

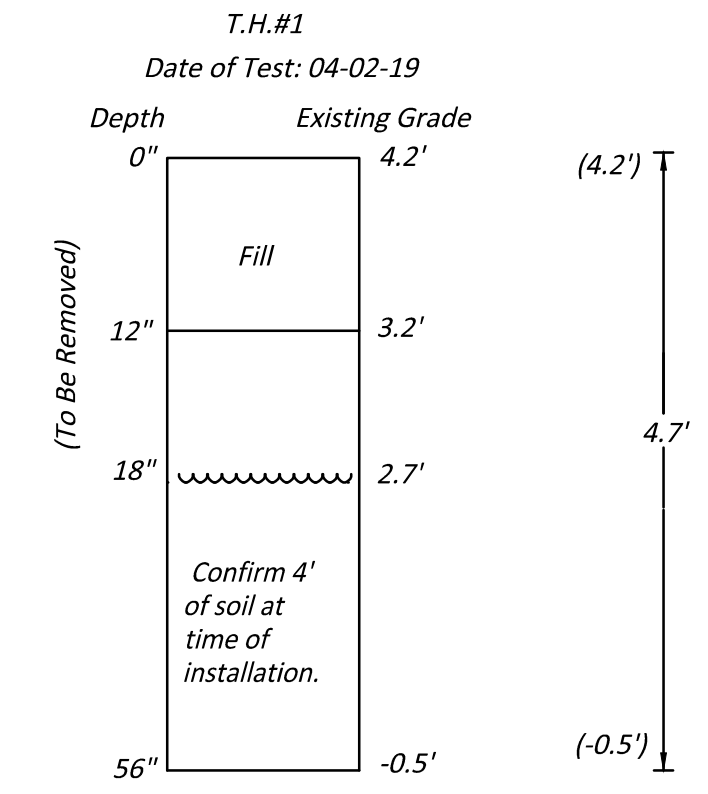
**GENERAL NOTES**

- A.) Neither driveway nor parking areas are allowed over septic system unless H-20 components are used and system is vented.
- B.) The designer will not be responsible for the system as designed unless constructed as shown. Any changes must be approved in writing by the designer.
- C.) Contractor shall be responsible for verifying the location of all underground and overhead utilities prior to the commencement of work.

**CONSTRUCTION NOTES**

- 1.) All materials and construction shall conform to the State Environmental Code, Title 5, and the requirements of the local Board of Health.
- 2.) Topsoil, subsoil, peat, or other unsuitable or impervious material [15.255 (1)] shall be removed five (5) feet laterally in all directions beyond the outer perimeter of the soil absorption system to the depth of the naturally occurring pervious material(s) and replaced with fill material meeting the specifications of 310 CMR 15.255 (3), [15.255(5)].
- 3.) Septic tank(s), grease trap(s), dosing chamber(s) and distribution box(es) shall be set on a level stable base which has been mechanically compacted. If the component is placed in fill, proper compaction is required to ensure stability and to prevent settling; native ground with a 6 inch stone base is otherwise adequate [15.221(2)].
- 4.) Base aggregate shall consist of 3/4" to 1-1/2" double washed stone free of iron, fines and dust and shall be installed from below the crown of the distribution line to the bottom of the soil absorption system [15.247 (1)]. Base aggregate shall be covered with a 2" layer of 1/8" to 1/2" double washed stone free of iron, fines and dust [15.247 (2)].
- 5.) From the date of installation of the soil absorption system until receipt of a Certificate of Compliance, the perimeter of the soil absorption system shall be staked and flagged to prevent the use of such area for all activities which might damage the system [15.246(2)].
- 6.) The Board of Health shall require inspection of all construction by an agent of the Board of Health and the designer and shall require such persons to certify in writing that all work has been completed in accordance with the terms of the permit and approved plans. 48 hours advance notice is requested.

**DEEP OBSERVATION HOLE LOG**



Representative of Approving Authority: Judith Giorgio, Chatham, Health Agent  
Soil Evaluator: Rick Judd, Moran Engineering Associates LLC  
Percolation Rate: <2 min. per inch in Substratum C. Assumed

Appropriate Index Well: TSW-89  
Water Level Range Zone: A  
Water Level for Index Well: 11.0  
for Month - Year: 06-11-2019  
Adjustment: 0.8  
Observed Ground Water Elev.: 2.6 to 3.0 over 24 hours  
Adjusted Ground Water Elev.: 3.6

**SYSTEM DESIGN CALCULATIONS**

- 1.) Basis of Design  
Number of Bedrooms: 4  
Other: (Future Bedroom)
  - 2.) Design Daily Flow Sewage Flow: 440 GPD
  - 3.) Septic Tank Capacity  
Required: 880 Gal.  
Provided: 1,500 Gal.
  - 4.) Soil Absorption System Capacity  
Required: 440 GPD  
Provided: 447 GPD
  - 5.) A garbage disposal is NOT permitted with this design
- \* 4 runs x [(4 x 7.4) + 0.6] = 120.8 L.F.  
120.8 L.F. x 3.0 x 1.67 = 605 S.F. Effective Area  
605 S.F. x 0.74 Gal/S.F./Day = 447 GPD
- A conventional system would require 440 / 0.74 = 594 S.F.

**SEPTIC TANK NOTES**

**SEPTIC TANK BUOYANCY CALCULATIONS:**  
Weight of Septic Tank = 23,600 lbs.  
Weight of Concrete Slab = 4,000 lbs. (min.)  
Total = 27,600 lbs.

Weight of Water Displaced by Tank = 26,500 lbs.  
< 27,600 lbs.; O.K.

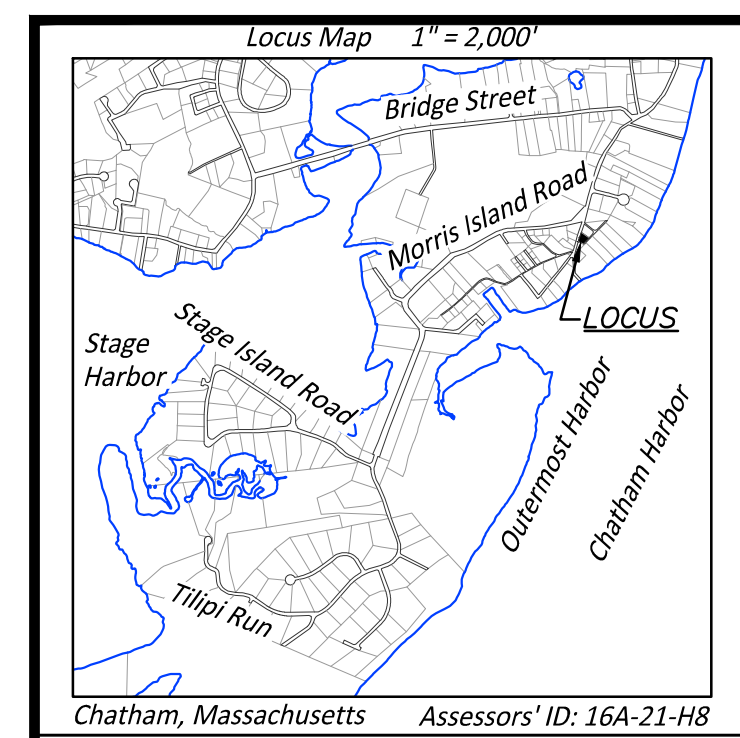
(6'x6'x11.5' = 414 C.F. x 64 lbs/CF = 26,496 ~ 26,500 lbs.)

The septic tank is to be coated with a salt water tolerant water proof sealant.

ACME-SHOREY SEPTIC TANK, Monolithic 1,500 gallon H-20

**FLOOD PLAIN NOTE**

All construction below the Design Flood Elevation (14) to be Flood Resistant Material. See FEMA NFIP Technical Bulletin 2, 2008.



**SEWAGE DISPOSAL SYSTEM PLAN**

15 & 21 Little Beach, Chatham, Massachusetts  
July 30, 2019

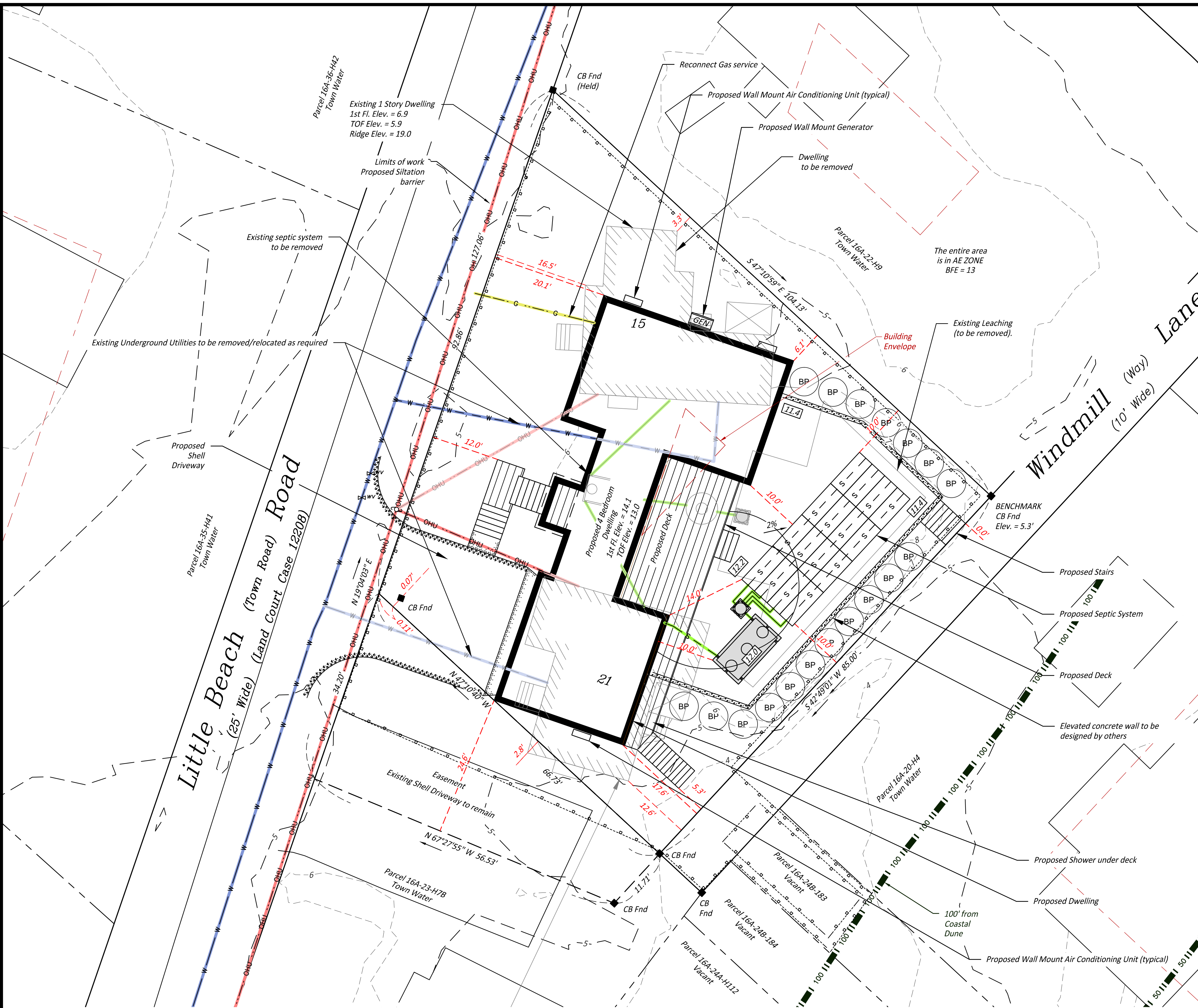
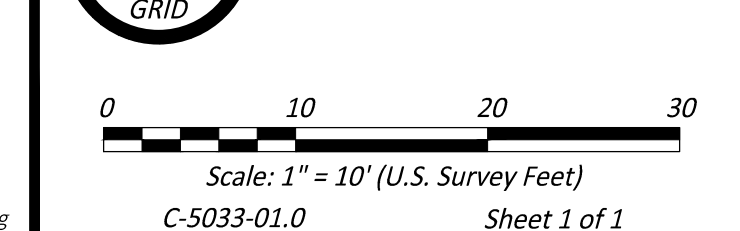
OWNER OF RECORD:  
Kimberly A. Chipman, Trustee of the Michaela Realty Trust  
Certificate Number: 143,223  
L.C. Plan: 12208-24, Lot 8

Description of Revision	Date

Prepared For  
**THE MICHAELA REALTY TRUST EAST-SOUTHEAST, LLC**

www.ese-llc.com office@ese-llc.com  
1038 Main Street, Chatham, MA 02633  
(508) 945-3965 \* Fax: (508) 945-5885

Vertical Datum: NAVD '88  
Horizontal Datum: NAD '83(2011)



**PROFILE OF SYSTEM**  
(Not to Scale)

