

Environmental Services - Water Quality
Onsite Wastewater Scan Data Entry Form

PERMIT #:

PIN #:

OP DATE:

SYSTEM USE:

- ☒ House
☐ Mobile Home
☐ Business
☐ Other

SEWAGE TYPE:

- ☒ Domestic
☐ Industrial

PUMP/SIPHON?:

- ☒ Yes
☐ No

PRESSURE MANIFOLD:

- ☐ Yes
☒ No

SYSTEM TYPE:

- ☐ I
☐ II
☐ III
☒ IV
☐ V
☐ VI
☐ Other

SUB TYPE:

- ☒ A
☐ B
☐ C
☐ D
☐ E
☐ F
☐ G

NBR BEDROOMS:

- ☐ 1
☐ 2
☐ 3
☒ 4
☐ 5
☐ 6
☐ Other

MAINT. SCHEDULE:

- ☒ Yes
☐ No *BK 8134p 26*

CERT. OPERATOR

- ☒ Yes
☐ No

GT ST PT SIZE

- | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|------------------|
| ☐ | ☐ | | 750 |
| ☐ | ☐ | ☐ | 900 |
| ☐ | ☐ | ☐ | 1,000 |
| ☐ | ☒ | ☒ | 1,200 |
| ☐ | ☐ | ☐ | 1,500 |
| ☐ | ☐ | ☐ | 1,800 |
| ☐ | ☐ | ☐ | 2,100 |
| ☐ | ☐ | ☐ | 2,500 |
| ☐ | ☐ | ☐ | 3,000 |
| ☐ | ☐ | ☐ | 4,000 |
| ☐ | ☐ | ☐ | 5,000 |
| ☐ | ☐ | ☐ | 8,000 |
| ☐ | ☐ | ☐ | 10,000 |
| ☐ | ☐ | ☐ | Other |
| ☒ | | ☐ | None/NA GT or PT |

DRAINFIELD SIZE(SQ. FT.)

DRAIN TYPE:

- ☒ Stone
☐ EZ Flow
☐ Infiltrator
☐ Biodiffuser
☐ Cultec
☐ Drip
☐ Hancor
☐ Large Dia. Pipe
☐ Multi-Pipe
☐ Other

MAX DEPTH (IN.):

- ☐ 12 in. or less
☒ 18 in. or less
☐ 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
☒ 12 in. or less
☐ 18 in. or less
☐ 24 in. or less
☐ Other

TRENCHES:

- ☒ Individual
☐ Bed

TRENCH WIDTH (IN.):

- ☐ 12 in. or less
☒ 18 in.
☐ 24 in.
☐ 36 in.
☐ 6 ft. or less
☐ 9 ft. or less
☐ Other

EC

PIN: 0711.04-52-5440

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES 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#: D005387 STATUS: A APP DATE: 02/24/1997 BLDG PERMIT#: 0981059
APPLICANT: JIM & DIANA LORD DAY PHONE: (919) 362 - 4791
ADDRESS: 1010 WELLSTONE CIRCLE FAX#: (919) 479 - 0035
CITY: APEX STATE: NC ZIP: 27502
OWNER: CHATHAM DEVELOPMENT CORP DAY PHONE: (999) 999 - 9999
ADDRESS: 102 HARDSCRABBLE DR FAX#: (919) 479 - 0035
CITY: HILLSBOROUGH STATE: NC ZIP: 27278
HD USE CD: 101 ONE-FAMILY HOUSE ORIG PERMIT#: REC?: Y
EXIST USE: TAX MAP#: 0667 0006
BEDROOMS: 4 BSMT: Y #EMPLOYEES: 0 WATER: I WASTEWATER: I GARB DISPOSAL: N
TOWNSHIP: 03 BUCKHORN JURIS: WC ZON: R80W PIN: ~~0711.03-30-1760-000~~
SUBD#: S 018 096 00 SUBD NAME: WEAVER CROSSING LOT-SEC: 1 ACRE: 6.97
IMPRV PRMT: ISSUED?: Y DATE: 04/21/1997 BY: ELC TYPE SYSTEM: IV PUMP: Y
CNSTR AUTH: ISSUED?: Y DATE: 06/25/1998 BY: ETD DATE EXPIRED: 06/25/2003
RECEIPT#: 0012759 FEE: 290.00 OP DATE: BY:
WATR SAMPL: REQ?: APPROVED?: DATE: PROPRIETARY SYS:
ST#: 8908 MI: DIR: NAME: WEAVER CROSSING DIR: TYP: RD
DIRECTIONS: 64 WEST, LEFT ON NEWHILL OLIVE CHAPEL RD, RIGHT INTO S/D 1ST LOT ON
RIGHT. REVISED PLANS, NEW CA ISSUED BY ETD ON 6-25-98.

Basement: yes

IMPROVEMENT PERMIT

SIZE OF TANK 1200 ST 1200 PT GALS. TOTAL SQ. FT. 4800 DEPTH OF STONE 9 IN. MAX. DEPTH LINE 12-14 IN.

WASTEWATER: DOMESTIC ☒ INDUSTRIAL ☐

I.P. ISSUED BY

E. Coates by E.D. Duff RS

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 Department of Environmental Services and an Operation Permit issued.

OTHER CONDITIONS: Install system according to revised LPP Plans submitted by February Assoc., Inc.. Septic tank filter with riser for access required. Simplex control panel with cycle counter and elapsed time meter required as per plans. Note some lines require solid 1 1/4" pvc pipe to be used between manifold and actual drainline (this portion of pipe is not required to be sleeved). Contract with Certified Operator and Recorded Maintenance Schedule required for O.P. to be issued. Tanks must be 15' from basement and no deeper than 2' in ground. Divert water away from tanks, set panel 12" above final grade.

SIZE OF TANK 1200 ST 1200 PT GALS. TOTAL SQ. FT. 4800 DEPTH OF STONE 9 IN. MAX. DEPTH LINE 12-14 IN.
ST FILTER REQUIRED ☒ NUMBER OF TRENCHES 11 LENGTH OF TRENCHES 960+285 Trans FT. WIDTH OF TRENCHES 18 IN.

C.A. ISSUED BY *E.D. Duff RS* INSTALLED BY *Miles Markham* CTR. I.D. #
SEPTIC TANK FILTER USED *2400 Rand. In. 1/2" / 8" square*
INNOV. APPRL. # IWWS- DATE 9/29/99 INSTALLATION APPROVED BY *He. B. K. RS*

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

WELL LOG INFORMATION = DEPTH 205 CASING DEPTH 39' YIELD 20 STATIC LEVEL 20'
WELL CONTRACTOR Goldston Well REG.# _____ PUMP CONTRACTOR _____ REG.# _____

CONSTRUCTION COMPLIANCE = GROUT APPROVED ☒ DATE 7/16/97 EHS H. Casebolt
WCHD ID # 8256 WELLHEAD APPROVED ☒ DATE 8/23/96 EHS William Starnes
NEGATIVE BACTERIOLOGICAL RESULTS ☐ DATE 8/23/96 EHS William Starnes
SYSTEM FINALIZED ☒ DATE 9/20/00 EHS William Starnes

COMMENTS: Well was installed prior to purchase of lot.

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.

AS BUILT ELEVATIONS

END FED

SHOW VALVES

SHOW ^(X) CHECKS

LENGTH

LENGTH

LENGTH

CENTERFED

et	hlg h	27
hroth	hlg h	
SS	hlg S	
hllg	-9	
hgg	hllg	89
hll	9L	hllg
ll	hll	hll
bd	alb	hllg
hb	hllg	hllg
hbb	-alb	hllg
hll	hll	hll

OTHER DRAW DIA.

23

10

I certify that the location of planned or existing structures are accurately shown. I understand that the plan may require the relocation of structures, regardless of degree of completion. I hereby grant permission to Municipal/County Representatives the right of entry to make evaluations or inspections upon this property.

1971
 DONOVAN L. OLIVE
 DB. 5324, PG. 63
 DB. 1991, PG. 284
 Construction Authorization
 Site Plan 0921059
 Revised 6-25-98 D5327

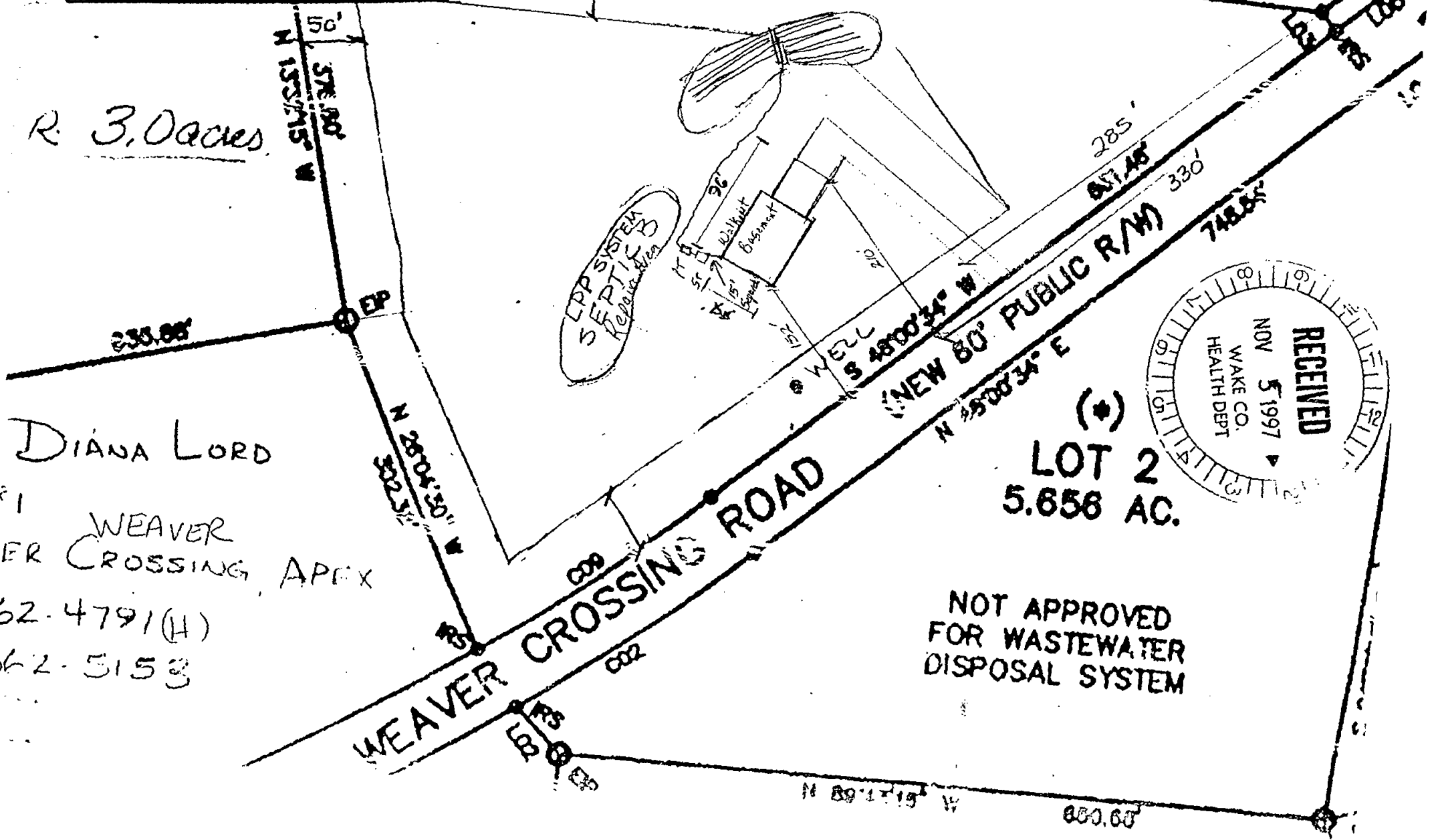
LOT "A"
 0.155 AC.
 Zoning ECW
 Approve DATE 11/7/97
 Revise OPEN SPACE
 Reject MBL
 Front 40 Rear 30
 Side 20 Corner 101
 Comments:

R. 3.0 acres

DIANA LORD

WEAVER CROSSING APEX

362-4791(H)
 362-5153



NOT APPROVED
 FOR WASTEWATER
 DISPOSAL SYSTEM

LPP INSTALLATION INSPECTION FORM

Tax Map _____ Parcel _____ Permit _____

LPP Construction Inspection Checklist

Site Preparation

Date 8/3/98

1. Is the site in the right location?
2. Roped off and protected from traffic?
3. Small trees and brush cleared?
4. Provisions for site drainage?
5. Distribution field shaped to shed water?
6. Lines staked out properly?
7. Comments _____

*30' x 1/2" into top of drain
8/3/98 3:05
30' 3/4" 9/6/98 2:00*

OK
↓

Small 4" Apko filter w/ Gaskets RA 5,382,357

Construction Check

Date _____

1. Tanks: SCP PTZ 41200 7/9/98
6-2598 SCP STB 669 12 00
 Proper size, type and construction?
 Installed properly?
2. Manifold and laterals:
 Depth of gravel suitable?
 Placement of dams? OK
OK ← Holes drilled properly and placed downward?
 Manifold and laterals connected properly? OK
3. Width of trenches
4. Comments _____

OK
OK
OK
OK
OK
OK

Operation Check

PANEL NOT SET 8/6/98

Date 8/98

1. Pump and switches operating?
2. High water alarm operating?
3. Electric receptacle outside pump tank?
4. Pressure head adjusted?
5. Comments 60 in @ 2040' 64 @ 2050' - 843pm -

Sub?
↓

Final Landscaping

Date 8/6/98

1. Site shaped to shed rainwater
2. Any low areas?
3. Diversion drains?
4. Downspout drains directed away from system?
5. Seeded and mulched?
6. Comments _____

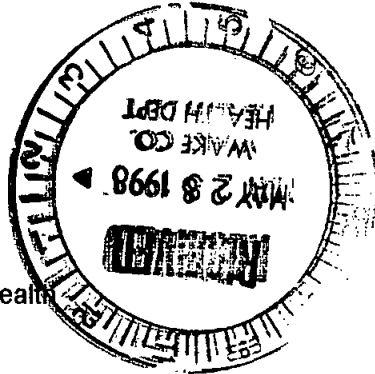
OK
OK
Not Reg
N/A
N/A



FEBRUARY ASSOCIATES, INC.

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

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



May 26, 1998

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

Dear Mr. Bristow:

Attached please find two copies of our proposal for a Low-Pressure-Pipe on-site sewage disposal system for:

Lot 1, Weaver Crossing Permit: D-5387

This proposal replaces the one submitted in October 1997. The property owners decided to use the other of their two approved LPP areas. This change has been approved by Mr. Ed Duke.

The proposal includes:

Plans & specifications, including flow chart and calculations
Site plan
Tank specifications
Pump, controls, and accessory specifications
Installation information

Page to Pick-up

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:

Jim & Diana Lord
1010 Wellstone Circle
Apex NC 27502

phone: 362-4791

Wife Page 509-2769

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
☒ 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 therein 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 6-25-98 By Ed Duke



FEBRUARY ASSOCIATES, INC.

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

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

REVISION - DIFFERENT
LPP SITE SELECTED

ALTERNATIVE SYSTEM DESIGN
date: 5-21-98

OWNER JIM & DIANA LORD
ADDRESS 1010 WELLSTONE CIR.
APEX NC 27502

TYPE OF SYSTEM LPP
COUNTY WAKE
SITE LOT 1 WEAVER CROSSING

PHONE 362-4791

Site evaluation by EVERETT COATES

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

Daily waste load 480 gpd, for 4 BR SFD LTAR .1 gal/sq.ft./day

Trenches
Maximum depth 12-14 inches
Width 18 inches
Gravel depth 8-9 inches
Gravel size 2-1 inches

Lateral sleeves: no yes, with 4 " diameter corrugated tubing ^{Sleeving should be 25' shorter than total length}
Fill cap: no yes, _____ deep, placed on site prior to installation
yes, _____ deep, placed over completed trenches

DESIGN PARAMETERS:

Septic tank 1200 gallons Pump tank 1200 gallons, 25 gallons per inch
Effluent filter: yes no RECOMMENDED

Lateral field 4800 sq. ft. Laterals 960 linear feet, 1 1/4 " diameter
with turnups in valve boxes or 6" diameter capped risers
Configuration SEE SITE PLAN +285' "TRANSITION" Solid 1 1/4"

Supply line ~ 150 feet, 3 " diam.

Manifold(s) ~ 125 feet, 3 " diam.

Dosing rate 75.9 gpm

Dosing volume 500 gallons

Total dynamic head 21.4 feet

Drawdown in pump tank 20 inches

Pump HYDROMATIC SPD100MH ^{HIGH HEAD} Controls RHOMBUS TYPE 112 PANEL (NEMA 4x)

W/ALARM OPTION, CYCLE COUNTER, ELAPSED TIME METER

Other equipment which meets or exceeds the specifications may be substituted

OTHER REQUIREMENTS: DIVERT ROOF & FOUNDATION DRAINAGE
AWAY FROM TANKS

* Floats for pump must be either dual floats (on + off) or SJE Pump master with 30" Drawdown capability or equal

Use 2" PVC
Pipe from
Pump thru
Union & check
valve - then
bush up to
3" PVC before
leaving tank
use 2" gate
Valves @
Drain field

ALTERNATIVE SYSTEM DESIGN

PAGE 2

NAME JIM & DIANA LORD

Dosing rate (from flow chart) 75.9 gpm

Max. pump run time 10 + min

Anti-siphon hole flow rate - gpm

Actual pump run time 6.6 min
(dosing volume / dosing rate)

TOTAL DOSING RATE 75.9 GPM

Top lateral elevation 103.6

Friction loss = $.00147 L Q$ ^{1.85}

Pump-off elevation 94.0

4.87

Elevation head 9.6 feet

L = length, Q = dosing rate, D = actual inside diameter
(C=120) (new pipe)

★ Design head 2.0 feet

supply line 150' of 3" = 5.2

Flush head 2.0 feet

manifolds 125' of 3" = 1.4

Friction & fittings loss 7.8 feet ←

TRANSITION 285' 1 1/4" = 1.2

TOTAL DYNAMIC HEAD 21.4 FEET

+ 20% fittings loss → TOTAL 7.8

4.561
USE AVG
FLOW PER
LAT, NOT
TOTAL FLOW

Draining manifold(s) length 125' X 38.4 gal/100' = 48 gallons

and
supply line

length - X - gal/100' = - gallons

total draining volume

- gallons ←

Lateral volume (INCLUDING "TRANSITION") length 960' ACTIVE 285' X 7.8 gal/100' = 75 ACTIVE 22.2 gallons

145.2 gallons ← volume to pressurize

Dosing volume: min: (5 x lat vol + drain) = 423 gallons

max: (10 x lat vol + drain) = 798 gallons

DOSING VOLUME 500 GALLONS

Interior dimensions of pump tank length - X width - X 1" = 25 gallons per inch

DRAWDOWN 20 INCHES = dosing volume / gallons per inch

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

newlpp2.doc

★ SELECTED TO REDUCE SYSTEM FLOW. AT 4', w/ MAXIMUM SPACING, FLOW WAS > 90 GPM.

LATERAL	ELEVATION (FT)	ELEV. DIFF. (FT)	HEAD (FT)	HOLE SIZE (IN)	FLOW PER HOLE (GPM)	LENGTH (FT)	SPAC- ING (FT)	NO. HOLES	FLOW PER LATERAL (GPM)	1ST AND LAST HOLE (FT)	INST FLOW RATE (GPM /FT)
1	103.60	0.00	2.0	5/32	0.407	50	3.0	14	5.70	5.5	0.114
2	102.90	0.70	2.7	5/32	0.473	65	4.0	15	7.10	4.5	0.109
3	102.70	0.90	2.9	5/32	0.490	60	4.5	13	6.37	3.0	0.106
4	102.00	1.60	3.6	5/32	0.546	60	5.0	11	6.01	5.0	0.100
5L	101.70	1.90	3.9	5/32	0.569	65	7.0	9	5.12	4.5	0.079
5R	101.70	1.90	3.9	5/32	0.569	20	6.0	3	1.71	4.0	0.085
6L	101.20	0.00	2.0	5/32	0.407	65	4.5	14	5.70	3.3	0.088
6R	101.20	0.00	2.0	5/32	0.407	50	4.0	11	4.48	5.0	0.090
7L	100.30	0.90	2.9	5/32	0.490	60	6.0	10	4.90	3.0	0.082
7R	100.30	0.90	2.9	5/32	0.490	55	6.0	9	4.41	3.5	0.080
8L	99.60	1.60	3.6	5/32	0.546	60	8.0	7	3.82	6.0	0.064
8R	99.60	1.60	3.6	5/32	0.546	55	8.0	6	3.28	7.5	0.060
9L	98.90	0.00	2.0	5/32	0.407	55	6.0	9	3.66	3.5	0.067
9R	98.90	0.00	2.0	5/32	0.407	60	6.0	10	4.07	3.0	0.068
10L	98.40	0.50	2.5	5/32	0.455	45	7.0	6	2.73	5.0	0.061
10R	98.40	0.50	2.5	5/32	0.455	45	7.0	6	2.73	5.0	0.061
11L	97.70	1.20	3.2	5/32	0.515	45	9.0	4	2.06	9.0	0.046
11R	97.70	1.20	3.2	5/32	0.515	45	9.0	4	2.06	9.0	0.046

INPUT ↓, ↑ OR END

FIELD NUMBER = 3

TOTAL LENGTH = 960 FT

TOTAL FLOW = 75.91 GPM

MAXIMUM REDUCTION OF FLOW BETWEEN LATERALS = 59.65%

Press any key to continue...