

Blanco CAD

Property

Account

Property ID: 83739 Legal Description: THE BLUFFS AT ROUND MOUNTAIN , LOT 26 , ACRES 5.01
 Geographic ID: BRM26 Agent Code:
 Type: Real
 Property Use Code:
 Property Use Description:

Location

Address: COMMANCHE RIDGE Mapsco:
 TX
 Neighborhood: NORTHEAST AUSTIN INFLUENCE Map ID:
 Neighborhood CD: NEAI

Owner

Name: COOPER MARCUS AND JUDY A Owner ID: 124342
 Mailing Address: 9361 GRANGER LN % Ownership: 100.000000000000%
 KELLER, TX 76244

Exemptions:

Values

(+) Improvement Homesite Value:	+	\$0	
(+) Improvement Non-Homesite Value:	+	\$0	
(+) Land Homesite Value:	+	\$0	
(+) Land Non-Homesite Value:	+	\$25,000	Ag / Timber Use Value
(+) Agricultural Market Valuation:	+	\$80,200	\$330
(+) Timber Market Valuation:	+	\$0	\$0
(=) Market Value:	=	\$105,200	
(-) Ag or Timber Use Value Reduction:	-	\$79,870	
(=) Appraised Value:	=	\$25,330	
(-) HS Cap:	-	\$0	
(=) Assessed Value:	=	\$25,330	

Taxing Jurisdiction

Owner: COOPER MARCUS AND JUDY A
 % Ownership: 100.000000000000%
 Total Value: \$105,200

Entity	Description	Tax Rate	Appraised Value	Taxable Value	Estimated Tax
CAD	Appraisal District	0.000000	\$25,330	\$25,330	\$0.00
GBL	BLANCO COUNTY	0.361700	\$25,330	\$25,330	\$91.62
GWD	BL-PED GROUNDWATER CONS DIST	0.023100	\$25,330	\$25,330	\$5.85
NJC	ESD #1	0.100000	\$25,330	\$25,330	\$25.33
SJC	JOHNSON CITY ISD	1.145800	\$25,330	\$25,330	\$290.23
Total Tax Rate:		1.630600			

Taxes w/Current Exemptions: \$413.03
 Taxes w/o Exemptions: \$413.03

Improvement / Building

No improvements exist for this property.

Land

#	Type	Description	Acres	Sqft	Eff Front	Eff Depth	Market Value	Prod. Value
1	BRM	THE BLUFFS AT ROUND MOUNTAIN	4.0100	174675.60	0.00	0.00	\$80,200	\$330
2	BRM	THE BLUFFS AT ROUND MOUNTAIN	1.0000	43560.00	0.00	0.00	\$25,000	\$0

Roll Value History

Year	Improvements	Land Market	Ag Valuation	Appraised	HS Cap	Assessed
2017	N/A	N/A	N/A	N/A	N/A	N/A
2016	\$0	\$105,200	330	25,330	\$0	\$25,330

Deed History - (Last 3 Deed Transactions)

#	Deed Date	Type	Description	Grantor	Grantee	Volume	Page	Deed Number
1	6/15/2016	WV	WARRANTY W/ VENDORS LIEN	ROUND MOUNTAIN BLUFFS LLC	COOPER MARCUS AND JUDY A	529	412	
2	7/15/2015	WV	WARRANTY W/ VENDORS LIEN	BERGMAN JAMES A	ROUND MOUNTAIN BLUFFS LLC	501	964	

Tax Due

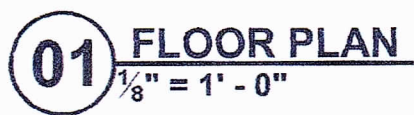
Property Tax Information as of 07/26/2016

Amount Due if Paid on:

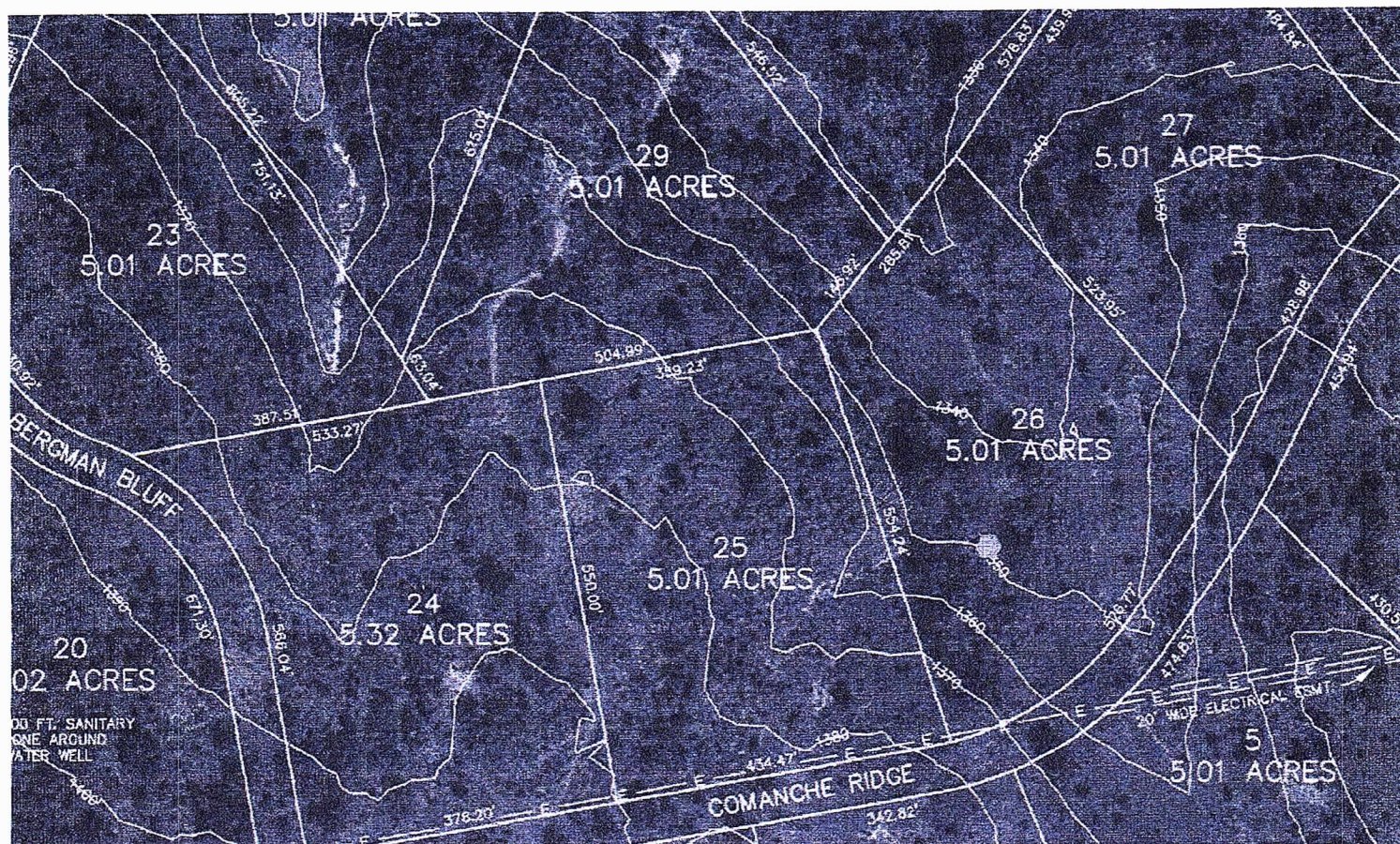
Year	Taxing Jurisdiction	Taxable Value	Base Tax	Base Taxes Paid	Base Tax Due	Discount / Penalty & Interest	Attorney Fees	Amount Due
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NOTE: Penalty & Interest accrues every month on the unpaid tax and is added to the balance. Attorney fees may also increase your tax liability if not paid by July 1. If you plan to submit payment on a future date, make sure you enter the date and **RECALCULATE** to obtain the correct total amount due.

(830) 868-4013



PAGE: A-1



House (Future)
2000 sqft
2 bd/2 ba/kit/w/d



Barn
2000 sqft
600 sqft living space
1 bd/1 ba/kit/w/d

Frank Powell R.S.

Texas Registered Sanitarian # 3115
TCEQ Site Evaluator Registration # OS9949
PO Box 272, Copeville, Texas 75121
214.957.8831

OSSF Site Evaluation Report

Job Name/Homeowner:	Cooper Residence		
Address:	Comanche Ridge		
City, State, Zip:	Marble Falls	Texas	78654
Permit Agency:	Blanco County Env. Hlth	County:	Blanco
Installer Name:	Billy Jacks Construction		
Designed By:	Frank Powell R.S.		
Date:	August 10, 2016	Record # :	5392

SOIL BORING #1

DEPTH	TEXTURE CLASS	SOIL TEXTURE	DRAINAGE// WATER MOTTLES // TABLE	RESTRICTIVE HORIZON
0"-4"	III	Clay Loam	none // none	No
4"		Rock	none // none	Yes

SOIL BORING #2

DEPTH	TEXTURE CLASS	SOIL TEXTURE	DRAINAGE// WATER MOTTLES // TABLE	RESTRICTIVE HORIZON
0"-6"	III	Clay Loam	none // none	No
6"		Rock	none // none	Yes

SITE FEATURES

5 acre tract, native grass. No pond, no creek, some trees, no flood hazard. Slope is downward to the north at about 2-10%. Soil is capable of sustaining vegetative growth. Public water supply.

OBSERVATIONS

Site Evaluator:

Professional Design Required

Frank Powell RS

License #

OS9949

Frank Powell R.S.

Texas Registered Sanitarian # 3115
TCEQ Site Evaluator Registration # OS9949
PO Box 272, Copeville, Texas 75121
214.957.8831

Technical Information Sheet

Customer Name: Cooper Residence Comanche Ridge County: Blanco Record #: 5392

Professional Design Required?: ☐ Yes

If yes, professional design attached:

☐ Yes

Soil Test: Type: ☐ Texture: ☐ Rock Structure: ☐ Massive

Sewer (House Drain): Pipe Size: ☐ 3"- 4" SDR 26 / Sch 40 PVC Pipe Slope: ☐ 1/8" per foot

Daily Wastewater Usage Rate: Q = ☐ 180 GPD Water saving devices: ☐ Yes

Criteria: ☐ Single Family Dwelling - 2 bedroom ; 572 sq.ft.

Treatment Unit:

Septic Tank: ☐

Aerobic Unit: ☐ Yes

Size Required: ☐ 480 GPD

Size Proposed: ☐ 500 GPD

Tank Dimensions: ☐ 82" W x 62" H x 140" L

Liquid Depth (bottom of tank to outlet): ☐ 51"

Manufacturer: ☐ Aqua Klear

Material / Model #: ☐ concrete / AK5B3

Pretreatment Tank: ☐ N/A

Type: ☐ Built in Aerobic Unit

Other: ☐ 750 gallon pump chamber with audio/visual alarm

Disposal System:

Type: ☐ Spray Irrigation Area Required : sq ft ☐ 4000

Area Proposed: sq ft ☐ 5655

Trench width or bed size: ☐ n/a

Trench depth: ☐ n/a

Type and size of pipe: ☐ 1" sch 40 PVC

Barrier type: ☐ n/a

Backfill Material: ☐ Sand

Other: ☐

Design Setbacks:

The following items are required to be shown on all designs if located within 150' of proposed disposal area. This includes items on adjacent properties.

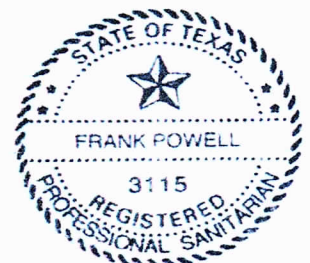
1. Property Lines
2. Structures, foundations, or improvements
3. Swimming pool
4. Water lines and meters
5. Existing septic systems
6. Sharp slopes or breaks
7. Streams, ponds, or lakes
8. Wells or cisterns
9. Easements & flood zones

APPLIES

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N/A

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Designer: Frank Powell R.S. Registration # 3115 Date: August 10, 2016

Frank Powell R.S.

Texas Registered Sanitarian # 3115
TCEQ Site Evaluator Registration # OS9949
PO Box 272, Copeville, Texas 75121
214.957.8831

Aerobic Spray Irrigation Design

Customer Name:	<u>Cooper Residence</u>	Builder:	<u>Billy Jacks Construction</u>
Address:	<u>Comanche Ridge</u>	County:	<u>Blanco</u>
		City:	<u>Marble Falls</u> Record: <u>5392</u>

DESIGN PARAMETERS:

Type of Dwelling: Single Family - 2 bedroom Square Footage: 572 sq.ft.
Daily Waste Flow: 180 GPD* Effluent Loading Rate: 0.045 gal/sq ft/day
Required Irrigation Area: 4000 sq ft Design Irrigation Area: 5655 sq ft

SYSTEM PARAMETERS:

Treatment Capacity Required: 480 GPD Pre-Treatment : Built in AquaKlear Unit
Aeration Unit : AquaKlear AK5B3 Liquid Capacity: 1300 gallon
Treatment Capacity: 500 GPD Chlorinator: In Line Pump Tank Size: 750 gallon

DISPOSAL PARAMETERS:

Sprinkler Type:	Number	Nozzle Size	Radius	Arc	Area	
K-Rain	1	3	30	360 degrees	2827	sq ft
K-Rain	2	3	30	360 degrees	2827	sq ft

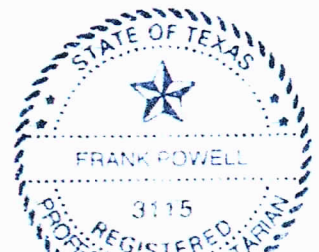
Pump Specifications: 1/2 HP 20 GPM (STA-RITE 20D0M05121 or equivalent)

* With water saving devices

** Less overlap area

Designed by : Frank Powell RS

Date : August 10, 2016



Spray Irrigation Calculation Sheet

Job Name/Homeowner:	Cooper Residence		
Address:	Comanche Ridge		
City, State, Zip:	Marble Falls	Texas	78654
Permit Agency:	Blanco County Env. Hlth	County	Blanco
Installer Name:	Billy Jacks Construction		
Designed By:	Frank Powell R.S.		
Date:	August 10, 2016	Record # :	5392

Flow Rate:

At 30 psi for a K-Rain sprinkler nozzle hole size 3 gives approximately 3.1 gallons per minute (gpm) per hole.

2 spray heads = 6.2 gpm

For multiple spray heads of varying nozzle sizes, the larger flow will be used for calculations.

Friction Loss:

Friction loss for a 1 inch schedule 40 PVC @ 6.2 gpm is about equal to 2.88 ft per 100' of pipe

For 275 ft of pipe and 25% accounting for fittings, the friction would be:

2.75	ft of pipe	x	2.88	ft of friction =	7.91	friction loss
25%		x	7.91	ft of friction =	1.98	friction loss
7.91	ft	+	1.98	ft	=	9.89 Total Friction Loss

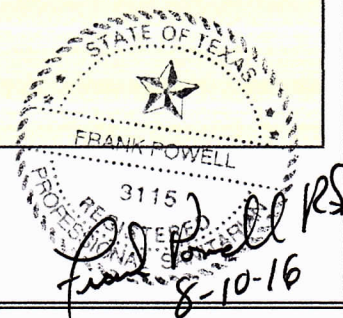
Total Friction Head:

Elevation distance from the pump to the field is approximately equal to 0 feet.

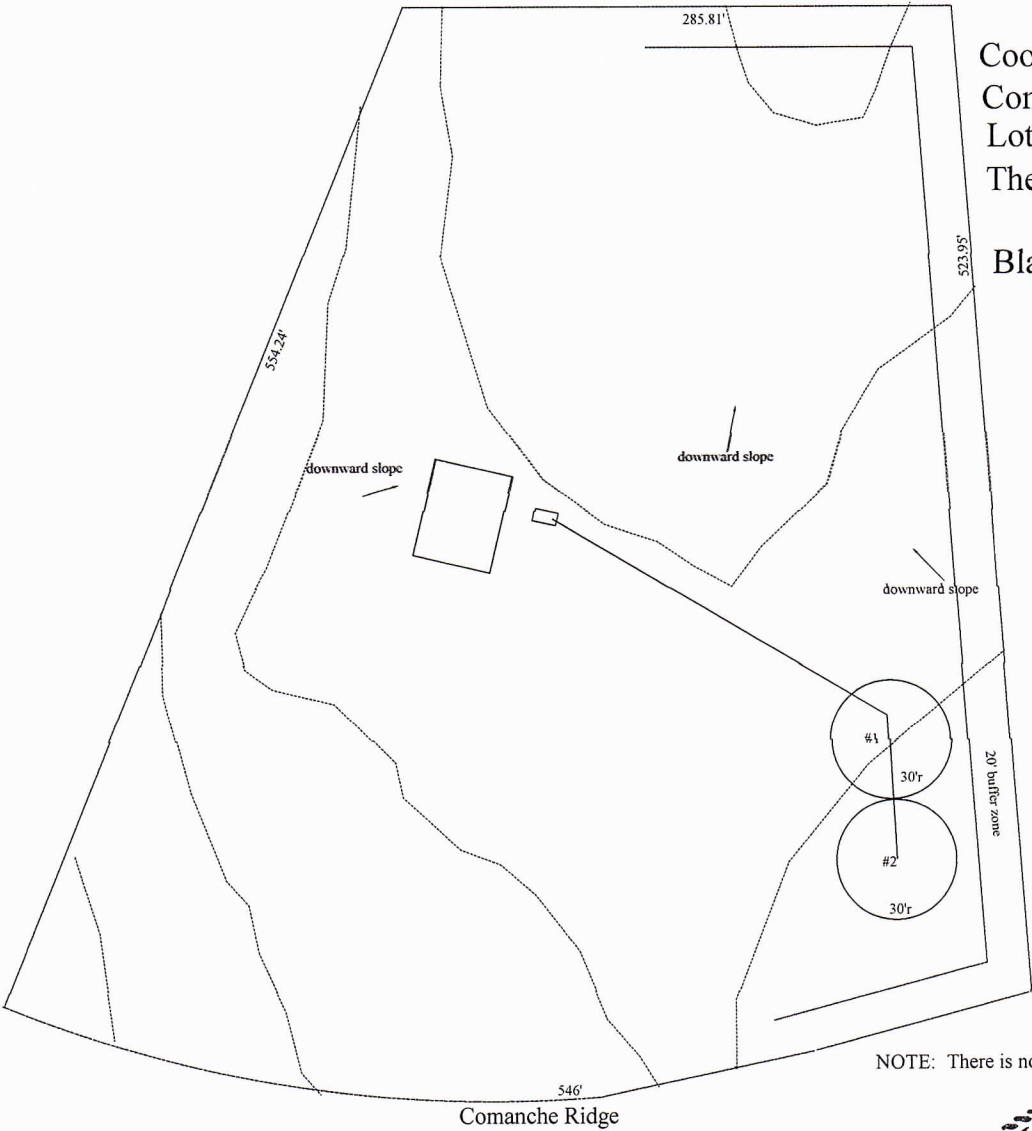
69.3 ft pressure head + 0 ft elevation head + 9.89 ft friction head = 79.19 feet

Dosing Volume:

The tank volume is <u>750</u> gallons	The tank inlet height is <u>54</u> inches.
The pump float switch will be 3' - 5' off the floor and on a tether ranging at <u>18</u> inches.	
This will give a dosing volume of <u>250</u> gallons.	
The alarm float will be at a level off of the floor of about <u>36</u> inches.	
This will give a storage volume of <u>250</u> gallons.	



Cooper Residence
Comanche Ridge
Lot 26
The Bluffs at
Round Mountain
Blanco County

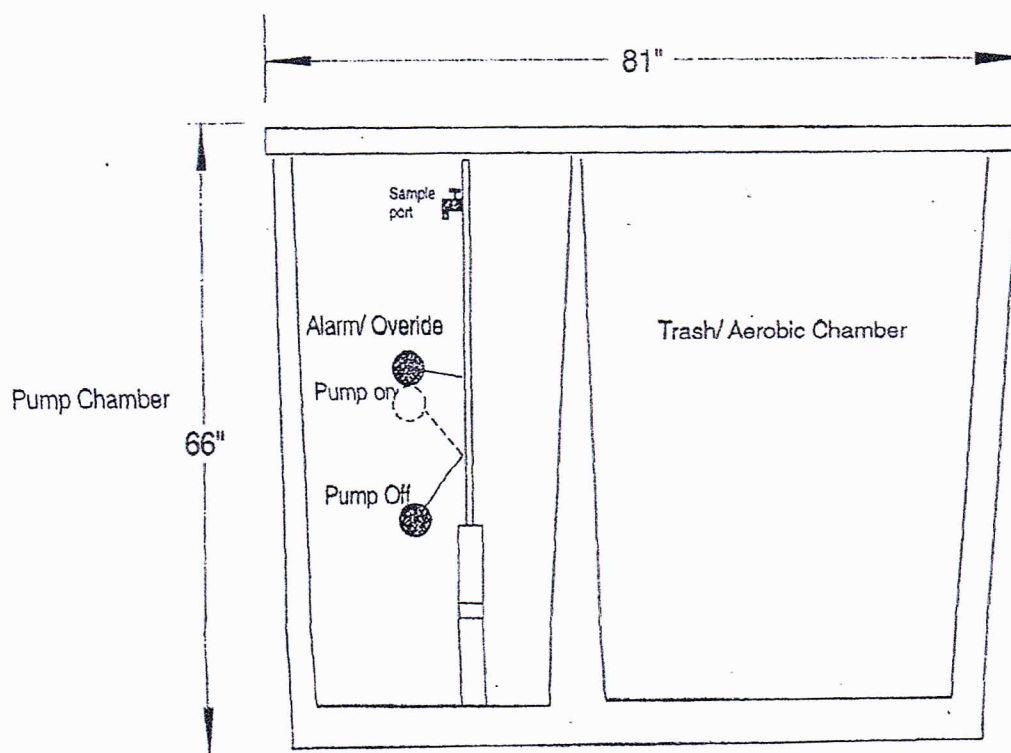
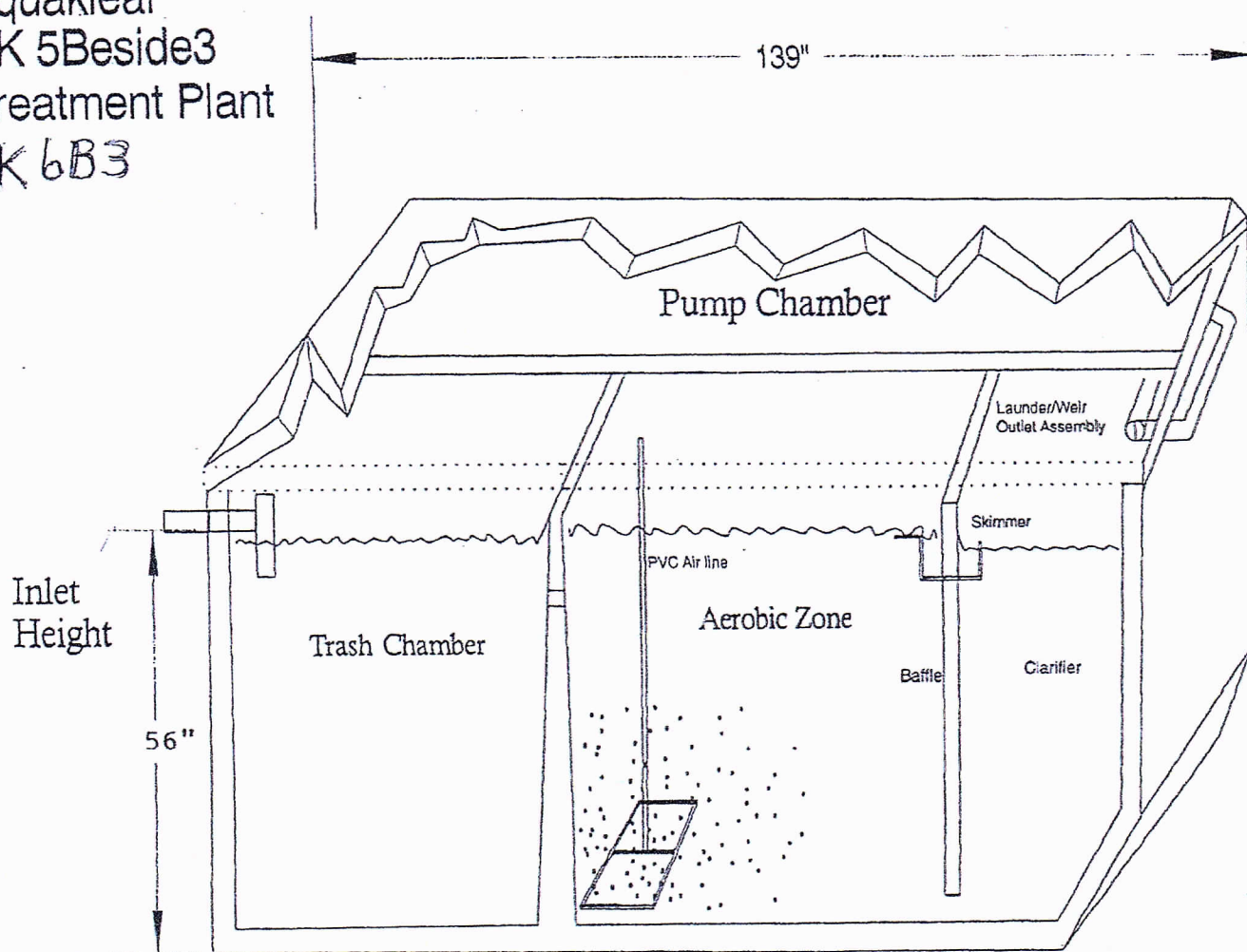


NOTE: There is no flood hazard on property.



Frank Powell RS
8-10-16

Aquaklear
AK 5Beside3
Treatment Plant
AK 6B3



Drawing is for example only
no portion of this design
sheet is to any specific scale.

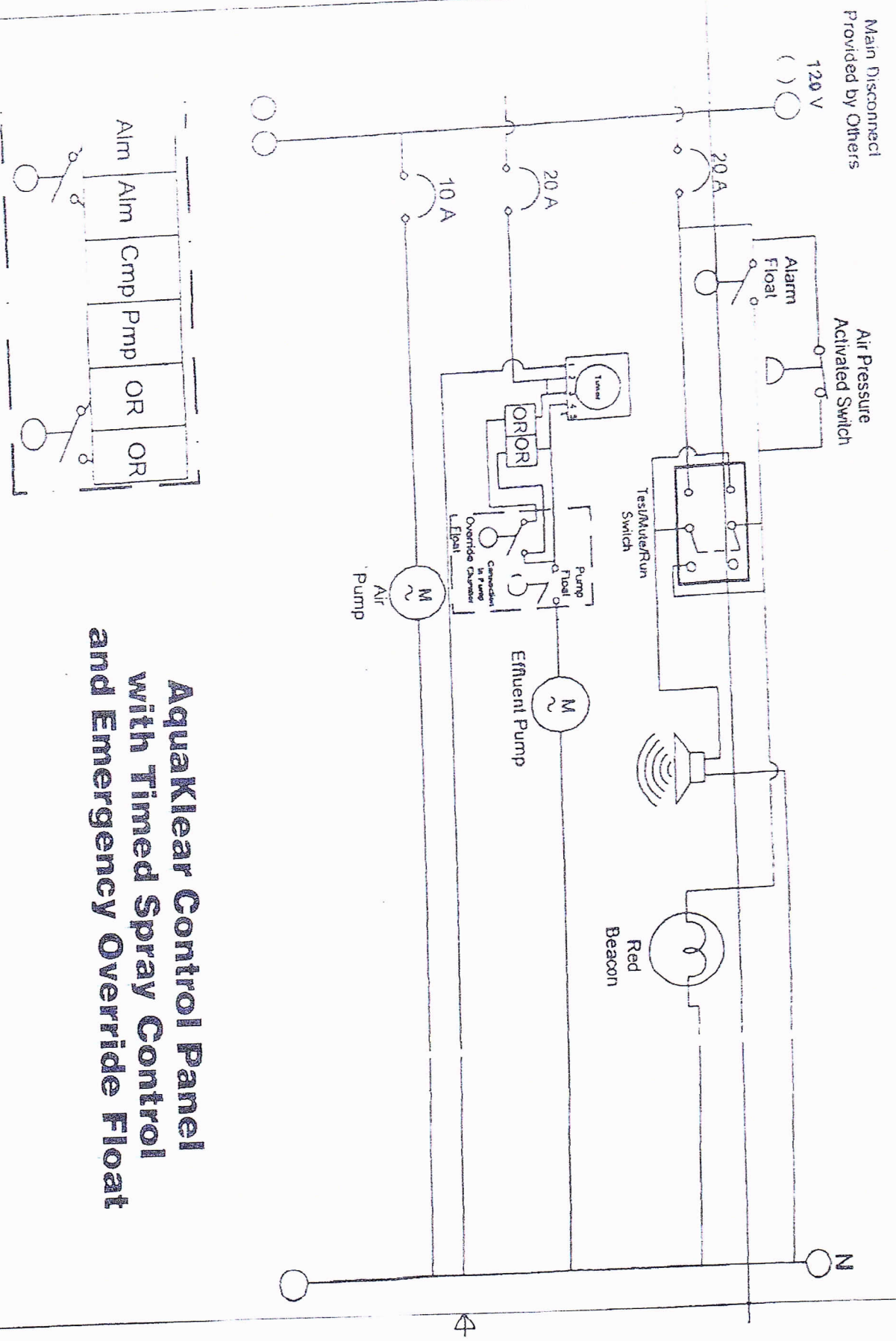


Pump Increment Chart

Model # AK5BESIDE3

+ # AK6BESIDE3

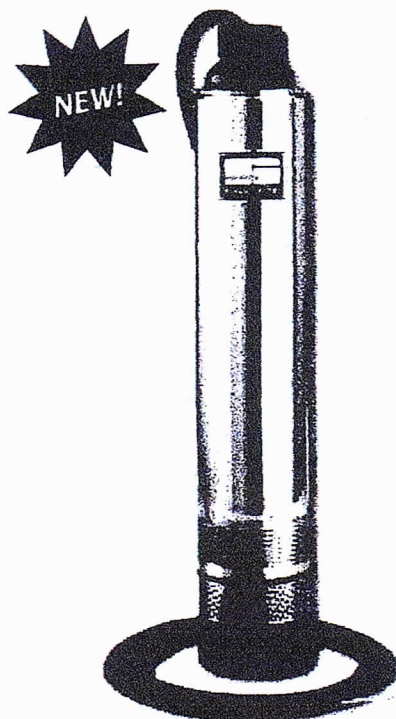
<u>Inches</u>	<u>Gallons</u>	<u>Inches</u>	<u>Gallons</u>
1	12.3	26	359.4
2	24.8	27	375.0
3	37.4	28	390.7
4	50.1	29	406.7
5	62.9	30	422.3
6	71.9	31	438.5
7	85.0	32	454.6
8	98.2	33	470.6
9	111.6	34	486.8
10	125.1	35	503.1
11	138.7	36	519.3
12	152.5	37	535.6
13	166.4	38	551.8
14	180.4	39	568.1
15	194.5	40	584.3
16	208.9	41	600.4
17	223.3	42	616.5
18	237.9	43	633.0
19	267.4	44	649.5
20	267.4	45	667.0
21	282.4	46	683.0
22	297.5	47	700.0
23	312.8	48	717.0
24	328.1	49	734.0
25	343.7	50	751.0



Aquaklear Control Panel with Timed Spray Control and Emergency Override Float



4" multi-stage submersible pump



This product is Listed to UL Standards for Safety by Underwriters Laboratories Inc. (UL).



The STEP Plus™ D Series 4" submersible pump in 10, 20 and 30 GPM models dominate with superior "DRAW-DOWN" capability.

The STEP Plus™ D Series 4" submersible pump dominates with reduced AMP DRAW.

The STEP Plus™ D Series 4" submersible pump dominates with COOLER and QUIETER operation.

APPLICATIONS

- **Clean and Gray Water...** for residential, commercial, and agricultural use.

SPECIFICATIONS

Motor – Available in 115 or 230 volt versions. Dry-wound, double ball-bearing, double-seal and thermal overload protected, UL and CSA approved.

Shell – Stainless steel (300 grade)

Discharge – Fiberglass-reinforced thermoplastic

Discharge Bearing – Nylatron®

Impellers – Acetel

Diffusers – Polycarbonate

Suction Caps – Polycarbonate with stainless steel wear ring

Thrust Pads – Proprietary spec.

Shaft and Coupling – Stainless steel 300 grade

Intake – Fiberglass-reinforced thermoplastic

Intake Screen – Stainless steel

Jacketed Cord – 600 Volt "SJOW" jacketed 10' leads, 2-wire with ground

Agency Listing – UL and CSA

ORDERING INFORMATION

Catalog Number	HP	Max. Load Amps	Volts	Phase/Cycles	Cord Length	Pallet Quantity	Weight (Lbs.)
10DOM05221	1/2	5.5	230	1/60	10'	80	16
10DOM05121	1/2	11.0	115	1/60	10'	80	16
20DOM05221	1/2	4.6	230	1/60	10'	80	16
20DOM05121	1/2	9.5	115	1/60	10'	80	16
30DOM05221	1/2	4.6	230	1/60	10'	80	16
30DOM05121	1/2	9.5	115	1/60	10'	80	16
20DOM05221+I	1/2	5.3	230	1/60	10'	80	16
20DOM05121+I	1/2	10.6	115	1/60	10'	80	16

Nylatron® is a registered trademark of Polymer Corp. SignaSeal™ and STEP Plus™ are trademarks of WICOR Industries.

In order to provide the best products possible, specifications are subject to change.

STEP Plus™ D SERIES

FEATURES

STEP Plus DOMINATES with a...

Patented Stage System – The proven SignaSeal™ staging system utilizes a patented ceramic wear surface. When incorporated with STA-RITE's "true" independent floating impellers, dominates with 1st-in-class performance, superior sand handling, and a thrust management staging system with industry exclusive "dry-run" capabilities.

Superior "draw-down" capability – The STEP Plus Dominates in this class with the lowest draw-down of 4-1/2" (a standard 4" NEMA submersible only draws-down to 13-1/2").

Reduced amp draw – The STEP Plus Dominates in this class with less energy consumption – over 25% less amp draw (9.5 amps vs. 12.7 amps, 115 volt) than a 4" NEMA submersible, reducing operating costs and extending the service life of float switch contacts.

Cooler and quieter operation – The STEP Plus Dominates by using the pumped liquid to cool the motor as it passes over the motor. The water passing over the motor dampens the motor noise, eliminating expensive "flow-inducer sleeves" required when using a standard 4" NEMA submersible.

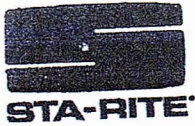
Impellers – Precision molded for perfect balance... ultra smooth for the highest performance and efficiency. Allows for .080" solids.

Shaft – Positive drive, hexagonal 7/16" – 300-grade stainless steel shaft offers generous impeller drive surfaces.

Shaft bearing – Exclusive self-lubricating Nylatron® bearing resists wear surface from sand and abrasives.

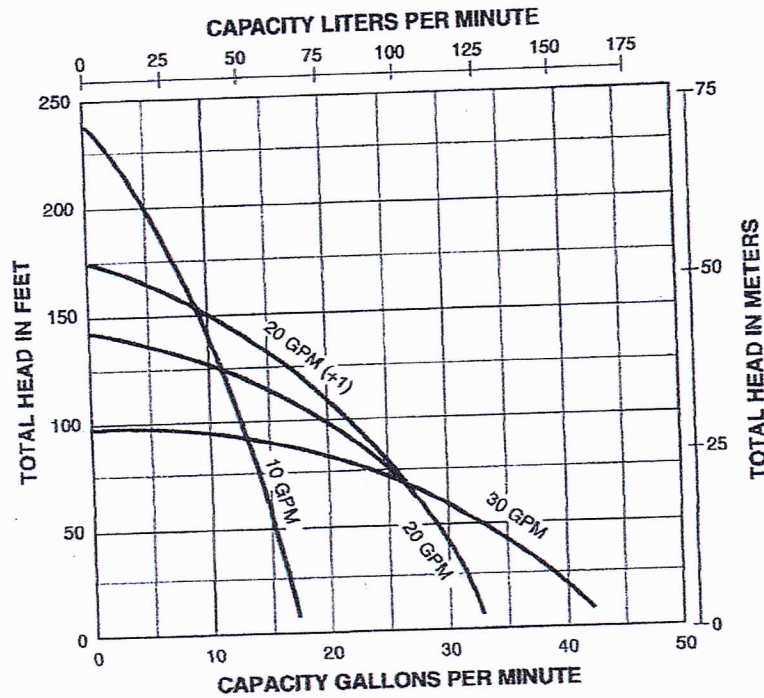
Shell – Heavy-walled, corrosion resistant 300-grade stainless steel.





4" multi-stage submersible pump

PUMP PERFORMANCE



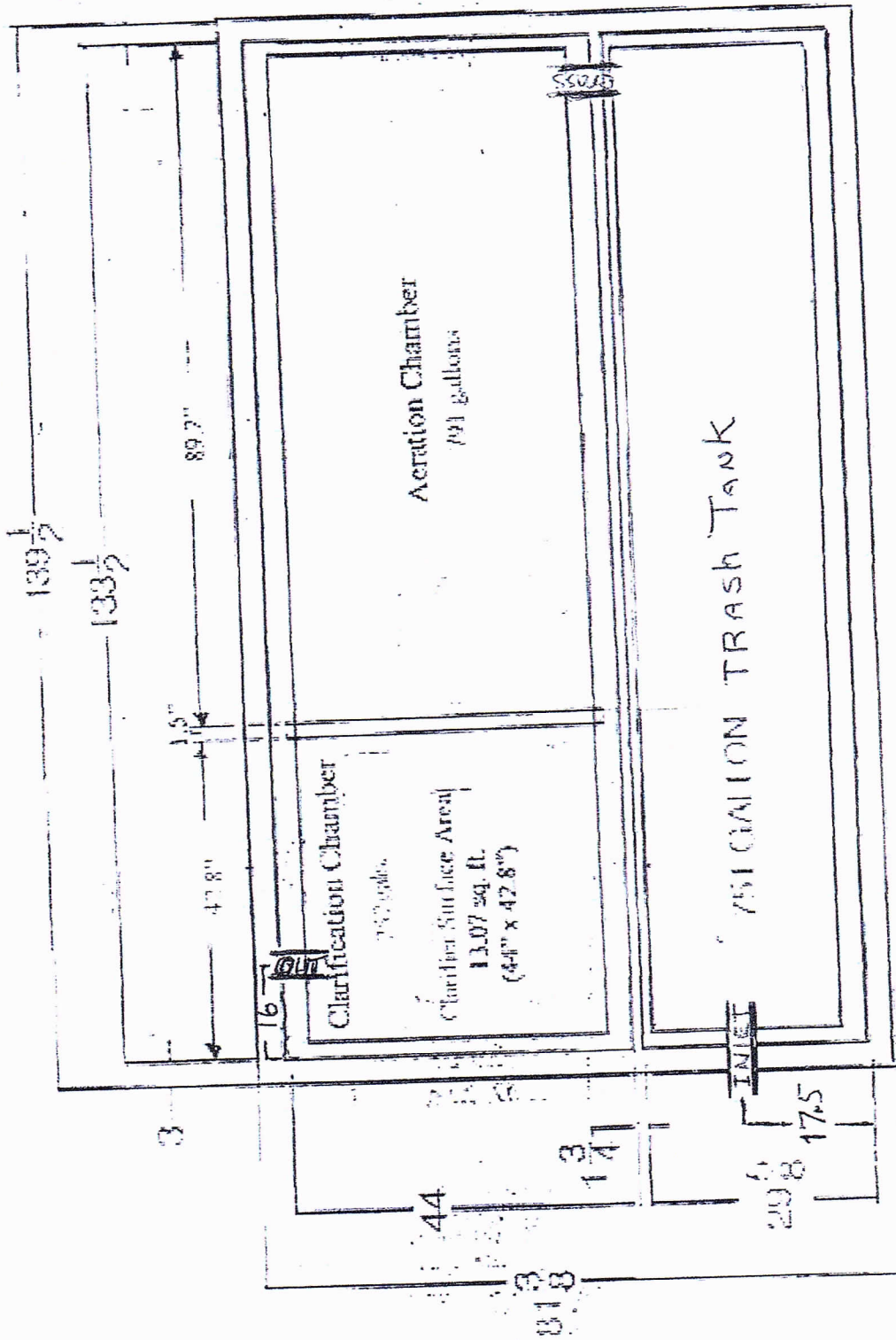
PUMP PERFORMANCE (Capacity in Gallons per Minute)

Pump Model	Flow Rate (GPM)	PSI											
		0	10	20	30	40	50	60	70	80	90	100	110
10DOM05221	10			15.0	13.7	12.7	11.5	10.2	8.4	6.5	4.3	1.0	
10DOM05121	10			15.0	13.7	12.7	11.5	10.2	8.4	6.5	4.3	1.0	
20DOM05221	20			30.0	26.0	21.5	14.2	4.4					
20DOM05121	20			30.0	26.0	21.5	14.2	4.4					
30DOM05221	30		38.5	33.3	25.8	16							
30DOM05121	30		38.5	33.3	25.8	16							
20DOM05221+1	20 + 1			30	27.5	24	20	13.5	6				
20DOM05121+1	20 + 1			30	27.5	24	20	13.5	6				

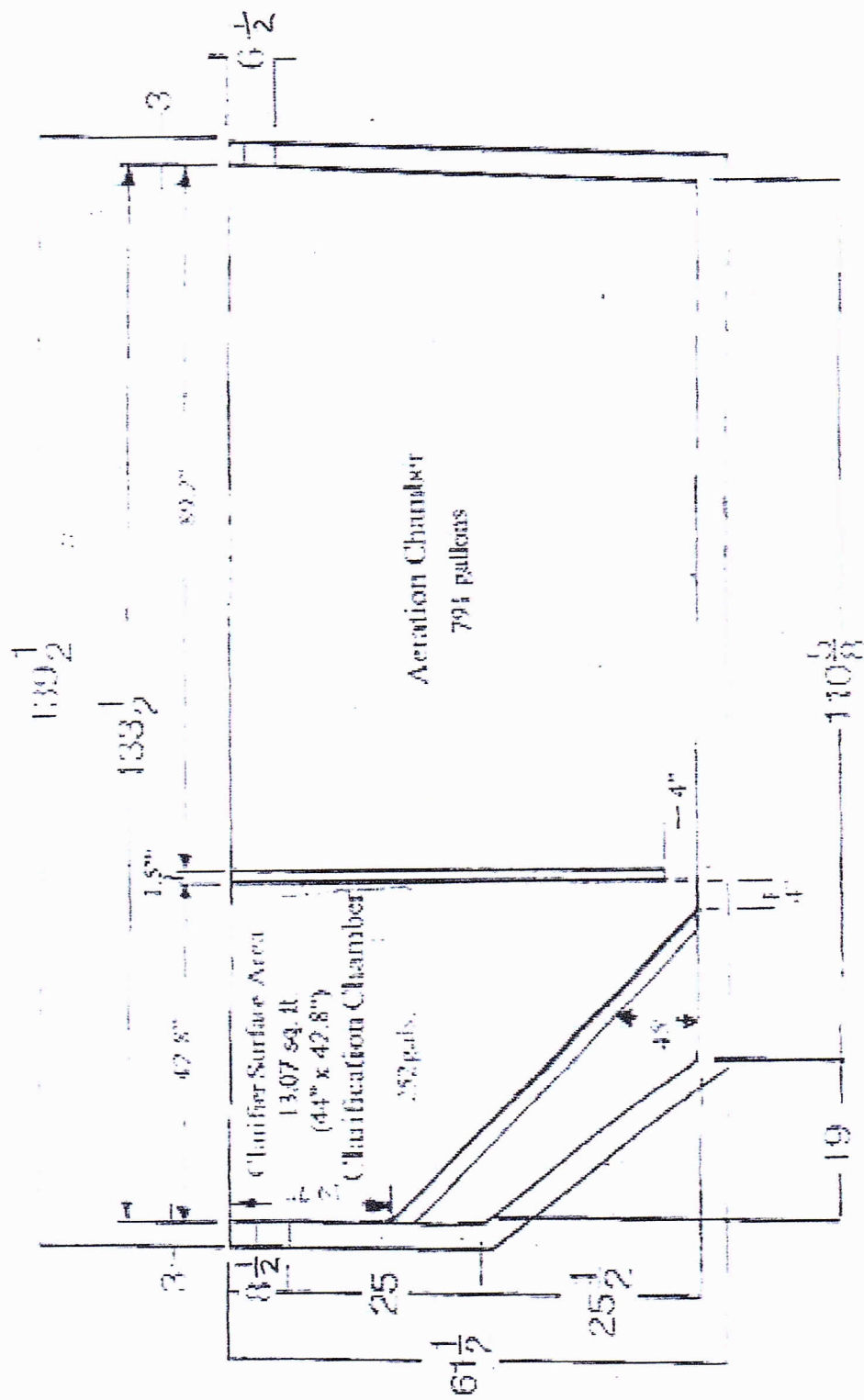
PUMP PERFORMANCE (Capacity in Liters per Minute)

Pump Model	Flow Rate (LPM)	Bar											
		0	.69	1.38	2.07	2.76	3.45	4.13	4.82	5.51	6.20	6.89	7.58
10DOM05221	37.85		56.8	51.9	48.1	43.5	38.6	31.8	24.6	16.3	3.8		
10DOM05121	37.85		56.8	51.9	48.1	43.5	38.6	31.8	24.6	16.3	3.8		
20DOM05221	75.7		113.6	98.4	81.4	53.7	16.7						
20DOM05121	75.7		113.6	98.4	81.4	53.7	16.7						
30DOM05221	113.55	145.7	126.0	97.7	60.6								
30DOM05121	113.55	145.7	126.0	97.7	60.6								
20DOM05221+1	75.7 + 1			113.4	103.9	90.7	75.6	51.0	22.6				
20DOM05121+1	75.7 + 1			113.4	103.9	90.7	75.6	51.0	22.6				

AK10PT-AK800AC

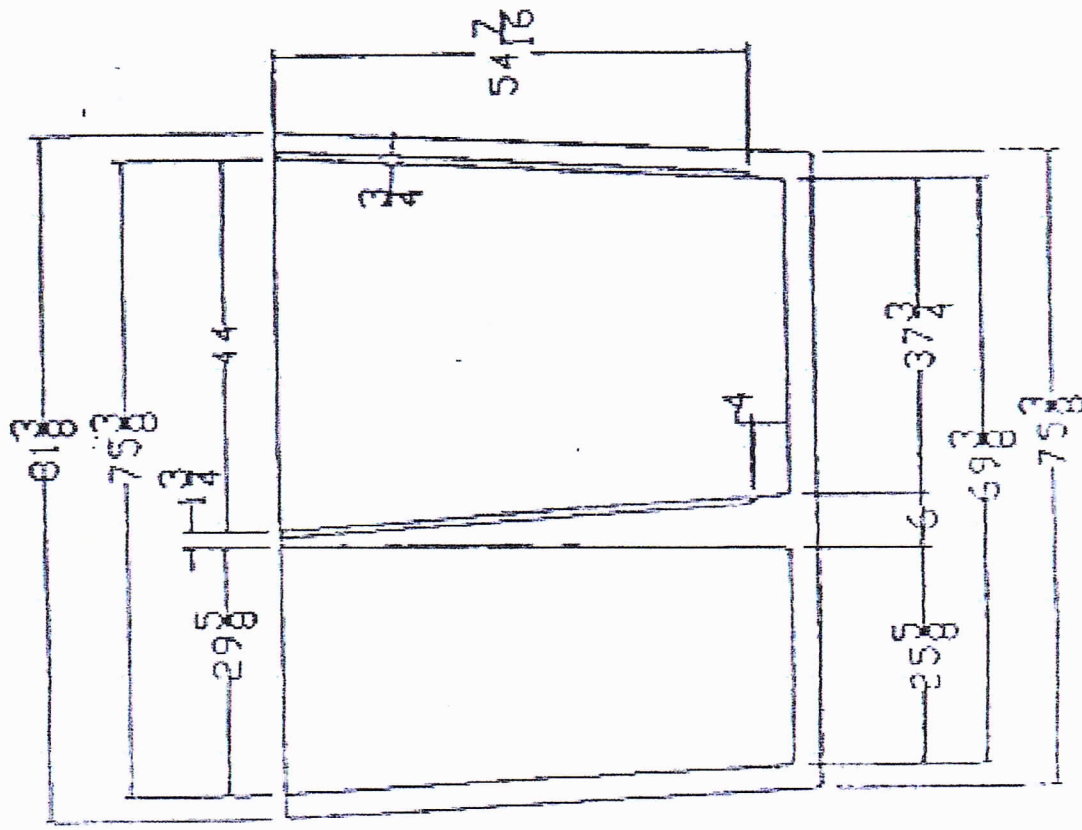


AK10PT
AK800CA



Side View

AK10PT



End View

11003-RCW

K-RAIN PROPLUS™ RCW

MODELS

11003-RCW

ProPlus Standard

EASY ARC SETTING

Arc Selection 40° to Continuous 360°



Adjust From Left Stop

SPECIFICATIONS

- Inlet: 3/4" Threaded NPT
- Arc Adjustment Range: 40° to Continuous 360°
- Flow Range: 1.5 - 8.6 GPM
- Pressure Rating: 7 - 70 PSI
- Precipitation Rate: .02 to 1.7 Inches Per Hour (Depending on Spacing and Nozzle Used)
- Overall Height (Popped Down): 7 1/2"
- Recommended Spacing: 22' to 40'
- Radius: 22' to 44'
- Low Angle Nozzle Trajectory: 12°
- Low Angle Nozzle: Installed 3 GPM
- Riser Height: 5"

PROPLUS RCW PERFORMANCE DATA

LOW ANGLE DATA

Nozzle	Pressure PSI	Radius Ft.	Flow GPM
#1	30	22'	1.5
	40	24'	1.7
	50	26'	1.8
	60	28'	2.0
#3	30	29'	3.0
	40	32'	3.1
	50	35'	3.5
	60	37'	3.8
#4	30	31'	3.4
	40	34'	3.9
	50	37'	4.4
	60	38'	4.7
#6	40	38'	6.5
	50	40'	7.3
	60	42'	8.0
	70	44'	8.6

METRIC

Nozzle	Pressure kPa Bars	Radius Meters	Flow Rate L/M M ³ /H
#1	207 2.04	6.71	5.67 .34
	275 2.72	7.32	6.43 .39
	344 3.40	7.92	6.80 .41
	413 4.08	8.53	7.56 .46
#3	207 2.04	8.84	11.34 .68
	275 2.72	9.75	11.72 .71
	344 3.40	10.67	13.23 .80
	413 4.08	11.28	14.36 .87
#4	207 2.04	9.45	12.85 .78
	275 2.72	10.36	14.74 .89
	344 3.40	11.28	16.63 1.00
	413 4.08	11.58	17.77 1.07
#6	275 2.72	11.58	24.57 1.68
	344 3.40	12.19	27.59 1.66
	413 4.08	12.80	30.24 1.82
	482 4.76	13.41	32.51 1.96