Environmental Services - Water Quality
Onsite Wastewater Scan Data Entry Form

PERMIT #: 0 0 0 6 8 9 3 PIN #: 1 7 1 9 4 9 8 6 9 3

OP DATE: 0 5 / 2 6 / 1 9 9 8

SYSTEM USE:
- [x] House
- [ ] Mobile Home
- [ ] Business
- [ ] Other

SEWAGE TYPE:
- [x] Domestic
- [ ] Industrial

PUMP/SIPHON?:
- [x] Yes
- [ ] No

PRESSURE MANIFOLD:
- [x] Yes
- [ ] No

SYSTEM TYPE:
- [ ] I
- [ ] II
- [x] III
- [ ] IV
- [ ] V
- [ ] VI
- [ ] Other

SUB TYPE:
- [ ] A
- [x] B
- [ ] C
- [ ] D
- [ ] E
- [ ] F
- [ ] G

NBR BEDROOMS:
- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4
- [x] 5
- [ ] 6
- [ ] Other

MAINT. SCHEDULE:
- [ ] Yes
- [x] No

CERT. OPERATOR
- [ ] Yes
- [x] No

GT	ST	PT	SIZE
[ ]	[ ]		750
[ ]	[ ]	[ ]	900
[ ]	[ ]	[ ]	1,000
[ ]	[ ]	[ ]	1,200
[ ]	[x]	[x]	1,500
[ ]	[ ]	[ ]	1,800
[ ]	[ ]	[ ]	2,100
[ ]	[ ]	[ ]	2,500
[ ]	[ ]	[ ]	3,000
[ ]	[ ]	[ ]	4,000
[ ]	[ ]	[ ]	5,000
[ ]	[ ]	[ ]	8,000
	[ ]	[ ]	10,000
[ ]	[ ]	[ ]	Other
[x]		[ ]	None/NA GT or PT

DRAINFIELD SIZE(SQ. FT.)

0 1 5 0 0

DRAIN TYPE:
- [ ] Stone
- [x] EZ Flow
- [ ] Infiltrator
- [ ] Biodiffuser
- [ ] Cultec
- [ ] Drip
- [ ] Hancor
- [ ] Large Dia. Pipe
- [ ] Multi-Pipe
- [ ] Other

MAX DEPTH (IN.):
- [ ] 12 in. or less
- [ ] 18 in. or less
- [x] 24 in. or less
- [ ] 26 in. or less
- [ ] 28 in. or less
- [ ] 30 in. or less
- [ ] 32 in. or less
- [ ] 36 in. or less
- [ ] Other

STONE DEPTH (IN.):
- [ ] 8 in. or less
- [x] 12 in. or less
- [ ] 18 in. or less
- [ ] 24 in. or less
- [ ] Other

TRENCHES:
- [x] Individual
- [ ] Bed

TRENCH WIDTH (IN.):
- [ ] 12 in. or less
- [ ] 18 in.
- [ ] 24 in.
- [x] 36 in.
- [ ] 6 ft. or less
- [ ] 9 ft. or less
- [ ] Other

JAH

WAKE COUNTY ENVIRONMENTAL HEALTH WELL AND SEWAGE SITE LOCATION PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED
UNTIL AN AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION HAS BEEN ISSUED.
PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/ OR IF SITE IS ALTERED OR INTENDED USE CHANGED

PERMIT#: D006893 STATUS: A APP DATE: 07/01/1997 BLDG PERMIT#: 0980026
APPLICANT: SPAINHOUR, REEVES DAY PHONE: (919) 554 - 1079
ADDRESS: 342 W PINE AVE FAX#: (000) 000 - 0000
CITY: WAKE FOREST STATE: NC ZIP: 27587
OWNER: FELTON, BRIAN H & DAWN F DAY PHONE: (000) 000 - 0000
ADDRESS: 8620 SWARTHMORE DR FAX#: (000) 000 - 0000
CITY: RALEIGH STATE: NC ZIP: 27615
HD USE CD: 101 ONE-FAMILY HOUSE ORIG PERMIT#: REC?: Y
EXIST USE: TAX MAP#: 0228
BEDROOMS: 5 BSMT: N #EMPLOYEES: 0 WATER: I WASTEWATER: I GARB DISPOSL: N
TOWNSHIP: 02 BARTON"S CREEK JURIS: WC ZON: 80W PIN: 1719.01 49 8693 000
SUBD#: S 000 000 00 SUBD NAME: BRIGHTWATER LOT-SEC: 14 ACRE: 2.88
IMPRV PRMT: ISSUED?: Y DATE: 08/20/1997 BY: TW TYPE SYSTEM: III PUMP: Y
CNSTR AUTH: ISSUED?: Y DATE: 11/05/1997 BY: ETD DATE EXPIRED: 11/05/2002
RECEIPT#: 0017370 FEE: 290.00 OP DATE: BY:
WATR SAMPL: REQ?: APPROVED?: DATE: PROPRIETARY SYS:
ST#: 1512 MI: DIR: NAME: BRIGHTWATER DIR: TYP: CT
DIRECTIONS: 2000W L 2002 WILL L BEFORE 2009 ONTO RAVEN RIDG
E 2ND ENT TO BRIGHTWATER LOT MARKED SFD FLOOD
CK REQD

16

IMPROVEMENT PERMIT

SIZE OF TANK 1500 ST 1500 PT GALS. TOTAL SQ. FT. 2000 DEPTH OF STONE 12 IN. MAX. DEPTH LINE 24 IN.

WASTEWATER: DOMESTIC ☒ INDUSTRIAL ☐ I.P. ISSUED BY Ed Dunkley for Tim Warren

AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION

VOID SIXTY (60) MONTHS FROM DATE OF ISSUANCE
AUTHORIZATION CONDITIONS

Contractor To Follow Contours, See Attached Site Plan For Wastewater System Design And Well Location. The wastewater system shall not be covered or placed into use until inspected by the Wake County Environmental Health Division and an Operation Permit issued.

OTHER CONDITIONS: **Install system according to plans submitted by February Assoc., Inc. Remove ALL trees 6 inches in diameter and less from the drainfield area. TREES are NOT to interfere with drainfield installation.**

PSA used w/25% reduction

SIZE OF TANK 1500 ST 1500 PT GALS. TOTAL SQ. FT. 2000 DEPTH OF STONE 12 IN. MAX. DEPTH LINE 24 IN.
NUMBER OF TRENCHES 5 LENGTH OF TRENCHES ~~134~~ 100 FT. WIDTH OF TRENCHES 3 FT.

C.A. ISSUED BY Ed Dunkley RS INSTALLED BY Patrick's Backhoe CTR. I.D. #____

INNOV. APPRL. #: IWWS-953R DATE 5-26-98 INSTALLATION APPROVED BY Ed Dunkley RS

WELL SYSTEM = PRIVATE ☒ SEMI-PUBLIC ☐ ///// NEW ☒ REPLACEMENT ☐ EXISTING ☐

100' P/L

WELL LOG INFORMATION = DEPTH 305' CASING DEPTH 53' YIELD 25 STATIC LEVEL ____
WELL CONTRACTOR Goldston's REG.# ____ PUMP CONTRACTOR ____ REG.# ____

CONSTRUCTION COMPLIANCE = GROUT APPROVED ☑ DATE 12-03-97 EHS Martha Tyndall
WCHD ID # 7812 WELLHEAD APPROVED ☑ DATE 6-2-98 EHS [illegible] for Martha Tyndall
NEGATIVE BACTERIOLOGICAL RESULTS ☑ DATE 06-02-98 EHS Martha Gregory
SYSTEM FINALIZED ☑ DATE 06-17-98 EHS Martha Gregory

COMMENTS: ____

****

This permit is based in part on information provided by the homeowner or his/her representative in the application submitted for this permit. The Environmental Health Specialist is not responsible for false or misleading information contained in the application. The Environmental Health Specialist is also not responsible for concealed conditions on the property or for statements in this report that may have resulted from false or misleading statements provided to him in the application. Neither Wake County nor the Environmental Health Specialist warrants that the septic tank system will continue to function satisfactorily in the future or that the water supply will remain potable.

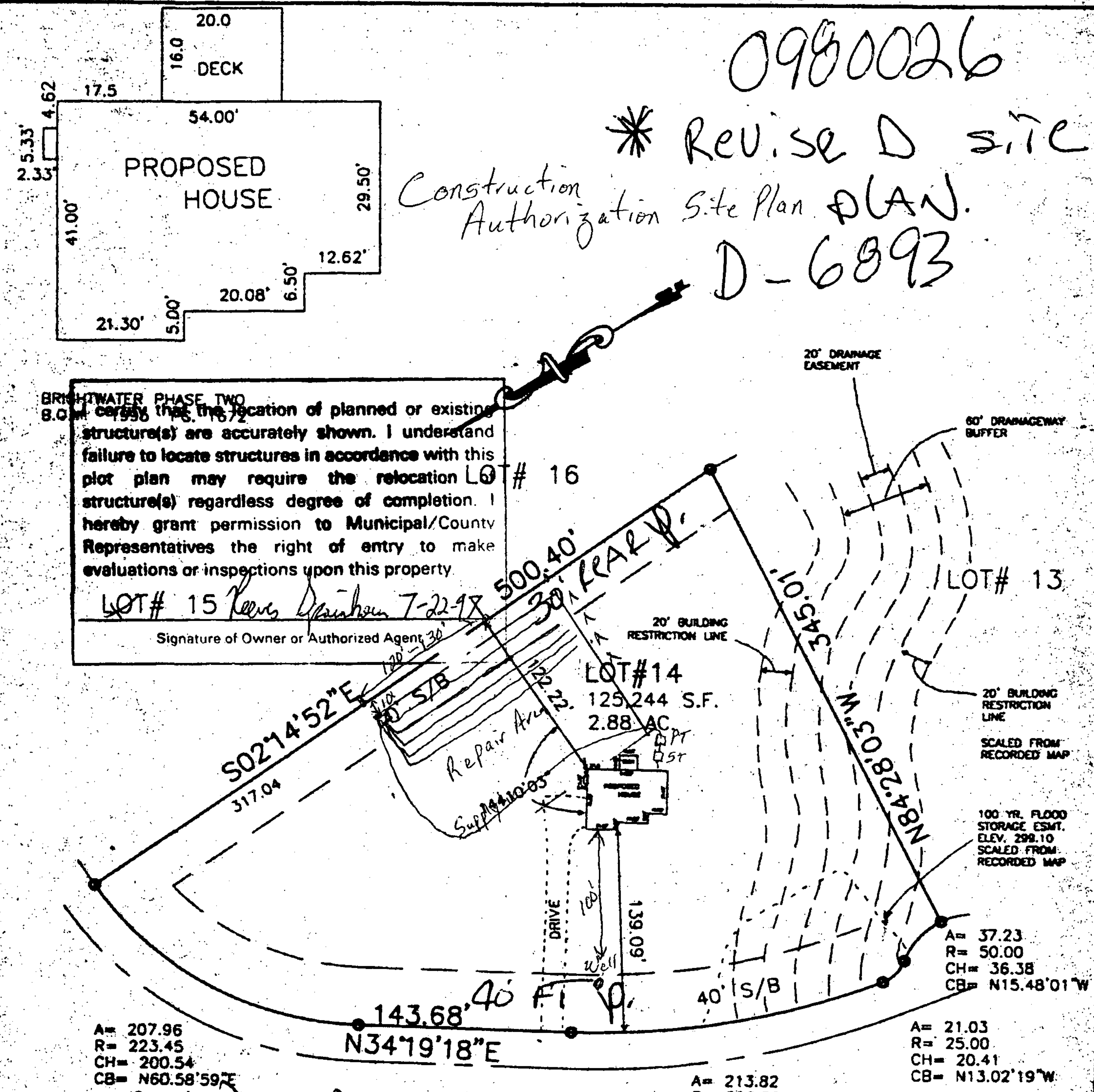
SUBJECT PROPERTY IS____ IS NOT ____ LOCATED IN A SPECIAL FLOOD HAZARD AREA AS DESIGNATED ON FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAP NUMBER____________________ ZONE________

0980026

* Revised site plan.

Construction Authorization Site Plan

D-6893



20.0
16.0
DECK
17.5
4.62
54.00'
5.33'
2.33'
PROPOSED HOUSE
29.50'
41.00'
12.62'
6.50'
20.08'
5.00'
21.30'
BRIGHTWATER PHASE TWO
20' DRAINAGE EASEMENT
60' DRAINAGEWAY BUFFER
LOT# 16
500.40'
30' REAR
LOT# 13
345.01'
20' BUILDING RESTRICTION LINE
LOT# 15
LOT#14
125,244 S.F.
2.88 AC
S02°14'52"E
N84°28'03"W
20' BUILDING RESTRICTION LINE
SCALED FROM RECORDED MAP
317.04
Repair Area
Supply
100 YR. FLOOD STORAGE ESMT. ELEV. 299.10 SCALED FROM RECORDED MAP
DRIVE
100'
139.09'
Well
A= 37.23
R= 50.00
CH= 36.38
CB= N15.48'01"W
40' S/B
143.68'
40' Front
N34°19'18"E
A= 207.96
R= 223.45
CH= 200.54
CB= N60.58'59"E
A= 21.03
R= 25.00
CH= 20.41
CB= N13.02'19"W
A= 213.82
R= 526.56
CH= 212.35
CB= N22.41'20"E
BRIGHTWATER COURT

I certify that the location of planned or existing structure(s) are accurately shown. I understand failure to locate structures in accordance with this plot plan may require the relocation structure(s) regardless degree of completion. I hereby grant permission to Municipal/County Representatives the right of entry to make evaluations or inspections upon this property.

Kevin Danahan 7-22-97

Signature of Owner or Authorized Agent

Zoning R-80W By MA
Approve ✓ Date 7/22/97
Revise ✓ Use 101
Reject____ MBL____
Front 40 Rear 30
Side 20 Corner —
Comments:

REVISED TO SHOW NEW HOUSE LOCATION 07/09/97
REVISED TO SHOW NEW HOUSE LOCATION 07/22/97

BRIGHTWATER SUBDIVISION

PHASE THREE – SHEET 1 OF 2

PRELIMINARY PLAT, NOT FOR RECORDATION, CONVEYANCE OR SALE

BUILDER TO VERIFY HOUSE DIMENSIONS

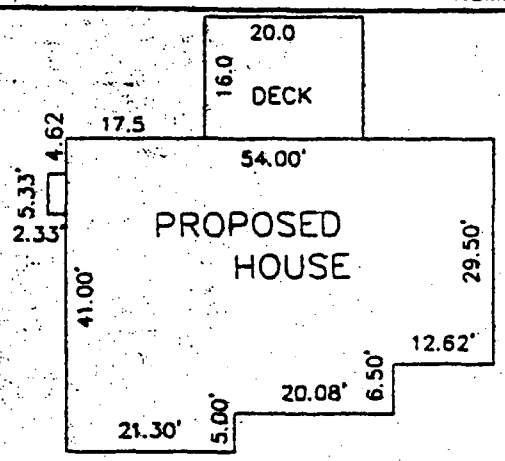
SUBJECT PROPERTY IS___ IS NOT ___ LOCATED IN A SPECIAL FLOOD HAZARD AREA AS DESIGNATED ON FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAP NUMBER_____ ZONE_____

0980026

Revise D site PLAN.

D-6893

Construction Authorization Site Plan

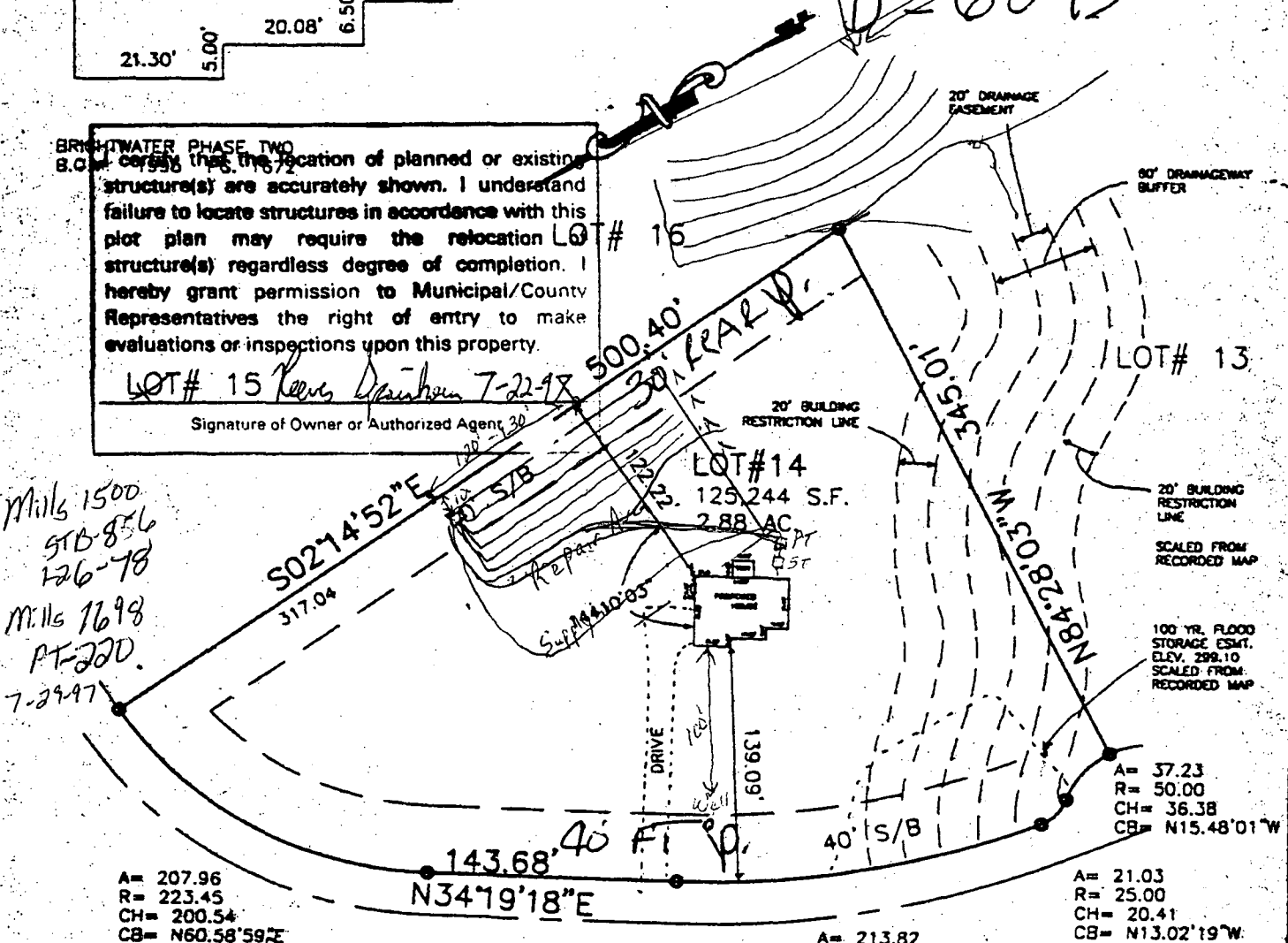


BRIGHTWATER PHASE TWO
B.C.W. 1998 PG. 1672

I certify that the location of planned or existing structure(s) are accurately shown. I understand failure to locate structures in accordance with this plot plan may require the relocation of structure(s) regardless degree of completion. I hereby grant permission to Municipal/County Representatives the right of entry to make evaluations or inspections upon this property.

LOT# 15 Reese Grantham 7-22-97

Signature of Owner or Authorized Agent



Mills 1500 STD-856 126-98
Mills 1698 PT-220. 7-29-97

BRIGHTWATER COURT

5'9" 11'

Zoning R-80W By MA

Approve ✓ Date 7/22/97

Revise ✓ Use 101

Reject ___ MBL ___

Front 40 Rear 30

Side 20 Corner ___

REVISED TO SHOW NEW HOUSE LOCATION 07/09/97

REVISED TO SHOW NEW HOUSE LOCATION 07/22/97

Comments:

BRIGHTWATER SUBDIVISION

PHASE THREE – SHEET 1 OF 2

PRELIMINARY PLAT, NOT FOR RECORDATION, CONVEYANCE OR SALE

BUILDER TO VERIFY HOUSE DIMENSIONS

FEBRUARY ASSOCIATES, INC.

P.O. Box 5427
Cary, N.C. 27512

Ph: 919/467-5427
Fax: 919/467-5463

OCT 27

October 23, 1997

Mr. Ed Duke, R.S.
Wake County Department of Health
PO Box 550
Raleigh NC 27602

Dear Mr. Duke:

Attached please find two copies of our proposal for a Pressure Manifold to Conventional Trenches for:

Lot 14, Brightwater permit D-6893

The proposal includes:
Plans & specifications, including calculations
Site plan
Manifold details
Tank specifications
Pump, controls, and accessory specifications
Installation information

Please note that specific manufacturers mentioned in the proposal are for example only; other products that meet or exceed the specifications may be substituted.

When review of the plans has been completed, please forward one copy of the plans (and permit, if applicable) to:

Reeves Spainhour 422-4325
342 W. Pine Ave.
Wake Forest NC 27587

If you have questions or require additional information, please feel free to call me.

Sincerely,

Katherine H. Morris, R.S., P.G.
President

coverwk.let

( ) APPROVED
(X) APPROVED AS NOTED
( ) DISAPPROVED

Review of this document has been made only for conformance with the design concept of the project and approval or approval as noted shall not relieve the contractor from responsibility for any errors in plan or for furnishing the materials, and equipment of proper dimension, size, quantity, quality and all performance characteristics to meet the requirements and intent of the contract documents.

WAKE COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION

Date 11-5-97 By

FEBRUARY ASSOCIATES, INC.

P.O. Box 5427
Cary, N.C. 27512

Ph: 919/467-5427
Fax: 919/467-5463

ALTERNATIVE SYSTEM DESIGN
date: 10-22-97

OWNER REEVES SPAINHOUR
ADDRESS 342 W. PINE AVE
WAKE FOREST NC 27587

PHONE 422-4325(M)

TYPE OF SYSTEM PRESSURE MANIFOLD
COUNTY WAKE
SITE LOT 14 BRIGHTWATER
D-6893
1719.01-49-8693

Site evaluation by TIM WARREN, R.S

SPECIFICATIONS: (Source: (permit) site evaluation, other: _____)

Daily waste load 600 **gpd, for** 5 BR. HOUSE **LTAR** .3 **gal/sq.ft./day**

Trenches
Maximum depth 24 **inches** **Gravel size** ≥1 **inches**
Width 36 **inches** **Gravel depth** 12 **inches**

DESIGN PARAMETERS:

Septic tank 1500 **gallons** **Pump tank** 1500 **gallons,** 33 **gallons per inch**

Nitrification line 2000 **square feet;** ≥ 667 **linear feet,** 3 **feet wide**

Configuration 5 @ 134

Supply line ~240 **feet,** 2 **" diam. Schedule 40 PVC**

Manifold(s) > 4 **feet,** 4 **" diam. Schedule 80 PVC**

All pipe and fittings Sch. 40 PVC unless noted. See "Site Plan" and "Manifold" sheets for details.

Number of taps 5 **tap size** 1/2 **tap spacing** 6" **on** (one, both) **sides of manifold**

Dosing rate 35.5 **gpm** **Dosing volume** 297 (227) **gallons**

Total dynamic head 230 **feet** **Drawdown in pump tank** 9 **inches** Dependent on Pump Tank

Pump HYDROMATIC SP50M **Controls** RHOMBUS TYPE 112 PANEL W/ 7" ALARM OPTION, ELAPSED TIME METER, CYCLE COUNTER, NEMA 4X BOX

Other equipment which meets or exceeds the specifications may be substituted

OTHER REQUIREMENTS: _____

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SPAINHOUR

PRESSURE MANIFOLD SPECIFICATIONS AND CALCULATIONS

Number of taps 5 Orifice 1/2" (nominal) .622" (actual)
SCH.40 TAP PIPE

Flow per orifice 7.1 gallons per minute

System flow 35.5 gallons per minute

Manifold diameter 4 inches, Schedule 80 PVC

Manifold length (minimum) 4 feet

Tap configuration 6" MINIMUM SPACING, ONE SIDE OF MANIFOLD

Supply line length ~ 240 feet, 2 " diameter Schedule 40 PVC

Elevation head ~ 14.0 feet

Friction loss 5.8 feet $= \frac{.00113\ L\ Q^{1.85}}{D^{4.87}}$ (new pipe)

L = supply line length
Q = system flow
D = actual inside diameter

Fittings loss (+20%) 1.2 feet

Design head 2.0 feet

TOTAL DYNAMIC HEAD 23.0 FEET

Pipe volume 438 GAL gallons = pipe length (670) X 65.3 gallons/100' (this is for 4" pipe)

Dosing volume 297 gallons = 60% (263) to 75% (328) pipe volume

Interior dimensions length " X width " X 1" = 33 gallons per inch
230 cubic inches per gallon

Drawdown 9 inches = dosing volume / gallons per inch
Dependenton Pump tank

Note: pump tank dimensions vary by manufacturer. Drawdown should be re-calculated using dimensions of specific tank selected. A minor adjustment in the dosing volume to achieve a whole number of inches is acceptable.
newpm2.doc