



**NOTICE OF PUBLIC MEETING  
SUDBURY CONSERVATION COMMISSION  
Monday, August 26, 2024 at 7:00 PM  
Virtual Meeting**

The Sudbury Conservation Commission will hold a public meeting to review the Request for Determination of Applicability filing under the Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw to replace an existing septic system with a tight tank within the 100-foot Buffer Zone at 316 Boston Post Road, in Sudbury, MA. Mark Alexander, Applicant. The meeting will be held on Monday, August 26, 2024 at 7:00 pm, via Zoom.

Copies of the application may be reviewed on the Conservation Department web page at:

<https://sudbury.ma.us/conservationcommission/meeting/conservation-commission-meeting-monday-August-26-2024/>

Please contact the Conservation Office with any questions at 978-440-5470.

SUDBURY CONSERVATION COMMISSION  
8/5/2024



Massachusetts Department of Environmental Protection  
Bureau of Water Resources - Wetlands

**WPA Form 1- Request for Determination of Applicability** Sudbury  
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40 Municipality

**A. General Information**

**Important:**  
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Mark Alexander  
First Name Last Name

316 Boston Post Road  
Address

Sudbury MA 01776  
City/Town State Zip Code

978 443 2001 mark@alexanderautomotiveservice.com  
Phone Number Email Address

2. Property Owner (if different from Applicant):

Testwork Revocable Trust  
First Name Last Name

316 Boston Post Road  
Address

Sudbury MA 01776  
City/Town State Zip Code

Phone Number Email Address (if known)

3. Representative (if any)

Michael DiModica  
First Name Last Name

M. J. DiModica Excavating  
Company Name

19 Christopher Lane  
Address

Sudbury MA 01776  
City/Town State Zip Code

978 443 8433 mjdimodica@verizon.net  
Phone Number Email Address (if known)

**B. Project Description**

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

316 Boston Post Road Sudbury  
Street Address City/Town

Latitude (Decimal Degrees Format with 5 digits after decimal e.g. XX.XXXXX) Longitude (Decimal Degrees Format with 5 digits after decimal e.g. -XX.XXXXX)

K09 405  
Assessors' Map Number Assessors' Lot/Parcel Number

b. Area Description (use additional paper, if necessary):  
Commercial Automotive Repair Shop

c. Plan and/or Map Reference(s): (use additional paper if necessary)

Tight Tank System October 25, 2018  
Title Date

Title Date

[How to find Latitude and Longitude](#)

[and how to convert to decimal degrees](#)



**B. Project Description (cont.)**

2. a. Activity/Work Description (use additional paper and/or provide plan(s) of Activity, if necessary):

See Attached Narrative

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

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3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)

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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Municipality

**C. Determinations**

1. I request the Sudbury Conservation Commission make the following determination(s). Check any that apply:

- a. whether the **area** depicted on plan(s) and/or map(s) referenced above is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced above are accurately delineated.
- c. whether the **Activities** depicted on plan(s) referenced above is subject to the Wetlands Protection Act and its regulations.
- d. whether the area and/or Activities depicted on plan(s) referenced above is subject to the jurisdiction of any **municipal wetlands' ordinance or bylaw** of:

Sudbury

Name of Municipality

- e. whether the following **scope of alternatives** is adequate for Activities in the Riverfront Area as depicted on referenced plan(s).

**D. Signatures and Submittal Requirements**

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

[Handwritten Signature]  
Signature of Applicant

7/30/24  
Date

[Handwritten Signature]  
Signature of Representative (if any)

7/30/24  
Date

316 Boston Post Road

Sudbury, MA

Tight Tank

Narrative

The site consists of an Auto Repair shop (Service Garage) with two (2) bays. There are no more than three (3) employees currently and the restrooms are not open to the public. The structure is located on a very small lot (8,829 s.f.) with high water table and very little room to work with. The site is located on Boston Post Road with no sewer available in town and catch basins in the Right of Way on Boston Post Road. After review with the town health agent the proposed use of the tight tank was the most effective way to provide on-site service for the facility.

The owner proposes the waste be monitored visually every 30 days and pumped as needed.

Pumping By:

Fairbanks Septic Pumping

239 Nobscot Road

Sudbury, MA 01776

The waste shall be disposed of at:

Fitchburg Wastewater Treatment Plant

401 Princeton Road

Fitchburg, MA

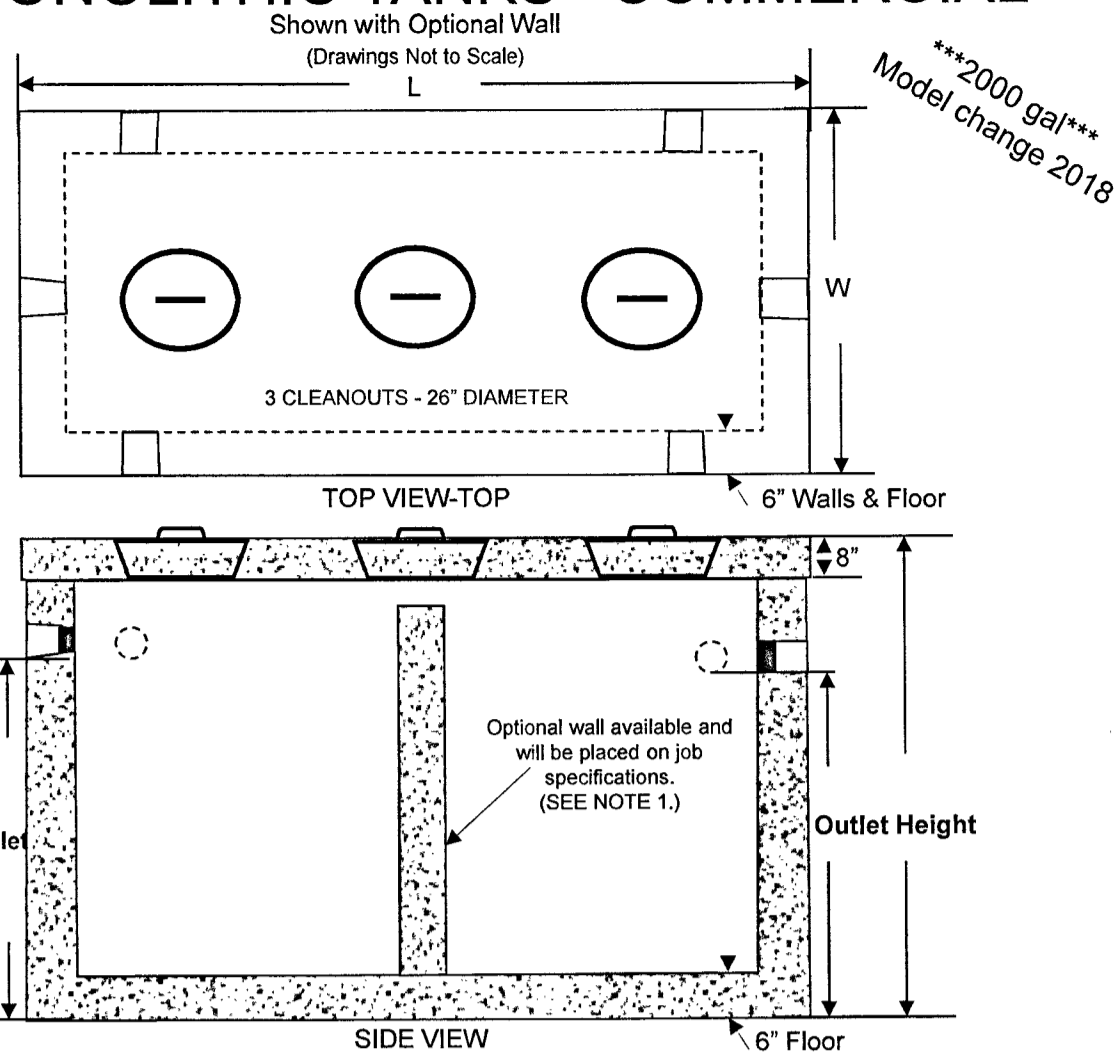
# H2O MONOLITHIC TANKS - COMMERCIAL

## ELEVATIONS

INV @ FDN 99.6 +/-

INV @ HOLDING TANK 99.4 +/-

## CONSTRUCTION NOTES



Critical Tank Dimensions				
Liquid Capacity	Inlet/Outlet	Height	L x W	Excavation Size
1000	58"/56"	76"	9' 4" x 5' 4"	11' 4" x 7' 4"
1500	58"/56"	76"	11' x 6'	13' x 8'
2000	Call	Call	12' 9 1/2" x 6' 11 1/2"	14' x 11'

- Notes**
- Special purpose Mono Tanks also available including FAST tanks & 2-Compartment tanks (wall placement & cleanout to be determined by job specs.) (\*Cleanout cover placement varies.)
  - Concrete strength f'c 5000PSI @ 28 days, Density 150 PCF.
  - Cement, Portland Type II or III, ASTM C150-81
  - Admixtures, air & plasticizers per ASTM C233-82
  - Reinforcement per ASTM C1227-latest revision
  - Design Loading AASHTO HS20-40
  - Constructions joints sealed with butyl rubber
  - Design conforms to 310 CMR 15.00, Mass Title V regs. for septic tanks

- All Elevations refer to Benchmark concrete sidewalk corner elevation 100.
- All construction shall conform to the requirements of Title 5 of the Massachusetts State environmental code and the board of health regulations of the town of Sudbury.
- All tight joint piping shall consist of polyvinyl chloride (PVC) schedule 40 or as specified.
- Any alteration to the approved plan must be approved by the design engineer and the board of health prior to construction.
- The contractor shall be responsible for verifying the location, size, and elevations of all existing utilities shown or not shown on these plans prior to and/or during construction. The design engineer shall be notified in writing of any utilities found interfering with the proposed construction so that remedial action may be taken before proceeding with construction.
- Compliance with all applicable regulations of the board of health, conservation commission, and other town agencies is mandatory and is the responsibility of the owner and not the designer. The owner is hereby notified that any construction within 100 feet of a regulated wetland usually requires an order of conditions from the conservation commission or Mass DEP.
- All precast structures shall be H-20 wheel loading, waterproof and water tight.
- Audio and visual signals shall be set to activate when 3/5 of the capacity of the tight tank has been reached. The alarm panel shall be located in a conspicuous location.
- The tight tank shall be serviced by a licensed septage hauler in the town of Sudbury upon the alarm being activated. The contents of the tank shall be properly disposed of at a licensed sewage treatment plant.
- The contents of the tight tank shall be strictly sanitary sewage.
- The tight tank shall have (1) 24" diameter cast iron cover and frame to grade for pumping. There shall be no surface water entering the tank through the cast iron cover or frame.

12. WETLAND FLAGGING BY DAVE BURKE AND LOCATION FROM PLAN BY SULLIVAN, CONNORS AND ASSOCIATES DATED OCT 7, 2020.

## TIGHT TANK DESIGN

SERVICE GARAGE 2 BAYS @ 125 GPD / BAY = 250 GPD

MIN TIGHT TANK CAPACITY  
500% x 250 GPD = 1250 GALLONS

PER TITLE 5 SEC 15.260 MIN 2,000 TIGHT TANK H-20

EL 101.5/- DTH 1 8.3.18  
0-54" FILL  
54"-70" PEAT  
70"-120" L.S.  
H.C. MOTTLES @ 30" EL 99.0 +/-

## 2,000 GALLON TIGHT TANK

NTS

### BUOYANCY CALCULATIONS

1. WT OF TIGHT TANK

ENDS : (2)(7')(6')(1.5) = 42 CF

SIDES : (2)(13')(6')(1.5) = 78 CF

BOTTOM : (12.75)(6.9)(1.5) = 44 CF

TOP : (12.75)(6.9)(6.7) = 59 CF

223 CF

223 CF x 150 #/CF = 33,450 #

WT OF SOIL → 4"

(12.75)(6.9)(4/12)(95 #/CF) = 2,786 #

36,236 #

2. TIGHT TANK DISPLACEMENT

$F_B = V \gamma$

$V = (12.75)(6.9)(6.2) = 546 \text{ CF}$

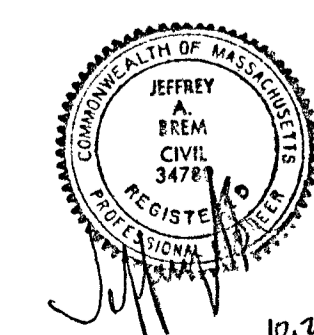
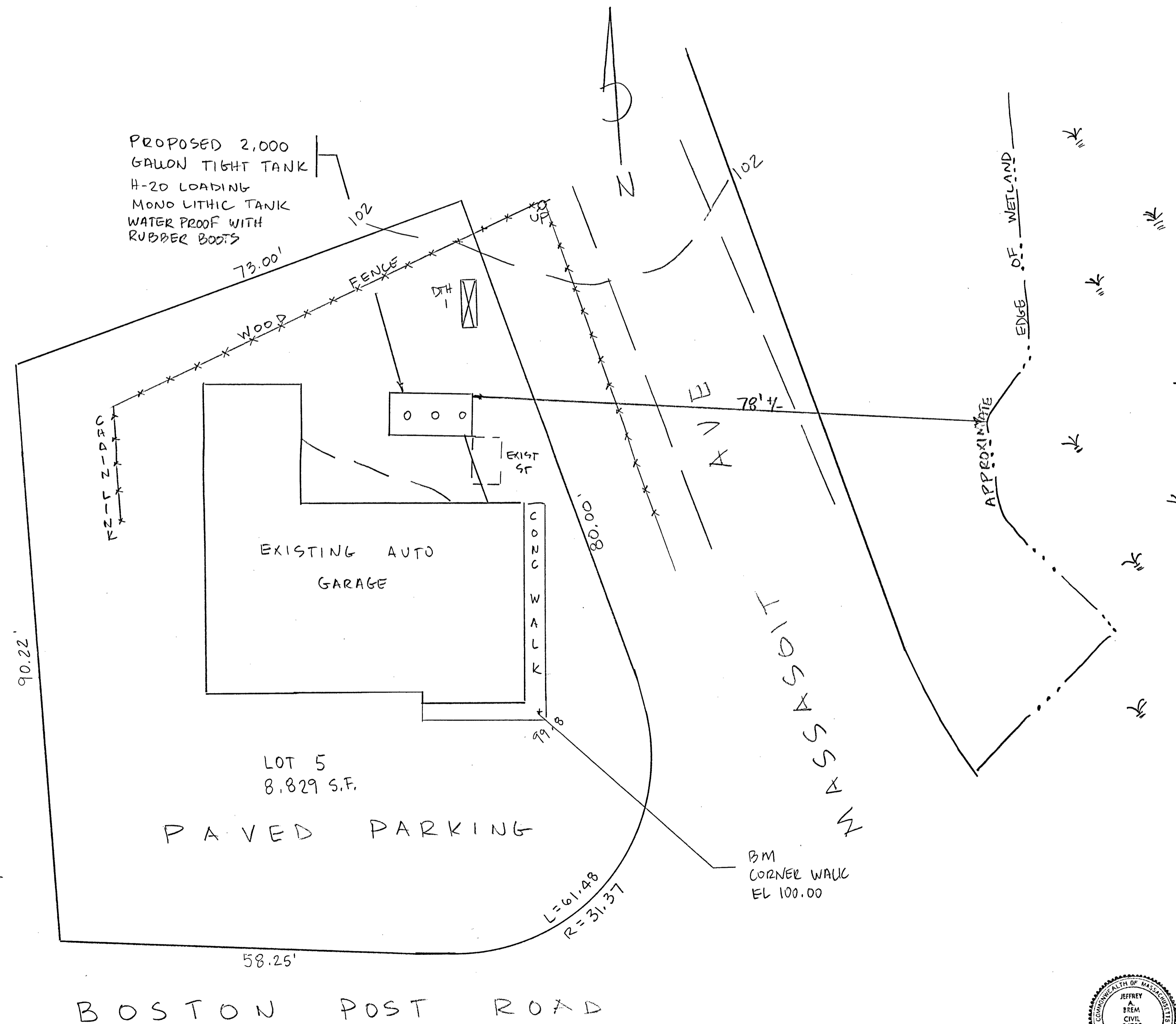
$V = 5/6 \Rightarrow$  ASSUMING 5 FT SUBMERGED = 0.83

$\gamma = 62.4 \text{ #/CF}$

$F_B = 546 \text{ CF} \times 5/6 \times 62.4 \text{ #/CF} = 28,280 \text{ #}$

36,236 # > 28,280 # ∴ TANK WILL NOT FLOAT

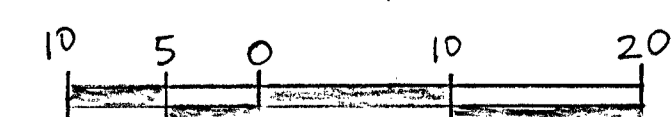
FS = 1.28



TIGHT TANK SYSTEM  
316 BOSTON POST ROAD  
SUDBURY, MA

PREPARED FOR:  
MARK ALEXANDER  
316 BOSTON POST ROAD  
SUDBURY, MA

PREPARED BY:  
M.J. DI MODICA E.C.  
19 CHRISTOPHER LN  
SUDBURY MA 01776  
OCTOBER 25, 2018



SCALE: 1" = 10'