONTAINMENT VOLUME W/ NEW SEPARATION WALL:

EMPTY CONTAINMENT VOLUME: 7,360FT³ = 55,056 GAL

(6)400 BARREL FRAC TANKS VOLUME OCCUPIED: 2,714 FT³ = 20,302 GAL

TOTAL CONTAINMENT VOLUME: 4,646 FT³ = 34,754 GAL

(1) 400 BARREL TANK CAPACITY: 2,262 FT³ = 16,921 GAL

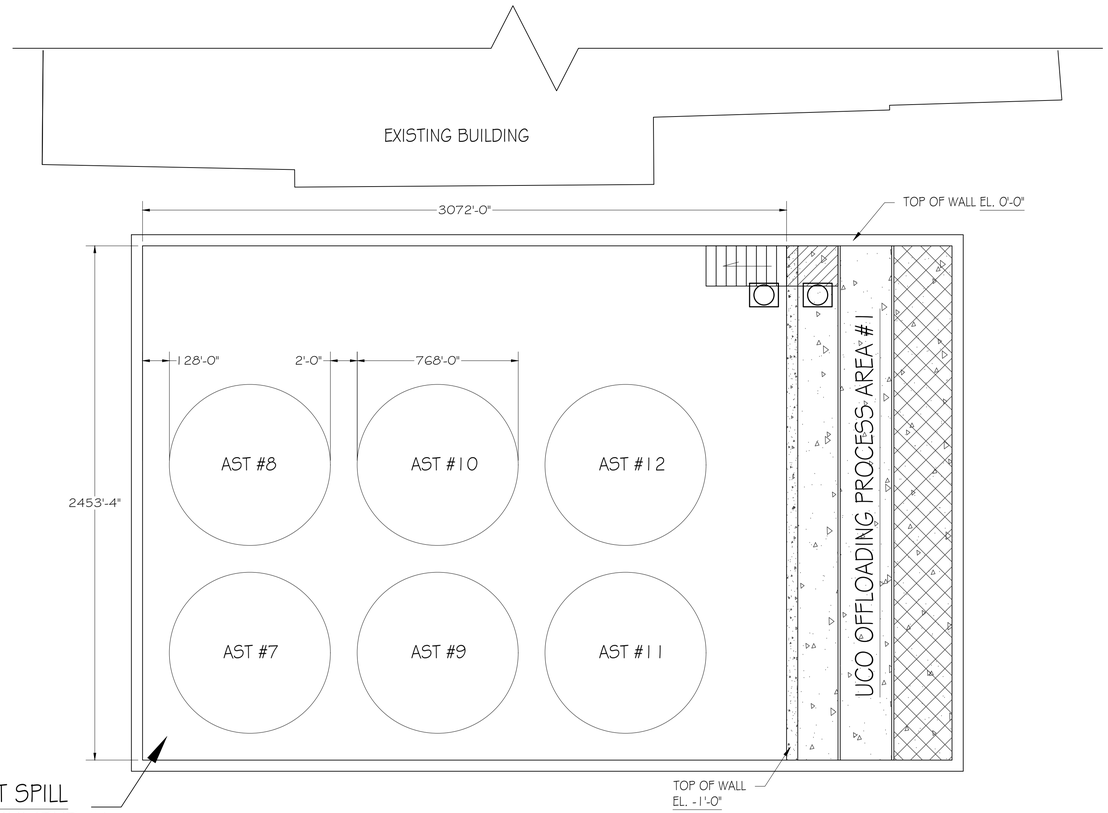
AST#2 CONTAINMENT VOLUME W/ NEW SEPARATION WALL:

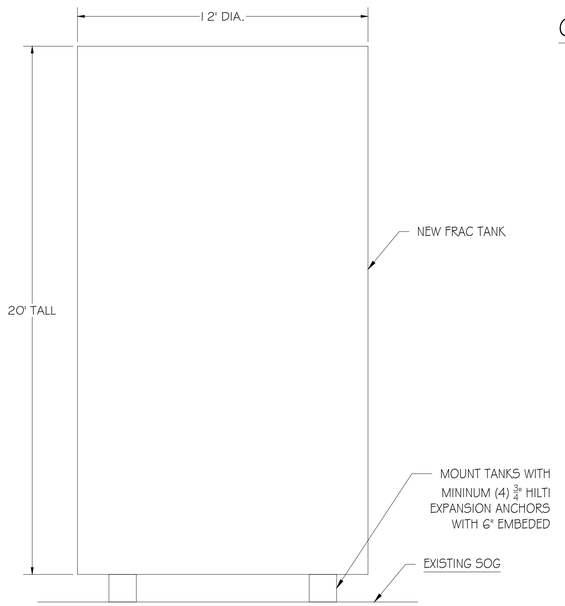
EMPTY CONTAINMENT VOLUME: 9,128 FT³ = 68,282 GAL

(6)400 BARREL FRAC TANKS VOLUME OCCUPIED: 3,393 FT³ = 25,381 GAL

TOTAL CONTAINMENT VOLUME: 5,735 FT³ = 42,901 GAL

(1) 400 BARREL TANK CAPACITY: 2,262 FT³ = 16,921 GAL





NEW FRAC TANK ELEVATION

NEW AFC FRAC TANK SPECIFICATION:

FIGURE 7
NEW AST LAYOUT PLAN
SCALE: 3/16"=1'-0"

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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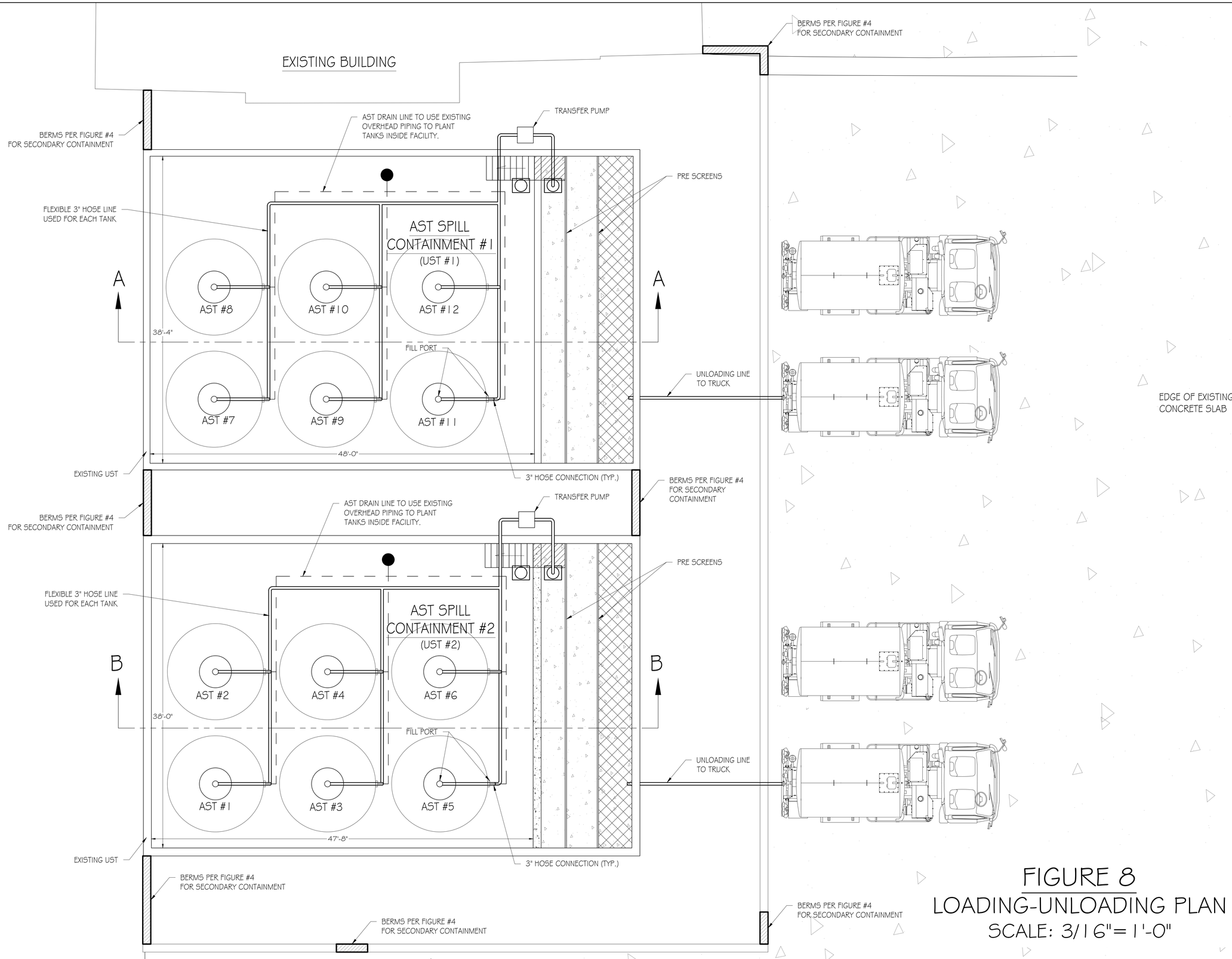

FIGURE 8
LOADING-UNLOADING PLAN
SCALE: 3/16"=1'-0"

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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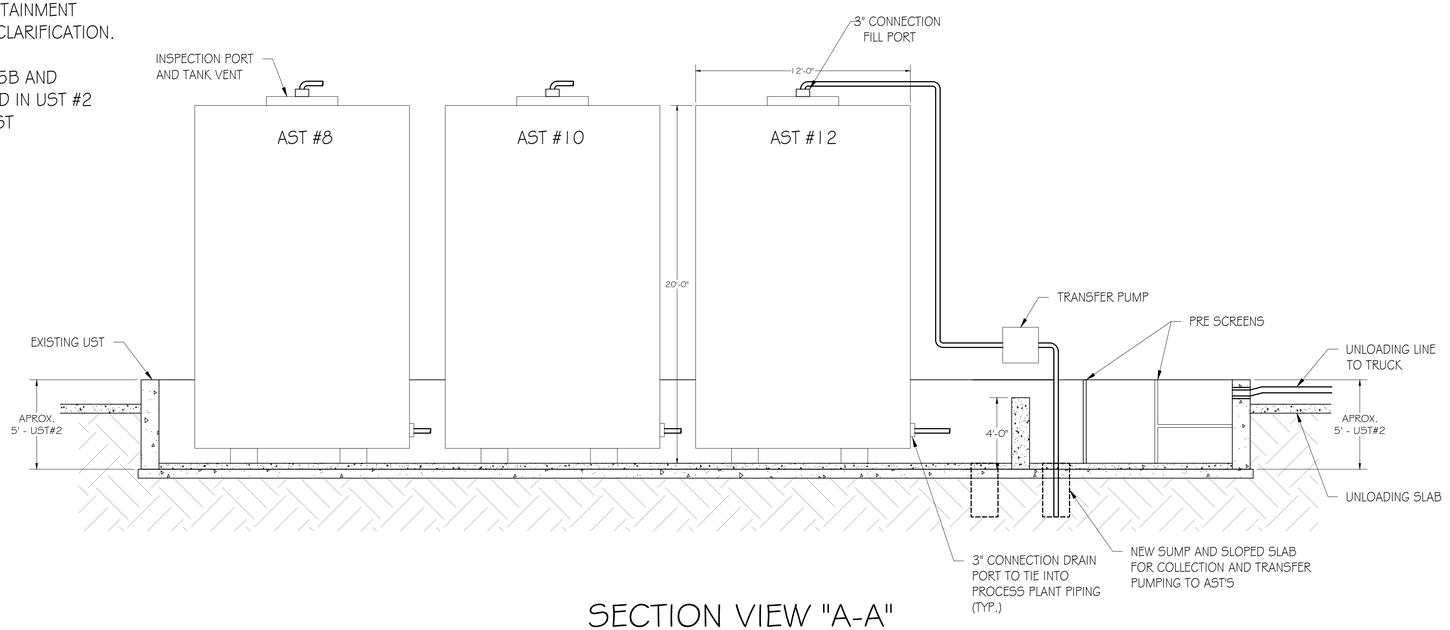
ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120

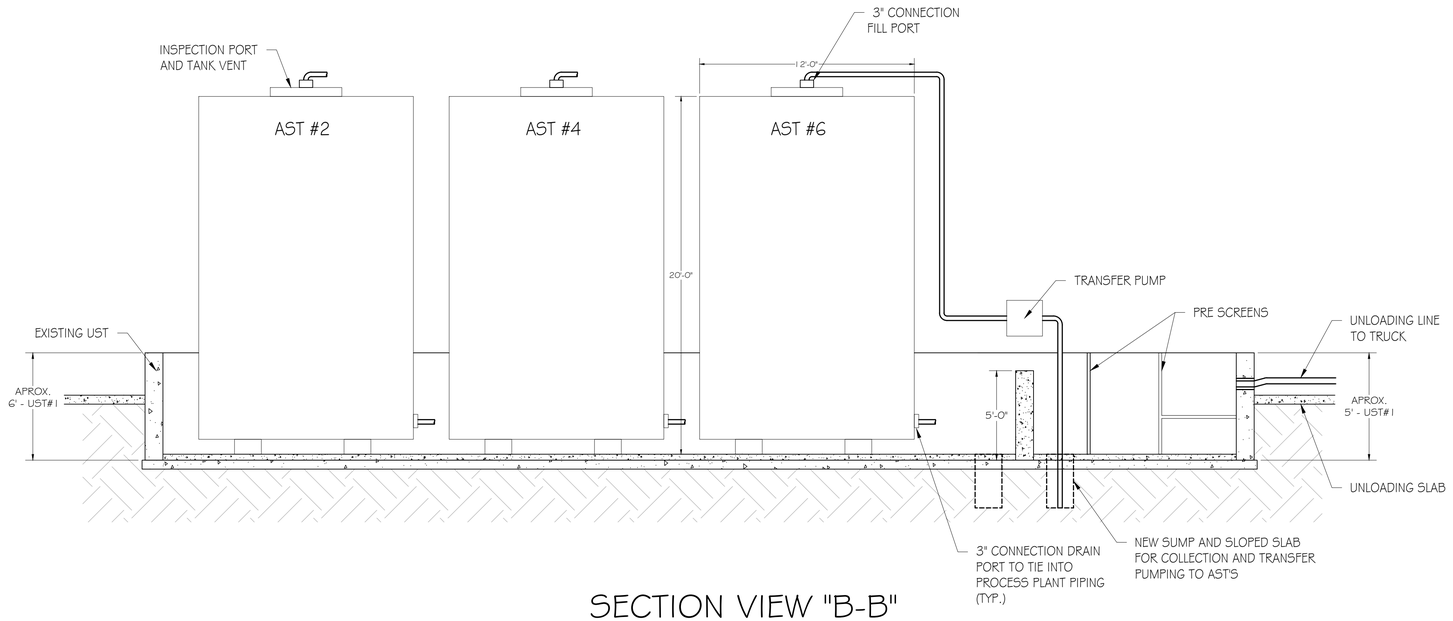
NOTES:

1.) UST #1 AND UST #2 RETROFIT ARE IDENTICAL WITH THE EXCEPTION THAT UST #2 IS 1' DEEPER AND THE UNLOADING CONTAINMENT WALL IS 1' TALLER. REFER TO NOTES ON PLANS FOR CLARIFICATION.

2.) UST #2 WILL BE RETROFIT AS SHOWN IN FIGURES 3-5B AND DRAWINGS 001-006. AST TANKS 1-6 WILL BE PLACED IN UST #2 CONTAINMENT. AST #7-12 WILL BE PLACED IN THE UST #1 CONTAINMENT.



SECTION VIEW "A-A"
(UST #1)



SECTION VIEW "B-B"
(UST #2)

FIGURE 9
UST RETROFIT SECTIONS
SCALE: 1/4"=1'-0"

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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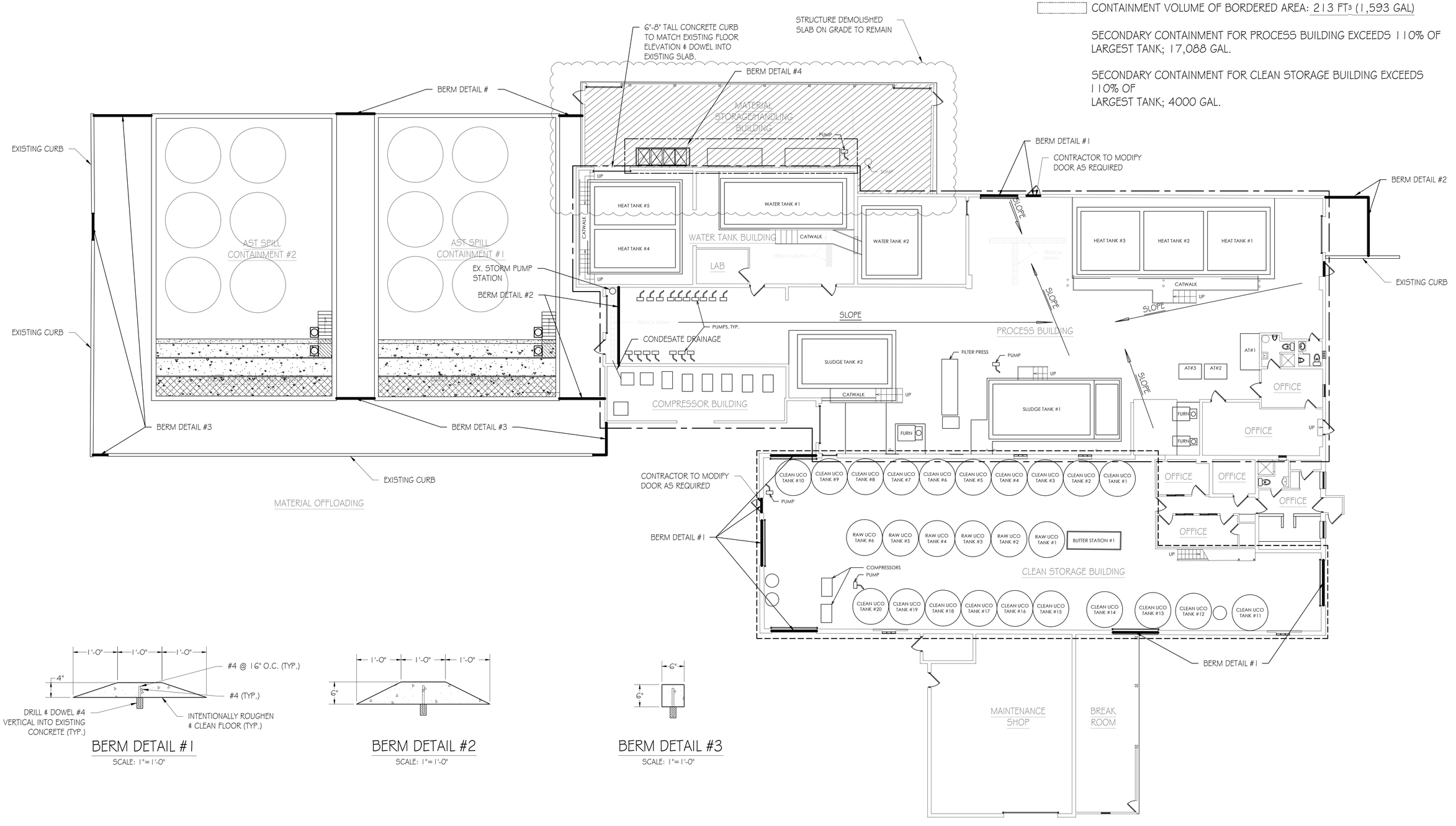
CONTAINMENT VOLUME OF BORDERED AREA: 3,015 FT³ (22,554 GAL)

CONTAINMENT VOLUME OF BORDERED AREA: 1,258 FT³ (9,413 GAL)

CONTAINMENT VOLUME OF BORDERED AREA: 213 FT³ (1,593 GAL)

SECONDARY CONTAINMENT FOR PROCESS BUILDING EXCEEDS 110% OF LARGEST TANK; 17,088 GAL.

SECONDARY CONTAINMENT FOR CLEAN STORAGE BUILDING EXCEEDS 110% OF LARGEST TANK; 4000 GAL.



BERM DETAIL #1

SCALE: 1"=1'-0"

BERM DETAIL #2

SCALE: 1"=1'-0"

BERM DETAIL #3

SCALE: 1"=1'-0"

FIGURE 10
SECONDARY SPILL CONTAINMENT PLAN
SCALE: NTS

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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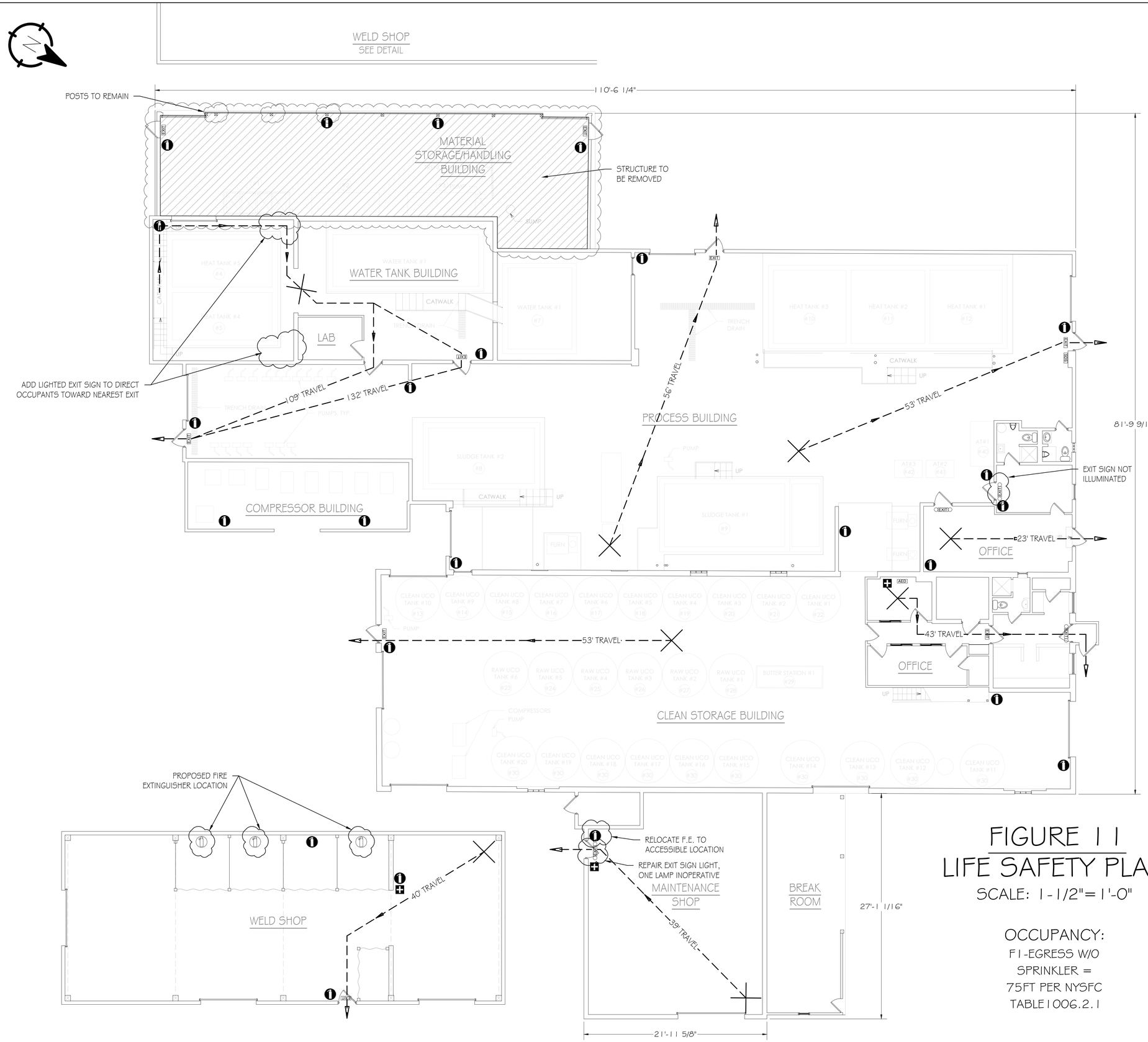

FIGURE 11
LIFE SAFETY PLAN

SCALE: 1-1/2"=1'-0"

OCCUPANCY:
F1-EGRESS W/O SPRINKLER = 75FT PER NYSFC TABLE1006.2.1

LEGEND

- FIRE EXTINGUISHER (EXISTING)
- FIRE EXTINGUISHER (PROPOSED)
- EXIT ILLUMINATED EXIT SIGN
- EXIT ILLUMINATED EXIT SIGN W/ LIGHTS
- FIRST AID STATION
- SDS SDS (SAFETY DATA SHEETS STATION)
- AED AED (AUTOMATED EXTERNAL DEFIBRILLATOR)
- EMERGENCY EXIT ROUTE
- MUSTER LOCATION

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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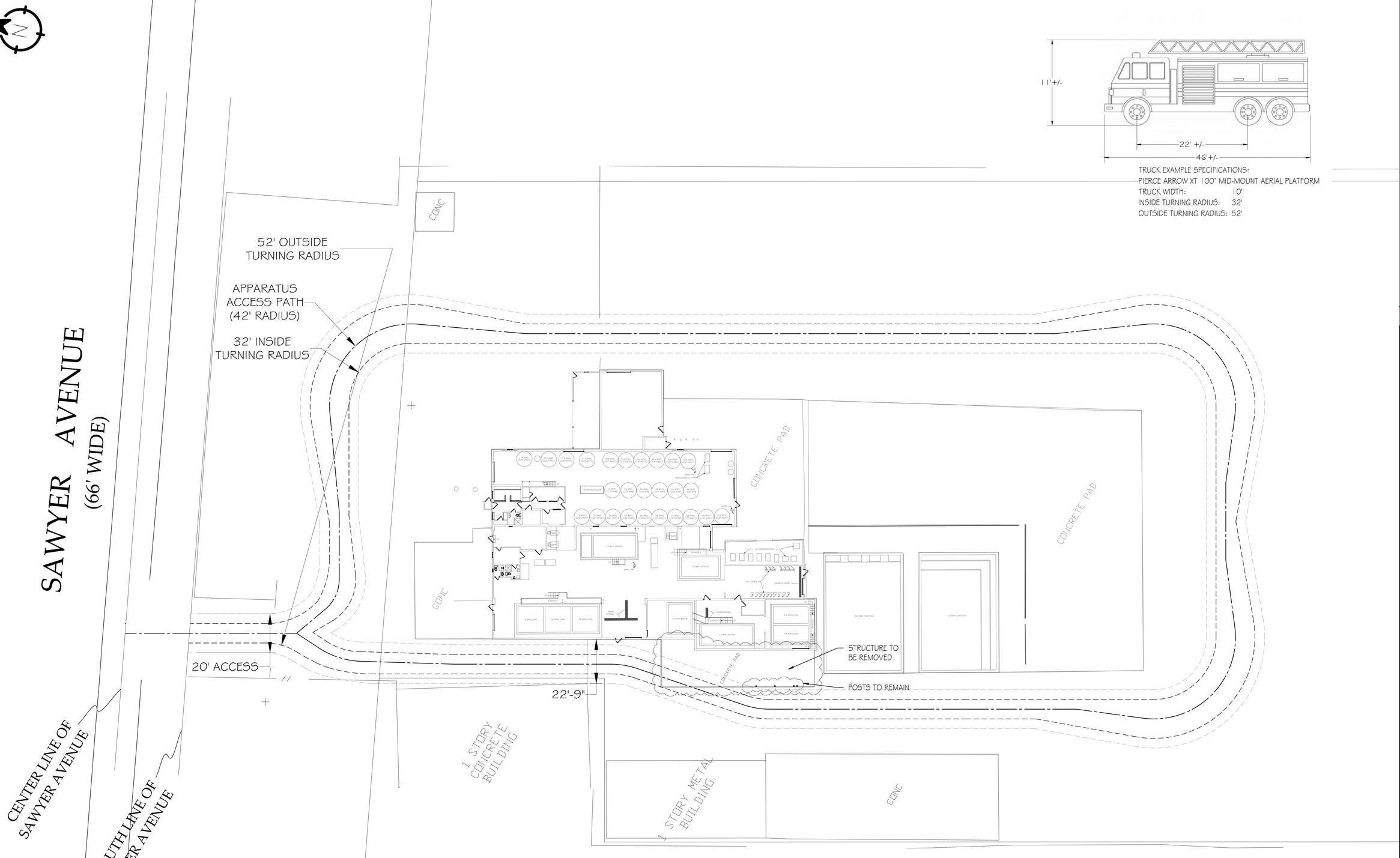

FIGURE 12
FIRE APPARATUS ACCESS
SCALE: NTS

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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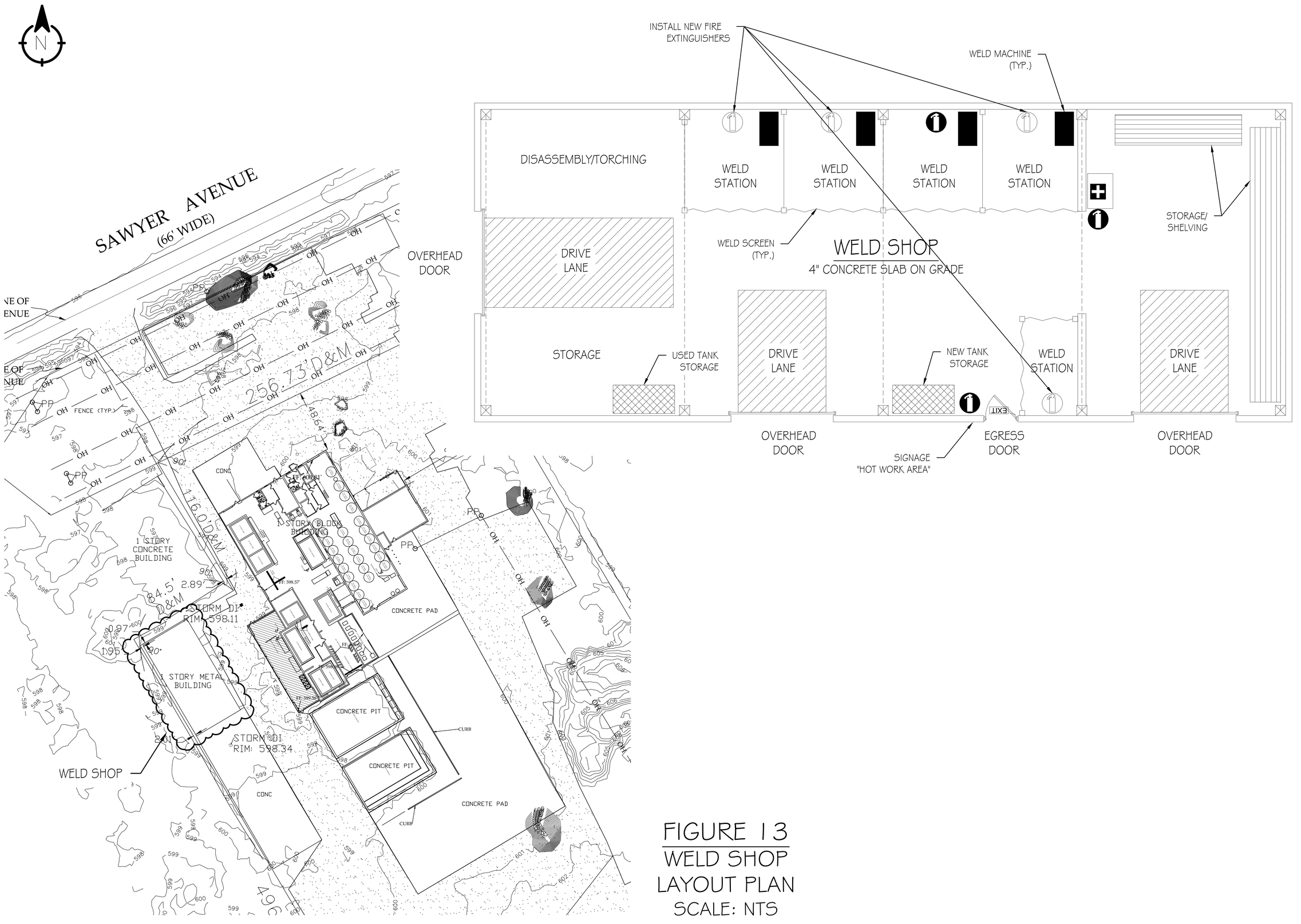

FIGURE 13
WELD SHOP LAYOUT PLAN
SCALE: NTS

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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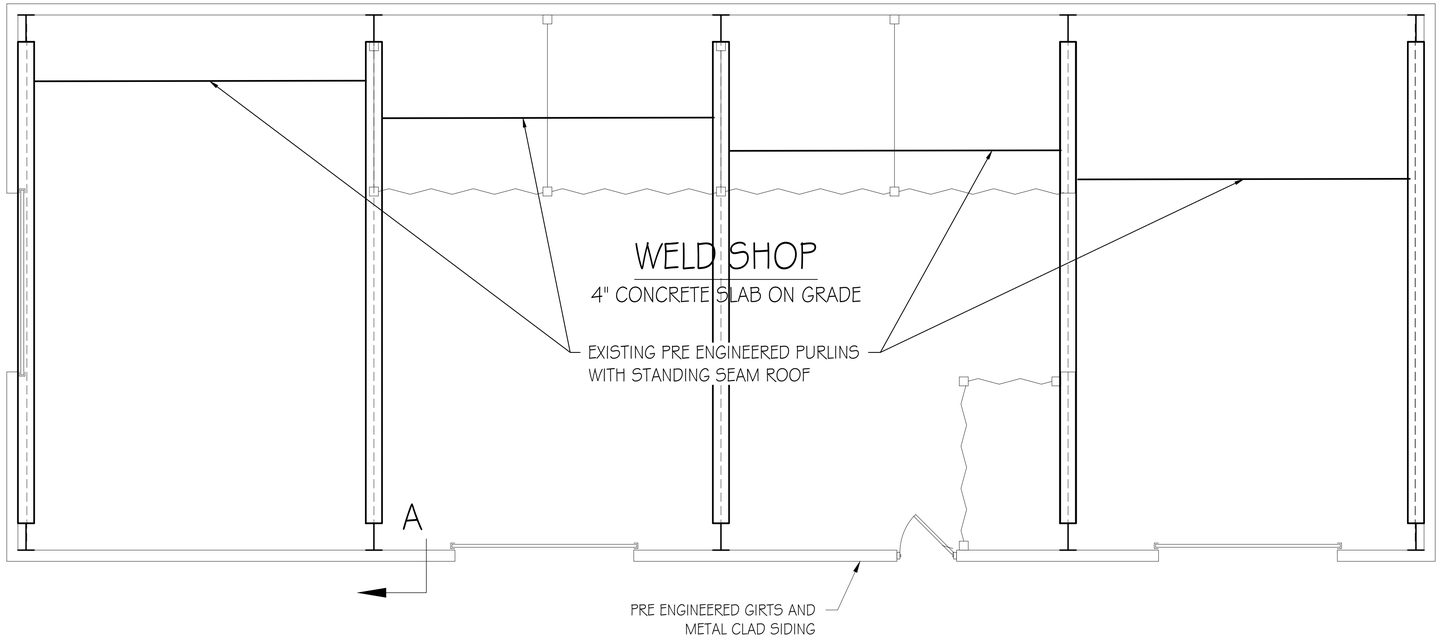
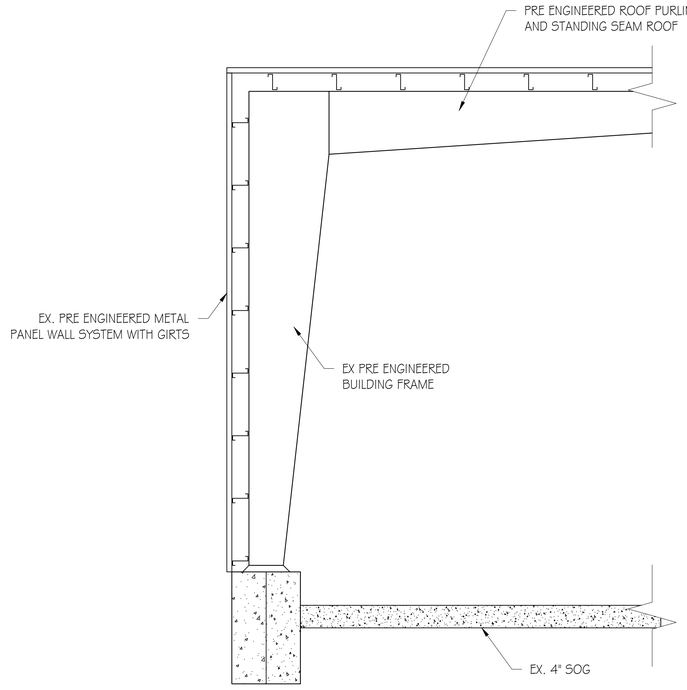


FIGURE 13A
EXISTING
PRE ENGINEERED METAL
BUILDING PLAN
SCALE: NTS



SECTION "A"
SCALE: NTS

BUFFALO BIODIESEL Inc.

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

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APPENDIX B
TRAINING FORMS

Certificate of Training

General Safety and Health Training

Employee Name: _____

Job Title: _____

BBD has provided me with training in **General Safety and Health Requirements**, which included the following topics:

1. OSHA General Duty Clause 5(a)(1).
2. Purpose of OSHA and its mission.
3. 29 CFR 1926.21 – Safety training requirements for providing a safe and healthy workplace.
4. 29 CFR 1926 Subpart C – General Safety and Health Provisions.
5. Recognition and control of common workplace hazards.
6. Employee responsibility to report unsafe conditions immediately to the foreman or safety director.
7. Reporting procedures for accidents and near-misses.

I acknowledge that I have received the above training and understand my responsibilities under **Buffalo Biodiesel's General Safety and Health Training Program**.

Employee's Signature:

Date: _____ _____

Trainer's Signature:

Date: _____ _____

Buffalo Biodiesel, Inc.
Address: 225 Sawyer Ave, Tonawanda Town, NY-14150 Phone: 800 721-1427
Website: www.buffalobiodiesel.com

Certificate of Training

Occupational Noise Exposure and Hearing Protection

Employee Name: _____

Job Title: _____

BBD has provided me with training in **29 CFR 1926.52 – Occupational Noise Exposure** and **29 CFR 1926.101 – Hearing Protection**, which included the following topics:

1. Locations where anticipated noise levels will be at or above the permissible exposure limit (PEL).
2. The duration per day that employees are permitted to work at various noise levels.
3. Basic anatomy of the ear.
4. Consequences of hearing loss.
5. Hearing protection devices (earplugs, earmuffs) and their limitations.
6. How to properly wear hearing protection devices.
7. How to clean hearing protection devices, when applicable.

I acknowledge that I have received the above training and understand my responsibilities under **Buffalo Biodiesel's Occupational Noise Exposure and Hearing Protection Program**.

Employee's Signature:

Date: _____ _____

Trainer's Signature:

Date: _____ _____

Buffalo Biodiesel, Inc.
Address: 225 Sawyer Ave, Tonawanda Town, NY-14150 Phone: 800 721-1427
Website: www.buffalobiodiesel.com

Certificate of Training

Hazardous Products and Hazard Communication

Employee Name: _____

Job Title: _____

BBD has provided me with training in **29 CFR 1926.59 (29 CFR 1910.1200) – Hazard Communication Standard**, which included the following topics:

1. Hazards of the chemicals present at the job site.
2. Requirements of 29 CFR 1926.59.
3. Operations where exposure to chemicals may occur.
4. Location of Safety Data Sheets (SDS).
5. How to read an SDS.
6. How to interpret pictograms.
7. How to determine, from the SDS, the proper personal protective equipment and emergency procedures.
8. The project-specific Hazard Communication Program and its location.
9. Proper labeling of all chemical containers.

I acknowledge that I have received the above training and understand my responsibilities under **Buffalo Biodiesel's Hazardous Products and Hazard Communication Program**.

Employee's Signature:

Date: _____ _____

Trainer's Signature:

Date: _____ _____

Buffalo Biodiesel, Inc.
Address: 225 Sawyer Ave, Tonawanda Town, NY-14150 Phone: 800 721-1427
Website: www.buffalobiodiesel.com

Certificate of Training

Personal Protective Equipment

Employee Name: _____

Job Title: _____

BBD has provided me with training in **29 CFR 1926 Subpart E – Personal Protective Equipment**, which included the following topics:

1. Requirements for personal protective clothing and equipment (PPE).
2. Limitations of PPE.
3. Hard hats – when they are required, proper use, cleaning, maintenance, and limitations.
4. Eye and face protection – when it is required, proper use, cleaning, maintenance, and limitations.
5. Hand and foot protection – when they are required, proper use, cleaning, maintenance, and limitations.
6. How to inspect PPE and when to turn in damaged PPE to the foreman or safety director.

I acknowledge that I have received the above training and understand my responsibilities under **Buffalo Biodiesel's Personal Protective Equipment Program**.

Employee's Signature:

Date: _____ _____

Trainer's Signature:

Date: _____ _____

Buffalo Biodiesel, Inc.
Address: 225 Sawyer Ave, Tonawanda Town, NY-14150 Phone: 800 721-1427
Website: www.buffalobiodiesel.com

Certificate of Training

Fire Protection

Employee Name: _____

Job Title: _____

BBD has provided me with training in **29 CFR 1926 Subpart F – Fire Protection**, which included the following topics:

1. The four classes of fires.
2. The type of fire extinguisher or extinguishing agent used for each class of fire, and the hazards of fighting fires.
3. Proper use of fire extinguishers (PASS – Pull, Aim, Squeeze, Sweep).
4. Preventive measures to reduce the potential for fires.
5. Use of temporary heating devices and required ventilation.
6. Identification of personnel authorized to fight fires, and instructions for those not authorized, including where to go in case of an emergency and company emergency procedures.
7. Demonstration of item #4, if authorized to fight a fire.

I acknowledge that I have received the above training and understand my responsibilities under **Buffalo Biodiesel's Fire Protection Program**.

Employee's Signature:

Date: _____ _____

Trainer's Signature:

Date: _____ _____

Buffalo Biodiesel, Inc.
Address: 225 Sawyer Ave, Tonawanda Town, NY-14150 Phone: 800 721-1427
Website: www.buffalobiodiesel.com

Certificate of Training

Forklifts

Employee Name: _____

Job Title: _____

BBD has provided me with training in **Forklift Operation**, in accordance with **29 CFR 1910.178(l) – Powered Industrial Trucks**, which included the following topics:

1. Operating instructions, warnings, and precautions for the type of forklift the employee is authorized to operate.
2. Differences between a forklift and an automobile.
3. Forklift controls and instrumentation.
4. Engine or motor operation.
5. Steering and maneuvering.
6. Visibility.
7. Fork and attachment adaptation.
8. Vehicle capacity and stability.
9. Inspection and maintenance procedures.
10. Refueling or recharging procedures.
11. Operating limitations.
12. Site-specific considerations, such as surface conditions and types of loads.
13. **Forklift make and model:** _____
14. **Forklift use evaluation:** _____

Evaluated by: _____

Employee's Signature:

Date: _____ _____

Trainer's Signature:

Date: _____ _____

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Tagout of Equipment Form

(In accordance with OSHA 29 CFR 1910.147 – The Control of Hazardous Energy)

Equipment Information

Equipment Name / ID: _____
Location: _____
Electrical / Mechanical Information: _____
Number of Tags Required: _____

1. AUTHORIZED EMPLOYEES

Only trained and authorized employees are permitted to service this equipment. List authorized employees below:

Name	Department	Signature	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

2. AFFECTED EMPLOYEES

All affected employees must be notified that servicing or maintenance is required and that the equipment will be shut down and tagged out. List affected employees below:

Name	Department	Signature	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

3. SHUTDOWN PROCEDURE

List the steps required to safely shut down the equipment:

- _____
- _____
- _____
- _____

4. VERIFICATION OF PROPER SHUTDOWN

List the steps to confirm all energy sources have been isolated:

- _____
- _____
- _____
- _____

5. START-UP PROCEDURE

List the steps to restore equipment safely after tag removal:

- _____
- _____
- _____
- _____

6. TAGOUT PROCEDURE

Describe how tags will be applied, secured, and verified:

- _____
- _____
- _____
- _____

REVIEW AND APPROVAL

Reviewed by: _____ Date: _____
Approved by: _____ Date: _____
Issue / Revision Date: _____

ADDITIONAL NOTES / REMARKS

_____
_____
_____
_____

CARBON MONOXIDE ALARM CALIBRATION AND TESTING RECORD

Carbon Monoxide Alarm Manufacturer: _____

Carbon Monoxide Alarm Serial Number: _____

Calibration Frequency (per manufacturer's instructions): ☐ Monthly ☐ Quarterly ☐ Annually

Testing Requirement: Carbon monoxide alarms shall be tested and/or inspected weekly to ensure proper operation.

WEEKLY TESTING / INSPECTION LOG

Date	Tested and/or Inspected By

CALIBRATION LOG

Date	Calibration (Pass/Fail)	Calibrated By

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OSHA Incident Reporting Form

(For Reporting Fatality, In-Patient Hospitalization, Amputation, or Loss of an Eye — per OSHA 29 CFR 1904.39)

Date: _____

Were you reporting a fatality, in-patient hospitalization, amputation, or loss of an eye?
☐ Yes ☐ No If yes, specify: _____

Name(s) of affected employee(s):

_____

_____

Date incident occurred: _____
Actual time of incident: _____
Time OSHA was notified: _____
How was OSHA contacted?
☐ Phone ☐ Internet
If by **phone**, what phone number was called?
_____
If you spoke to an OSHA Compliance Officer, list name of CSHO:
_____
If by **internet**, did you print out the notification? ☐ Yes ☐ No
If **No**, explain why:
_____

Additional Information:
(Examples: OSHA requested additional information, conducted a site visit, etc.)

_____

_____

Name of person reporting incident to OSHA:
_____

Signature of person reporting incident to OSHA:
_____

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Action Checklist for Spill Observed

IMMEDIATE ACTIONS

☐ Immediately discontinue all product transfer operations and warn all persons to stay clear.
☐ Shut off loading pumps, determine source of leak and stop by closing valves, if it can be safely done.
☐ Eliminate all sources of ignition (e.g., shut down and/or do not attempt to start any engines, use only non-sparking tools and equipment).
☐ Attend to injured personnel and ensure safety of all others.
☐ Verify product type(s), identify material(s), and estimate quantity spilled.
☐ Notify the Authorized Individuals/Alternate Authorized Individuals and assist with initial response actions as directed.
☐ Contain product and/or keep product away from storm water sewers by blocking or diking to prevent discharge off site, if it can be done safely.

AUTHORIZED INDIVIDUALS / ALTERNATE AUTHORIZED INDIVIDUALS

☐ Evaluate the situation and assume control.
☐ Notify Fire Department and Police Department as appropriate.
☐ Make regulatory notifications of spill and proposed actions. Document names of agencies called, persons who received calls, and the times the calls are made.
☐ Call out cleanup contractors if necessary. Advise them of the location of the spill, the nature of the spill, and the products involved.
☐ Advise neighboring property owners and operators of any threat to their property or personnel.
☐ Determine whether adjacent streets or roads should be blocked.
☐ Determine level of response needed, hazards or product(s) involved, and proper response guidelines to be followed.
☐ Direct containment and cleanup activities.
☐ Allow adequate time for dissipation of vapors before resuming operations.

INCIDENT INFORMATION

Time: _____ **Date:** _____
Personnel Reporting: _____
Driver Name: _____ **Location:** _____

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Oil Spill Documentation Form

(For Internal Use)

Name: _____

Telephone Number: _____

Release Location:

_____

(Attach site map with leak identified)

Duration: From: _____ am/pm To: _____ am/pm **Date:** _____

Time of Discovery of Release: _____ am/pm

Material Released: _____

Components: _____

Spilled To (circle all that apply):

Air Drain Pond On-site Soil Storm Water Ditch Concrete/Asphalt Pad

Other: _____

Estimated Quantity: _____ **Into Surface Water:** ☐ Yes ☐ No

Prevailing Weather Conditions (e.g., wind speed and direction):

_____

Description of the Release (including cause):

_____

_____

Corrective Actions Taken:

_____

_____

Could the Spill Have Been Prevented? Explain:

_____

_____

_____

Site and Response Information

Has the area been completely secured? ☐ Yes ☐ No ☐ Unknown
Are there any railroad or utility companies to be notified? ☐ Yes ☐ No ☐ Unknown
Have or will any law enforcement groups be involved? ☐ Yes ☐ No ☐ Unknown
If local response agencies are involved, have they been informed of the product's characteristics and handling precautions? ☐ Yes ☐ No ☐ Unknown
Were there any injuries or fatalities? ☐ Yes ☐ No ☐ Unknown
Is this a DOT-reportable release? ☐ Yes ☐ No ☐ Unknown

Notifications

Agency / Individual Notified	**By (Name)**	**Time (am/pm)**
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____

Signature: _____

Date: _____

Title: _____

APPENDIX C
ROUTINE INSPECTION SHEETS

Daily Inspection Audit

Inspector Name: _____
Date of Inspection: _____ **Time:** _____ AM / PM
Areas Inspected: _____

Storage Tanks / Vessels
AST Secondary Containment #1 – Condition: [AST # 49-54]

_____

AST Secondary Containment #2 – Condition: [AST # 43-48]

_____

Clean Storage Building – Condition: [AST # 13-39]

_____

Sludge Tanks – Condition: [Sludge Tank #1 & 2]: _____

Water Tanks – Condition: [Water Tanks #1 & 2]: _____

Heat Tanks – Condition: [Heat Tanks #1-5]: _____

Pipelines (Please circle product source and Audit Condition) ☐ N/A

Storage Location	Product Source	Audit Condition	Pass	Fail	N/A
Heat Tank #1	OSC #1 / #2	_____	☐	☐	☐
Heat Tank #2	OSC #1 / #2	_____	☐	☐	☐
Heat Tank #3	OSC #1 / #2	_____	☐	☐	☐
Heat Tank #4	OSC #1 / #2	_____	☐	☐	☐
Heat Tank #5	OSC #1 / #2	_____	☐	☐	☐
Sludge Tank #1	OSC #1 / #2	_____	☐	☐	☐
Sludge Tank #2	OSC #1 / #2	_____	☐	☐	☐
Water Tank #1	OSC #1 / #2	_____	☐	☐	☐
Water Tank #2	OSC #1 / #2	_____	☐	☐	☐
Dump Tank #1	Barrels/ Totes	_____	☐	☐	☐
Butter Tank #1	Barrels/ Totes	_____	☐	☐	☐
Mid Tank # 1–6	Main Floor / OSC #1/2	_____	☐	☐	☐
Discharge #1	AST # 1–10	_____	☐	☐	☐
Discharge #2	AST # 11–20	_____	☐	☐	☐

All audit observations must be filed and maintained for a minimum of 7 years from the date of audit.

Processing Operations

Processing Activity	Details / Comments
Oil Discharged	Tank #: _____ Amount: _____ Comments: _____
Oil Intake	Tank #: _____ Amount: _____ Comments: _____
Screen Trough Cleaning	Daily Clean and Draining of Offloading Trough
Water Discharged	Tank #: _____ Amount: _____ Comments: _____
Water Intake	Source: _____ Comments: _____
Sludge Outbound	Tank #: _____ Amount: _____ Comments: _____
Garbage Removed	Amount: _____ Comments: _____
Process Tanks empty at end of shift?	☐ Yes ☐ No Comments: _____

Additional Comments:

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Equipment Inspection Audit

Inspector Name: _____
Date of Inspection: _____ **Time:** _____ AM / PM
Areas Inspected: _____

Compressor / Utility Room: _____

Weld Shop: _____

Maintenance Shop: _____

Designated Metal Scrap Area: _____

Designated Wood Scrap Area: _____

Trench Drains: _____

Filter Press: _____

Grease Trap: _____

OWS: _____

Overfill Alarms: _____

Compressors: _____

Accessory Pump #1: _____

Accessory Pump #2: _____

Equipment Repairs / Maintenance / Replacements:

Pending Repairs

Repair Item	Issue	Date Opened	Exp. Completion Date

Trailers and Trucks Utilized	Driver Name	Condition

Vehicle and Tanker Parking
Overall Condition:

All audit observations must be filed and maintained for a minimum of 7 years from the date of audit.

Housekeeping Audit

Inspector Name: _____
Date of Inspection: _____ **Time:** _____ AM / PM
Areas Inspected: _____

Floors: ☐ Garbage Removed ☐ Product Waste Cleared ☐ Clear Walking Path
Report damage: _____

Walls: ☐ Product Waste Cleared
Report damage: _____

Doors: ☐ Functional ☐ Unobstructed
Report damage: _____

Ceilings: ☐ Product Waste Cleared
Report damage: _____

Railings: ☐ Product Waste Cleared
Report damage: _____

Bathroom: ☐ Functional ☐ Waste Removed
Report damage: _____

Offices: ☐ Equipment Functional ☐ Clear Workspace
Report damage: _____

Additional Comments:

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All audit observations must be filed and maintained for a minimum of 7 years from the date of audit.

APPENDIX D
EMERGENCY RESPONSE/ SPILL PLAN

EMERGENCY RESPONSE PLAN

Training Requirements

A training plan has been created to ensure the employees working at BBD receive the required training to complete their assigned tasks without jeopardizing their own safety and safety of others around them.

Points of Contact

- Tom Wiley will be the main point of contact after Sumit Majumdar.
- All vacuum truck, box truck and tanker truck training will be conducted by Christian Mostacelo, or an outside agency.
- All internal plant operations training will be conducted by Tom Wiley.
- All fabrication shop training will be conducted by Tom Wiley.
- All health and safety training will be conducted by Tom Wiley, Sumit Majumdar or an outside agency.
- Hazard Communication training (HAZCOM) will be conducted by Md Tanzim Ahsan or an outside Agency.

Role	Name
President	Sumit Majumdar
General Manager	Tom Wiley
Comptroller	Martin Howard
Chief Operating Officer	Tom George
Foreman	Josh Joseph
Head Loader	Charles Cetola

BBD training plan has been developed for the plant operators, fabrication shop employees, and commercial truck drivers (box truck, vac trucks, and tankers). Plant employees are trained on the requirements of OSHA health and safety and must contribute in a safe workplace environment.

New hire training for work within the plant or fabrication shop are assigned to shadow a senior employee. Training is implemented via on-the-job hands-on training working with the senior employee and this OCM manual to ensure competency. BBD also determines if an employee needs training based on their work quality. Any employee violating BBD's operating procedures will lead to a disciplinary action followed by demonstrations showing the employee the correct protocol slash procedures.

Development Approach

All personnel, including equipment operators, general laborers, supervisors and management, will receive the appropriate training prior to being allowed to participate in or supervise work. The training will include the duties and functions to be performed and the responsibilities of identifying and communicating issues or potential issues to the employee's direct supervisor and recording issues in the daily log or area inspection forms.

Issues and Recommendations

Drivers are required to notify management of regular maintenance issues (oil change, tire condition and pressure, equipment wear, etc.) to increase driver safety and to extend the useful life of the equipment and minimize excessive breakdown of the company's vehicles.

BBD is preparing instructional videos for all drivers which will become part of the river training program. The BBD fleet safety manager will go over all the pre- and post- trip inspection requirements with every driver to ensure all drivers understand their job duties. The fleet safety manager will also randomly and periodically inspect vehicles on vehicle logs to ensure the drivers are completing their logs and are notifying the management of equipment or safety issues that arise in the company vehicles.

Testing and Evaluation

Upon completion of training, the new hire plant laborers are required to carry out the plant processes or tasks associated with their new position, while under the supervision of a senior employee. The employee is tested on equipment, pumps, filling of tanks and storage of oil, spill response, etc. Once the senior employee determines the new hire is competent and can carry out the task independently without much supervision, the new hire will be assigned to carry out in independent task. The Supervisor will note the evaluation within the employees personnel file and that they have satisfactorily completed the evaluation for the job(s) for which they are assigned.

The same procedure is used for evaluating the fabrication shop employees and the truck drivers.

Operational Documentation

The plant management will be trained in documenting all spill cleanup, sludge removals, and water volume discharges accurately. Records will be kept both in printed and electronic formats to ensure records can readily be provided to NYSDEC or other regulatory authorities. These records will assist BBD in preparing and submitting the annual reports in NYSDEC. These records will be kept and available at the facility for (7) years.

SPILL AND EMERGENCY RESPONSE PLAN

The following emergency numbers will be conspicuously posted at the site in the main Office and near telephones:

Onsite Emergency Contact(s)

- Primary – Sumit Majumdar/President/CEO
  - **(716) 253-4467**
  - 1 800 721-1427
- Alternate – Tom Wiley /General Manager
  - **(716) 550-17G4**
  - 1 800-721-1427

Local and national Emergency Contact(s)

- Local Emergency response Contact(s): Fire/Paramedics/Police/Hazmat: **G11**
- NYSDEC Hotline: **1-800-457-7362**
- EPA National Spill Response Center: **1-800-424-8802**
- Poison Control Center: **1-800-222-1222**

Local Emergency Medical Facility

Kenmore Mercy Hospital: **716-447-6100**

2950 Elmwood Avenue

Buffalo, NY 14217

Additional Data Resources

- Safety Data sheets: https://chemicalsafety.com/sds-search
- NYSDEC Spill Prevention and Response: https://www.dec.ny.gov/regulations/2634.html

This Emergency Response Plan addresses the hazards most likely to be encountered during the operations of the facility. This plan is not, however, to be construed as a compilation of all possible emergencies that are hazards which might occur or exist at the site. It is the sole responsibility of this facility operator to ensure that the facility is operated, at a minimum, in conformance with the Occupational Safety and Health Agency (OSHA) regulations detailed in 29 CFR Parts 1900 through 1910, inclusive, and any other pertinent local regulations, so that the health and welfare of the workers is safeguarded. This facility does not accept any hazardous liquid, radioactive materials, regulated medical, contained gaseous or other material not specifically identified previously. Therefore, the hazards for which a potential exists at this facility in which this plan addresses are fire, explosion, equipment breakdown, plant shutdown, unusual traffic conditions and receipt unauthorized materials.

Emergency Responder Arrangements and Emergency Coordinator Responsibilities

Arrangements will be coordinated with the respective emergency response teams in the event that their service is required at the facility. BBD maintains contact with the local fire department, police department, and first aid/ ambulance squads as listed below. Prints of the facility layout showing the location of site features and processing areas and doors are provided to each department as requested.

At all times during hours of facility operations, there will be at least one emergency coordinator on site or on call, with the authority to commit the necessary resources of the facility to carry out the provisions of the of this emergency response and contingency plan.

The owner is designated as the primary emergency coordinator for the facility. Office and cell telephone numbers for this individual are listed below. It is the responsibility of this person to identify and coordinate any special or emergency activities during operating hours. Events that require the attention of the emergency coordinator include fire, explosion, air slash soil releases, unscheduled facility shutdown, power failure, and delivery of unauthorized material to the facility (other than an incidental amount).

Should an incident take place, the emergency coordinator will secure the facility by closing off the affected area. Once the area has been isolated from traffic, appropriate actions will be taken, for example, activation of the fire extinguishers, or removal compensable materials. A logbook entry will be maintained by the emergency coordinator to record events date time description, action slash repairs, etcetera.

The emergency coordinator will be responsible for contacting any additional support teams as needed to assist in responding to an event. If an evacuation of the facility is necessary, the emergency coordinator will notify plant staff, direct employees to evacuation routes and oversee roll calls at the assembly areas.

Emergency Response Procedures

The Emergency Response Procedures follow the ERP noted above. These are the plant- specific plans for dealing with emergencies and shall be implemented immediately whenever there is a fire, explosion, or release of a hazardous substance that threatens human health or the environment. The emergency response plan shall be reviewed and immediately amended whenever:

- The Plan fails during an emergency.
- The facility changes in its design, construction, operation, maintenance, or other circumstances in a way that increases the potential for fire, explosions, or release of a hazardous substance.
- The list of emergency contacts changes,
- The list of emergency equipment changes.

The potential emergencies may include fire, containment collapse, fuel spills, employee injury, etc. Where there may be a release of a contaminant, BBD will consult New York Department of Environmental spill reporting center and state guidelines to determine when a release is required to be reported.

BBD will provide the necessary equipment or supplies to prevent or minimize potential emergency situations. Equipment or supplies may include absorbent materials, shovels and fire extinguishers. No BBD employee is to remain with any critical plant equipment during an emergency that could injure that employee by not evacuating as trained. If an emergency does arise in the plant, the following are the proper procedures.

General

1. Coordination between local, state and federal disasters and Emergency Management personnel will be communicated prior to work commencing. The proper authorities will be given a copy of this section of the plan and the necessary information from the health and safety plan.
2. The local hospitals will be sent a letter documenting the hazards of the project and providing with the necessary SDS, an event site worker is transported to the hospital.
3. Directions to the hospital will be posted on site and a copy will be placed in a central location when the health and safety program is in effect.
4. Employees will be trained in emergency procedures. The training will be both verbally and by providing a copy of this plan to the employees.
5. Contact information will be provided to the employees who need additional information pertaining to the plan and/or their respective duties.

Pre-Emergency Planning

- The safety director will establish a line of communications with local hospitals, government agencies and any other emergency responses organizations prior to site activities.
- During the pre-job safety meeting and bi-monthly thereafter, all employees will be trained in the provisions of the Emergency Response Plan, communications systems, and evacuation routes.
- This plan will be reviewed and revised, if necessary, on a regular basis.

Training

Employees will receive training on the Emergency Action Plan as follows:

- When is the plan modified or changed in any way.
- When an employee is initially assigned to a job and on an annual basis thereafter.
- When an employee’s responsibilities under the plan change.

Line of Authority

- The safety director will have primary responsibility for responding to and correcting emergency situations. This includes taking appropriate measures to ensure the safety of site personnel and the public. Tom Wiley has been assigned this responsibility based on relevant work experience and will assume this position until termination.
- The Project Superintendent will be relieved of his responsibility only by the appropriate police or the fire chief. Tom George is carrying out responsibilities as the project superintendent and will continue to do so until termination. The title as been assigned based on prior experience and aptitude.

Evacuation Procedure

Prior to an evacuation, all employees will be trained as to the evacuation routes, designate a meeting location and if an employee is required to assist other employees, their roles and responsibilities.

1. If a fire, chemical spill or release or other emergency action is discovered at the site, the person making discovery will immediately notify the safety director or project Superintendent.
2. The safety director will make the decision to evacuate the area if necessary.
3. The primary response to any emergency will be to protect the health and safety of employees, as well as the community and environment.
4. After Step 3 is completed, and if the safety director deems it safe, steps will be taken to identify, contain, treat, and properly dispose of material involved as a secondary response.
5. In the event of an emergency which necessitates an evacuation of the plant, the following alarm procedures will be implemented:

   THREE (3) LONG BLASTS OF A COMPRESSED AIR HORN

6. When notified to evacuate, all personnel will be expected to proceed to the closest designated safe area. The safe area will be set up when and at least 100 feet from the hazard**.**
7. Personnel will remain at the area until authorized by the safety director who will complete a head count to verify all employees have been evacuated and accounted for.

Emergency Medical Procedures

1. Employees are to inform the safety director or foreman immediately of any person(s) who become injured.
2. The safety director will decide if emergency services are required. At this time the person on site who has current training in first aid will be summoned to assist the injured persons.
3. Any person who becomes ill or injured in the work area must be decontaminated, if potentially exposed to contaminated or regulated materials, to a maximum sent possible. If the injury or illness is minor, full decontamination should be completed and first aid administered prior to transport. If the patient's condition is serious, at least partial decontamination should be completed (i.e. complete disrobing of the victim and redressing

in clean coveralls or wrapping in a blanket). First aid should be administered while awaiting an ambulance or paramedics. All injuries and illnesses must be immediately reported to the safety director.

4. Where ambulances are used to transport employees, inform the ambulance staff of the potential for contamination.
5. Any person being transported to a clinic or hospital for treatment should take with them information on the chemicals (SDS) they have been exposed to at the site. If the person cannot take the SDS with them, a copy of it is provided to the ambulance staff or directly to the hospital.
6. All work-related fatalities are to be reported to OSHA within 8 hours, and all work-related inpatient hospitalizations, amputations and loss of an eye are to be reported to OSHA within two hours.

Fire or Explosion

1. In the event of a fire or explosion, the local fire department should be summoned immediately.
2. If safe to do so, stop operations shut off equipment in the immediate work area and other equipment that may feed the fire.
3. The project supervisor and/or the safety director will advise the fire commander of the location, nature, and identification of the hazardous material(s) on-site.
4. If it is safe to do so, Site personnel may:
    a. use firefighting equipment available on site to control or extinguish the fire and,
    b. remove or isolate flammable or hazardous materials which may contribute to the fire.
5. Report to the designated Safe Area if the warning system is activated until the project supervisor and/or safety director provides further instructions.

Chemical Spills or Leaks

1. In the event of a spill or leak, site personnel will:
    a. inform their supervisor immediately:
    b. locate the source of the spillage and stop the flow if it can be done safely. Prevent the spill from entering waterways or drains. Begin containment and recover the spilled materials if it can be done safely.
2. If the spill release is expected to pose a significant hazard or is beyond the capabilities of the immediate personnel, then the safety director will be contacted immediately.
3. The Safety Director will assess the following:
    a. The material spilled or released
    b. Location release or spell

c. An estimate of the quantity release and the rate at which is being released
d. Any injuries involved
e. Fire and slash or explosion or possibility of these events occurring
f. The area and the materials involved in the location of the fire or explosion

4. In the event of a chemical spill that is not contained, an area of isolation will be established around the spill. The size of the area would generally be dependent on the size of the spill and materials involved.
5. When any spill occurs, only those persons involved in the oversight or performance of the emergency cleanup operations will be allowed within the designated hazard area.
6. If an incident may threaten the health or safety of the surrounding community, the public will be informed and possibly directed to evacuate from the area. The safety director will inform the proper agencies in the event that this is necessary.
7. If the control and cleanup of the spill or release is within the capabilities of onsite personnel, then the police or Emergency Management personnel will not be notified unless the release migrates beyond the perimeter of the site. Reporting spills or releases in accordance with other federal state and local regulations also the responsibility of the safety director.

Emergency Equipment

1. Emergency equipment may include the following:
    a. First Aid Kit
    b. fire extinguisher
    c. Eye Wash Station
    d. emergency shower two-way radio or mobile phone

Media Related Events

If an emergency occurs that warrants a visit from the media, site personnel will not be authorized to speak with the media. The site safety director or foreman will contact management for direction. If given permission by management, the person selected to speak with the media will:

1. Provide information that is factual.
2. Record in the site logbook all information provided to the media.
3. Avoid speculation on the cause of the events, amount of damage and seriousness of the injuries.
4. Do not release names of injured person(s).

Incident Follow-up

1. Following all emergency response actions and activation of this plan, the safety director will conduct a debriefing session of all key personnel involved.
2. The response will be critiqued, documented, and response plans revised, if necessary. Corrective actions will be listed where procedures were inadequate or where the need for improvement was found.
3. Employees will be advised of any corrective actions and results of the critique as soon as possible.

SPILL PREVENTION AND RESPONSE

Spills can seriously disrupt the facilities operations. Not only is a viable material loss, but all work must be stopped in order to deal with the cleanup. Despite best efforts and training, spills may occur. When they do, it makes sense to respond to them as carefully and as efficiently as possible. UCO oil spills are not hazardous to human health and therefore can be cleaned up by the plant employees, if the employees are wearing their PPE. For hazardous materials such as NaOH, small spills may be handled by plant employees wearing proper PPE and under supervision of the plant manager. For larger spills, which are unlikely to happen because the volume of hazardous substances used in the plant is small, an outside contractor will be hired to clean and dispose of any large hazardous substance spills. If handled properly, a spill may be nothing more than a nuisance. If handled improperly, a spill can disrupt plant operations and may cause harm to the environment.

How to Prevent Spills

Used cooking oil management: UCO, including waste (waste process water, and sludge), are to be managed in a way that prevents releases.

Sodium Hydroxide and Chlorine Management:

Both NaOH and the chlorine shall be stored in the water tank room. Both products shall be stored in their original packaging and must only be handled by trained employees. The room shall always be kept well ventilated. A copy of the MSDS sheets and proper spill or skin contact exposure information is kept in the Main office. Employees are trained as to where to find the MSDS/SDS information sheets and how to handle the chemicals safely.

General Requirements

The following general requirements are to be followed; These include:

- When dumping the carboys and oil buckets do not overfill the drums/vats.
- Pay careful attention to the size of containers to avoid overfilling.
- Any leaking drums must be labeled and scrapped immediately.
- Any leaking/ damaged vat shall be identified and sent over to the fabrication shop to be fixed.
- All drums shall be kept clean.
- When offloading trailers all containers (drums, carboys, vats) shall be brought inside the building to prevent leakage on to the soil.
- Containers with oil shall not be stored outside.
- Ensure all hazardous substances, oil tanks, are properly marked and labeled.
- Good Housekeeping
- All hazardous substances, (NaOH, pump oil, etc.) must be stored inside the buildings or undercover.

- Store hazardous substances, not used daily, in cabinets, or in designated areas.
- All hazardous substance containers should be closed while not in use.
- Once opened the entire bag of NaOH shall be used and dumped into the water tank. Opened bags containing NaOH will not be allowed on the plant premises.
- If a bag is found to be open/ punctured during the transportation storage, that bag shall be isolated and used immediately.
- All containers containing any NaOH solids or solutions shall be labeled.
- NaOH shall not be mixed with any other chemicals or cleaning agents.
- Use drip pans or other collection devices to contain drips or leaks from dispensing containers or equipment.
- Implement preventative maintenance activities to reduce the potential for release from equipment.
- Immediately clean up and properly manage all small spills or leaks.
- Keep all work areas and hazardous substance storage areas clean and good general condition.
- Periodically (daily) inspect the equipment to ensure leaks are not occurring. (Record inspection in the daily log and complete the daily inspection forms)
- Keep all work areas and hazardous substance storage areas clean and in good general condition.

Handling and Storage of Caustic Soda and Chlorine

Employees should take care to avoid breaking or punching bags and drums of caustic soda and thereby avoid contact with this corrosive material. Since dry caustic soda left exposed to the atmosphere absorbs moisture and reacts with carbon dioxide, containers will be kept closed. Drums and bags should be stored in a dry place indoors.

Dissolving Caustic Soda

A short period of mechanical agitation is all that is needed to dissolve caustic soda in water completely. Bubblers shall always be turned on when mixing caustic soda and chlorine in the water tank.

CAUTION

Do not add water to caustic soda beads. The proper way is to add beads slowly to the surface of cold water and agitate while they dissolve to avoid violent eruption or explosive reaction. If the water is not agitated, adding caustic soda beads rapidly is dangerous. The danger is greater if the water is warm instead of cold. The high heat of solution of dry caustic soda may cause a sudden violent eruption of caustic solution. Also, a layer of concentrated solution may be formed and suddenly mixed with a layer of less concentrated solution. In this case, the high heat of solution may create steam and cause the solution to erupt.

Stock Rotation

Due to its hygroscopic nature, PELS caustic soda bead inventory should be rotated to ensure that all the product is consumed within 180-day period. This will minimize any product agglomeration in the package.

Handling and Storage of Chlorine (Sodium Hypochlorite)

Always check the label before using the product. Keep this product in original container with manufacturers' labels dry and tightly closed container. Storing cool, dry, well-ventilated area away from heat or open flame. In case of decomposition, isolate container(s) (if possible), and flood area with large amounts of water to dissolve all materials before discarding this container.

Dissolving Sodium Hypochlorite

Do not pre-mix this product before adding it to the water tank. Use clean, dry scoops to measure this product. Do not use the scoop for any other purpose. Turn on the bubbler after adding this product to thoroughly mix it with water. Always remove the gloves and wash your hands after handling this product. Do not mix this product with any other product.

Storage and Handling of Petroleum Products

Storing cool, dry, well ventilated, out of direct sunlight and away from heat and ignition sources, secure and separate from work areas. Keep amount in storage to a minimum.

Eliminate heat ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs. Do not use near welding operations or other high energy sources. Use funnel when filling equipment like lawn mowers. Make sure the product doesn't spill on the ground.

Employee Training

All employees must receive periodic training on the proper handling of UCO, Spill prevention practices, and emergency response procedures. The training must include a review of the spill prevention and emergency response plan, and review of location and use of emergency response equipment. Training can be recorded through the staff training logs or on other equivalent record keeping files. A record of the training topic, instructor name and attendance record will be part of the files recorded for training. Completion of Area and safety training shall be added to the employee's personnel file.

Hazardous Substance Inventory

An inventory must be maintained for all hazardous substances stored in quantity (< 55 gallons), and/ or list of locations where non-bulk hazardous substances are stored (flammable lockers- shop floor). The inventory must be updated every six months or every time a new hazardous substance is brought within the plant's perimeter. All hazardous material will have the materials listed in the MSDS/SDS master list in the Main office. Supervisors will assure that any new items ordered will have the MSDS/SDS sheets sent to the Main office and added to the master list and that all employees handling will be aware of the handling instructions and safety (PPE) required when handling.

Spill Response Equipment

Spill response equipment must be maintained and located in areas where spills are likely to occur. Spill should provide adequate response capabilities to manage any anticipated spill or release. The following general requirements are to be followed including:

Stock spill cleanup kits that are compatible with the hazardous substance stored on site.

Locate spill kits in areas where spills are likely to occur (loading and off-loading pads, chemical storage areas, locations where hazardous substances are being stored).

Spill kits should be sized to manage the anticipated release (spill equal to the largest container).

Emergency response equipment should be inspected periodically (generally monthly but not less than annually) to ensure that the spill kit is complete. Any use of the spill kit should be recorded in the daily log, and it should also be recorded that the spill kit items were ordered and when replaced and the location and area where the cleanup occurred.

Spill Response and First Aid Equipment

Location	Spill Equipment Content/Inventory
Main Plant by Heat Tank 1-3	50-gallon-Spill Kit including universal absorbent socks, pillows and pads. 40- gal drum of peat moss for absorbent
Main Plant by Water Tank	50-gallon-Spill Kit including universal absorbent socks, pillows and pads. 40- gal drum of peat moss for absorbent. 2 Ultra-Grate Guards
Main Plant- sludge Tank 2	Non-sparking shovels, broom, dustpan.
Storage Tank Area	50-gallon-Spill Kit including universal absorbent socks, pillows and pads. 40- gal drum of peat moss for absorbent
Main Office	First Aid Kit and defibrillator/SDS Book

Spill Cleanup and Disposal Procedures

In the event of a hazardous substance release, the spill cleanup materials are to be properly containerized, labeled, and characterized by laboratory analysis to determine if it is designated as a dangerous or hazardous waste. The designated on-site emergency contact and other resources (i.e. NY Spill Hotline) will determine the waste status prior to disposal.

Simple/Small Spills

For simple spills (less than 5 gallons which has not entered into the sewer system or cannot contaminate surface waters), emergency responders do not need to be notified. However, DEC shall be notified if the spill has over 5 gallons. Regardless of the amount the plant manager must be notified of the spill. Most importantly, before cleaning up the simple spill, be sure that you can do it safely. You must have the right personal protective equipment (PPE), including, at a minimum,

appropriate eye protection, protective gloves, and steel toe boots. The following steps should be taken during spill cleanup:

- Isolate the area and put slippery/greasy floor signs.
- Contain the spill. Make a dike around the outside edges of the spill. Use absorbent materials such as peat moss or absorbent pillow.
- Add absorbents to the spill, working from the spill's outer edges towards the center.
- The peat moss should be scooped, swept and placed in a plastic bucket and disposed of into a garbage bin. Clean the area to eliminate any slipping hazard.
- Record the action in the daily log.

Intermediate or large spills

Emergency responders shall be notified immediately after the discovery of an intermediate or large spill caused by overfilling a tank, tanker, collapse of a tanker or tank, or a loose hose.

Although BBD has measures in place to prevent what may constitute significant or major spills, there is always a possibility of a large spill. The following steps shall be taken upon discovery of an intermediate or large spill:

- Identify the source of the spill and if possible, stop the source of the spill (overflowing of a tanker/ tank can be stopped by simply turning off the pump).
- Assign one person to notify the authorities and management.
- Notify all employees on the radio and seek assistance to contain the spill.
- Determine the source of the spill and stop the spill and its source by closing a valve, plugging a leak, or setting a container upright. Transfer the materials from the damaged container, tanker or concrete tank with the aid of pumps and vacuum trucks.
- If the oil is flowing towards the storm sewers, assign a person to cover the storm sewer grate by installing the ultra-Grate guards and booms around the storm sewers. Assign some people to contain this by placing an oil absorbent boom and peat moss around the outside edges/perimeter of the spill.
- Clean up spills immediately to prevent spreading of waste by wind, rain, and vehicle traffic and potential safety hazards.
- When possible, let the flow to low lying areas and pump the oil using a vacuum truck.
- If the spill or leak is caused by a major leak/crack in in the heat tanks/ tankers that can't be patched/plugged, then pump the oil out using the vacuum trucks and pumps. Vacuum trucks can also pump free oil from the ground surface. The pumped oil can be discharged to the rear or the dump tank.
- Once the oil has been pumped out, spread peat moss onto the impacted area. If the spill is on concrete floor, scoop up the peat moss and clean the floor. If the spill has impacted soil, dig up the contaminated soil and peat moss and spread the soil/ peat moss on a liner. The oil

in the excavated soil and peat moss should bio-degrade after 4-6 weeks, after which the peat moss can be disposed of in the garbage.

- If the oil is discharged into the storm sewer, use a vacuum truck to suck/vacuum the content out of the storm sewer. Have another vacuum truck pumped the content from the downstream storms sewer to prevent oily water discharge into the drainage ditch. The vacuum truck content can be disposed of at the bio digester operated by Denali Water Solutions.

Sodium Hydroxide/Chlorine Spill (Solid)

Any spill larger than 50 kilograms or two bags should be handled as an emergency and the fire department called immediately. If you are in doubt of what to do, call the fire department or your local chemical spill emergency response center.

Before cleaning up a small spill:

- Make sure that the product is dry and is not mixed with other products.
- Use caution if the product is mixed with other materials (such as grass, paper, etcetera.) or if the product is reacting (hissing, bubbling, smoking, gassing, burning) or the containers or bulging.
- If there is any sign of the chemical reactions happening, evacuate the area immediately and contact your local fire department for help.

DO

Wear protective gloves, boots and aprons made of butyl rubber or neoprene (or other material specified in the SDS).

Wear safety goggles-goggles offer better protection against liquid splashes and airborne dust than safety glasses. Goggles that are called “indirectly vented” or “non ventilated” chemical resistance and will help prevent liquids from splashing and reaching the eyes. Face Shields may be worn in combination with goggles for better protection.

Ventilate the area if indoors.

Carefully place the spilled product in clean, dry plastic bag or container. Place this filled plastic bag inside another bag when finished.

Keep an eye on the product once it has been picked up. A reaction may be delayed. Shovel the NaOH and dump it into a water tank. Flush the impacted area with diluted acidic acid (vinegar citric acid or sodium bicarbonate) then flush the spill area with water.

DO NOT

Do not place spilled products back in the original container.

Do not generate dust when cleaning up a powder or solid. The dust may react with the moisture on your skin and cause injury.

If using a container to hold a spill, do not seal the container.

For specific details, refer to the attached MSDS/SDS for that product.

Petroleum Product Spills

If the spill is caused by a jerry can, stop the spill, transfer the content into another DOT approved bucket/container. Spill on a vehicle can also be stopped by using a wooden plug, band, or putty on a hole.

Contain and recover the spill. If the leak can't be stopped, catch the flowing liquid using a pan, pale, hubcap, shovel or whatever is available. Spreading sorbent material, such as kitty litter, sand, ground corn cobs, straw, sawdust, wood chips, peat, synthetic sorbet pads, or dirt from the roadside can stop the flow and soak up the petroleum on pavement.

Collect the contaminated sorbent and place material in buckets or in plastic bags. Dispose of the sorbet material at a hazardous waste disposal site or at a site where the material is preapproved after waste characterization.

Report the spill, if the amount is greater than 5 gallons or if the spill has entered a waterway.

Decontamination Processes

Decontamination is the process of physically removing or neutralizing contaminants that have accumulated on personnel and equipment; The last step of spill cleanup. The probability extended permutation is directly linked to the length of contact. The longer the contact, the more after we're required to decontaminate.

Loose contaminants such as dust or vapor may be removed by scrubbing, washing, and rinsing.

Adhering contaminants such as resins and muds may require physical removal by brushing and wiping. The effectiveness of this removal may be improved by solidifying, freezing, absorption and adsorption procedures.

Volatile substances may be removed by evaporation together with washing and rinsing. Be aware of worker exposure during this process.

All clean up supplies and equipment (brooms, dust pans, shovels, containers) personal protective equipment (chemical suits, respirators, gloves, boots, aprons, etc.) and any additional equipment in the area, that may have been contaminated during the spill release but may not initially be obvious.

Documentation

After cleaning up a spill, a simple write up should be prepared to document what happened, the five (5) “W” s should be used as a guideline (who, what, where, why and what was learned). Most major incidents are almost always preceded by numerous near misses, that can be used to learn from.

Personal Protective Equipment (PPE)

The OSHA personal protective equipment standard (29 CFR §1910.132) requires employers to determine the appropriate personal protective equipment for each hazard and to train employees on how and when to use personal protective equipment.

- Chemical splash goggles
- Face shields
- Nitrile gloves
- Appropriate body protection, (BBD uniform covering the entire body)
- Tyvek suits
- Shoe/ foot coverings
- Basic emergency equipment (should be close at hand)
- Neutralizers (citric acid, sodium bicarbonate, ETC.)
- Caution tape
- A shovel, broom and dustpan
- Heavy duty disposable bags with ties
- Duct tape-universal tool
- Telephone/radio
- Spill kit
- Eyewash station and a safety shower

An eyewash station has been installed in the water tank room. That eye wash station is within 5 feet of the Water Tank and 10 feet of the NaOH storage area.

A safety shower is installed in the drum washing station area. This area is always kept clear of debris or obstacles that could hinder access, in the event and affected employee needs to use a shower. Large signs have been posted to the general area to guide the affected employees to location of the eye-wash station and the safety shower. Both locations are clearly marked on the walls and always within the line of sight.

SDS Program

BBD has a hard copy of their SDS sheets for all products used at the plant. This manual is reviewed annually, when products are no longer in use or when new products are added, whichever comes first. Reviews of the manual are documented and dated within the manual. BBD is in the process of creating an online database for ease of use and searching for products to ensure proper precautions are taken when handling. The SDS Manual is currently located in the Process area of the plant next to the Northwest overhead door at the at grade loading dock.

FIRE PREVENTION AND CONTROL

Fire Prevention

- Waste accumulation is prohibited. Combustible waste material creating a fire hazard shall not be allowed to accumulate in the buildings.
- Vegetation. Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed regularly (as necessary). A record of this activity will be kept in the daily log when completed.
- Used oily rags shall be stored inside the fire-resistant container outside the building. The container should always be kept closed.
- Waste storage bins provided by Republic Services Inc. They are stored at least 50 feet from the building.
- Housekeeping trash and debris are always kept to a minimum. The work area is cleaned of debris at the end of every day. A record of the cleaning is made in the daily log.
- Smoking restrictions inside the work area are strictly enforced.
- "No smoking" and "Flammable/Combustible Area" signs are conspicuously posted throughout the plant
- Do not refuel equipment while operating or when hot
- Do not refuel in confined spaces
- Keep flammable liquid stored in tightly closed self-closing approved spill proof containers
- Store flammable liquids and proper containers away from ignition sources, i.e. open flames, cigarettes and spark providing sources.
- Do not overload outlets and circuits.
- Only OSHA approved metal safety fuel tanks, with self-locking spouts and flame arresters are to be used. These containers need to be stored in the fireproof locker.

Fire Protection

1. If a fire should strike, keep in mind the following rules:
    a. Make sure everyone gets out
    b. Call the fire department at once
    c. Do not attempt to fight the fire unless qualified
    d. Staying near an exit so you can escape if need be. Stay low, away from heat and smoke. If the fire gets large, get out.

Employee Training

OSHA requires that all employees be trained to use fire extinguishers. Training is required upon employment and at least annually thereafter. It is recommended that training sessions cover how to determine when a fire is too big to handle; What type of extinguisher use; and the PASS system of early-stage firefighting. It also is recommended that live fire training be conducted periodically processes this level training is not needed each year). All company fire prevention training sessions will be documented. If an outside organization conducts training, it would be a good idea to obtain training certificates for the attendees. A record of the training will be kept in the daily log and records of training kept for each employee that is trained.

BBD will take all necessary steps to prevent fires. Regular inspections during various operations are to be made to ensure fire prevention objectives are being met. The steps are listed below. Every employee is trained to fight fires by the company's management team. The training includes:

- The proper use of fire extinguishers.
- The location of each fire extinguisher throughout the plant.
- Where to meet event of a fire in order to account for personnel.
- How to alert the local fire service authorities, i.e. posted phone numbers.
- The manner which emergencies are announced, i.e. (3) blasts from air horn.
- Emergency escape procedures.
- The area of greatest potential fire hazards.
- Names and job titles of the persons responsible for maintenance of fire prevention equipment.
- Safe operating procedures for fueling equipment.
- All persons working in the plant would be familiarized with the evacuation codes and procedures.
- The management is to conduct a weekly toolbox safety meeting to discuss all pertinent health and safety issues.
- The record of the meeting will be kept in that daily log for that day.
- Training is to be provided prior to commencement of the job and on an annual basis thereafter.
- Training activities and attendees are recorded on the training log and on the daily log.

Reporting and Extinguishing Fire

- The fire department and management team will be notified when a fire is spotted.
- All workers are to be alerted over the radio and evacuated, as needed, utilizing the fire notification alarm if necessary.

- The PASS method will be used to extinguish the fire by those employees who have been properly trained.
- The area will be evacuated immediately if the fire is large. Evacuees will assemble at the predetermined, assembly location.

Fire Reporting and Response Procedure

1. If you discover fire or smoke, notify all employees over the radio as you exit the building from the nearest exit.
2. If you are not in immediate danger,
    a. Call 911 or call the Town of Tonawanda dispatch at 716-876-5300 and provide:
        i. Name
        ii. the specific location of the fire (address- and building or area name or number)
        iii. The size and type of fire
        iv. any other information requested by the dispatcher notify the company president over the radio or by phone
3. Notify the Incident Commander or your manager of the fire and commence Emergency Response Procedures.

Emergency Response Procedure

If trained in the proper use of portable fire extinguishers employees may attempt to extinguish or contain a small fire. Employees shall not place themselves or others in unnecessary danger. If someone else needs emergency medical attention, call 911. Follow the instructions provided by the authorities (fire department, police department, or dispatcher).

Evacuation Procedures

Maintain calm.

When you see fire or smoke, or when otherwise directed to leave the building, make sure other people in your immediate area are aware of the need to evacuate. Where possible, stay together and account for those in your group.

- Close but do not lock doors as employees leave. Take valuables (if in the same room) but leave large bags behind. Turn off unnecessary equipment if possible.
- Know the locations of primary and alternate exits. During an emergency, walk to the nearest safe exit and evacuate the building. Once outside, go to the front of the building and pre-determined and identified assembly area. Report to the supervisor/manager. Account for everyone in the plant. Report those missing to the manager. Do not leave the area unless you're told to do so.

Fire Apparatus Access

BBD shall maintain fire apparatus access around the perimeter of the building at a minimum 20' width with turning radii noted on Figure 12 in Appendix A. All fire lanes shall be free and clear of storage, clutter, trailers, etc. There is no stand pipe or hydrant located on the property.

Additional Responsibilities for Managers

- In addition to the above, managers have specific responsibilities to their employees. Weekly 5 minutes during the staff meeting will be spent to review how manager will work together to effectively implement emergency procedures.
- To the extent it is possible, managers will stay with and guide their employees to the nearest and safe exit, to assure that all employees have been evacuated.
- At the place of assembly, managers will account for those in their group and be able to report their status to the fire department or the plant manager.
- Managers will encourage their employees to stay together at the place of assembly to avoid traffic chaos and related safety issues.
- Managers will assist with injury reports and worker compensation claims as appropriate.

Assembly Points and Employee Accountability

There are no fixed or portable control gates in the plant, that create dead- end conditions. Hardware on doors of the plant is of the type that will always permit exiting from the space without the use of a key.

In the event of an emergency such as fire all employees are called on the radio to evacuate the plant from the nearest exit and meet in front of the building (Refer to Life Safety Plan in Figure 11 of Appendix A). To ensure all employees have been accounted for in the event of an emergency the incident commander takes attendance, and the composite list is given to the plant manager or the fire department.

APPENDIX E
NOISE SURVEY

PREVIOUS NOISE SURVEY RESULTS

Barton & Laguidice (B&L) conducted noise monitoring on June 10, 2022 at the 1 monitoring location identified as M-1 on Drawing 1 provided in Appendix E. The following summary of results were prepared for BBD by B&L and represent the current and future conditions associated with noise from plant operations.

A summary table of the monitoring results is also presented in Appendix E. Quest SoundPro DL sound level meters were used to measure and record the sound level at the monitoring locations. The meters were set to record at an A-weighting scale and "slow" response measuring options in accordance with 6 NYCRR Part 360.19(j). The meters were equipped with a data logger that was programmed to record the equivalent steady-state sound level (Leq) during the measurement period on a continuous basis.

The meters were calibrated in the field with an AC-300 acoustical calibrator before and after the measurement period. The pre-reading calibration results were recorded by the meters' data logging system to the calibrator sound level of 114 dB. The post-reading calibration results were recorded by the meters' data logging system to the calibrator sound level of 114 dB for M-1 for both night and daytime readings. The post-reading calibration is used as a check to ensure that each meter is operating accurately during the measurement period. Records of field calibrations are provided on the data report generated by the Detection Management Software system provided in Attachment 2. A factory calibration certificate certifying that the meter was calibrated to the manufacturer's specifications within the last year was supplied by the instrument rental company and is provided in Attachment 3.

The sound level meter was positioned at M-1, mounted on a tripod at a height of approximately 1.5 meters (5 feet) above ground surface, and fitted with appropriate microphone wind screens offset approximately the same distance from the nearest receptor from the road, and approximately 10 feet from Buffalo Biodiesel's main entrance. Field measurements of wind speed were taken prior to initiating sound measurements and recorded on field data sheets also provided in Attachment 3. Relative humidity and temperature data was obtained from a nearby weather station.

During the monitoring period, observations regarding specific sources of noise that contributed to the overall sound levels were recorded by field personnel. The predominant noise sources observed during the monitoring period for M-1 were traffic along Sawyer Ave including tractor trailers. The facility operated normally, as confirmed by operations, including normal employee traffic and truck traffic.

Noise Monitoring Results

The noise monitoring event recorded the 1-hour steady-state equivalent sound levels (Leq-1hr) for each location with results of 62.03dB(A) at M-1 from 6AM – 7AM, and 60.81 db(A) at M-1 from 8AM – 9AM, which as noted earlier is the peak noise causing time for the facility. The night time monitoring exceeds Part 360 noise limits, however almost none of the noise was facility, rather traffic contributed to a much greater part to the noise. This is supported by the fact that the ambient noise after traffic

in the morning when the facility creates the most noise is lower than at night and is in compliance with daytime noise levels. These ambient noise levels from traffic, of which was counted 8 tractor trailers and 150 cars of non-facility traffic passing though during the 1 hour monitoring in comparison to the 14 cars of facility traffic during the morning hour help demonstrate that the noise is not the result of Buffalo Biodiesel's operations. The daytime monitoring was found to be in compliance with Part 360 Noise Regulations for Urban areas.

LEGEND

M-1 NOISE MONITORING LOCATION JUNE 10, 2022
6AM-7AM NIGHT
9AM-10AM DAY

BUFFALO BIODIESEL, INC.
NOISE MONITORING

NOISE MONITORING LOCATION PLAN

ERIE COUNTY, NEW YORK
CITY OF TONAWANDA

443 Electronics Parkway
Liverpool, NY
13088
B&L
Barton & Loguidice, D.P.C.

Date
JULY 2022

Scale
1" = 50'

Figure Number
1

Project Number
2412.001.001

Session Report

6/13/2022

Information Panel

Name	BuffaloBiodiesel_M1_Nighttime
Start Time	6/10/2022 5:46:37 AM
Stop Time	6/10/2022 7:04:47 AM
Device Name	BGM050004
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	

Summary Data Panel

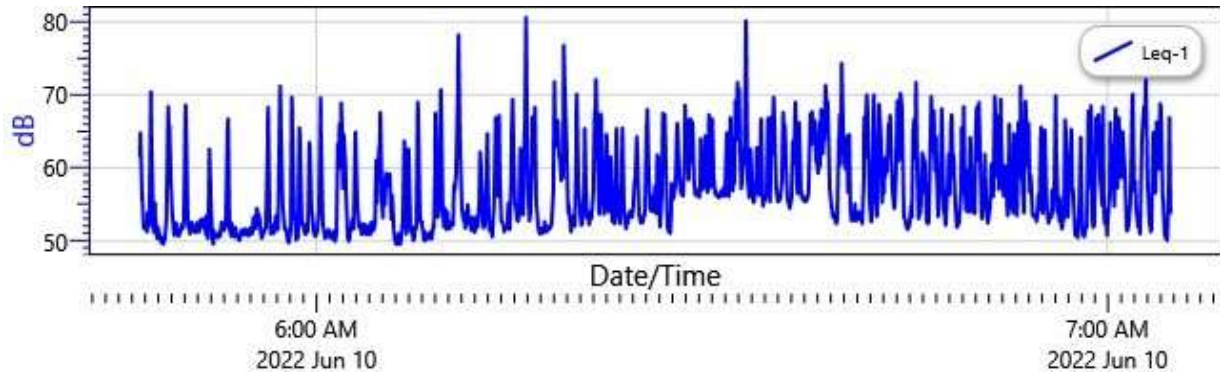
Description	Meter	Value	Description	Meter	Value
Leq	1	61.5 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
6/10/2022 5:34:27 AM	Calibration	114.0			
6/10/2022 7:08:00 AM	Verification	114.0			

Logged Data Chart

BuffaloBiodiesel_M1_Nighttime: Logged Data Chart



Session Report

6/13/2022

Information Panel

Name	BuffaloBiodiesel_M1_Daytime
Start Time	6/10/2022 8:27:42 AM
Stop Time	6/10/2022 10:00:53 AM
Device Name	BGM050004
Model Type	SoundPro DL
Device Firmware Rev	R.13H
Comments	

Summary Data Panel

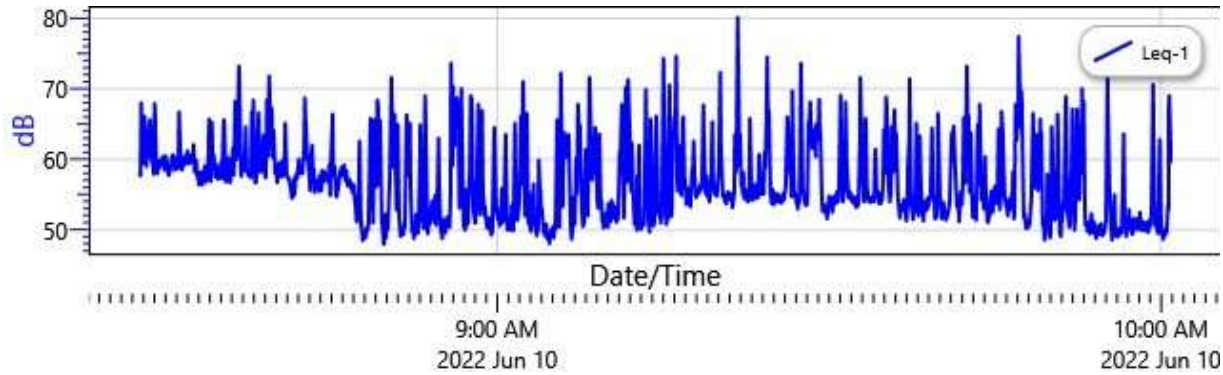
Description	Meter	Value	Description	Meter	Value
Leq	1	60.7 dB			
Exchange Rate	1	3 dB	Weighting	1	A
Response	1	SLOW	Bandwidth	1	OFF

Calibration History

Date	Calibration Action	Level	Cal. Model Type	Serial Number	Cert. Due Date
6/10/2022 8:25:07 AM	Calibration	114.0			
6/10/2022 10:04:11 AM	Verification	114.0			

Logged Data Chart

BuffaloBiodiesel_M1_Daytime: Logged Data Chart



FA00727

TSI INCORPORATED – OCONOMOWOC
1060 Corporate Center Drive, Oconomowoc, WI 53066 USA
tel 651 490 2811 + toll free 800 245 0779 + web www.tsi.com

Certificate of Calibration

Certificate No:1005921 BGM050004

Submitted By: ECO RENTAL SOLUTIONS LLC
5900 HOLLIS STREET STE T2
EMERYVILLE, CA 94608-2008

Serial Number:	BGM050004	Date Received:	3/18/2022
Customer ID:	FA00727	Date Issued:	4/19/2022
Model:	SOUNDPRO DL-2 SLM	Valid Until:	4/19/2023

Test Conditions:

Temperature:	18°C to 29°C
Humidity:	20% to 80%
Barometric Pressure:	890 mbar to 1050 mbar

Model Conditions:

As Found:	DAMAGED
As Left:	IN TOLERANCE

SubAssemblies:

Description:	Serial Number:
MICROPHONE QE 7052 1/2 IN. ELECTRET	53997
TYPE 2 PREAMP	0122 0314

Calibrated per Procedure:53V899

Reference Standard(s):

I.D. Number	Device	Last Calibration	Date Calibration Due
EF000100	QUEST-CAL	3/31/2021	3/31/2022
ET0000556	B&K ENSEMBLE	6/18/2020	6/18/2022

Measurement Uncertainty:

ACOUSTIC +/- 0.19DB
Estimated at 95% Confidence Level (k=2)

Calibrated By: Paul M. Wegmann 4/19/2022

PAUL WEGMANN Service Technician

This report certifies that all calibration equipment used in the test is traceable to NIST, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of TSI Incorporated.

APPENDIX F
SEWER CONNECTION PERMIT #646 AND DISCHARGE ANALYTICALS

Permit No. 646

TOWN OF TONAWANDA

INDUSTRIAL SEWER CONNECTION PERMIT

Company Name: Buffalo Biodiesel, Inc.
Division Name (if Applicable)

Mailing Address: 17 Court Street
Street or P.O. Box
Buffalo, NY 14207
City, State and Zip Code

Facility Address: 225 Sawyer Ave.
Street or P.O. Box
Tonawanda, New York 14150
City, State and Zip Code

The above Industrial User is authorized to discharge industrial wastewater to the Town of Tonawanda sewer system in compliance with the Town's Sewer Use Ordinance Number 2-2000, any applicable provisions of Federal or State law or regulation, and in accordance with discharge point(s), effluent limitations, monitoring requirements, and other conditions set forth herein.

This permit is granted in accordance with the application filed on January 2, 2025 in the office of the Pretreatment Administrator, and in conformity with plans, specifications, and other data submitted to the Town in support of the above application.

Effective Date: January 2, 2025

Expiration Date: December 31, 2027

Permit No. 646

Date: 1-2-24 Signed: Paul K Morrow

Paul Morrow
Town of Tonawanda
Pretreatment Coordinator

Permit No. 646

Modified Date: _____

WASTEWATER STREAMS AUTHORIZED FOR DISCHARGE

WASTEWATER STREAM	APPROXIMATE FLOW(GPD)	YES	NO
A. Sanitary Discharge	8,000	X	
B. Cooling Water			
C. Boiler Blowdown			
D. Process Wastewater			
E. Other	Drum Cleaning- 500 GPD	X	
F. Other		X	

PART 1 - WASTEWATER DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS

A. LOCALLY DERIVED LIMITATIONS

The industrial user shall comply with the following locally derived effluent limitations effective as of: ***January 2, 2025. All discharge is to take place between the hours of 7 a.m. and 5 p.m., no discharge is allowed outside of the hours.***

MONITORING LOCATION: Discharge Pipe from Oil Water Separator

SAMPLE TYPE: Grab

PARAMETERS	SAMPLE FREQUENCY	LIMIT	PURPOSE
pH	2x per Month *	5.0-9.5 SU	Compliance
Oil and Grease	"	300 mg/l	"
BOD	"	250 mg/l	Surcharge
TSS	"	"	"
Total Phosphorus	"	6.0 mg/l	"
Total Zinc	"	4.4 mg/l	Compliance
Total Arsenic	"	0.5 mg/l	Compliance
Total Mercury	"	0.001 mg/l	Compliance
Total Copper	"	2.6 mg/l	Compliance
Total Chrome	"	1.5 mg/l	Compliance
Total Nickel	"	5.0 mg/l	Compliance
Total Cyanide	"	1.1 mg/l	Compliance
Flow	Monthly		

BOD= Biochemical Oxygen Demand, TSS= Total Suspended Solids

*Two times per month at least 14 days apart.

Note: The complete list of discharge limitations for dischargers to the Town Treatment Plant is contained in the Town's Local Law 2-2000. On the basis of the application and previous monitoring, parameters deemed applicable to this discharge have been excerpted and their limitations included above. The discharger should be aware that all other limitations apply and should consider all such limitations when considering process changes or plant modifications.

PART II - SPECIAL CONDITIONS/COMPLIANCE SCHEDULE

1. *The Industrial User shall develop, within 6 months of the effective date of this permit, an accidental spill prevention/slug control/SPCC plan(s) to eliminate or minimize the accidental or slug discharge of pollutants into the sewer system, which could have an effect on the Town's treatment plant, sludge, or cause the Town to violate its SPDES permit.*

PART III - REPORTING REQUIREMENTS

1. *All Industries requiring submittal of self-monitoring reports (SMR's) must submit all laboratory results on all discharged samples. If a lab analysis was performed using an EPA approved test method, then those results must be included in the SMR.*
   Persons signing SMR's must be a responsible company official, ie; owner, corporate manager, or supervise more than two hundred fifty (250) employees. Any of the above may appoint a company representative to sign SMR's but written notice must be supplied to this office authorizing said employee to sign.

The following statement will be required on all SMR's and baseline monitoring reports (BMR):

" I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violation."

2. *If an Industrial User knows in advance of the need for a bypass, it shall submit prior notice to the Town, if possible at least ten days before the date of the bypass. An Industrial User shall submit oral notice of an unanticipated bypass or slug discharge that exceeds applicable Pretreatment Standards to the Town within 24 hours from the time the Industrial User becomes aware of the bypass or slug discharge. A written submission shall also be provided within 5 days of the time the Industrial User becomes aware of the bypass or slug discharge. The written submission shall contain a description of the bypass or slug discharge and its cause; the duration of the bypass/ slug discharge , including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass/ slug discharge. The Town may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.*

3. *The Industrial User shall notify the Town 30 days prior to the introduction of new wastewater or pollutants or any substantial change in the volume or characteristics of the wastewater being introduced into the POTW from the User's industrial processes. The Industrial User Is required to notify the Town immediately of any changes to its facility affecting it potential for slug discharge.*

4. *Any upset experienced by the Industrial User of its treatment that places it in a temporary state of non-compliance with wastewater discharge limitations contained in this permit or other limitations specified in the Town's Ordinance shall be reported to the Town within 24 hours of first awareness of the commencement of the upset. Immediate resampling for the non-compliance pollutant shall begin. A detailed report shall be filed within 5 days.*

5. *The Industrial User is required to submit to the Town reports on the results of its sampling of the pollutants specified in Part I of this Permit. This report shall also contain monthly flows.*

6. *Analytical procedures must be performed in accordance with 40 CFR Part 136. Additional pollutants not contained in Part 136 must be performed using validated analytical methods approved by EPA (40 CFR 403.12 [g] [4]).*

7. *All self-monitoring reports shall be submitted to the following address by the 25th day of the month following the reporting period:*

Paul Morrow, Pretreatment Coordinator
Wastewater Treatment Facility
Two Mile Creek Road
Tonawanda, New York 14150

PART IV - STANDARD CONDITIONS

1. *The Industrial User shall comply with all the general prohibitive discharge standards in Article IV of the Local Law 2-2000.*

   a. *BOD 250 mg/l, SS 250 mg/l, P 6 mg/l are not to be construed as discharge limits of the above pollutants but as a baseline for generating abnormal sewer charges. Permitees that sample more frequently than required for surchargeable parameters and have a greater then 30% variation in flow per reportable day will have a flow averaged used for surcharge calculation.*

2. RIGHT OF ENTRY

The Industrial User shall, after reasonable notification by the Town, allow the Town or its representatives, exhibiting proper credentials and identification, to enter upon the premises of the User, at all reasonable hours, for the purposes of inspection, sampling, or records inspection. Reasonable hours in the context of inspection and sampling includes any time the Industrial User is operating any process which results in a process wastewater discharge to the Town's sewerage system.

3. RECORDS RETENTION

The Industrial User shall retain and preserve for no less than three (3) years, any records, books, documents, memoranda, reports, correspondence and all summaries thereof, relating to monitoring, sampling and chemical analysis made by or in behalf of the User in connection with its discharge.

a) *All records that pertain to matters that are the subject of special orders or any other enforcement or litigation activities brought by the Town shall be retained and preserved by the Industrial User until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.*

4. CONFIDENTIAL INFORMATION

Except for data determined to be confidential under Article VII, Section 4 of the Town's Ordinance, all reports required by this permit shall be available for public inspection at the office of the Pretreatment Coordinator, Wastewater Treatment Facility, Two Mile Creek Road, Tonawanda, New York 14150.

5. RECORDING OF RESULTS

For each measurement or sample taken pursuant to the requirements of this permit, the user shall record the following information:

a) *The exact place, date and time of sampling;*
b) *The dates the analyses were performed;*
c) *The person(s) who performed the analyses;*
d) *The analytical techniques or methods used, and*
e) *The results of all required analyses.*
f) Where sanitary sewer discharge is measured by a mechanical or electronic device, accuracy of device shall be certified correct every year by the manufacturer
g) Where sanitary sewer discharge is measured as consumed water, the water meter must be certified as per the following schedule: meter size 5/8 to 1 inch every ten years, meter size 1 inch to 4 inch every five years, and meter size 4 inches and larger every year.

6. DILUTION

No Industrial User shall increase the use of potable or process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit

7. PROPER DISPOSAL OF PRETREATMENT SLUDGES AND SPENT CHEMICALS

The disposal of sludges and spent chemicals generated shall be done in accordance with Section 405 of the Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

8. TOXIC SUBSTANCES

All waters shall be maintained free of toxic substances in concentrations that are toxic to or produce detrimental physiological responses in human, plant, animal, or aquatic life.

9. SIGNATORY REQUIREMENTS

All reports required by this permit shall be signed by a principal executive officer of the User, or his designee.

10. REVOCATION OF PERMIT

The permit issued to the Industrial User by the Town may be revoked when after inspection, monitoring or analysis it is determined that the discharge of wastewater to the sanitary sewer is in violation of Federal, State, or local laws, ordinances, or regulations. Additionally, falsification or intentional misrepresentation of data or statements pertaining to the permit application or any other required reporting form, shall be cause for permit revocation.

11. LIMITATIONS ON PERMIT TRANSFER

Transfer of permit. Industrial waste permits are issued to a specific user for a specific operation. In the event of any change in ownership of the industrial facility, the permittee shall notify the new owner of the existence of the permit by letter, a copy of which shall be forwarded to the Pretreatment Administrator 30 days prior to change of ownership. A new industrial waste permit must be issued to the new owner.

12. FALSIFYING INFORMATION OR TAMPERING WITH MONITORING EQUIPMENT

Knowingly making any false statement on any report or other document required by this permit or knowingly rendered any monitoring device or method inaccurate, may result in punishment under the criminal law of the Town, as well as being subjected to civil penalties and relief.

13. MODIFICATION OR REVISION OF THE PERMIT

a) *The terms and conditions of this permit may be subject to modification by the Town at any time as limitations or requirements as identified the Town's Ordinance, are modified or other just cause exists.*
b) *This permit may also be modified to incorporate special conditions resulting from the issuance of a special order.*
c) *The terms and conditions may be modified as a result of EPA promulgating a new federal Pretreatment standard.*
d) *Any permit modifications which result in new conditions in the permit shall include a reasonable time schedule for compliance if necessary.*

Permit No: 646

14. DUTY TO REAPPLY

The Town shall notify a User sixty (60) days prior to the expiration of the User's Permit. Within thirty (30) days of the notification, the User shall reapply for re- issuance of the permit on a form provided by the Town.

15. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

16. LIMITATIONS

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any invasion of personal rights, nor any infringement of Federal, State or Local regulations.

17. ENFORCEMENT OF THE SEWER USE LAW AND PERMITS

The Town has developed and received USEPA approval of its Enforcement Response Plan which details the standard responses to be taken by the Town when it encounters various violations of the Sewer Use Law or the terms of this permit. Copies of this document are available at the office of the Pretreatment Administrator. Town of Tonawanda Sewer Use Ordinance 2-2000 Article VI 165-33 allows for punitive Administrative fines of up to $5,000 per day. The Town of Tonawanda may also maintain an action or proceeding in the name of the Town of Tonawanda in a court of competent jurisdiction for injunctive relief of any violation Article 6 of the Town Sewer Use Ordinance 2-2000

ANALYTICAL REPORT

Lab Number:	L2563647
Client:	Buffalo Biodiesel, Inc 225 Sawyer Ave Tonawanda, NY 14150
ATTN:	Sumit Majumdar
Phone:	(800) 986-0919
Project Name:	2X MONTHLY ANALYSIS
Project Number:	Not Specified
Report Date:	10/21/25

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 2X MONTHLY ANALYSIS
Project Number: Not Specified

Lab Number: L2563647
Report Date: 10/21/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2563647-01	BUFF BIO 10-25-1ST	WATER	TONAWANDA, NY	10/08/25 09:48	10/08/25

Project Name:	2X MONTHLY ANALYSIS	**Lab Number:**	L2563647
Project Number:	Not Specified	**Report Date:**	10/21/25

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Pace Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Pace's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	2X MONTHLY ANALYSIS	**Lab Number:**	L2563647
Project Number:	Not Specified	**Report Date:**	10/21/25

Case Narrative (continued)

Report Submission

Please note that this report format does not contain typical QC parameters that were performed with these samples. As such, any QC outliers or non-conformances can only be reviewed by accessing your Customer Center account at www.alphalab.com and building a Data Usability table (format 11) in our Data Merger tool.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Kelly Stenstrom

Title: Technical Director/Representative Date: 10/21/25

METALS

Project Name: 2X MONTHLY ANALYSIS
Lab Number: L2563647
Project Number: Not Specified
Report Date: 10/21/25

SAMPLE RESULTS

Lab ID: L2563647-01
Client ID: BUFF BIO 10-25-1ST
Sample Location: TONAWANDA, NY
Date Collected: 10/08/25 09:48
Date Received: 10/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/l	0.0050	--	1	10/11/25 01:01	10/17/25 00:16	EPA 3005A	19,200.7	MRP
Chromium, Total	ND		mg/l	0.0100	--	1	10/11/25 01:01	10/17/25 00:16	EPA 3005A	19,200.7	MRP
Copper, Total	ND		mg/l	0.0100	--	1	10/11/25 01:01	10/17/25 00:16	EPA 3005A	19,200.7	MRP
Mercury, Total	ND		mg/l	0.00020	--	1	10/11/25 02:16	10/14/25 19:49	EPA 245.1	3,245.1	JWN
Nickel, Total	ND		mg/l	0.0250	--	1	10/11/25 01:01	10/17/25 00:16	EPA 3005A	19,200.7	MRP
Zinc, Total	0.0366		mg/l	0.0050	--	1	10/11/25 01:01	10/17/25 00:16	EPA 3005A	19,200.7	MRP

INORGANICS
&
MISCELLANEOUS

Project Name: 2X MONTHLY ANALYSIS
Project Number: Not Specified

Lab Number: L2563647
Report Date: 10/21/25

SAMPLE RESULTS

Lab ID: L2563647-01
Client ID: BUFF BIO 10-25-1ST
Sample Location: TONAWANDA, NY

Date Collected: 10/08/25 09:48
Date Received: 10/08/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	52.		mg/l	2.0	NA	2	-	10/13/25 10:00	121,2540D	AEL
Cyanide, Total	ND		mg/l	0.005	--	1	10/16/25 21:00	10/17/25 12:27	121,4500CN-CE	JER
pH (H)	6.65		SU	-	NA	1	-	10/11/25 16:01	121,4500H+-B	DMO
Phosphorus, Total	2.87		mg/l	0.100	--	10	10/13/25 10:00	10/13/25 14:01	121,4500P-E	EYA
BOD, 5 day	400		mg/l	250	NA	125	10/09/25 19:15	10/14/25 15:37	121,5210B	SPS
Oil & Grease, Hem-Grav	27		mg/l	4.0	--	1	10/18/25 07:04	10/18/25 13:39	140,1664B	TPR

Project Name: 2X MONTHLY ANALYSIS
Project Number: Not Specified

Lab Number: L2563647
Report Date: 10/21/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2563647-01A	Plastic 250ml HNO3 preserved	NA	<2	<2		Y	Absent		NI-UI(180),ZN-UI(180),HG-U(28),CR-UI(180),AS-UI(180),CU-UI(180)
L2563647-01B	Plastic 250ml NaOH preserved	NA	>12	>12		Y	Absent		TCN-4500(14)
L2563647-01C	Plastic 250ml H2SO4 preserved	NA	<2	<2		Y	Absent		TPHOS-4500(28)
L2563647-01D	Plastic 950ml unpreserved	NA	NA			Y	Absent		PH-4500(.01),BOD-5210(2)
L2563647-01E	Plastic 950ml unpreserved	NA	NA			Y	Absent		TSS-2540-LOW(7)
L2563647-01F	Amber 1L HCl preserved	NA	NA			Y	Absent		OG-1664(28)
L2563647-01G	Amber 1L HCl preserved	NA	NA			Y	Absent		OG-1664(28)

*Values in parentheses indicate holding time in days

Project Name:	2X MONTHLY ANALYSIS	**Lab Number:**	L2563647
Project Number:	Not Specified	**Report Date:**	10/21/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report - No QC

Project Name:	2X MONTHLY ANALYSIS	**Lab Number:**	L2563647
Project Number:	Not Specified	**Report Date:**	10/21/25

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: DU Report - No QC

Project Name:	2X MONTHLY ANALYSIS	**Lab Number:**	L2563647
Project Number:	Not Specified	**Report Date:**	10/21/25

Data Qualifiers

ND	- Not detected at the reporting limit (RL) for the sample.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
P	- The RPD between the results for the two columns exceeds the method-specified criteria.
Q	- The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
R	- Analytical results are from sample re-analysis.
RE	- Analytical results are from sample re-extraction.
S	- Analytical results are from modified screening analysis.
V	- The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
Z	- The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report - No QC

Project Name: 2X MONTHLY ANALYSIS **Lab Number:** L2563647

Project Number: Not Specified **Report Date:** 10/21/25

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

140 Method 1664,Revision B: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-10-001, February 2010.

LIMITATION OF LIABILITIES

Pace Analytical Services performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Pace Analytical Services.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, SM4500CL-G, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Ca, Cr, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1: Hg. **EPA 245.7:** Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY kY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
MA M-MA00030, CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 85084, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, LA 245052, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

For a complete listing of analytes and methods, please contact your Project Manager.

Pace® Location Requested (City/State): Westboro

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB L2563647 BUFFBIO – ISLE

Company Name:	Buffalo Biodiesel, Inc.
Street Address:	225 Sawyer Ave Tonawanda, NY 14150
Customer Project #:	
Project Name:	2X Monthly Analysis
Site Collection Info/Facility ID (as applicable):	
Contact/Report To:	Sumit Majumdar
Phone #:	716-408-1399 x 325
E-Mail:	sumit@buffalobiodiesel.com
Cc E-Mail:	
Invoice To:	
Invoice E-Mail:	
Purchase Order # (if applicable):	
Quote #:	

Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET

County / State origin of sample(s): NY

Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required): [ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

	Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	OG-1664	TSS-2540-LOW	PH, BOD-5210	TPHOS-4500	Metals by 200.7*	TCN-4500	Sample Comment
01	Buff Bio 10-25-1ST	WW	CC			10/8	9:48am	7			X	X	X	X	X	X	

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

** 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: Brenda Pirinelli

AcctNum / Client ID: BUFFBIO-ISLE

Table #:

Profile / Template:

Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample.

Additional Instructions from Pace®:
*Metals 200.7 - Zn, As, Hg, Cu, Cr, Ni

Collected By:
(Printed Name)

Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:

	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature) CC	10/8 15:37	PACE	10/08/25 @ 15:37
Relinquished by/Company: (Signature) PACE	10/8/25 @ 15:37	Received by/Company: (Signature)	10/8 2330
Relinquished by/Company: (Signature) Russell B. Bixby	10-8-25 16:05	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time: 10/9 0400	Received by/Company: (Signature)	Date/Time: 10/9/25 0400

Tracking Number:

Delivered by: [ ] In- Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

Page: 1 of 1

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ENV-FRM-CORQ-0019_v02_110123 ©

Sample Delivery Group Summary

Pace Job Number : L2563647

Account Name : Buffalo Biodiesel, Inc
Project Number :
Project Name : 2X MONTHLY ANALYSIS

Received : 08-OCT-2025
Reviewer : Monique Irving

Delivery Information

Samples Delivered By : Pace Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	3.2	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NA**

APPENDIX G
RETROFITTING SPILL CONTAINMENT SYSTEM DESIGN PLANS- UST 1 AND 2

BUFFALO BIODIESEL
OFFLOADING & STORAGE IMPROVEMENTS
225 SAWYER AVE,
TONAWANDA, NY 14150

DRAWING LIST:
DWG-001 - COVER SHEET
DWG-002 - SITE PLAN
DWG-003 - GENERAL NOTES
DWG-004 - EXISTING CONDITIONS
DWG-005 - CONCRETE PIT RETROFIT
DWG-006 - RETRO FIT DETAILS

REV	DESCRIPTION	DATE	BY
2	FINAL RELEASE	10/22/2025	BSB

REVISION HISTORY

TITLE: COVER SHEET

SHEET: 1 OF 6

REV: 1

CLIENT: BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

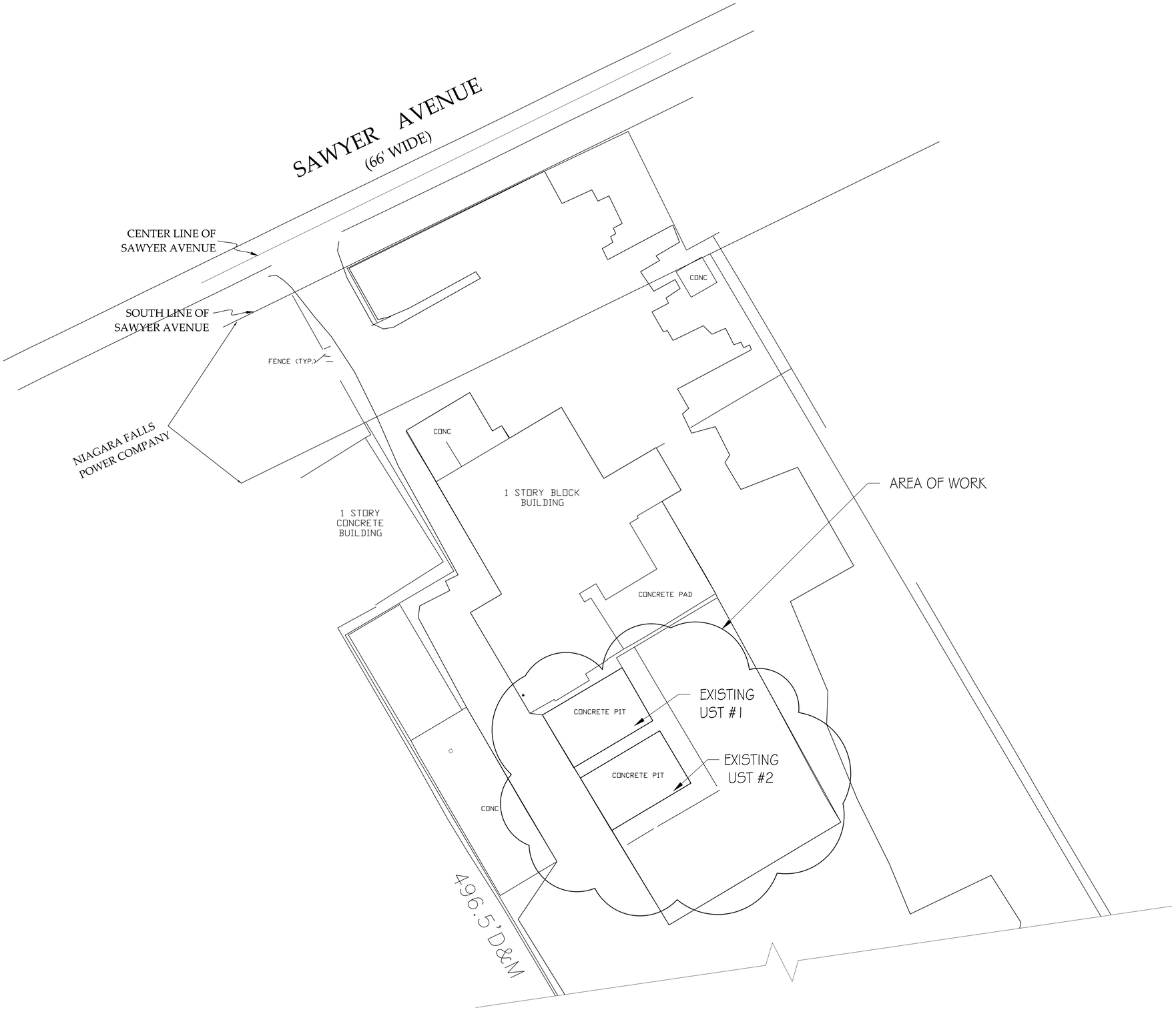
DWG NO.: DWG-001

DRAWING INFO.

DRAWN BY:	B.S.B.
DATE:	9/10/2025
CHECKED:	M.K.
DATE:	9/10/2025
SCALE:	AS NOTED

LAKESIDE DESIGN ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120
Civil / Structural Engineering

AFI ENVIRONMENTAL



SITE PLAN

SCALE: NTS

REV	DESCRIPTION	DATE	BY
2	FINAL RELEASE	10/22/2025	BSB

REVISION HISTORY

TITLE: SITE PLAN

SHEET: 2 OF 6

REV: 1

D

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

DWG NO.: DWG-002

DRAWING INFO.	
DRAWN BY:	B.S.B.
DATE:	9/10/2025
CHECKED:	M.K.
DATE:	9/10/2025
SCALE:	AS NOTED

LAKESIDE DESIGN
ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120

CIVIL AND STRUCTURAL NOTES

GENERAL NOTES

G1. THESE NOTES ARE A REPRESENTATION OF THE MINIMUM STANDARDS FOR INSTALLTION.

G2. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE NEW YORK STATE BUILDING CODE LATEST EDITION AND ALL APPLICABLE STATE, FEDERAL AND LOCAL CODES.

G3. VERIFY EXISTING CONDITIONS, LAYOUTS AND DIMENSIONS PRIOR TO COMMENCEMENT OF WORK. NOT ALL CONDITIONS ARE SHOWN THAT MAY AFFECT THE NEW WORK.

G4. CONTRACTOR SHALL BE RESPONSIBLE FOR JOB SITE CONDITIONS DURING PERFORMANCE OF WORK, INCLUDING SAFETY OF ALL PERSONS DIRECTLY OR INDIRECTLY AFFECTED BY THE WORK OPERATIONS. CONTRACTOR SHALL ADHERE TO ALL GENERALLY ACCEPTED CONSTRUCTION PRACTICES, ALL PLANT SAFETY RULES, PRECAUTIONS, AND REQUIREMENTS OF LOCAL, STATE AND FEDERAL CODES. SCHEDULE AND COORDINATE ALL CONTRACT WORK TO AVOID CONFLICT WITH OWNERS OPERATIONS.

G5. BRING ANY AND ALL CONFLICTS BETWEEN THESE DRAWINGS AND THE EXISTING CONDITIONS AND BETWEEN THESE DRAWINGS TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO PROCEEDING.

G6. PROTECT ALL EXISTING EQUIPMENT, PIPING, ROOFS, WALLS, ETC. BEFORE CONTRACT WORK STARTS. ITEMS DAMAGED DURING THE WORK ARE TO BE REPAIRED TO MATCH SURROUNDING EXISTING SURFACES AND ITEMS AT NO EXPENSE TO THE OWNER. PATCH AND SEAL ALL WALLS, FLOORS, ROOFS, ETC. TO OWNERS SATISFACTION.

EXISTING CONDITIONS

E1. ALL EQUIPMENT, SCREENS OR ANY OTHER ITEMS WITHIN THE UST SHALL BE REMOVED PRIOR TO START OF CONCRETE RETROFIT.

E2. CONTRACTOR SHALL COORDINATE WITH OWNER AND LOCATE/IDENTIFY ANY AND ALL SUFACE MOUNTED OR EMBEDDED ITEMS INLCUDING ELECTRICAL CONDUIT, HYDRAULIC FEED LINES, ETC. PRIOR TO COMMENCING WORK.

E3. ELECTRICAL EQUIPMENT SHALL BE DISCONNECTED AND LOCKED AND TAGGED PRIOR TO START OF CONSTRUCTION.

E4. PRIOR TO COMMENCEMENT OF WORK ALL OILS, GREASE AND LAITANCES SHALL BE REMOVED DOWN TO BARE CONCRETE.

E5. CONTRACTOR TO USE TEMPORARY SUMPS, DAMS OR ANY MEANS NECESSARY TO PROTECT AREA OF WORK FROM RECONTAMINATION PRIOR TO PLACEMENT OF CONCRETE.

E6. PREPARE ALL SURFACE RECEIVING NEW CONCRETE PER PLANS.

E7. NOTIFY ENGINEER UPON COMPLETION OF SURFACE PREP FOR INSPECTION AND APPROVAL.

CONCRETE

C1. ALL REINFORCED CONCRETE WORK TO CONFORM TO THE LATEST ACI 318 CODE AND CRSI STANDARDS, INCLUDING ACI 614 FOR HANDLING, ACI 347 FOR FORMS, ACI 306 FOR COLD WEATHER, ACI 305 FOR HOT WEATHER AND ACI 301 FOR STRUCTURAL CONCRETE.

C2. OWNER SHALL EMPLOY A THIRD PARTY INSPECTIOR FOR ALL FIELD TESTING AND INSPECTIONS ON ALL STRUCTURAL CONCRETE WORK.

C3. CONTRACTOR TO SUBMIT, FOR APPROVAL BY OWNERS REPRESENTATIVE, A CONCRETE MIX DESIGN FOR EACH TYPE AND STRENGTH OF CONCRETE REQUIRED TO COMPLETE THE PROJECT. SUBMIT MIX DESIGNS FOR REVIEW 30 DAYS PRIOR TO PLACEMENT OF CONCRETE. ALL CONCRETE MIX DESIGNS SHALL BE PREPARED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF ACI 318 (INCLUDING BUT NOT LIMITED ALL BACK UP DATA, MIX ADDITIVES, AND BATCH TESTING BY 30 CONSECUTIVE TEST OR 3-POINT CURVE).

C4. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28-DAYS:

A.	WALLS AND SLABS	4000 PSI
B.	ALL OTHER CONCRETE	4000 PSI

C5. ALL CONCRETE SHALL BE NORMAL WEIGHT TYPE I/TYPE II CONCRETE WITH A NOMINAL DRY DENSITY OF 145 PCF.

C6. ALL CONCRETE SHALL BE AIR ENTRAINED 6% +/- 1% UNLESS OTHERWISE NOTED.

C7. CONCRETE SLUMP SHALL BE 4" +/-1" UNLESS OTHERWISE NOTED.

C8. HORIZONTAL AND VERTICAL SURFACE IN CONTACT WITH EXISTING CONCRETE TO RECEIVE SIKA SWELL STOP ADHERED WATER STOP.

C9. SIZE OF CONCRETE PLACEMENTS SHALL NOT EXCEED THE FOLLOWING:

A. NEW STRUCTURES AND SLABS – PLACE IN ACCORDANCE WITH JOINT PATTERNS INDICATED ON PLAN. PLACE IN LINEAR STRIPS NOT TO EXCEED 30 FEET. PLACEMENTS AREA SHALL NOT EXCEED "FORMED JOINTS" AS INDICATED ON PLAN WITHOUT PRIOR ACCEPTANCE BY THE OWNER'S REPRESENTATIVE.

C10. WET CURE ALL CONCRETE OR CURE WITH A NYDOT APPROVED MEMBRANE CURING COMPOUND.

C11. MINIMUM ELAPSED TIME BETWEEN ADJACENT CONCRETE PLACEMENTS SHALL BE 48 HOURS.

C12. NO CALCIUM CHLORIDE SHALL BE USED IN ANY CONCRETE.

C13. CONCRETE FINISHES SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

A.	EXTERIOR HORIZONTAL SURFACES, FLOOR SLABS AND PAVEMENTS	BROOM
B.	ALL OTHER EXPOSED SURFACE	STEEL TROWEL

C14. UPON COMPLETION OF WORK AND PROPER CURING, CONTRACTOR TO APPLY EPOXY SEALER PER PLANS ON ALL FOUR SIDES OF NEW SUMP AND FLOOR SLAB.

REINFORCING

R1. ALL REINFORCING BARS SHALL HAVE PROPER COVER, EMBEDMENT, LAPS, PLACEMENT, ETC. PER ACI 315, ACI 310 AND CRSI STANDARDS AND AS SHOWN ON THE DRAWINGS AND THE LAP SPLICE TABLE.

R2. ALL BAR REINFORCEMENT SHALL CONFORM TO ASTM 615 – GRADE 60

R3. WELDED WIRE FABRIC REINFORCEMENT SHALL CONFORM TO ASTM A 185

R4. CLEARANCE OF MAIN REINFORCEMENT FROM ADJACENT SURFACES SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN IN DETAIL:

A.	FOOTINGS AND SURFACE IN PERMANENT CONTACT WITH THE GROUND	3 INCH
B.	FORMED SURFACES IN CONTACT WITH THE GROUND OR EXPOSED TO WEATHER	2 INCH
C.	IN ALL CASES, CLEARANCE SHALL NOT BE LESS THAN	1-1/2 INCH

NOTE: MAXIMUM DEVIATION FROM THESE REQUIREMENTS SHALL BE + 1/4 INCH FOR SECTIONS TEN (10) INCHES OR LESS AND +1/2 INCH FOR SECTIONS OVER TEN (10) INCHES THICK.

R5. REINFORCEMENT SHALL BE CONTINUOUS THROUGH ALL CONSTRUCTION JOINTS UNLESS OTHERWISE INDICATED ON DRAWINGS.

R6. WHERE REINFORCEMENT IS NOT SHOWN ON THE DRAWINGS, PROVIDE REINFORCEMENT IN ACCORDANCE WITH APPLICABLE TYPICAL DETAILS OR SIMILAR TO THAT SHOWN FOR MOST NEARLY SIMILAR SITUATIONS, AS DETERMINED BY THE OWNER'S REPRESENTATIVE. IN NO CASE SHALL REINFORCEMENT BE LESS THAN MINIMUM PERMITTED BY THE APPLICABLE CODES.

R7. ALL REINFORCING SHALL BE INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE OR THE OWNER'S TESTING AGENCY, PRIOR TO PLACING CONCRETE.

R8. WHERE CONTINUOUS BARS ARE CALLED FOR, THEY SHALL BE RUN CONTINUOUSLY AROUND CORNERS, LAPPED AT NECESSARY SPLICES AND HOOKED AT DISCONTINUOUS ENDS.

R9. WELDED WIRE FABRIC SHALL BE LAPPED ONE FULL MESH PANEL OR 6 INCHES MINIMUM.

R10. ALL REINFORCING SPLICES SHALL CONFORM TO THE TABLE PROVIDED IN THE GENERAL NOTES FOR EACH STRENGTH OF CONCRETE BUT IN NO CASE LESS THAN REQUIREMENTS OF THE LATEST EDITION OF ACI 318.

R11. BEAMS, SLABS AND WALLS SHALL NOT BE SLEEVED OR BOXED OUT OR HAVE THEIR REINFORCING INTERRUPTED EXCEPT AS SPECIFICALLY NOTED ON THE DRAWINGS. PROVIDE ADDITIONAL REINFORCEMENT AROUND OPENINGS AS SHOWN IN DETAILS OR APPROVED BY OWNER'S REPRESENTATIVE.

R12. SUBMIT CHECKED SHOP DRAWINGS TO THE OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO FABRICATION OF REINFORCING. DRAWINGS SHALL SHOW REINFORCING DETAILS, INCLUDING SIZE AND SPACING OF BARS AND SUPPORT DETAILS. SHOP DRAWINGS SHALL INDICATE CONSTRUCTION JOINTS, CURBS, DEPRESSIONS, SLEEVES, OPENINGS, ETC. WITH ALL ADDITIONAL REINFORCING REQUIRED.

R13. BAR SUPPORTS SHALL BE GALVANIZED OR STAINLESS STEEL. IN ADDITION, BAR SUPPORTS IN CONTACT WITH EXPOSED SURFACES SHALL BE PLASTIC TIPPED.

SLAB AND WALL REINFORCING LAP SPLICE LENGTHS

LAP SPLICE LENGTH FOR REINFORCING IN 4000 PSI CONCRETE ARE AS FOLLOWS:

BAR SIZE	TENSION SPLICE TOP	TENSION SPLICE OTHER	DEVELOPMENT LENGTH
3	17	13	13
4	22	17	17
5	28	22	21
6	33	26	25
7	49	37	32
8	55	43	42
9	63	48	53
10	70	54	68
11	78	60	83

NOTES:

1. LAPPED SPLICE LENGTHS BASED ON ASTM 61, GRADE 60 REBAR.
2. REINFORCING BARS ARE CLASSED AS TOP BARS WHEN MORE THAN 12" OF CONCRETE IS CAST BENEATH RESPECTIVE REINFORCING.
3. COMPRESSION SPLICES PERMISSIBLE ONLY WHERE SPECIFICALLY NOTED ON THE DRAWINGS, DETAILS OR SCHEDULES.
4. TENSION SPLICES SHALL BE USED IN ALL BEAMS, SLABS AND WALLS UNLESS OTHERWISE NOTED.
5. WHEN LAPPING LARGER BARS WITH SMALL ER BARS, LAP LENGTH FOR SMALLER BAR SHALL GOVERN RESPECTIVE SPLICE.
6. SPLICE CONTINUOUS TOP REINFORCING BARE AT CENTER OF CLEAR SPAN WITH COMPRESSION SPLICE.
7. SPLICE CONTINUOUS BOTTOM REINFORCING AT THE CENTER OF SUPPORTING ELEMENTS WITH COMPRESSION SPLICES.
8. ALL SPLICE AND DEVELOPMENT LENGTHS NOTED IN INCHES.

REV	DESCRIPTION	DATE	BY
2	FINAL RELEASE	10/22/2025	BSB

REVISION HISTORY

TITLE: GENERAL NOTES

SHEET: 3 OF 6

REV: 1

D

BUFFALO BIODIESEL Inc.

DWG NO.: DWG-003

CLIENT: BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

DRAWING INFO.	
DRAWN BY:	B.S.B.
DATE:	9/10/2025
CHECKED:	M.K.
DATE:	9/10/2025
SCALE:	AS NOTED

LAKESIDE DESIGN ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120

LDE Civil / Structural Engineering

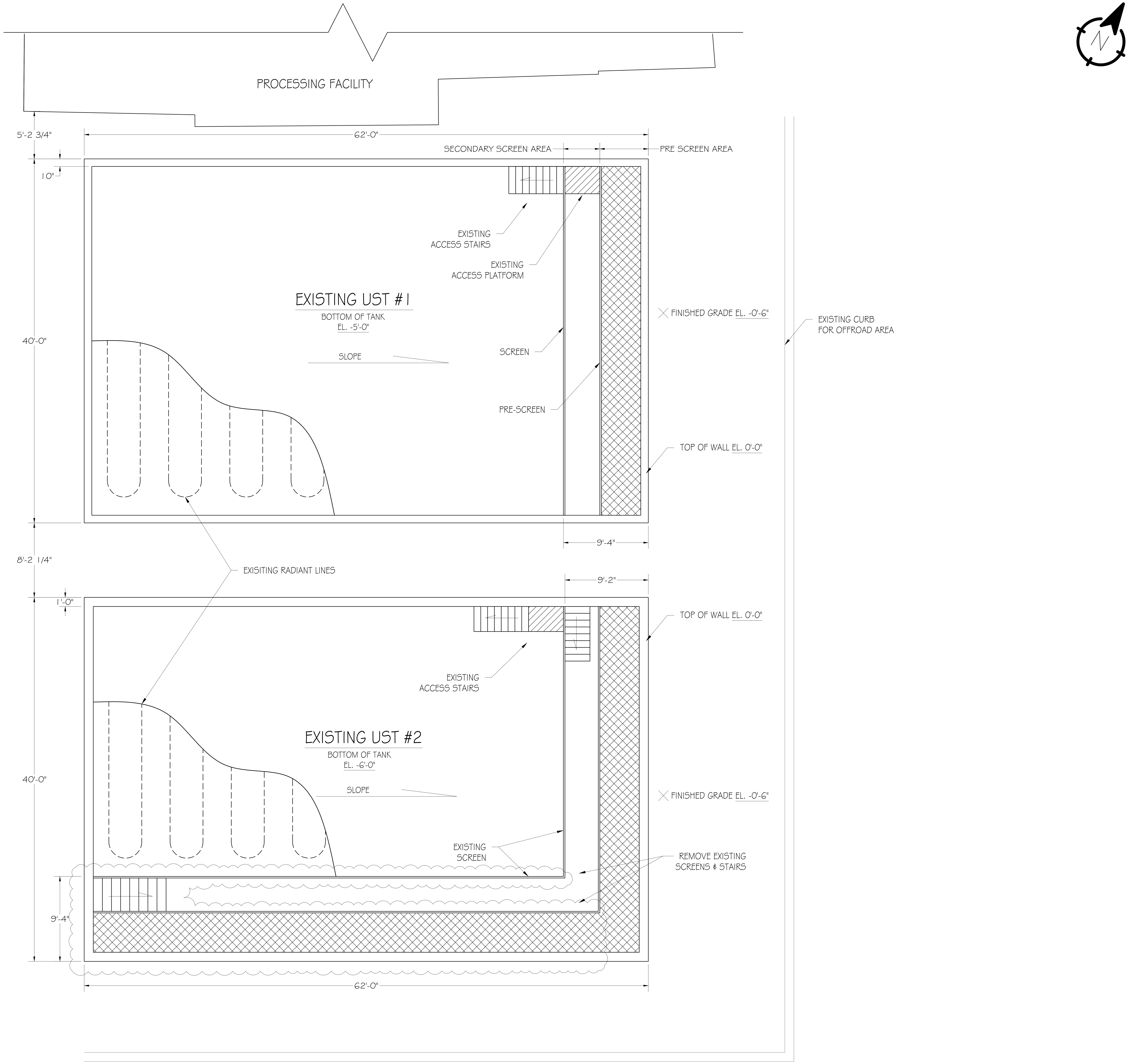
AEI ENVIRONMENTAL

NOTES:

1.) CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK.

2.) COORDINATE W/ OWNER REMOVAL OF ANY/ALL EQUIPMENT FROM EXISTING UST.

3.) REMOVE AND REUSE STAIRS AND ACCESS PLATFORMS.



EXISTING CONDITION / DEMO PLANS

SCALE: 3/16"=1'-0"

2	FINAL RELEASE	10/22/2025	BSB
REV	DESCRIPTION	DATE	BY

REVISION HISTORY

TITLE: EXISITING CONDITIONS

REV: 1

SHEET: 4 OF 6

BUFFALO BIODIESEL INC

CLIENT: BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

DWG NO.: DWG-004

DRAWING INFO.

DRAWN BY:	B.S.B.
DATE:	9/10/2025
CHECKED:	M.K.
DATE:	9/10/2025
SCALE:	AS NOTED

LAKESIDE DESIGN ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120

LDE Civil / Structural Engineering

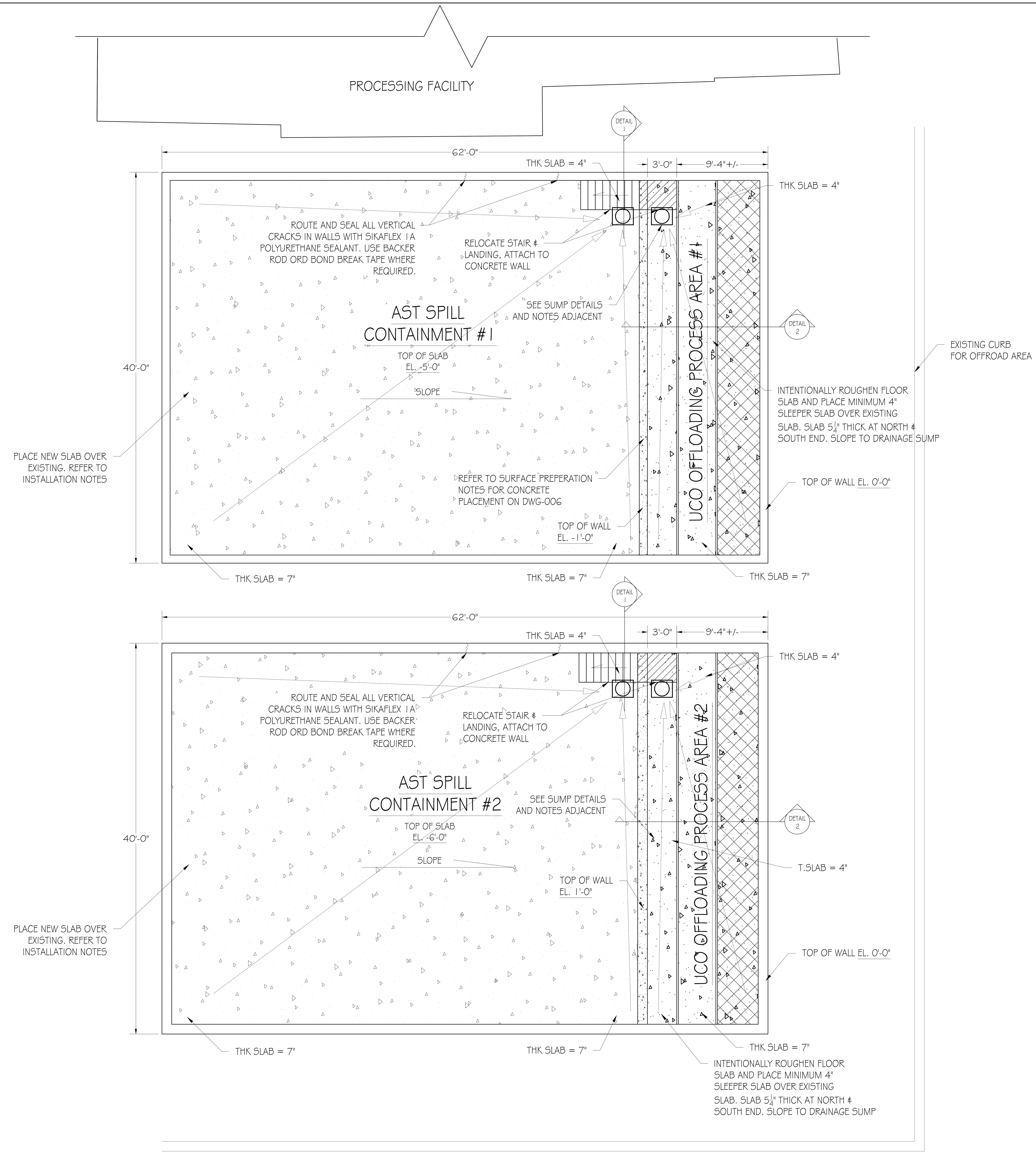
AFI ENVIRONMENTAL

NOTES:

1.) REFER TO SITE PLAN DWG-002 LOCATION.

2.) REFER TO GENERAL NOTES DWG-003 FOR ADDITIONAL INFO.

3.) REFER TO DETAILS ON DWG-006 FOR ADDITIONAL INFO.



CONCRETE PIT RETROFIT

SCALE: 3/16"=1'-0"

1	INITIAL RELEASE	09/10/2025	BSB
REV	DESCRIPTION	DATE	BY

REVISION HISTORY

AFI ENVIRONMENTAL

LDE Civil / Structural Engineering

LAKESIDE DESIGN ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120

DRAWING INFO.

DRAWN BY:	B.S.B.
DATE:	9/10/2025
CHECKED:	M.K.
DATE:	9/10/2025
SCALE:	AS NOTED

CLIENT:
BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

DWG NO.: DWG-005

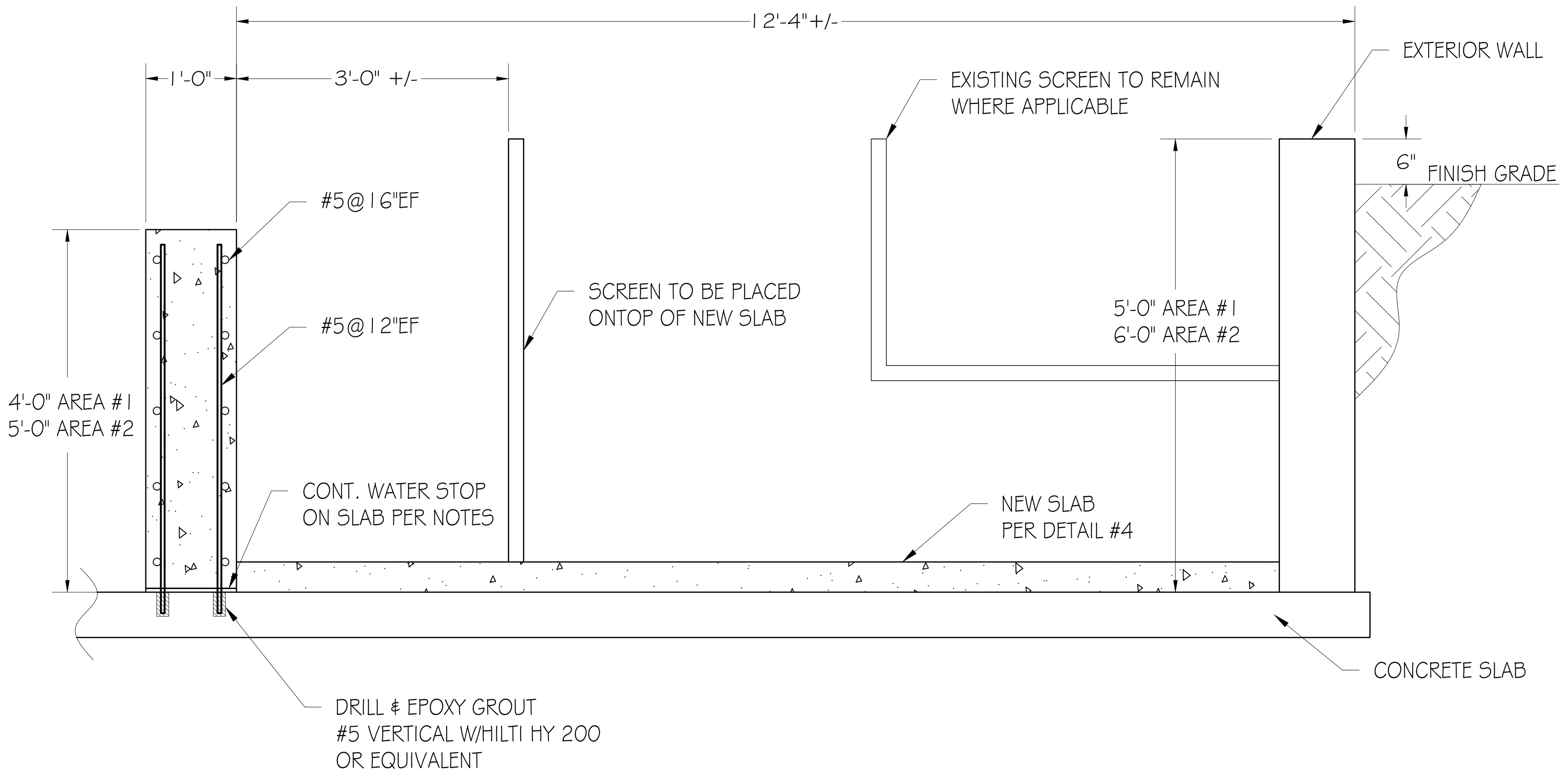
BUFFALO BIODIESEL

TITLE: CONCRETE PIT RETROFIT

SHEET: 5 OF 6

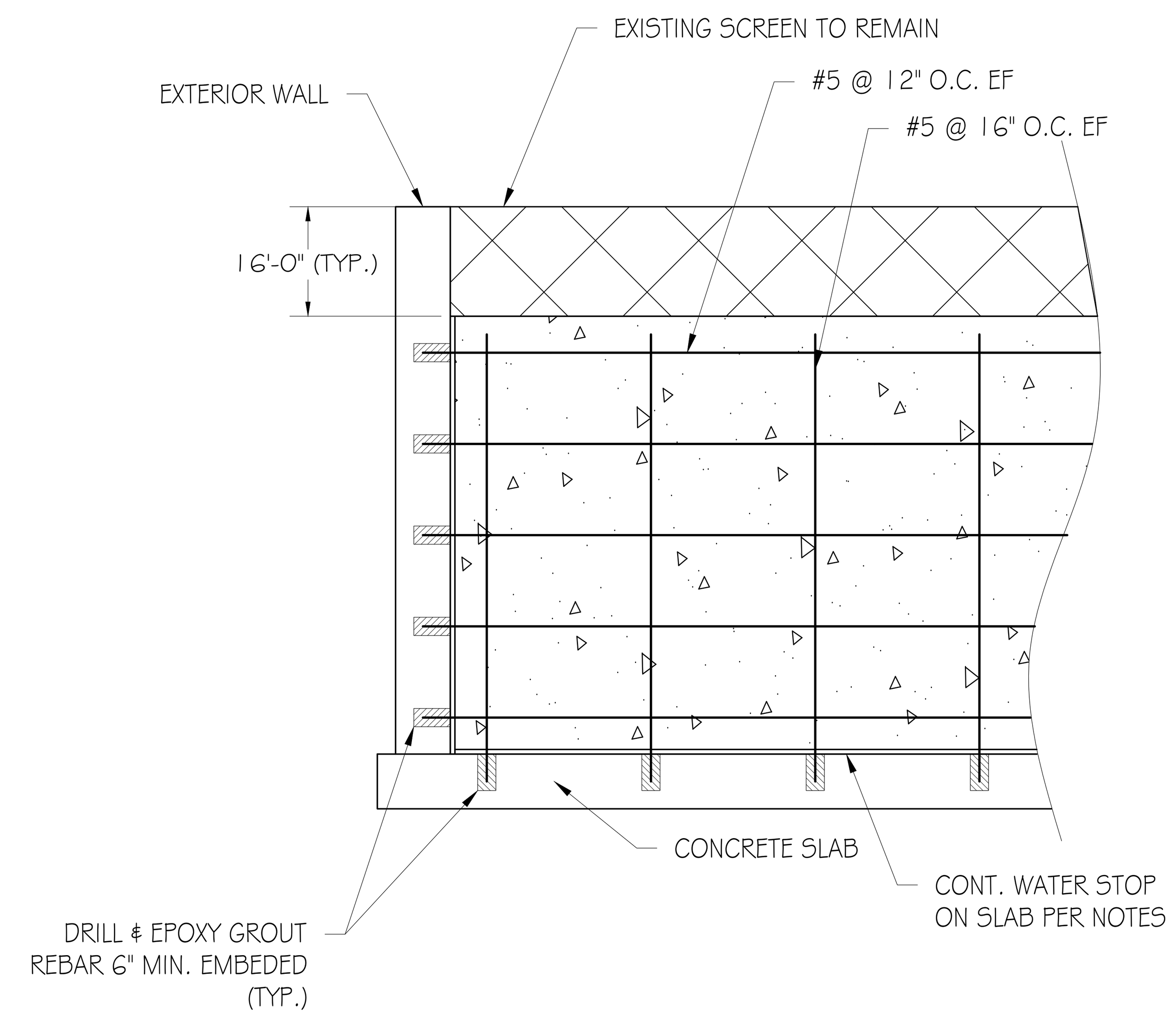
REV: 1

D



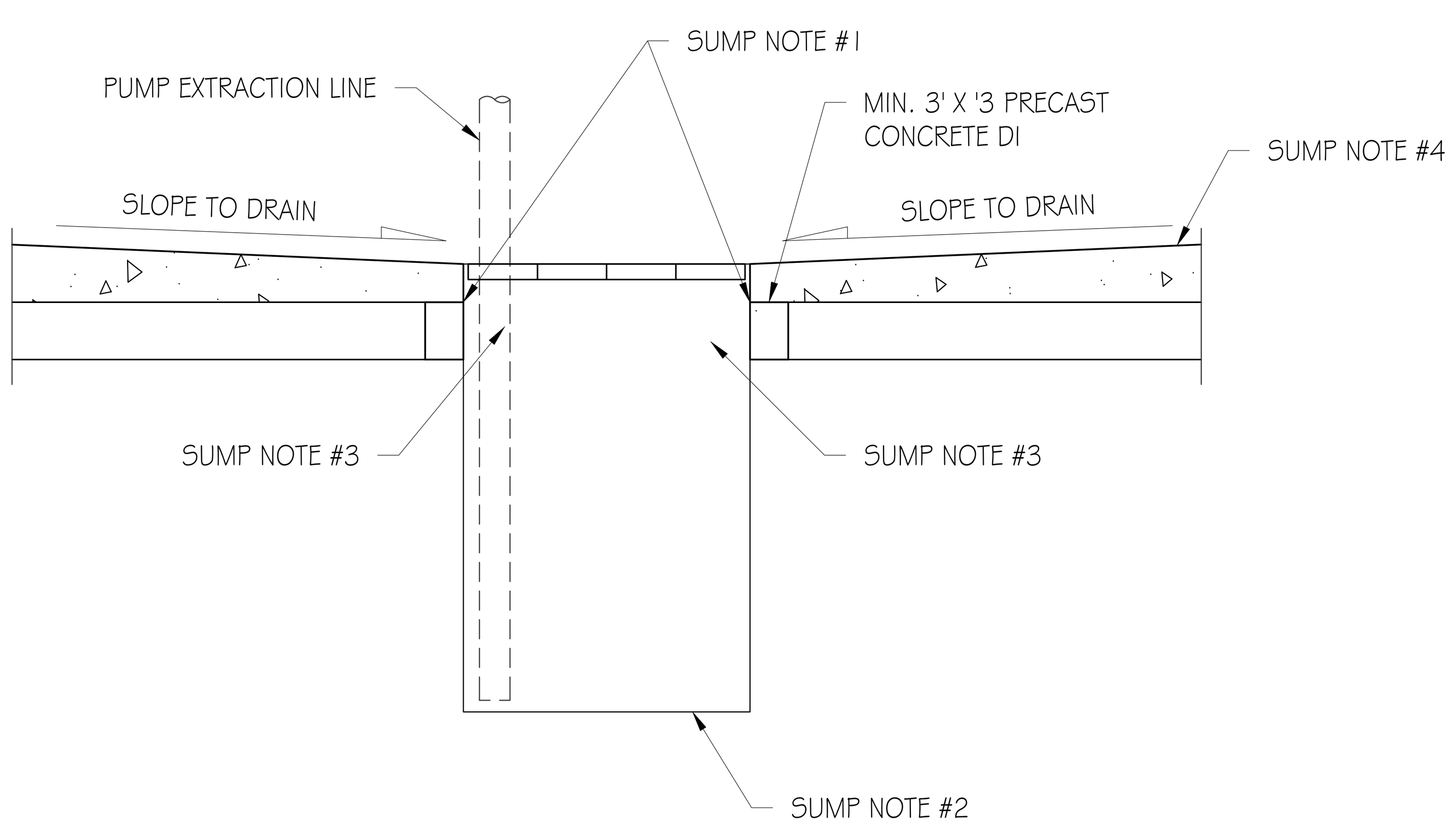
DETAIL #1

SCALE: $\frac{3}{4}$"= 1'-0"



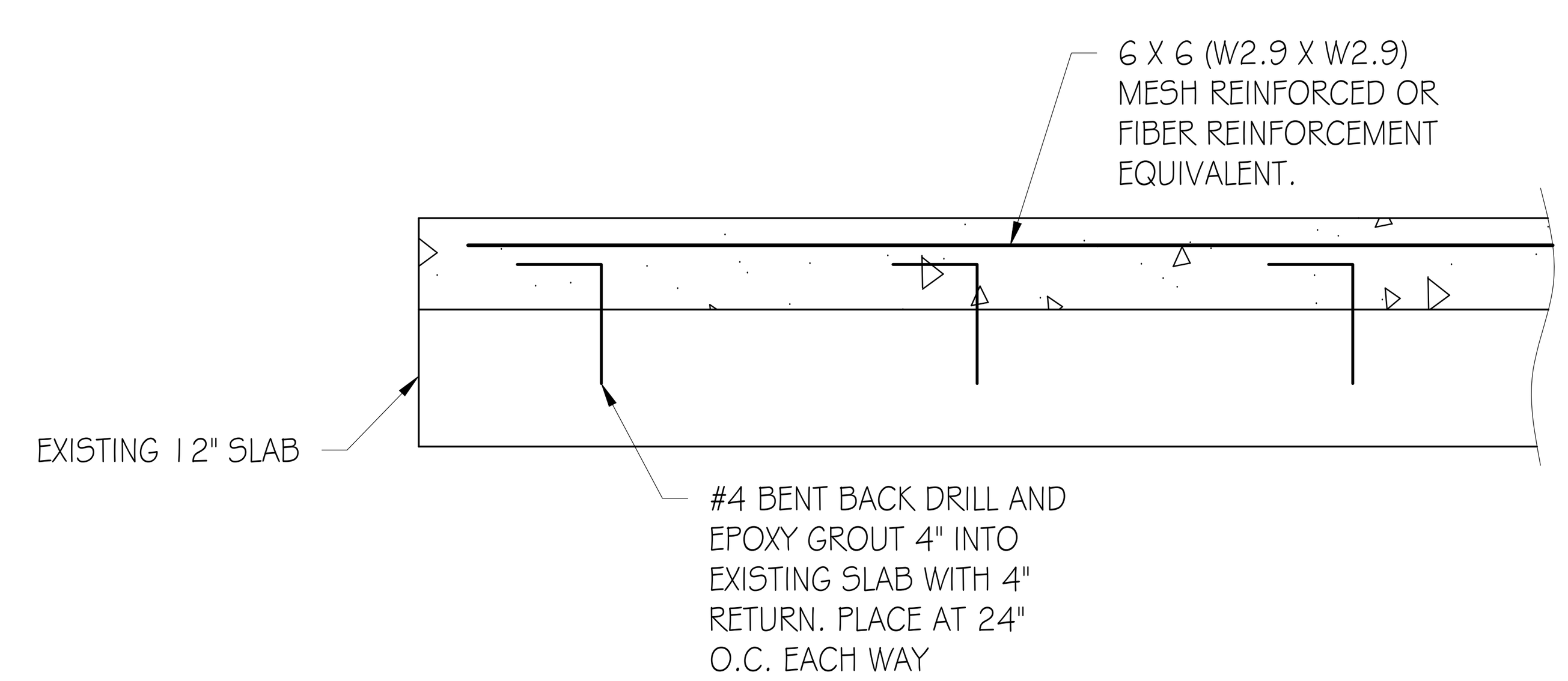
DETAIL #2

SCALE: $\frac{3}{4}$"= 1'-0"



DETAIL #3
SUMP

SCALE: $\frac{3}{4}$"= 1'-0"



DETAIL #4
NEW DRAINAGE SLAB

SCALE: $1\frac{1}{2}$"= 1'-0"

CONCRETE SURFACE PREPARATION AND PLACEMENT SEQUENCE NOTES:

1. REFER TO GENERAL NOTES ON DWG 003 FOR ADDITIONAL INFORMATION ON INSTALLATION AND MATERIALS.
2. CONTRACTOR SHALL CLEAN AND REMOVAL ALL OILY MEDIA, DEBRIS, DIRT AND LAITANCES WITHIN AREA OF CONCRETE REFURBISHMENT AND MODIFICATIONS PRIOR TO COMMENCING WORK. (NOTE ATEMPORARY DAM ACROSS THE WIDTH OF THE TANK MAY BE REQUIRED TO PREVENT INFLUX OF DEBRIS, WATER OR MATERIAL AFTER CLEANING AS THE TANKS SLOPE FROM WEST TO EAST.)
3. UPON SUCCESSFULLY REMOVING DEBRIS DOWN TO BARE CONCRETE, CONTRACTOR SHALL INTENTIONALLY ROUGHEN SIDE WALLS AND CONCRETE FLOOR OF UNDERGROUND STORAGE TANK (UST).
4. DRILL AND EPOXY GROUT DOWELS VERTICALLY IN FLOOR SLAB AND HORIZONTALLY INTO WALLS FOR NEW CONCRETE KNEE WALL.
5. PLACE SELF ADHERING BENTONITE WATER STOP CENTERED ON NEW WALL ALONG THE BASE AND SIDE WALLS. APPROVED PRODUCT IS SIKA SWELLSTOP.
6. TIE REBAR, FORM AND POUR NEW KNEE WALL PER PLANS. PRIOR TO PLACEMENT CONTRACTOR SHALL CONTACT ENGINEER OF RECORD TO INSPECT REBAR, FORM WORK AND INSTALLATION.
7. OWNER SHALL EMPLOY A THIRD PARTY TESTING AGENCY TO SAMPLE FRESH CONCRETE FOR QUALITY ASSURANCE.
8. STRIP FORMS, ALLOW FOR ADEQUATE CURE TIME AND EPOXY SEAL CONCRETE ON 4 SIDES INSIDE OF NEW CONTAINMENT AND THE FLOOR WITH SIKAGARD – 62 SEALER. REFER TO MNFR. NOTES ON APPROPRIATE CONCRETE CURE TIME PRIOR TO SEALING.
9. SUBSTITUTIONS SHALL BE SUBMITTED TWO WEEKS PRIOR TO PROPOSED USE TO THE ENGINEER OF RECORD. ONLY APPROVED MATERIALS SHALL BE INSTALLED.

SUMP NOTES:

1.) SAW CUT AND DEMO OPENING FOR NEW POLY SUMP. EXCAVATE BELOW SLAB TO INSTALL SUMP AND BACKFILL FIRMLY AROUND WITH SAND OR ANOTHER GRANULAR MATERIAL THAT IS SELF COMPACTING.

2.) INSTALL NEW SOLID WALL POLYETHYLENE SUMP BOX, ZOELLER 22 GAL OR APPROVE EQUIVALENT. PRECAST CONCRETE DRAINAGE INLET CAN BE SUBSTITUTED AS ALTERNATE.

3.) SEAL AROUND SUMP BOX WITH CLOSURE POUR OF QUICK SET CONCRETE.

4.) PLACE NEW SLAB FOR DRAINAGE AND SLOPE TO SUMP.

5.) UPON COMPLETION OF NEW SLEEPER SLAB FOR DRAINAGE, INSTALL SUMP LINE FOR TANK FILLING.

REV	DESCRIPTION	DATE	BY
2	FINAL RELEASE	10/22/2025	BSB

REVISION HISTORY

TITLE: RETROFIT DETAILS

SHEET: 6 OF 6

REV: 1

D

CLIENT: BUFFALO BIODIESEL
225 SAWYER AVE, TONAWANDA TOWN, NY 14150

DWG NO.: DWG-006

DRAWING INFO.

DRAWN BY:	B.S.B.
DATE:	9/10/2025
CHECKED:	M.K.
DATE:	9/10/2025
SCALE:	AS NOTED

LAKESIDE DESIGN ENGINEERING, DPC
2891 PEARCE RD
NORTH TONAWANDA
NEW YORK, 14120

Civil / Structural Engineering

APPENDIX H
TOWN OF TONAWANDA ZONING LETTER AND OCCUPANCY/OPERATING PERMITS

Town of Tonawanda
Building Department

525 Belmont Ave
Buffalo, NY 14223
Phone: 877-8801
Fax: 871-8845

PARCEL SEARCH / ZONING

Reference Number: MS-2025-0058

10/08/2025

Empire State Property
2680 Grand Island Blvd
Grand Island, NY 14072

RE: 225 Sawyer Ave, Town of Tonawanda, NY (SBL 65.09-6-6)

To Whom it May Concern:

Please be advised of the following details for the above mentioned property:

Year Built:

Current Use(s): Biodiesel Refining Facility This is a permitted use in the zoning district.

Violations:
Property is in the process of receiving a Certificate of Compliance. The initial Compliance inspection revealed Property Maintenance Code violations. Violations must be corrected before the Compliance Certificatee can be issued.

Additional Details: There are no variances, sites plans, or special use permits on file for this property.

Property is located in the G-I General Industrial Zoning District.

This office certifies that, if any portion of the improvements on the property are partially or completely destroyed, such improvements may be rebuilt to their current size and configuration without any further permits, approvals or the like, other than the standard building, plumbing, and electrical permits which can be obtained if plans and specifications are prepared in conformity with the Town of Tonawanda's current building code.

This does not include the sump pump compliance that is required for transfer of property.

Should you have any questions or comments, please contact this office at your earliest convenience.

Yours truly,

Code Enforcement Officer

Town of Tonawanda
Building Department

525 Belmont Ave
Buffalo, NY 14223
Phone: 877-8801
Fax: 871-8845

CERTIFICATE OF OCCUPANCY

Buffalo Biodiesel Inc.
17 Court St.
Buffalo, NY 14202

Permit #: BP2025-1139
Address: 225 Sawyer Ave

Dear Buffalo Biodiesel Inc.,

THIS CERTIFIES THAT THE PREMISES LOCATED AT 225 Sawyer Ave , IN THE TOWN OF TONAWANDA, FOR WORK DESCRIBED AS:

Updating documentation of Operating Permits and life safety items for Certificate of Occupancy - Buffalo Biodiesel.

WAS INSPECTED BY Sean Pellicore, ON 12/22/2025, AND FOUND TO BE IN SUBSTANTIAL COMPLIANCE WITH THE TERMS AND REQUIREMENTS OF THE NYS UNIFORM FIRE PREVENTION AND BUILDING CODE AND THE CODE OF THE TOWN OF TONAWANDA.

THIS INSPECTION SPECIFICALLY RELATES TO THE CONSTRUCTION COMPLETED UNDER BUILDING PERMIT NO. BP2025-1139, AND OCCUPANCY IS HEREBY PERMITTED.

SCOTT BARRY
SUPERINTENDENT OF BUILDINGS, CODE ENFORCEMENT & INSPECTIONS

Town of Tonawanda
Building Department
525 Belmont Ave
Buffalo, NY 14223
Phone: 877-8801
Fax: 871-8845

OPERATING PERMIT CERTIFICATE OF COMPLIANCE

December 22, 2025

Buffalo Biodiesel Inc.
17 Court St.
Buffalo NY 14202

Permit Number: OP2025-0015
Permit Type: Operating Permit for Hot Work.
Expires:December 22, 2026
Address: 225 Sawyer Ave

Dear Buffalo Biodiesel Inc.,

This certifies that the premises located at 225 Sawyer Ave, Tonawanda, NY 14150 was inspected by Sean Pellicore and found to be in substantial compliance with the terms and requirements of the NYS Uniform Fire Prevention and Building Code and the Code of the Town of Tonawanda. This permit may be revoked should the premises not be maintained in accordance with the provisions of these codes.

Scott Barry
Superintendent of Buildings, Code Enforcement and Inspections

Town of Tonawanda
Building Department
525 Belmont Ave
Buffalo, NY 14223
Phone: 877-8801
Fax: 871-8845

OPERATING PERMIT CERTIFICATE OF COMPLIANCE

December 22, 2025

Buffalo Biodiesel Inc.
17 Court St.
Buffalo NY 14202

Permit Number: OP2025-0016
Permit Type: Operating Permit for Hazerdous Material Handling.
Expires:December 22, 2026
Address: 225 Sawyer Ave

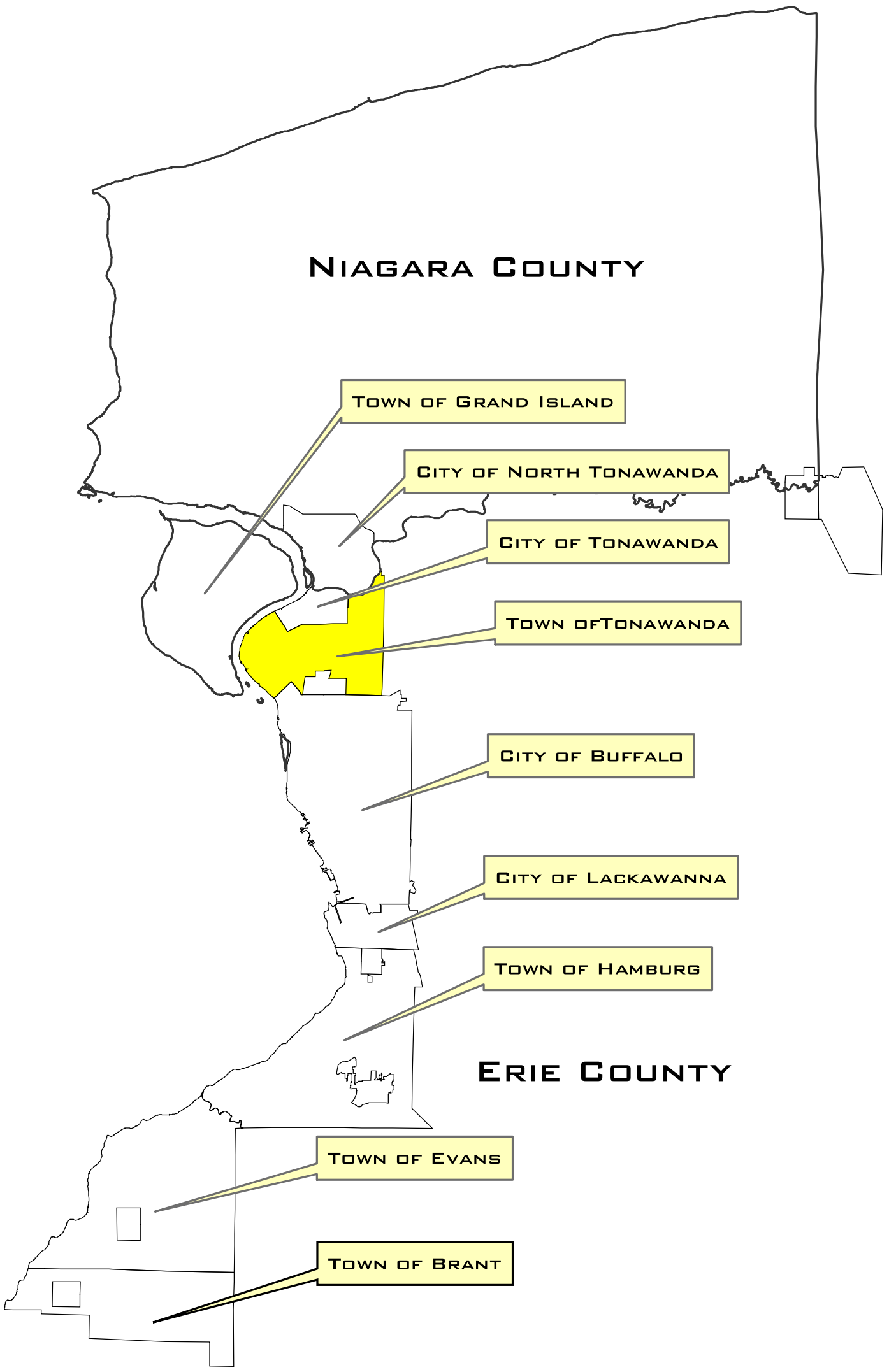
Dear Buffalo Biodiesel Inc.,

This certifies that the premises located at 225 Sawyer Ave, Tonawanda, NY 14150 was inspected by Sean Pellicore and found to be in substantial compliance with the terms and requirements of the NYS Uniform Fire Prevention and Building Code and the Code of the Town of Tonawanda. This permit may be revoked should the premises not be maintained in accordance with the provisions of these codes.

Scott Barry
Superintendent of Buildings, Code Enforcement and Inspections

APPENDIX I
SITE ENVIRONMENTAL MAPPING

MAP 1 - REGIONAL SETTING



LEGEND

Town of Tonawanda

N
W E
S

5 0 5
MILES

DATA SOURCES: ECDEP, NIAGARA COUNTY, TOWN OF TONAWANDA

MAP 2 - Regional Map Showing the Major Population Centers around Buffalo Biodiesel Inc.

Legend

Railroads

Interstate System

Public Transit Route

2019 USA Population Density

- 24,000 - 629,000 people per sq mi
- 15,800 - 24,000 people per sq mi
- 8,400 - 15,800 people per sq mi
- 1,000 - 8,400 people per sq mi
- 0 - 1,000 people per sq mi

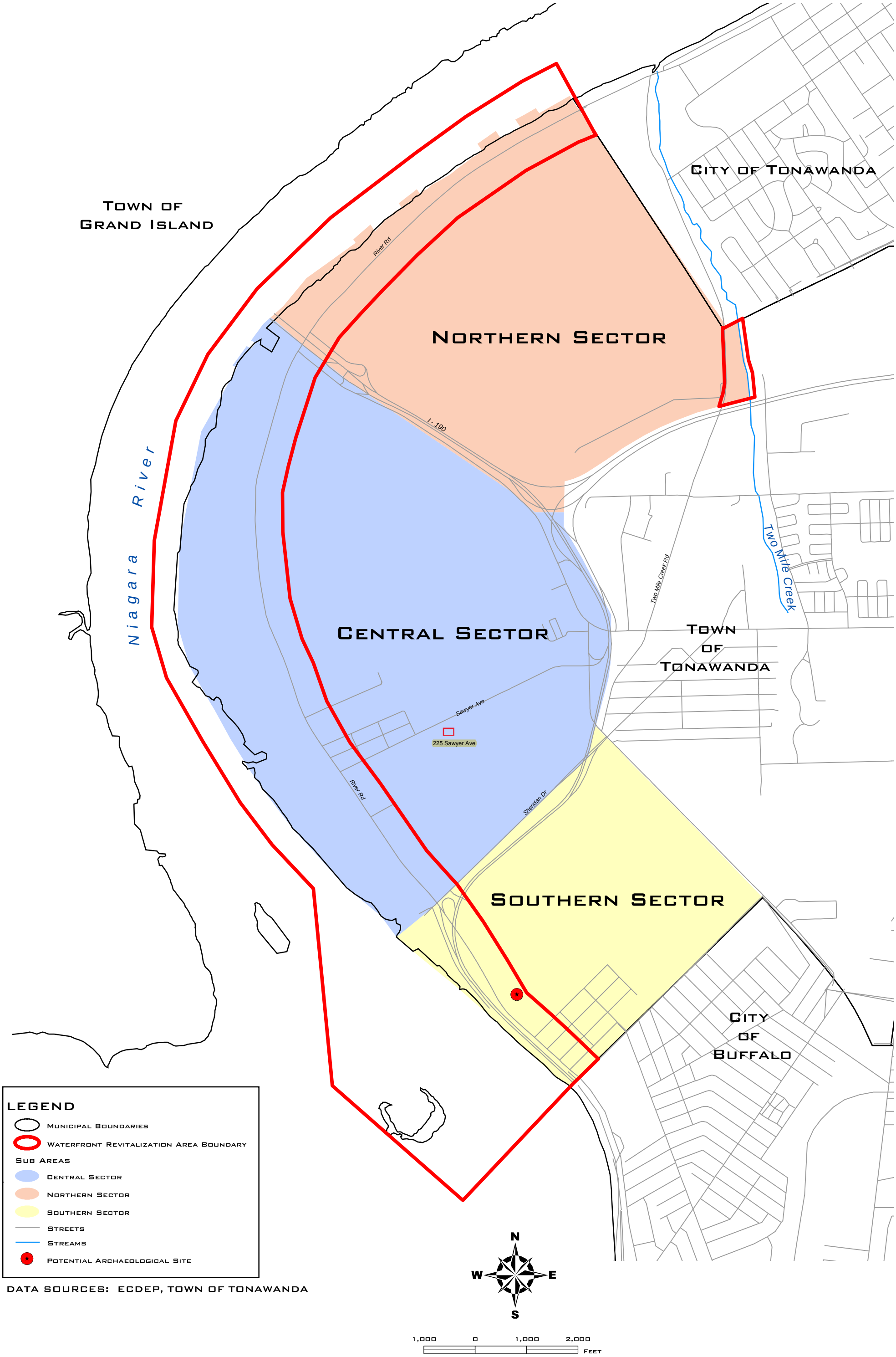
Map Created By BBD Inc.

BUFFALO BIODIESEL Inc.

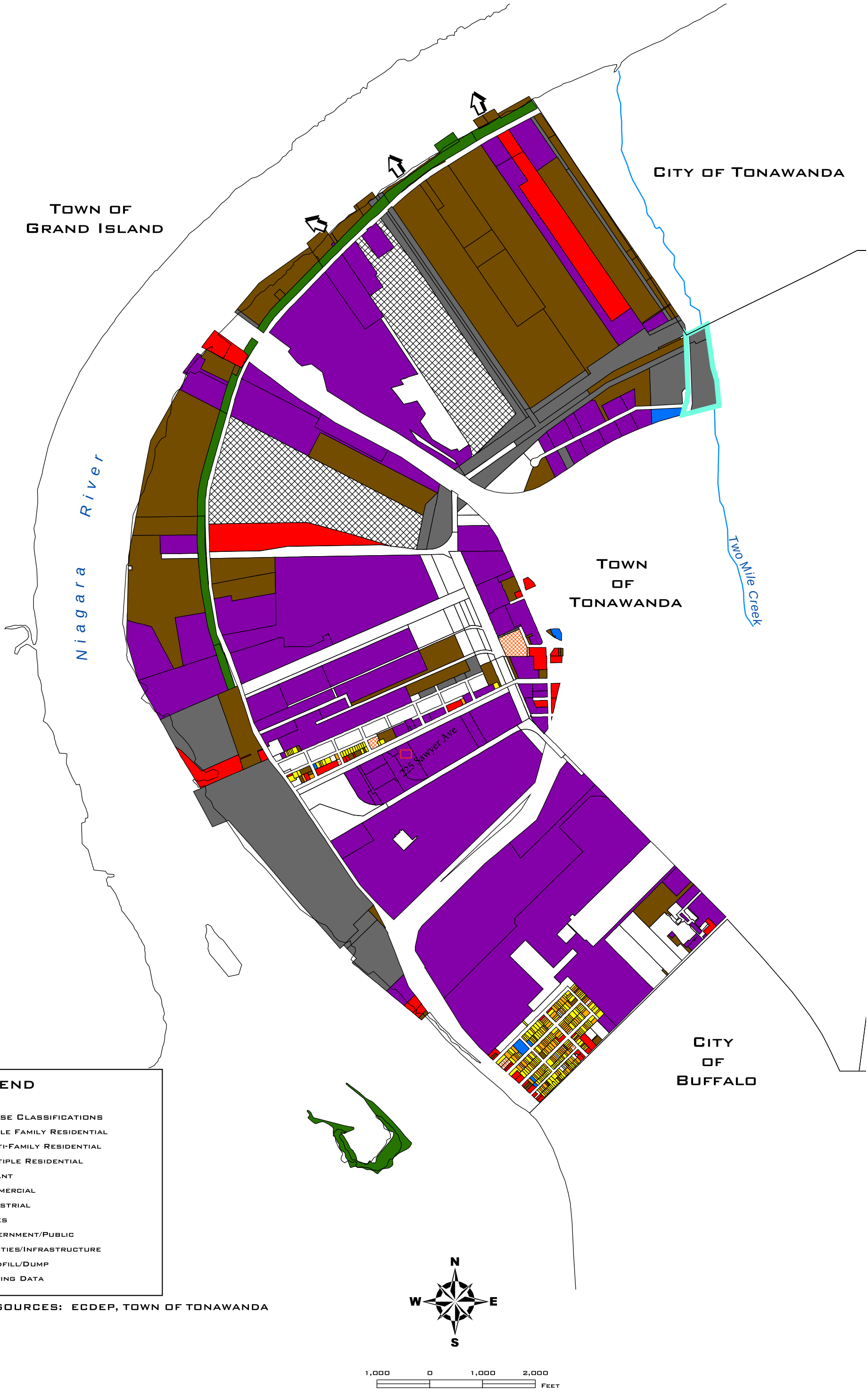
Coordinate System: WGS1984 Web Mercator
Map Scale: 1: 144,448
Software: ArcGIS

Source: Esri, USGS, Garmin, FAO, NOAA, EPA, NPS, U.S. Census

MAP 3 - STUDY AREA AND SUBAREAS

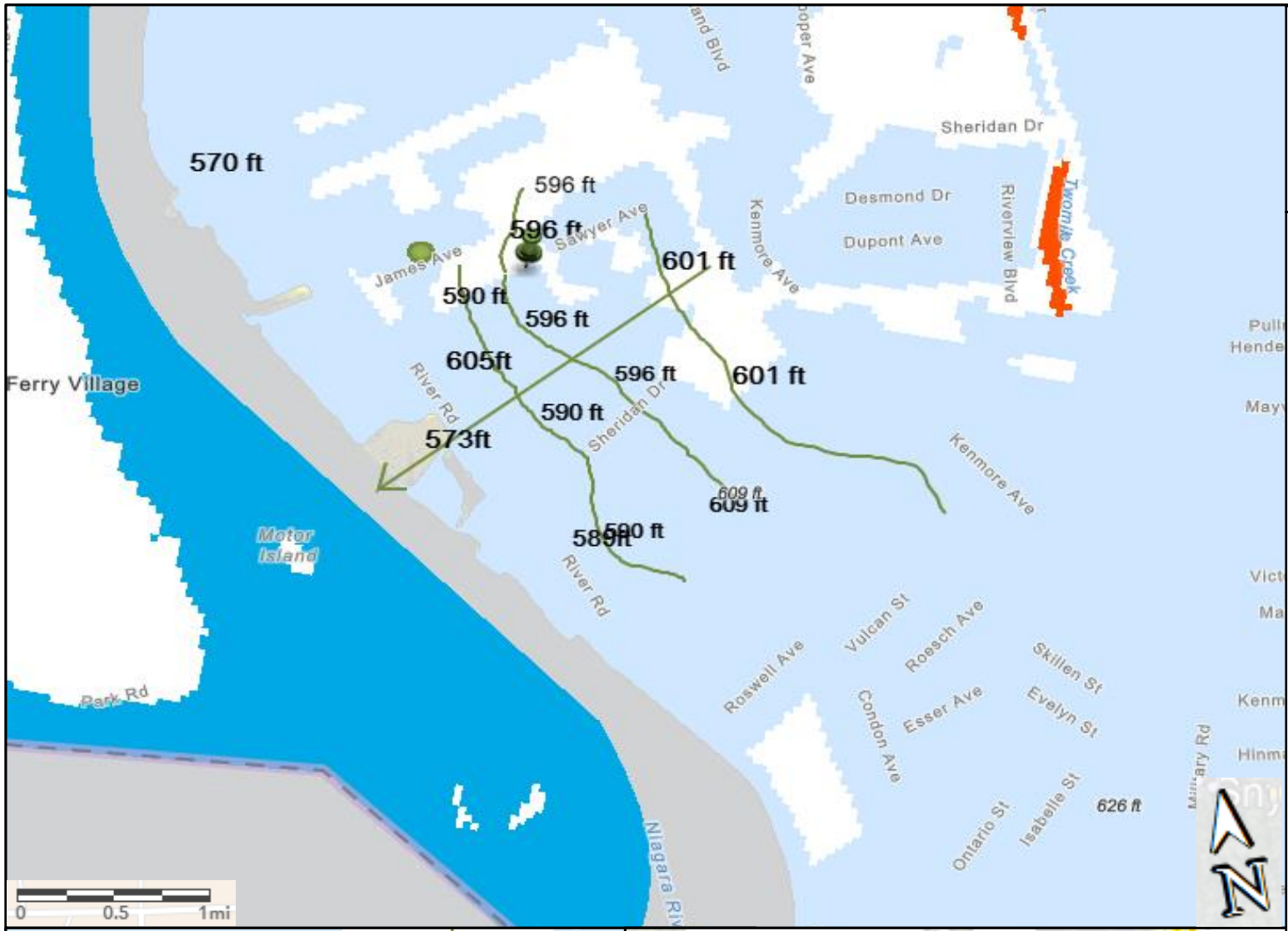


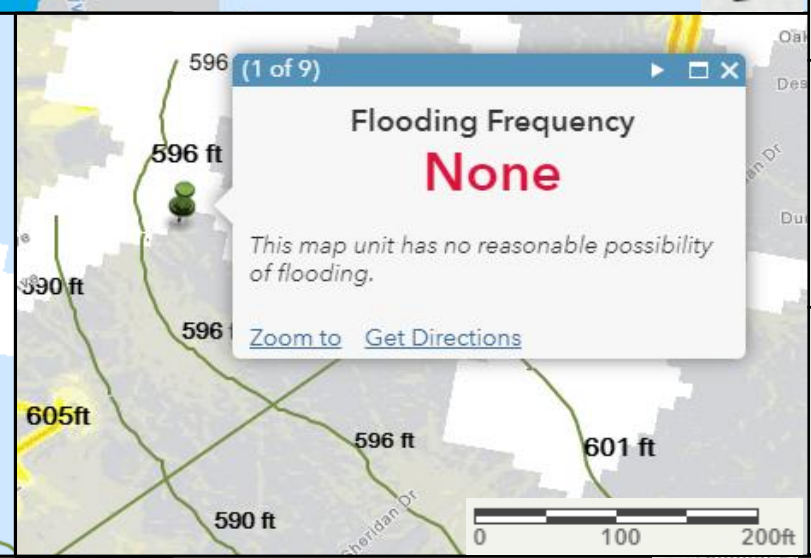
MAP 4 - EXISTING LAND USE



DATA SOURCES: ECDEP, TOWN OF TONAWANDA

MAP 5 - 100-year flood, elevations and Soil Flooding Frequency





Legend

Soil Flooding Frequency

- None
- Very Rare
- Rare
- Occasional
- Common
- Frequent
- Very Frequent

FEMA 100 Year Flood Zones

FEMA 100 Year Flood Zones

- 100 Year Flood Zones
- Counties with Flood Data Available
- Counties with Flood Data not Available

Map Created By
BBD Inc.

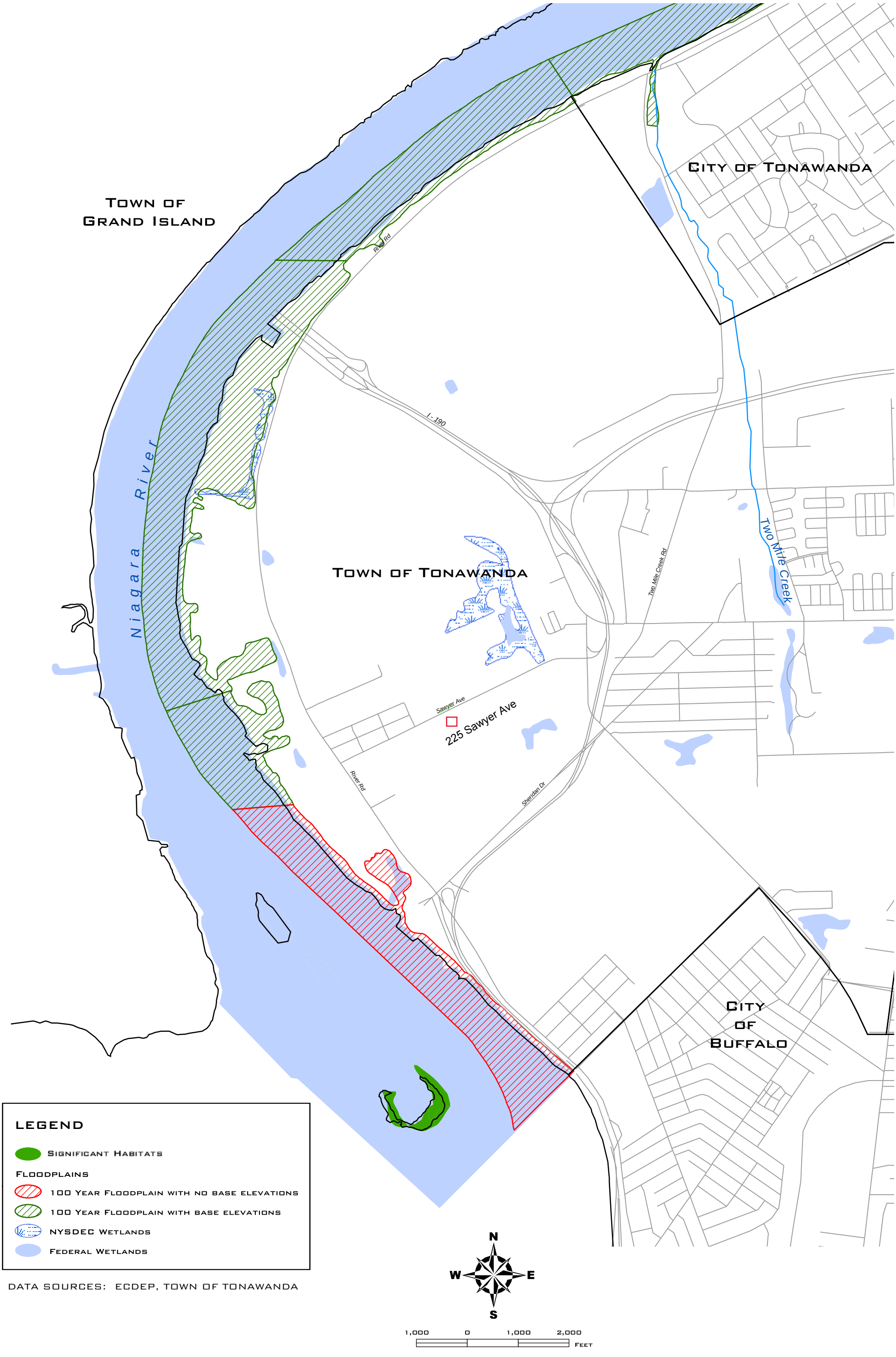
BUFFALO BIODIESEL Inc.

Coordinate System: WGS1984 Web Mercator
Map Scale: 1: 144,448
Software: ArcGIS

Source: Esri, NASA, NGA, USGS| Esri, HERE, Garmin, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

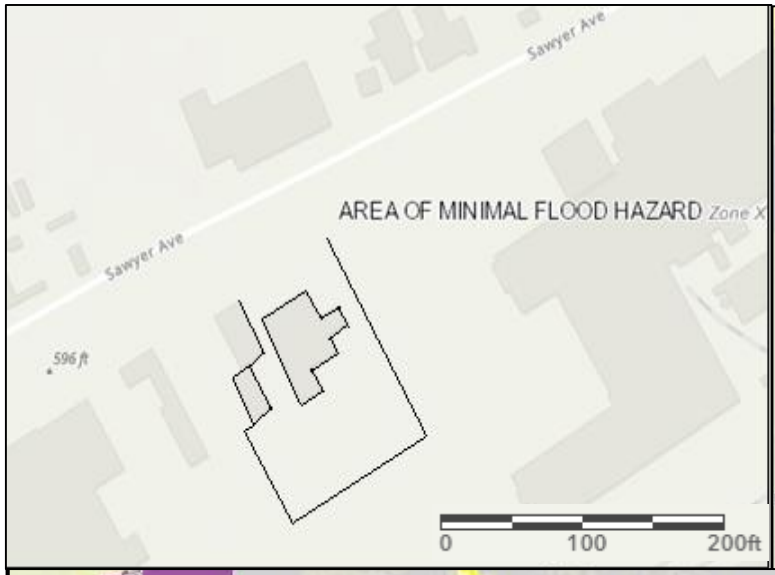
POWERED BY esri

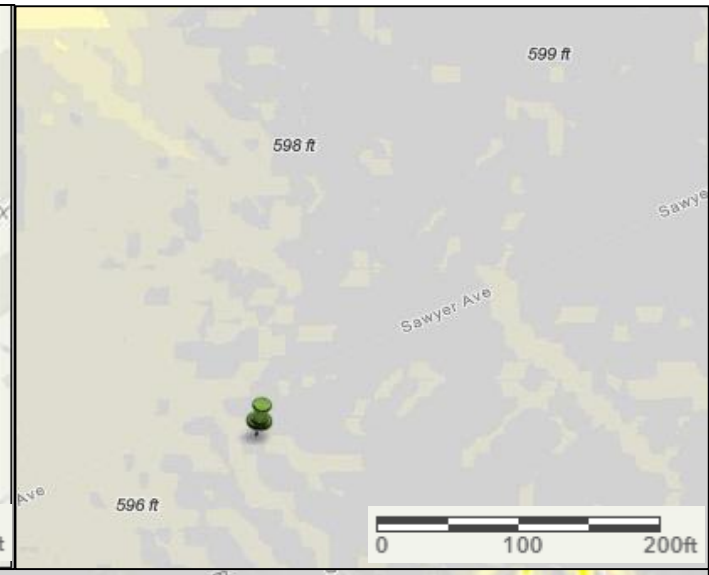
MAP 6 - Floodplains, Wetlands, and Habitats

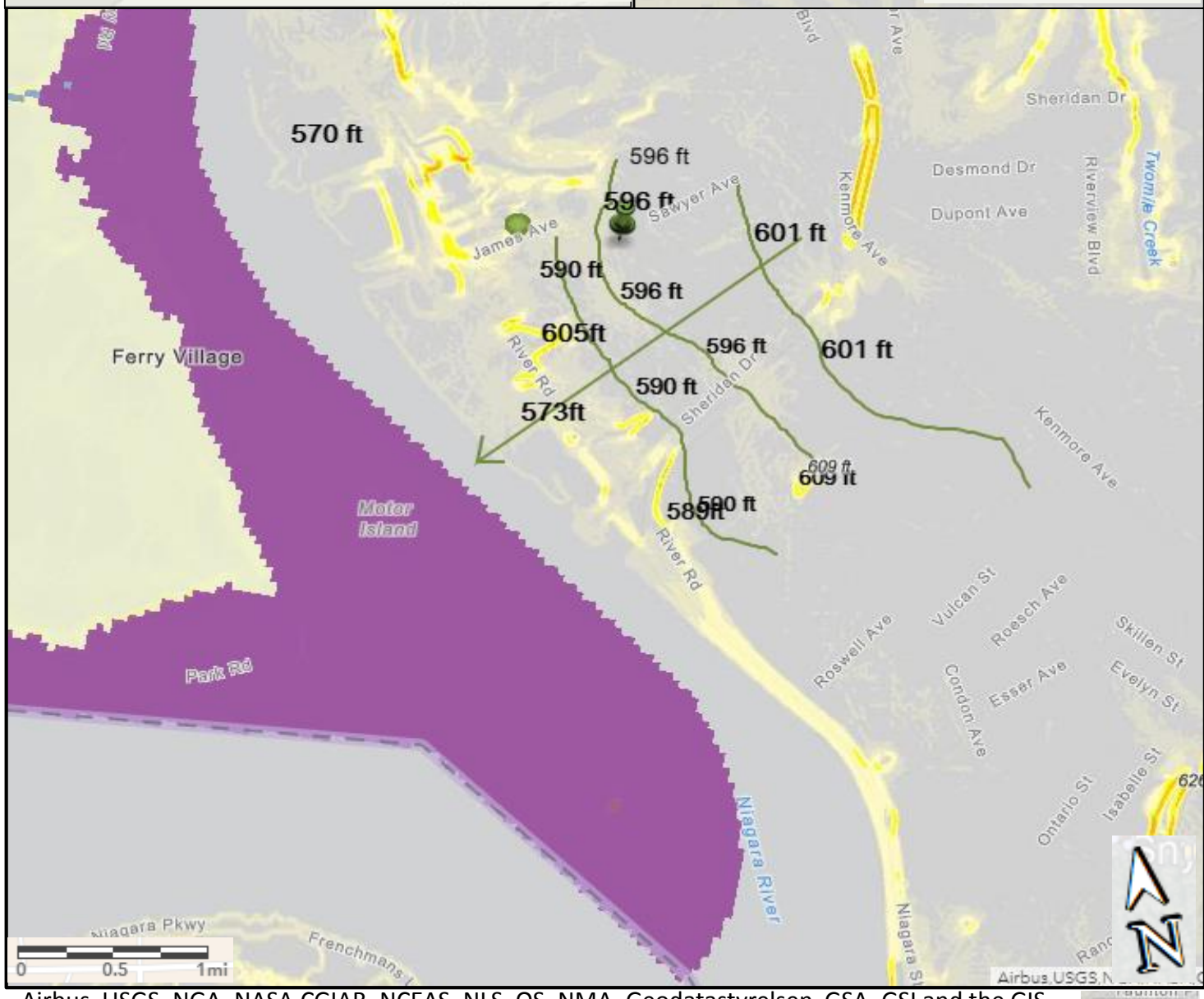


DATA SOURCES: ECDEP, TOWN OF TONAWANDA

MAP 7 - Annual Flood, Topographic and Elevation Map of the Facility and the Surrounding Areas







Legend

Flood Hazard Areas

- 1% Annual Chance Flood Hazard

Terrain Slope Map

- Flat
- Nearly Level
- Gently Level
- Gently Sloping
- Strongly Sloping
- Gently Steep
- Moderately Steep
- Steep

Map Created
By BBD Inc.

BUFFALO BIODIESEL Inc.

Coordinate System: WGS1984 Web Mercator
Map Scale: 1: 144,448
Software: ArcGIS

Airbus, USGS, NGA, NASA,CGIAR, NCEAS, NLS, OS, NMA, Geodatastyrelsen, GSA, GSI and the GIS User Community| Source: FEMA, Esri.

POWERED BY esri

MAP 8 - Elevation Contour, wetlands and vegetation

Legend

- Elevation Contour
- Vegetation
- Wetlands
- 225 Sawyer Ave

Map Created by

The National Map US Topo

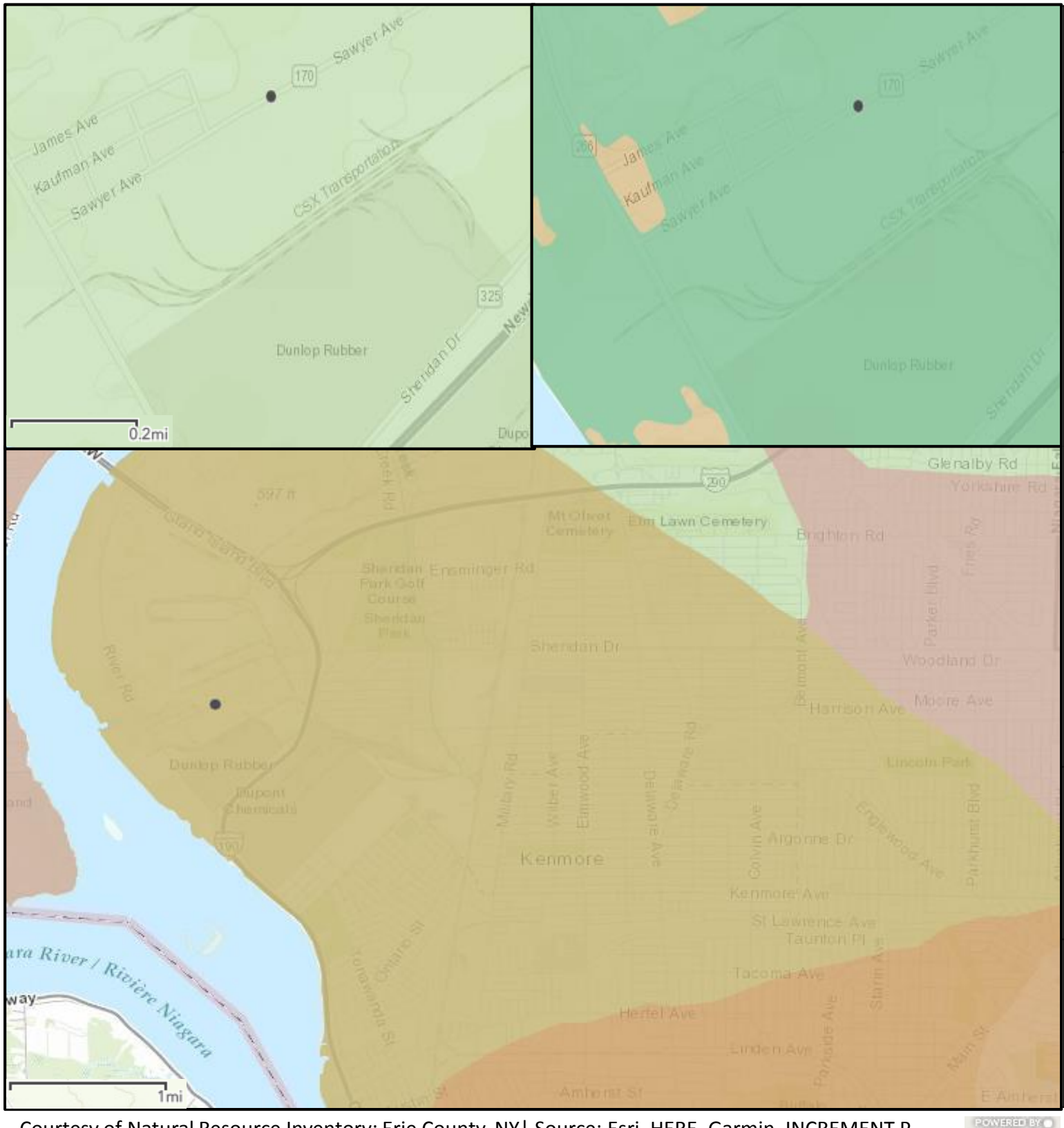
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

North American Datum of 1983 (NAD83)
Map Scale: 1:24,000
Contour interval of 10 ft.
Software: Esri - ArcGIS

SCALE 1:24 000

Bedrock Geology

Surficial Geology



MAP 9 - Bedrock and Surficial Geology

Legend

Bedrock Geology

- Ludlowville Formation
- Camillus Shale
- West River Shale
- Moscow Formation
- Marcellus Formation
- Onondaga Limestone
- Skaneateles Formation

Surficial Geology

- Lacustrine Silt and Clay
- Till
- Outwash Sand and Gravel
- Colluvium
- Hydric Soils

Map Created By BBD Inc.

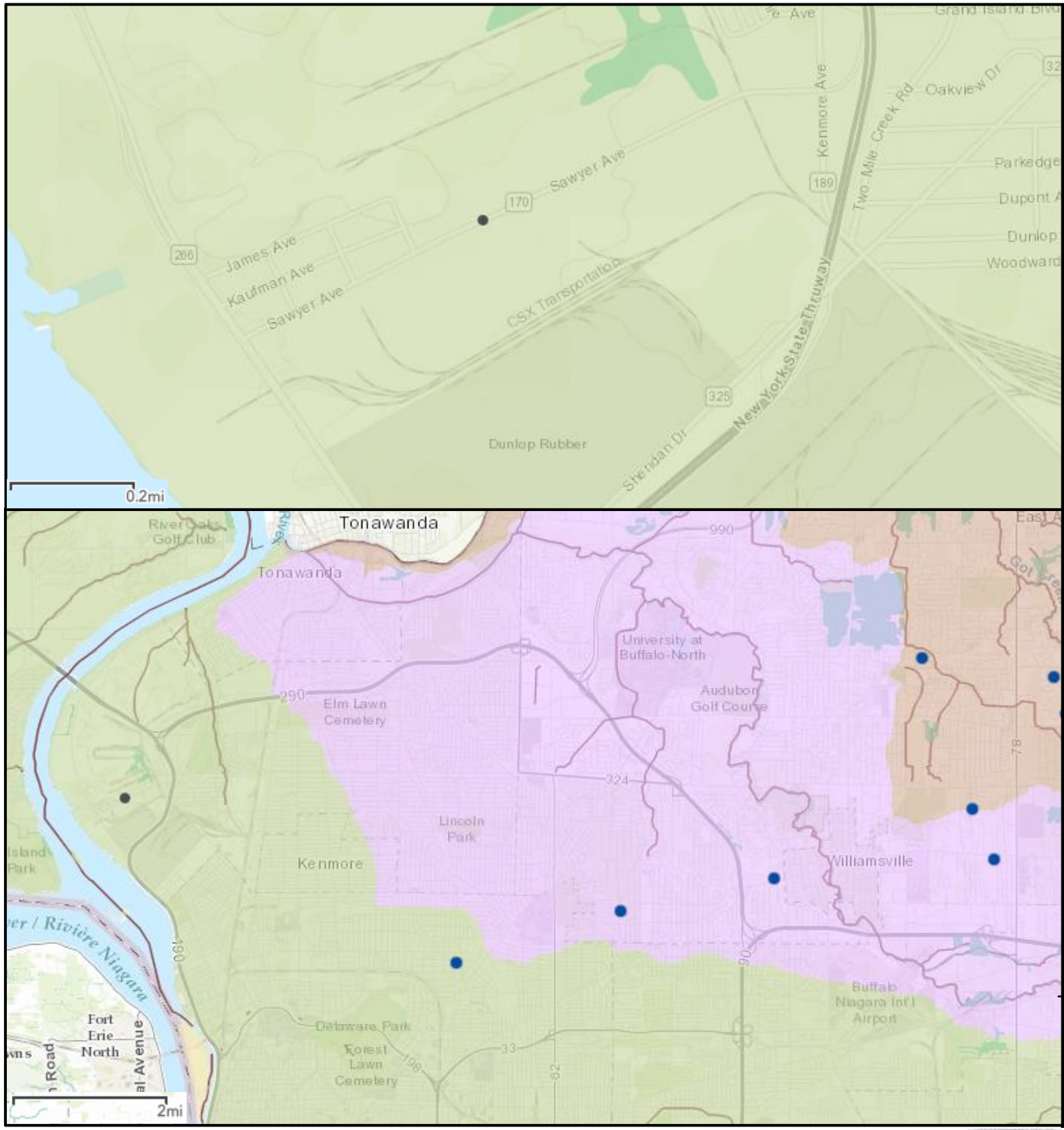
BUFFALO BIODIESEL Inc.

Coordinate System: WGS1984 Web Mercator
Map Scale: 1: 18,056 & 1: 72,224
Software: ArcGIS

Courtesy of Natural Resource Inventory: Erie County, NY| Source: Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA, AAFC

POWERED BY esri

MAP 10 - Regional Aquifers, Watersheds, Water-bodies, and Water Wells



Legend

Aquifers

- Sole Source Aquifer
- Unconsolidated Aquifer

Watersheds

- Buffalo Creek
- Buffalo River
- Cattaraugus Creek
- Lower Tonawanda Creek
- Niagara River

- NYS DEC Wetlands
- EPA Impaired Waters
- NYS DEC Water Well Records

Map Created By BBD

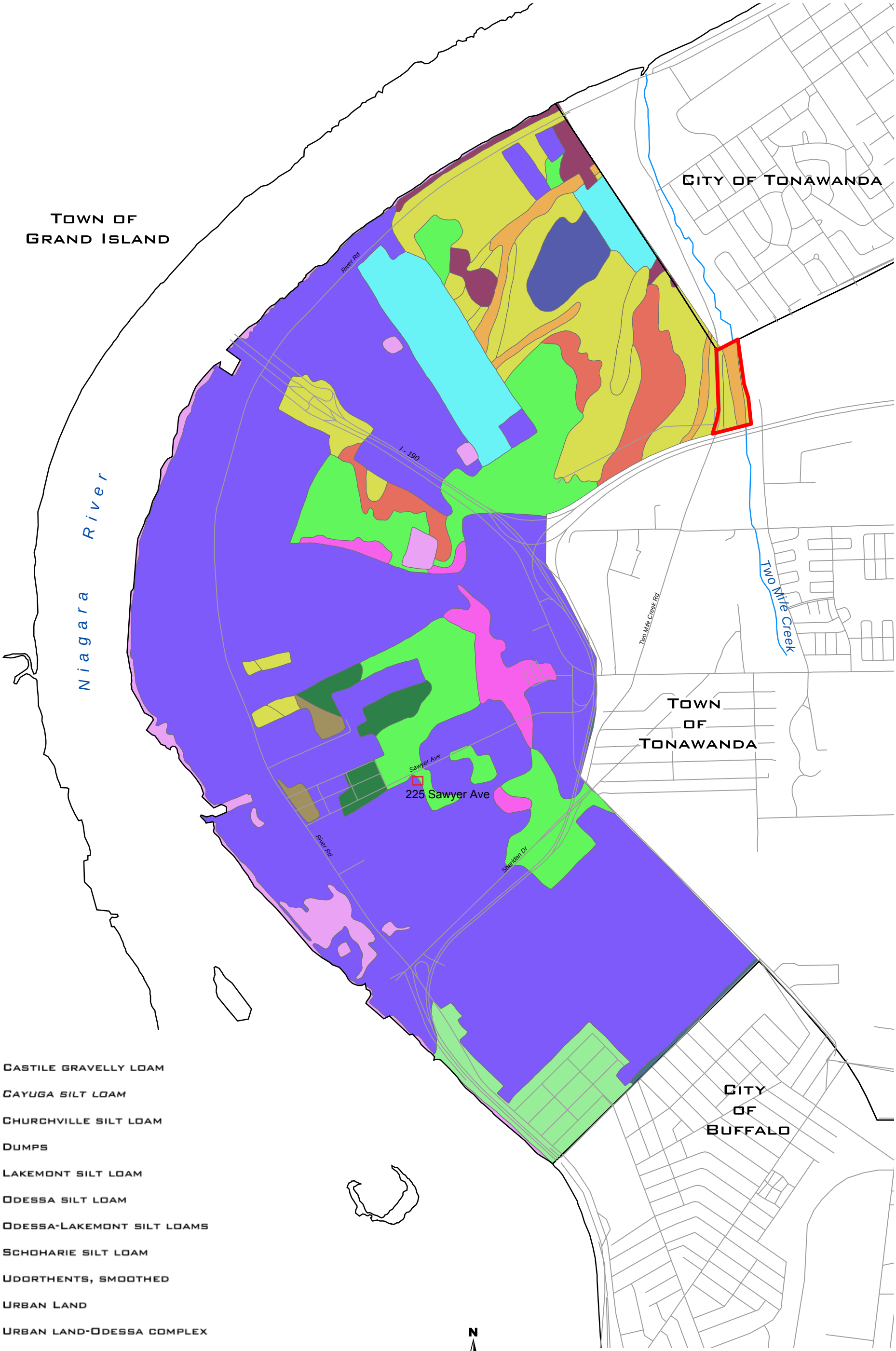
BUFFALO BIODIESEL Inc.

Coordinate System: WGS1984 Web Mercator
Map Scale: 1: 144,448 & 1: 18,056
Software: ArcGIS

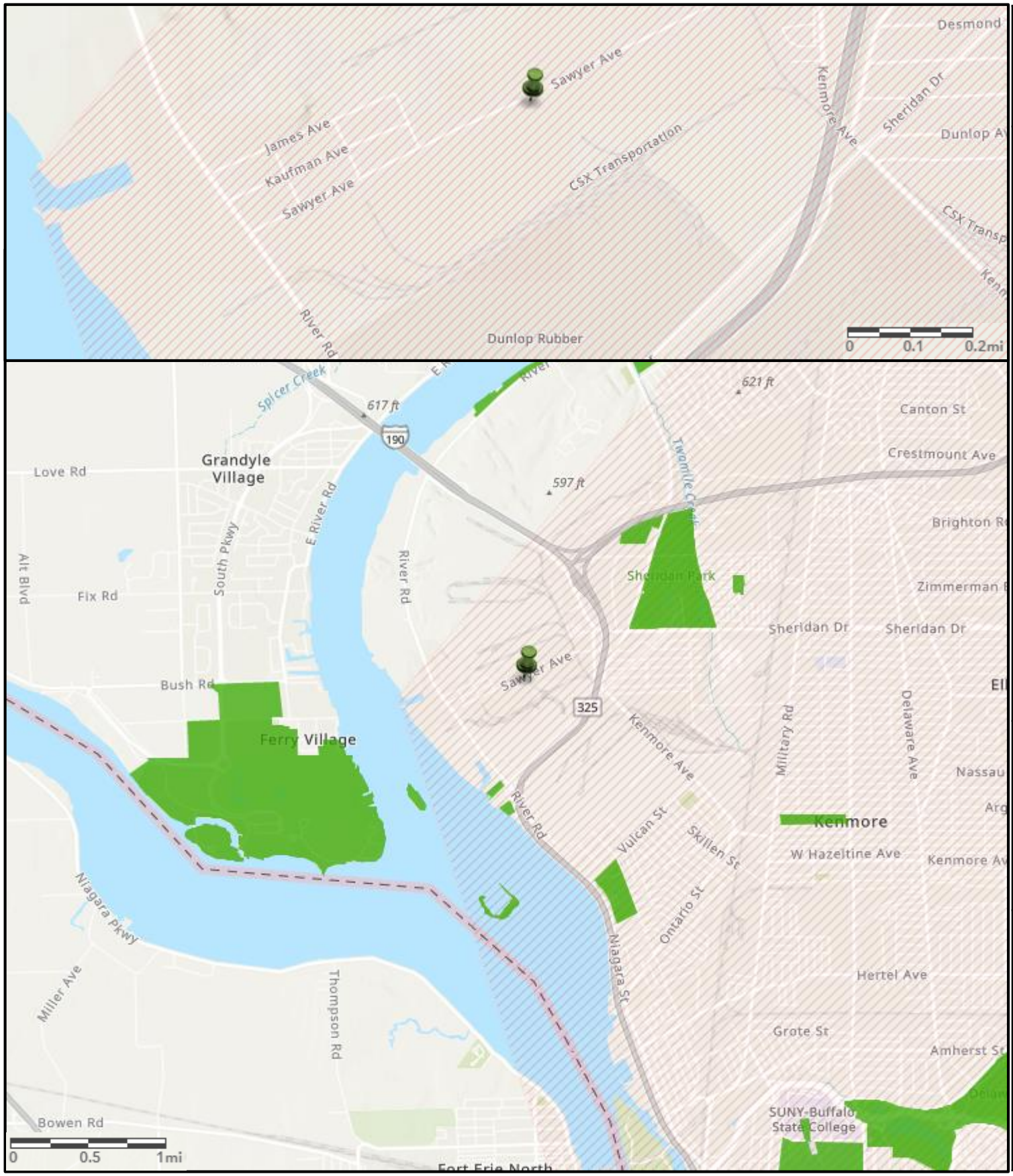
Courtesy of Natural Resource Inventory: Erie County, NY| Province of Ontario, Ontario MNR, Esri Canada, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS, AAFC

POWERED BY esri

MAP 11 - Soil Classification of Tonawanda



DATA SOURCES: ECDEP, TOWN OF TONAWANDA



Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, Province of Ontario, Esri, HERE, Garmin, INCREMENT P, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, NRCan, Parks Canada

MAP 12 - Protected Land/ Habitats and Species

Legend

Endangered Plants

- Low Concentration
- Medium Concentration
- Very Low or No Concentration
- High Concentration

- Endangered Species Area

Endangered Animal Species and Protected Lands

- Protected Land
- Endangered Species – Special Designation
- Endangered Species – Critical Habitats
- Endangered Species – FWS Approved

Map Created by BBD Inc.

BUFFALO BIODIESEL Inc.

Coordinate System: WGS1984 Web Mercator
Map Scale: 1: 18,056 & 1: 72,224
Software: ArcGIS

MAP 13 - Conservation Areas, Protected Areas, and Major Industrial Areas Around BBD

Legend

Ny Protected Areas

- Local
- State
- Federal
- Tribal
- Non-governmental Organization
- Bird Conservation Areas
- Important Bird Area's (Generalized)
- State Significant Coastal Habitat
- Natural Heritage Community
- Rare Plants and/or Animals (Generalized)
- NYS DEC Remediation Sites

State Pollutant Discharge Elimination System

- 01- State Significant Industrial
- 03- EPA Major Industrial
- 05- EPA Major Municipal
- 07- State Significant Municipal

Map Created By BBD Inc.

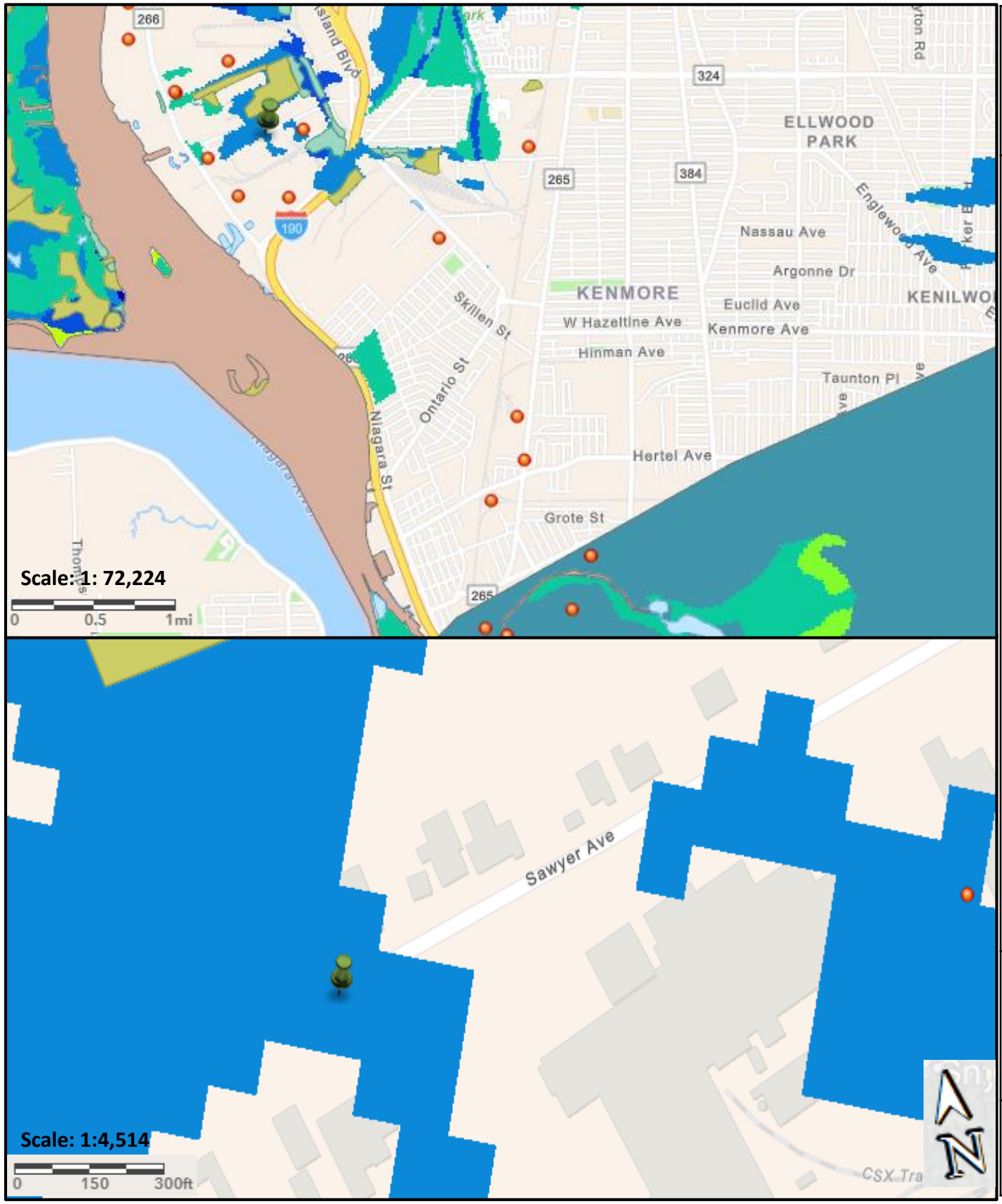
BUFFALO BIODIESEL Inc.

Coordinate System: WGS1984 Web Mercator
Map Scale: 1: 288,895 & 1: 36,112
Software: ArcGIS

Ontario Base Map, Province of Ontario, Ontario MNR, Esri Canada, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

POWERED BY esri

MAP 14 - Regional and site Map of Remediation Sites, Wetlands, Aquifers and the Soils Drainage Class



Legend

- **Erie County Remediation Sites**
- Basin and Range Carbonate-Rock Aquifer

Wetlands

- Freshwater Emergent Wetlands
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Soil Drainage Class

- Excessively Drained
- Somewhat Excessively Drained
- Well Drained
- Moderately Well Drained
- Somewhat Poorly Drained
- Poorly Drained
- Very Poorly Drained

Map Created By BBD Inc.

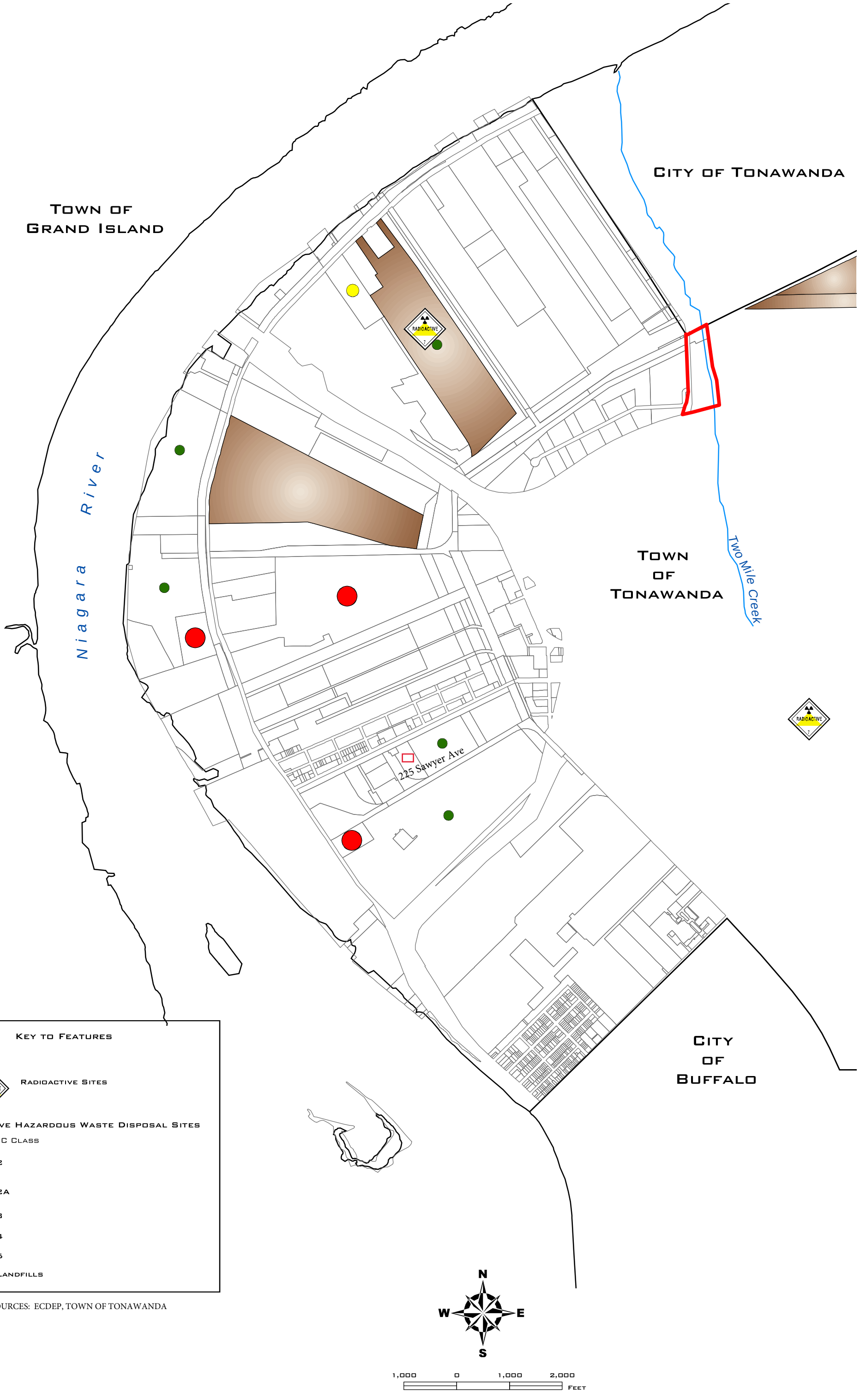
BUFFALO BIODIESEL Inc.

Coordinate System: WGS1984 Web Mercator
Map Scale: 1:72,224 &1: 4,514
Software: ArcGIS

Source: USGS, USFWS, USDA, NRCS, Ersi| Esri Community Maps Contributors, Province of Ontario, Niagara Region

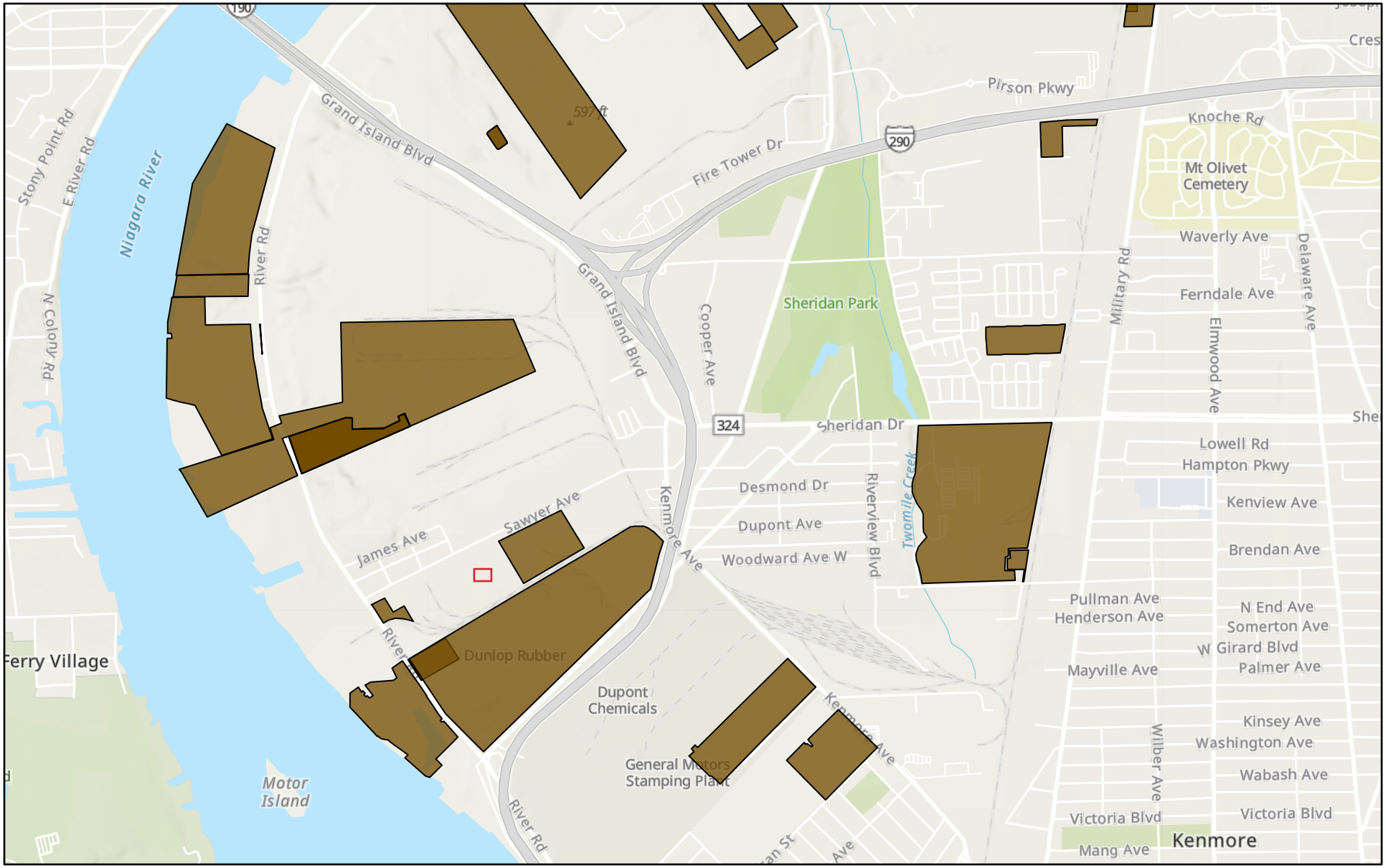
POWERED BY esri

MAP 15 - INACTIVE WASTE DISPOSAL SITES



DATA SOURCES: ECDEP, TOWN OF TONAWANDA

MAP 16 - NYS DEC SUPERFUND SITES



1/13/2020

Minn 2019 New York State Remediation Sites

1:36,112

0 0.23 0.45 0.9 mi

0 0.35 0.7 1.4 km

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS,

APPENDIX J
JOB TITLE AND DESCRIPTION LIST

Buffalo Biodiesel Inc. – Plant Worker Data

Following is the requested plant employee data including names, position title, job description and training provided by Buffalo Biodiesel Inc.

Chief Operating Officer

Name: Thomas George
Job Description: Oversees daily operations including collection, logistics, processing, maintenance, and compliance. Ensures performance targets and supports strategic growth.
Training: HAZCOM, OSHA (29 CFR 1910), Quality Control, Leadership, Emergency Response

Plant Foreman

Name: Josh Joseph
Job Description: Manages material handling, liquid processing, waste treatment, and supervises direct reports of 10-16 workers.
Training: PPE, HAZCOM, Occupational Noise, Fire Protection

Process Foreman

Names: Donte Robinson, Kenny Sibouyo
Job Description: Oversees plant operations, equipment monitoring, troubleshooting, and ensures processing quality and efficiency.
Training: PPE, HAZCOM, Occupational Noise, Fire Safety

350/MIG Welder

Names: Branden Snyder, Ryan Wilton, Christopher Hager
Job Description: Repairs and maintains steel dumpsters; MIG welding with 75/25 gas; performs part fabrication, painting, shearing, cutting, and bending.
Training: PPE, HAZCOM, Occupational Noise, Fire Safety, OSHA (29 CFR 1910)

Mechanic

Names: Ali Shareef, Padraic Beanan, Robert Arch
Job Description: Inspects and repairs machinery, vehicles, and equipment; performs troubleshooting and preventive maintenance; supports repair foreman.
Training: Power Tools, HAZCOM, Occupational Noise, Fire Safety

General Laborer

Names: David Brady, Gerald Tierney, Aaron Conklin
Job Description: Supports plant operations with material movement, cleaning, and general assistance.
Training: PPE, HAZCOM, Occupational Noise, Fire Safety

Repair Foreman

Name: Ernesto Hernandez
Job Description: Supervises repair crews, assigns tasks, diagnoses equipment issues, and ensures timely repairs.
Training: PPE, HAZCOM, Occupational Noise, Fire Safety

Repair Technician

Name: Abel Escalona
Job Description: Inspects, maintains, and repairs tanks and equipment related to refining processes.
Training: Power Tools, HAZCOM, OSHA (29 CFR 1910), Fire Safety

Process Technician

Name: Devin Sutherland
Job Description: Handles materials, processing, waste treatment, and supervises 4–8 workers.
Training: PPE, HAZCOM, OSHA (29 CFR 1910), Fire Safety

Fabrication Foreman

Name: Wayne Quest
Job Description: Maintains steel dumpsters, performs weld leak tests, and works in shearing, painting, cutting, and bending.
Training: PPE, HAZCOM, Occupational Noise, Fire Protection, Welding

Janitor

Names: Rahkeim Sistrunk, Quashaun Moore
Job Description: Ensures facility cleanliness, handles waste disposal, floor care, and general upkeep.
Training: PPE, HAZCOM, Occupational Noise, Fire Safety

Power Washer

Name: Justin Acker
Job Description: Cleans tanks, equipment, and processing areas using high-pressure systems.
Training: OSHA (29 CFR 1910), Pressure Washer

Bender

Name: Corey Williams
Job Description: Shapes and assembles metal piping and structural components for plant systems.
Training: Power Tools, OSHA (29 CFR 1910), Occupational Noise

Loader

Name: Thomas Taczynski
Job Description: Loads and unloads trucks/tanks safely and ensures accurate material documentation.
Training: OSHA (29 CFR 1910), Forklift Safety

APPENDIX K
ODOR CONTROL PLAN

Odor-Control & Response Plan

Used Cooking Oil & Yellow Grease Processing Facility

Prepared to Comply with 6 NYCRR § 360.19(i) & Subpart 361-8

---

1. Purpose and Regulatory Basis

This Odor-Control & Response Plan describes the methods, procedures, equipment, and management practices implemented to ensure that odors generated by the Facility are **effectively controlled** and **do not constitute a nuisance**, as required by **6 NYCRR § 360.19(i)**.

This plan also integrates operational requirements applicable to used-cooking-oil processing facilities under **6 NYCRR Subpart 361-8**, including spill prevention, containment, housekeeping, vector control, and storage-time limits, all of which help prevent odor generation.

---

2. Facility Description

2.1 Location and Surroundings

The BBD plant facility is located at 225 Sawyer Ave. Tonawanda, NY 14150. The Town of Tonawanda is located in Erie County, immediately north of the City of Buffalo (Appendix I - Map 1). It is bounded on the east by the Town of Amherst, on the north by the Cities of Tonawanda and North Tonawanda, and on the west by the Niagara River. The industrial area of the Town of Tonawanda has a scientifically low population due to the various industries with limited to low residential dwellings present. BBD is located in the towns zoning area known as General Industrial (GI). This is the ideal area for a plant collecting UCO from the surrounding community as the road is connected to major roads and highways: the New York State Thruway Niagara Section (I-190) and the Youngman Memorial Highway (I-290). The Thruway lies in the industrial corridor occupying the western quarter of the town. Much of the area in this sector is occupied by major industrial facilities and utilities, including Peroxy Chem LLC, Tonawanda Coke, tank farms, scrapyards, truck terminals, rail lines, power lines, and the Niagara Mohawk Fly-Ash Disposal site. At the northeast corner of Sawyer Avenue and River Road lies the small residential enclave known as the Sawyer-Kaufman community which is surrounded by heavy industry (Appendix I – Map 4). The prevailing wind direction in the Town is West/Southwest

2.2 Facility Operations

The BBD plant facility processes UCO and yellow Grease only, with all materials delivered by either a vacuum tanker, enclosed tote or drum. Hours of operations for the plant are from 7:00 AM – 1:00 AM Sunday through Saturday, 7 days a week. The average weekly volume of UCO processed is 30,000 gal, while the maximum volume is 50,000 gallons. Equipment used in the process includes: unloading tanks (currently USTs however being retrofitted to ASTs per Milestone #1 response), heat tanks, sludge processing tanks, water tanks, grease trap/oil water separator, refined oil storage tanks (AST's), hot water pipes and boilers, compressors, transfer pumps, filter press and yellow grease melt troughs. Refer to Appendix A – Figure 6 which shows the processing areas within the plant along with tank volumes by use.

2.3 Odor-Generating Activities/Areas

- Offloading/unloading areas
- Unprocessed oil/grease storage tanks
- Processed oil tanks
- Residuals storage/drums
- Wastewater collection/handling areas
- Spill areas or potential leak points

---

3. Odor-Control Measures

3.1 Source Control (Primary Prevention)

- **Enclosed or covered storage tanks** for all unprocessed and processed used cooking oil.
- **Secondary containment** meeting the ≥110% requirement to prevent leaks and ponding.
- **Overfill prevention systems** (alarms, automatic shutoff, slow-fill valves).
- **Sealed transfer hoses and quick-connect fittings** to minimize drips and air exposure.
- **Temperature control** (if heated tanks are used) to avoid overheating oil and generating odors.
- **Limited storage durations**:
    - Unprocessed oil: ≤30 days
    - Processed oil: ≤12 months
    - Residual waste: ≤7 days
- **Good housekeeping procedures** including:
    - Daily cleanup of spills/drips
    - Floors kept free of residual grease

  - Covered containers for any solids or food particles
- **Regular tank and equipment maintenance** to prevent leaks, corrosion, and buildup.

3.2 Spill Prevention & Rapid Cleanup

Spill control measures can be found in Appendix D and are summarized below:

- Immediate cleanup of any spilled oil using absorbents.
- Placement of spill kits at offloading, processing, and storage areas.
- Disposal of absorbent materials as per facility waste-handling procedures.
- Documentation of all spills and corrective actions.

3.3 Wastewater and Residuals Management

- Collect and store any wastewater in the waste water tank and treat for discharge.
- Frequent removal of wastewater by permitted sanitary discharge permit (See Appendix F).
- No open outdoor storage of wastewater or oily residues.
- Drains kept clear; no standing water allowed in containment areas.

3.4 Ventilation & Airflow Control

- Indoor pump rooms or processing areas maintained under **negative pressure** where feasible.
- Ventilation exhaust filtered or directed away from sensitive receptors.
- Routine inspection of fans, filters, and ductwork.
- Overhead doors open when permissible
- ASTs sealed tight no odor release from Raw UCO storage

3.5 Vector & Pest Control

- Removal of food particles and solids from incoming oil to minimize attraction of pests.
- Weekly inspections for insects/rodents.
- Use of sealed waste containers.
- Coordination with a licensed pest management contractor if needed.

---

4. Odor Monitoring Procedures

4.1 Routine Monitoring

- **Daily odor inspection** performed during operating hours by trained staff.
- Monitoring points include:
    - Property boundary (downwind)
    - Offloading area
    - Processing room
    - Storage tanks

4.2 Objective Assessment

(Use one or more of the following depending on site capacity)

- 0–5 odor intensity scale
- Downwind walk-throughs at multiple distances
- Meteorological data logged (wind direction, speed, humidity, temperature)

4.3 Monitoring During High-Risk Events

- Tank unloading
- Tank mixing
- Spill cleanup
- High-temperature processing events
- Equipment malfunction or power failures

---

5. Odor Complaint Response Procedure

5.1 Receiving Complaints

- Any employee receiving a complaint documents the following:
    - Date/time
    - Complainant contact info (if provided)
    - Complaint location
    - Description of odor (intensity, type, duration)
    - Weather conditions

5.2 Investigation Steps

- Conduct immediate on-site inspection
- Check all tanks, pumps, and pipes for leaks or open ports
- Verify ventilation system operation
- Review recent activities (offloading, spills, maintenance)
- Document findings and corrective actions

5.3 Corrective Actions

- Stop or modify activities generating odor
- Perform repairs or replacements
- Increase ventilation or temporarily relocate vents
- Improve or expedite waste removal
- Enhance cleaning and housekeeping
- Notify management if odors persist

5.4 Communication with Authorities

If DEC requests information or if a pattern of complaints emerges, the Facility Manager provides:

- Odor logs
- Complaint records
- Corrective action reports
- Operating/maintenance logs

---

6. Recordkeeping

The facility maintains the following for **minimum regulatory retention periods**:

- Daily odor inspection logs
- Complaint records and resolutions
- Spill logs and corrective actions
- Maintenance records for tanks, pumps, containment, and ventilation
- Training records for staff
- Storage time logs for unprocessed oil, processed oil, and residual wastes
- Housekeeping checklists and pest control logs

---

7. Staff Training

All personnel involved in receiving, processing, storing, or transporting used cooking oil must be trained annually in:

- Odor-control procedures
- Spill response
- Odor complaint handling

- Housekeeping requirements
- Operation and inspection of odor-related equipment

Training records are maintained by the Facility Manager.

---

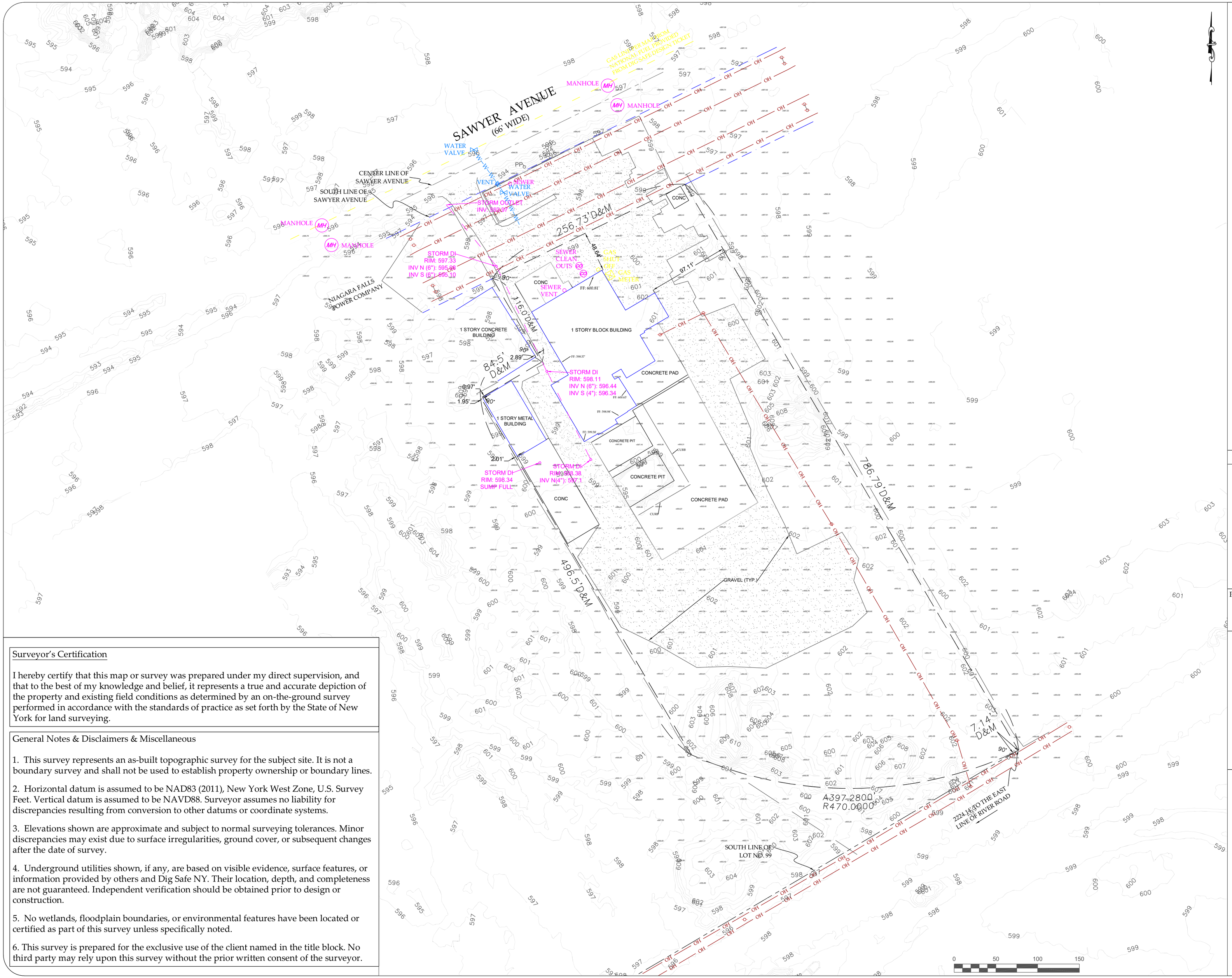
8. Plan Review and Updates

This plan is reviewed **annually** or sooner if:

- Operations change
- DEC requires modifications
- Frequent odor complaints occur
- Equipment changes materially affect odor potential

Revisions are documented and distributed to all relevant staff.

APPENDIX L
CERTIFIED SITE SURVEY



SURVEY NOTES

1. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION2, OF THE NEW YORK STATE EDUCATION LAW.
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9. THIS SURVEY NOT VALID FOR SUBSEQUENT OWNERS, MORTGAGES OR TITLE INSURERS UNLESS THIS SURVEY HAS BEEN RESURVEYED BY THIS SURVEYOR.

LEGEND

×599.50	GROUND SPOT GRADE
597.0	CONTOUR
	GRAVEL
	POWER POLE
	FENCE
OH	OVERHEAD POWER LINES
	PROPERTY LINE
	STORM SEWER LINE
W	WATERLINES
G	GAS LINES

PREPARED FOR:

BUFFALO BIODIESEL

225 SAWYER

DRAWN JSB	*DATE* 10.30.25	PART OF LOT 99 OF THE NEW YORK STATE RESERVATION TOWN OF TONAWANDA COUNTY OF ERIE STATE OF NEW YORK
APPROVED TAS	*DATE* 10.30.25	
SCALE 1" = 50'	*SHEET* 1 OF 2	*PROJECT NO.*

Surveyor's Certification

I hereby certify that this map or survey was prepared under my direct supervision, and that to the best of my knowledge and belief, it represents a true and accurate depiction of the property and existing field conditions as determined by an on-the-ground survey performed in accordance with the standards of practice as set forth by the State of New York for land surveying.

General Notes & Disclaimers & Miscellaneous

1. This survey represents an as-built topographic survey for the subject site. It is not a boundary survey and shall not be used to establish property ownership or boundary lines.

2. Horizontal datum is assumed to be NAD83 (2011), New York West Zone, U.S. Survey Feet. Vertical datum is assumed to be NAVD88. Surveyor assumes no liability for discrepancies resulting from conversion to other datums or coordinate systems.

3. Elevations shown are approximate and subject to normal surveying tolerances. Minor discrepancies may exist due to surface irregularities, ground cover, or subsequent changes after the date of survey.

4. Underground utilities shown, if any, are based on visible evidence, surface features, or information provided by others and Dig Safe NY. Their location, depth, and completeness are not guaranteed. Independent verification should be obtained prior to design or construction.

5. No wetlands, floodplain boundaries, or environmental features have been located or certified as part of this survey unless specifically noted.

6. This survey is prepared for the exclusive use of the client named in the title block. No third party may rely upon this survey without the prior written consent of the surveyor.

CROSS STATE LAND SURVEY, PLLC

9196 MOHAWK RD
ANGOLA, NY 14006
(716)238-3228
TRACYMANGUSO@GMAIL.COM

TRACY A. SPADA, PLS
LICENSE # 050806
N.Y.S. CERTIFIED WBE

APPENDIX M
CLOSURE LETTER – COST AND REMOVAL OF MEDIA

ROSLIN ENTERPRISES INC.
686335 Highway 2, Princeton ON
Canada N0J1V0
1-888-997-0993
info@roslinent.com

Buffalo Biodiesel Plant Shutdown Waste and Oil Removal

To whom concerned,

Buffalo Biodiesel (BBD) had requested a cost estimate for removing all oil and waste from their tanks on site and Roslin Enterprises Inc. taking custody of all material.

Roslin Enterprises Inc. is federally and provincially approved for cross border trucking as well as managing all organic waste streams (i.e. fats, oils, grease, process water and organic materials).

All processes, trucking and material handling will be performed solely by Roslin Enterprises Inc. assets and personnel.

The below estimations of costs do not take into consideration the value of the Used Cooking Oil which is the primary commodity being produced by BBD.

Current fair market value of the refined Used Cooking Oil (UCO) is $0.557/lb as of Dec 01, 2025.

The primary line of business is oil collection and refining for the purposes of reuse within the renewable fuels markets. Therefore, the primary commodity (UCO), has an inherent value which exceeds the costs associated with removal of product from BBD facilities.

Below is a breakdown of tank descriptions provided by BBD and estimated costs:

Rear Tank 1 Gallons: 87,565	1,459/inch	5 feet tall	*3
Rear Tank 2 Gallons: 105,078	1,459/inch	6 feet tall	*3
Heat Tank 1, 2 and 3 Gallons: 8,002 each	111/inch	6 feet tall	*2
Heat Tank 4 and 5 Gallons: 9,336 each	97/inch	8 feet tall	*2
Sludge Tank 1 Gallons: 9,184	153/inch	5 feet tall	*4
Sludge tank 2 Gallons: 11,370	118/inch	8 feet tall	*4
Water tank 1 Gallons: 10,724	111/inch	8 feet tall	*5
Water Tank 2 Gallons: 17,088	178/inch	8 feet tall	*5
Storage Tanks 1-20 Gallons: 4,300 each		12 feet tall	*1
Raw Storage Tanks 1-6 Gallons: 4,300 each		12 feet tall	*2

Total gallons of respective material if tanks were completely full to the top:

Refined UCO @ 98%:	86,000 gallons
Raw UCO @ 60-80%:	68,478 gallons
Semi processed UCO @ 50%:	192,643 gallons
Sludge (breadcrumb) separation @ 10%:	20,554 gallons
Process water:	27,812 gallons

Roslin Estimated Costs to remove unprocessed materials and waste materials.

	Oil yield (%)	Total Volume (Gal)	Total weight (lbs) *Assuming 7.6lbs per Gal)	Yielded Oil	Market Value (USD/lb)	Costs (USD)
Refined UCO	98%	86,000	654,460.00	654,460.00	$ 0.575	$ - 0.0
Raw UCO	70%	68,478	521,117.58	364,782.31	$ 0.500	$ 0.0
Semi Processed UCO	50%	192,643	1,466,013.23	733,006.62	$ 0.40	$ 0.0
Sludge (breadcrumb) separation	0%	20,554	156,415.94	-	-	$ 7,500.00
					TOTAL (USD):	**$0.00**

*As noted on p1., the total cost to truck and remove materials are outlined above. Again, because of the market value of the UCO, Roslin will remove all materials listed above at no cost to Buffalo Biodiesel Inc.

Signed:

Adrian Tod

Business Development Manager 519-536-3632 / adrian@roslin.ca

APPENDIX N
REINFORCED CONCRETE TANK ANALYSIS AND PLANS

R.C.C. Rectangular Atmospheric Oil Tank Design and Analysis

Structure Design Calculation

Applicant Name:
Buffalo Biodiesel, Inc.

Facility Name and Address:
Buffalo Biodiesel, Inc. – Used Cooking Oil (UCO) and Yellow Grease Processing – Transfer Facility
225 Sawyer Avenue
Tonawanda, NY 14150

Preparer Name and Address:
Muhammad Adeel Khan, B.Sc., MEnvSc
Buffalo Biodiesel, Inc.

Date / Revision Date:
December 2020

Project Title	Sludge Tank 2 Design and Structure	Project No.	001
Section	**Oil Tank Structure**	Subject	Calculation Sheet
Project Manager	Adeel Khan	Design Phase:	Analysis and Detailed design
Designer	Umar Hayat		

Computer Applications Used

Title STAAD Pro V8i Version: V 16.0.0

Scopes of Checking for Manual and Computer-Generated Calculations

Computer output used input for Excel sheet

Basic Design Information or Source and Reference:

Table 2. Comparison of the average density values between five vegetable oils at different temperatures.

	ρ_{oil} (kg/m^3)				
T (°C)	Canola oil	Corn oil	Olive oil	Peanut oil	Soybean oil
22 ± 1	913.3 ± 0.7^{b,c}	915.3 ± 0.7^{a,b}	908.7 ± 0.7^{d}	912.1 ± 0.7^{c}	915.7 ± 0.7^{a}
40	901.7 ± 0.7^{f}	904.4 ± 0.0^{e}	897.4 ± 0.0^{g}	899.3 ± 0.7^{g}	903.3 ± 0.0^{e,f}
60	890.4 ± 0.0^{i}	892.8 ± 0.0^{h}	885.8 ± 0.0^{j}	886.8 ± 0.7^{j}	892.4 ± 0.7^{h,i}
80	878.0 ± 0.7^{l}	880.7 ± 0.7^{k}	874.2 ± 1.2^{m}	875.2 ± 0.7^{m}	880.0 ± 0.0^{k,l}
100	867.2 ± 1.2^{n}	868.3 ± 0.0^{n}	861.7 ± 0.7^{o}	862.4 ± 0.7^{o}	867.6 ± 0.7^{n}
120	854.0 ± 0.7^{p}	855.9 ± 0.7^{p}	849.7 ± 0.0^{q}	850.4 ± 0.7^{q}	855.9 ± 0.7^{p}
140	841.6 ± 0.0^{s}	843.5 ± 0.7^{r,s}	836.9 ± 0.0^{t}	837.6 ± 0.7^{t}	844.7 ± 0.7^{r}
160	829.1 ± 0.7^{v}	832.2 ± 0.0^{u}	825.3 ± 0.0^{w}	825.9 ± 0.7^{w}	833.0 ± 0.7^{u}
180	817.1 ± 0.0^{y}	819.4 ± 0.0^{x}	813.6 ± 1.2^{z}	814.3 ± 0.7^{z}	820.2 ± 0.7^{x}
200	806.6 ± 0.0^{aa}	807.8 ± 0.0^{aa}	–	801.5 ± 0.7^{ab}	807.4 ± 0.7^{aa}

±: corresponds to the standard deviation, $n = 3$.
[a:] Tukey mean comparison per parameter (95% Confidence)- no significant difference between values sharing same letter.

Safe to assume density to be 882 kg/m3

Table 6. Comparison of the average viscosity values between five vegetable oils over a range of temperatures.

	μ_{oil} (mPa·m)				
T (°C)	Canola oil	Corn oil	Olive oil	Peanut oil	Soybean oil
22 ± 1	63.5 ± 1.6^{c}	59.2 ± 0.8^{d}	74.1 ± 2.2^{a}	72.2 ± 0.8^{b}	57.1 ± 1.1^{e}
40	34.9 ± 0.9^{h}	34.5 ± 0.6^{h}	40.1 ± 1.5^{f}	38.8 ± 0.7^{g}	31.3 ± 0.6^{i}
60	18.8 ± 0.3^{k}	19.1 ± 0.3^{k}	21.1 ± 0.9^{j}	20.5 ± 0.4^{j}	17.9 ± 0.7^{k}
80	11.8 ± 0.4^{m,n}	12.5 ± 0.2^{l,m,n}	13.4 ± 0.9^{l}	12.6 ± 0.4^{l,m}	11.4 ± 0.6^{n}
100	8.2 ± 0.4^{o,p}	9.0 ± 0.2^{o,p}	9.6 ± 0.8^{o}	8.8 ± 0.5^{o,p}	8.3 ± 0.6^{p}
120	5.5 ± 0.2^{q,r,s,t}	6.4 ± 0.3^{q}	6.1 ± 0.2^{q,r}	6.1 ± 0.5^{q,r}	5.6 ± 0.4^{q,r,s}
140	4.4 ± 0.1^{s,t,u,v,w}	5.1 ± 0.2^{r,s,t,u}	4.8 ± 0.2^{s,t,u,v}	4.8 ± 0.5^{s,t,u,v}	4.8 ± 0.7^{s,t,u,v}
160	3.7 ± 0.2^{v,w,x,y,z}	4.3 ± 0.2^{t,u,v,w}	4.0 ± 0.1^{u,v,w,x}	4.0 ± 0.5^{u,v,w,x}	3.9 ± 0.3^{u,v,w,x,y}
180	3.0 ± 0.2^{x,y,z}	3.5 ± 0.1^{w,x,y,z}	3.3 ± 0.1^{w,x,y,z}	3.1 ± 0.2^{w,x,y,z}	3.2 ± 0.3^{w,x,y,z}
200	2.6 ± 0.3^{z}	3.1 ± 0.2^{w,x,y,z}		2.7 ± 0.1^{y,z}	2.8 ± 0.3^{x,y,z}

±: corresponds to the standard deviation, n ≥ 3.
[a:] Tukey mean comparison per parameter (95% Confidence) no significant difference between values sharing same letter.

Viscosity safe to assume at 15 mPa*m

Temperature around 70 C

Velocity = 0 as the fluid is confined within the tank.

Total volume of the fluid = 2.43 m (height) * 3.05 m (width) * (5.79 length) = 42.91 m3

Fill to 90 % of capacity = 38.62 m3

Height of the fluid = 2.19 m

Pressure = Force /Area also Pressure = Density of oil * acceleration due to gravity * Height (depth of oil)

Force = P *A

The oil is not exerting uniform pressure on the wall the tanks at all heights. As the depth of the oil increases in the tank so does the pressure on the wall. The relationship between the pressure and the depth is proportional.

Depth ↑ = Pressure on the walls of the tank ↑

dF = Pressure * dA (at any given depth in the tank)

$$\int dF = \int P * g * h * dA$$

dA = w*dh (area at any given depth of the tank)

Force = $\int_0^{2.19} dF = \int_0^{2.19} P * g * h * w * dh$

Density of the oil, acceleration due to gravity and the width or length of the tank are constant. Therefore, we integrate h*dh

F = P*g*w $h^2/2$ * area of the wall [average pressure on the width of the wall]

F = (882 Kg/m^3 *9.8 m/s^2 *5.79 m * $(2.19m)^2$)/2

F= 120013.87 N [force exerted on the mid-section length of the wall]

The maximum force will be exerted on the bottom of the wall = 240027.5 N

Wall length = 5.79 m

Depth	**Force action on section of the wall (N)**	**Total force acting on the wall (N)**
0.5	12511.6	12511.6
1	50046	62557.6
1.5	112604.5	175162.1
2	200185.8	375347.9
2.19	**240027.8**	**615375.7**

Introduction

To perform an accurate analysis a structural engineer must determine information such as structural loads, geometry, support conditions, and material properties. The results the analysis include support reactions, stresses and displacements. This information is then compared to criteria that indicate the conditions of failure.

This document reflects of design calculations of Design of R.C.C Rectangular Cooking oil tank (capacity of tank = 27,000 Liter). The structure is a majorly a Concrete Structure with Fibre Reinforcement Concrete According to ASTM C1609/C1609M Standard. The design has been carried out according to ACI 318 Concrete Code.

STAAD Pro software was used for analysis of R.C.C oil tank and its Elements forces & Element/Plates stresses.

1. **Geometry of the Tank**

The structure consists of:

Length of oil tank = 17 ft

Height of oil tank = 8 ft

Width of oil tank = 8 ft

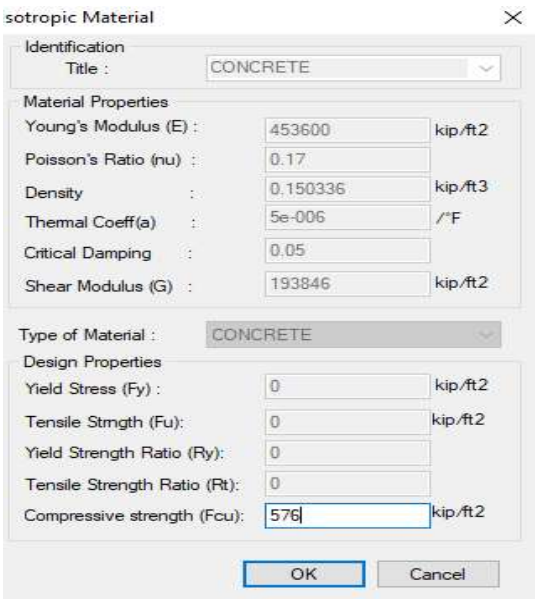
Edge Distance to The Wall = 1 ft

Wall Thickness = 13 Inch

Slab Thickness = 10 Inch

Free Board (FB) = 1 ft

Density of Cooking Oil = 882 Kg/m^3



List of Design Standards

- ACI 318 Code
- ASTM C1609/C1609M Standard

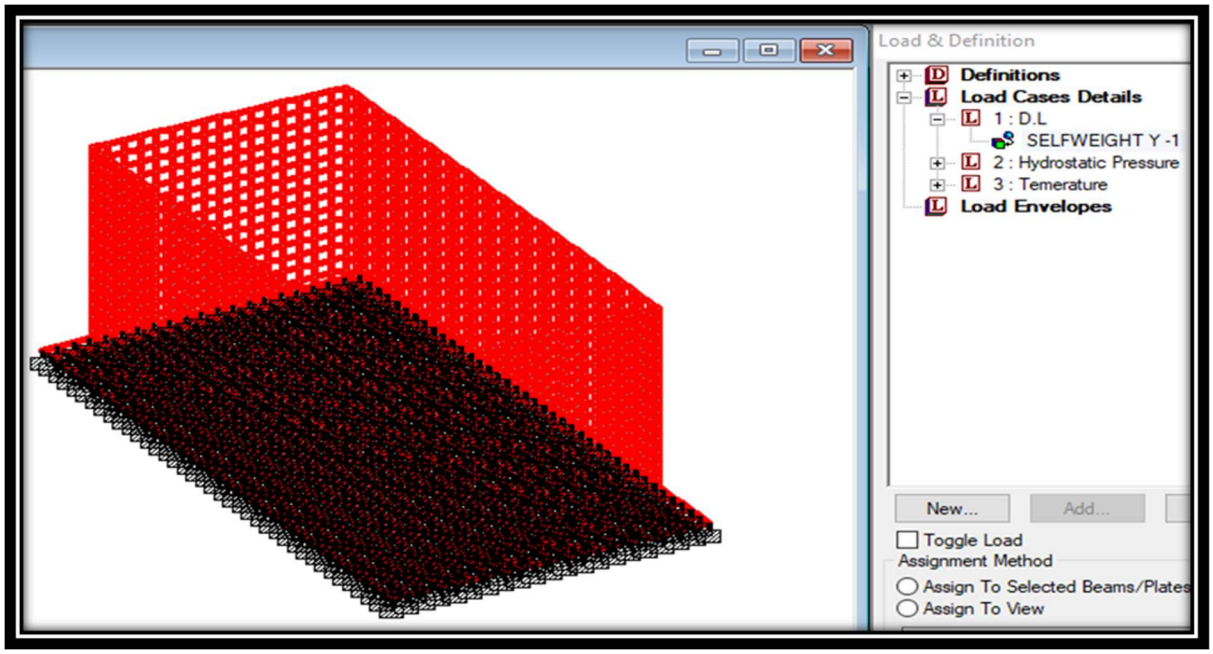
Design Criteria

Loads

Following Loads have been Considered for design of R.C.C Cooking Oil Tank Design

A. Dead Load
B. Hydrostatic Pressure of Cooking Oil/Water
C. Temperature Load

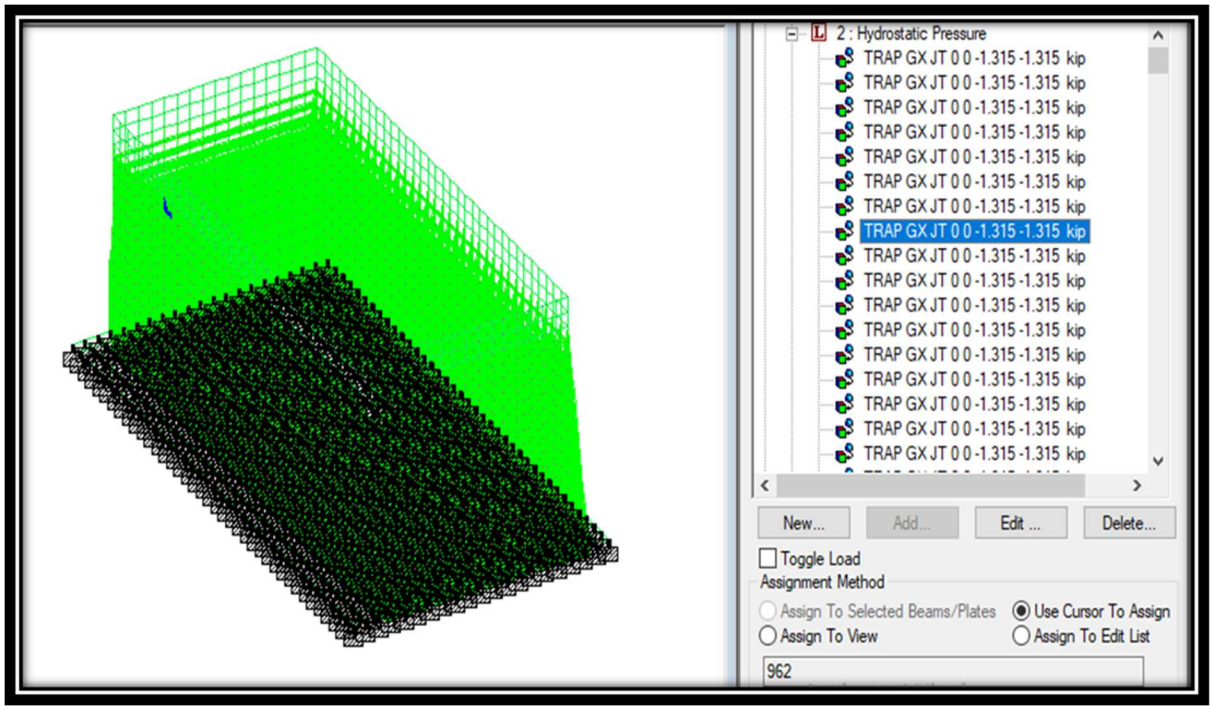
A. Dead Load (Self Weight)



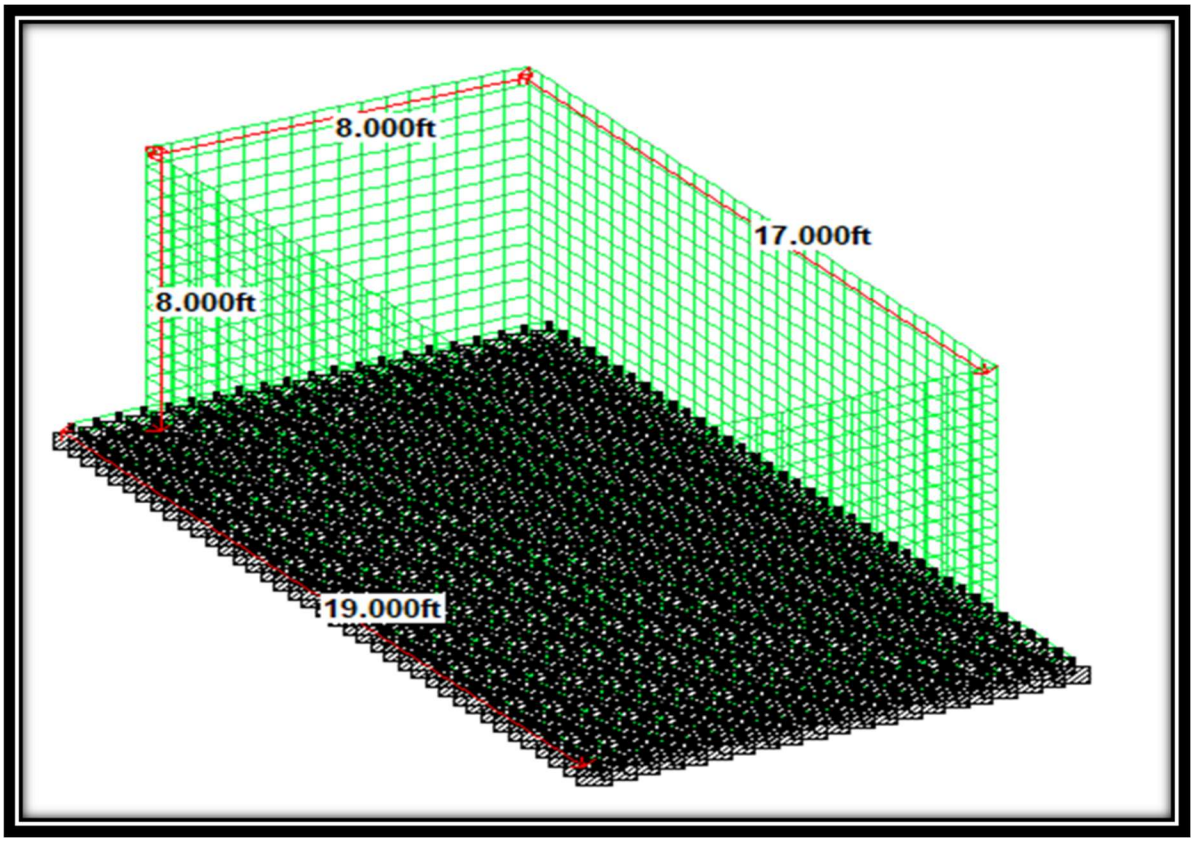
B. Hydrostatic Pressure (Cooking Oil Density = 882 Kg/m^3)

P = ρ g h

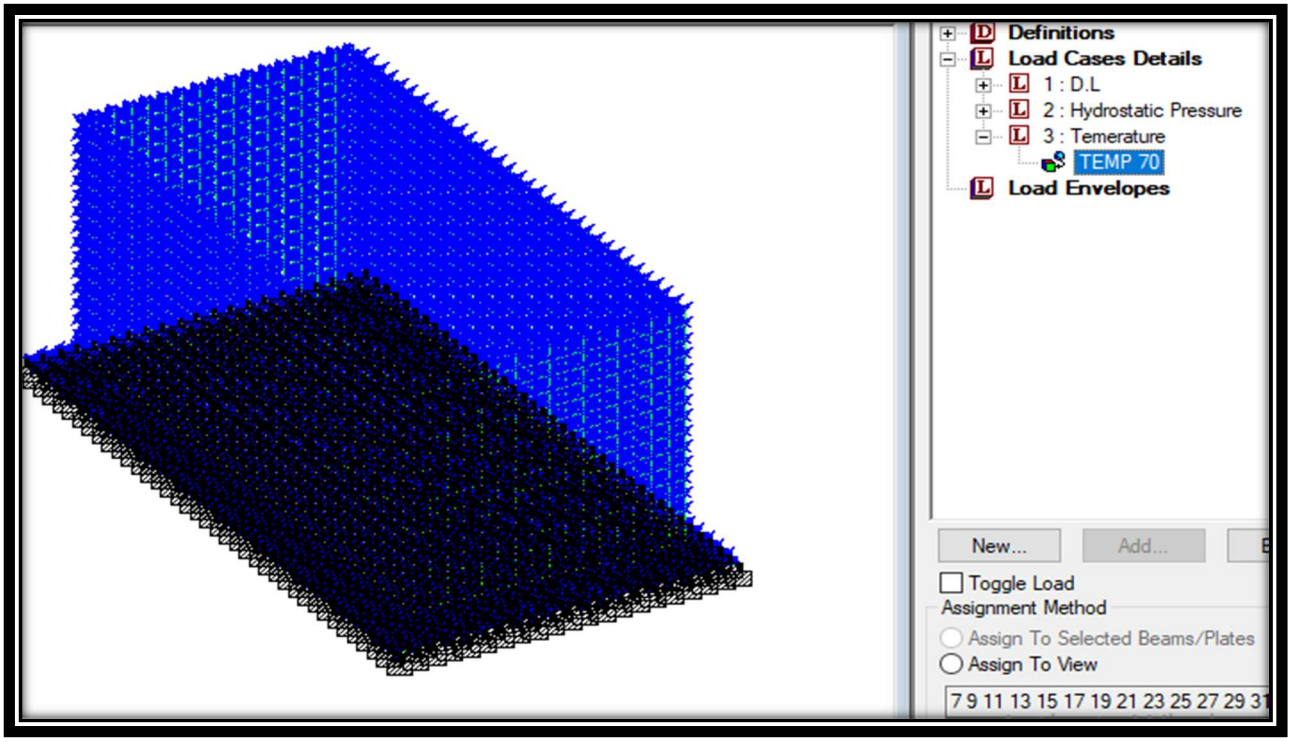
P = 18.41 KPa



Reinforced Cement Concrete (R.C.C) Oil Tank Dimensions

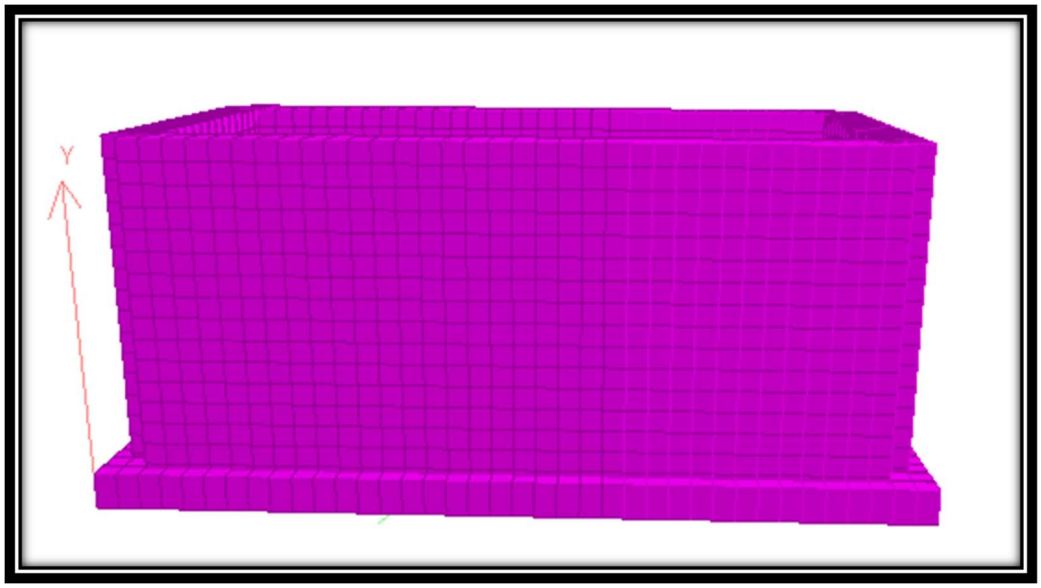


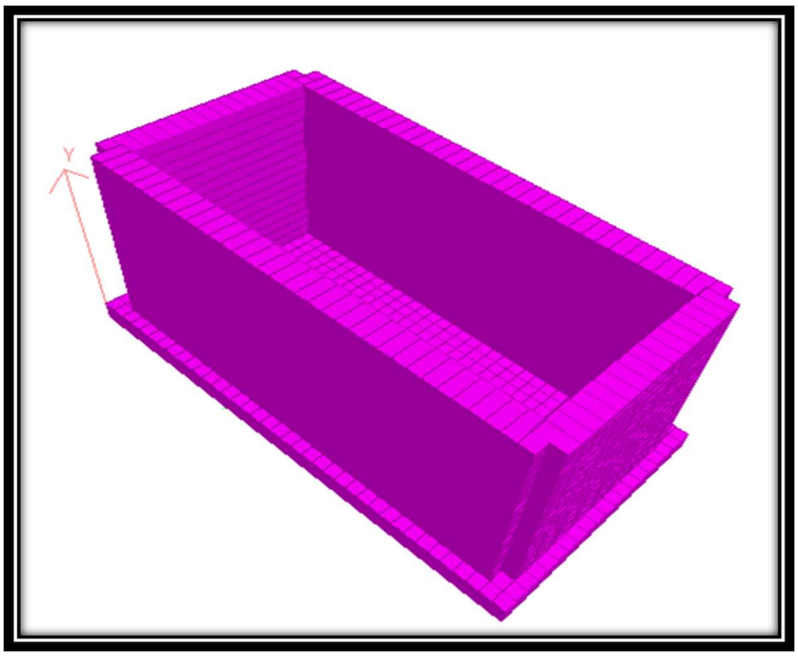
Thermal (Temperature) Load (70 °C Degree)

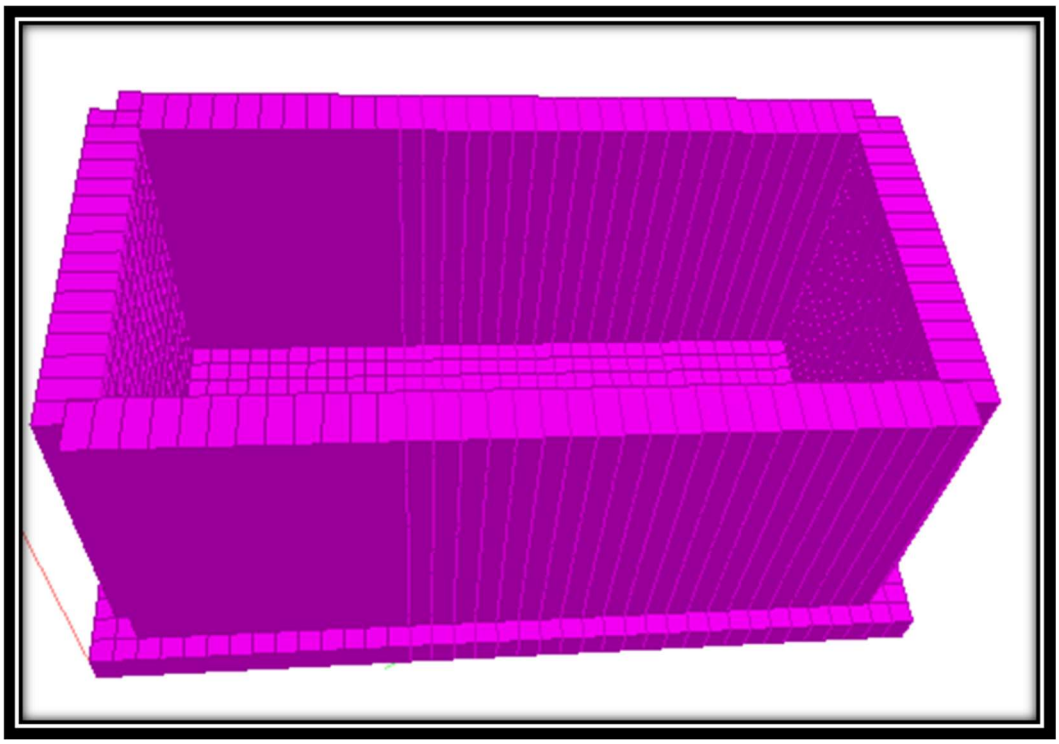


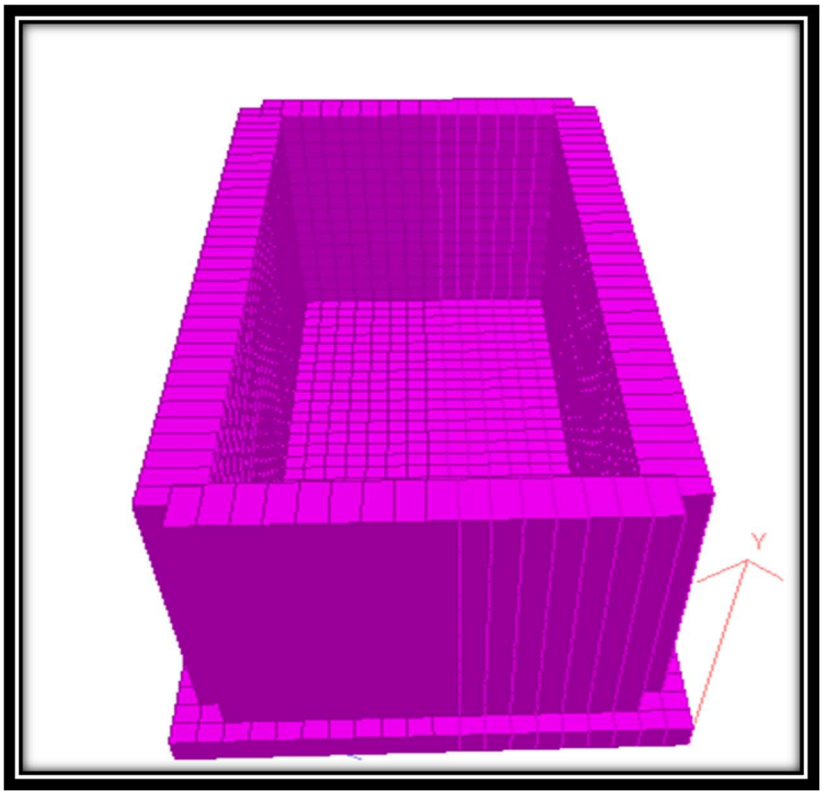
Structural Modeling

STAAD Pro Model of R.C.C. Rectangular Oil Tank Design Structures





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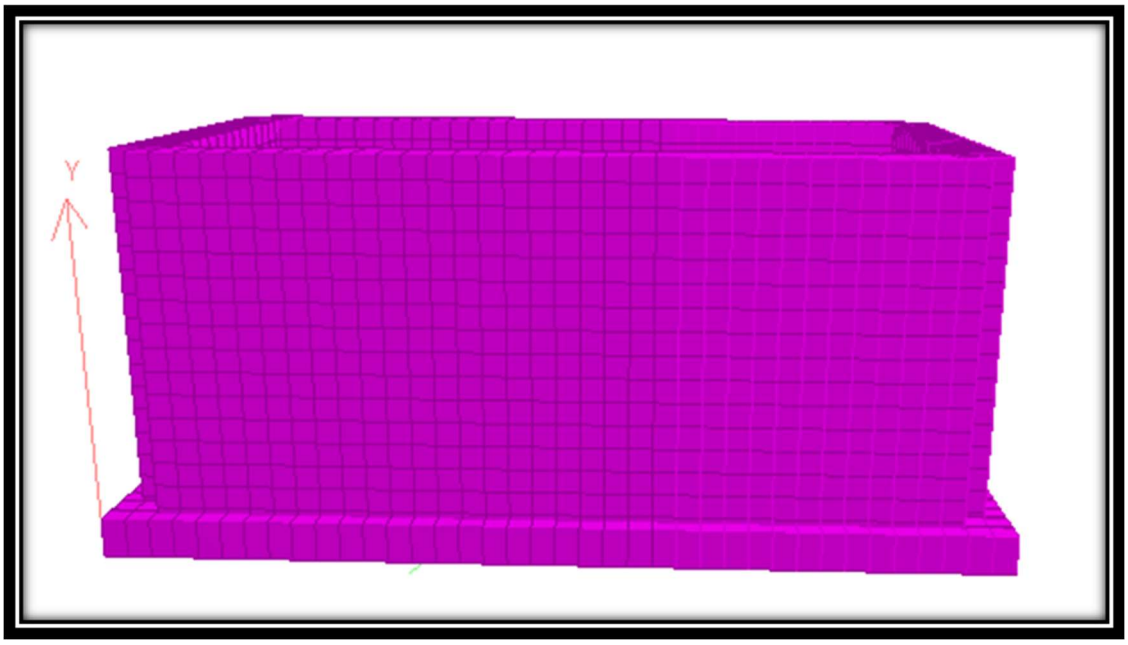
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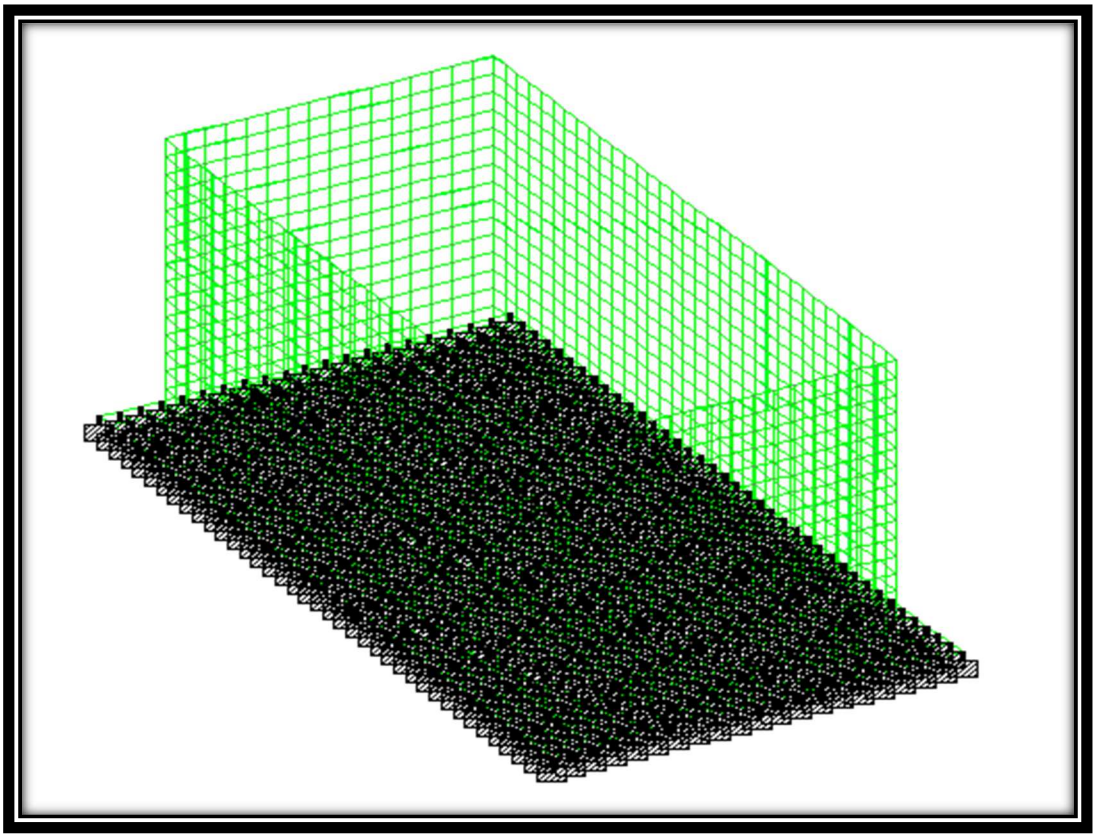
Structural Analysis and Results

The Structure & All Concrete Elements/Plate - Pass in Green



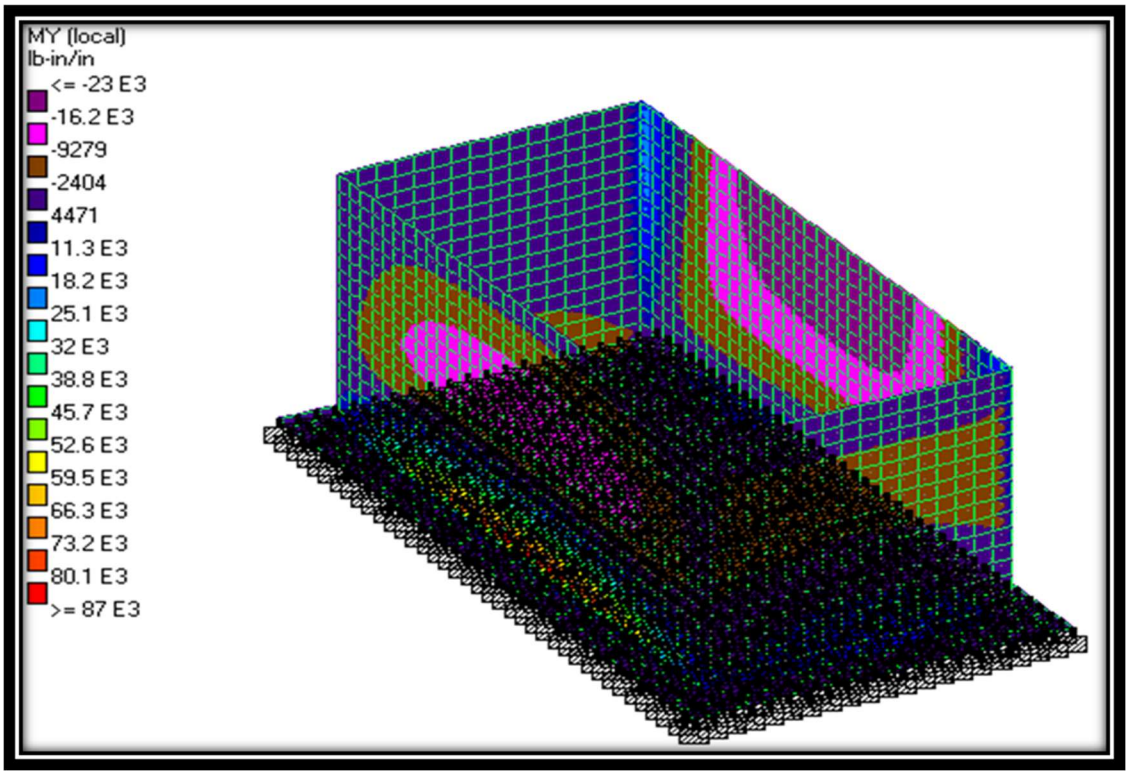
Summary of Node Displacement

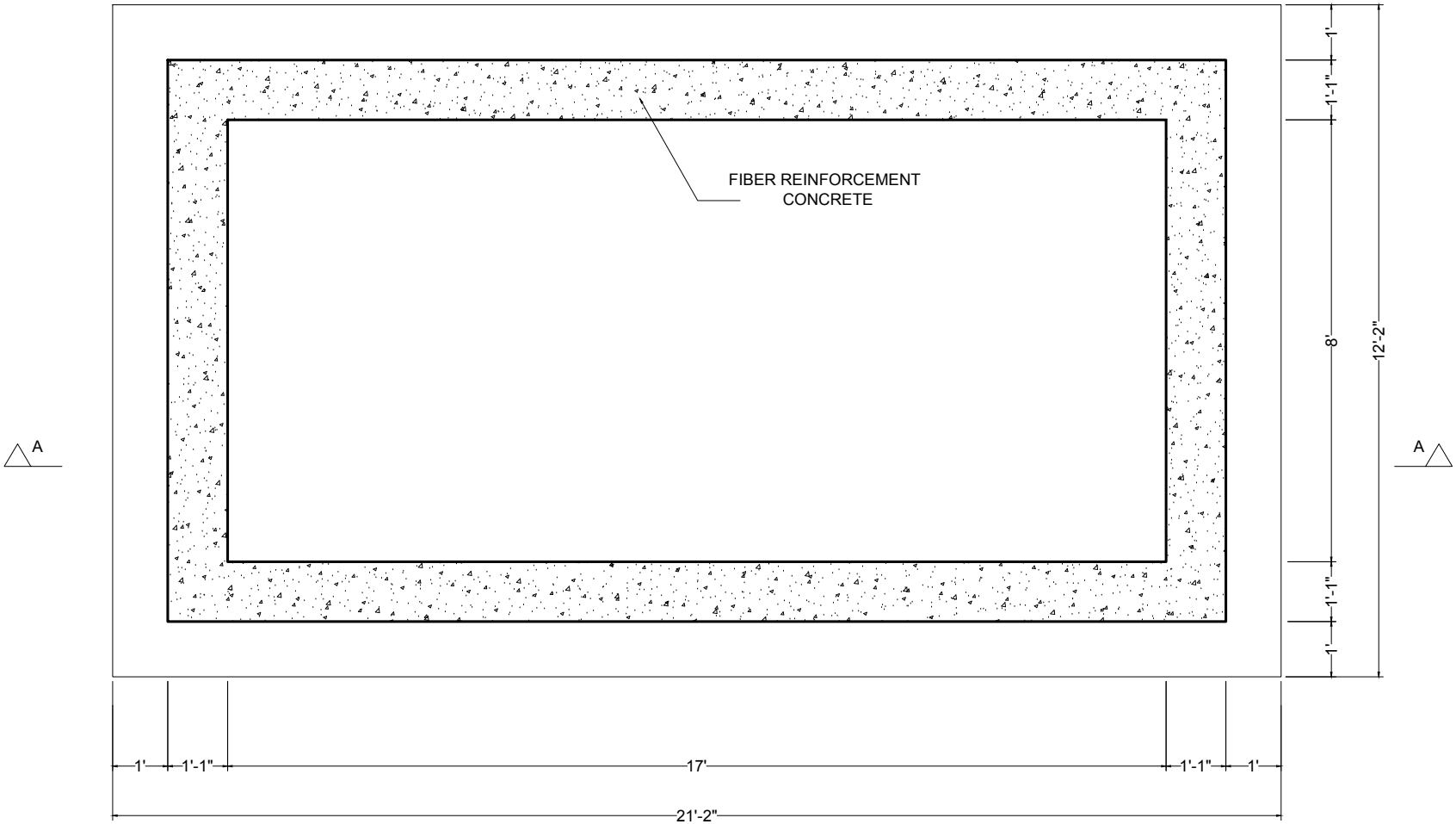
All | Summary

	Node	L/C	Horizontal X in	Vertical Y in	Horizontal Z in	Resultant in	Rotational rX rad	rY rad	rZ rad
Max X	1923	2 Hydrostatic	**0.172**	-0.000	-0.001	0.172	0.000	0.000	-0.002
Min X	857	2 Hydrostatic	**-0.172**	-0.000	-0.001	0.172	0.000	-0.000	0.002
Max Y	857	3 Temerature	-0.013	**0.040**	0.000	0.042	-0.000	-0.000	0.000
Min Y	1629	2 Hydrostatic	0.000	**-0.003**	0.039	0.039	0.000	-0.000	-0.000
Max Z	1629	2 Hydrostatic	0.000	-0.003	**0.039**	0.039	0.000	-0.000	-0.000
Min Z	2412	2 Hydrostatic	0.000	-0.000	**-0.041**	0.041	-0.000	0.000	-0.000
Max rX	2210	3 Temerature	-0.008	0.004	0.012	0.015	**0.001**	0.000	0.000
Min rX	1414	3 Temerature	-0.008	0.004	-0.012	0.015	**-0.001**	-0.000	0.000
Max rY	2130	2 Hydrostatic	0.054	-0.001	-0.001	0.054	0.000	**0.002**	-0.000
Min rY	832	2 Hydrostatic	-0.054	-0.001	-0.001	0.054	0.000	**-0.002**	0.000
Max rZ	1224	2 Hydrostatic	-0.051	-0.000	-0.000	0.051	0.000	-0.000	**0.002**
Min rZ	1912	2 Hydrostatic	0.051	-0.000	-0.000	0.051	0.000	0.000	**-0.002**
Max Rs	857	2 Hydrostatic	-0.172	-0.000	-0.001	**0.172**	0.000	-0.000	0.002

R.C.C Tank Elements/Plates Stresses on 13-Inch-Thick Wall & 10-Inch-Thick Slab

The stresses of the Plate/Elements are in permissible limit so in this way the R.C.C. tank is pass corresponding to hydrostatic pressure of Cooking oil (Density of Cooking Oil = 882 Kg/m^3).





Atmospheric Oil Tank Plan
UST #1 and 2

drawing title
UST #1 and 2
Atmospheric Oil Tank Plan
Concrete Outline

BUFFALO BIODIESEL Inc.

consulting architect and engineer

client
---

job title
Buffalo Biodiesel, Inc.
AST Reinforced Concrete Plans

job no.
---

signatures

drawing no.
0001

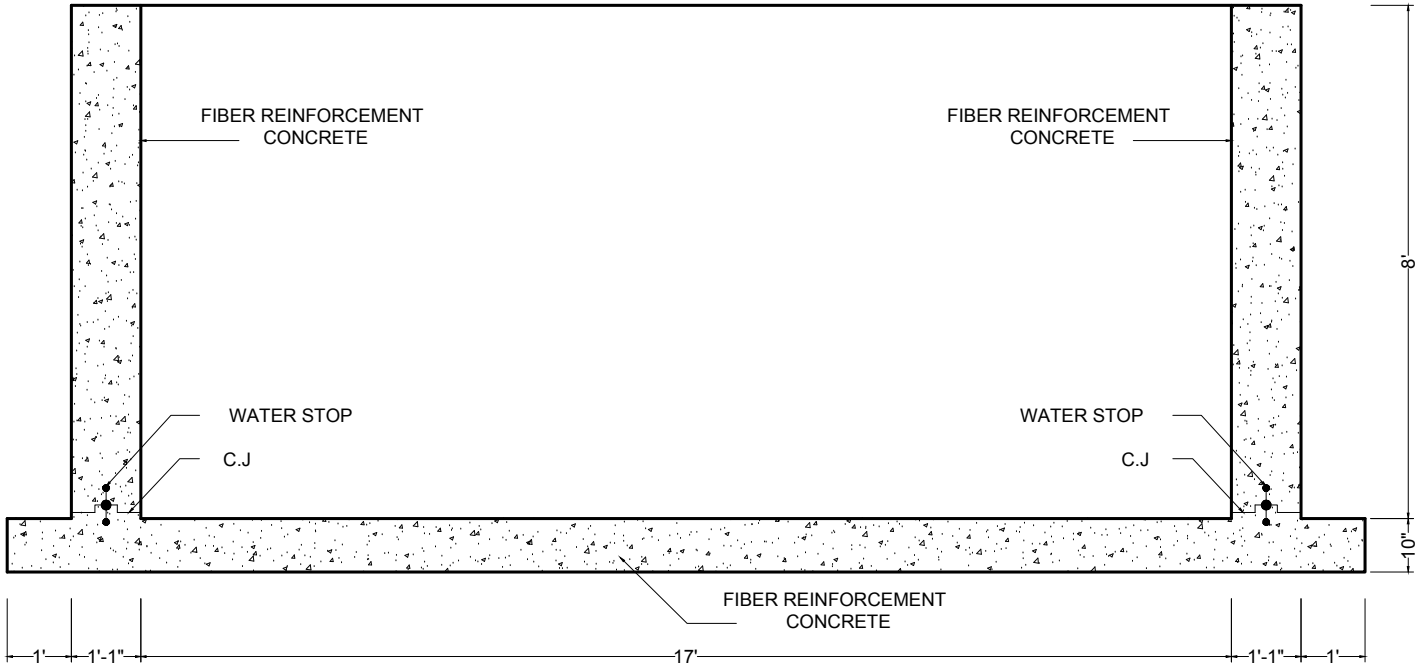
revision suffix

scale

date
DEC.16,2019

drawn
M.ABUBAKAR

checked



Section A-A
UST #1 and 2

drawing title

Section A-A
Concrete Outline

BUFFALO BIODIESEL Inc.

consulting architect and engineer

client
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job title
Buffalo Biodiesel, Inc.
AST Reinforced Concrete Plans

job no.
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signatures

drawing no.
0002

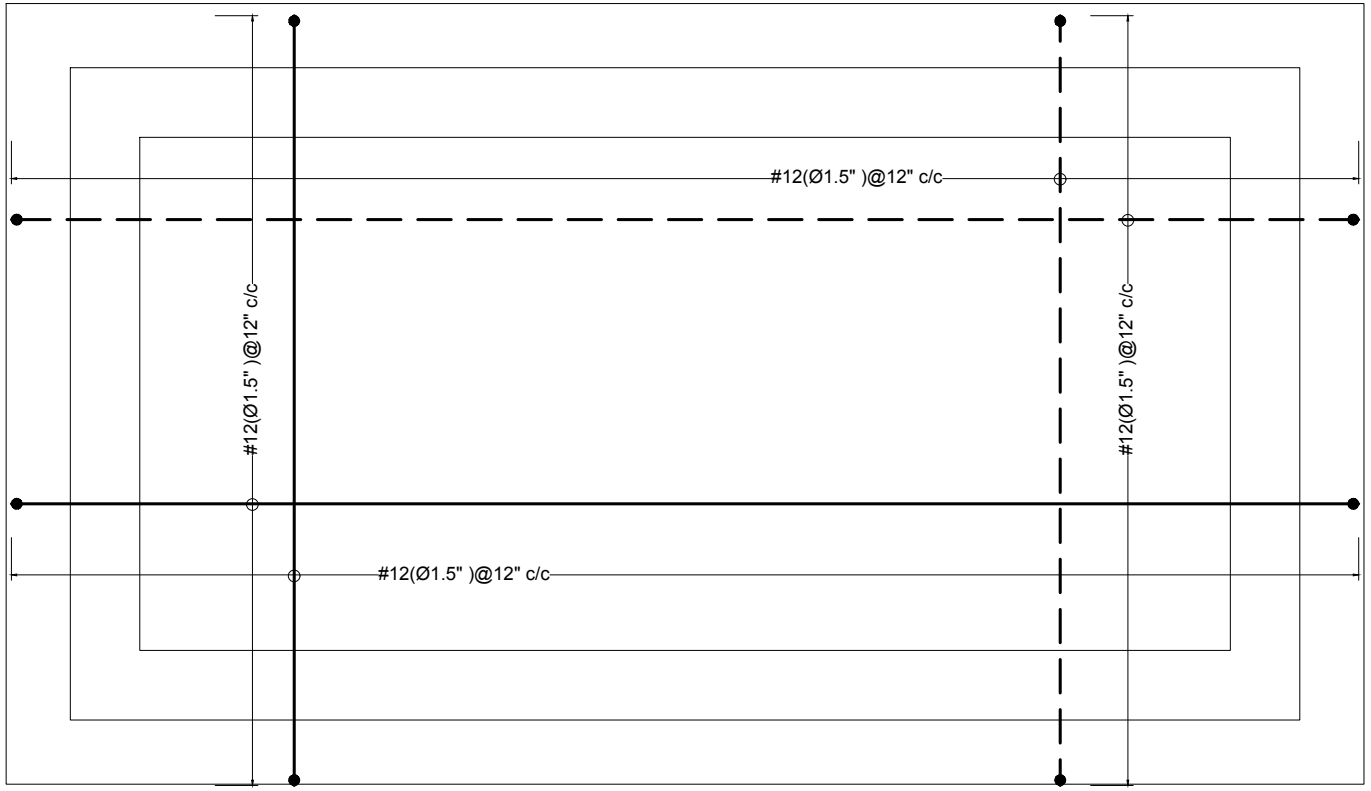
revision suffix

scale

date
DEC.16,2019

drawn
M.ABUBAKAR

checked



Top And Bottom Reinforcement Plan

UST #1 and 2

drawing title

Top And Bottom Plan Reinforcement

BUFFALO BIODIESEL Inc.

consulting architect and engineer

client

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job title

Buffalo Biodiesel, Inc.
AST Reinforced Concrete Plans

job no.

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drawing no.

0003

revision suffix

signatures

scale

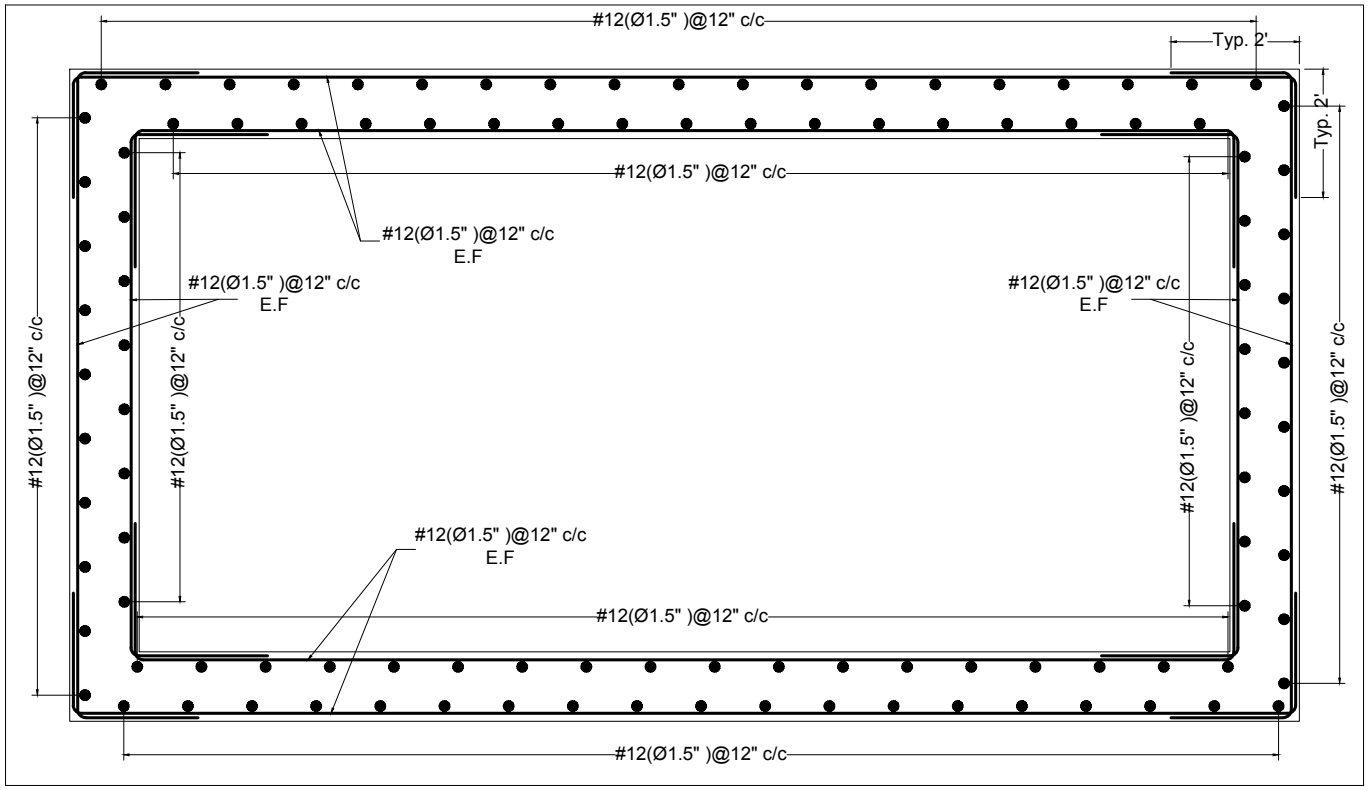
date

DEC.16,2019

drawn

M.ABUBAKAR

checked



Wall Reinforcement Plan
UST #1 and 2

drawing title

Wall Reinforcement Plan

BUFFALO BIODIESEL Inc.

consulting architect and engineer

client
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job title
Buffalo Biodiesel, Inc.
AST Reinforced Concrete Plans

job no.
---

signatures

drawing no.
0004

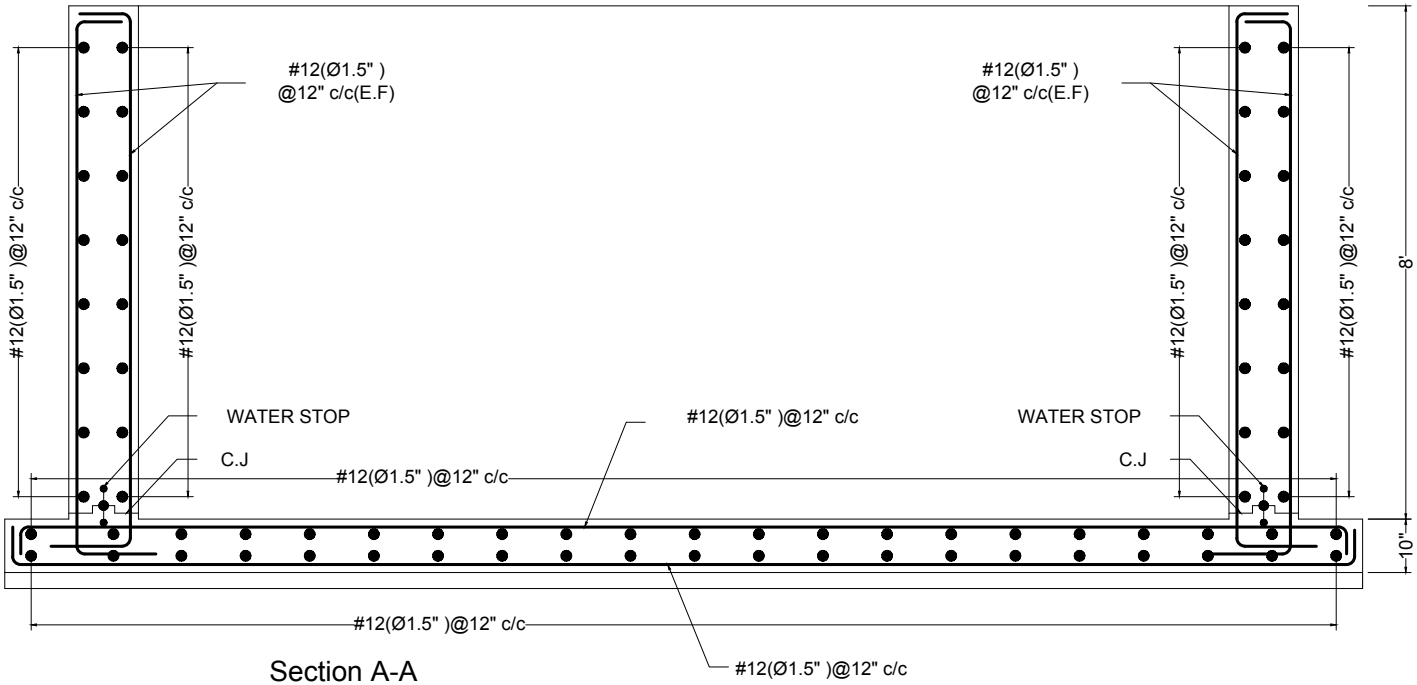
revision suffix

scale

date
DEC.16,2019

drawn
M.ABUBAKAR

checked



Section A-A

UST #1 and 2

drawing title

Section A-A
Reinforcement

BUFFALO BIODIESEL Inc.

consulting architect and engineer

client
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job title
Buffalo Biodiesel, Inc.
AST Reinforced Concrete Plans

job no.
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signatures

drawing no.
0005

revision suffix

scale

date
DEC.16,2019

drawn
M.ABUBAKAR

checked

APPENDIX O
STRUCTURAL ASSESSMENT AND INSPECTION REPORT

Structural Assessment Report

Report Title: Structural Assessment of One-Story CMU Wall Building and Ancillary Pre-Engineered Metal Building
Property Address: 225 Sawyer Avenue Tonawanda, NY 14150
Assessment Date: September 5, 2025
Prepared By: Lakeside Design Engineering, DPC
Client: Buffalo Biodiesel, Inc.

1. Executive Summary

This structural assessment was conducted on a one-story building constructed with concrete masonry unit (CMU) walls, supported by bar joists and a metal deck roofing system, as well as an ancillary pre-engineered metal building (PEMB) on the same property. The purpose of the assessment was to evaluate the overall structural integrity of both structures, identify any potential deficiencies, and provide recommendations if necessary. Based on a thorough visual inspection and review of available documentation, no structural deficiencies were observed in either structure. Both buildings appear to be in sound condition, with all components performing as expected for their age and design.

2. Introduction

2.1 Purpose

The assessment was performed to determine the current structural condition of the primary and ancillary buildings and to confirm compliance with applicable building codes and standards. This report documents the findings and conclusions from the site visit.

2.2 Building Description

The subject property includes two structures and various indoor and outdoor reinforced concrete fluid storage/containment tanks as follows:

Primary Building:

A single-story structure approximately 17,500 square feet in area, erected approximately in 1960. Key structural elements include:

- **Exterior Walls:** Load-bearing CMU walls, typically 8-inch or 12-inch thick, reportedly with reinforced grout cores where applicable.
- **Roof System:** Open-web steel bar joists spanning between the CMU walls, supporting a corrugated metal deck. The roofing assembly includes insulation and a membrane overlay (assumed to be a built up roof such as EPDM or similar based on visual observation).

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- **Foundation:** Assumed to be shallow spread footings or slab-on-grade, based on typical construction for this building type (not directly inspected as part of this assessment).

Ancillary Structure:

A pre-engineered metal building (PEMB) approximately 3,275 square feet in area, used for a welding and tote repair shop, erected approximately in 1980. Key structural elements include:

- **Primary Framing:** Rigid steel frames with tapered or straight columns and rafter beams, bolted base connections, and end wall frames.
- **Secondary Framing:** Cold-formed Z or C purlins and girts supporting the roof and wall panels.
- **Roof and Wall Panels:** Standing seam or through-fastened metal roof panels and metal wall panels.
- **Foundation:** Concrete piers or slab-on-grade with embedded base plates (visual confirmation of exposed portions).
- **Other Features:** Standard overhead door openings and personnel doors; no mezzanines or crane systems observed.

Reinforced Concrete Storage/Containment Tanks:

There are nine (9) above ground storage tanks (ASTs) of various capacities located inside the Primary Building. In addition to the interior ASTs there are two previously classified underground storage tanks (USTs) which have been repurposed as Secondary Containment tanks located outside in the rear of the facility. These ASTs and USTs are shown in Figures located in Appendix A. Both ASTs and USTs are reported to be constructed within the last 10-15 years and are used as part of the UCO and Yellow Grease Refinement process.

- **Walls:** Reinforced concrete walls measured between 10" – 12" thick 8-inch or 12-inch thick with epoxy coating on exterior where applicable
- **Foundation:** Assumed to be shallow mat foundation footing, based on typical construction for this building type (not directly inspected as part of this assessment). Previous design and analysis documents located in Appendix N provides engineered sketches to support this assumption, although these were not prepared by Lakeside Design Engineering, DPC.

3. Methodology

The assessment was conducted in accordance with industry standards, including guidelines from the American Society of Civil Engineers (ASCE), the Metal Building Manufacturers Association (MBMA), and the International Building Code (IBC). The following methods were employed:

- **Visual Inspection:** A comprehensive walk-through of the interior and exterior of both structures, including accessible roof areas, walls, framing, and connections.
- **Non-Destructive Evaluation:** Examination for signs of distress such as cracking, corrosion, deflection, buckling, or water intrusion.

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- **Documentation Review:** There were no documents available for review on premise such as: as-built drawings, manufacturer erection drawings, maintenance records, and prior inspection reports.
- **Limitations:** The inspection was visual only and did not include invasive testing, removal of finishes, or specialized equipment. Inaccessible areas (e.g., concealed connections or high roof sections) were not evaluated.

The inspection was conducted under clear weather conditions, allowing for unobstructed views.

4. Findings

4.1 Primary Building – Exterior Walls (CMU)

The CMU walls were inspected for cracks, spalling, efflorescence, or signs of settlement. All walls appeared plumb and level, with no visible cracks exceeding hairline width. Mortar joints were intact, and there was no evidence of water infiltration or deterioration. Reinforcement was not visible for inspection.

4.2 Primary Building – Roof Structure (Bar Joists and Metal Deck)

The bar joists were examined for alignment, corrosion, and connection integrity. All joists were straight, with no signs of buckling, twisting, or excessive deflection under dead loads. Bridging and bracing elements were secure. The metal deck showed no rust, punctures, or deformation. Roof drainage appeared adequate, with no ponding observed.

4.3 Primary Building – Connections and Supports

Wall-to-roof connections, including ledger angles and embed plates, were secure without loose bolts or welds. No corrosion was noted at steel-to-masonry interfaces.

4.4 Ancillary Structure – Pre-Engineered Metal Building

The primary rigid frames were straight and plumb, with no evidence of distortion, buckling, or excessive deflection. Column base plates and anchor rods were visible at exposed locations and showed no signs of corrosion, loosening, or foundation distress. Secondary members (purlins and girts) were properly aligned and securely fastened. Roof and wall panels were intact, with little to no dents, tears, or significant fastener pull-out observed. End wall framing and bracing rods were tight and in place. Little to no corrosion was noted on structural members, and coatings appeared in good condition. Door openings and frames were operational.

4.5 USTs and ASTs

All Reinforced Concrete was found to be in good operational condition with few hairline cracks (likely from shrinkage during curing), no spalling or delamination, no efflorescence and no chalking or signs of carbonation. USTs showed no signs of shear cracks or distress from seasonal ground movement. ASTs, additionally, showed no signs of shear cracks or distress from operational use.

Owner was instructed to continue routine inspections, keep up on maintenance and coatings and address any deficiencies as they arise. Should they need, it is recommended to contact the services

of a registered design professional to assist with anything considered more then maintenance repairs.

4.6 Overall Condition

No structural deficiencies were identified in either the primary CMU building, the ancillary pre-engineered metal building or the USTs and ASTs. All structures exhibit no signs of distress, overload, or environmental damage. All components are functioning as intended, and the structures meet or exceed expected performance for their design life.

5. Conclusion

Based on the visual inspection and evaluation, the one-story CMU wall building with bar joist and metal deck roofing, ancillary pre-engineered metal building and the USTs and ASTs are structurally sound. No deficiencies were found, and all structures are suitable for continued use in their current configurations. The absence of issues suggests effective original construction, proper erection (for the PEMB), and ongoing maintenance.

6. Recommendations

No immediate repairs or further investigations are recommended at this time. It is advised to conduct routine maintenance, including periodic roof inspections, cleaning of drainage systems, and checking of panel fasteners and sealants on the PEMB, to preserve the structures' condition. A follow-up assessment is suggested in 5 years or after any significant events (e.g., severe weather, modifications, or high wind/snow loading).

If additional information becomes available or if conditions change, this assessment should be revisited.

Prepared By:
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Disclaimer: This report is based on observations made at the time of inspection and is not a guarantee against future issues. Structural engineering assessments are professional opinions and do not constitute a warranty.