



HOWARD COUNTY HEALTH DEPARTMENT

66420

DATE 10/24/19

W/S

Received From

Allied Environmental Services

PHONE # 301 776-8370

For

Well Permit/12528
Hall Shoppe

CASH
 CHECK

NO. 149601

One hundred sixty Dollars

\$ 160.00

Received By

A Kemp



HOWARD COUNTY HEALTH DEPARTMENT

66420

DATE
10/21/19

W5

Received From

Well Environment Services

PHONE #

301 776-1370

For

Well Permit/12578

Hall Shopper

CASH

CHECK

NO.

149101

One hundred sixty

Dollars

\$

100 | 00

Received By

A King

C1 60717

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

FILL IN THIS FORM COMPLETELY PLEASE TYPE

COUNTY NUMBER

ST/CO USE ONLY DATE RECEIVED

DATE WELL COMPLETED

APPROVED 12/13/2019

Depth of Well 300

PERMIT NO. FROM "PERMIT TO DRILL WELL" 40-18-064

OWNER Hershaw, Carl + Beck, Angela WELL SITE ADDRESS 12578 Hall Shop Rd TOWN fulton, MD

WELL LOG

Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

Table with columns: DESCRIPTION, FEET (FROM, TO), check if water bearing. Includes entries like Top Soil, Bin Silty Soil, Bin Sand, Bin Rock + Mica, Limestone, Bin mica, Bin Rock, Limestone, Gray Rock.

GRROUTING RECORD

WELL HAS BEEN GROUTED (Y/N) TYPE OF GROUTING MATERIAL (Cement CM, Bentonite Clay BC) NO. OF BAGS 36 NO. OF POUNDS 1800

CASING RECORD (Steel ST, Concrete CO, Plastic PL, Other OT)

MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch) Total depth of main casing (nearest foot)

OTHER CASING (if used) diameter inch depth (feet) from to

SCREEN RECORD (Steel ST, Brass BR, Open Hole HO, Plastic PL, Other OT)

DEPTH (nearest ft.)

NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED (Y/N)

CIRCLE APPROPRIATE LETTER A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT...

DRILLERS LIC. NO. M 3 D 106 DRILLERS SIGNATURE

LIC. NO. D

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

SCREEN RECORD (Steel ST, Brass BR, Open Hole HO, Plastic PL, Other OT) SLOT SIZE 1 2 3 DIAMETER OF SCREEN (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.) W Q TELESCOPE CASING LOG INDICATOR OTHER DATA

PUMPING TEST

HOURS PUMPED (nearest hour) PUMPING RATE (gal. per min.) METHOD USED TO MEASURE PUMPING RATE WATER LEVEL (distance from land surface) BEFORE PUMPING WHEN PUMPING TYPE OF PUMP USED (for test)

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. CAPACITY: GALLONS PER MINUTE (to nearest gallon) PUMP HORSE POWER PUMP COLUMN LENGTH (nearest ft.) CASING HEIGHT (circle appropriate box and enter casing height) LAND SURFACE (nearest foot)

LATITUDE 39.17502 LONGITUDE 76.94872 (DEFAULT COORD. WGS 84)

Pursuant to §10-624 of the Code of Maryland Annotated and the Maryland Code personal info requested on this form is in processing... Failure to provide the info. may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or state law.

05-36822

EMERGENCY/TEMP NO. IF ANY

TAG = N/A

B 1 66716

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL please type

STATE PERMIT NUMBER H0-18-0124 fill in this form completely

OWNER INFORMATION: Date Received (APA), Henshaw Carl + Black Angela, 12578 Hall Shop Road, Fulton MD 20759

LOCATION OF WELL: Howard, 8 COUNTY, 21, 23 SUBDIVISION, 42, SECTION 44 46, LOT 48 50, 52 NEAREST TOWN, 71

DRILLER INFORMATION: Driller's Name Marshal Arnette, License No. MS D 106, Firm Name Allied Well Drilling, Address PO box 129 Annapolis Junction MD 20701, Signature Marshal Arnette, Date 10/23/19

SOURCES OF DRILLING WATER: 1. PUBLIC, 2. 11/26/17, 3. WYO-BEN, INC, Grant-well DF Lot # 09121912 12:51 and Quik Grant 1108191

12578 Hall Shop Rd, ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX), DISTANCE FROM ROAD 650 FT, TAX MAP: 0040 BLK: 0005 PARCEL 0326

WELL INFORMATION: APPROX. PUMPING RATE (GAL. PER MIN.) 8 12, AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX): [D] DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION, [F] FARMING, [I] INDUSTRIAL, COMMERCIAL, DEWATERING, [P] PUBLIC WATER SUPPLY WELL, [T] TEST, OBSERVATION, MONITORING, [O] OPEN LOOP GEOTHERMAL, [C] CLOSED LOOP GEOTHERMAL 3 loops

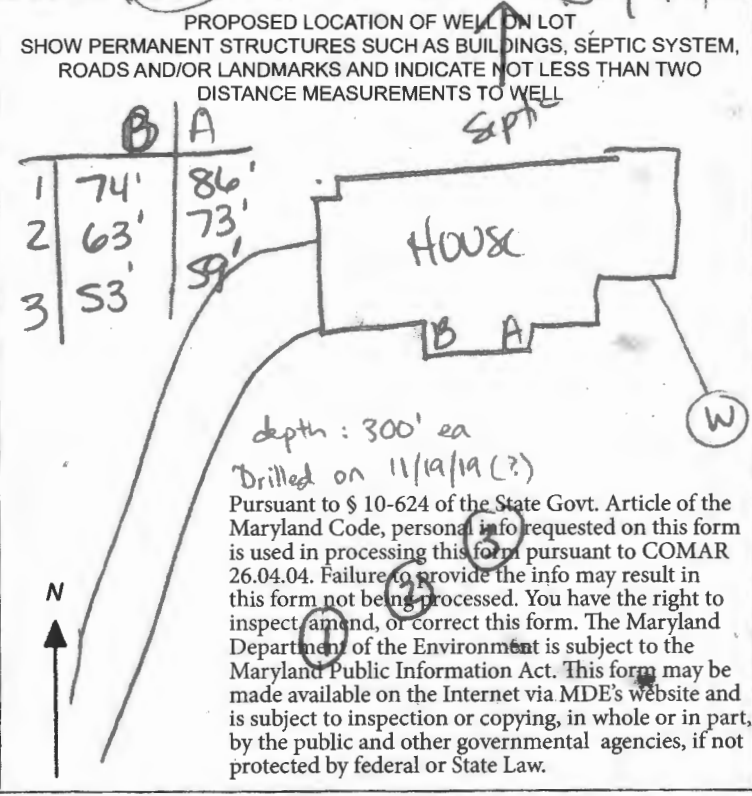
NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL: Howard, COUNTY NAME, STATE SIGNATURE, DATE ISSUED 11/5/2019, CO SIGNATURE, EXP. DATE 11/5/2020

APPROXIMATE DEPTH OF WELL 300' FEET, APPROXIMATE DIAMETER OF WELL 4 1/2 INCH

METHOD OF DRILLING (circle one): BORED (or Augered) AIR-ROTary, JETTED AIR-PERcussion, Jetted & DRIVEN ROTARY (Hydraulic Rotary), DRive-POINT

REPLACEMENT OR DEEPEINED WELLS (CIRCLE APPROPRIATE BOX): [N] THIS WELL WILL NOT REPLACE AN EXISTING WELL, [Y] THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED, [S] THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS, [D] THIS WELL WILL DEEPEIN AN EXISTING WELL

Not to be filled in by driller (MDE OR COUNTY USE ONLY): APPROP. PERMIT NUMBER, PERMIT No. H0-18-0124



depth: 300' ea, Drilled on 11/19/19 (?), Pursuant to § 10-624 of the State Govt. Article of the Maryland Code, personal info requested on this form is used in processing this form pursuant to COMAR 26.04.04. Failure to provide the info may result in this form not being processed. You have the right to inspect, amend, or correct this form. The Maryland Department of the Environment is subject to the Maryland Public Information Act. This form may be made available on the Internet via MDE's website and is subject to inspection or copying, in whole or in part, by the public and other governmental agencies, if not protected by federal or State Law.

HOWARD COUNTY GROUTING PROCEDURE

Boreholes will be grouted from the bottom to the top via a tremie pipe and positive displacement pump. Bentonite grout, known as Quik-Grout will be used according to the manufacturer's specifications to achieve a consistency of at least 20% solids (24 gallons potable water/50 lb. sack of grout) and a permeability no more than $2.5 \text{ E}(-08) \text{ cm/sec}$. Grouting will be completed immediately after installing the geothermal loop and no later than twenty-four (24) hours after installing the geothermal loop. Open boreholes/annular space will be protected as necessary to prevent the entry of surface water or pollutants.

GRADE

EACH BORE HOLE (TYP.)

MINIMUM
HORIZONTAL BURY
DEPTH 4 FT

FOR CONT.
SEE PLANS

HORIZONTAL
PIPING

GROUT ENTIRE ANNULAR
SPACE AND VERTICAL
U-TUBE WITH (BENTANITE)
GROUT.

BORE DEPTH



DEPTH MARKINGS IN FEET TO
INDICATE DEPTH OF INSERTION

TAPE

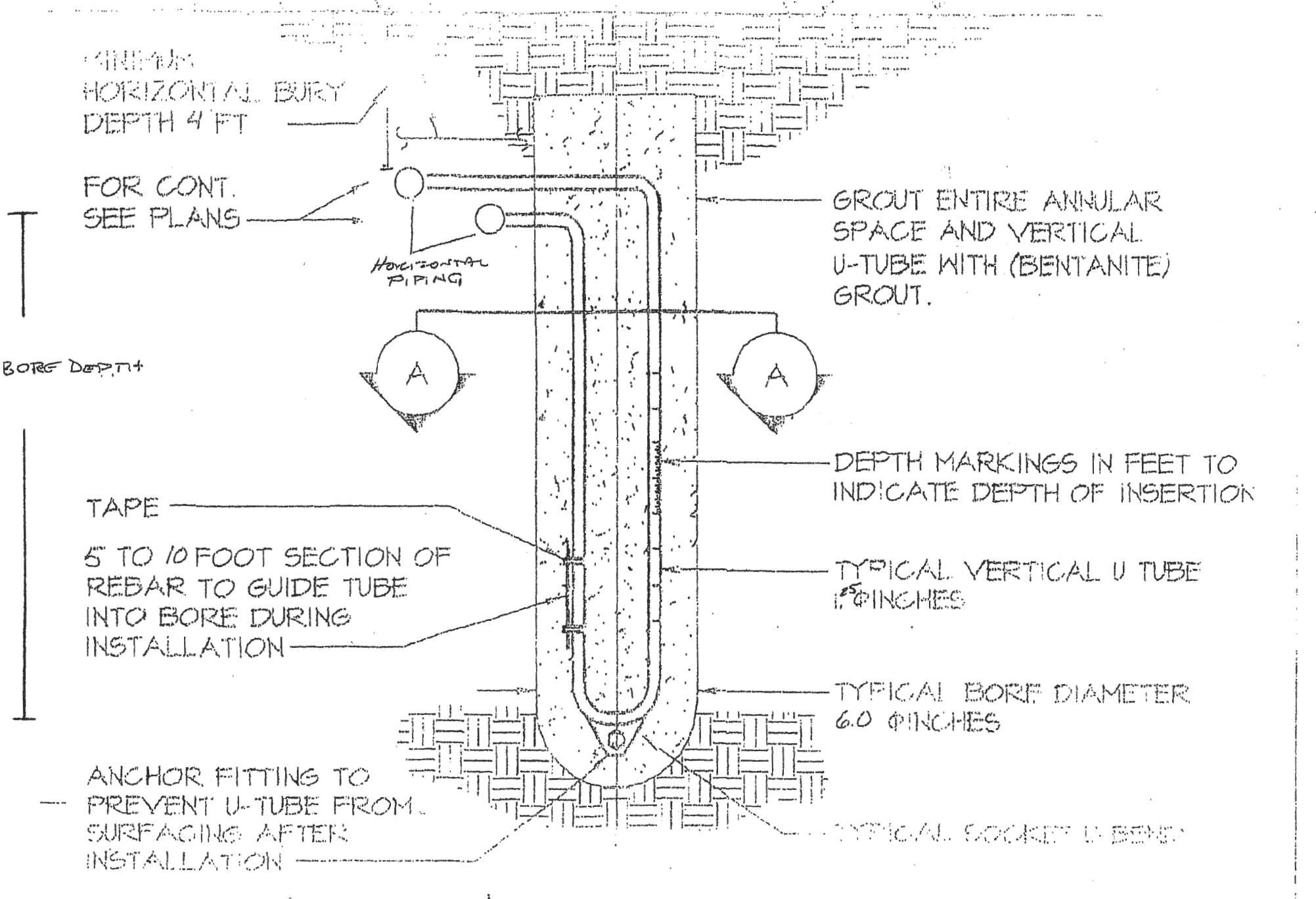
5' TO 10 FOOT SECTION OF
REBAR TO GUIDE TUBE
INTO BORE DURING
INSTALLATION

TYPICAL VERTICAL U TUBE
1.5" Ø INCHES

TYPICAL BORE DIAMETER
6.0 Ø INCHES

ANCHOR FITTING TO
PREVENT U-TUBE FROM
SURFACING AFTER
INSTALLATION

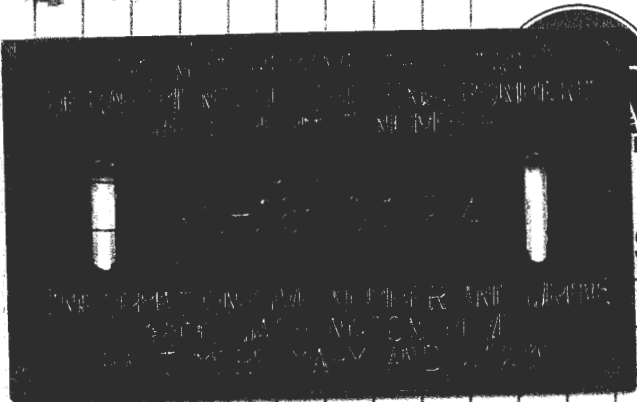
TYPICAL SOCKET U-BEND



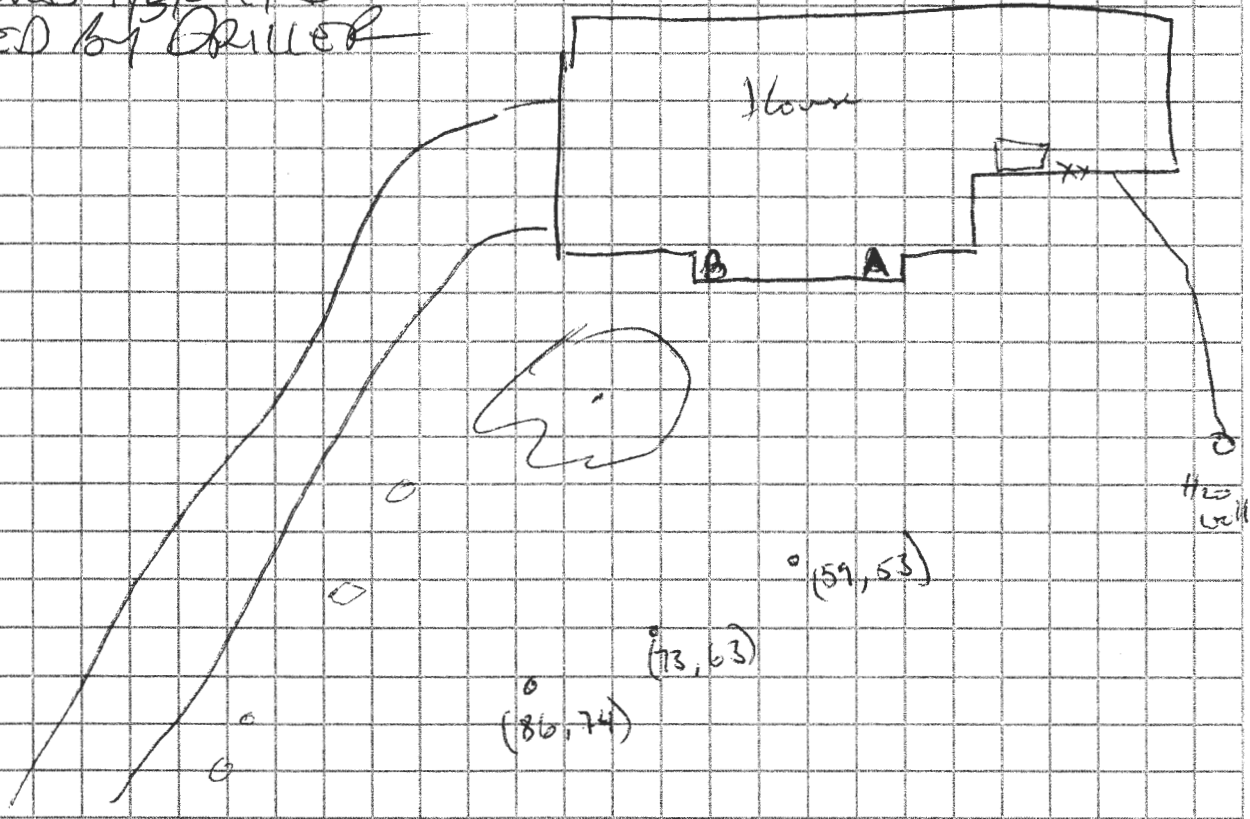
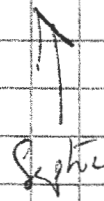
12578 Hall Shop

Allied

WELL DRILLING
SITE PLAN



12578 Hall Shop
Approved 1/5/2019
Signed by Driller



Sediment Control Protocol: Gill bag

Distance From House: 55'
From Septic: 100'
From Sewer: NF
From Property Line: ~ 45'
From Street: 100'

Trees Nearby: Yes - no CM
Utility Issues: _____
Mats Needed: NO
Access For H/U: _____
Neighboring Tags: NO TAG

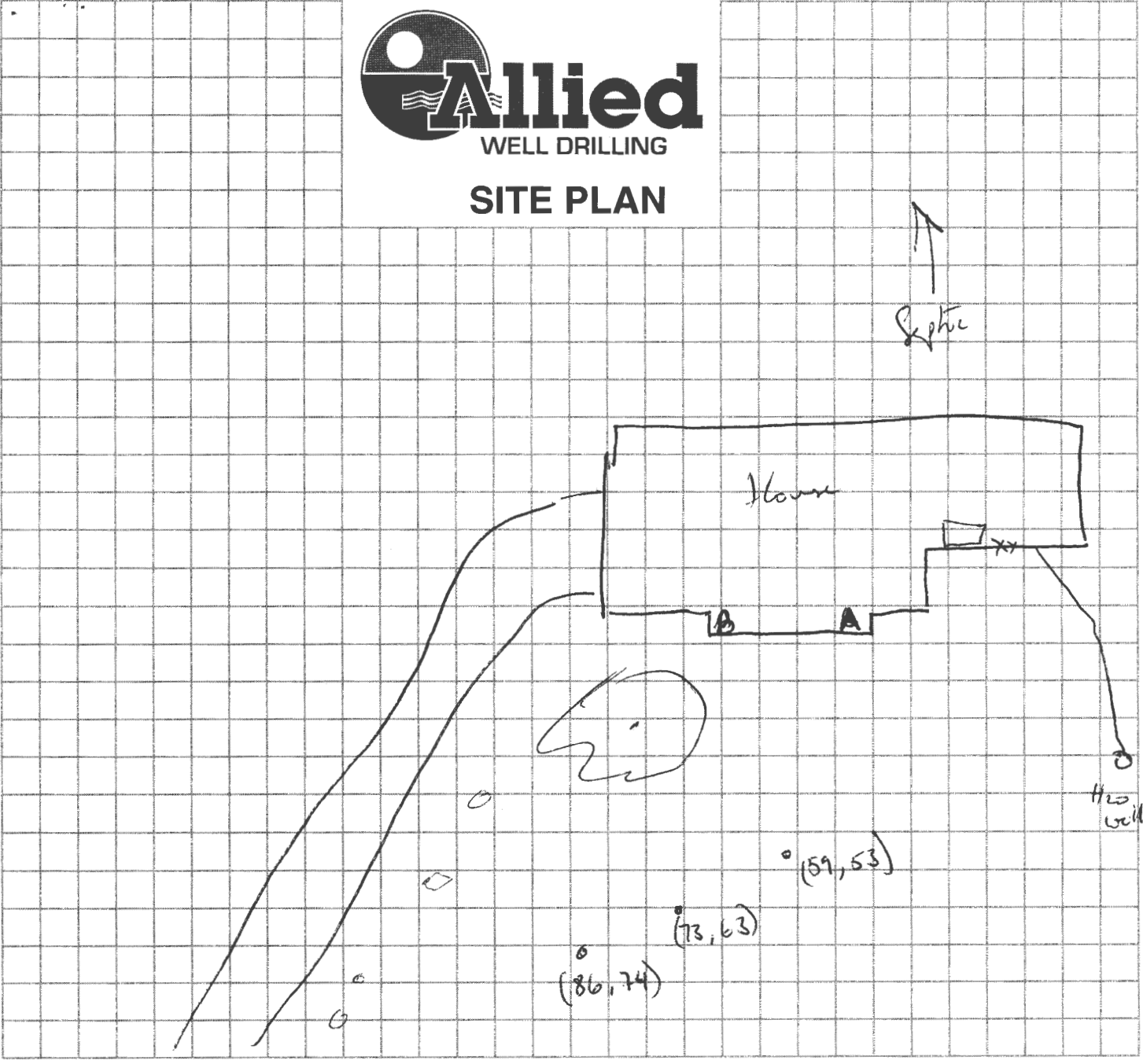
Comments: _____

Person Completing Form: _____

12578 Hall Shop



SITE PLAN



Sediment Control Protocol: Gill bag

Distance From House: 55'
 From Septic: 100'
 From Sewer: NA
 From Property Line: ~ 45'
 From Street: 100'

Trees Nearby: Yes - no OH
 Utility Issues: _____
 Mats Needed: NO
 Access For H/U: _____
 Neighboring Tags: NO TAG

Comments: _____

Person Completing Form: _____