

**GENERAL NOTES**

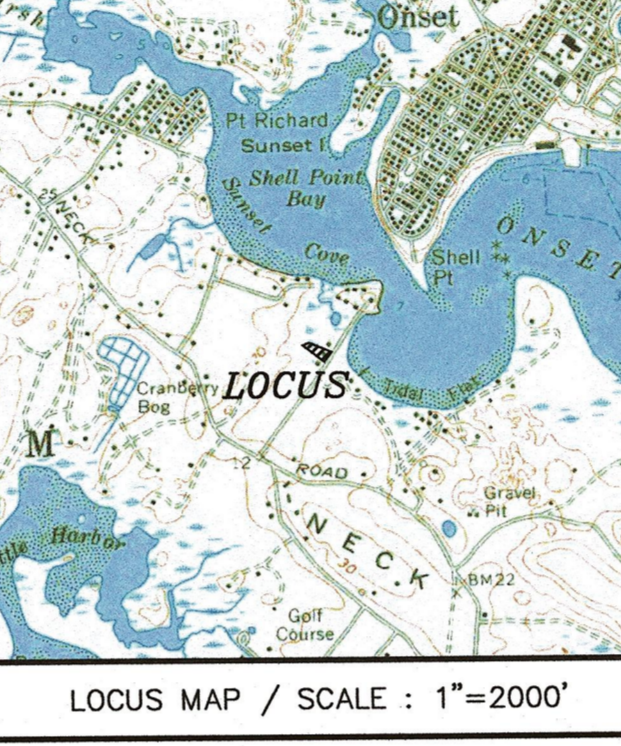
- UNLESS OTHERWISE NOTED, ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH TITLE 5 OF THE STATE ENVIRONMENTAL CODE AND ANY APPLICABLE LOCAL RULES.
- ANY CHANGES TO THIS PLAN MUST BE APPROVED BY THE BOARD OF HEALTH AND THE DESIGN ENGINEER.
- 4" SCHEDULE 40 PVC PIPE WITH WATER TIGHT JOINTS SHALL BE USED IN THE DISPOSAL SYSTEM UNLESS OTHERWISE NOTED.
- SLOPE ALL SOLID PIPE AT 1.0% MINIMUM.
- THIS SYSTEM IS NOT DESIGNED FOR A GARBAGE DISPOSAL.
- LOCAL BOARD OF HEALTH AND DESIGN ENGINEER TO BE NOTIFIED PRIOR TO BACKFILLING WHEN SYSTEM IS NEARLY COMPLETE AND READY FOR INSPECTION. SYSTEM IS NOT TO BE BACKFILLED WITHOUT FIRST OBTAINING APPROVAL FROM BOARD OF HEALTH AND DESIGN ENGINEER.
- ELEVATIONS BASED ON NAVD-88
- CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION & REPORT ANY DISCREPANCIES TO THE DESIGN ENGINEER. ALL UNDERGROUND UTILITIES SHOWN OR NOT SHOWN WERE COMPILED ACCORDING TO AVAILABLE RECORD PLANS AND IN PART FROM DISCREPANCY DELINEATIONS AND ARE APPROXIMATE ONLY. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD. BEFORE EXCAVATING, BLASTING, INSTALLING, BACK FILLING, GRADING, PAVING OR REPAIRING, ALL UTILITY COMPANIES, PUBLIC AND PRIVATE MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN. SEE MGL CHAPTER 370, ACTS OF 1963. CONTRACTORS MUST CALL DIG-SAFE. G.A.F. ENGINEERING, INC. ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.
- NON-SHRINK GROUT TO BE USED AT ALL POINTS WHERE PIPES ENTER OR LEAVE ALL CONCRETE STRUCTURES IN ORDER TO PROVIDE WATER TIGHT SEALS.
- ALL TANKS SHALL BE WATERTIGHT THROUGH MANUFACTURERS SPECIFICATIONS OR APPLICATION OF ASPHALT OR SYNTHETIC POLYMER SEALER.
- ALL SEPTIC SYSTEM COMPONENTS SHALL WITHSTAND H-10 LOADING UNLESS LOCATED UNDER PAVEMENT, DRIVES OR TRAVELED WAYS IN WHICH CASE THEY SHALL WITHSTAND H-20 LOADING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL APPLICABLE FEES AND OBTAINING ALL PERMITS, INCLUDING A TRENCH PERMIT PURSUANT TO 320 CMR 14.00 AS APPLICABLE.
- WHERE REQUIRED, CONTRACTOR SHALL REMOVE ALL LOAM, SUBSOIL AND UNSUITABLE MATERIAL IN AREA BENEATH AND FOR 5 FT. ON ALL SIDES OF LEACHING FACILITY. REPLACE ALL UNSUITABLE MATERIAL WITH CLEAN COARSE SAND FREE FROM CLAY, FINES OR OTHER UNSUITABLE MATERIAL IN ACCORDANCE WITH 310 CMR 15.255(3).
- CONTRACTOR SHALL NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES FOUND IN SITE CONDITIONS FROM THOSE SHOWN PRIOR TO CONTINUATION OF WORK.
- ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.
- ALL SOIL ABSORPTION SYSTEMS SHALL HAVE A MINIMUM OF ONE (1) INSPECTION PORT CONSISTING OF A PERFORATED FOUR(4) INCH PIPE PLACED VERTICALLY DOWN INTO THE CHAMBER TO THE NATURALLY OCCURRING SOIL OR SAND FILL BELOW THE CHAMBER. THE PIPE SHALL BE CAPPED WITH A SCREW TYPE CAP AND ACCESSIBLE TO WITHIN THREE(3) INCHES OF FINISH GRADE.
- WHERE AN EXISTING SEPTIC TANK IS TO BE ABANDONED IN PLACE, IT SHALL BE PUMPED COMPLETELY DRY AND THE BOTTOM SHALL BE RUPTURED. THE REMAINDER OF TANK SHALL BE COLLAPSED AND BACKFILLED WITH CLEAN SAND.
- WHERE AN EXISTING SEPTIC TANK IS TO BE REMOVED FROM THE SITE, IT SHALL BE PUMPED COMPLETELY DRY PRIOR TO REMOVAL. WHERE A LEACHING AREA IS TO BE REMOVED, ALL STRUCTURES, INCLUDING DISTRIBUTION BOX, ANY PIPE, CRUSHED STONE AND ALL CONTAMINATED SOIL SHALL BE REMOVED. ALL MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
- PROPOSED PROJECT IS LOCATED WITHIN: ASSESSORS MAP # 20 LOT # 1017-B ZONING DISTRICT RESIDENCE 60 (R-60) BUILDING SETBACKS F: 60 ft. S: 20 ft. R: 20 ft. FEMA FLOOD ZONE VE ELEVATION 17 & 18 AS SHOWN ON COMMUNITY PANEL # 25023C0581K
- OWNER OF RECORD: TJP REALTY, LLC ADDRESS: 19 OVER JORDAN ROAD WAREHAM, MA 02571

- NOTES:**
- CONTRACTOR SHALL COORDINATE WITH THE TOWN OF WAREHAM WATER DEPARTMENT PRIOR TO CONSTRUCTION. WATER SERVICE TO BE A MINIMUM OF 10 FEET FROM SEWAGE DISPOSAL SYSTEM.
  - CONTRACTOR SHALL COORDINATE WITH OWNER FOR DRIVEWAY SURFACE FINISH.
  - BLOWER UNIT AND VENT FOR FAST SYSTEM MUST BE INSTALLED ABOVE THE FLOOD ZONE ELEVATION. CONTRACTOR SHALL COORDINATE WITH OWNER AND MICROFAST ON LOCATION.
  - FOR COMPLETE DWELLING DIMENSIONS AND CONSTRUCTION DETAILS REFER TO ARCHITECTURAL & STRUCTURAL PLANS BY OTHERS.
  - SITE GRADING TO BE COORDINATED WITH ADJACENT LOT 1017-C.
  - THE EXACT LOCATION AND DETAILS OF CONSTRUCTION FOR THE EXISTING SEWAGE DISPOSAL SYSTEM IS NOT KNOWN. CONTRACTOR TO CONFIRM AT TIME OF CONSTRUCTION AND COORDINATE WITH HEALTH DEPARTMENT AND ENGINEER.
  - THE EXISTING BUILDING FOOTPRINT SHALL BE BACKFILLED WITH STRUCTURAL FILL AND COMPACTED TO AT LEAST 95% OF STANDARD PROCTOR DENSITY.
  - ALL CONSTRUCTION SHALL COMPLY WITH MASSACHUSETTS AND INTERNATIONAL BUILDING CODE REQUIREMENTS, AS APPLICABLE, FOR CONSTRUCTION IN FLOOD ZONES. REFER TO ARCHITECTURAL PLANS.
  - LOAM AND SEED ALL DISTURBED AREAS.

**VARIANCE REQUEST PURSUANT TO 310 CMR 15.405: CONTENTS OF LOCAL UPGRADE APPROVAL:**

**310 CMR 15.211: MINIMUM SETBACK DISTANCES:**  
 REQUIRED: THE SOIL ABSORPTION SYSTEM SHALL BE 10 FEET FROM A PROPERTY LINE.  
 PROVIDED: THE SOIL ABSORPTION SYSTEM IS 8 FEET FROM THE EASTERLY PROPERTY LINE AND 6 FEET FROM THE STREET LINE.

**LOCAL VARIANCE TO WAREHAM BOARD OF HEALTH REGULATION 8: WATER QUALITY PROTECTION**  
 REQUIRED: THE SOIL ABSORPTION SYSTEM SHALL BE 150 FEET FROM A SURFACE WATER.  
 PROVIDED: THE SOIL ABSORPTION SYSTEM SHALL BE 93 FEET FROM A SURFACE WATER.



**TEST PIT DATA**

INSPECTOR: JOHN VIVEIROS	DATE: 11/21/19
SOIL EVALUATOR: BRIAN GRADY	CERT. #: SE923
TEST PIT #: 1	TEST PIT #: 2
ELEV TOP = 6.6	ELEV TOP = 6.5
MOTT. ENC.	MOTT. ENC.
ELEV WATER = 1.4	ELEV WATER = 1.3
PERC RATE = MIN/IN	PERC RATE = 2 MIN/IN
DEPTH OF PERC =	DEPTH OF PERC = 30-48"
TEXTURAL CLASS I	TEXTURAL CLASS I

A LOAMY SAND 10YR3/3	A LOAMY SAND 10YR3/3
B SAND W/ROOTS 10YR5/6	B SAND W/ROOTS 10YR5/6
C MED. SAND 2.5Y6/4	C MED. SAND 2.5Y6/4

MOTT. @ 62" WATER @ 66"

**DESIGN DATA**

NUMBER OF BEDROOMS 2  
 NUMBER OF PERSONS 4  
 DESIGN FLOW 110 GAL/DAY/BEDROOM  
 TOTAL DESIGN FLOW 220 GAL/DAY

SEPTIC TANK:  
 220 GAL X 200% = 440 GALS. DESIGN CAPACITY  
 USE 1500 GALLON SEPTIC TANK. (MIN. SIZE PER REGS)

LEACHING FIELD:  
 BOTTOM CAPACITY-EFFECTIVE LEACHING AREA (ELA)  
 18 CHAMBERS IN BED CONFIGURATION  
 3 ROWS OF 6 CHAMBERS  
 WIDTH=(3 ROWS x 2.83'W)= 8.49 FT  
 LENGTH=(6 CHAMBERS/ROW x 5'L)= 30 FT/ROW  
 30 FT/ROW x 3 ROWS= 90 FT.  
 90 FT x 4.73 ELA\*= 425.7 SF  
 425.7 SF x 0.74 GPD/SF= 315 GAL/LEACHING/DAY  
 ELA\*=EFFECTIVE LEACHING AREA-SEE DEP APPROVAL

**LEGEND**

F.F. = 00.00	FINISHED FLOOR ELEVATION	T/O/F = 00.00	TOP OF FOUNDATION
G.F. = 00.00	GARAGE FLOOR ELEVATION	INV. = 00.00	INVERT ELEVATION
B.F. = 00.00	BASEMENT FLOOR ELEVATION	(00.00)	AS-BUILT ELEVATION
-100	EXISTING CONTOURS	100x0	EXISTING SPOT GRADE
110	PROPOSED CONTOURS	TP	TEST PIT LOCATION
G	GAS LINE	---	LIMITS OF WETLANDS
E	ELECTRIC LINE	---	SEPTIC TANK
W	WATER LINE	---	LIMITS OF OVERDIG
4"	SOLID SCH-40 PVC PIPE	□	DISTRIBUTION BOX

