C 1915 (MDE USE ON)

# STATE OF MARYLAND
## WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED AFTER WELL IS COMPLETED.

COUNTY NUMBER A58095F

ST/CO USE ONLY
DATE Received MM 10 DD 14 YY 99

DATE WELL COMPLETED MM 10 DD 01 YY 99

Depth of Well 280 (TO NEAREST FOOT)

11/22/99 OK AL

PERMIT NO. FROM "PERMIT TO DRILL WELL" HO-94-2380

OWNER (last name) BPMP Assoc. (first name)
STREET OR RFD Bucks Run Road TOWN Glenwood
SUBDIVISION Wellington West SECTION LOT 10

## WELL LOG
Not required for driven wells

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

| DESCRIPTION (Use additional sheets if needed) | FEET FROM | FEET TO | check if water bearing |
|---|---|---|---|
| Dirt | 0 | 1 | |
| Clay & Br. Shale | 1 | 4 | |
| Soft Br. Shale | 4 | 56 | X |
| Hard Br. & Blue Shale | 56 | 69 | |
| Hard Br. Shale | 69 | 70 | X |
| Hard Blue Sandstone | 70 | 170 | |
| Hard Blk Sandstone | 170 | 171 | X |
| Hard Blk. & Blue Sandstone | 171 | 210 | |
| White Sandstone | 210 | 211 | X |
| Hard Blk. & Blue Sandstone | 211 | 280 | |

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes Y (44) no N (44)

CIRCLE APPROPRIATE LETTER
- A — A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E — ELECTRIC LOG OBTAINED
- P — TEST WELL CONVERTED TO PRODUCTION WELL

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, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M W D 256

Dana Kyker Jr. II
DRILLERS SIGNATURE
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: JW D 334

Dana Kyker Jr. II BB
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

### GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y (44) no N (44)
TYPE OF GROUTING MATERIAL (Circle one)
CEMENT CM (45 46) BENTONITE CLAY BC (45 46)
NO. OF BAGS 30 NO. OF POUNDS 2820
GALLONS OF WATER 180
DEPTH OF GROUT SEAL (to nearest foot)
from 0 (48 TOP 52) ft. to 61 (54 BOTTOM 58) ft.
(enter 0 if from surface)

### CASING RECORD
casing types insert appropriate code below
ST STEEL; CO CONCRETE; PL PLASTIC; OT OTHER

| MAIN CASING TYPE | Nominal diameter top (main) casing (nearest inch)! | Total depth of main casing (nearest foot) |
|---|---|---|
| ST (60 61) | 6 (63 64) | 62 (66 70) |

### OTHER CASING (if used)
EACH CASING

| diameter inch | depth (feet) from | to |
|---|---|---|
| | | |
| | | |

### SCREEN RECORD
screen type or open hole — insert appropriate code below
ST STEEL; BR BRASS BRONZE; HO OPEN HOLE; PL PLASTIC; OT OTHER

C 2 — DEPTH (nearest ft.)

EACH SCREEN

| | | | |
|---|---|---|---|
| 1 | HO (8 9) | 62 (11 15) | 280 (17 21) |
| 2 | (23 24) | (26 30) | (32 36) |
| 3 | (38 39) | (41 45) | (47 51) |

SLOT SIZE 1 ____ 2 ____ 3 ____
DIAMETER OF SCREEN ____ (56 60) (NEAREST INCH)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 — from ____ to ____ (68)

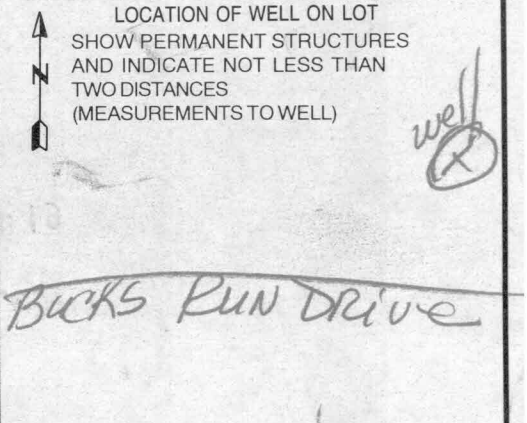
MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (70) (E.R.O.S.) (72) W Q (74 75 76)
TELESCOPE CASING; LOG INDICATOR; OTHER DATA

C 3

### PUMPING TEST
HOURS PUMPED (nearest hour) 3 (8 9)
PUMPING RATE (gal. per min.) 10. (11 15)
METHOD USED TO MEASURE PUMPING RATE submersible
WATER LEVEL (distance from land surface)
BEFORE PUMPING 24 (17 20) ft.
WHEN PUMPING 97 (22 25) ft.
TYPE OF PUMP USED (for test)
A air (27); P piston (27); T turbine (27); C centrifugal (27); R rotary (27); O other (describe below) (27); J jet (27); S submersible (27)

### PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES 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. (29)
CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)
PUMP HORSE POWER (37 41)
PUMP COLUMN LENGTH (nearest ft.) (43 47)
CASING HEIGHT (circle appropriate box and enter casing height)
+ above (49) LAND SURFACE
– below (49)
1 (nearest foot) (50 51)

### LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURES AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



EMERGENCY/TEMP NO. IF ANY

B 1 (1 2 3 6) 8577 SEQUENCE NO. (MDE USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

# STATE OF MARYLAND
# PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER (70 79): HO-99-2380
fill in this form completely

Date Received (APA) (8 13): 07/26/99

## OWNER INFORMATION

BMG ASSOCIATES LLC (15 Last Name / Owner / First Name 34)
15298 UNION CHAPEL RD (36 Street or RFD 55)
WOODBINE MD 21797 (57 Town / 70 State 72 / Zip 76)

## DRILLER INFORMATION

CIRCLE: MSD / MGD / MWD

Dana Kyker Jr II
Driller's Name
256 (77 License No. 80)
Westminster Rotary Well Drilling
Firm Name
P.O. Box 861 Westminster, Md 21158
Address
Dana Kyker II 7/26/99
Signature Date

## B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.) (8 12): 5
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) (14 20): 750

## USE FOR WATER (CIRCLE APPROPRIATE BOX)

- D HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
- F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
- 22 I INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)
- P PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)
- T TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

APPROXIMATE DEPTH OF WELL (24 28): 430 FEET

APPROXIMATE DIAMETER OF WELL: 6 NEAREST INCH

## METHOD OF DRILLING (circle one)

BORED (or Augered) JETTED Jetted & DRIVEN
30 37 AIR-ROTary AIR-PERcussion ROTARY (Hydraulic Rotary)
CABLE REVerse-ROTary DRive-POINT
other

## REPLACEMENT OR DEEPENED 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
- 39 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 DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE) (41 52):

## Not to be filled in by driller (MDE OR COUNTY USE ONLY)

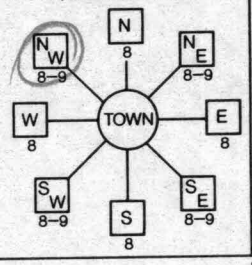
APPROP. PERMIT NUMBER (54 63): GAP
FORCE (67 68): AM WRITE INITIALS IN BOX
PERMIT No. (70 71 72 73 74 75 76 77 78 79): HO-99-2380

## B 3 LOCATION OF WELL

(1 2) HOWARD (8 COUNTY 21)
WELLINGTON WEST (23 SUBDIVISION 42)
SECTION (44 46): 2 LOT (48 50): 10
GLENWOOD (52 NEAREST TOWN 71)
MILES FROM TOWN (enter 0 if in town) (73 76 77 78): 2 MI

## B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)




Bucks Run Drive (11 NEAR WHAT ROAD 30)

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH N; W 32 E (WEST / EAST); S SOUTH

(34 37) 300 DISTANCE FROM ROAD
ENTER FT OR MI (38 39): FT

TAX MAP: _____ BLK: _____ PARCEL _____

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

Howard Co A58095F
COUNTY NAME COUNTY NO.

STATE SIGNATURE _____ INSERT S (41)

DATE ISSUED (43 48): 08/26/99
A McMillo 082600
CO SIGNATURE EXP. DATE

NORTH GRID (50 55): 5300000
EAST GRID (57 63): 7900000

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

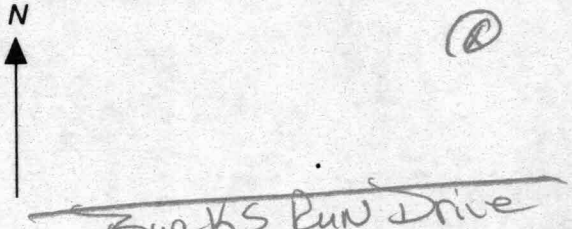
SOURCES OF DRILLING WATER
1. City
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 790
N 530
000 000

10/1/99
9.00 Grout
Not complete @ time of insp
A

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION




SPECIAL CONDITIONS
NOTE = APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED =

COUNTY

Page 1 of 1
Date 10/01/99

Review _____

# FIELD DATA SHEET
## HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 94-2380
Location of property (road) Bucks Run DR
Subdivision Wellington West Lot 10 Block ____ Plat ____ Sec. ____
Well Driller Dana Kyker Owner BPMP Assoc

Depth of well 280 feet
Distance of measuring point (M.P.) above ground 1 foot
Static water level (S.W.L.) below M.P. 24 ~~feet~~

I. High rate pumping -- reservoir drawdown

Time pump started 10:55 am Pumping rate 10 GPM
Total time 3hrs to reach pumping water level 97 ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes

| TIME (in 15 minute intervals | WATER LEVEL below M.P. | PUMPING RATE time to fill ½ 1 gallon bucket | FLOW METER READING (if used) | CALCULATED FLOW (gallons per minute) |
|---|---|---|---|---|
| 10:55 | 24' | 5 sec. | | 12 |
| 11:10 | 60' | 5 sec. | | 12 |
| 11:25 | 89' | 5 sec. | | 12 |
| 11:40 | 89' | 6 sec. | | 10 |
| 11:55 | 90' | 6 sec. | | 10 |
| 12:10 | 91' | 6 sec. | | 10 |
| 12:25 | 92' | 6 sec. | | 10 |
| 12:40 | 93' | 6 sec. | | 10 |
| 12:55 | 95' | 6 sec. | | 10 |
| 1:10 | 9.6' | 6 sec. | | 10 |
| 1:25 | 97' | 6 sec. | | 10 |
| 1:40 | 97' | 6 sec. | | 10 |
| 1:55 | 97' | 6 sec. | | 10 |
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Page ____ of ____ Review ____

Date 10/1/99

7:30. 3hr pump

FIELD DATA SHEET
HOWARD COUNTY WELL YIELD TEST

Well Permit No. HO - 94-2380
Location of property (road) Bucks Run DR
Subdivision Wellington West Lot 10 Block ____ Plat ____ Sec. ____
Well Driller Dana Kyker Owner BPMP Assoc

Depth of well 280
Distance of measuring point (M.P.) above ground 2'
Static water level (S.W.L.) below M.P. 240

I. High rate pumping -- reservoir drawdown

Time pump started 10:55 Pumping rate ____
Total time ____ to reach pumping water level ____ ft. below M.P.

II. Recovery pump test data - observations to be recorded every 15 minutes

| TIME (in 15 minute intervals | WATER LEVEL below M.P. | PUMPING RATE time to fill 5 gallon bucket | FLOW METER READING (if used) | CALCULATED FLOW (gallons per minute) |
|---|---|---|---|---|
| 10:55 | 24 | 5 sec | | 12 |
| ↓ | ↓ | ↓ | | ↓ |
| 11:25 | 89 | 5 | | 12 |
| 11:40 | 89 | 6 | | 10 |
| | | | | |
| | | | | |
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| | | | | |
| | | | 10-1-99 | |
| | | | Sample taken - H2O | |
| | | | slightly cloudy | |
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HD-224

# HOWARD COUNTY HEALTH DEPARTMENT
## BUREAU OF ENVIRONMENTAL HEALTH
## WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648

## Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

**NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.**

Company Name: Willoughby Plumb Telephone #: 410-781-7051
Address: 6223 Patrick Dr Sykesville, MD 21784

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:
Name (Print): Chris Willoughby License #: 6992
*A licensed individual must perform the actual installation. Apprentices must be under the direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.

Name of Property Owner: POLK HOMES Telephone #: HO-646-2003
Subdivision: WELLWOOD WEST Lot #: 10 Well Tag #: HO 99-3380
Site Address: 15161 BUCKS RUN DR
WOOD BOE, MD

**Submersible Pump Data**
Make: JACUZZI
Model #:
Pump Capacity GPM
Well Yield: 10 GPM
Depth of well encountered at time of pump installation: 280 (feet)
If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arresters or Cable guards are required – Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt ___

**Pitless Adapter**
Make: HARLAND
Model#:
Depth: 48" (36" min)
NSF approved: ✓

**Well Cap and Electric Conduit**
Two piece watertight cap: ✓
Screened, vented well cap: ✓
Cap secured to casing: ✓
Conduit min 18" B.G.: ✓
Conduit secured to well cap: ✓

**Piping to house**
Type: CRESLINE
PSI: 111 (160 psi min)
Depth of supply line: ✓ (36" min)

**House Connection**
PVC sleeved to undisturbed soil at wall penetration: ✓
Approximate length of sleeve: 4
Sleeve caulked and sealed properly: ✓

**The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.**

Chris Willoughby 6-20-01
Signature of company representative responsible for installation date

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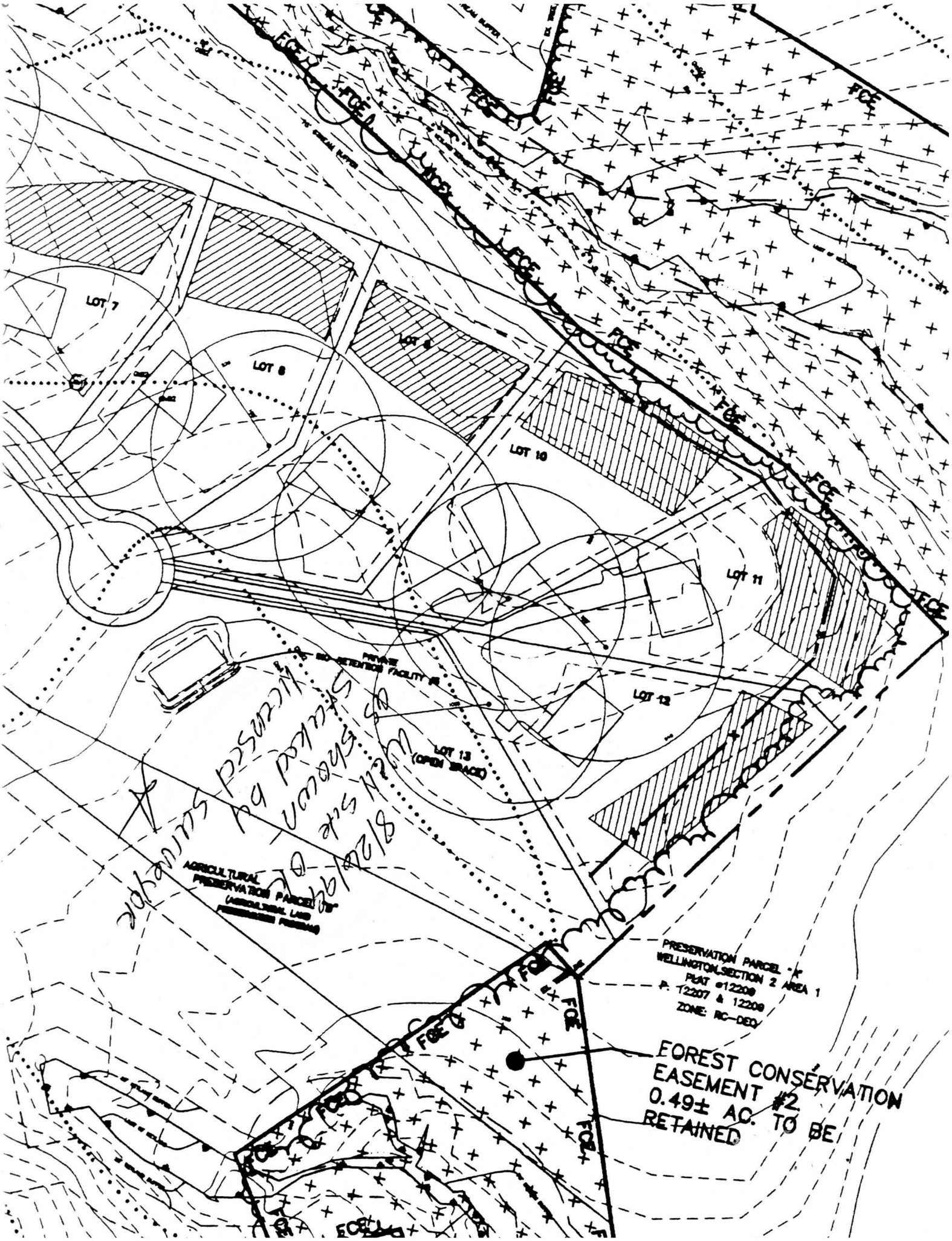
**For Health Department Use Only – Not to be completed by Installer**

Date Insp. Requested: 4/16/01 Date Insp. Approved: 6/20/01 SRK/BB

Inspection Data:
- Pitless adapter and water supply line at least 36" below grade ✓
- Two piece cap installed and attached to casing securely ✓
- Elec. conduit extends at least 18" below grade/attached to cap properly ✓
- Safety rope installed inside of well casing ✓
- Correct well tag attached properly and casing 8" above finished grade ✓
- Water supply line sleeved adequately at house connection ✓
- Adequate grout observed below pitless adapter ✓

ND-213(Rev. 8/00)


LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13
(OPEN SPACE)
PRIVATE
BIO-RETENTION FACILITY #5
AGRICULTURAL
PRESERVATION PARCEL
PRESERVATION PARCEL "A"
WELLINGTON, SECTION 2 AREA 1
PLAT #12208
P. 12207 & 12208
ZONE: RC-DEO
FOREST CONSERVATION
EASEMENT #2
0.49± AC. TO BE
RETAINED
FCE