

1214119 - Approved
- H.O.

Menu Save Reset Cancel Help

Record Detail * (This section is required.)

Permit Type	Permit Number	Opened Date
Building/Residential/Misc/Solar Panel	B19003621	10/25/2019
Description of Work		
SFD/ INSTALL (102) GROUND-MOUNTED SOLAR PANELS		

check spelling

Address * (This section is required.)

Search Reset Clear Get Parcel & Owner

Street #	Street Name	Street Type	
13710	OLD ROVER	RD	
Unit Type	Unit #	X Coordinate	Y Coordinate
-Select-		-76.99391	39.29149
City	State	Zip Code	Primary
WEST FRIENDSHIP	MD	21794	Yes

Parcel * (This section is required.)

Search Reset Clear Get Address & Owner

GIS ID *	Parcel	Parcel Area	Land Value	Improved Value	Exemption Value	Plan Area
903978	168	5	302700	1023900	721200	RURAL
Legal Description						
IMPSLOT 2 5.000 A[]OLD ROVER RD[]LICHENDALE FARM						

check spelling

Block	Lot	Census Tract	Council Dist	Inspection Dist	Supervisor Dist	Map #	DAP Zone
9999	2	603000	5				
Plan Area	State Tax Id	Subdivision Name					
	1403309983	LICHENDALE FARM					
Section	Area	Tax Map					
		15					
Grid	Zoning District	ADC Map					
15-13	RR-DEO	4813-A4					
SDP No.	Final Plan No.	WP File No.					
Record Plat No.	WS Contract No.	FDP No.					
6071							
Owner Occupied	Year Built	Historic District					
<input type="radio"/> Yes <input type="radio"/> No	2003	<input type="radio"/> Yes <input checked="" type="radio"/> No					
Historic District Registry No.	Stat Area	Flood Plain					
	3-04	<input type="radio"/> Yes <input checked="" type="radio"/> No					
Building No							

Owner * (This section is required.)

Search Reset Clear

Name *
SCHNFIDFR MARVIN J TRUSTEE
Address Line 1

13710 OLD ROVER RD
 Address Line 2
 Address Line 3
 Mail City: WEST FRIENDSHIP Mail State: MD Mail Zip Code: 21794
 Phone: 240-462-6123 Primary: Yes
 E-mail
 Cell Number Fax Number

Professionals * (This section is required.)

Search Reset Clear

License # * Business Name
 08050127353 SOLAR ENERGY WORLD LLC
 License Type * First Name Middle Name Last Name
 MHIC Co GEOFFREY MIRKIN
 Primary Address Line 1
 Yes 5681 MAIN STREET
 Address Line 2
 City State ZIP Code
 ELKRIDGE MD 21075
 Phone 1 Phone 2 Fax
 4105792009 4105791601
 E-mail
 GMIRKIN@SOLARENERGYWORLD.COM

Applicant * (This section is required.)

Search As Owner As Lic. Prof As Contact

Type * First Name MI Last Name
 Applicant JOHN STOKES
 Relationship Full Name
 Applicant JOHN STOKES
 Primary Organization Name
 Yes SOLAR ENERGY WORLD
 Street Address
 5681 MAIN STREET
 Address Line 2
 City State Zip Code
 ELKRIDGE MD 21075
 Phone Cell Fax
 410-579-2082
 E-mail *
 istokes@solarenergyworld.com

Addtl Info

Est Construction Cost *Housing Units * Number of Buildings *Public Owned
 54000 0 0 No
 Construction Type
 --Select--

RESIDENTIAL SOLAR PANEL INFO

SOLAR PANEL INFORMATION

Capital Project-No Fee Type of Installation * Number of Panels * Water Supply * Sewage Disposal * Expiration Date


Yes No

Solar Collector - Ground M ▾

102

Private ▾

Private ▾

6/1/2020 

Existing Use *

SFD ▾

**PAYMENT
INFORMATION**

Check 1

Payee 1

Check 2

Payee 2

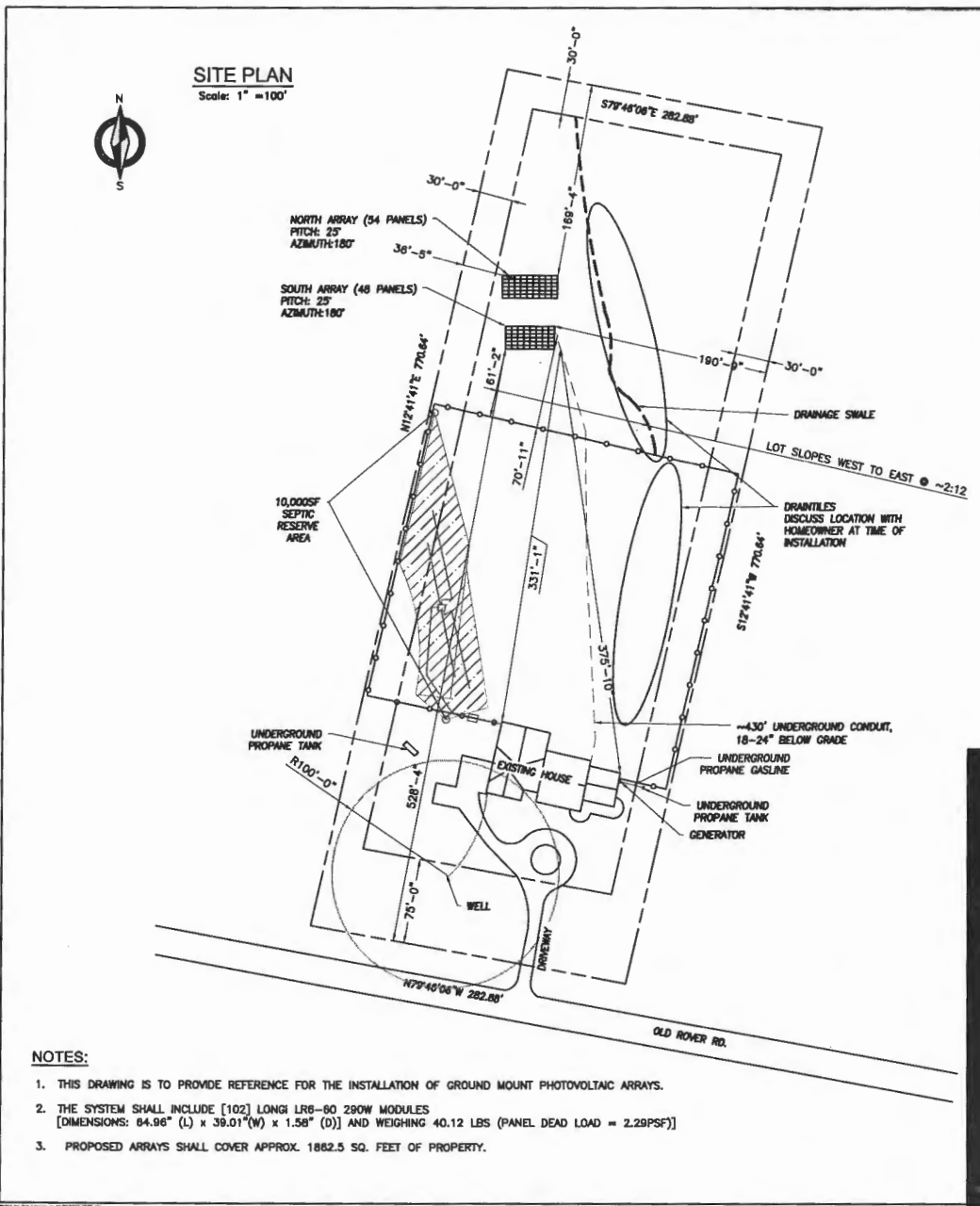
SAP Doc No

SAP Entered

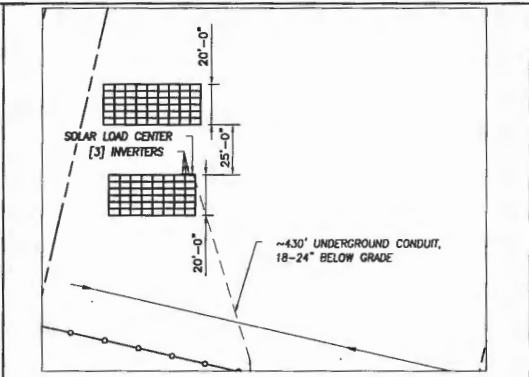


Submit Cancel

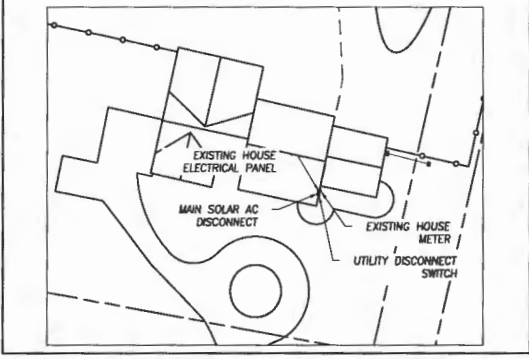
B19003621



- NOTES:**
1. THIS DRAWING IS TO PROVIDE REFERENCE FOR THE INSTALLATION OF GROUND MOUNT PHOTOVOLTAIC ARRAYS.
 2. THE SYSTEM SHALL INCLUDE [102] LONGI LR8-80 280W MODULES [DIMENSIONS: 64.96" (L) x 39.01" (W) x 1.58" (D)] AND WEIGHING 40.12 LBS (PANEL DEAD LOAD = 2.29PSF)
 3. PROPOSED ARRAYS SHALL COVER APPROX. 1862.5 SQ. FEET OF PROPERTY.



EQUIPMENT PLAN



General Notes

SolarEnergyWorld
Because Tomorrow Matters
Solar Energy World LLC.
5681 Main Street
Elkridge, MD 21075
(888) 497-3233

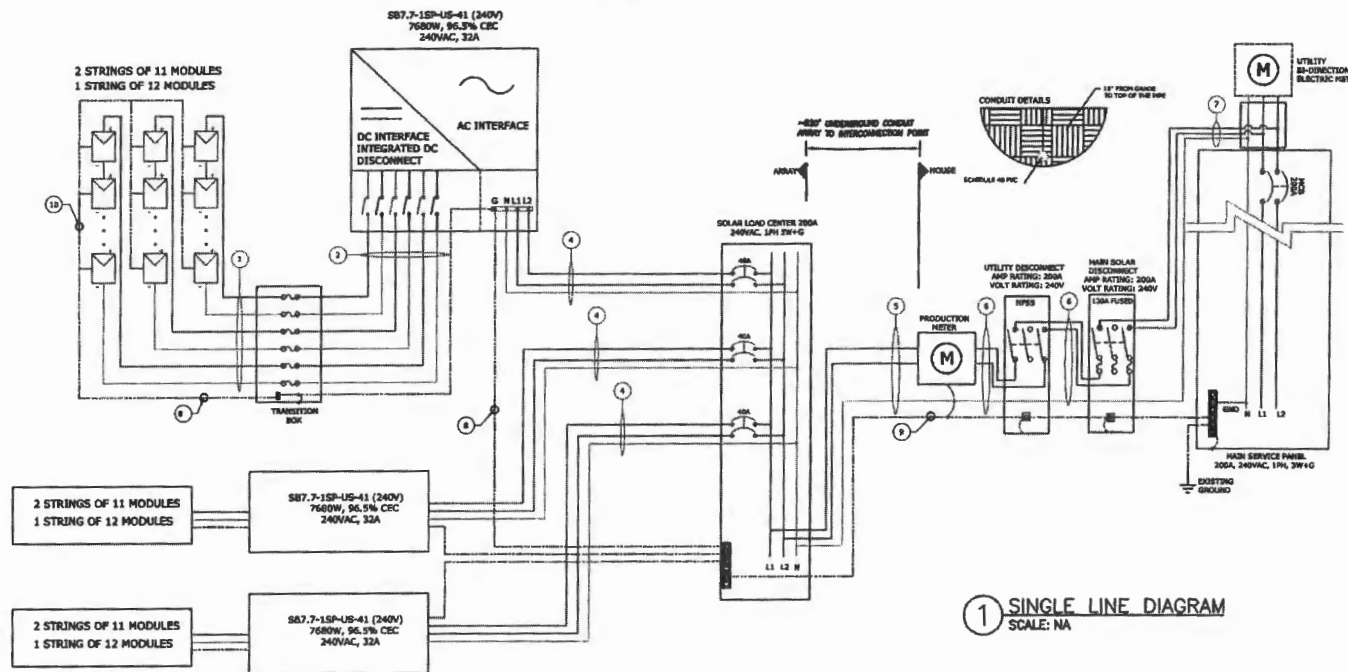
This drawing is the property of Solar Energy World Inc. The information herein considered shall be used for the sole benefit of Solar Energy World. It shall not be disclosed to others outside the recipient's organization, in whole or in part, without the written permission of Solar Energy World, except in connection with the sale and use of the respective Solar Energy equipment.

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. 28331, EXPIRATION DATE NOVEMBER 05, 2019.
*STAMPED AND SIGNED FOR STRUCTURES ONLY

Project Name and Address

Marvin Schneider Residence (GM)
13710 Old Rover Rd.
West Friendship, MD 21794
29.58 kW

Drawn By T.M.L.	A001
Date 23-SEPT-2019	
Scale AS NOTED	



① SINGLE LINE DIAGRAM
SCALE: NA

ARRAY		Module Specs			
MODEL NUMBER	Longi LR6-60-280W				
POWER	290 W				
RATED VOLTAGE (Vmp)	31.7 V				
RATED CURRENT (Imp)	9.15 A				
OPEN CIRCUIT VOLTAGE (Voc)	38.8 V				
SHORT CIRCUIT CURRENT (Isc)	9.21 A				
MAXIMUM SYSTEM VOLTAGE	1000VDC				
Inverter Specifications		SB7-1SP-US-41 (240V)		SB7-1SP-US-41 (240V)	
MAXIMUM DC VOLTAGE	600 V	600 V	600 V	600 V	600 V
MAXIMUM POWER OUTPUT	7680 W	7680 W	7680 W	7680 W	7680 W
NOMINAL AC VOLTAGE	240 VAC	240 VAC	240 VAC	240 VAC	240 VAC
MAXIMUM AC CURRENT	32 A	32 A	32 A	32 A	32 A
ARRAY DETAILS					
NO. OF MODULES PER STRING	11	12	11	11	12
NO. OF STRINGS	2	2	2	2	2
ARRAY WATTS AT STC	6180	3480	3360	3480	3480
MAX VOLTAGE	484	528	580	528	528
690.53 Label Info.					
RATED VOLTAGE	318 V	347 V	328 V	328 V	347 V
RATED CURRENT	7.5 A	7.5 A	7.5 A	7.5 A	7.5 A
MAX SYSTEM VOLTAGE	600 V	600 V	600 V	600 V	600 V
MAX SHORT CIRCUIT CURRENT	18 A	18 A	18 A	18 A	18 A
WIRE/CONDUIT SCHEDULE ARRAY					
TAG	DESCRIPTION	WIRE SIZE/TYPE	NOTES		
1	Panel to Transition Box	#10 USE-2			
2	Transition Box to DC Disconnect	#10 THHN/THWN-2 IN EMT			
3	DC Disconnect to Inverter	NA	Integrated to Inverter		
4	Inverter to Solar Load Center	#8 THHN/THWN-2 IN EMT			
5	Solar Load Center to Production Meter	400 NON AL IN SCHEDULE 40 PVC	2.93% voltage Drop		
6	Production Meter to Main Solar Disconnect	#1 Cu IN SCHEDULE 40 PVC			
7	Main Solar Disconnect to Interconnection Point	#1 Cu IN SCHEDULE 40 PVC			
8	Equipment Grounding Conductor	#10 Cu			
9	Equipment Grounding Conductor	#6 Cu	Rare Copper Wire		
10	Grounding Electrode Conductor	#8 Cu			

GENERAL ELECTRICAL NOTES: NEC2014

- EQUIPMENT USED SHALL BE NEW, UNLESS OTHERWISE NOTED.
- EQUIPMENT USED SHALL BE UL LISTED, UNLESS OTHERWISE NOTED.
- EQUIPMENT SHALL BE INSTALLED PROVIDING ADEQUATE PHYSICAL WORKING SPACE AROUND THE EQUIPMENT AND SHALL COMPLY WITH NEC.
- COPPER CONDUCTORS SHALL BE USED AND SHALL HAVE INSULATION RATING 600V, 90°C, UNLESS OTHERWISE NOTED.
- CONDUCTORS SHALL BE SIZED IN ACCORDANCE TO NEC. CONDUCTORS AMPACITY SHALL BE DE-RATED FOR TEMPERATURE INCREASE, CONDUIT FILL AND VOLTAGE DROP.
- ALL CONDUCTORS, EXCEPT USE-2, SHALL BE INSTALLED IN APPROVED CONDUITS OR RACEWAY. CONDUITS SHALL BE ADEQUATELY SUPPORTED AS PER NEC.
- AC DISCONNECT SHOWN IS REQUIRED IF THE UTILITY REQUIRES VISIBLE-BLADE SWITCH.
- EXPOSED NON-CURRENT CARRYING METAL PARTS SHALL BE GROUNDED AS PER NEC.
- LOAD SIDE INTER-CONNECTION SHALL COMPLY WITH NEC
- SMS MONITORING SYSTEM AND IT'S CONNECTION SHOWN IS OPTIONAL. IF USED, REFER TO SMS INSTALLATION MANUAL FOR WIRING METHODS AND OPERATION PROCEDURE.
- ASHRAE FUNDAMENTAL OUTDOOR DESIGN TEMPERATURES DO NOT EXCEED 47°C IN THE U.S. (PHOENIX, AZ or PALM SPRINGS, CA)
- FOR LESS THAN 9 CURRENT-CARRYING CONDUCTORS IN ROOF MOUNTED SUNLIGHT CONDUIT USING THE OUTDOOR TEMPERATURE OF 47°C
 - 12AWG CONDUCTOR ARE GENERALLY ACCEPTABLE FOR MODULES WITH AN Isc OF 6.4 AMPS WITH A 10 AMP FUSE.
 - 10AWG CONDUCTOR ARE GENERALLY ACCEPTABLE FOR MODULES WITH AN Isc OF 9.6 AMPS WITH A 15 AMP FUSE.

Wire string for OCPD
 $Ex(Isc \times (1.25)(1.25)(\# \text{ of strings in parallel})) = \text{wire ampacity or using NEC table 690.8}$

General Notes

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SolarEnergyWorld
 Because Tomorrow Matters

5681 Main Street Elkridge, MD 21075 (888) 497-3233

*STAMPED AND SIGNED FOR STRUCTURES ONLY

Project Name and Address

Marvin Schneider GM
 13710 Old Rover Rd
 West Friendship, MD 21794
 29.58kW

Drawn by
 TML
 Date
 27-SEPT-2019

Sheet
 E1

Oswald, Hank

From: Oswald, Hank
Sent: Thursday, November 14, 2019 1:56 PM
To: John Stokes (jstokes@solarenergyworld.com)
Subject: B19003621_13710 Old Rover Road_Ground Mount Solar Panel
Attachments: WS_OldRoverRoad_13710_SepticPermit-2003.pdf

Hello Mr. Stokes:

The well location and the shape of the sewage disposal area on the building permit site plan does not match the signed perc cert plan on record (see attachment page #5). In addition, please add the septic system components to the plan (see attachment page #2).

Once you make the revision, please submit to DILP and let me know. Should you have any questions, please don't hesitate to ask.

Thanks,

Hank

Hank Oswald
Licensed Environmental Health Specialist
Howard County Health Department
Bureau of Environmental Health
Well & Septic Program
8930 Stanford Boulevard
Columbia, MD 21045
410.313.1786 (Office)
hoswald@howardcountymd.gov



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LAYOUT 7/8/03 NAM INSP 4 _____
 INSP 2 7/9/03 2PM INSP 5 _____
 INSP 3 7/21/03 4PM INSP 6 _____

ISSUE DATE: 6/27/03
 APPROVAL DATE: 7/21/03

**PERMIT
INDEXED**

P 519033
 A 517978

**ON-SITE SEWAGE DISPOSAL SYSTEM
 HOWARD COUNTY HEALTH DEPARTMENT
 BUREAU OF ENVIRONMENTAL HEALTH**

03-309983

Fogle's Septic Clean, Inc. IS PERMITTED TO INSTALL ALTER 795-5670

ADDRESS: 580 Obrecht Road, Sykesville 21784 PHONE NUMBER: 410-206-0670

SUBDIVISION: Lichendale Farm LOT NUMBER: 2

ADDRESS: 13710 Old Rover Road PROPERTY OWNER: Marvin & Debbie Schneider

SEPTIC TANK CAPACITY (GALLONS): 1500 OUTLET BAFFLE FILTER REQUIRED SO

PUMP CHAMBER CAPACITY (GALLONS): N/A COMPARTMENTED TANK REQUIRED SO

NUMBER OF BEDROOMS: 5

SQUARE FEET PER BEDROOM: 180

LINEAR FEET OF TRENCH REQUIRED: 260 HOUSE SERVED BY PUBLIC WATER

TRENCHES:	Trench to be 3.0 feet wide. Inlet 3.0 feet below original grade. Bottom maximum depth 6.0 feet below original grade. Effective area begins at 3.0 feet below original grade. 3.0 feet of stone below distribution pipe.
LOCATION:	Place the distribution box as shown on approved site plan. Run trenches on contour.
NOTES:	Basement will not sewer by gravity.

PLANS APPROVED: Steven R. Krieg DATE: 2/4/2003

NOTES: PERMIT VOID AFTER 2 YEARS
 CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
 WATERTIGHT SEPTIC TANKS REQUIRED
 ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL UNLESS SPECIFICALLY AUTHORIZED
 MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED
 CONTRACTOR RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE REGULATIONS, GUIDELINES AND THE TERMS OF THIS PERMIT

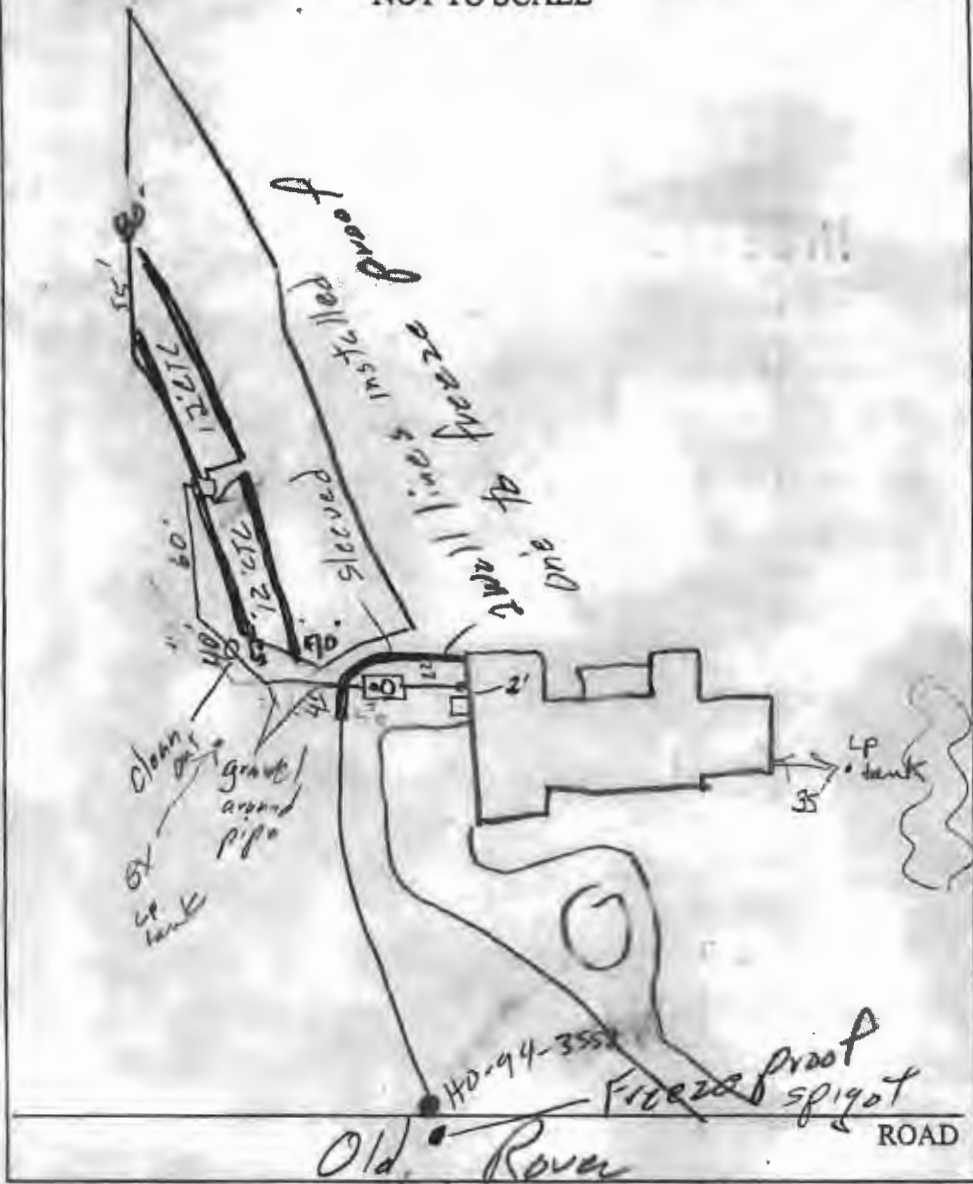
NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM

BUILDING PERMIT SIGNER RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT AND RETURNED ALL 410-313-2640 FOR INSPECTION OF SEPTIC SYSTEM

7-10-03 600142632-46 PRO PANE TALK

AS17928

NOT TO SCALE



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	3'	6'
NUMBER OF TRENCHES		4
TOTAL LENGTH		260
ABSORPTION AREA		780 4
DISTRIBUTION BOX LEVEL		<input checked="" type="checkbox"/>
DISTRIBUTION BOX BAFFLE		<input checked="" type="checkbox"/>
DISTRIBUTION BOX PORT		<input checked="" type="checkbox"/>

SEPTIC TANK DATA	
SEPTIC TANK 1 LEVEL	<input checked="" type="checkbox"/>
CAPACITY	1500 GAL
SEAM LOC	Top
TANK LID DEPTH	1'
BAFFLES	<input checked="" type="checkbox"/>
BAFFLE FILTER	Yes
MANHOLE LOC	Center
6" PORT LOC	Front
WATERTIGHT TEST	<input type="checkbox"/>
SEPTIC TANK 2 LEVEL	<input type="checkbox"/>
CAPACITY	_____ GAL
SEAM LOC	_____
TANK LID DEPTH	_____
BAFFLES	NA
BAFFLE FILTER	_____
MANHOLE LOC	_____
6" PORT LOC	_____
WATERTIGHT TEST	<input type="checkbox"/>

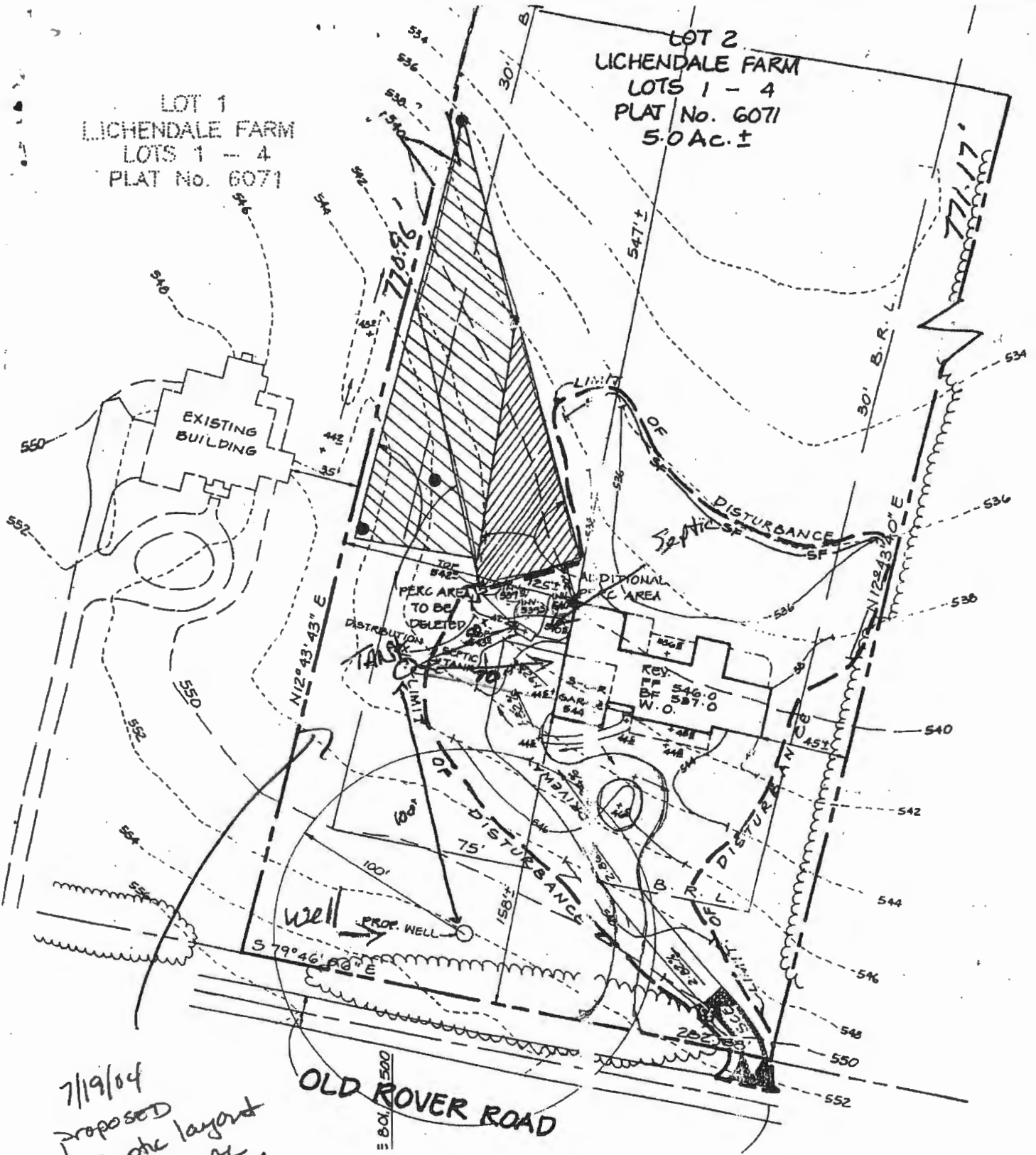
PRE-CONSTRUCTION 7/8/03 SRA stated wrong, corrected. Can't make it to the D.B. by gravity w/ swale off the house. Must pump. Install 3" 55"

INSTALLATION (2) 75' trenches on contours (SO) 7/9/03 Contractor got system by gravity OK to cover all work. Want contr. to test system w/ water for final approval. Also need to verify enough fill is brought in to cover line from S.T. 12" to 18" then swale (SO) 7/10/03 T/E to Foyles, need C.U. on line between S.T. & D.B. (SO) 7/21/03 Water test to D.B. OK (SO)

FINAL INSPECTOR Steve Sw DATE OF APPROVAL 7/21/03

LOT 1
LICHENDALE FARM
LOTS 1 - 4
PLAT No. 6071

LOT 2
LICHENDALE FARM
LOTS 1 - 4
PLAT No. 6071
5.0 AC. ±



7/19/04
Proposed
septic layout
NOT REMOVED.

OLD ROVER ROAD

7/10/03 Proposed

LP tank OK (SD)

B00142632

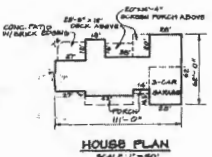
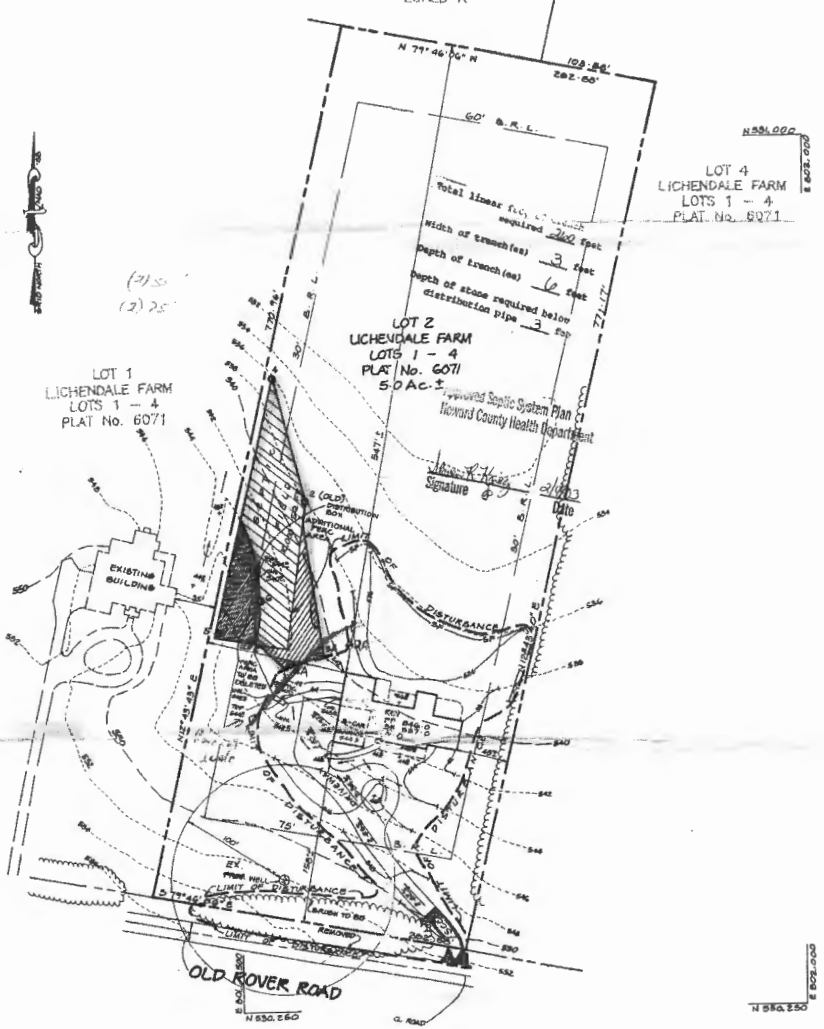
NOTE: EXISTING TOPOGRAPHY HAS BEEN TAKEN FROM A FIELD RUN SURVEY BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT APRIL, 2002.

LOT 3
LICHENDALE FARM
LOTS 1 - 4
PLAT No. 6071
ZONED R

LOT 4
LICHENDALE FARM
LOTS 1 - 4
PLAT No. 6071

LOT 2
LICHENDALE FARM
LOTS 1 - 4
PLAT No. 6071
50 AC ±

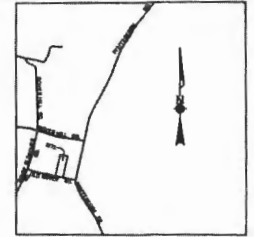
LOT 1
LICHENDALE FARM
LOTS 1 - 4
PLAT No. 6071



STATEMENT
4" CA-6
DRAWING SECTION
NOT TO SCALE

GENERAL NOTES

- THIS PLAN DESIGNATES A MAXIMUM 10,000 G.P.D. PRIVATE SEWERAGE TREATMENT PLANT AS REQUIRED BY THE HEALTH DEPARTMENT OF THE GOVERNMENT FOR INDIVIDUAL SEWERAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS SEWERAGE SHALL BECOME AVAILABLE AND YOUR OWN CONTRIBUTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR SUCH COMPLIANCE WITH THE PRIVATE SEWERAGE TREATMENT PLANT. RECOGNITION OF A MAXIMUM SEWERAGE TREATMENT PLANT SHALL NOT BE NECESSARY.
- WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPERTY BOUNDARY HAVE BEEN SHOWN TO THE BEST OF OUR KNOWLEDGE AND INFORMATION.
- THE LOT BOUNDARY COMPARES WITH THE BOUNDARY OWNERSHIP WITHIN AND LOT AREA AS REQUIRED BY THE HEALTH DEPARTMENT OF THE GOVERNMENT.
- TOPOGRAPHY SURVEY HAS BEEN FIELD SURVEYED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT APRIL, 2002.



BY THE DEVELOPER :

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER _____ DATE _____

BY THE ENGINEER :

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Christopher J. Reid 9/28/02
ENGINEER _____ DATE _____

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

NATURAL RESOURCES CONSERVATION SERVICE _____ DATE _____

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT _____ DATE _____

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

CHIEF, DIVISION OF LAND DEVELOPMENT _____ DATE _____

CHIEF, DEVELOPMENT ENGINEERING DIVISION _____ DATE _____

DATE	NO.	REVISION

OWNER / DEVELOPER

JST BUILDERS
6050 DAYBREAK CIRCLE SUITE H
CLARKSVILLE, MD 21029
(410) 954-0364

PROJECT: LICHENDALE LOT 2

AREA: TAX MAP NO. 15, PARCEL 15B ZONED R AND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: **REVISED PERC CERT. PLAN & BUILDING PERMIT PLOT PLAN.**

Patton Harris Rust & Associates, PC
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Gotham, MD 21045
T 410.997.8900
F 410.997.9282

PHRA

4/23/02

DATE _____

DESIGNED BY: C.J.R.
DRAWN BY: J.V.A.
PROJECT NO: 11580-1-D
DATE: AUGUST 18, 2002
SCALE: 1" = 50'
DRAWING NO. 1 OF 2

APPROVED: FOR PERMITS WATER AND PRIVATE SEWERAGE SYSTEMS BY THE HOWARD COUNTY HEALTH DEPARTMENT.

Christopher J. Reid 2-7-03
HOWARD COUNTY HEALTH OFFICER-SIX DATE _____

- LEGEND**
- PERC TEST FAILED
 - PERC TEST PASSED
 - EXISTING TREES/LINE
 - EXISTING FIELD
 - ADDITIONAL PERC AREA TO BE ARIED
 - PERC AREA TO BE DISTURB
 - STABILIZED CONSTRUCTION ENTRANCE
 - EXIST. PROPOSED WELL
 - PROPERTY LINE
 - BUILDING RESTRICTION LINE
 - LIMIT OF DISTURBANCE
 - SALT FENCE
 - PROPOSED BUILDING
 - EXISTING BUILDING
 - EXISTING ROAD

DO NOT DISCARD