



**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: 8-10-15 **ONSITE SEWAGE DISPOSAL SYSTEM** P 556574

APPROVAL DATE: 9/15/15 SEC **PERMIT: CONSTRUCTION** A \_\_\_\_\_

PROPERTY ADDRESS: 2050 Drivers Lane

SUBDIVISION: Vista Ridge LOT: 14 TAX ID: 04-595479

CONTRACTOR: Fogle's Septic Clean Inc. EMAIL: kevin@foglesinc.com

CONTRACTOR ADDRESS: 580 Obrecht Road, Sykesville, MD 21784 PHONE: 410-795-5670

CONTRACTOR CERTIFIED FOR BAT INSTALLATION:  MDE  MANUFACTURER:

PROPERTY OWNER: DR Horton EMAIL: \_\_\_\_\_

OWNER ADDRESS: 1356 Beverly Road, McClean, VA 22101 PHONE: 571-723-0813

BAT UNIT MODEL: Norweco PUMP SIZE: \_\_\_\_\_ PUMP TANK CAPACITY: 750 GPD

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 09/25/14 DATE RECORDED: 09/26/14

DISTRIBUTION SYSTEM:  GRAVITY  PRESSURE DOSED BEDROOMS: 5 APPLICATION RATE: 0.8

TRENCHES:	LINEAR FEET REQUIRED: <u>156 235'</u>	INLET DEPTH: <u>3 4'</u>
	TRENCH WIDTH: <u>3 2'</u>	MAXIMUM BOTTOM DEPTH: <u>8</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>5</u>

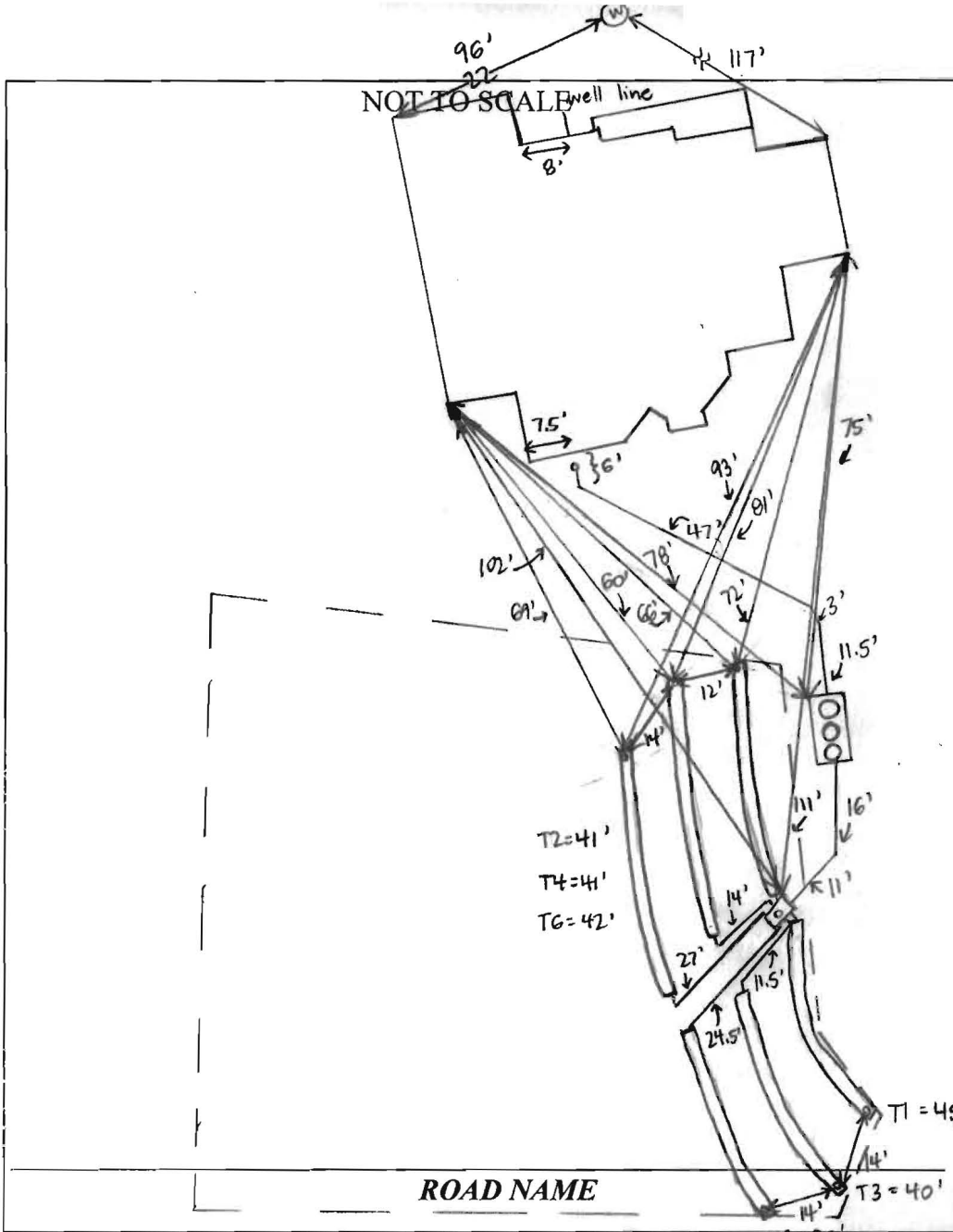
LOCATION: **PER APPROVED SITE PLAN. SEWAGE DISPOSAL AREA AND BAT UNIT LOCATION MUST BE STAKED BY LICENSED SURVEYOR PRIOR TO PRE-CONSTRUCTION INSPECTION.**

NOTES: Install BAT unit per plan.

ISSUED BY: Dana Bernard ISSUE DATE: 8-10-15 EXPIRATION DATE: 8-10-16

- 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 15004293
- 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.**



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
2'	4'	8'
NUMBER OF TRENCHES		6
TOTAL LENGTH		247'
ABSORPTION AREA		494' • SIDEWALL
DISTRIBUTION BOX LEVEL		YES
DISTRIBUTION BOX BAFFLE		YES
DISTRIBUTION BOX PORT		YES

SEPTIC TANK DATA	
SEPTIC TANK I LEVEL	YES
MANUFACTURER	NORWECO
CAPACITY	1300 GAL
SEAM LOC	TOP
TANK LID DEPTH	2-2.5'
BAFFLES	NO
BAFFLE FILTER	NO
MANHOLE LOC	FRONT, MID, REAR
6" PORT LOC	NONE
WATERTIGHT TEST	NO
SLOTTED	NO
DATE ON LID	

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	

**PRE-CONSTRUCTION:**

8/31/15 Layout with Fogle's on site. All SDA stakes present, tank stakes not. Supervisor on site - okay'd tank location with him. Laid out 3x79' trenches on contour. 1-2 trees will have to be removed for upper two trenches. Fogle's may move the western ends of trenches a couple of feet downhill to save trees, keeping 12' between centers + using transit to dig. (SC)

**INSTALLATION:**

9/1/15 Tank installed, bedded with #2 stone. Pipe laid from cleanout at house to tank - need house connection. Fogle's requested putting the D-box in the middle (vs NW corner of easement) to make piping a straight shot. Should be fine - install 6x40' trenches (SC)  
 9/1/15 D-box installed, connected to tank. Fogle's starting to dig T1. Tank bedded with #2 stone. (SC) 9/2/15 T1-T5 complete, Fogle's digging T6. D-box leveled with speed levelers. 4' to stone, 8' bottoms. Some rock encountered at ends of T3 + T5, about 6' deep. Fogle's broke T3 observation pipe while backfilling - need to replace. Need house connection + BAT startup certification. (SC) 9/8/15 BAT startup certification received. Still need house connection. (SC) 9/15/15 House connection made and observation pipe fixed. (SC)

FINAL INSPECTOR Sarah Collins DATE OF APPROVAL 9/15/15

# Back River Pre-Cast, LLC

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

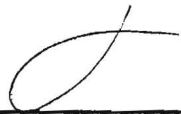
## Letter of Certification

This is to certify that the Norweco Singulair TNT 600 GPD Septic Tank installed at 2050 Drovers Ln., Cooksville, MD 21723 on September 1, 2015 was installed according to the manufacture's specifications.

Installer: Matt Cooney

Property Owner: DR Horton, Inc

Permit #



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MATTHEW GECKLE

Vice-President



Bureau of Environmental Health

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Facebook: www.facebook.com/hocohealth

Twitter: HowardCoHealthDep

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 25 day of Sept, among DR Horton Inc DR Horton Inc, 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 2050 Drivers Lane, 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 14970 Folio 366.

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.

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

HOWARD COUNTY CIRCUIT COURT (Land Records) WAR 15799, p. 0478, MSA\_CE53\_15790. Date available 10/01/2014. Printed 08/10/2015.

2  
4

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.

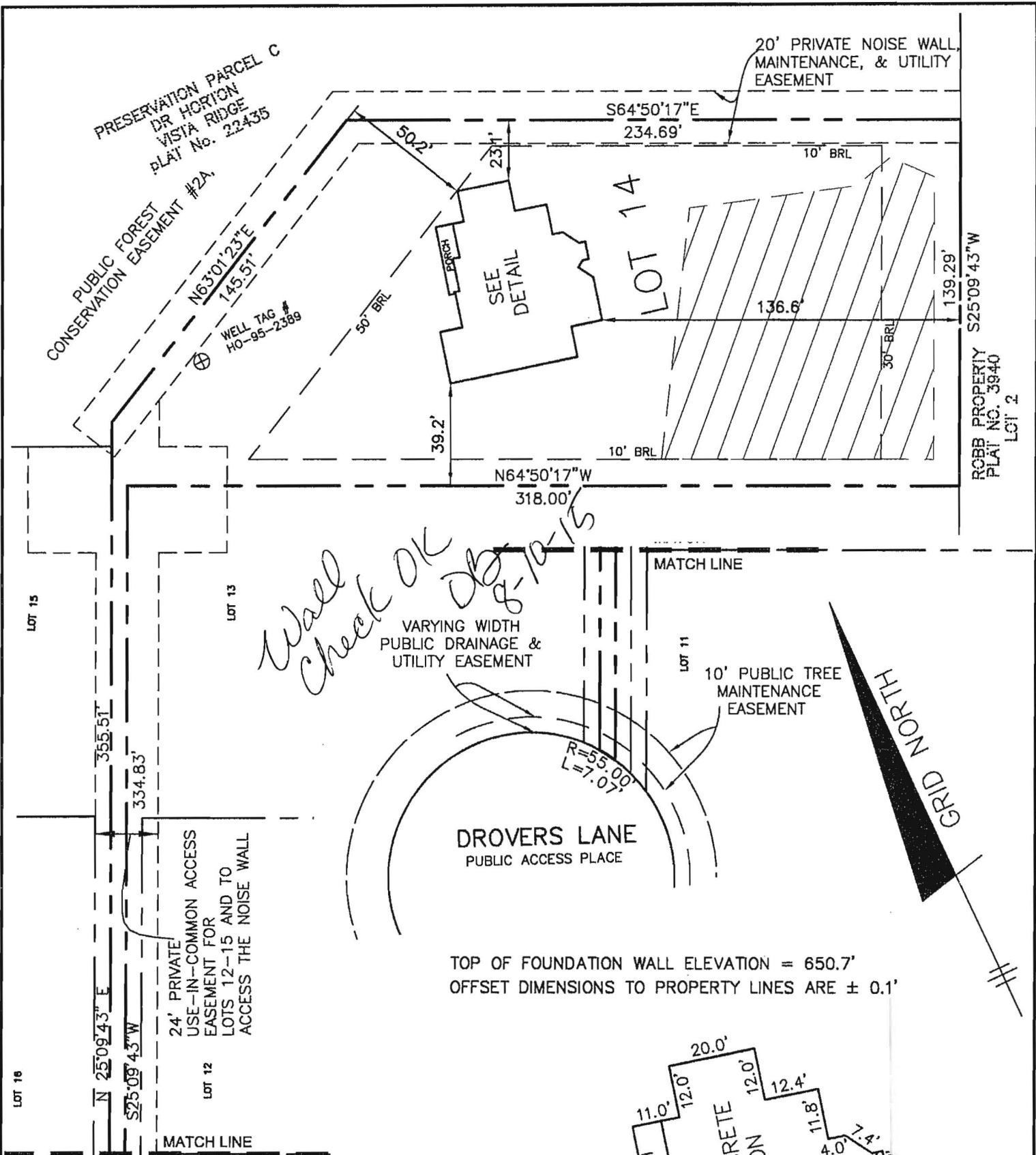
IN WITNESS WHEREOF, the parties have signed and sealed this agreement on the date indicated above.

  
Howard County Health Department

 9/25/14  
Owner #1 Signature Date  
D.R. Horton Inc  
Owner #1 Print Name

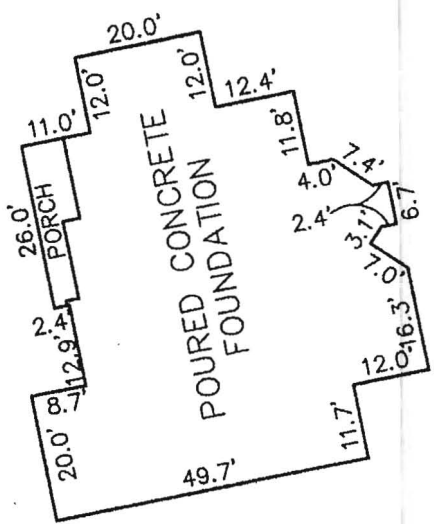
Buyer #1 Signature Date  
Buyer #1 Print Name

LR - Agreement  
Recording Fee 20.00  
Grantor/Grantee Name:  
D.R. HORTON INC  
Reference/Control #: 66  
LR - Agreement  
Surcharge 40.00  
SubTotal: 60.00  
Total: 240.00  
09/26/2014 10:50  
CC13-ES  
#3340310 CC0503 -  
Howard Co  
Columbia/CC05.03.08 -  
Register 08  
Owner#2 Signature Date  
Owner #2 Print Name  
Buyer #2 Signature Date  
Buyer #2 Print Name



*Wall Check OK 08-10-15*

TOP OF FOUNDATION WALL ELEVATION = 650.7'  
 OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'



FOUNDATION DETAIL  
 SCALE: 1" = 30'

WALL CHECK

VISTA RIDGE  
 PLAT No. 22432  
 LOT No. 14

2050 DROVERS LANE

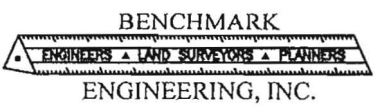
4TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

SCALE: 1" = 50' DATE: 06/24/2015

SURVEYOR'S CERTIFICATE

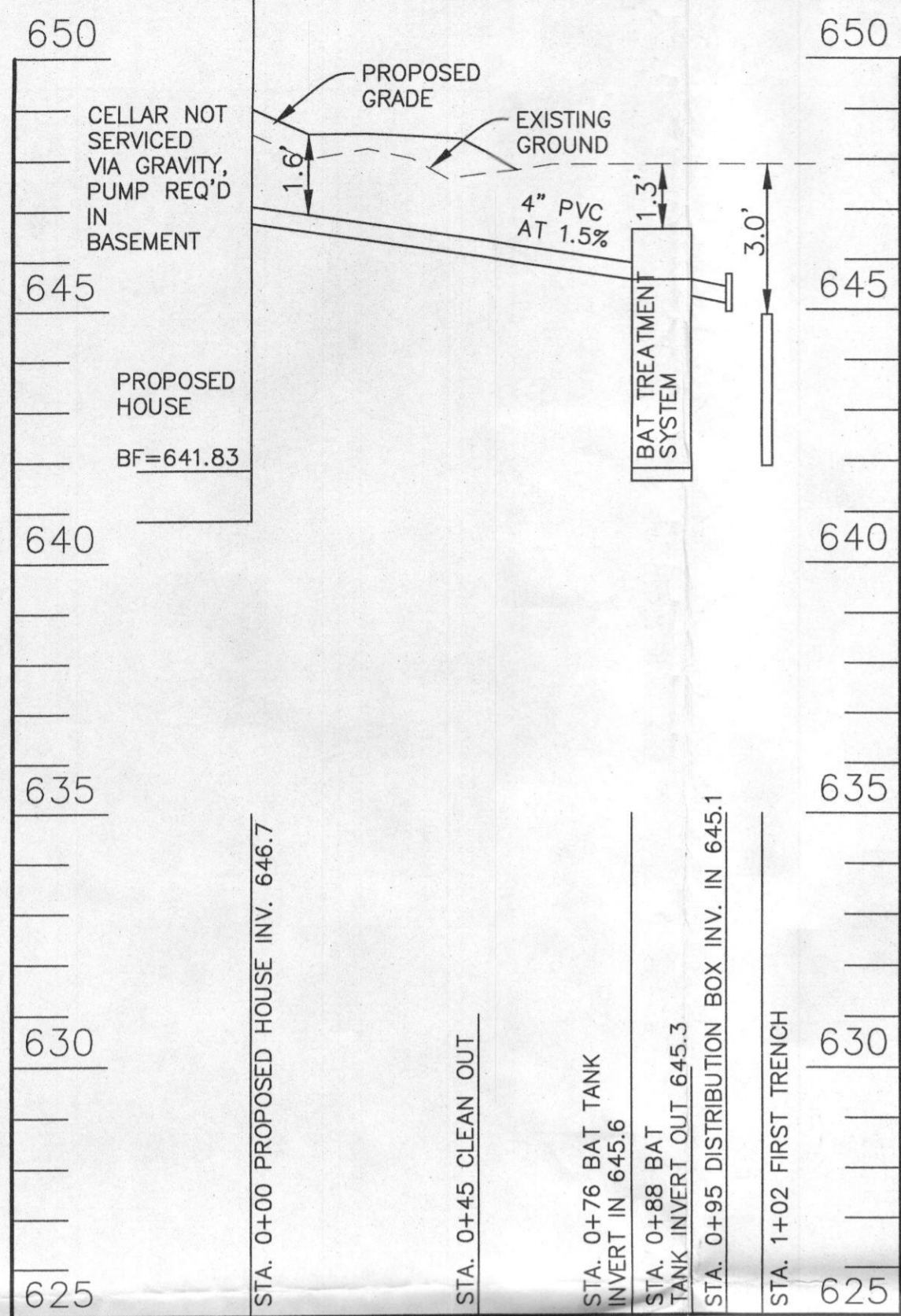
I HEREBY CERTIFY THAT THESE DOCUMENTS, WERE PREPARED BY ME OR UNDER MY RESPONSIBLE CHARGE, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21320, EXPIRATION DATE 1-7-2017 AND TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF, THAT THE DIMENSIONS OF THE BUILDING WALLS SHOWN HEREON ARE CORRECT; THAT THEY ARE BASED ON A FIELD RUN SURVEY PERFORMED BY BENCHMARK ENGINEERING INC. ON 06/24/2015.

*Donald A. Mason*  
 DONALD A. MASON  
 PROFESSIONAL LAND SURVEYOR  
 MD REG. No. 21320  
 FOR BENCHMARK ENGINEERING, INC.  
 MD REG. No. 351  
 FEMA FIRM No. 24027C0035D  
 ZONE: X  
 DATED: 11/06/2013



BENCHMARK  
 ENGINEERS • LAND SURVEYORS • PLANNERS  
 ENGINEERING, INC.  
 8480 BALTIMORE NATIONAL PIKE • SUITE 315  
 ELLICOTT CITY, MARYLAND 21043  
 phone: 410-465-6105 • fax: 410-465-6644  
 www.bei-civilengineering.com

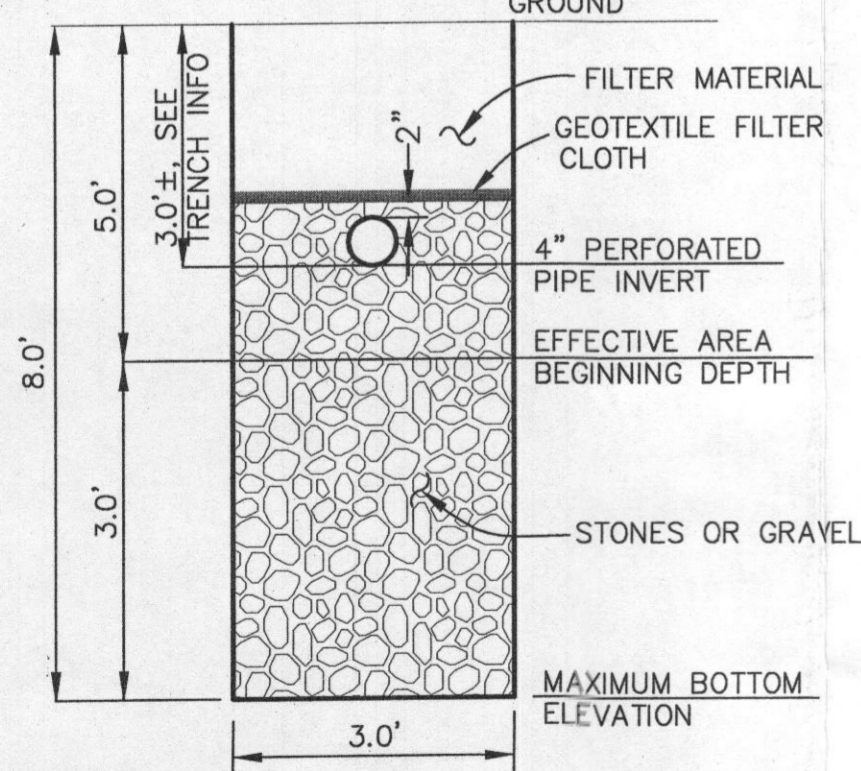
FIELD OBS. BY AIS&ML  
 COMP. BY EWF  
 DRAWN BY EWF



SEWER PROFILE - LOT 14  
SCALE: VERTICAL 1"=3', HORIZONTAL 1"=30'

**TRENCH INFORMATION**

TRENCH	LENGTH	GROUND ELEVATION	INVERT ELEVATION	MAX. BOTTOM ELEV.	INVERT	GROUND AT
TRENCH 1-1	40 LF	647.7	644.7	639.7	INV. OUT OF HOUSE	646.7
TRENCH 1-2	40 LF	647.7	644.7	639.7	INV. INTO BOX	645.1
TRENCH 1-3	40 LF	647.3	644.3	639.3	INV. OUT OF BOX	645.0
TRENCH 1-4	40 LF	647.3	644.3	639.3	GROUND AT BOX	647.9
TRENCH 2-1	40 LF	647.0	644.0	639.0	INV. OUT OF SEPTIC TANK	646.6
TRENCH 2-2	40 LF	646.9	643.9	638.9	GROUND OVER SEPTIC TANK	647.9
TRENCH 2-3	40 LF	646.7	643.7	638.7	INV. INTO BOX	645.1
TRENCH 2-4	40 LF	646.5	643.5	638.5	GROUND AT BOX	647.9



TYPICAL TRENCH DETAIL  
NOT TO SCALE

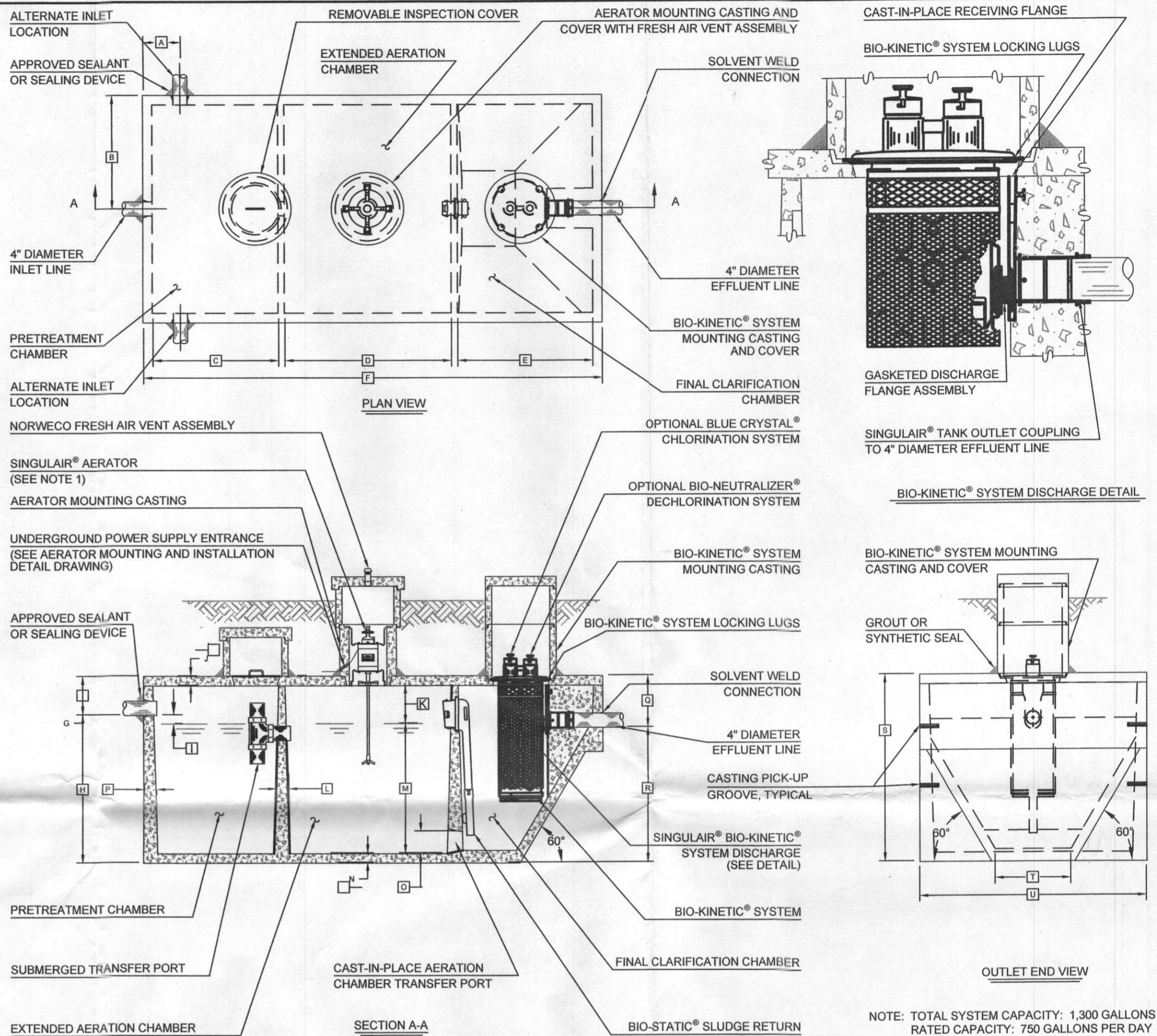
CRITICAL DIMENSIONS			
A	1'-0"	N	0'-3"
B	3'-0"	O	0'-6"
C	3'-4"	P	0'-3"
D	4'-5"	Q	1'-4"
E	3'-7"	R	3'-8"
F	12'-2"	S	5'-0"
G	1'-0"	T	2'-0"
H	4'-0"	U	6'-0"
I	0'-3"	V	
J	0'-3"	W	
K	1'-0"	X	
L	0'-2"	Y	
M	3'-6"	Z	

U.S. AND FOREIGN PATENTS PENDING	<b>norweco</b>	3-26-07	B
MMVII	LOW-PROFILE SINGULAR® BIO-KINETIC® WASTEWATER TREATMENT SYSTEM MODEL TNTLP-600 GPD	JMM	NTS
		10-16-06	PC-5-7091

Required BAT Site Plan Notes

- 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 sit plan may be required.
- The maximum depth of the BAT shall be per the manufacturer's specification, 3.0'.
- The blower may not be located further from the tank than the manufacturer's specifications, 75'.
- The BAT system shall be maintained and operated for the life of the system.
- The BAT shall be operated by and maintained by a certified service provider.
- Within one month of installation, a person installing the BAT system shall report to the Maryland Department of the Environment (MDE) in a manner acceptable to MDE, the address and date of completion of the BAT installation and the type of BAT installed.
- Electrical work for the BAT installation must be performed by a licensed electrician.
- An agreement and Easement must be completed and signed by all applicable parties, and recorded in Land Records of Howard County.
- The Health Department requires documentation for the start-up certification from the manufacturer prior to final approval of the installation.



NOTES:  
TOTAL SYSTEM CAPACITY: 1,300 GALLONS  
RATED CAPACITY: 600 GALLONS PER DAY AND  
ABLE TO SERVICE UP TO FIVE (5)  
BEDROOMS PER MANUFACTURER.

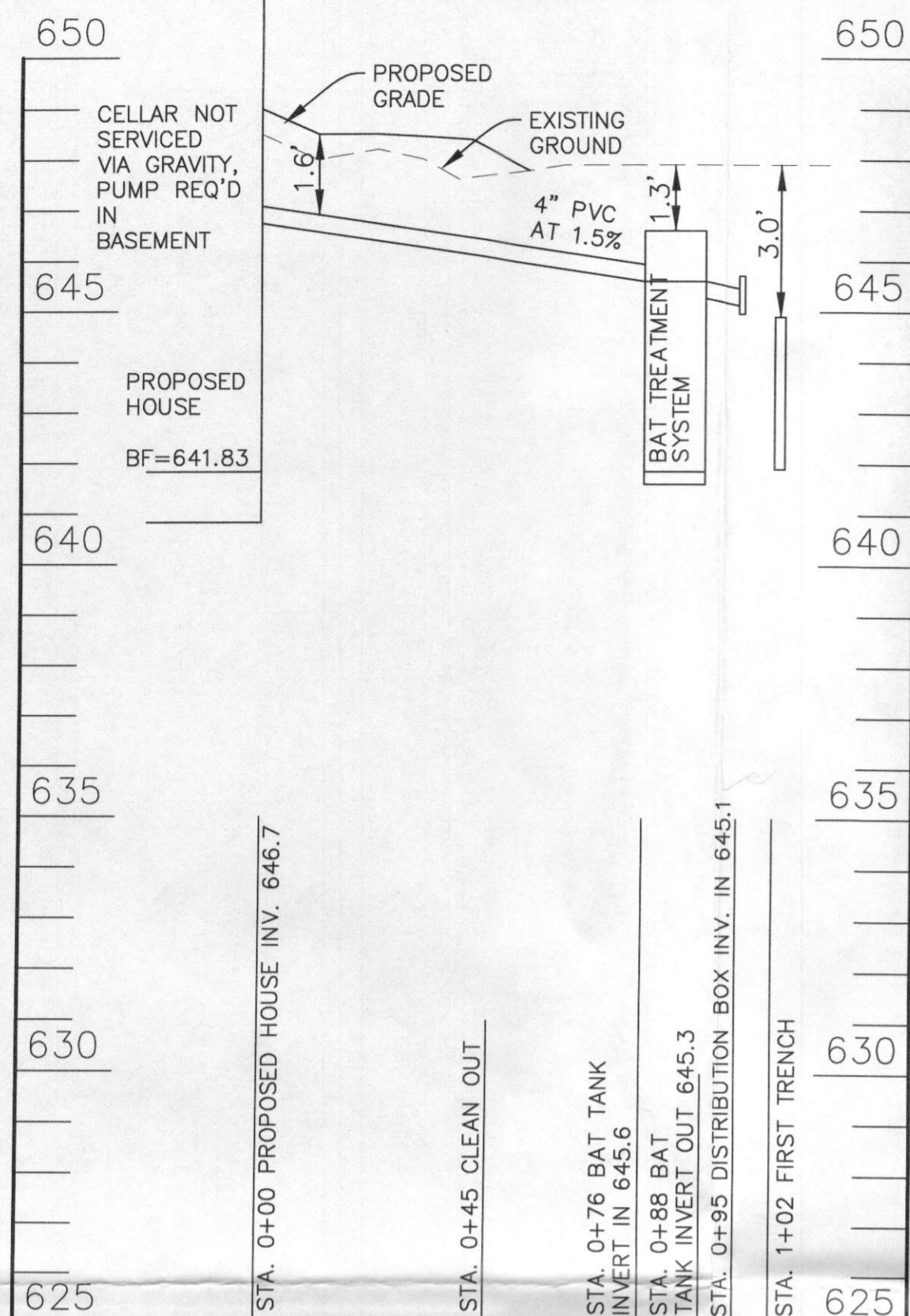
SEE MANUFACTURER SPECIFICATIONS FOR  
DETAILS. WWW.NORWECO.COM

**BENCHMARK**  
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS  
**ENGINEERING, INC.**

8480 BALTIMORE NATIONAL PIKE ▲ SUITE 315  
ELLCOTT CITY, MARYLAND 21043  
PHONE: 410-465-6105 ▲ FAX: 410-465-6644  
BEI@BEI-CIVILENGINEERING.COM

SIGNATURE AND SEAL ARE FOR  
CULVERT PROFILE ONLY:  
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. 45577, Exp. Date: 6-08-2016.

OWNER/BUILDER: DR HORTON, INC. 1356 BEVERLY ROAD SUITE 300 MCLEAN, VA 22101 PHONE: 571-723-0813 FAX: 800-551-5015	PROJECT: <b>VISTA RIDGE</b> LOT 14
LOCATION: 2050 DROVERS LANE COOKSVILLE, MD 21723 TAX MAP No. 8 - BLOCK No. 23 - PARCEL No. 176 4TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND TAX ID NUMBER 04-595485	TITLE: BUILDING PERMIT PLAN AND BAT SITE PLAN
HOUSE TYPE: BALMORAL	DATE: AUGUST 6, 2014 SEPTEMBER 12, 2014
DESIGN: JMC	DRAFT: JMC
SCALE: 1" = 30'	PROJECT NO. 1635 DRAWING 2 OF 2

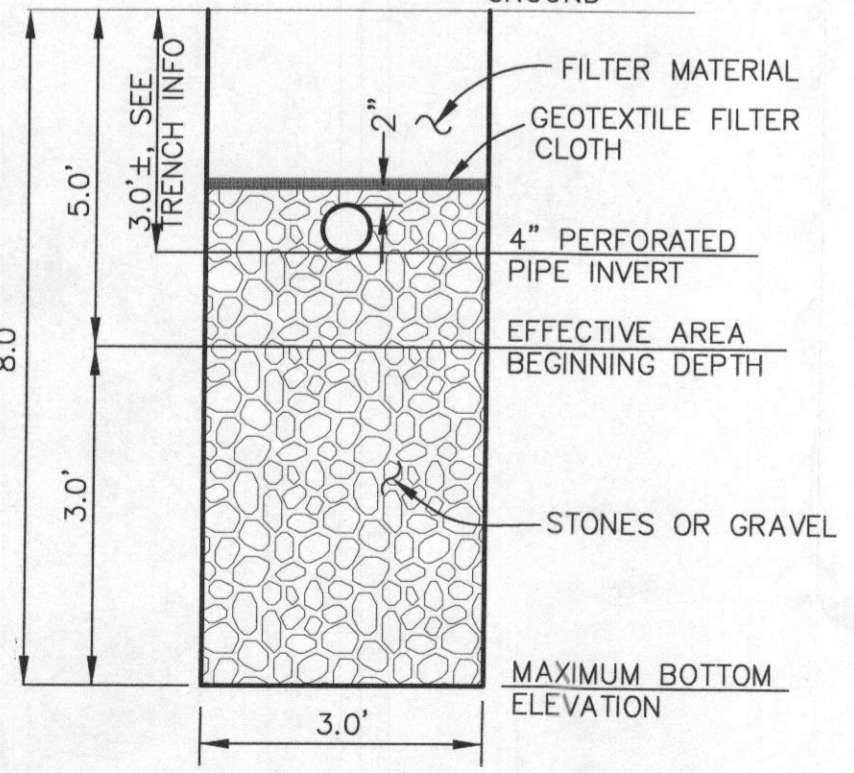


SEWER PROFILE - LOT 14  
SCALE: VERTICAL 1"=3', HORIZONTAL 1"=30'

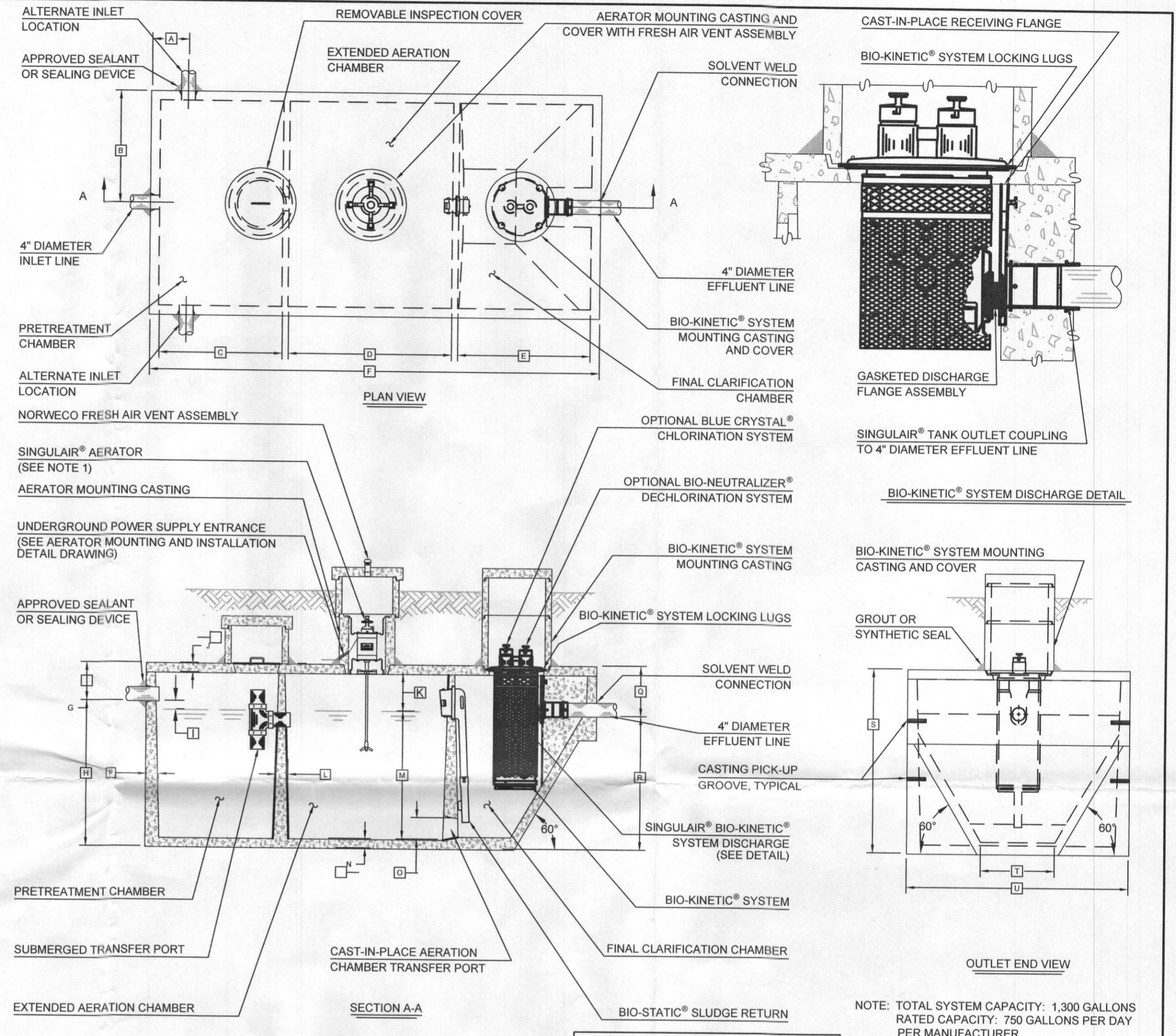
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TRENCH 2-3	40 LF	646.7	643.7	638.7
TRENCH 2-4	40 LF	646.5	643.5	638.5

CRITICAL DIMENSIONS			
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B	3'-0"	O	0'-6"
C	3'-4"	P	0'-3"
D	4'-5"	Q	1'-4"
E	3'-7"	R	3'-8"
F	12'-2"	S	5'-0"
G	1'-0"	T	2'-0"
H	4'-0"	U	6'-0"
I	0'-3"	V	
J	0'-3"	W	
K	1'-0"	X	
L	0'-2"	Y	
M	3'-6"	Z	



TYPICAL TRENCH DETAIL  
NOT TO SCALE



NOTES:  
TOTAL SYSTEM CAPACITY: 1,300 GALLONS  
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SEE MANUFACTURERS SPECIFICATIONS FOR  
DETAILS. WWW.NORWECO.COM

NOTE: TOTAL SYSTEM CAPACITY: 1,300 GALLONS  
RATED CAPACITY: 750 GALLONS PER DAY  
PER MANUFACTURER.

- Required BAT Site Plan Notes
- 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 sit plan may be required.
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ELLCOTT CITY, MARYLAND 21043  
PHONE: 410-465-6105 ▲ FAX: 410-465-6644  
BEI@BEI-CVILENGINEERING.COM

SIGNATURE AND SEAL ARE FOR  
CULVERT PROFILE ONLY:  
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. 45577, Exp. 6-08-2016.

*John M. Carline*  
STATE OF MARYLAND  
JOHN M. CARLINE  
No. 45577  
PROFESSIONAL ENGINEER

OWNER/BUILDER: DR HORTON, INC.  
1356 BEVERLY ROAD  
SUITE 300  
MCLEAN, VA 22101  
PHONE: 571-723-0813  
FAX: 800-551-5015

PROJECT: VISTA RIDGE LOT 14

LOCATION: 2050 DROVERS LANE  
COOKSVILLE, MD 21723  
TAX MAP No. 8 - BLOCK No. 23 - PARCEL No. 176  
4TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND  
TAX ID NUMBER 04-595485

TITLE: BUILDING PERMIT PLAN AND BAT SITE PLAN

HOUSE TYPE: BALMORAL

DATE: AUGUST 6, 2014  
SEPTEMBER 12, 2014

PROJECT NO. 1635

SCALE: 1" = 30'

DRAWING 2 OF 2

DESIGN: JMC DRAFT: JMC