

**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](http://www.hchealth.org)  
 Facebook: [www.facebook.com/hocohealth](http://www.facebook.com/hocohealth)

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

RECEIPT DATE: 7-29-19 **ONSITE SEWAGE DISPOSAL SYSTEM** P 965575

APPROVAL DATE: 12/3/2019 **PERMIT: CONSTRUCTION** A \_\_\_\_\_

PROPERTY ADDRESS: 2385 Route 97

SUBDIVISION: Gue Property LOT: 97 TAX ID: 04-356926

cumberlanddevcustomhomes@gmail.com

CONTRACTOR: Curtis Cumberland EMAIL: com

CONTRACTOR ADDRESS: 2983 Duvall Road, Woodbine, MD 21797 PHONE: [REDACTED]

PROPERTY OWNER: Tod Gue EMAIL: \_\_\_\_\_

OWNER ADDRESS: 2385 Route 97, Cooksville, MD 21723 PHONE: \_\_\_\_\_

SEPTIC TANK SIZE (GALLONS): 1500 TANK MANUFACTURER: Babylon

PUMP MODEL: N/A PUMP SIZE N/A PUMP TANK CAPACITY: N/A

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 4 APPLICATION RATE: 0.8

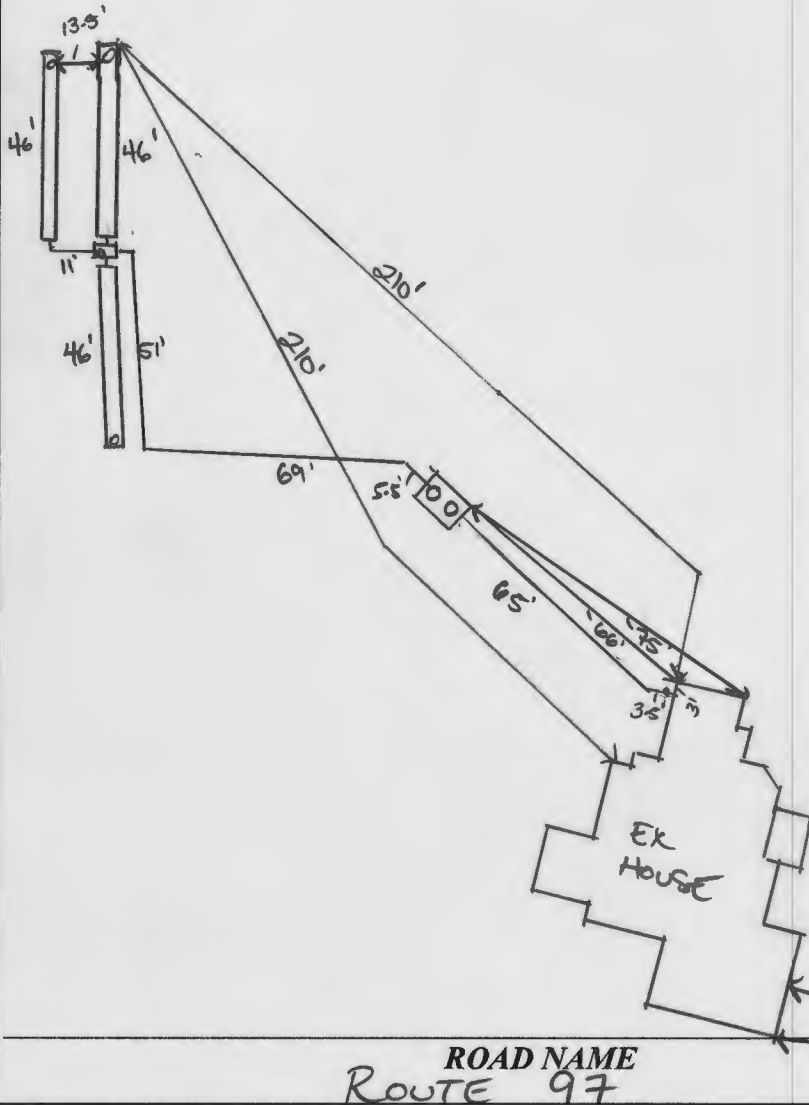
TRENCHES:	LINEAR FEET REQUIRED: <u>166.50 / 136.5</u> <sup>Ⓚ</sup>	INLET DEPTH: <u>4</u>
	TRENCH WIDTH: <u>2</u>	MAXIMUM BOTTOM DEPTH: <u>7</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>4</u>
LOCATION:	PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND TANK LOCATIONS MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.	
NOTES:	Pre-construction meeting required.  TYPD ON PERMIT. LINEAR FEET TO MATCH ENGINEER PLAN SIGNED 11/13/2018 FOR 3 X 45.5' TRENCHES <sup>Ⓚ</sup>	

ISSUED BY: Robert Freemon ISSUE DATE: 7-29-19 EXPIRATION DATE: 7-29-20

- 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 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 N/A
- 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



**TRENCH/DRAINFIELD DATA**

WIDTH	INLET	BOTTOM
2'	4'	7'
NUMBER OF TRENCHES		3
TOTAL LENGTH		138 F
ABSORPTION AREA		276 SF + SIDE WALL
DISTRIBUTION BOX LEVEL		SPEED
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

**SEPTIC TANK DATA**

SEPTIC TANK 1 LEVEL	YES
MANUFACTURER	BABYLON
CAPACITY	1500 GAL
SEAM LOC	TOP
TANK LID DEPTH	3.5'
BAFFLES	YES
BAFFLE FILTER	NO
MANHOLE LOC	FRONT/BACK
6" PORT LOC	-
WATERTIGHT TEST	-
SLOTTED	YES
DATE ON LID	08/24/2019

**PUMP/SEPTIC TANK LEVEL**

MANUFACTURER	
CAPACITY	GAL
SEAM LOC	
TANK LID DEPTH	
BAFFLES	
BAFFLE FILTER	
MANHOLE LOC	
6" PORT LOC	
WATERTIGHT TEST	
SLOTTED	
DATE ON LID	

16-95-2484

**PRE-CONSTRUCTION:**

08/01/2019 TANK, SDA, AND TRENCHES STAKED TO UNAPPROVED PLAN. TANK LOCATION OK. TO LAY OUT TRENCHES ON ANOTHER LAYOUT CANNOT MAKE FALL TO TOP OF SDA. INSTALL SYSTEMS BOTTOM OF SDA, UP. MAY NEED PUMP TANK IN LATER REPLACEMENT SYSTEMS  
 08/02/2019 CONFIRMED CONTOUR OF TRENCHES.

**INSTALLATION:**

08/02/2019 TANK SET, SEWER LINE INSTALLED (PM) PIPE INSTALLED TO BEND AROUND HING. TRENCHES BEING DIG, TWO DISTAL. 7' DEEP. REINSPECT BAFFLES ON TANK. (+) C/A COVERING BAFFLES. TO SEND PICTURES (+) 12/3/2019 PICTURES OF BAFFLES SENT. OK TO FINISH (+)

FINAL INSPECTOR

DATE OF APPROVAL

12/3/2019



# HOWARD COUNTY HEALTH DEPARTMENT

65575

DATE 7/29/19

P5

Received From

Cumberland

PHONE # 301 370-4145

Development Custom Homes

For

Septic Permit - 2385 RT 97

- CASH
- CHECK

NO.

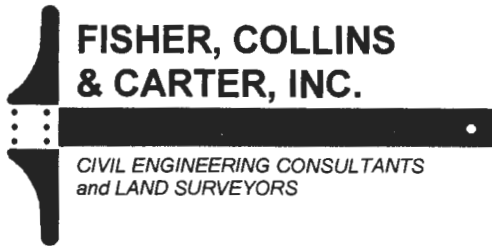
1739

Three hundred ninety-five Dollars

\$ 395.00

Received By

J King



**FISHER, COLLINS  
& CARTER, INC.**

CIVIL ENGINEERING CONSULTANTS  
and LAND SURVEYORS

Terrell A. Fisher, P.E., L.S.  
Earl D. Collins, P.E.  
Charles J. Crovo, Sr. P.E., L.S.

Paul W. Kriebel, P.E.  
Mark L. Robel, P.L.S.  
Aldo M. Vitucci, P.E.

# Transmittal

Via:  Fax  Mail  Messenger  E-Mail  To Be Picked Up  
 Fax (original to follow via U.S. Mail)

To: **CUMBERLAND DEV. CUSTOM HOMES**  
**2983 DUVALL ROAD**  
**WOODBINE, MD 21797**

Attn: **CURTIS CUMBERLAND**  
Fax: **N/A**  
Phone: **(301) 252-1122**

From: **MARK L. ROBEL**

CC:

Re: **MD RTE 97**

W.O.# **17041-6001**

Date: **DECEMBER 26, 2018**

Pages: **2** **Page(s) Including this cover**

We are forwarding:  Prints  Copy of Letter  Specifications  Shop drawings  Other  
 Urgent  For your use  As requested  For Review & Comment

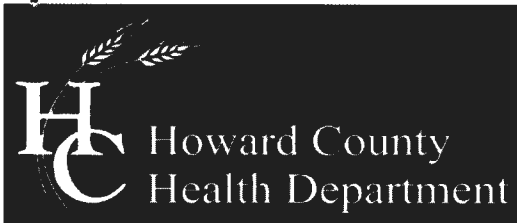
Remarks:

**PLEASE FIND THE ATTACHED FOUNDATION LOCATION SURVEY FOR PATRICKS PLACE  
OFF OF MD ROUTE #97.**

**YOU HAVE ANY QUESTIONS OR COMMENTS, PLEASE DO NOT HESITATE TO CALL**

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Twitter: HowardCoHealthDep

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

MEMORANDUM

TO: Aldo Michael Vitucci
Fisher, Collins & Carter, Inc.
10272 Baltimore National Pike
Ellicott City, MD 21042

FROM: Robert Freemon
Well & Septic Program

RE: 2385 Rt. 97
Cooksville, MD 21723
"Septic Plan Comments"

DATE: 10/26/2018

I have reviewed the septic plan for 2385 Rt. 97 and here are my comments.

- Septic tank must be a two chamber tank. Center wall must have a slot 2 inches in height and 4 feet wide for the effluent to flow through. This center wall should split the tank in to a 2/3rds section and a 1/3rd section.
Label all existing structures on the property along with "To Remain" or "To Be Removed".
Alternate well sites must be visible. Symbol representing the existing well should be used to show the existing well on the "Plan".
Clearly label trenches as to which are the initial and which are replacements. Whole trenches should be shown as whole trenches. Showing sections of a trench that is actually whole will be confusing.
There are more trenches shown on the "Plan" than are described in the system calculations.
Put the well tag number next to the existing well.
Shown the sqft of the SDA.
Pull the trenching systems south up to the edge of the SDA. The space between the SDA edge and proposed trenches is being wasted.
"Plan" needs to clearly show which line is the septic line and which line is the drywell line at the eastern most corner of the house. It is hard to tell which line is which.
Make sure each section of the septic plan (Plan, Initial Trench Detail and Septic Profile) correspond with one another. There are multiple differences in elevations between the three.

Remove Note 3

- Labelled existing on the plan
- Trench detail is to be removed

## **Freemon, Robert**

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**From:** Freemon, Robert  
**Sent:** Friday, October 26, 2018 4:06 PM  
**To:** 'Stephanie Tuite'  
**Cc:** 'Tony Fertitta'; 'CDCH'  
**Subject:** RE: 2385 Route 97  
**Attachments:** 2385 Rt. 97.pdf

Hi,  
Attached are my comments for 2385 Rt. 97. If you have any questions let me know.

**Robert "Spencer" Freemon**  
**Howard County Health Department**  
**8930 Stanford Blvd. Columbia, MD 21045**  
**Bureau of Environmental Health**  
**Well and Septic Program**  
**Phone: 410-313-6357**  
**Email: [rfreemon@howardcountymd.gov](mailto:rfreemon@howardcountymd.gov)**  
**Website: <https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>**

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**From:** Stephanie Tuite [<mailto:Stephanie@fcc-eng.com>]  
**Sent:** Friday, October 26, 2018 1:27 PM  
**To:** Freemon, Robert  
**Subject:** RE: 2385 Route 97

Ok. Thanks very much, I got the impression that I just didn't have the comments. Have a good weekend.

Steph

Stephanie Tuite, RLA, PE, LEED AP BD&C  
FISHER, COLLINS & CARTER, INC.

---

**From:** Freemon, Robert <[rfreemon@howardcountymd.gov](mailto:rfreemon@howardcountymd.gov)>  
**Sent:** Friday, October 26, 2018 1:25 PM  
**To:** Stephanie Tuite <[Stephanie@fcc-eng.com](mailto:Stephanie@fcc-eng.com)>  
**Subject:** RE: 2385 Route 97

Yes I will be taking a look at it today and getting back to you and Mr. Cumberland.

**Robert "Spencer" Freemon**  
**Howard County Health Department**  
**8930 Stanford Blvd. Columbia, MD 21045**  
**Bureau of Environmental Health**  
**Well and Septic Program**  
**Phone: 410-313-6357**  
**Email: [rfreemon@howardcountymd.gov](mailto:rfreemon@howardcountymd.gov)**  
**Website: <https://www.howardcountymd.gov/Departments/Health/Environmental-Health/Well-and-Septic>**

**FISHER, COLLINS  
& CARTER, INC.**

**CIVIL ENGINEERING CONSULTANTS  
and LAND SURVEYORS**

# Transmittal

Terrell A. Fisher, P.E., L.S.  
Earl D. Collins, P.E.  
Charles J. Crovo, Sr., P.E., L.S.

Paul W. Kriebel, P.E.  
Mark L. Robel, P.L.S.  
Aldo M. Vitucci, P.E.  
Frank Manalansan II, L.S.  
Stephanie Tuite, RLA, P.E., LEED AP BD&C

Via:  Fax  Mail  Messenger  E-Mail  To Be Picked Up  
 Fax (original to follow via U.S. Mail)

To: <b>Bureau of Environmental Health</b> <b>8930 Stanford Blvd.</b> <b>Columbia, Maryland 21046-4544</b>	Attn: <b>Spencer</b> Fax: Phone: <b>410-313-2640</b>
---	--

From: <b>Tony Fertitta</b>	CC:
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Re: <b>2385 Maryland Route 97</b>	W.O.# <b>17041-6001</b>
Date: <b>October 30, 2018</b>	Pages: <b>0</b> <b>Page(s) Including this cover</b>

We are forwarding: <input checked="" type="checkbox"/> Prints <input type="checkbox"/> Copy of Letter <input type="checkbox"/> Specifications <input type="checkbox"/> Shop drawings <input type="checkbox"/> Other
<input type="checkbox"/> Urgent <input type="checkbox"/> For your use <input type="checkbox"/> As requested <input checked="" type="checkbox"/> For Review & Comment

Remarks:

**Re: 2385 Maryland Route 97.**

**Here are 3 new copies of the OSDS for 2385 Maryland Route 97. Please let me know if you have any questions.**

**Thank You,**

**Tony.**

**Fisher, Collins, & Carter, Inc. Ph. 410-461-2855**

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# Transmittal

Via:  Fax  Mail  Messenger  E-Mail  To Be Picked Up  
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B18003198

To: <b>Bureau of Environmental Health</b> <b>8930 Stanford Blvd.</b> <b>Columbia, Maryland 21046-4544</b>	Attn: <b>Mark Spencer</b> Fax: Phone: <b>410-313-2640</b>
---	---

From: <b>Tony Fertitta</b>	CC:
----------------------------	-----

Re: <b>2385 Maryland Route 97</b>	W.O.# <b>05106-3003</b>
Date: <b>October 12, 2018</b>	Pages: <b>0</b> <b>Page(s) Including this cover</b>

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	<input type="checkbox"/> Urgent	<input type="checkbox"/> For your use	<input type="checkbox"/> As requested	<input checked="" type="checkbox"/> For Review & Comment	

Remarks:

**Re: 2385 Maryland Route 97.**

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**Thank You,**

**Tony.**

**Fisher, Collins, & Carter, Inc. Ph. 410-461-2855**

*Completed  
CC to  
Frank*

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# FISHER, COLLINS & CARTER, INC.

CIVIL ENGINEERING CONSULTANTS  
and LAND SURVEYORS

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---	--

From: <b>Tony Fertitta</b>	CC:
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Re: <b>2385 Maryland Route 97</b>	W.O.# <b>17041-6001</b>
Date: <b>November 12, 2018</b>	Pages: <b>0</b> Page(s) Including this cover

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Remarks:

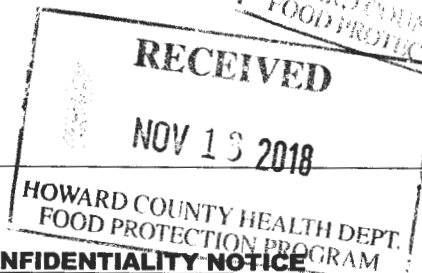
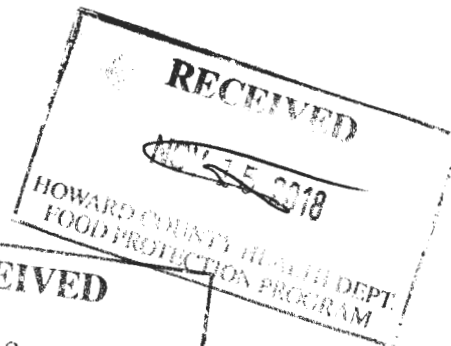
Re: **2385 Maryland Route 97.**

Here are 3 new copies of the OSDS for 2385 Maryland Route 97. Please let me know if you have any questions.

Thank You,

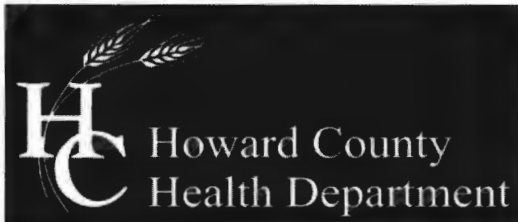
Tony.

Fisher, Collins, & Carter, Inc. Ph. 410-461-2855



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Twitter: HowardCoHealthDep

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

**MEMORANDUM**

TO: Aldo Michael Vitucci  
Fisher, Collins & Carter, Inc.  
10272 Baltimore National Pike  
Ellicott City, MD 21042

FROM: Robert Freemon *RF*  
Well & Septic Program

RE: 2385 Rt. 97  
Cooksville, MD 21723  
"Septic Plan Comments"

DATE: 11/5/2018

I have reviewed the septic plan for 2385 Rt. 97 and here are my comments.

- x • Septic tank must be a two chamber tank. Center wall must have a slot 2 inches in height and 4 feet wide for the effluent to flow through. This center wall should split the tank in to a 2/3<sup>ds</sup> section and a 1/3<sup>rd</sup> section.
- x • Clearly label trenches as to which are the initial and which are replacements. Whole trenches should be shown as whole trenches. Showing sections of a trench that is actually whole will be confusing.
- x • Show the sqft of the SDA.
- x • Make sure each section of the septic plan (Initial Trench Detail, 2<sup>nd</sup> Replacement System and Trench Data) corresponds with one another.

11/9/18 Forwarded this memo again to FCC and Curtis since comments were not addressed. R/14

Included trenches needing to be shifted to top of SDA.

**FISHER, COLLINS  
& CARTER, INC.**

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---	--

From: <b>Tony Fertitta</b>	CC:
----------------------------	-----

Re: <b>2385 Maryland Route 97</b>	W.O.# <b>17041-6001</b>
Date: <b>November 6, 2018</b>	Pages: <b>0</b> <b>Page(s) Including this cover</b>

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---

Remarks:

**Re: 2385 Maryland Route 97.**

**Here are 3 new copies of the OSDS for 2385 Maryland Route 97. Please let me know if you have any questions.**

**Thank You,**

**Tony.**

**Fisher, Collins, & Carter, Inc. Ph. 410-461-2855**

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1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. THE WELL HO-95-2484 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
4. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

**INITIAL SYSTEM**

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 3 BEDROOMS  
 LOADING RATE = 3 BEDROOMS X 150 GPD/BEDROOM = 450 GPD  
 APPLICATION RATE = 0.8  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 7 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 450 GPD / 0.8 = 562.5 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2 \times 3)) = 0.444$   
 TRENCH LENGTH = 562.5 SF X 0.444/2 = 124.9 FEET  
 (USE 3 TRENCHES AT 41.7 L.F.)  
 TRENCH SPACING = 2D+W = ((2x3) + 2) = 8' USE 10'

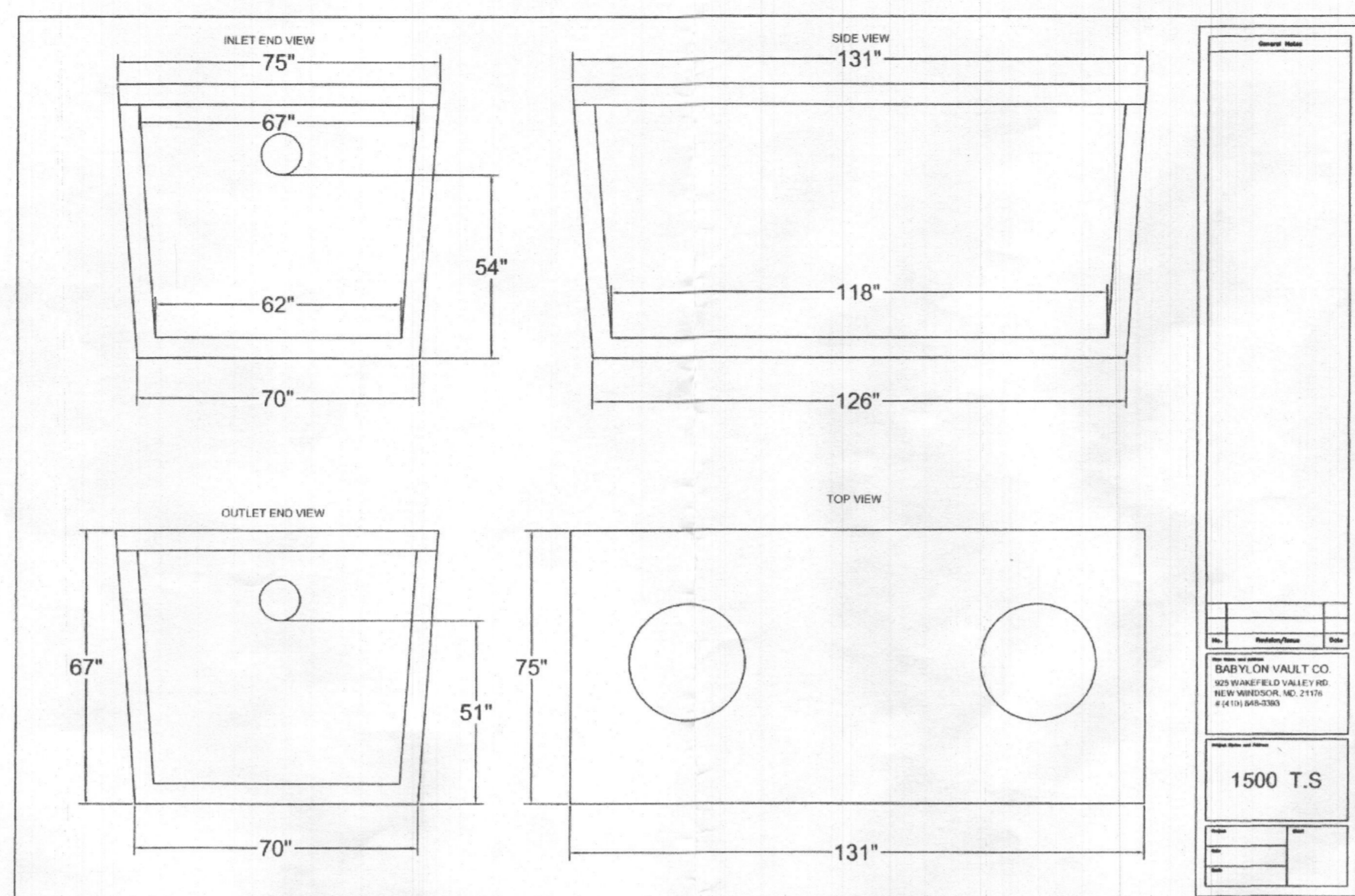
**1ST REPLACEMENT SYSTEM**

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 3 BEDROOMS  
 LOADING RATE = 3 BEDROOMS X 150 GPD/BEDROOM = 450 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 7 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 450 GPD / 1.2 = 375 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2 \times 3)) = 0.444$   
 TRENCH LENGTH = 375 SF X 0.444/2 = 83.3 FEET  
 (USE 2 TRENCHES AT 41.25 L.F.)  
 TRENCH SPACING = 2D+W = ((2x3) + 2) = 8' USE 10'

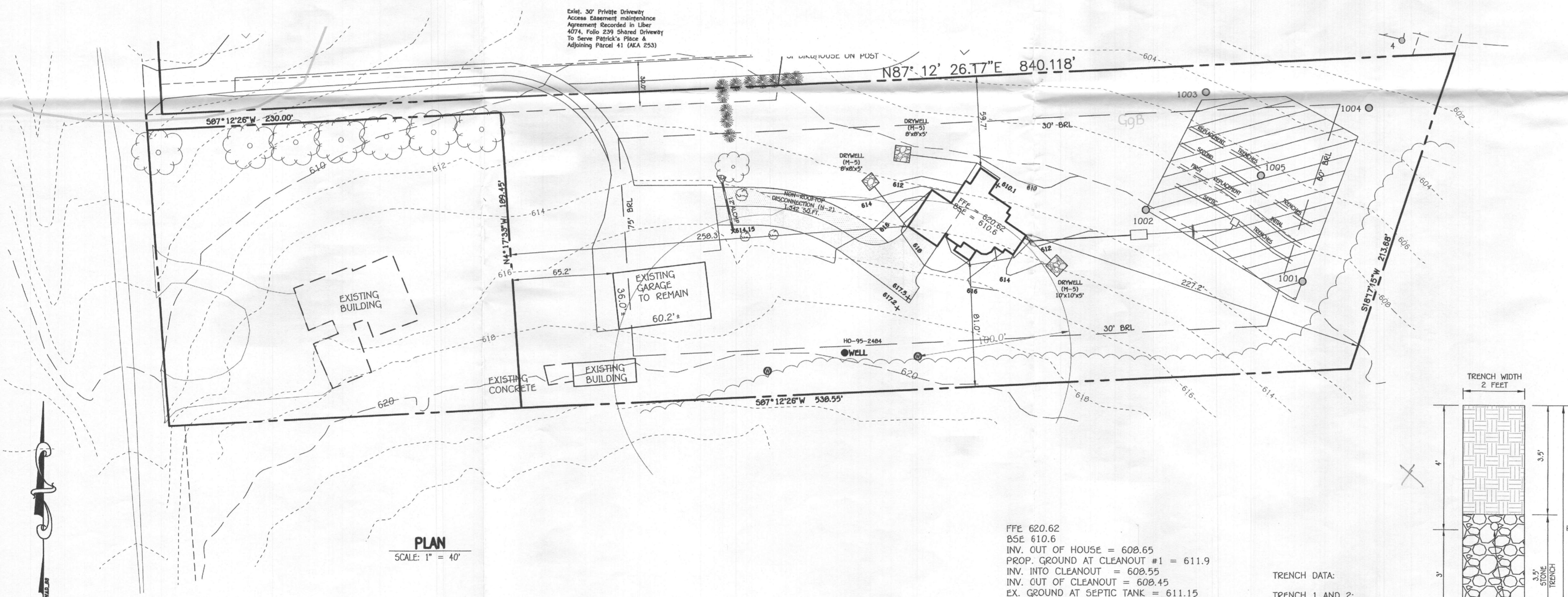
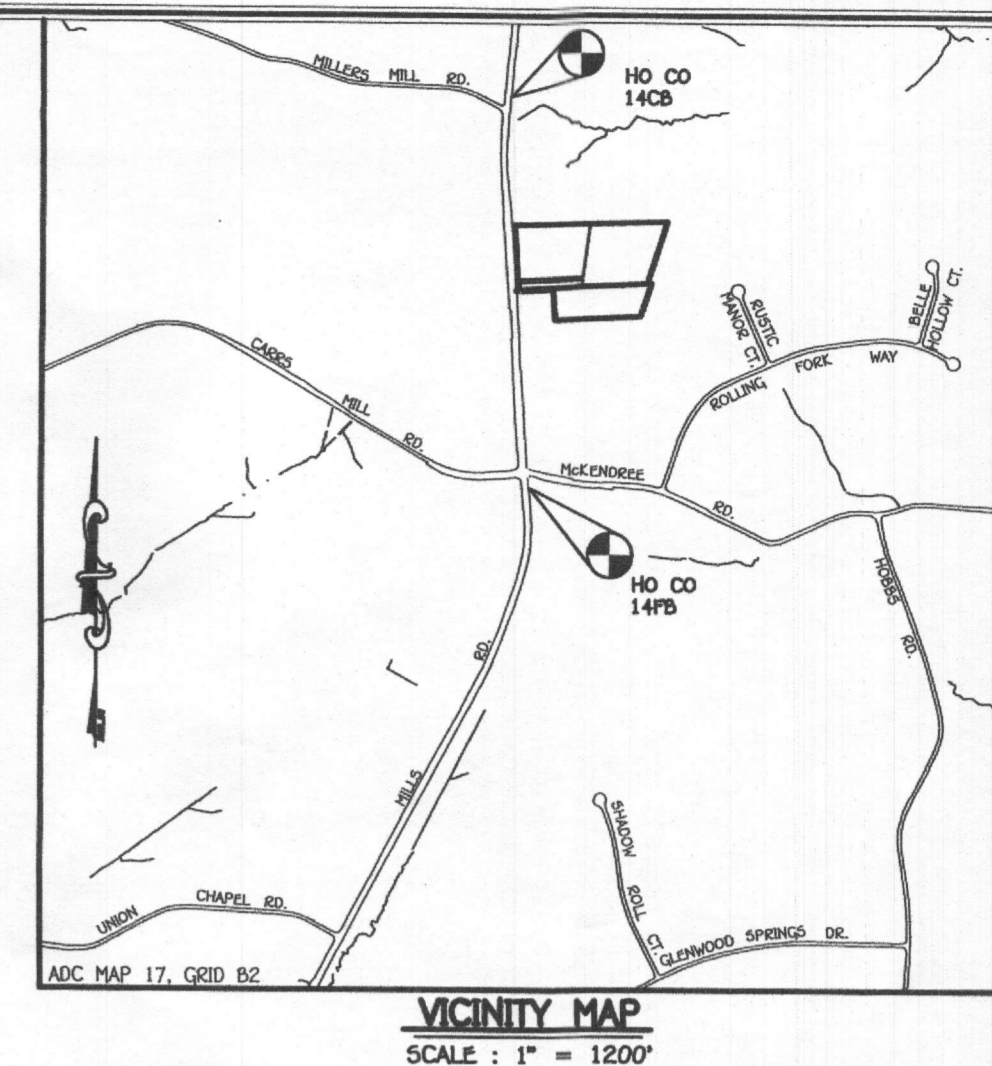
**2ND REPLACEMENT SYSTEM**

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 3 BEDROOMS  
 LOADING RATE = 3 BEDROOMS X 150 GPD/BEDROOM = 450 GPD  
 APPLICATION RATE = 0.8  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 8 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 4 FEET  
 SF OF DRAINFIELD = 450 GPD / 0.8 = 562.5 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2 \times 4)) = 0.364$   
 TRENCH LENGTH = 562.5 SF X 0.364/2 = 51.2 FEET  
 (USE 2 TRENCHES AT 39.09 L.F.)  
 TRENCH SPACING = 2D+W = ((2x4) + 2) = 10' USE 10'

*Handwritten calculations:*  
 $150 \times 3 = 450$   
 $450 / 0.8 = 562.5$   
 $562.5 / 2 = 281.25$   
 $281.25 \times 0.364 = 101.25$



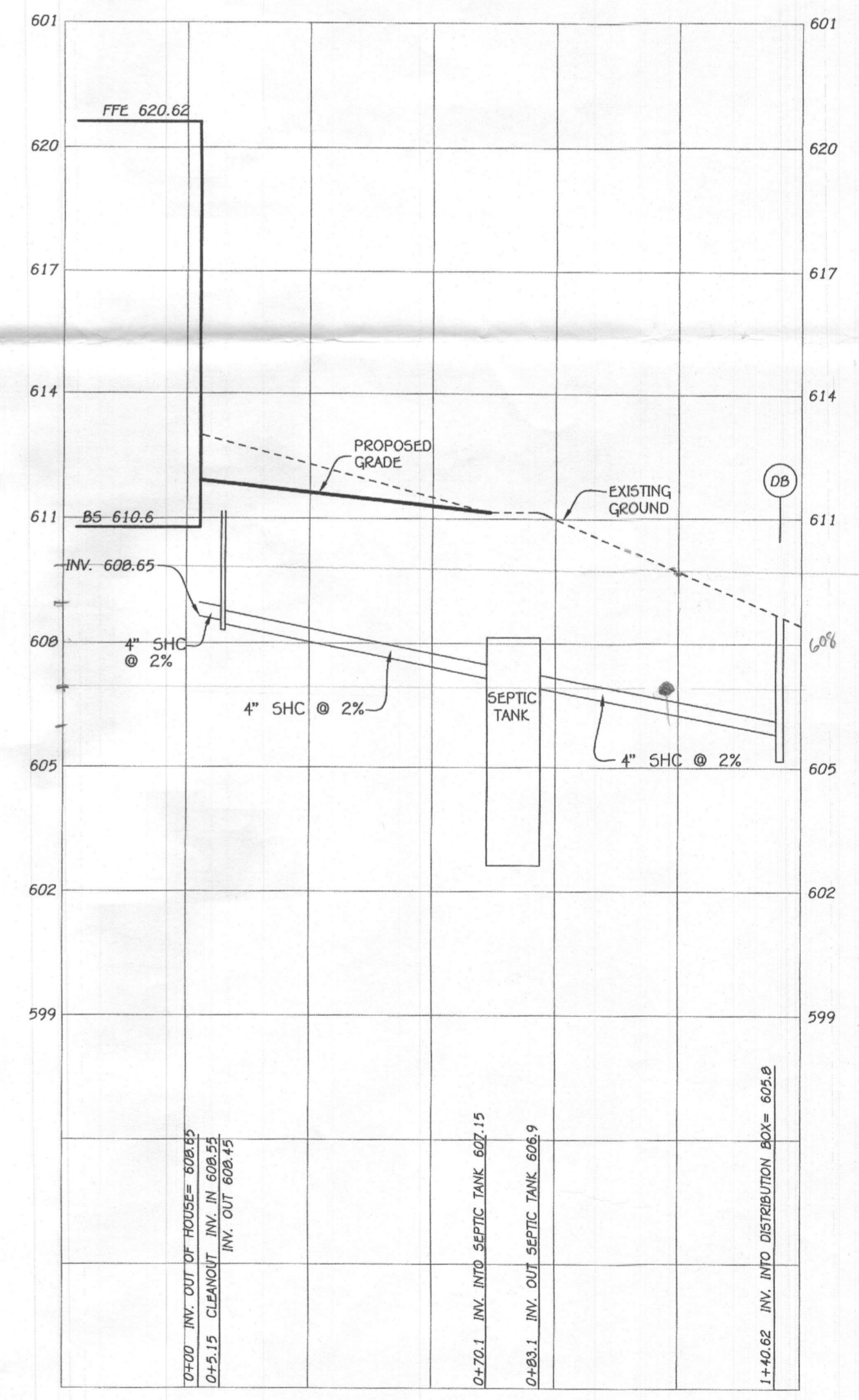
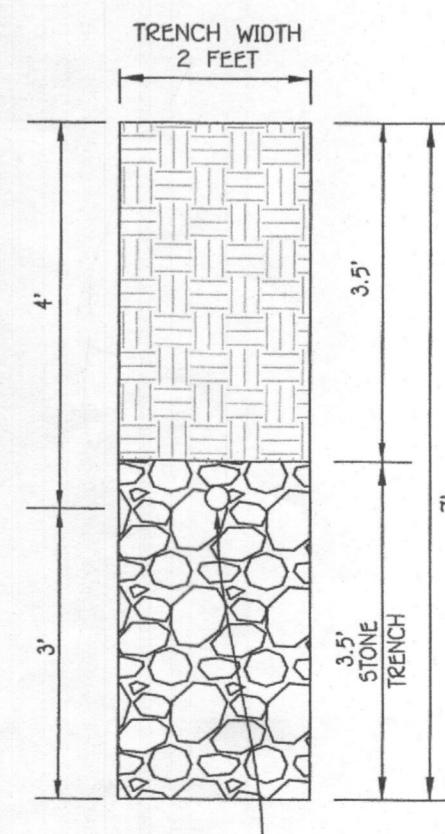
- LEGEND**
- EXISTING 2' CONTOURS
  - EXISTING 10' CONTOURS
  - EXISTING TREE LINE
  - (W) DENOTES EXISTING WELL



**PLAN**  
 SCALE: 1" = 40'

FPE 620.62  
 BSE 610.6  
 INV. OUT OF HOUSE = 608.65  
 PROP. GROUND AT CLEANOUT #1 = 611.9  
 INV. INTO CLEANOUT = 608.55  
 INV. OUT OF CLEANOUT = 608.45  
 EX. GROUND AT SEPTIC TANK = 611.15  
 PROP. GRADE ABOVE SEPTIC TANK = 611.15  
 TOP OF SEPTIC TANK = 608.15  
 INV. INTO SEPTIC TANK = 607.15  
 EX. GROUND AT DISTRIBUTION BOX = 608.7  
 INV. INTO DISTRIBUTION BOX = 605.8  
 INV. OUT OF DISTRIBUTION BOX = 605.7

**TRENCH DATA:**  
 TRENCH 1 AND 2:  
 EX. GROUND ABOVE = 608.7  
 INV. IN = 605.7  
 BOTTOM TRENCH = 601.7



**OWNER**  
 TODD M. GUE  
 2385 ROUTE 97  
 COOKSVILLE, MD 21723  
 c/o CURTIS CUMBERLAND (301) 252-1122

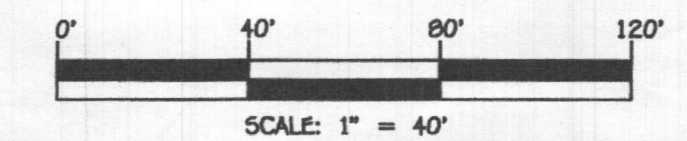


**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20740, EXPIRATION DATE: 02/22/2019.

*Signature of Professional Engineer*  
 Signature Of Professional Engineer

10/27/18  
 DATE

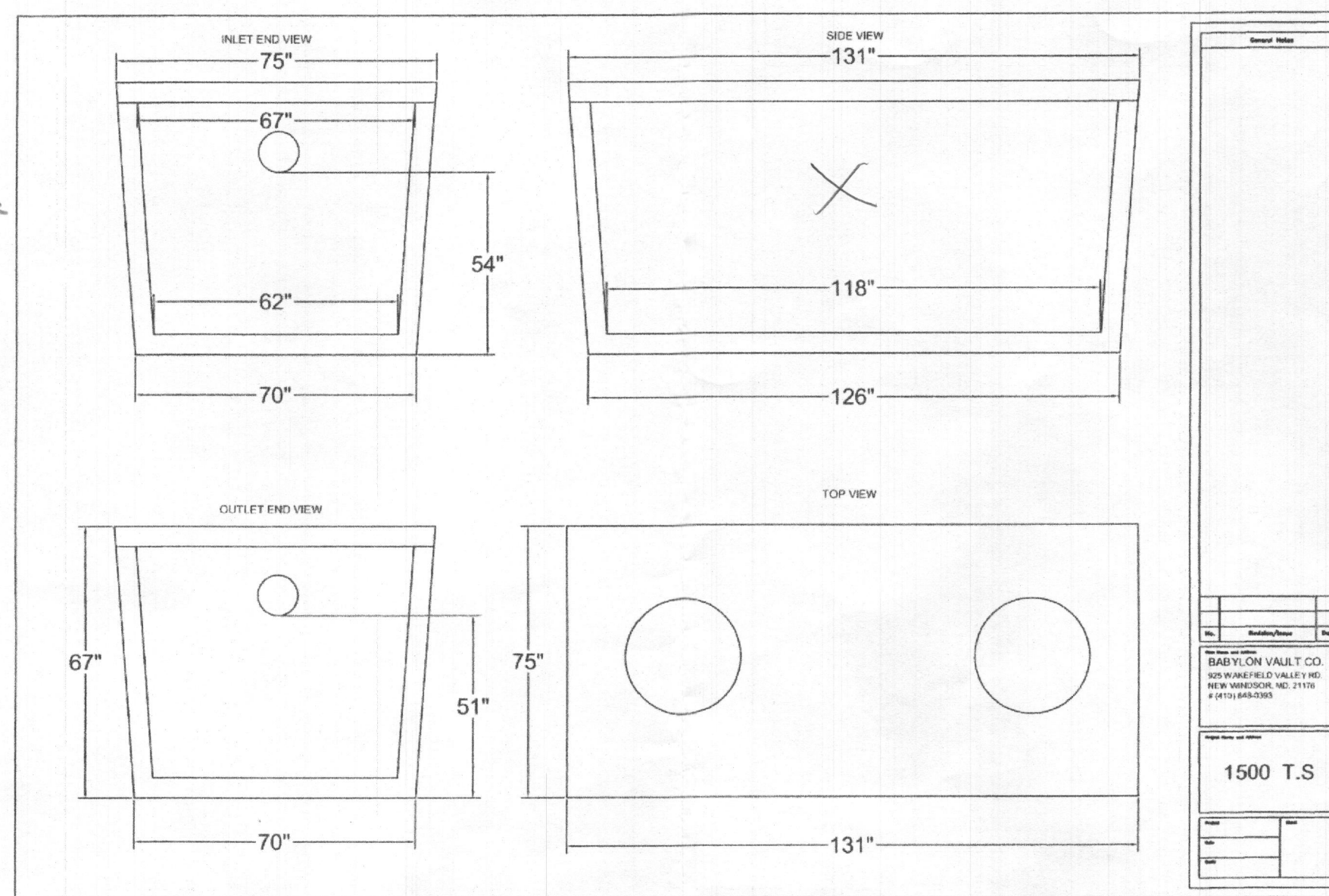
**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SERVICE OFFICE PARK 10272 BALTIMORE NATIONAL PIKE  
 ELLEOTT CITY, MARYLAND 21042  
 (410) 461-2895



**SEPTIC SYSTEM INSTALLATION SITE PLAN**  
**2385 MARYLAND ROUTE 97**  
 ZONED: RC-DEO  
 TAX MAP 14 GRID 11 PARCEL 253  
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 40' DATE: OCTOBER, 2018  
 SHEET 1 OF 1

1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. THE WELL HO-95-2404 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
4. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

$150 \times 4 = 600$   
 $600 / 4 = 150$   
 $750 / 2 = 375$   
 $375 \times .44 = 165$  Initial  
 $375 \times .36 = 135$  2nd Replace



**INITIAL SYSTEM**

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 4 BEDROOMS  
 LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD  
 APPLICATION RATE = 0.8  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 7 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 600 GPD / 0.8 = 750 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2 \times 3)) = 0.444$   
 TRENCH LENGTH = 750 SF x 0.444 / 2 = 111 FEET  
 (USE 4 TRENCHES AT 41.63 L.F.)  
 TRENCH SPACING = 2D+W = ((2x3) + 2) = 8' USE 10'

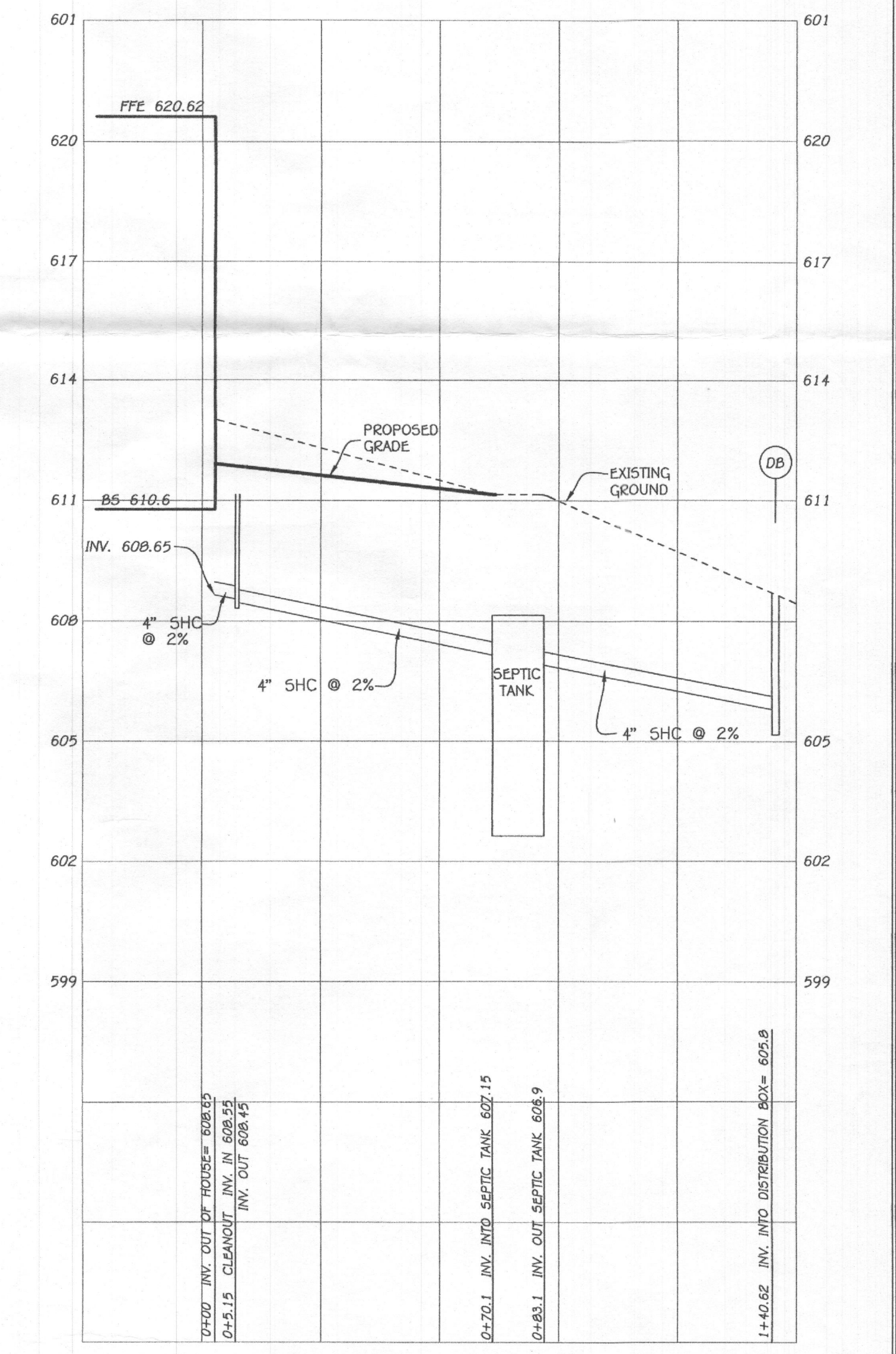
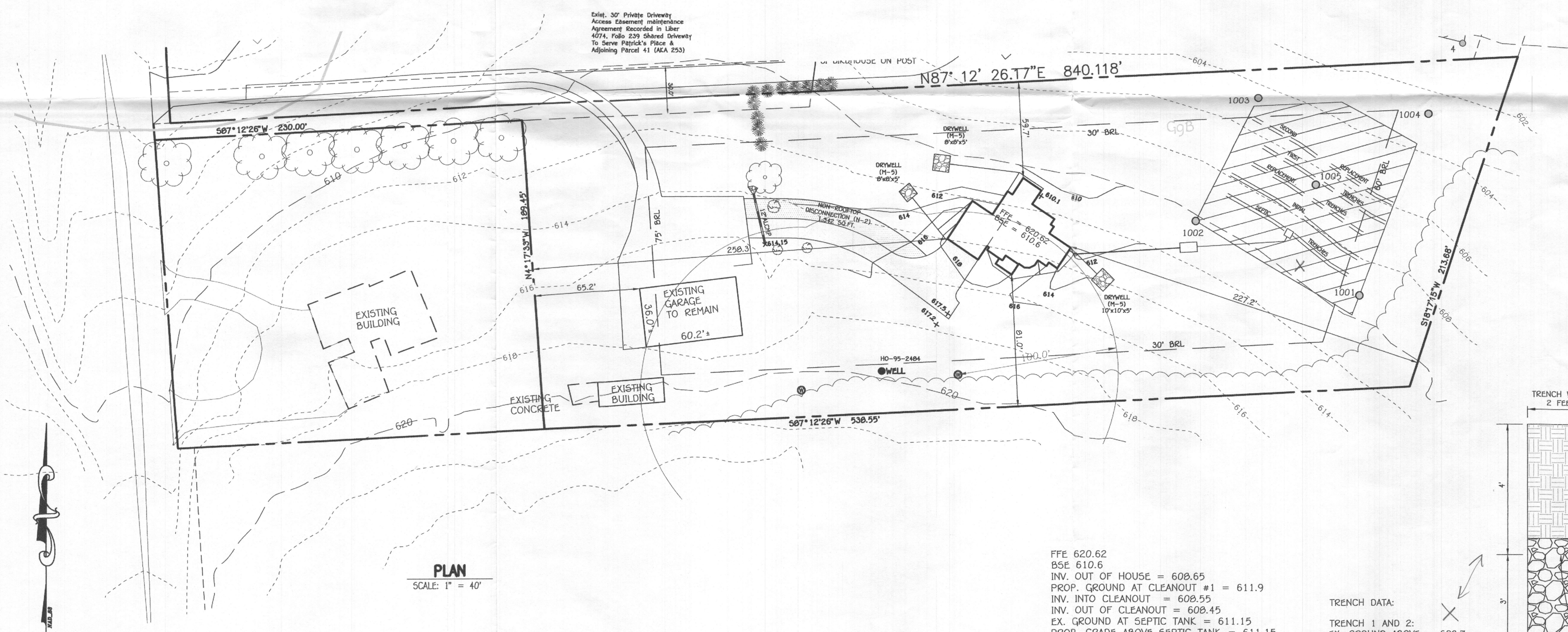
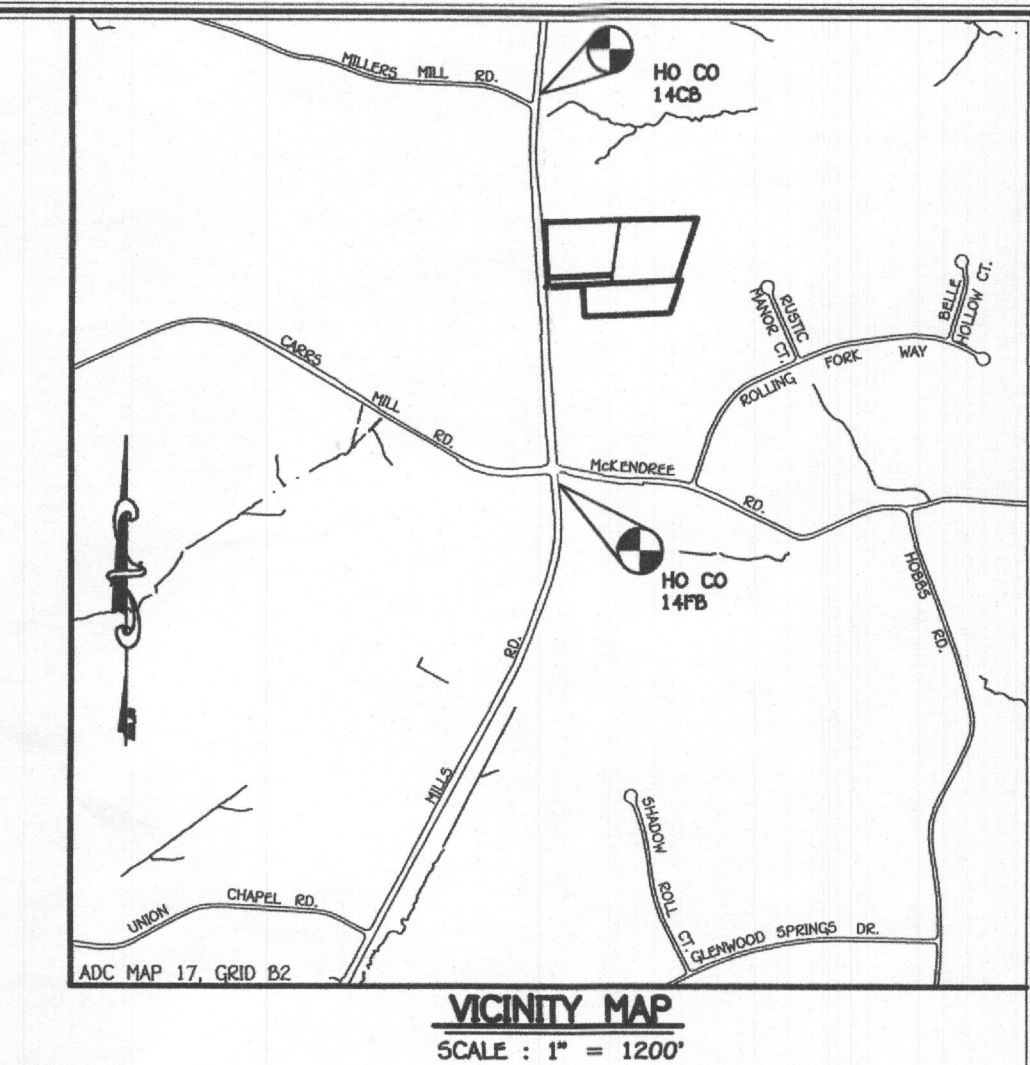
**2ND REPLACEMENT SYSTEM**

SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 4 BEDROOMS  
 LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD  
 APPLICATION RATE = 0.8  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 8 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 4 FEET  
 SF OF DRAINFIELD = 450 GPD / 0.8 = 562.5 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2 \times 4)) = 0.364$   
 TRENCH LENGTH = 562.5 SF x 0.364 / 2 = 51.2 FEET X  
 (USE 3 TRENCHES AT 45.50 L.F.)  
 TRENCH SPACING = 2D+W = ((2x4) + 2) = 10' USE 10'

**1ST REPLACEMENT SYSTEM**

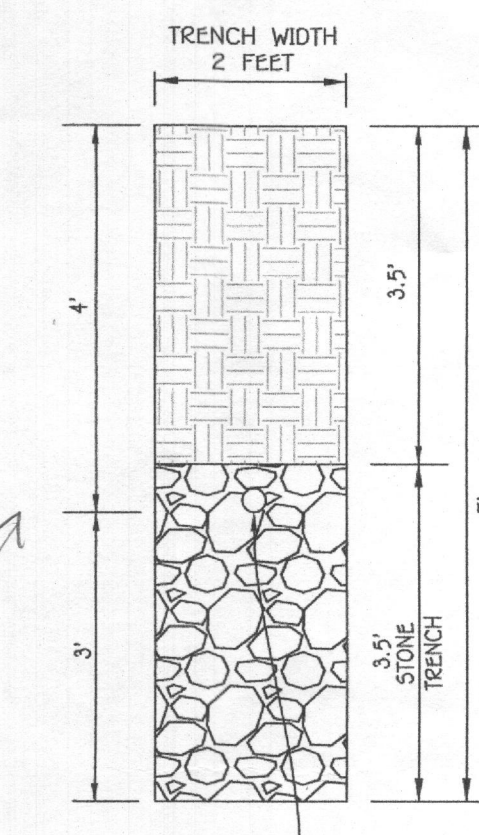
SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 4 BEDROOMS  
 LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 7 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 600 GPD / 1.2 = 500 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2 \times 3)) = 0.444$   
 TRENCH LENGTH = 500 SF x 0.444 / 2 = 111.00 FEET  
 (USE 3 TRENCHES AT 37.00 L.F.)  
 TRENCH SPACING = 2D+W = ((2x3) + 2) = 8' USE 10'

- LEGEND**
- EXISTING 2' CONTOURS
  - EXISTING 10' CONTOURS
  - EXISTING TREE LINE
  - (W) DENOTES EXISTING WELL



FFE 620.62  
 BSE 610.6  
 INV. OUT OF HOUSE = 608.65  
 PROP. GROUND AT CLEANOUT #1 = 611.9  
 INV. INTO CLEANOUT = 608.55  
 INV. OUT OF CLEANOUT = 608.45  
 EX. GROUND AT SEPTIC TANK = 611.15  
 PROP. GRADE ABOVE SEPTIC TANK = 611.15  
 TOP OF SEPTIC TANK = 608.15  
 INV. INTO SEPTIC TANK = 607.15  
 INV. OUT OF SEPTIC TANK = 606.9  
 EX. GROUND AT DISTRIBUTION BOX = 608.7  
 INV. INTO DISTRIBUTION BOX = 605.8  
 INV. OUT OF DISTRIBUTION BOX = 605.7

**TRENCH DATA:**  
 TRENCH 1 AND 2:  
 EX. GROUND ABOVE = 608.7  
 INV. IN = 605.7  
 BOTTOM TRENCH = 601.7



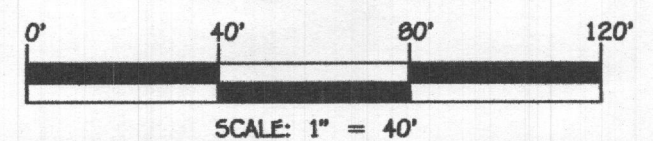
**INITIAL TRENCH DETAIL**  
SCALE: 1"=2'

**OWNER**  
 TODD M. GUE  
 2385 ROUTE 97  
 COOKSVILLE, MD 21723  
 c/o CURTIS CUMBERLAND (301) 252-1122



**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20748, EXPIRATION DATE: 02/22/2019.  
 Signature of Professional Engineer: *Michael J. Fisher*  
 DATE: 10/31/19

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2895



**SEPTIC SYSTEM INSTALLATION SITE PLAN**  
**2385 MARYLAND ROUTE 97**  
 ZONED: RC-DEO  
 TAX MAP 14 GRID 11 PARCEL 253  
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1"=40' DATE: NOVEMBER, 2018  
 SHEET 1 OF 1

1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. ELECTRICAL WORK FOR THE INSTALLATION MUST BE PERFORMED BY A LICENSED ELECTRICIAN.
4. THE WELL HO-95-2484 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
5. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

FFE 620.62  
 BSE 610.6  
 INV. OUT OF HOUSE = 608.65  
 PROP. GROUND AT CLEANOUT #1 = 611.9  
 INV. INTO CLEANOUT = 608.55  
 INV. OUT OF CLEANOUT = 608.45  
 EX. GROUND AT SEPTIC TANK = 611.15  
 PROP. GRADE ABOVE SEPTIC TANK = 611.15  
 TOP OF SEPTIC TANK = 608.15  
 INV. INTO SEPTIC TANK = 607.15  
 INV. OUT OF SEPTIC TANK = 606.9  
 EX. GROUND AT DISTRIBUTION BOX = 608.7  
 INV. INTO DISTRIBUTION BOX = 605.8  
 INV. OUT OF DISTRIBUTION BOX = 605.7

**INITIAL SYSTEM**  
 SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 3 BEDROOMS

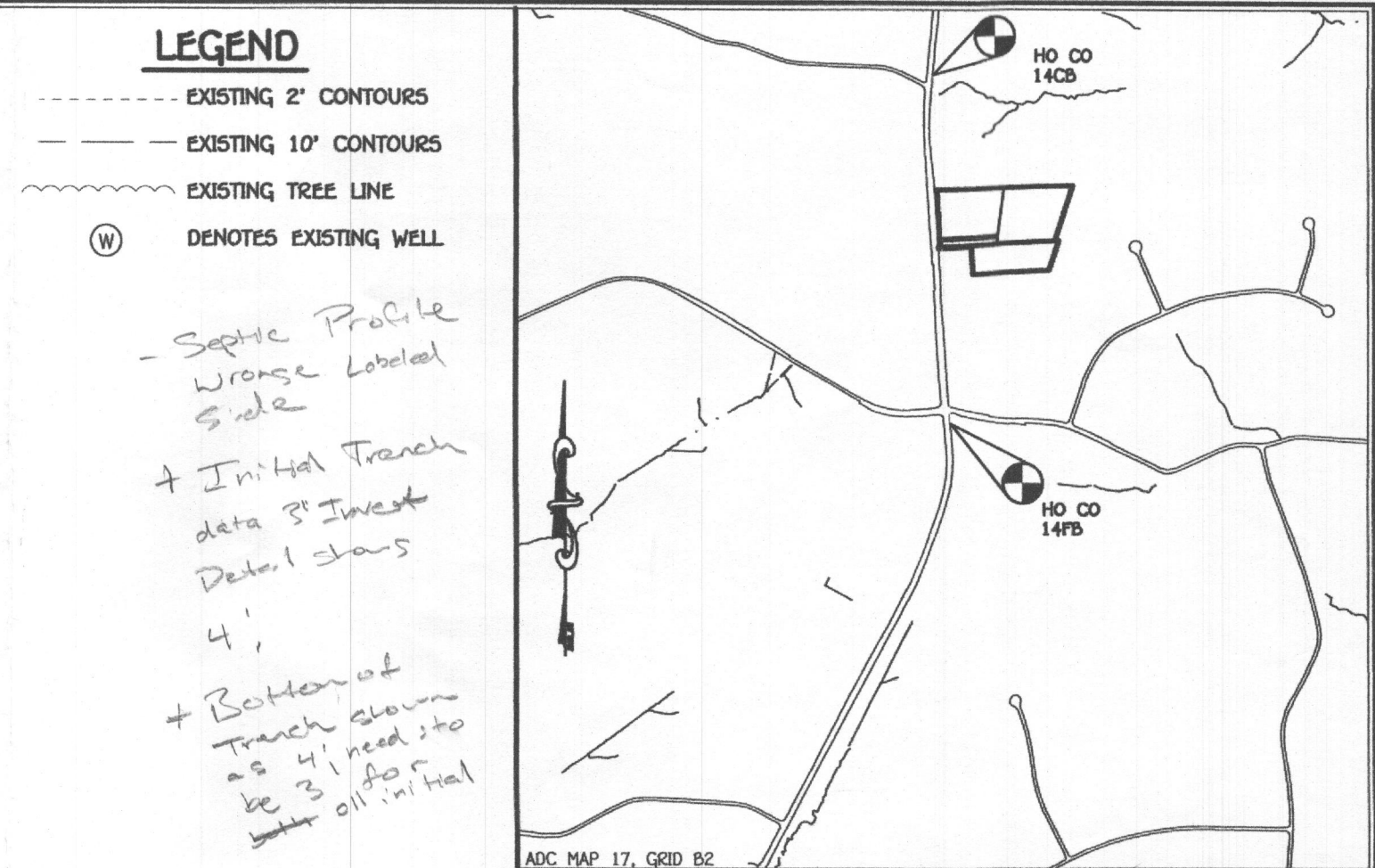
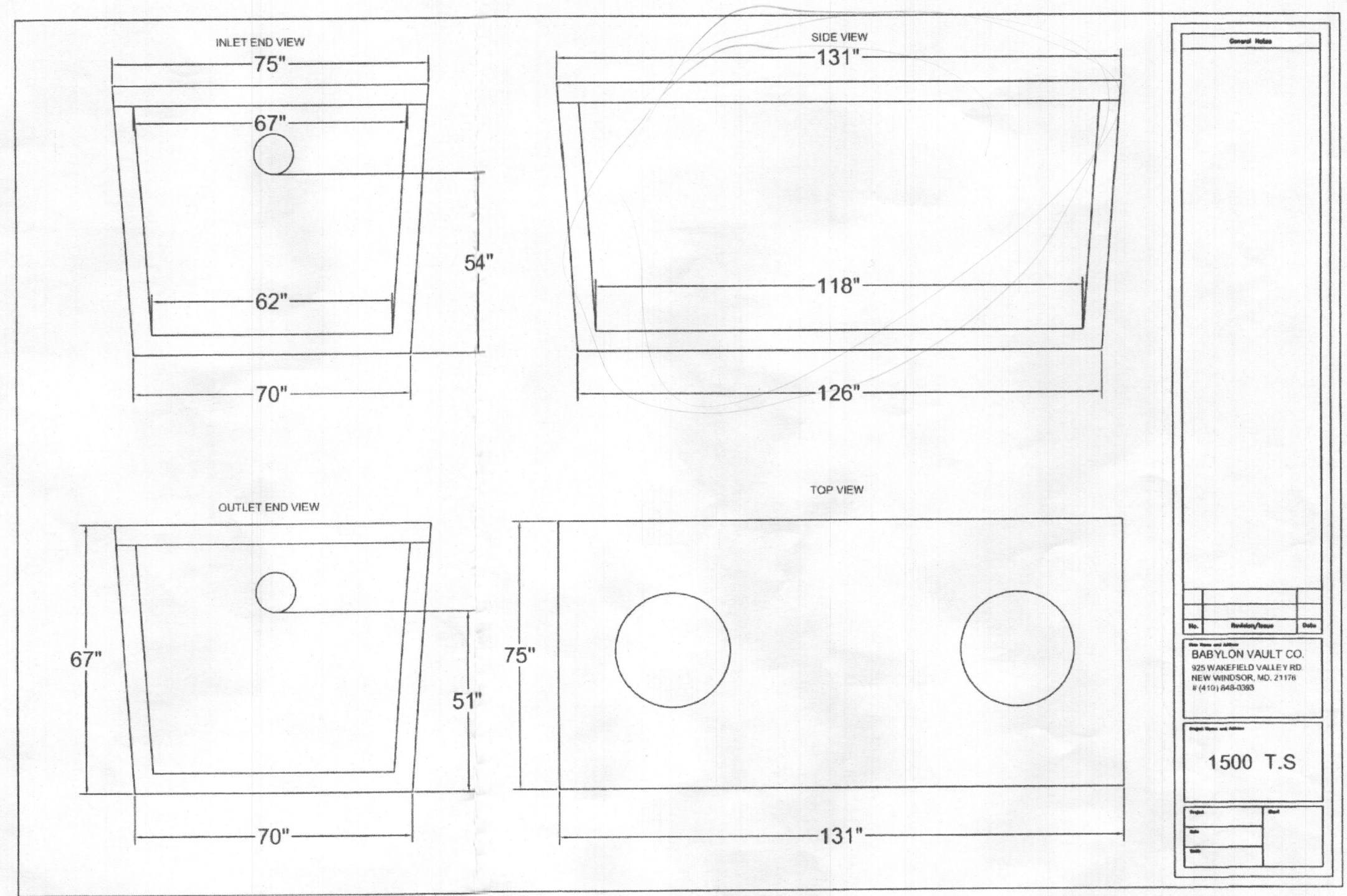
LOADING RATE = 3 BEDROOMS X 150 GPD/BEDROOM = 450 GPD  
 APPLICATION RATE = 0.8  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 7 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 450 GPD / 0.8 = 562.5 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2x3)) = 0.444$   
 TRENCH LENGTH = 562.5 SF x 0.444/2 = 124.9 FEET  
 (USE 3 TRENCHES AT 41.7 LF.)  
 TRENCH SPACING = 2D+W = ((2x3) + 2) = 8' USE 10'

**1ST REPLACEMENT SYSTEM**  
 SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 3 BEDROOMS

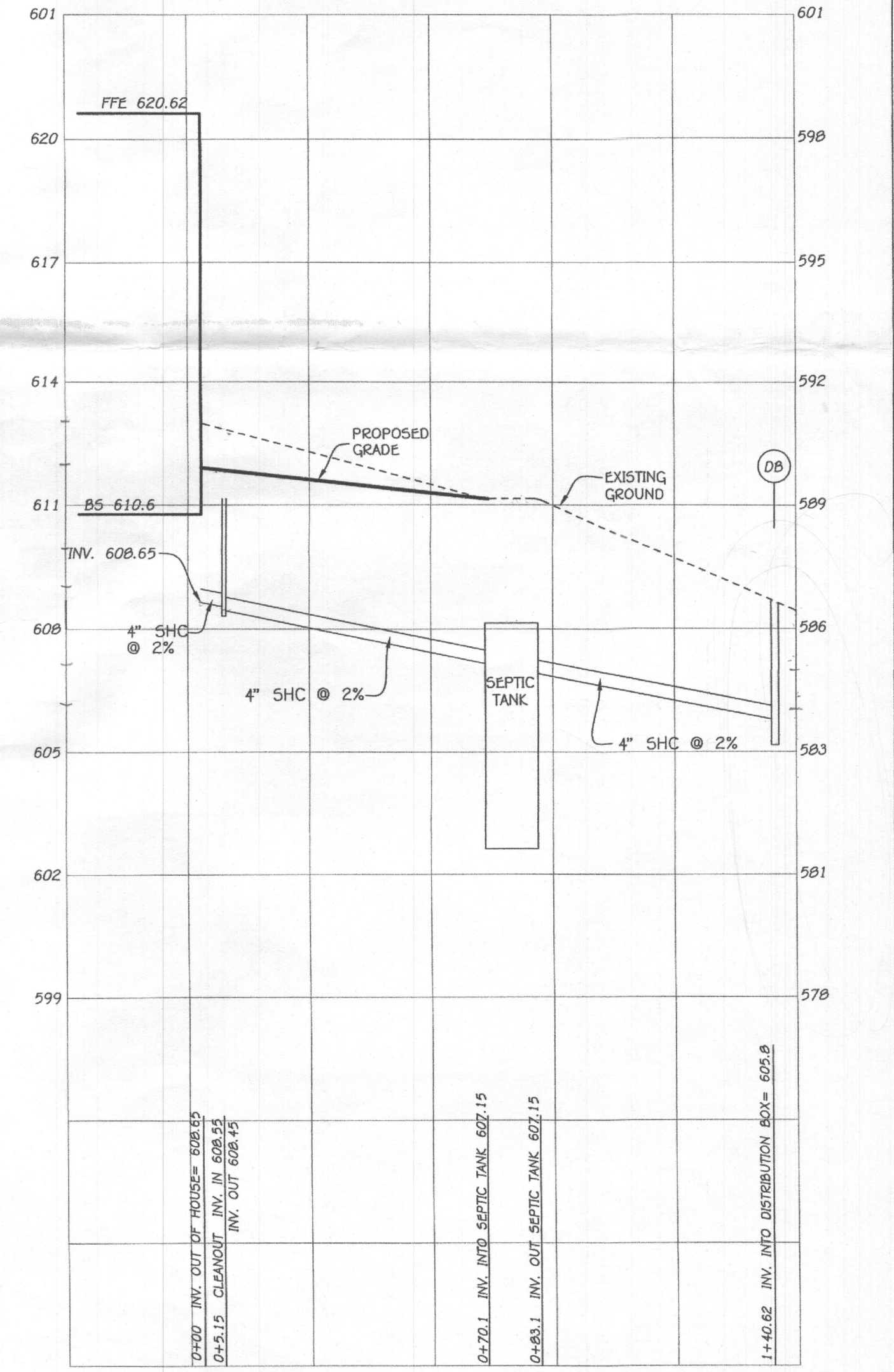
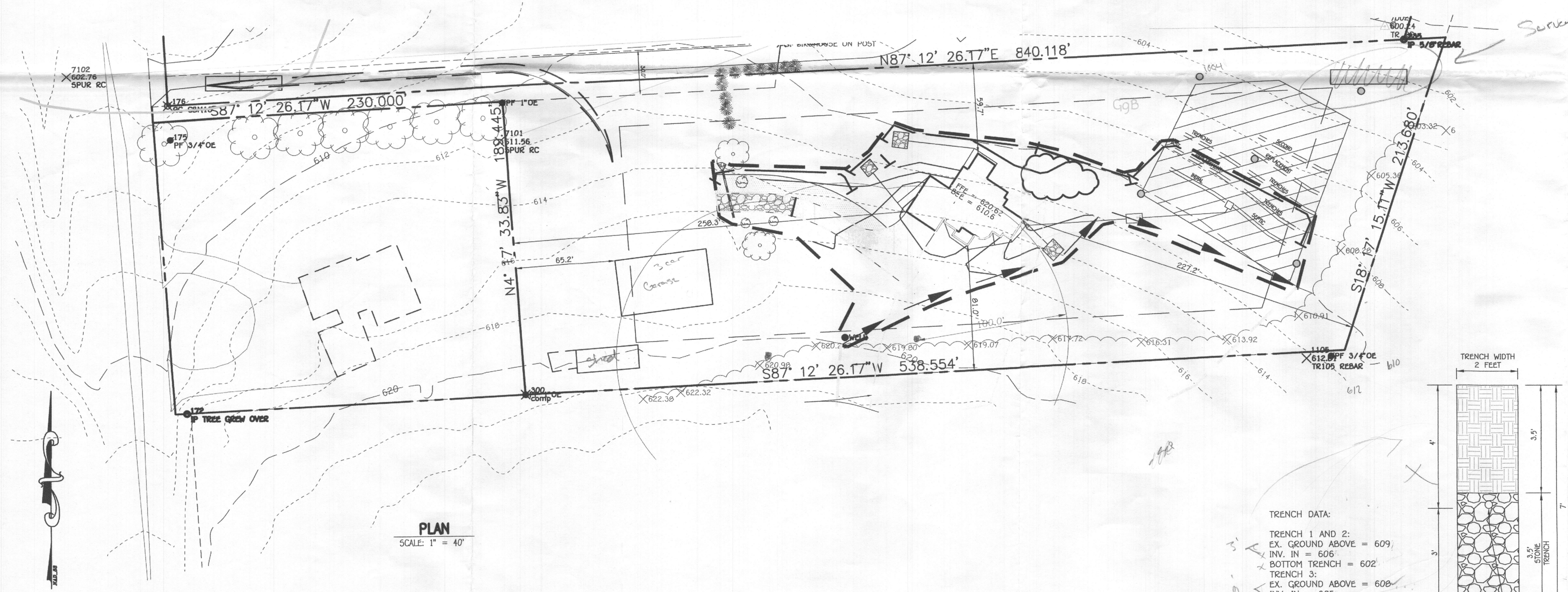
LOADING RATE = 3 BEDROOMS X 150 GPD/BEDROOM = 450 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 7 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 450 GPD / 1.2 = 375 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2x3)) = 0.444$   
 TRENCH LENGTH = 375 SF x 0.444/2 = 83.3 FEET  
 (USE 2 TRENCHES AT 41.7 LF.)  
 TRENCH SPACING = 2D+W = ((2x3) + 2) = 8' USE 10'

**2ND REPLACEMENT SYSTEM**  
 SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 3 BEDROOMS

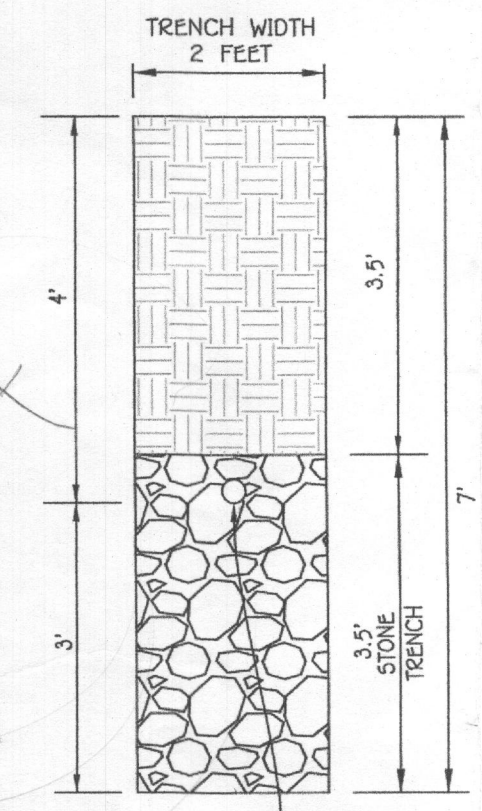
LOADING RATE = 3 BEDROOMS X 150 GPD/BEDROOM = 450 GPD  
 APPLICATION RATE = 0.8  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 8 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 4 FEET  
 SF OF DRAINFIELD = 450 GPD / 0.8 = 562.5 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2x4)) = 0.364$   
 TRENCH LENGTH = 562.5 SF x 0.364/2 = 102.4 FEET  
 (USE 2 TRENCHES AT 51.2 LF.)  
 TRENCH SPACING = 2D+W = ((2x4) + 2) = 10' USE 10'



- Septic Profile W/zone Labeled Side
- + Initial Trench data 3' Invert Detail class 4'
- + Bottom of Trench shown as 4' head, 3' to be 3' for initial
- Invert to 2'
- Potential Basement Bedroom
- Septic Tank under center wall
- Rectangular?
- Alternate well sites need to be visible.
- clearly label trenches. Too many trenches.
- Show trenches whole
- Consider to remain or remove
- Label garage shed
- Put well tag with well
- Pull Trenches back to top of SDA



**TRENCH DATA:**  
 TRENCH 1 AND 2:  
 EX. GROUND ABOVE = 609  
 INV. IN = 606  
 BOTTOM TRENCH = 602  
 TRENCH 3:  
 EX. GROUND ABOVE = 608  
 INV. IN = 605  
 BOTTOM TRENCH = 601



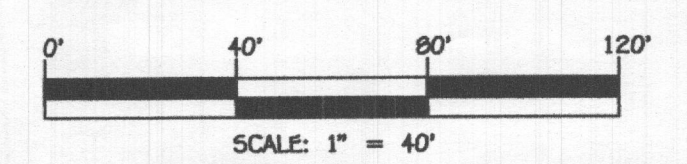
**OWNER**  
 TODD M. GUE  
 2385 ROUTE 97  
 COOKSVILLE, MD 21723  
 c/o CURTIS CUMBERLAND (301) 252-1122



**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20748, EXPIRATION DATE: 02/22/2019.

*Michael J. Vitale*  
 Signature Of Professional Engineer  
 10/2/19  
 DATE

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2022

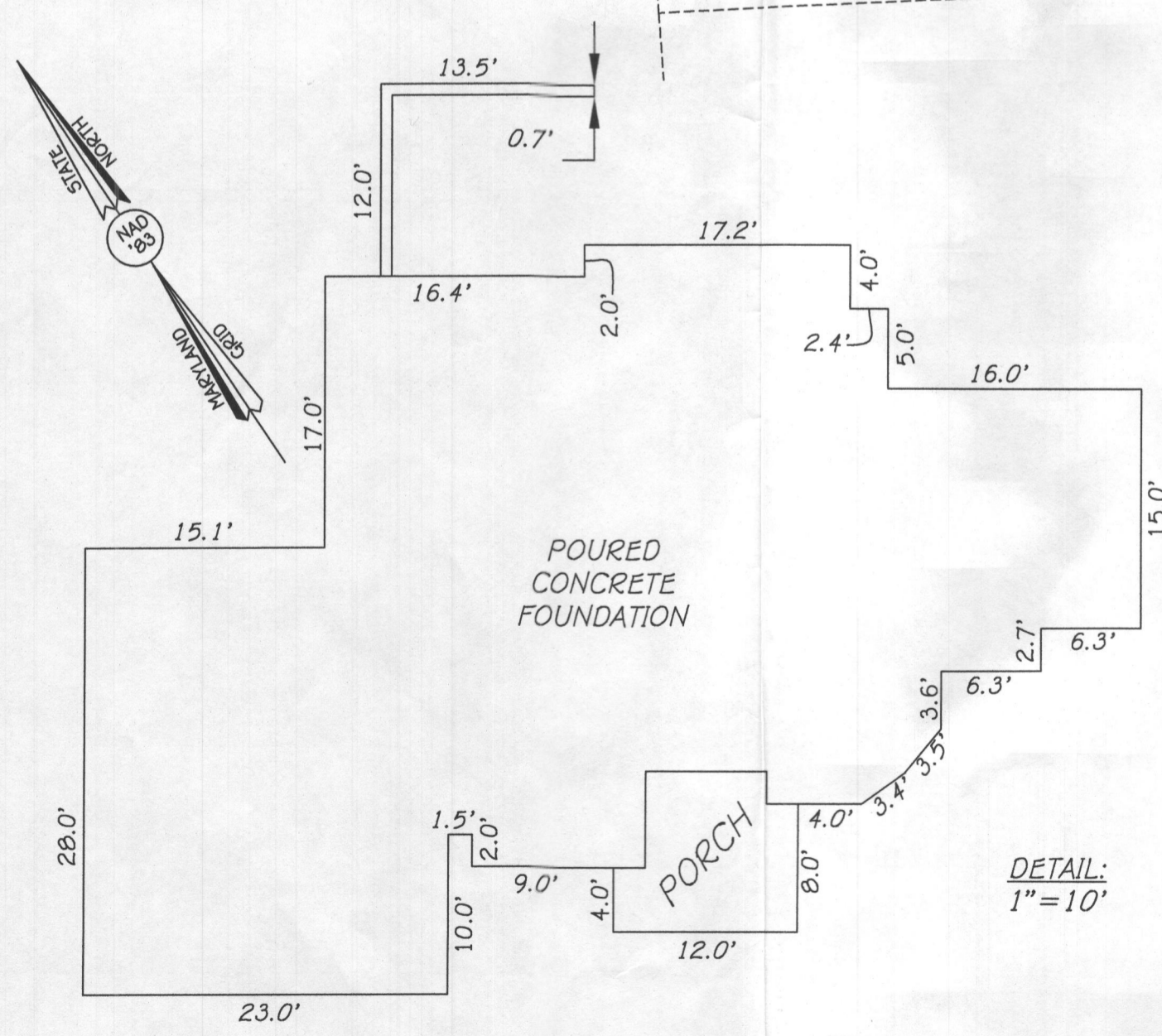
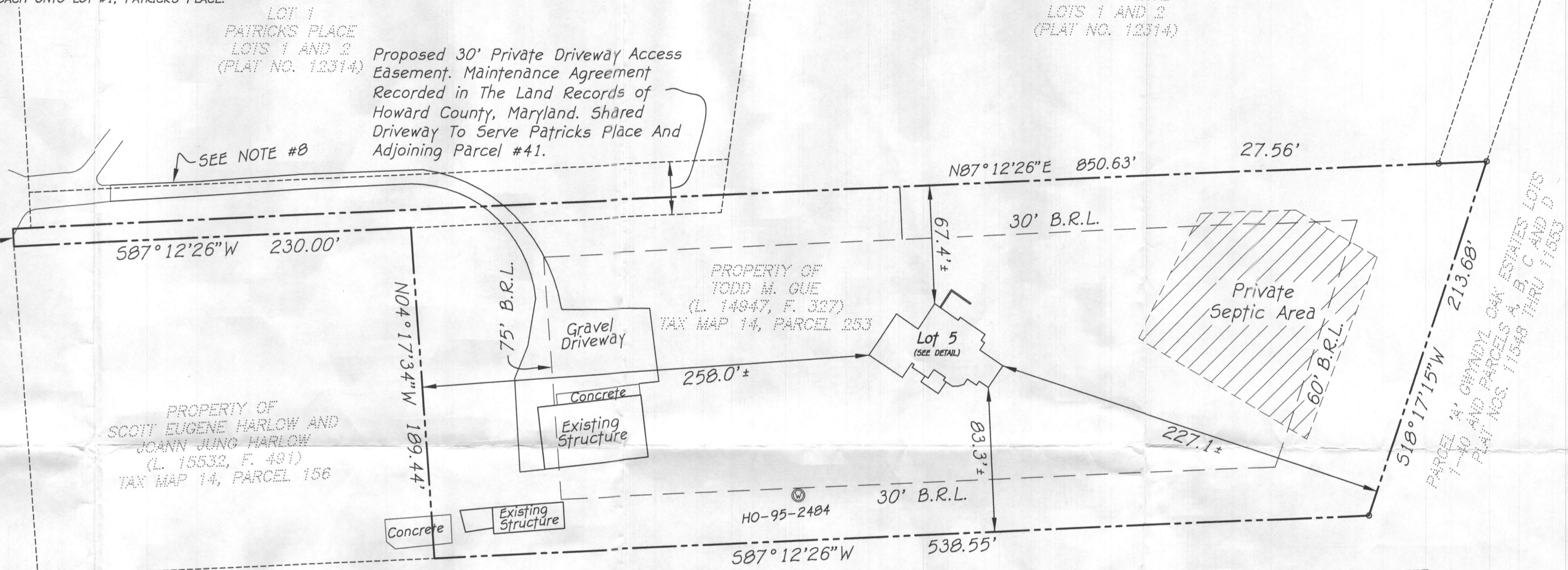


**SEPTIC SYSTEM INSTALLATION SITE PLAN**  
**2385 MARYLAND ROUTE 97**  
 ZONED: RC-DEO  
 TAX MAP 14 GRID 11 PARCEL 253  
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1"=40' DATE: OCTOBER, 2018  
 SHEET 1 OF 1

**GENERAL NOTES:**

- 1) THIS LOCATION DRAWING IS PREPARED FOR THE BENEFIT OF THE CLIENT SIGNING THE HOUSE LOCATION SURVEY APPROVAL FORM INsofar AS IT IS REQUIRED BY A LENDER OR TITLE INSURANCE COMPANY OR ITS AGENTS IN CONNECTION WITH THE CONTEMPLATED TRANSFER, FINANCING OR REFINANCING OF THE PROPERTY SHOWN HEREON. UNLESS INDICATED AS BEING A BOUNDARY SURVEY, THIS LOCATION DRAWING IS NOT INTENDED FOR USE IN THE ESTABLISHMENT OF PROPERTY LINES AND IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATIONS OF FENCES, GARAGES, BUILDINGS OR OTHER EXISTING OR FUTURE IMPROVEMENTS. AS A RESULT, THIS LOCATION DRAWING DOES NOT PROVIDE FOR ACCURATE IDENTIFICATION OF PROPERTY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING FOR RE-FINANCING.
- 2) SUBJECT PROPERTY IS SHOWN IN ZONE X ON THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP OF HOWARD COUNTY, MARYLAND, COMMUNITY PANEL No. 24027C0045D EFFECTIVE NOV. 6, 2013.
- 3) THE OFFSETS FROM BUILDING LINE TO PROPERTY LINE AS SHOWN ON THE PLAT HEREON ARE TO AN ACCURACY OF PLUS OR MINUS 1.0'.
- 4) NO TITLE REPORT FURNISHED. SUBJECT TO ALL EASEMENTS, RIGHTS OF WAY AND CONDITIONS OF RECORD.
- 5) THE EXISTING WELL(S) SHOWN ON THIS PLAN (IDENTIFIED WITH THE ATTACHED WELL TAG NUMBER HO-95-2404 HAS BEEN FIELD LOCATED BY FISHER, COLLINS AND CARTER, INC. PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.
- 6) PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROPERTY LINE SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 339, EXPIRATION DATE 10/04/2020.
- 7) BUILDING PERMIT #B-18003198
- 8) PART OF THE EXISTING DRIVEWAY APPEARS TO ENCROACH ONTO LOT #1, PATRICKS PLACE.

Maryland 97  
(Roxbury Road)  
(Minor Aerial)  
60' R/W



PARCEL 'A'  
OWYNDYL OAK ESTATES  
LOTS 1-40 AND  
PARCELS A, B, C AND D  
PLAT NOS. 11548  
THRU 11553

LOT 6  
OWYNDYL OAK ESTATES  
LOTS 1-40 AND  
PARCELS A, B, C AND D  
PLAT NOS. 11548  
THRU 11553

#2305 MARYLAND ROUTE 97  
TAX MAP 14, PARCEL 253  
FOURTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
DEED REFERENCE: 14947/327

B.R.L. = BUILDING RESTRICTION LINE  
TOP OF FOUNDATION ELEVATION = 618.3'

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLICOTT CITY, MARYLAND 21042  
(410) 461-2955

Drawing Name: \_\_\_\_\_  
FCC # \_\_\_\_\_

Mark L. Robel  
12/20/18  
PROFESSIONAL LAND SURVEYOR DATE  
REG. #339

**HOUSE LOCATION DRAWING**

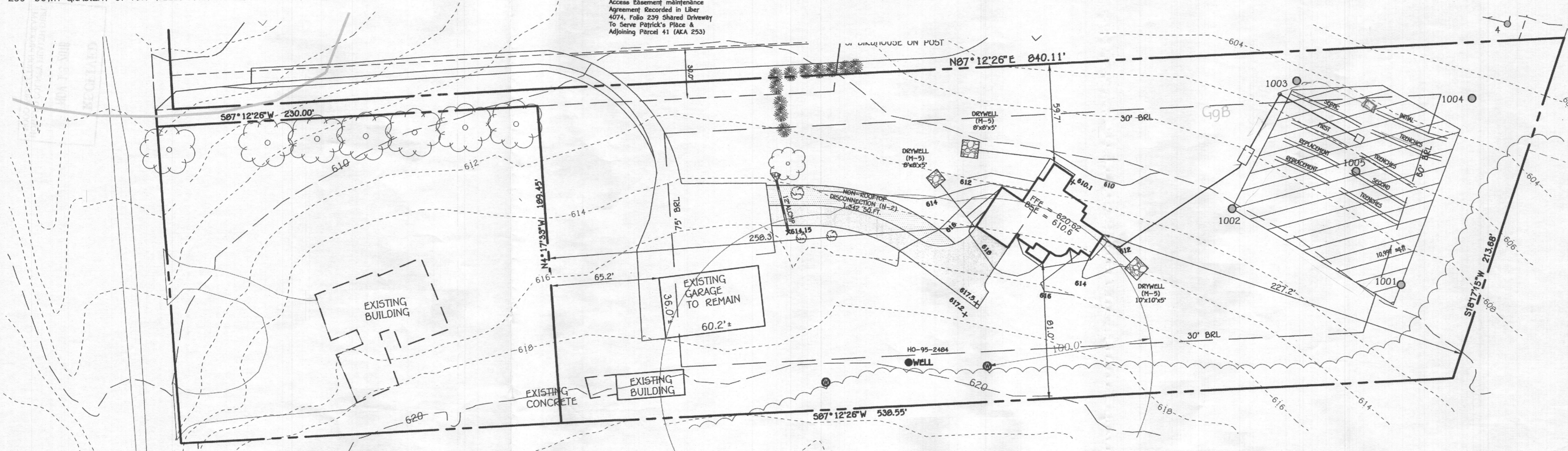
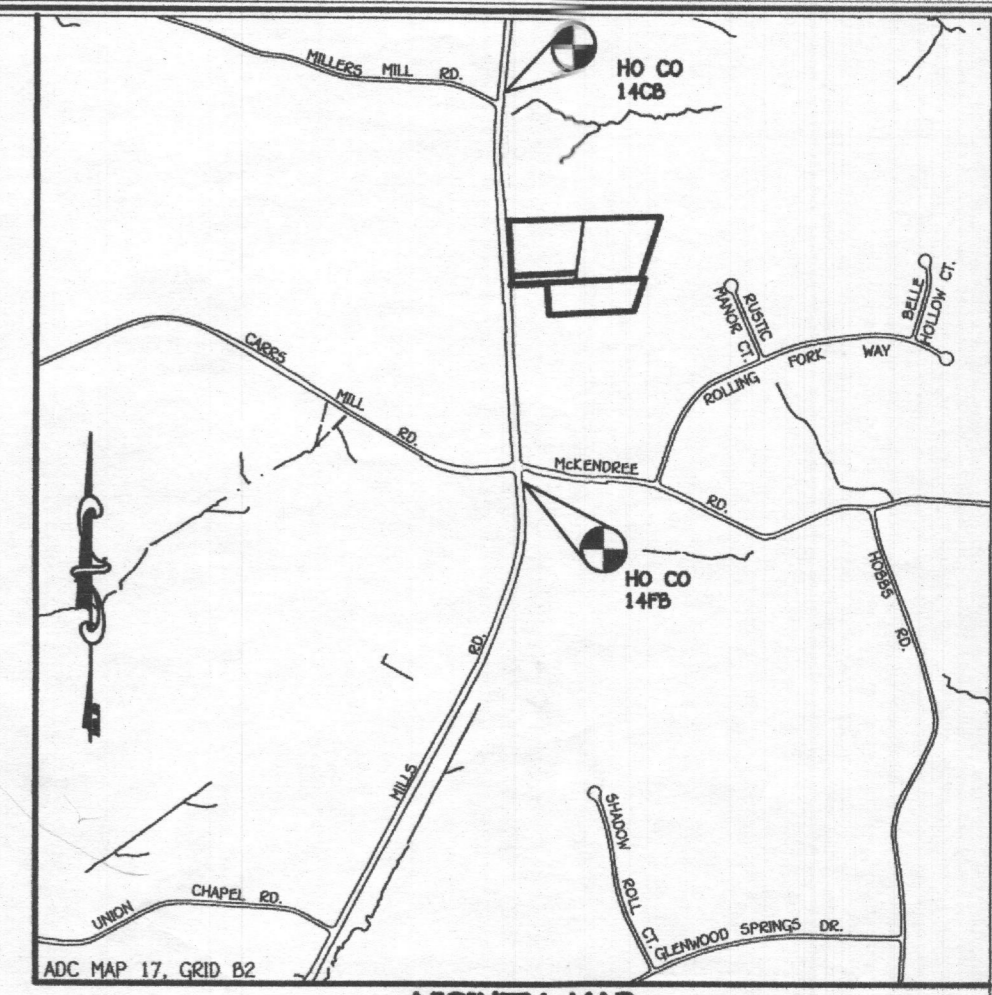
FOUNDATION LOCATION: 12/18/18  
FINAL LOCATION: \_\_\_\_\_  
BOUNDARY SURVEY: \_\_\_\_\_

SCALE: 1"=50'  
DATE: 12/20/18  
DRAWN BY: MD  
CHECKED BY: MLR  
PROJECT No.: 17041-6001

1. ANY CHANGE TO THE LOCATIONS OR DEPTHS TO ANY COMPONENTS MUST BE APPROVED BY THE ENGINEER AND THE HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO INSTALLATION. A REVISED SITE PLAN MAY BE REQUIRED.
2. THE MAXIMUM EARTH COVER OVER THE TANK IS 3 FEET. GREATER EARTH COVER WILL REQUIRE A HEAVY LOAD BEARING TANK.
3. THE WELL HO-95-2484 HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN.
4. ALL WELLS AND SEPTIC SYSTEMS LOCATED WITHIN 100' OF THE PROPERTY BOUNDARIES AND 200' DOWN GRADIENT OF ANY WELLS AND/OR SEPTIC SYSTEMS HAVE BEEN SHOWN.

Exist. 30' Private Driveway  
 Access Statement Maintenance  
 Agreement Recorded in Liber  
 4074, Folio 239 Shared Driveway  
 To Serve Patrick's Place &  
 Adjoining Parcel 41 (AKA 253)

- LEGEND**
- EXISTING 2' CONTOURS
  - - - EXISTING 10' CONTOURS
  - EXISTING TREE LINE
  - (W) DENOTES EXISTING WELL

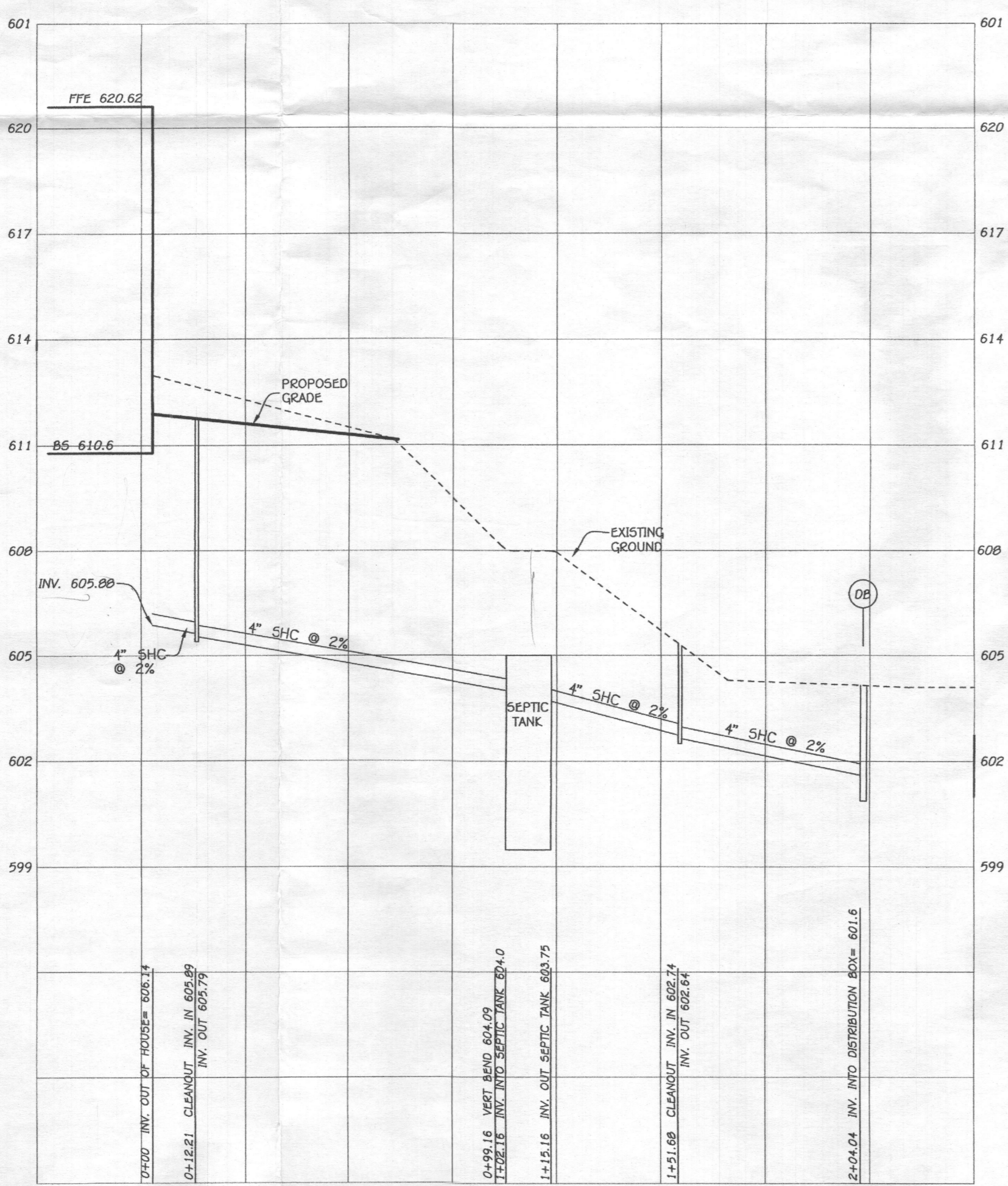


**PLAN**  
 SCALE: 1" = 40'

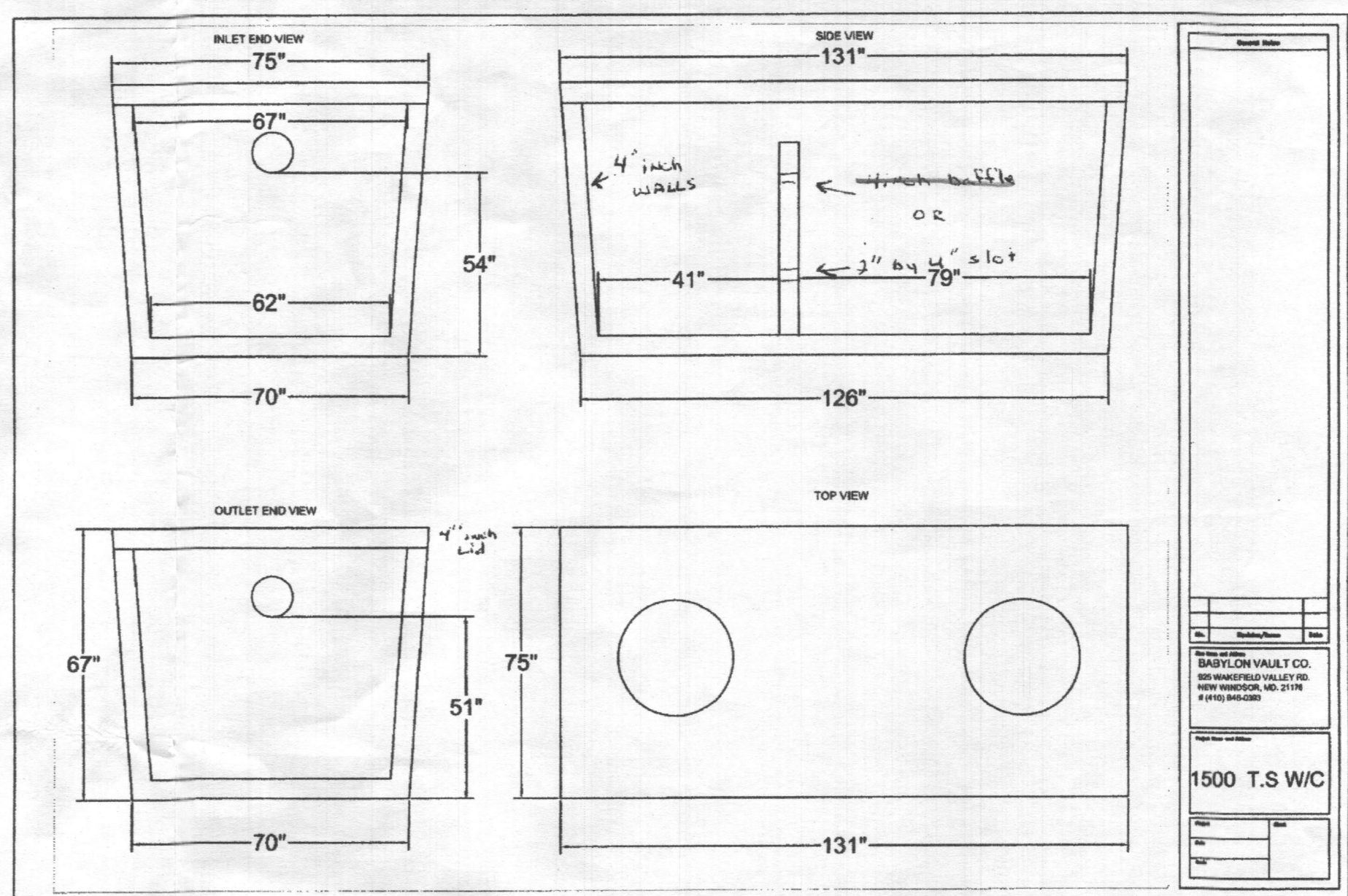
**2ND REPLACEMENT SYSTEM**  
 SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 4 BEDROOMS  
 LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD  
 APPLICATION RATE = 0.8  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 7 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 600 GPD / 0.8 = 750 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2x3)) = 0.444$   
 TRENCH LENGTH = 250 SF x 0.444/2 = 166.50 FEET (USE 4 TRENCHES AT 41.63 L.F.)  
 TRENCH SPACING = 20+W = ((2x3) + 2) = 8' USE 10'

**1ST REPLACEMENT SYSTEM**  
 SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 4 BEDROOMS  
 LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 600 GPD  
 APPLICATION RATE = 1.2  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 7 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 3 FEET  
 SF OF DRAINFIELD = 600 GPD / 1.2 = 500 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2x3)) = 0.444$   
 TRENCH LENGTH = 250 SF x 0.444/2 = 111.00 FEET (USE 3 TRENCHES AT 37.00 L.F.)  
 TRENCH SPACING = 20+W = ((2x3) + 2) = 8' USE 10'

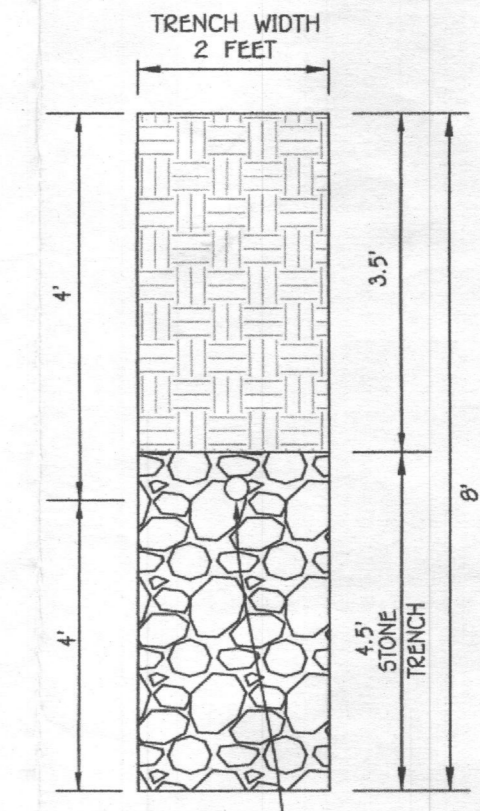
**INITIAL SYSTEM**  
 SEWAGE DISPOSAL SYSTEM DATA, DESIGN FOR 4 BEDROOMS  
 LOADING RATE = 4 BEDROOMS X 150 GPD/BEDROOM = 450 GPD  
 APPLICATION RATE = 0.8  
 EFFECTIVE SIDEWALL BEGINS AT 4 FEET  
 TRENCH DEPTH = 8 FEET  
 TRENCH WIDTH (W) = 2 FEET  
 EFFECTIVE DEPTH (D) = 4 FEET  
 SF OF DRAINFIELD = 450 GPD / 0.8 = 562.5 SF  
 COEFFICIENT OF REDUCTION OF TRENCH LENGTH =  $(W+2)/(W+1+2D) = (2+2)/(2+1+(2x4)) = 0.364$   
 TRENCH LENGTH = 562.5 SF x 0.364/2 = 136.50 FEET (USE 3 TRENCHES AT 45.50 L.F.)  
 TRENCH SPACING = 20+W = ((2x4) + 2) = 10' USE 10'



**SEPTIC PROFILE**  
 SCALE: 1" = 30'



**TRENCH DATA:**  
 TRENCH 1 AND 2:  
 EX. GROUND ABOVE = 605.5  
 INV. IN = 601.4  
 BOTTOM TRENCH = 597.5  
 TRENCH 3:  
 EX. GROUND ABOVE = 604.2  
 INV. IN = 600.4  
 BOTTOM TRENCH = 596.2



**INITIAL TRENCH DETAIL**  
 SCALE: 1" = 2'

Approved Septic System Plan  
 Howard County Health Department  
 Signature: *[Signature]* Date: 11/13/10



**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20748, EXPIRATION DATE: 02/22/2015.  
 Signature: *[Signature]* Date: 11/12/10  
 Signature Of Professional Engineer

FFE 620.62  
 BSE 610.6  
 INV. OUT OF HOUSE = 606.14  
 PROP. GROUND AT CLEANOUT #1 = 611.19  
 INV. INTO CLEANOUT = 605.89  
 INV. OUT OF CLEANOUT = 605.79  
 EX. GROUND AT SEPTIC TANK = 608.0  
 PROP. GRADE ABOVE SEPTIC TANK = 608.0  
 TOP OF SEPTIC TANK = 605.0  
 INV. INTO SEPTIC TANK = 604.0  
 INV. OUT OF SEPTIC TANK = 603.75  
 PROP. GROUND AT CLEANOUT #2 = 604.3  
 INV. INTO CLEANOUT = 602.74  
 INV. OUT OF CLEANOUT = 602.64  
 EX. GROUND AT DISTRIBUTION BOX = 605.5  
 INV. INTO DISTRIBUTION BOX = 601.6  
 INV. OUT OF DISTRIBUTION BOX = 601.5

**SEPTIC SYSTEM  
 INSTALLATION SITE PLAN  
 2385 MARYLAND ROUTE 97**  
 ZONED: RC-DEO  
 TAX MAP 14 GRID 11 PARCEL 253  
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 40' DATE: NOVEMBER, 2010  
 SHEET 1 OF 1

**OWNER**  
 TODD M. GUE  
 2385 ROUTE 97  
 COOKSVILLE, MD 21723  
 c/o CURTIS CUMBERLAND (301) 252-1122

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE  
 ELLSBETH CITY, MARYLAND 21102  
 (410) 461-2995

11/2017/17041(Engineering)Draws/17041-5001\_Rev001 Septic Install Plan.dwg, Layout.1, 11