



HEALTH

Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

Date Received: 2/25/16

Permit No.: BIG 000669

Building Address: 5007 Altogether Way
 City: Clarksville State: MD Zip Code: 21029
 Suite/Apt. # _____ SDP/WP/BA #: GP-15-081
 Census Tract: _____ Subdivision: Greenberry
 Section: _____ Area: _____ Lot: 21
 Tax Map: _____ Parcel: _____ Grid: _____
 Zoning: _____ Map Coordinates: _____ Lot Size: _____

Existing Use: Vacant Lot
 Proposed Use: Single family house
 Estimated Construction Cost: \$ 230,000
 Description of Work: New 2 story "Chapel Hill II" with 3 car garage, morning room, 4'x12' to family room
 Occupant or Tenant: _____
 Was tenant space previously occupied? Yes No
 Contact Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Property Owner's Name: NVR Inc
 Address: 9720 Patuxent woods Drive
 City: Columbia State: MD Zip Code: 21046
 Phone: 410-379-5956 Fax: _____
 Email: _____

Applicant's Name & Mailing Address, (If other than stated herein)
 Applicant's Name: Jim Kerwin
 Address: PO Box 552
 City: Woodbridge State: MD Zip Code: 21792
 Phone: 443-309-7792 Fax: _____
 Email: Jim@DecaturBuildingServices.com

Contractor Company: NV Homes
 Contact Person: Ryan Johnson
 Address: 9720 Patuxent Woods Drive
 City: Columbia State: MD Zip Code: 21046
 License No.: 56
 Phone: 410-379-5956 Fax: _____
 Email: _____

Engineer/Architect Company: _____
 Responsible Design Prof.: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Commercial Building Characteristics	Residential Building Characteristics	
Height:	<input checked="" type="checkbox"/> SF Dwelling	<input type="checkbox"/> SF Townhouse
No. of stories:	<u>Depth</u>	<u>Width</u>
Gross area, sq. ft./floor:	1 st floor:	
	2 nd floor:	
Area of construction (sq. ft.):	Basement:	
	<input type="checkbox"/> Finished Basement	
Use group:	<input checked="" type="checkbox"/> Unfinished Basement	
	<input type="checkbox"/> Crawl Space	
<u>Construction type:</u>	<input type="checkbox"/> Slab on Grade	
<input type="checkbox"/> Reinforced Concrete	No. of Bedrooms: <u>4</u>	
<input type="checkbox"/> Structural Steel	<u>Multi-family Dwelling</u>	
<input type="checkbox"/> Masonry	No. of efficiency units:	
<input type="checkbox"/> Wood Frame	No. of 1 BR units:	
<input type="checkbox"/> State Certified Modular	No. of 2 BR units:	
	No. of 3 BR units:	
	Other Structure:	
	Dimensions:	
<input checked="" type="checkbox"/> Roadside Tree Project Permit	Footings:	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Roof:	
<u>Roadside Tree Project Permit #</u>	<input type="checkbox"/> State Certified Modular	
	<input type="checkbox"/> Manufactured Home	

Utilities	
<u>Water Supply</u>	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
<u>Sewage Disposal</u>	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	
Electric: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Gas: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<u>Heating System</u>	
<input checked="" type="checkbox"/> Electric <input type="checkbox"/> Oil	
<input checked="" type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas	
<input type="checkbox"/> Other:	
<u>Sprinkler System:</u>	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Grading Permit Number: <u>G-15 000 287</u>	
Building Shell Permit Number:	

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT; (3) THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSTING NOTICES.

Jim Kerwin
 Applicant's Signature
Jim@DecaturBuildingServices.com
 Email Address
AGENT
 Title/Company

Jim Kerwin
 Print Name
2/25/2016
 Date
RECEIVED
 FEB 25 2016 11:25 AM
 AH

LICENSES & PERMITS DIVISION

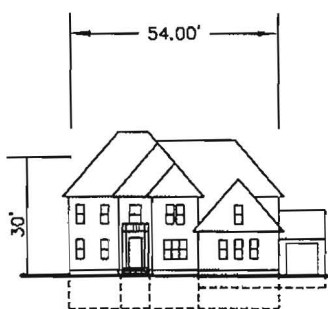
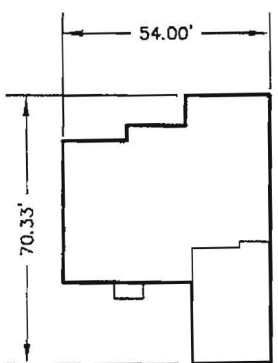
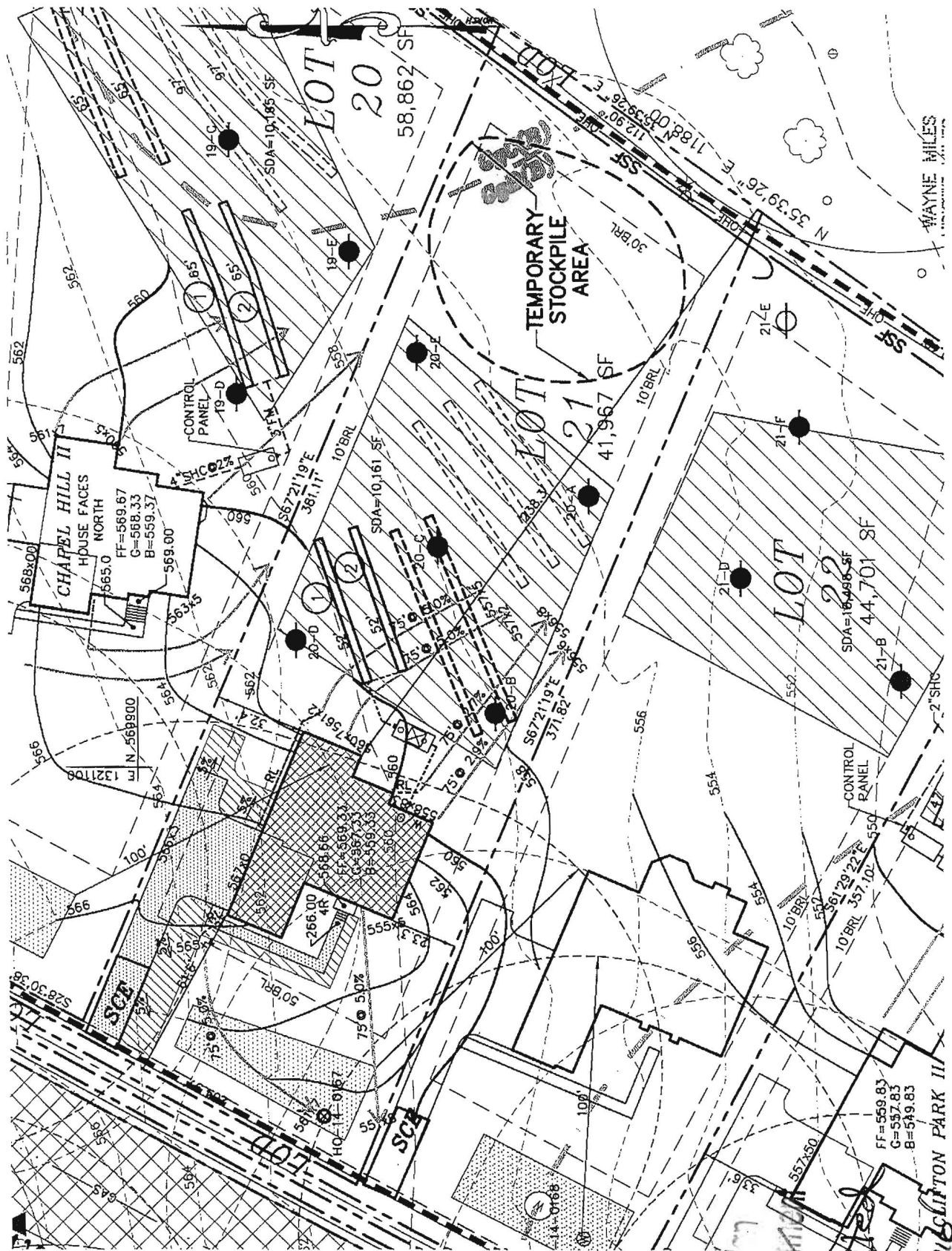
Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 PLEASE WRITE NEATLY & LEGIBLY
 -FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
<input checked="" type="checkbox"/> State Highways		
<input checked="" type="checkbox"/> Building Officials		
<input checked="" type="checkbox"/> PSZA (Zoning)		
<input checked="" type="checkbox"/> PSZA (Engineering)		
<input checked="" type="checkbox"/> Health		<u>Shelley R. Brinkman</u>

Is Sediment Control approval required for issuance? Yes No
 CONTINGENCY CONSTRUCTION START

DPZ SETBACK INFORMATION	
Front:	
Rear:	
Side:	
Side St.:	
All minimum setbacks met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is Entrance Permit Required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Historic District?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lot Coverage for New Town Zone:	
SDP/Red-line approval date:	

Filing Fee	\$ <u>100.00</u>
Permit Fee	\$
Tech Fee	\$
Excise Tax	\$
PSFS	\$
Guaranty Fund	\$ <u>50.00</u>
Add'l per Fee	\$
Total Fees	\$
Sub-Total Paid	\$
Balance Due	\$
Check	<u>908459</u>



CHAPEL HILL II
ELEV. A

Approved Septic System Plan
Howard County Health Department
4-bedroom SFD
approved as illustrated
B16000669
R. Buckley
3/16/2010
Signature

PLOT PLAN (SITE SPECIFIC)
GREENBERRY
LOT 21

FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: 1" = 50' DRAWN BY: MMM DATE: FEB. 2016 PN: 15-005

**MILDENBERG
BOENDER, & ASSOC., INC.**

Engineers Planners Surveyors
7350-B Grace Drive, Columbia, Maryland 21044
(410) 997-0296 Balt. (410) 997-0298 Fax.



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

Twitter: [HowardCoHealthDep](https://twitter.com/HowardCoHealthDep)

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

MEMORANDUM

TO: *Taylor Faris, NV Homes, Inc.*

FROM: *Robert Bricker, REHS/RS, L.E.H.S.*
Well & Septic Program

RE: *5007 Altogether Way (Greenberry Lot 21) Potential Basement Bedroom*

DATE: March 16, 2016

I have reviewed the floor plans in support of Building Permit **B16000669** for a new home at **5007 Altogether Way** and noted that there is a rough-in for a full bathroom in the unfinished basement. Please note that this makes it very likely for one or more rooms to be considered bedrooms upon conversion of the basement to finished living space.

For reference, the following is the bedroom definition in Howard County Code Section 3.801(b):

- (1) Except as provided in paragraph (2) of this subsection, a bedroom is any space in the conditioned are of a dwelling unit or accessory structure that:
 - (i) Is 90 square feet or greater in size;
 - (ii) May be used as a private sleeping area; and
 - (iii) Has at least one window and one interior door.
- (2) If a home office, library, or similar room is proposed, it may not be a bedroom if there is no closet; and
 - (i) The room contains permanently built-in bookcases around the perimeter of the room, desks, and other features that encumber the room;
 - (ii) A minimum 4 foot-wide opening, without doors, into another room;
 - (iii) A half wall (4 foot maximum height) between the room and another room; or
 - (iv) The room is a first floor room or basement area that does not have direct access to full bathrooms or "roughed in" plumbing that would provide direct access to future full bathroom facilities.

The Health Department strongly recommends sizing the onsite sewage disposal system at least one bedroom larger than the existing 4-bedroom design to accommodate a future finished basement. If you choose to only size for the existing design, any future building permit for a finished basement may be placed on hold until the system is upgraded to accommodate the proposed number of bedrooms. This memo will be retained in the Health Department file for future reference.

CHAPEL HILL II

LOT 21
4 Bedrooms

B16000 669

'OK' *rs* 3/4/2016



NVR, Inc.
Architectural Services
Architects
21 Byte Court, Suite A
Frederick, MD 21702

	FULL BASEMENT						ATTACHED GARAGE / ROOMS						STANDARD DETAILS	
	STD. DWGS.	ELEV. "A"	ELEV. "B"	ELEV. "C"	ELEV. "K"	ELEV. "L"	MORNING ROOM	4' EXTENSION TO HOUSE	ALT. DESIGN OWNER'S SUITE	1 CAR SIDE GARAGE	SITTING AREA / COVERED PORCH	3 CAR SIDE GARAGE		2'-0" EXTENSION GARAGE
SPEC SHEET	2													D-1
FRONT ELEVATIONS		3	4	5	6	7								D-2
SIDES AND REAR ELEVATIONS		8	9	10	11									D-4
FOUNDATION	12	13	13	13	13		12	14		14		12	12	D-5
FOUNDATION HOLD DOWN	15.1	15.2	15.2	15.2	15.2		15.1	15.1	15.1	15.1	15.1	15.1		D-5a
PLUMBING	16													D-6
BASEMENT PLAN	17	18	18	19	19									D-7
FIRST FLOOR PLAN	20	21	21	22	22		20, 23	23		24		20, 21, 22		D-8c
SECOND FLOOR PLAN	25	26	26	27	27		25	28		25				D-11
BUILDING SECTION AT FOYER	24						24							D-12
BUILDING SECTION AT GARAGE	30						30		30	30				D-12b
BUILDING SECTION AT MORNING ROOM	31						31							D-12c
PRIMARY STAIR - PINE	32, 33, 34													D-13
PRIMARY STAIR - OAK	35, 36, 37													D-14
PRIMARY STAIR - DIRECT SET	38, 39, 40													D-15a
SECONDARY STAIR - PINE / OAK	41, 42, 43, 44													D-16
KITCHEN PLANS, HOOD A	45													D-17
KITCHEN PLANS, HOOD A - MORNING ROOM	46						46							D-20
KITCHEN PLANS, HOOD B	47													D-21
KITCHEN PLANS, HOOD B - MORNING ROOM	48						48							D-22
KITCHEN PLANS - HUTCH / PLANNING DESK	44													D-22a
MISC. CABINETS - BUTLER'S PANTRY, LAUNDRY, WET BAR	50													D-27
INTERIOR DETAILS - TRIM	51, 52, 53													D-28a
INTERIOR DETAILS - FIREPLACE	54, 55													D-29
EXTERIOR DETAILS - PORCH		56	56											D-30
BASEMENT ELECTRICAL	57	58	58	59	59									D-34
FIRST FLOOR ELECTRICAL	60	61	61	62	62		60, 63	63	64	60, 61, 62				D-36
SECOND FLOOR ELECTRICAL	65	66	66	67	67				68	66				D-38
FIRST FLOOR JOIST LAYOUT	64	70	70	70	64		64	64						D-38a
SECOND FLOOR JOIST LAYOUT	71	72	72	72	71					71				D-40
ROOF FRAMING		73	74	75	76	77		78, 74	80, 81	80, 81, 82, 83				D-40a
TRUSS BRACING - NV	84													D-44
BRACED WALL PANEL DETAIL- FIRST FLOOR - 90 MPH	85, 86						85	85	87	86	85			D-45
BRACED WALL PANEL DETAIL- SECOND FLOOR	88													D-46
ROOF VENT		89	90	91	92	93								WB-1
HEATING LAYOUT - BASEMENT	94													F-1
HEATING LAYOUT - FIRST FLOOR	95, 97													
HEATING LAYOUT - SECOND FLOOR	96, 98													

BASE SQUARE FOOTAGE

FIRST FLOOR	GROSS SQ. FT.	1797
SECOND FLOOR	GROSS SQ. FT.	1671
HOUSE TOTAL	GROSS SQ. FT.	3468

ELEVATIONS SQ. FT.

ELEVATION "A"	GROSS SQ. FT.	+0
ELEVATION "B"	GROSS SQ. FT.	+108
ELEVATION "C"	GROSS SQ. FT.	+138
ELEVATION "K"	GROSS SQ. FT.	+140
ELEVATION "L"	GROSS SQ. FT.	+0

ADDITIONAL SQ. FT.

MORNING ROOM	GROSS SQ. FT.	+264
4' EXT TO HOUSE	GROSS SQ. FT.	+64
OWNER'S SITTING AREA	GROSS SQ. FT.	+158
ALT OWNER'S / 2 CAR	GROSS SQ. FT.	+122
ALT OWNER'S / 3 CAR	GROSS SQ. FT.	+208

MAXIMUM FINISHED SQ. FT.

HOUSE TOTAL	GROSS SQ. FT.	4302
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**MAXIMUM SQ. FT. DOES NOT INCLUDE BASEMENT

FINISHED BASEMENT SQ. FT.

RECREATION ROOM	GROSS SQ. FT.	840
MORNING ROOM	GROSS SQ. FT.	+264
4' EXT.	GROSS SQ. FT.	+64
BASEMENT BATH	GROSS SQ. FT.	+45
EXERCISE ROOM	GROSS SQ. FT.	+220
MEDIA ROOM	GROSS SQ. FT.	+210
HOME OFFICE	GROSS SQ. FT.	+235

UNFINISHED AREA

UNFINISHED BASEMENT	GROSS SQ. FT.	1798
2 CAR GARAGE	GROSS SQ. FT.	427
3 CAR GARAGE	GROSS SQ. FT.	632
1 CAR GARAGE	GROSS SQ. FT.	240

FOOTPRINT

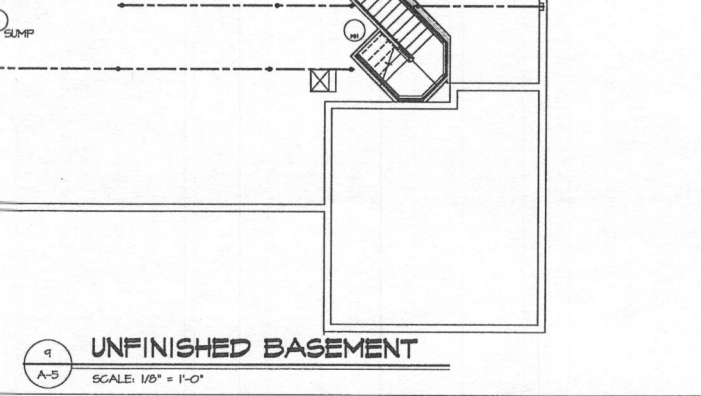
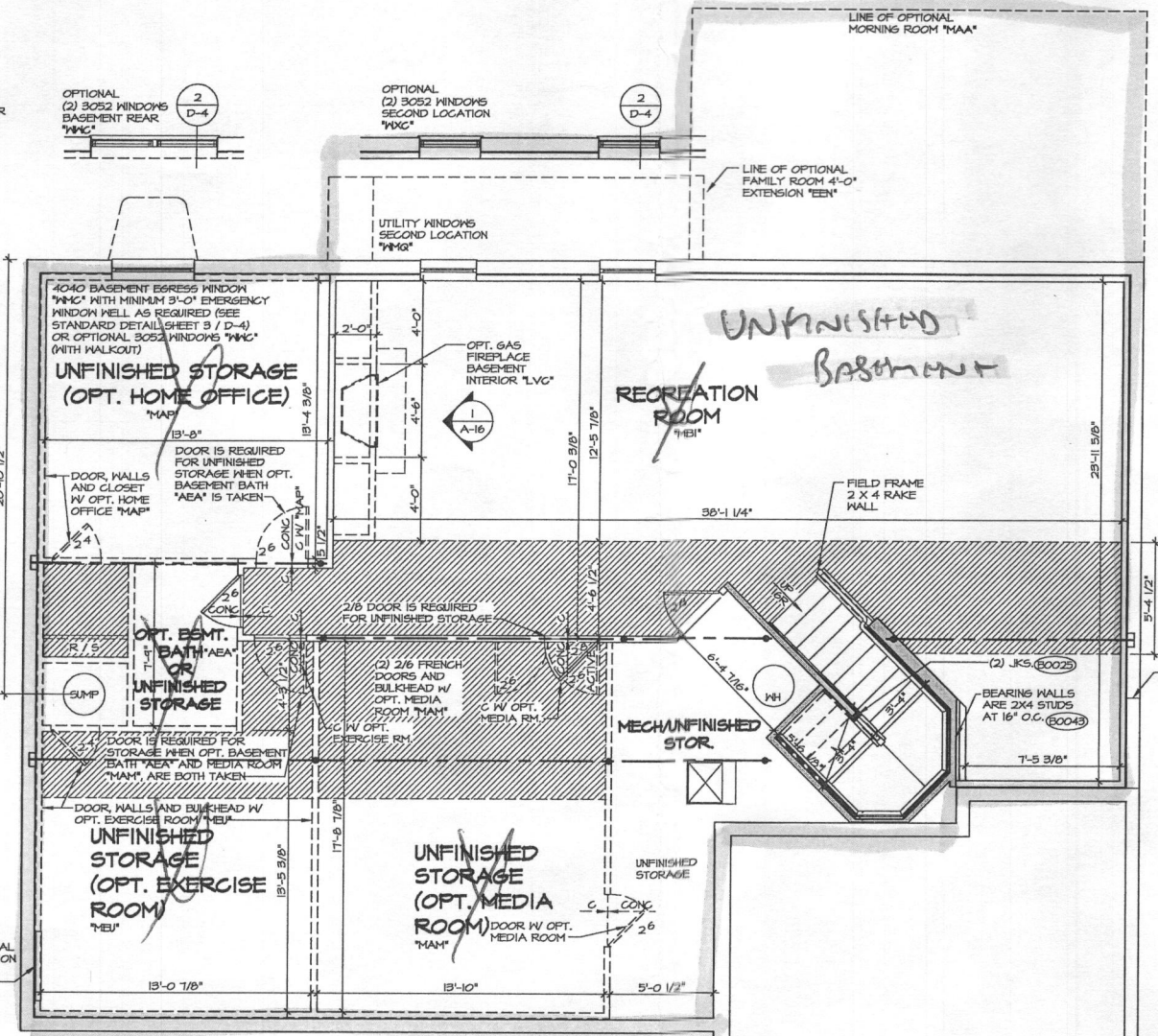
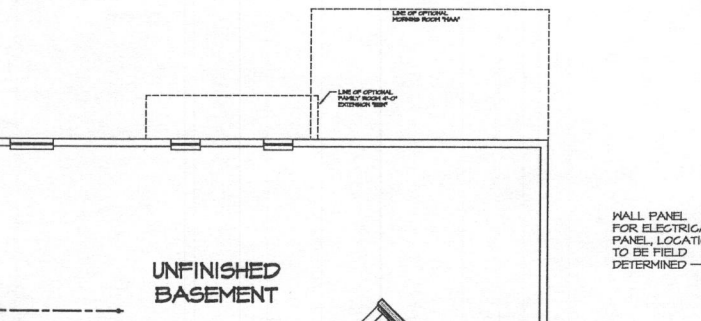
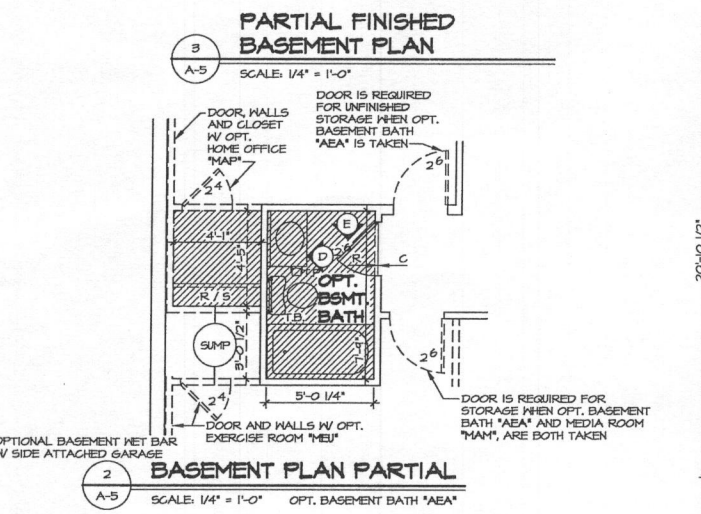
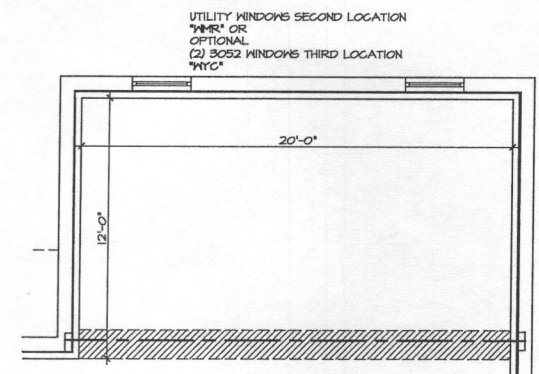
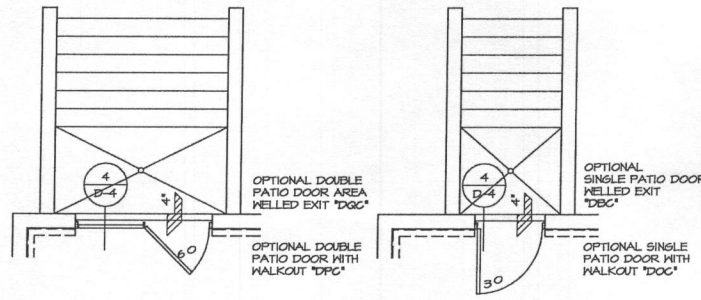
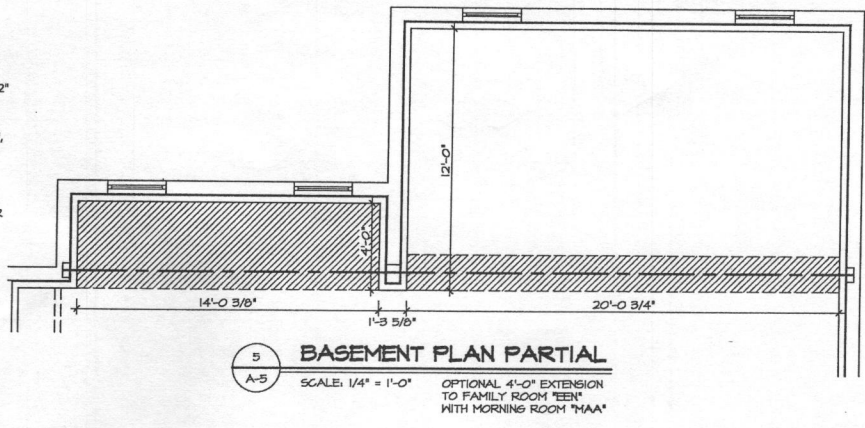
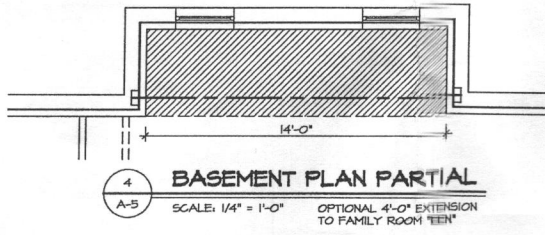
BASE HOUSE:	
WIDTH:	54'-0"
DEPTH:	48'-0"
MAXIMUM:	
WIDTH:	66'-4"
DEPTH:	70'-4"

SET - VERSION
10900-02 **CS-1**

J:\Dwg\NVA\DETACHED\CHAPEL HILL II\10900_02_CSI.dwg 02/18/16 - 9:40 am

3 Bedrooms

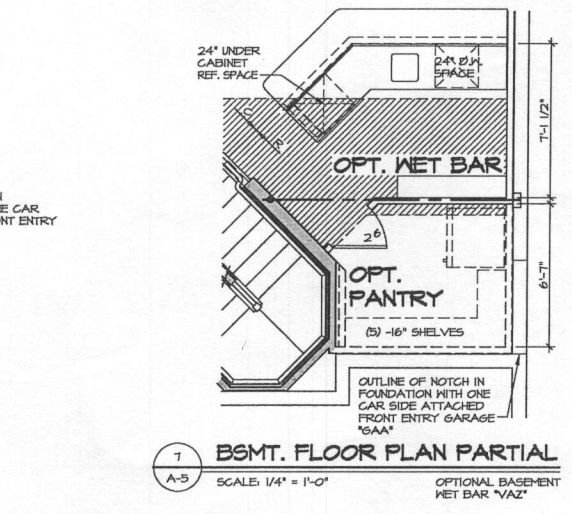
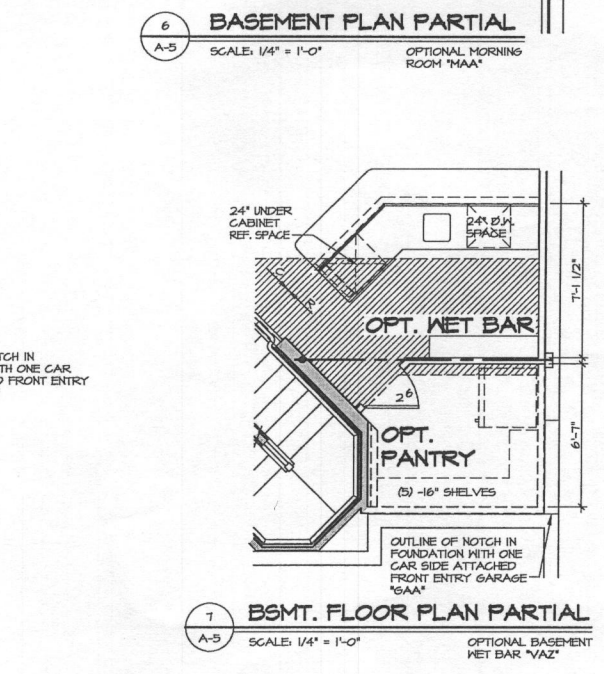
- NOTES:**
1. ALL HEADERS ARE (3) 2x6, UNLESS OTHERWISE NOTED.
 2. ALL EXTERIOR WALLS ARE 6" UNLESS OTHERWISE NOTED.
 3. ALL INTERIOR WALLS ARE 5 1/2" UNLESS OTHERWISE NOTED.
 4. HATCHED AREAS INDICATE DROPPED CEILINGS.
 5. ALL CASED OPENINGS AT 8'-3", UNLESS OTHERWISE NOTED.
 6. WALKER ALWAYS ON THE LEFT PER PLAN OR REVERSE PLAN (WHERE APPLICABLE).
 7. JACKS MUST EXTEND THROUGH TOP PLATES OF WALL TO BEAR DIRECTLY ON BOTTOM CHORD OF GIRDER TRUSS AT LOCATIONS NOTED.



WITH OPTION "SGI" - DRYWALL UNFINISHED BASEMENT CEILING AREA

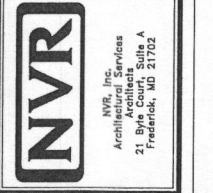
NOTES:

- 1/2" GYPSUM WALL BOARD REQUIRED ON CEILING IN UNFINISHED AREAS WHEN NO SPRINKLER SYSTEM IS INSTALLED.
- A MAXIMUM AREA OF 80 SQ FT MAY BE OMITTED AS NEEDED FOR INSTALLATION OF PLUMBING, ELECTRICAL, AND/OR HVAC (TYPICALLY AN 8'-0"X8'-0" CEILING SPACE ABOVE MECHANICAL AREA).
- PROVIDE FIRE BLOCKING AS REQUIRED AT PERIMETER OF ANY AREAS WHERE DRYWALL HAS BEEN OMITTED.

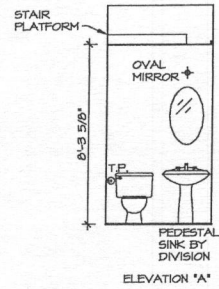


REV. NO.	DATE	REMARKS
1	2/14/14	56A - MARKETING REVIEW REVISIONS
2	3/10/14	726K - TRIM MARKETING REVISIONS
3	7/15/14	838B - MODIFIED OPTIONS CODES ON 2 / A-5
4	8/7/14	838B - ADDED A END WALL NEXT TO REF. AT MET BAR (PAR ID 26449)
5	10/15/14	838B - ADDED OUTLINE OF FOUNDATION NOTCH BY OPT. "MAA" TO PLAN
6	10/24/15	838B - REVISED HALL LOCKE OPTION TO 2X6 ADDED BRG. CLG. BATH (PAR 8178)
7	10/24/15	838B - ADDED UTIL. NEWS SECOND LOC. "NYC" TO MORNING ROOM (PAR 83919)
8	1/27/16	899 - PAR 817829 - UPDATED HANGERS TO MATCH STAIR PLANS

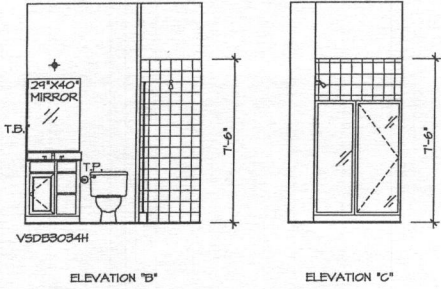
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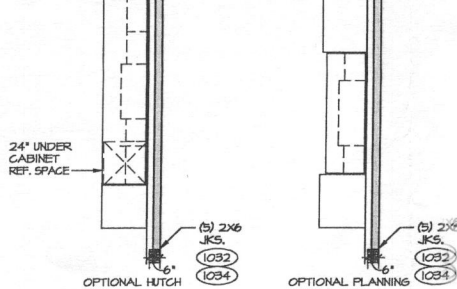
MODEL	CHAPEL HILL II
SHEET NO.	A-5
SET NO.	10400
VERSION	02
DRAWN BY	SMN
DRAWING TITLE	BASEMENT FLOOR PLAN
DATE:	7/24/15
OPTION	OPTION
OPTION DESCRIPTION	
DATE	01/27/16
SCALE	1/8" = 1'-0"



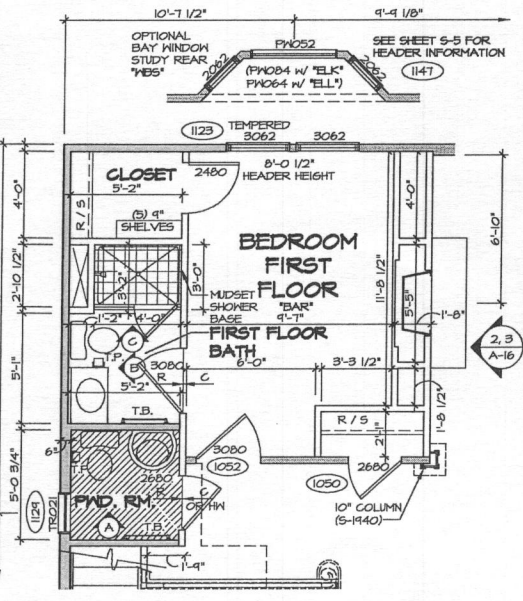
7 POWDER ROOM ELEVATION
A-6 SCALE: 1/4" = 1'-0"



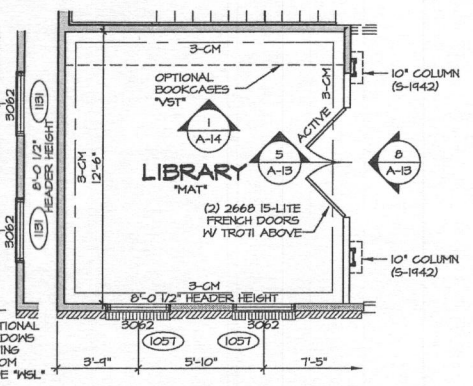
6 BATH W/ BEDROOM FIRST FLOOR
A-6 SCALE: 1/4" = 1'-0"



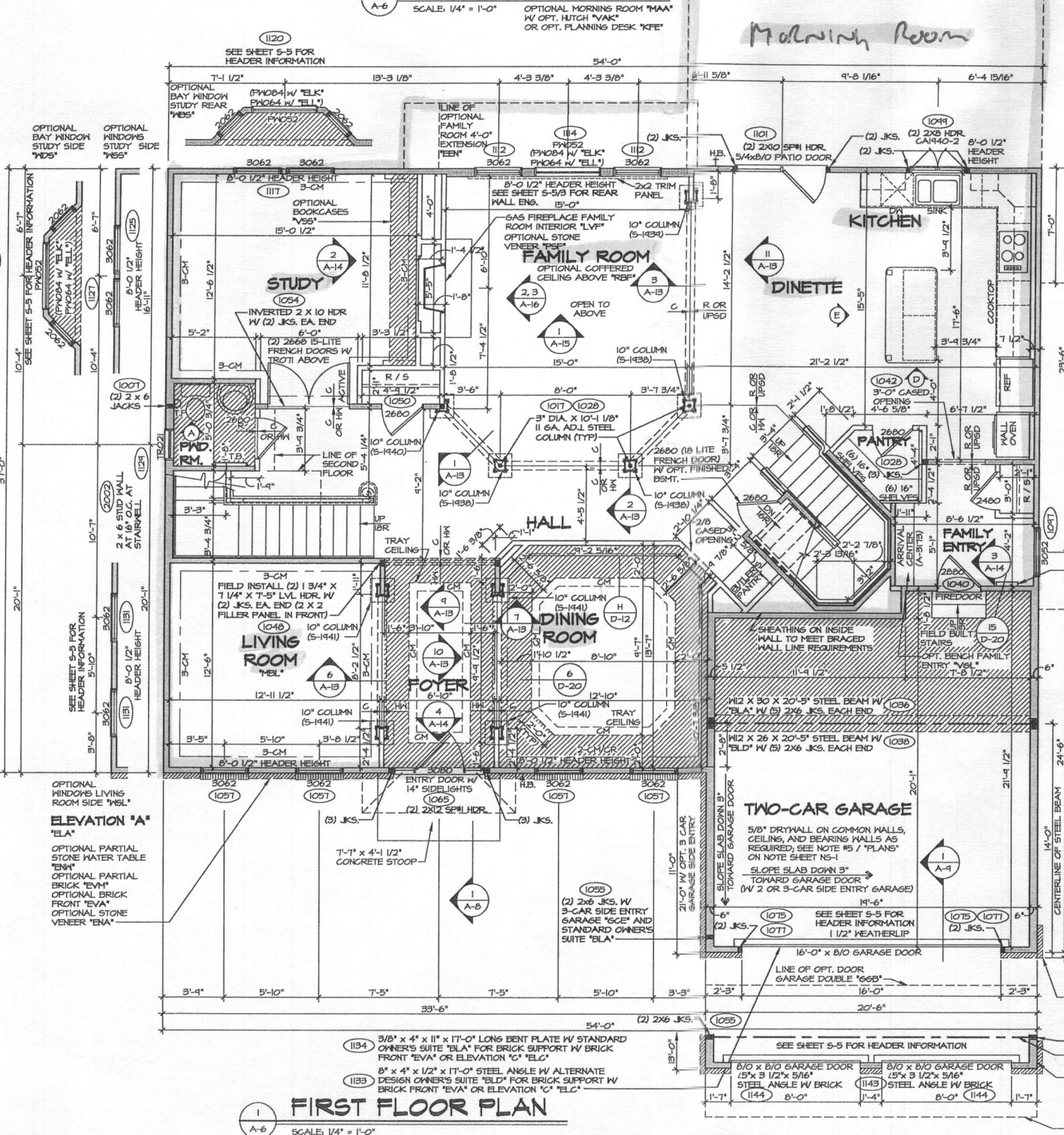
5 PARTIAL FIRST FLOOR PLAN
A-6 SCALE: 1/4" = 1'-0"



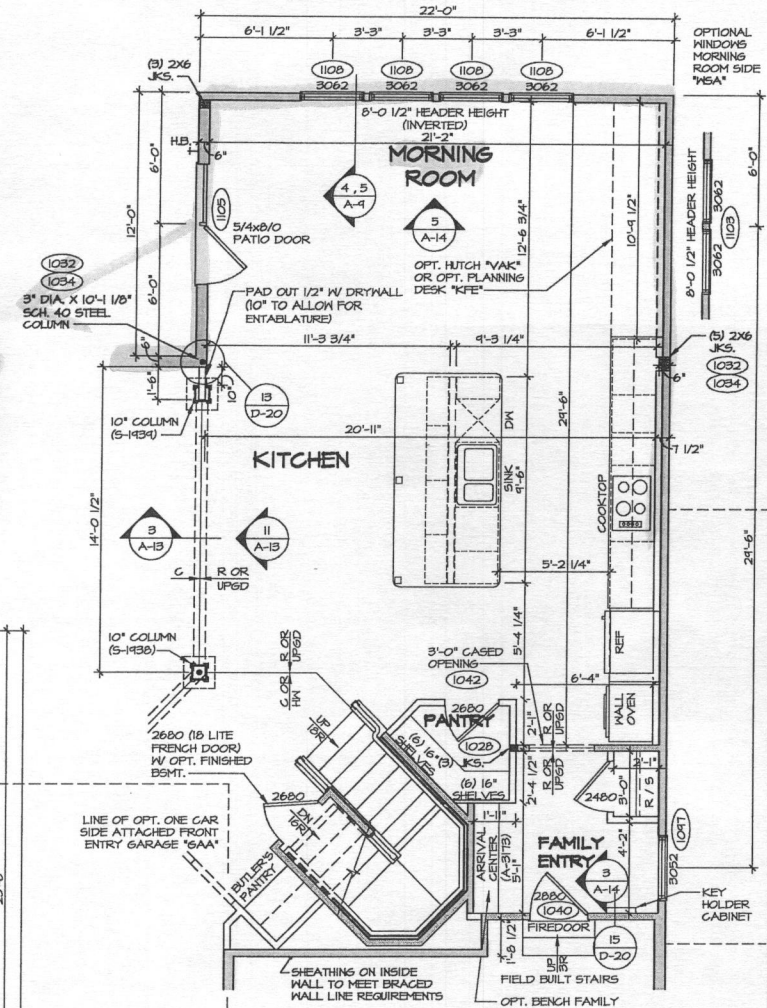
3 FIRST FLOOR PLAN PARTIAL
A-6 SCALE: 1/4" = 1'-0"



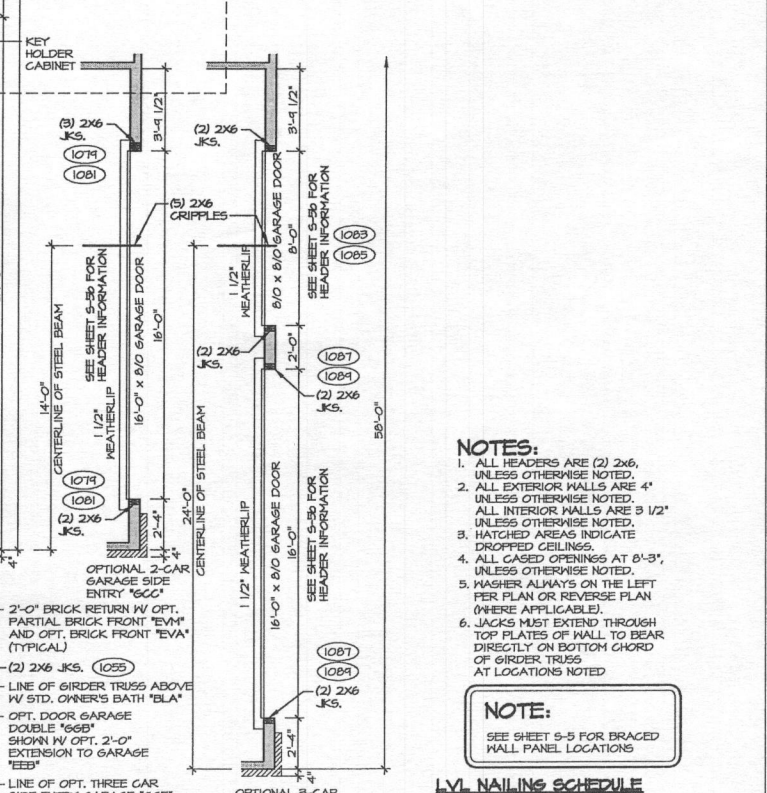
2 FIRST FLOOR PLAN PARTIAL
A-6 SCALE: 1/4" = 1'-0"



1 FIRST FLOOR PLAN
A-6 SCALE: 1/4" = 1'-0"



4 FIRST FLOOR PLAN PARTIAL
A-6 SCALE: 1/4" = 1'-0"



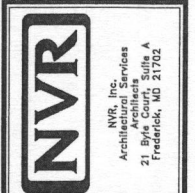
- NOTES:**
- ALL HEADERS ARE (2) 2x6, UNLESS OTHERWISE NOTED.
 - ALL EXTERIOR WALLS ARE 4" UNLESS OTHERWISE NOTED.
 - ALL INTERIOR WALLS ARE 3 1/2" UNLESS OTHERWISE NOTED.
 - HATCHED AREAS INDICATE DROPPED CEILING.
 - ALL CASED OPENINGS AT 6'-3", UNLESS OTHERWISE NOTED.
 - WASHER ALWAYS ON THE LEFT PER PLAN OR REVERSE PLAN (WHERE APPLICABLE).
 - JACKS MUST EXTEND THROUGH TOP PLATES OF WALL TO BEAR DIRECTLY ON BOTTOM CHORD OF GIRDER TRUSS AT LOCATIONS NOTED.
- NOTE:**
SEE SHEET S-5 FOR BRACED WALL PANEL LOCATIONS
- LVL NAILING SCHEDULE**
(2) 1 3/4" x 7 1/4" LVL FASTEN W/ (2) ROWS OF 16d NAILS AT 12" O.C.

0 Bedrooms

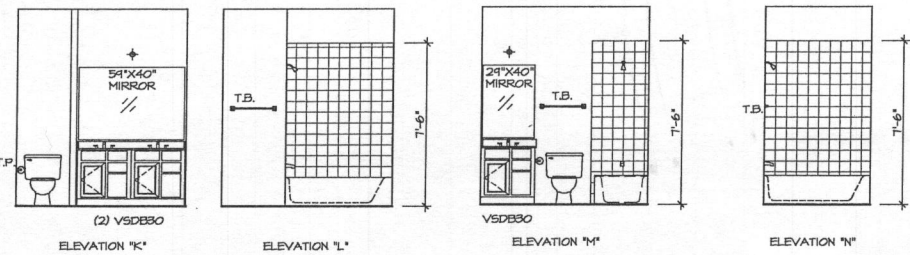
Morning Room

REVISIONS

REV. NO.	DATE	DESCRIPTION
1	02/15/16	ISSUED FOR PERMITS
2	02/16/16	REVISED PER 10303 - UPDATED HANDRAILS TO MATCH STAIR PLANS
3	02/16/16	REVISED PER 10303 - REVISED HALL BEHIND INT. FIREPLACE TO BE 2'0" AND MOVED 1" (PAR ID 20616)
4	02/16/16	REVISED PER 10303 - REVISED KITCHEN CABINET LAYOUT
5	02/16/16	REVISED PER 10303 - DROPPED CEILING IN GARAGE FOR PLUMBING / INSULATION
6	02/16/16	REVISED PER 10303 - ADDED TRIM PANEL UNDER FAMILY ROOM WINDOW
7	02/16/16	REVISED PER 10303 - ADDED HATCH TO HEADSET SHOWER OPT. BAR PAR 88924
8	02/16/16	REVISED PER 10303 - PLANT BUILT ARRIVAL CENTER PROJECT
9	02/16/16	TEMP - 2012 VA CODE UPDATE

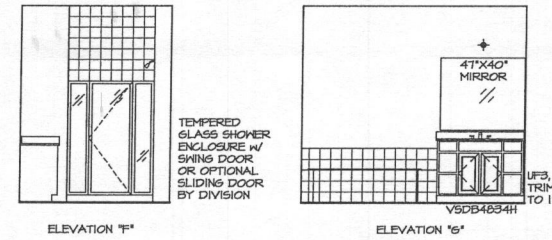


MODEL	CHAPEL HILL II
SHEET NO.	A-6
VERSION	02
DRAWN BY	SMW
DATE	7/24/15
OPTION	OPTION
OPTION DESCRIPTION	20



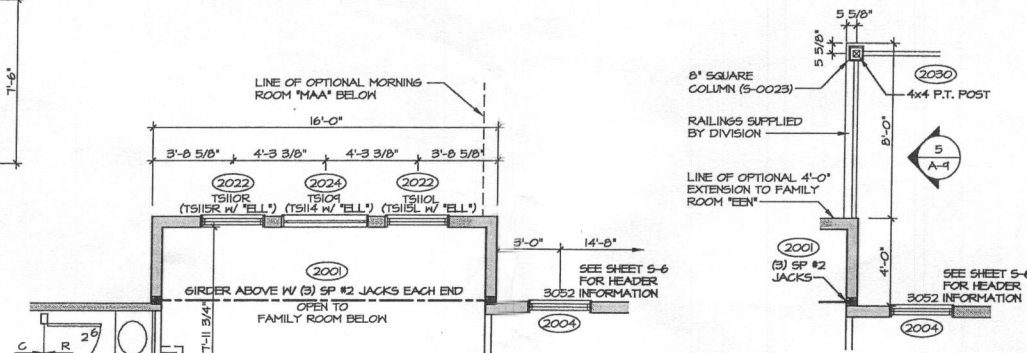
5 BATH #1 ELEVATIONS
SCALE: 1/4" = 1'-0"

6 BATH #2 ELEVATIONS
SCALE: 1/4" = 1'-0"



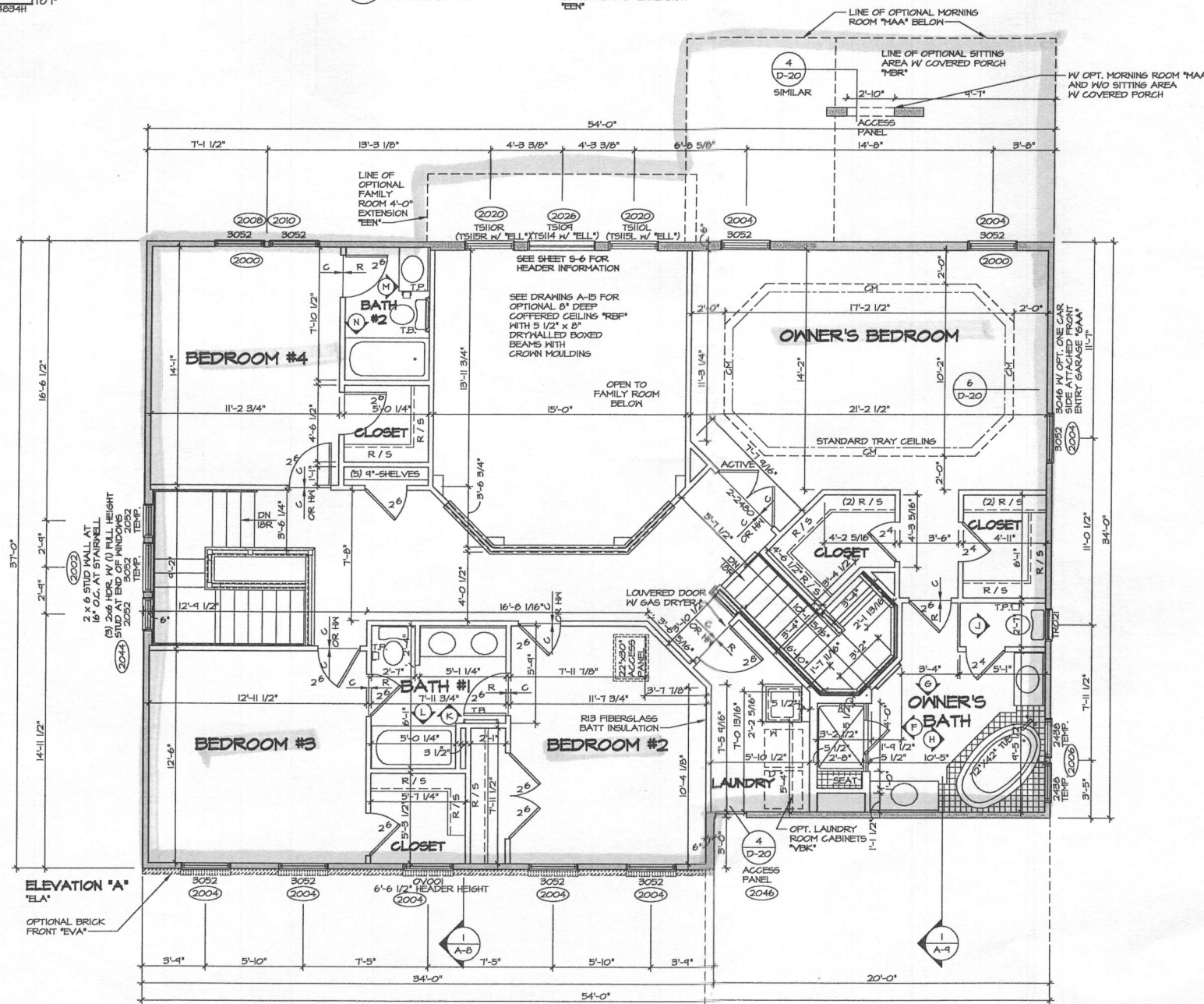
7 OWNER'S BATH ELEVATIONS
SCALE: 1/4" = 1'-0"

NOTES:
ALL VSD#24-42
DRAWERS TO BE
SET ON RIGHT
HAND.

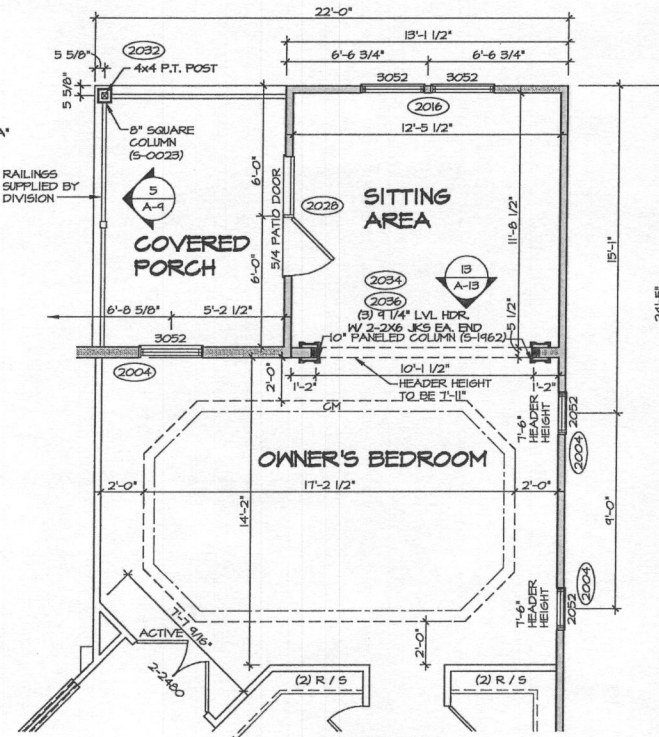


4 PARTIAL SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

3 PARTIAL SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"



1 SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"



2 PARTIAL SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

- NOTES:
- ALL HEADERS ARE (2) 2x6, UNLESS OTHERWISE NOTED.
 - ALL EXTERIOR WALLS ARE 4" UNLESS OTHERWISE NOTED.
 - ALL INTERIOR WALLS ARE 3 1/2" UNLESS OTHERWISE NOTED.
 - HATCHED AREAS INDICATE DROPPED CEILING.
 - ALL CASED OPENINGS AT 8'-3", UNLESS OTHERWISE NOTED.
 - WASHER ALWAYS ON THE LEFT PER PLAN OR REVERSE PLAN (WHERE APPLICABLE).
 - JACKS MUST EXTEND THROUGH TOP PLATES OF HALL TO BEAR DIRECTLY ON BOTTOM CHORD OF GIRDER TRUSS AT LOCATIONS NOTED.

NOTE:
SEE SHEET S-5 FOR BRACED WALL PANEL LOCATIONS

4 Bedrooms

REVISIONS	DATE	DESCRIPTION
1	10/22/14	CLB - REVISED LAUNDRY AND BEDROOM #2 HALL (PAR 12847D)
2	12/17/14	JLR - REVISED BULKHEAD NOTE AT FAMILY ROOM OVERLOOK
3	1/22/15	SKA - REVISED TOILET AREA WITH OPTION FOR PAR 12847E
4	2/23/15	SKA - REVISED TOILET AREA IN BATH #1 TO BE 2'-7" PER CODE (PAR 12847E)
5	6/9/15	LEA - REVISED INTERIOR HEADER NOTE (PAR 12847E)
6	12/01/15	CLB - REVISED A-2052 AND 3052 IN STAIRWELL TO TEMP. (PAR 12847F)
7	10/16/16	CLB - ADDED INSULATION NOTE TO THE WALL BETWEEN BEDROOM AND LAUNDRY
8	12/28/16	SKA - PAR 12847E - UPDATED HANDRAILS TO MATCH STAIR PLANS
9	2/14/18	CLB - NOTED REV. HEADER NOTE FOR 2x6 BASH TO 4'-0" EXT. (PAR 12847G)

SET NO.	10900
VERSION	02
DRAWN BY	SMN
DATE:	7/24/19
OPTION	

MODEL	CHAPEL HILL II
DRAWING TITLE	SECOND FLOOR PLAN
OPTION DESCRIPTION	

SHEET NO.	A-7
	25

SOILS TABLE (WITHIN LOD)

SYMBOL	RATING	NAME	K FACTOR
GgB	(B)	GLENELG LOAM, 3-8% SLOPES.	.20
GgC	(B)	GLENELG LOAM, 8-15% SLOPES.	.20

PRIMARY TRENCH DATA

TRENCH	EX. GROUND ELEVATION	INVERT ELEVATION	BOTTOM OF TRENCH EL.
1	559.4	555.4	553.4
2	558.9	554.9	552.4

SEPTIC TRENCH SIZING

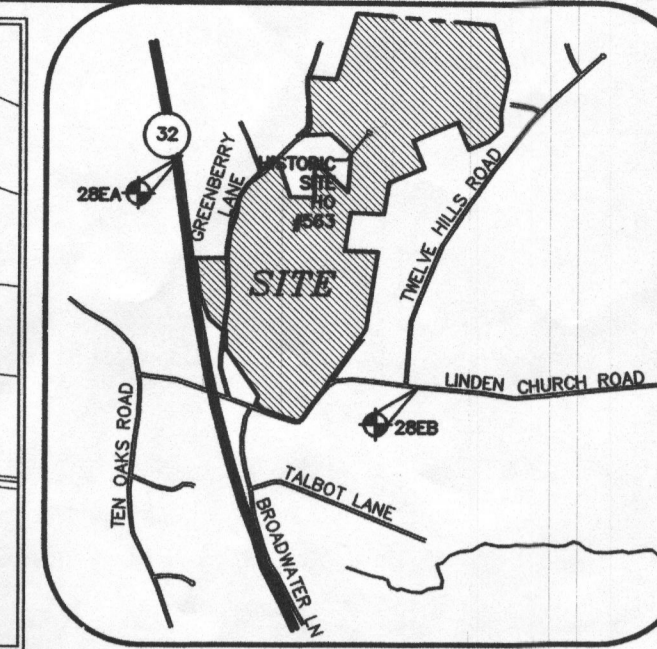
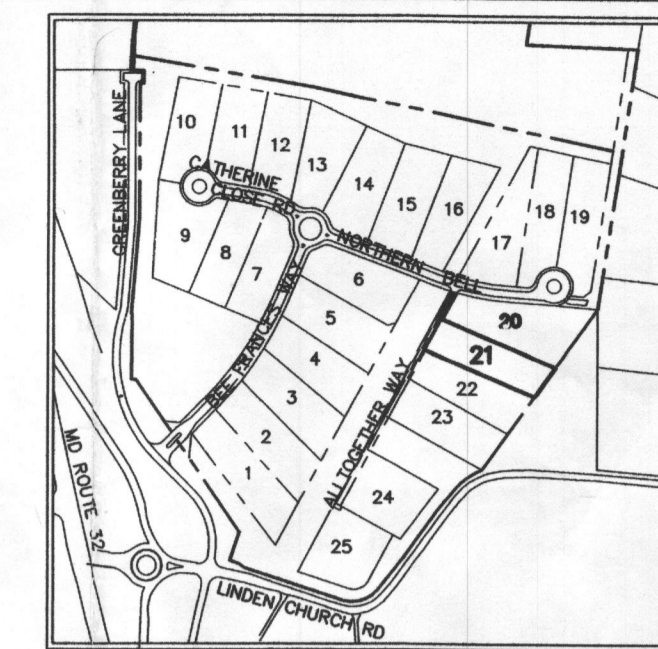
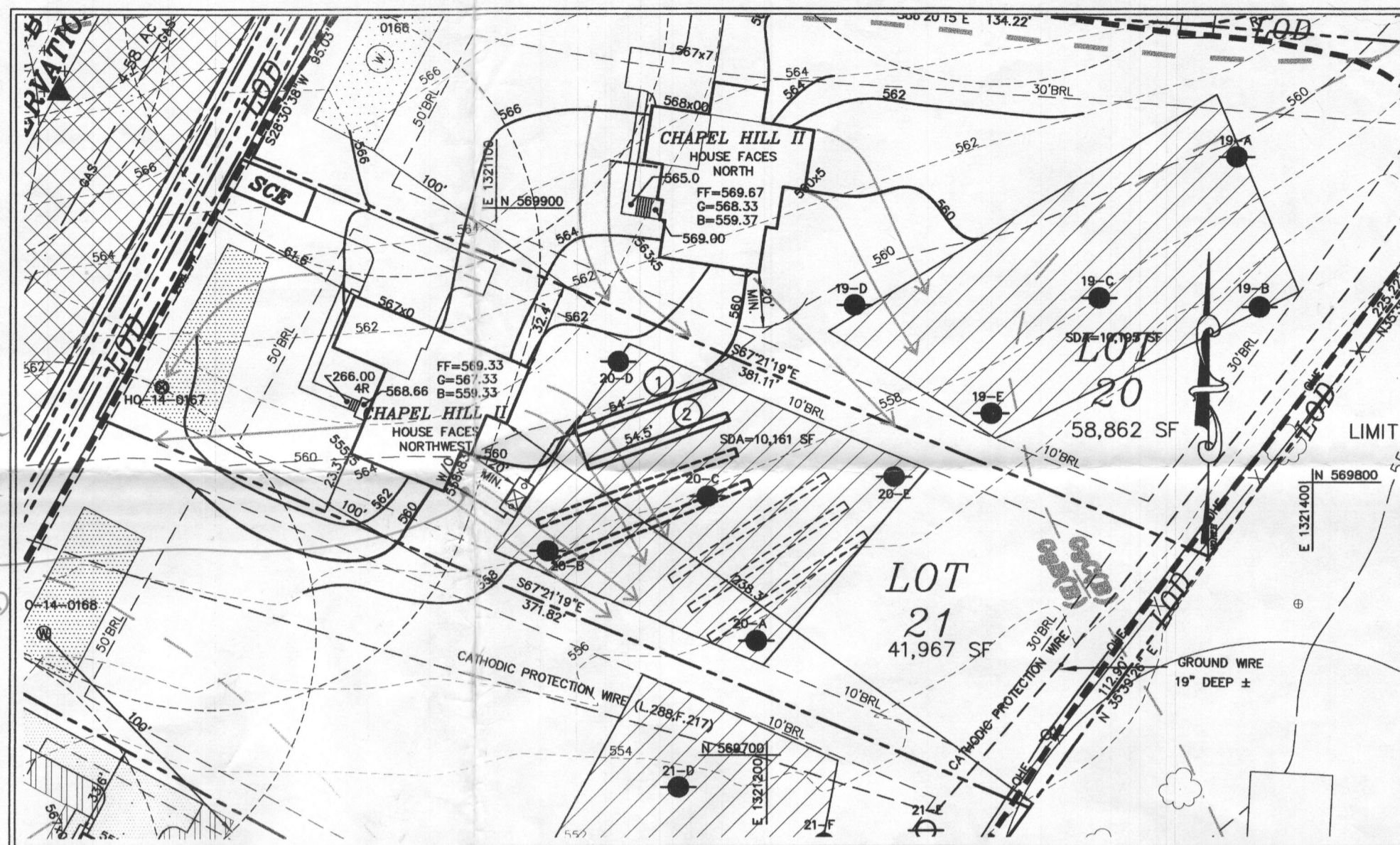
SYSTEM	APPLICATION RATE (GPD / SF)	MAXIMUM FLOW RATE (GPD)	AREA OF REQUIRED TRENCH (SF)	TRENCH LENGTH (FT)	EFFECTIVE TRENCH DEPTH (FT)	TRENCH BOTTOM DEPTH (FT)	TRENCH REDUCTION FACTOR**	ADJUSTED LENGTH OF REQUIRED TRENCH (LF)	MINIMUM SPACING (FT)	NUMBER OF TRENCHES	PROVIDED TRENCH LENGTH (FT)
PRIMARY	1.2	600	500	3	166.7	4.0	0.62	103.3	10.0'	2	52.1'
SECONDARY	0.8	600	750	3	250	4.5	0.62	155	10.0'	2	77.5'
TERTIARY	0.6	600	1,000	3	333.3	6.0	0.62	202.7	10.0'	3	69'

BAT SYSTEM CHART

DESCRIPTION	ELEVATION
FINISHED GRADE AT SEPTIC TANK	560.00
INVERT INTO TANK	556.29
EXTERIOR BOTTOM OF TANK	551.62
INTERIOR BOTTOM OF TANK	551.95
PUMP OFF	553.20
PUMP ON	553.76
HIGH WATER ALARM	555.20
WATER LEVEL	556.20
INVERT OUT OF TANK	557.87
FINISHED GRADE AT TRENCH #1	559.40
INVERT INTO TRENCH #1	555.40
FINISHED GRADE AT TRENCH #2	558.90
INVERT INTO TRENCH #2	554.90
TOTAL DYNAMIC HEAD	8.94'
DOSED VOLUME	100 GAL
PUMP RUNTIME	2.08 MIN.

LOW PRESSURE DOSING SYSTEM - INITIAL INSTALLATION

TRENCH	GROUND ELEVATION	PIPE INV. ELEVATION	TRENCH LENGTH (FT)	LATERAL LENGTH (FT)	PERFORATION DIAMETER (IN)	PRESSURE HEAD (FT)	PERFORATION FLOW RATE (GPM)	PERFORATION SPACING (FT)	NUMBER OF PERFORATIONS	TRENCH FLOW RATE (GPM)
1	559.40	555.40	54.50'	48.50'	5/16	2.0	1.63	3.5	15	24.45
2	558.90	554.90	54.00'	48.00'	5/16	2.5	1.82	4.0	13	23.66



LOCATION PLAN
SCALE: 1"=600'

VICINITY MAP
SCALE: 1"=2000'
ADC MAP 24 GRID F6

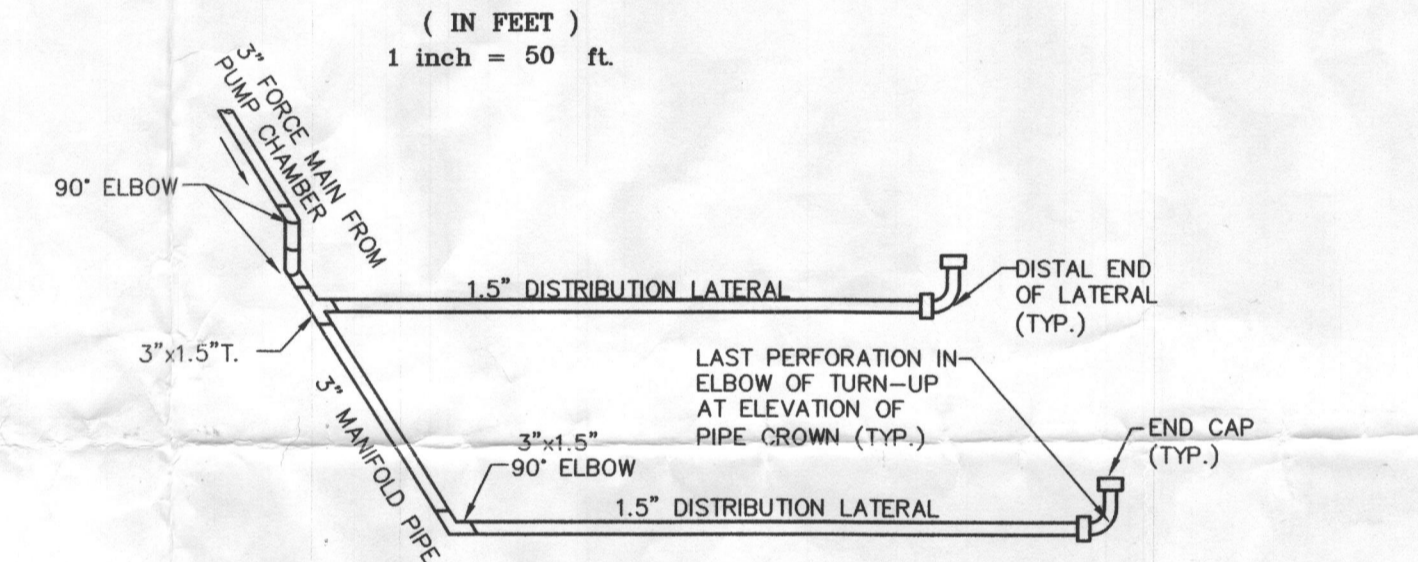
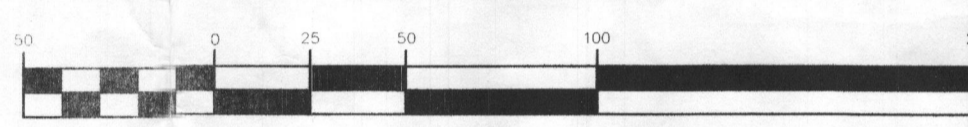
GENERAL NOTES:

- THE SUBJECT PROPERTY IS ZONED RR-DEO PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- PARCEL BACKGROUND: TAX MAP : 28 GRID: PARCEL : 48 LOT: 21 DEED REFERENCE: LIBER 5891 FOLIO 307 ELECTION DISTRICT : FIFTH ZONING : RR-DEO. AREA : 41,967 S.F. DPZ FILES: EOP-13-025, SP-13-010, F-14-095, GP-15-081
- TOPOGRAPHY FOR THE DEVELOPED AREAS IS BASED ON AERIAL SURVEY FLOWN BY WINGS TOPOGRAPHY INC. ON OR ABOUT MARCH 2007.
- PRIVATE WELL AND SEPTIC WILL BE UTILIZED.
- SOILS DATA BASED ON THE USDA SOIL SURVEY OF HOWARD COUNTY, MD, DATED MAY, 2008.
- THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
- ANY CHANGES TO A PRIVATE SEWERAGE EASEMENT SHALL REQUIRE A REVISED PERC CERTIFICATION PLAN.
- EXISTING WELLS, SEPTIC SYSTEMS, AND SEWERAGE DISPOSAL AREAS WITHIN 100' OF THE PROPERTY AND THOSE WELLS WITHIN 200' DOWN GRADIENT OF EXISTING OR PROPOSED SEPTIC SYSTEMS OR SEWAGE DISPOSAL AREAS HAVE BEEN SHOWN.

BEST AVAILABLE TECHNOLOGY 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 SITE PLAN MAY BE REQUIRED.
- THE MAXIMUM DEPTH OF THE BAT PER THE MANUFACTURER'S SPECIFICATION IS 3.0' FEET.
- THE BLOWER MAY NOT BE LOCATED MORE THAN 100 FEET FROM THE TANK BASED ON MANUFACTURER'S SPECIFICATIONS.
- 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 (1) 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 THE 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.

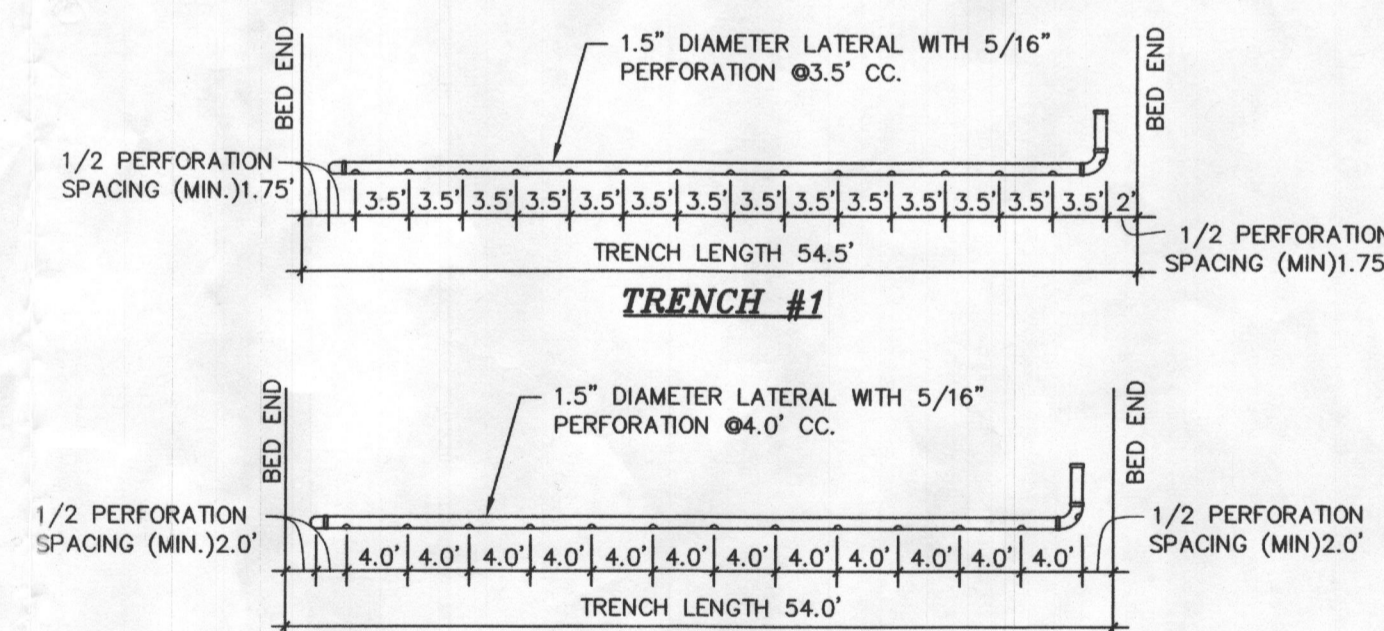
GRAPHIC SCALE



END FEED MANIFOLD DISTRIBUTION NETWORK SCHEMATIC

NOT TO SCALE

NOTE: ALL PIPE ARE SCH. 40 PVC ROGED PIPE



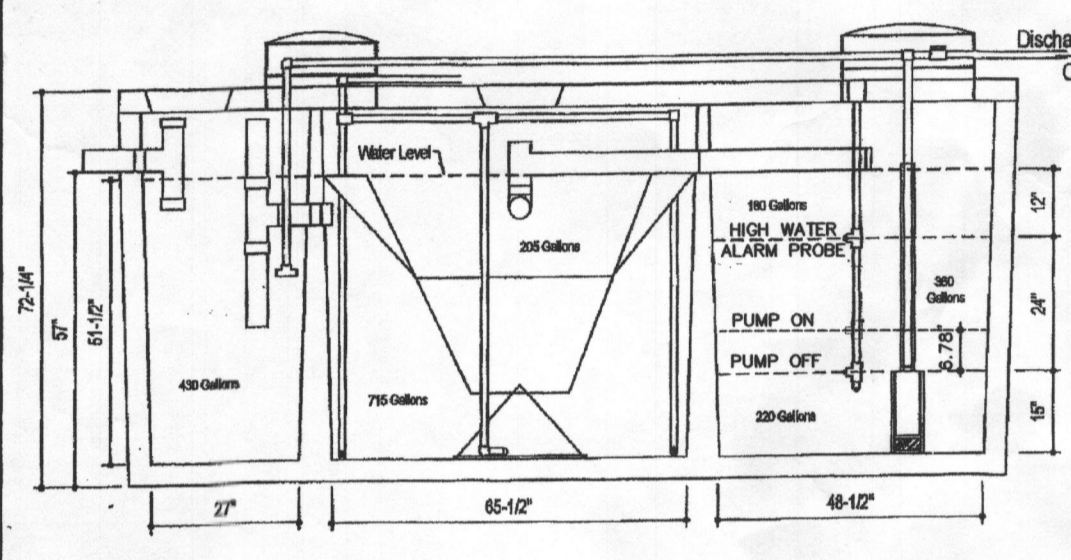
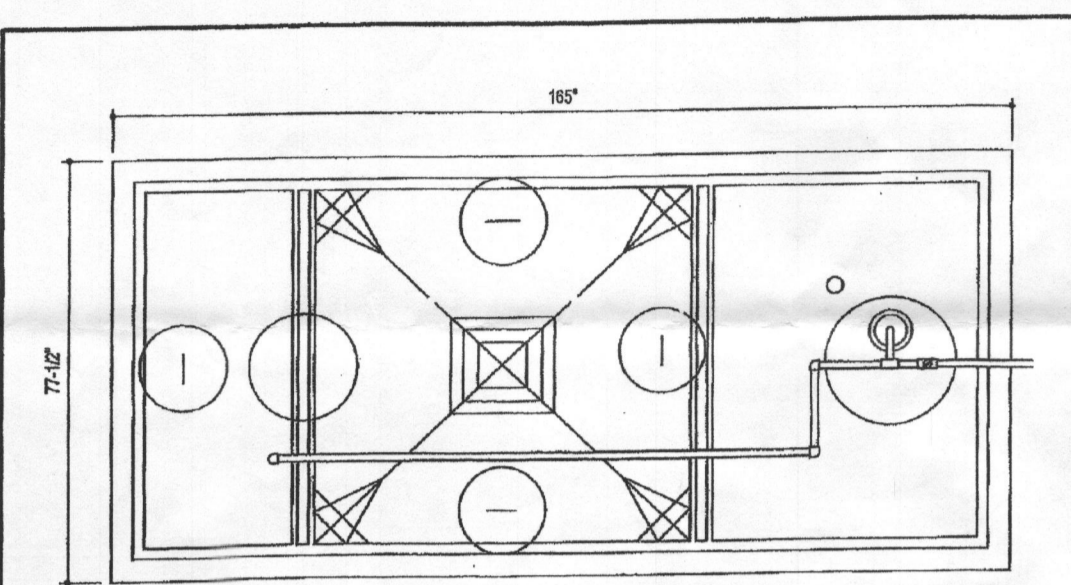
END FEED LAYOUT

NOT TO SCALE

ON-SITE SEWAGE DISPOSAL SYSTEM:

RESIDENTIAL SYSTEM DESIGN: HOOT 600 BNR
4 BEDROOM HOUSE (LIVING AREA = 2,288 SQ.FT.)
150 GALLONS X # OF BEDROOMS = VOLUME OF WASTEWATER /DAY
150 X 4 = 600 GPD
PERC RATE = 2-5 MINUTES/INCH
APPLICATION RATE = 1.2 GPD/SQ.FT.
DESIGN FLOW x APPLICATION RATE = SQ.FT. OF TRENCH REQUIRED
600 x 1.2 = 720 SQ.FT.
SQ.FT. REQUIRED x WIDTH OF TRENCH = LENGTH OF TRENCH
50.4 x 3.0' = 166.7 FT
USE TWO (2) TRENCHES (52')
A MINIMUM OF 10' BETWEEN TRENCHES UTILIZING SIDEWALL REDUCTION CREDIT.
MINIMUM TANK CAPACITY = 750 GALLONS

WELL CERTIFICATION:
THE EXISTING WELL, TAG NO. HO-14-0167, HAS BEEN FIELD LOCATED AND IS ACCURATELY SHOWN

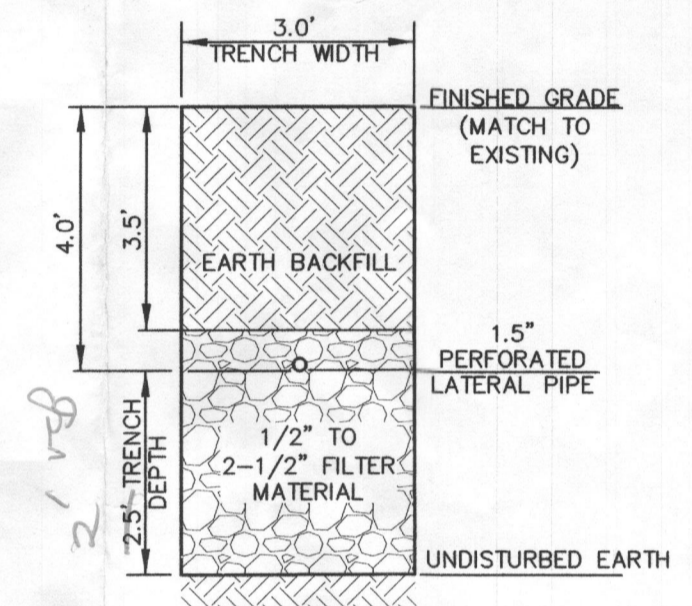


DESIGN DATA & GENERAL NOTES

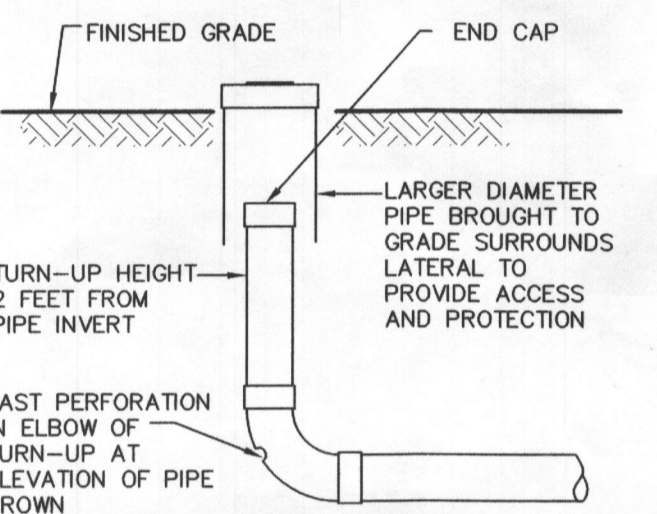
1. Construct through 18" (18" max.) @ 30" dia. Density = 110 pcf.
2. Concrete: Portland Type II per ASTM C 1504.
3. Admixtures: As recommended per ASTM C 494, C & C-404.4.
4. Reinforcing: per ASTM A 618. Min. 4-1/2" cover.

Mayer Brothers, Inc.
600 GPD BNR SYSTEM
H-600 BNR
with 750 GALLON PUMP CHAMBER

Dep. No. Hoot Form #1 No Scale March 15, 2013



TRENCH DETAIL
NOT TO SCALE



TURN-UP DETAIL
NOT TO SCALE

NOTE: PLACE AN OBSERVATION PIPE IN THE GRAVEL BED AT DISTAL END OF EACH TRENCH SEGMENT

Goulds Water Technology

Wastewater

APPLICATIONS
Specifically designed for the following uses:
• Homes, Farms, Trailer Courts, Motels, Schools, Hospitals, Industry, Effluent Systems

SPECIFICATIONS
• S/TOW or STOW severe duty oil and water resistant power cords.
• 1/2-1 HP models have NEMA three prong grounding plugs.
• 1 1/2 HP and larger units have bare lead cord ends.

Pump
• Class 10 overload protection must be provided in separately ordered starter unit.
• STOW power cords all have bare lead cord ends.
• Designed for Continuous Operation: Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage when fully submerged.
• Bearings: Upper and lower heavy duty ball bearing construction.
• Power Cable: Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking. Standard cord is 20'. Optional lengths are available.
• O-ring: Assures positive sealing against contaminants and oil leakage.

MOTORS
• Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.
• Class B insulation on 1/2-1 1/2 HP models.
• Class F insulation on 2 HP models.

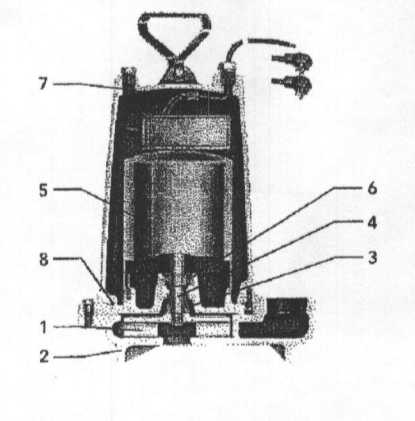
Single phase (60 Hz):
• Capacitor start motors for maximum starting torque.
• Built-in overload with automatic reset.

PERFORMANCE RATINGS (gallons per minute)

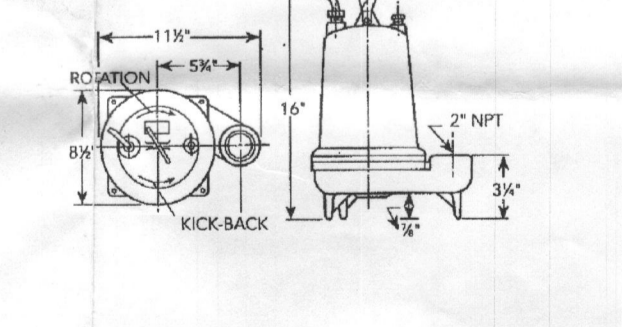
Order No.	1/2 HP	3/4 HP	1 HP	1 1/2 HP	2 HP	3 HP	4 HP
10	120	1750	3500	3500	3500	3500	3500
15	86	-	-	-	-	-	-
10	70	63	78	94	-	-	58 95
15	52	52	70	90	103	128	53 93 138
20	27	35	60	83	98	123	49 90 136
25	5	15	48	76	94	117	45 87 133
30	-	-	35	67	85	110	40 83 130
35	-	-	22	57	82	103	35 80 126
40	-	-	-	45	74	95	30 77 121
45	-	-	-	35	64	86	25 74 116
50	-	-	-	25	53	77	-
55	-	-	-	40	67	-	68 103
60	-	-	-	30	56	-	63 96
65	-	-	-	20	45	-	58 89
70	-	-	-	30	-	-	55 81
75	-	-	-	-	25	-	51 74
80	-	-	-	-	-	-	47 66
90	-	-	-	-	-	-	37 49
100	-	-	-	-	-	-	28 30

COMPONENTS

Item No.	Description
1	Impeller
2	Casing
3	Mechanical Seal
4	Motor Shaft
5	Motor
6	Ball Bearings
7	Power Cable
8	Casing O-Rings

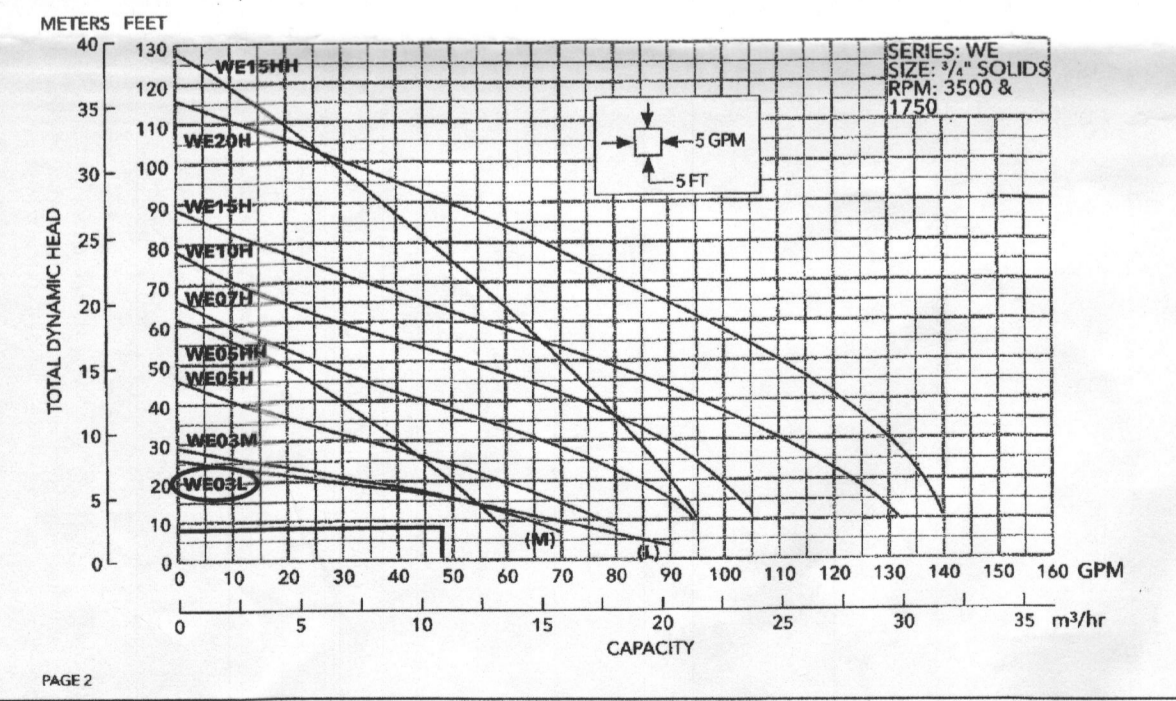


DIMENSIONS
(All dimensions are in inches. Do not use for construction purposes.)



xylem
Let's Solve Water

Xylem, Inc.
2881 East Bayard Street Ext., Suite A
Seneca Falls, NY 13148
Phone: (866) 323-4210
Fax: (866) 322-5877
www.xyleminc.com/brands/gouldswatertechnology
Goulds is a registered trademark of Goulds Pump, Inc. and is used under license.
© 2012 Xylem Inc. 03888 8/1 April 2012



STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER

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. 17942, EXP DATE 09/03/2016.

R. JACOB HIKMAT, P.E.

DATE: 03/11/16

DEVELOPER
NV HOMES
9720 PATUXENT WOODS DRIVE
COLUMBIA, MARYLAND 21046
(410)379-5956

LOW PRESSURE DOSING SYSTEM

NO. OF BEDROOMS: 4
TRENCH LENGTH: TRENCH #1 = 54.5', TRENCH #2 = 54.0'

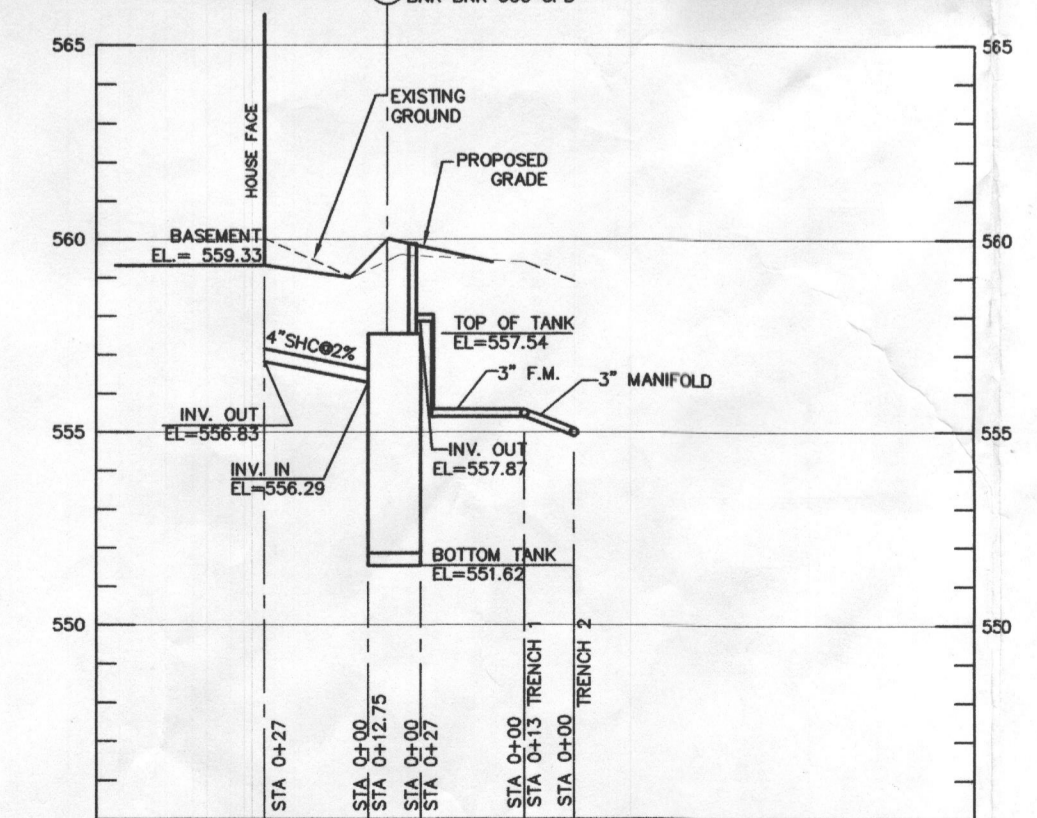
FLOW METHOD: GRAVITY TO TANK
END FEED MANIFOLD (TRENCHES LENGTH >75')
HOLE DIAMETER: 5/16"
HOLE SPACING: LATERAL #1 = 3.5' (FIGURE 4.4), LATERAL #2 = 4.0', LATERAL #1 = 48.5', LATERAL #2 = 48.00'

LATERAL LENGTH: LATERAL #1 = 15', LATERAL #2 = 13'
LATERAL DIAMETER: 1.5" (FIGURE 4.4)
PRESSURE HEAD: LATERAL #1 = 2.0', LATERAL #2 = 2.5'
ORIFICE DISCHARGE: LATERAL #1 = 1.63 GPM; LATERAL #2 = 1.82 GPM
LATERAL DISCHARGE: (NO. OF HOLES x ORIFICE DISCHARGE)
LATERAL #1 = 24.45
LATERAL #2 = 23.66

SYSTEM DISCHARGE: 48.11 GPM

MINIMUM DOSE:
S/LATERAL VOL.+MANIFOLD VOL.=FORCE MAIN VOL.
FORCE MAIN DIAMETER: 3" (TABLE 4.4)
MANIFOLD DIAMETER: 3"
LATERAL VOLUME: 10.15 GAL. (48.5x10.6'x100)+(48x10.60'x100)
MANIFOLD VOLUME: 5.0 GAL. (13x38.4'x100)
FORCE MAIN VOLUME: 7.68 GAL. (20x38.4'x100)
MINIMUM DOSE: 83.43 GAL. (5x10.15+5.0+7.68)
6 DISCHARGES PER DAY
VOLUME PER DISCHARGE (600\6) 100 GAL > 83.43 GAL

TOTAL HEAD:
DYNAMIC HEAD+STATIC HEAD+OPERATING HEAD
F. M. FRICTION LOSS: 0.12 (TABLE 4.4)
MANIFOLD FRICTION LOSS: 0.08 (TABLE 4.4)
FITTINGS FRICTION LOSS: 0.49 (7x90'ELBOW, 10' PER FITTING=70' OF PIPE)+ 1.90' (TEE, 15' PER FITTING=15' OF PIPE)
85'(TABLE 4.4)
LATERAL SAFETY FACTOR: 1.5'
STATIC HEAD: 4.75'
DISTAL HEAD: 2.0'
TOTAL DYNAMIC HEAD: 8.94' (0.12+0.08+0.49+1.5+4.75+2.0)



PROFILE - PRIVATE SEWER
SCALE: 1"=20' HOR, 1"=2' VER

date	MAR-2016	engineering	MM	approval	RJH
project	15-005	illustration	MM	scale	1"=60

description	revisions
no.	date

5007 ALTOGETHER WAY, CLARKSVILLE MD
GREENBERRY LOT 21
HOWARD COUNTY
FIFTH ELECTION DISTRICT
SITE PLAN FOR BAT INSTALLATION

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7850-B Grace Drive, Columbia, Maryland 21044
(410) 997-0298 Fax
(410) 997-0296 Cell



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

Twitter: HowardCoHealthDep

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

MEMORANDUM

TO: *Taylor Faris, NV Homes, Inc.*

FROM: *Robert Bricker, REHS/RS, L.E.H.S.* 
Well & Septic Program

RE: *5007 Altogether Way (Greenberry Lot 21) Potential Basement Bedroom*

DATE: March 16, 2016

I have reviewed the floor plans in support of Building Permit **B16000669** for a new home at **5007 Altogether Way** and noted that there is a rough-in for a full bathroom in the unfinished basement. Please note that this makes it very likely for one or more rooms to be considered bedrooms upon conversion of the basement to finished living space.

For reference, the following is the bedroom definition in Howard County Code Section 3.801(b):

- (1) Except as provided in paragraph (2) of this subsection, a bedroom is any space in the conditioned are of a dwelling unit or accessory structure that:
 - (i) Is 90 square feet or greater in size;
 - (ii) May be used as a private sleeping area; and
 - (iii) Has at least one window and one interior door.
- (2) If a home office, library, or similar room is proposed, it may not be a bedroom if there is no closet; and
 - (i) The room contains permanently built-in bookcases around the perimeter of the room, desks, and other features that encumber the room;
 - (ii) A minimum 4 foot-wide opening, without doors, into another room;
 - (iii) A half wall (4 foot maximum height) between the room and another room; or
 - (iv) The room is a first floor room or basement area that does not have direct access to full bathrooms or "roughed in" plumbing that would provide direct access to future full bathroom facilities.

The Health Department strongly recommends sizing the onsite sewage disposal system at least one bedroom larger than the existing 4-bedroom design to accommodate a future finished basement. If you choose to only size for the existing design, any future building permit for a finished basement may be placed on hold until the system is upgraded to accommodate the proposed number of bedrooms. This memo will be retained in the Health Department file for future reference.