

Bureau of Environmental Health
8930 Stanford Boulevard, Columbia, MD 21045
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth

Maura J. Rossman, M.D., Health Officer

RECEIPT DATE: 12/30/15

ONSITE SEWAGE DISPOSAL SYSTEM

P 557955

APPROVAL DATE: 5/12/16



PERMIT:

CONSTRUCTION

A

PROPERTY ADDRESS: 11005 Blevins Drive

SUBDIVISION: Blevins Property

LOT: 1

TAX ID: 05-5977661

CONTRACTOR: Hatfield's Equipment

EMAIL: ken@hatfieldsequipment.com

CONTRACTOR ADDRESS: P.O. Box 519, Annapolis Junction, MD 20701

PHONE: 301-480-4289

CONTRACTOR CERTIFIED FOR BAT INSTALLATION:



MDE



MANUFACTURER:

PROPERTY OWNER: Williamsburg Group LLC

EMAIL: marinamorris@williamsburgllc.com

OWNER ADDRESS: 5485 Harpers Farm Road, Columbia, MD 21044

PHONE: 410-997-8800

NORWECO TNTLP-

BAT UNIT MODEL: 500GPD

PUMP SIZE: 0.4hp

PUMP TANK CAPACITY: 1500gal

OPERATION & MAINTENANCE AGREEMENT

DATE SIGNED: 5/13/16

7-2-15

DATE RECORDED: 5/13/16

7-2-15

DISTRIBUTION SYSTEM:



GRAVITY



PRESSURE DOSED

BEDROOMS: 5

APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>174</u>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>3</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>5.5</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	<u>2 x 87'</u>	

ISSUED BY: Robert Bricker

ISSUE DATE: 1-15-16

EXPIRATION DATE: 12/30/16

NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION

NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING

NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.

NOTE: WATERTIGHT SEPTIC TANKS REQUIRED

NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL

NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS

NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM



ELECTRICAL PERMIT ISSUED

E

NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.

NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.

CALL 410-313-1771 TO SCHEDULE INSPECTIONS.

NOT TO SCALE

See As-Built Drawing
On Separate Sheet

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH 3' INLET 4' BOTTOM 8'

NUMBER OF TRENCHES 2

TOTAL LENGTH 173'

ABSORPTION AREA 519+Sidewall

DISTRIBUTION BOX LEVEL Yes

DISTRIBUTION BOX BAFFLE Elbow

DISTRIBUTION BOX PORT Yes

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL Yes

MANUFACTURER Norweco

CAPACITY 1500 GAL

SEAM LOC Top

TANK LID DEPTH 3'

BAFFLES no

BAFFLE FILTER out & t

MANHOLE LOC Front/Back/Rear

6" PORT LOC none

WATERTIGHT TEST No

SLOTTED Yes

DATE ON LID 1-11-16

PUMP/SEPTIC TANK LEVEL Yes

MANUFACTURER Babylon

CAPACITY 1500 GAL

SEAM LOC Top

TANK LID DEPTH 3.5'

BAFFLES no

BAFFLE FILTER No

MANHOLE LOC Front

6" PORT LOC none

WATERTIGHT TEST No

SLOTTED no

DATE ON LID Dry

PRE-CONSTRUCTION:

2/18/2016 Install system similar to what is shown on plan. Two 87' trenches. Tank locations staked. (BB)

INSTALLATION: 3/3/16 4" Gandy sewer ran. Both tanks beginning to be set. Line under frost footer. Pump tank may be ~4' cover. (K) 3/3/16 Tanks set, plumbed, pump (1/2 HP pump) set on 3 1/2" blocks, RIDER installed. OK for use. (K) 3/4/2016 Pump line covered and not inspected. System finished. Need pump and alarm test and certification of Norweco system. (BB) 3/8/2016 Norweco certification received from Back River Pre-Cast. (BB) 5/5/16 On site for pump + alarm. 5' cover over pump tank. Norweco alarm sounds + aerator runs. Alarm sounds, pump pumps effluent to D-box. Williamsburg Homes must fix grade over tanks prior to permit approval. (S) 5/12/16 Grade adjusted over tanks: 3' over Norweco, 3.5' over pump tank. (S)

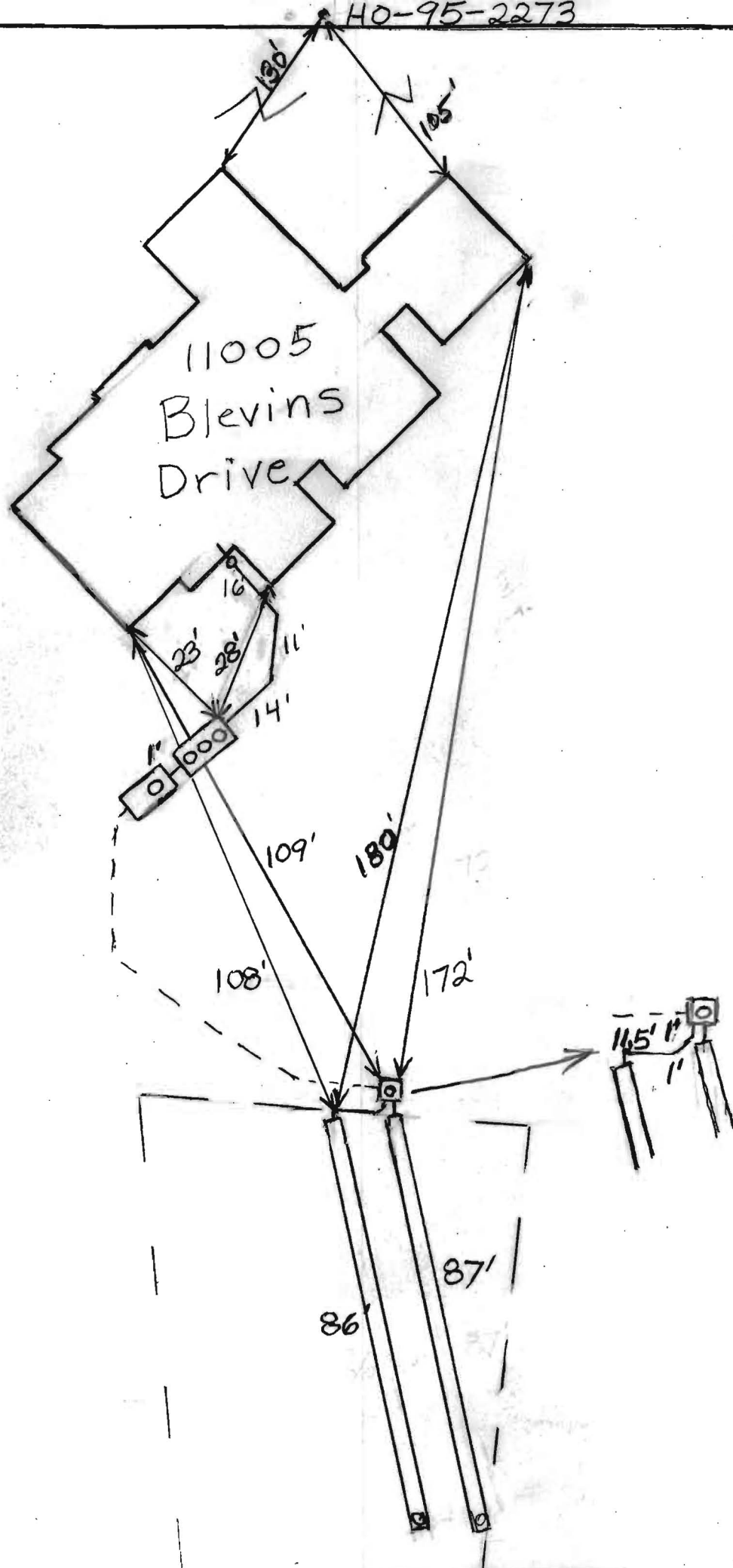
FINAL INSPECTOR

Sarah Colhrs

DATE OF APPROVAL

5/12/16

HO-95-2273



1. THIS PLAT IS A BENEFIT TO THE CONSUMER ONLY INsofar AS IT IS REQUIRED BY A LENDER OR A TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH CONTEMPLATED TRANSFER, FINANCING OR REFINANCING PURPOSES. THIS PLAT IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATION OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE STRUCTURES. THIS PLAT DOES NOT PROVIDE FOR THE ACCURATE IDENTIFICATION OF PROPERTY BOUNDARY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR FOR SECURING FINANCING OR REFINANCING.
2. THE +/- SETBACK ACCURACY IS 1 FOOT.
3. THIS PLAN OR PLAT IS NOT INTENDED TO SHOW ALL MATTERS RELATED TO THE PROPERTY SHOWN HEREON.
4. B.R.L. = BUILDING RESTRICTION LINE

WALL CHECK: 11-30-2015
TOP OF WALL ELEV. = 479.7'

DETAIL
SCALE: 1"=30'

LOT 1
3.0000 AC.±

—PUBLIC FOREST-
CONSERVATION
EASEMENT 4

—PRIVATE
SEWAGE
EASEMENT

10' PUBLIC TREE
MAINTENANCE
EASEMENT

LOCATION DRAWING
11005 BLEVINS DRIVE
LOT 1
EVINS PROPERTY
LOTS 1 THRU 8
& NON-BUILDABLE PARCEL 'A'
ELECTION DISTRICT NO. 5
HOWARD COUNTY, MARYLAND

THIS LOT DOES NOT APPEAR TO LIE WITHIN THE 100 YEAR FLOOD PLAIN AS SHOWN ON THE F.E.M.A. FLOOD HAZARD MAP 24015C-0152-E AS REVISED MAY 4, 2015.

HEREBY CERTIFY THAT I WAS IN RESPONSIBLE CHARGE
OVER THE PREPARATION OF THIS LOCATION DRAWING AND
THE SURVEY WORK REFLECTED INT, IS IN COMPLIANCE WITH
REQUIREMENTS SET FORTH IN THE CODE OF MICHIGAN AND TITLE
9, SUBTITLE 13, CHAPTER 05, REGULATION 13, AND THE
POSITION OF EXISTING IMPROVEMENTS AS SHOWN THEREON,
ARE CORRECT, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

MICHAEL D. ADCOCK
PROFESSIONAL LAND SURVEYOR
NO. 21257, EXPIRATION DATE: 06-16-2017

Adcock &
Associates · LLC

Engineers · Surveyors · Planners

3300 North Ridge Road, Suite 160
Ellicott City, Maryland 21043
Phone: 443.325.7682 Fax: 443.325.7685
Email: mike@saaland.com

REFERENCE:

PLAT NO. 23200

DATE:

DECEMBER 2, 2015

SCALE:

$$1'' = 100'$$

FILE NO.:

11-054

Back River Pre-Cast, LLC

PO BOX 329
Glyndon, MD 21071
Phone # 410-833-3394
Fax # 410-833-4116

Letter of Certification

This is to certify that the Norweco Singulair TNT 600 GPD Septic Tank installed at 11005 Blevins Dr., Clarksburg, MD 21029 March 3, 2016 was installed according to the manufacture's specifications.

Installer: Jeff Reiter

Property Owner: Williamsburg Group

Permit #

THIS CERTIFICATION IS FOR INSTALLATION ONLY. THE 5-YEAR OPERATIONS & MAINTENANCE AGREEMENT FROM DATE OF INSTALLATION WILL ONLY GO INTO EFFECT AFTER BACK RIVER PRE-CAST, LLC RECEIVES FINAL AND FULL PAYMENT FOR THE SYSTEM.



MATTHEW GECKLE
Vice-President

Back River Pre-Cast, LLC

PO BOX 329
Glyndon, MD 21071
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MATTHEW GECKLE
Vice-President



16307 FOLIO 049

Bureau of Environmental Health

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Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

000355

Maura J. Rossman, M.D., Health Officer

OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM

THIS AGREEMENT is made this 20th day of July, 2015, among Mohammed + Tayyara Khan, hereinafter collectively referred to as "Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at Lot 1 11005 Blewins Drive, Clarksville, in the Election District of Howard County, Maryland, and the deed to same is recorded or shall be recorded among the Land Records of Howard County, Maryland in Liber 1576 Folio 325.

WHEREAS, The Lot is suitable for the installation of a conventional on-site sewage disposal system with an advanced pre-treatment system, utilizing best available technology to perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07, effective January 1, 2013. The pre-treatment device being installed is NORWECO 600.

NOW, THEREFORE, the parties hereto agree as follows:

A. Owner hereby grants to the County the right to enter upon the Lot at any reasonable time for access to the system to make periodic inspections and the Owner agrees to provide any information and data in Owner's possession reasonably requested and needed by the County to develop accurate and thorough test results.

B. Owner acknowledges and agrees that neither the County nor any of its agents or employees, either officially or individually, underwrites the operation of any system approved by them.

C. The Owner will devote reasonable care and effort to the operation and maintenance of the system in perpetuity or until a public sewer connection is made so that a system malfunction is not the result of poor maintenance, faulty operation, or neglect.

D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County with a private entity to operate and maintain on a regularly scheduled basis an approved advanced pre-treatment system. The owner shall supply a copy of the contract to the County when it is renewed or altered.

E. This agreement shall run with the land and upon Owner's taking title to the Lot shall bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Lot that the system shall require

maintenance or other attention. Upon taking title to the Lot, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.

F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.

G. This agreement may be voided at any time at the discretion of the County.

H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated above.

Barb Khan 7/2/2015
Howard County Health Department

[Signature] 2-23-15
Owner #1 Signature Date
Bob Corbett
Williamsburg Group LLC
Owner #1 Print Name

[Signature] 6/27/15
Buyer #1 Signature Date
Mohammed Khan
[Signature] 6/27/15
Buyer #1 Print Name
Tayyaba Khan

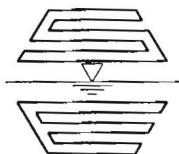
Owner #2 Signature Date

Owner #2 Print Name

Buyer #2 Signature Date

Buyer #2 Print Name

LR - Agreement
Recording Fee 20.00
Grantor/Grantee Name:
Khan
Reference/Control #:
159
LR - Agreement
Surcharge 40.00
Subtotal: 60.00
Total: 60.00
07/02/2015 12:20
4462261 C00503 -
Howard Co
Jolumbia/CC05.03.09 -
Printer 09
CC13-KD



11130 Dovedale Court, Suite 200
Marriottsville, MD 21104
Website: www.sillengineering.com
Civil Engineering for Land Development

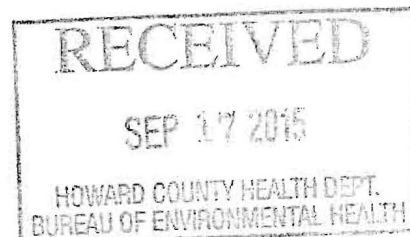
Office: 443-325-5076
Fax: 410-696-2022
Email: info@sillengineering.com

SILL ENGINEERING GROUP, LLC

April 20, 2015

Howard County Health Department
Bureau of Environmental Health
8390 Stanford Boulevard
Columbia, Maryland 21045

Attn: Mr. Jeff Williams



Re: Blevins Property
Lot 1
Pump Design

Dear Mr. Williams:

Please find below the Pump Design for this project. Based on this design we recommend:

- Norweco Singlair Model 500 or equivalent
- Meyers SRM4 series pump or equivalent
- C. R. Semler, Inc 1,500 gallon top seam tank or equivalent

- Design Flow: 750 GPD
- Diameter of Force Main: 2.0"
- Material: Schedule 40 PVC
- Dose Calculations:
 - Design Flow: 750 gpd
 - Length of force main:
 - 2.0" force main = 110.15'
 - Volume of force main:
 - 110.15' x 17.4 gallons per 100' = 19.2 gallons
 - Minimum dose is the greater of:
 - Volume of force main: 19.2
- Or
- 1/6th the design flow: 1/6 x 750 gallons = 125 gallons
- Use 125 gallons for dose
- Pump Design:
 - Pump flow required: 30 gpm
 - Dose amount: 125 gallons
 - Pump run time: 4.2 minutes
 - Static head (see profile for detail): 9.59' use 9.6'

- Friction head calculation (Table 4.3):

Pipe size	-	2.0"
1/4 Bend (90°)	-	1 @ 8.0' = 8.0'
1/8 Bend (45°)	-	4 @ 4.0' = 16.0'
1/16 Bend (22.5°)	-	-
1/32 Bend (11.25°)	-	-
Gate Valve	-	1 @ 1.3' = 1.3'
Standard Tee	-	-
Run Tee	-	-
Cross	-	-
Reducer	-	-
Couplings	-	4 @ 2.0' = 8.0'
Total Equivalent Length of pipe	-	33.3'

- Flow at 2.0" pipe = 30 gpm

- Friction loss per 100' (Table 4.4) of 2.0" schedule 40 plastic pipe: 1.54

- Total equivalent length of 2.0" Force Main and appurtenances =
 $110.15' + 33.3' = 143.45'$

- Friction loss in 2.0" pipe = $143.45' / 100 \times 1.54 = 2.2'$

- Total Friction Head = 2.2'

- Total Dynamic Head = Static head + Distal Head + Friction head

- $9.6' + 2.0' + 2.2' = 13.8'$ use 14.0'

• Pump Chamber Design:

- For pump tank dimensions and detail, see plans.

- Pump chamber elevations:

Proposed grade at top of tank (at inlet): 470.10

Top of pump tank: 468.51

Pump chamber invert in: 467.26

High Water Alarm: 464.71

Pump On: 464.21

Pump Off: 463.84

Bottom inside slab of tank: 462.18

- Pump Chamber volumes:

Invert In to Pump On: 147.05 cf or 1,100 gallons

Pump On to Pump Off: 16.95 cf or 125 gallons

Excess (High Water Alarm to underside of tank lid): 158.52 cf or 1186 gallons

OK
 reB
 10/21

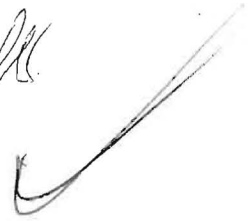
Blevins Property
Lot 1
April 20, 2015

Thank you for your consideration of this Pump Design. Should you have any questions or comments regarding this matter, please do not hesitate to contact this office.

Sincerely,
Sill Engineering Group, LLC

Kate Szallo

Kate Szallo

A large, stylized handwritten signature, likely of the same person as the one next to the typed name, written in dark ink.

