

Menu Save Reset Cancel Help

Record Detail (This section is required.)

Permit Type Building/Residential/Misc/Solar Panel Permit Number B24003888 Opened Date 10/10/2024
Description of Work SFD / INSTALL (50) GROUND MOUNTED SOLAR PANELS IN REAR YARD OF DWELLING**SUBJECT TO FIELD INSPECTION**

Approved
10/24/24

Online BP.
g8 10/17/24

[check spelling](#)

Address (This section is required.)

Search Reset Clear Get Parcel & Owner

Street # 1035 Street Name SUNSET VALLEY Street Type DR
Unit Type Unit # X Coordinate Y Coordinate
-Select-- -76.97585 39.34343
City SYKESVILLE State MD Zip Code 21784 Primary 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
831733 305 3.78 247000 809900 562900 RURAL

Legal Description
IMPSLOT 7 3.786 A[]1035 SUNSET VALLEY DR[]SUNSET VALLEY S 2

[check spelling](#)

Block Lot Census Tract Council Dist Inspection Dist Supervisor Dist Map # DAP Zone
7 603000 5
Plan Area State Tax Id Subdivision Name
1403309029
Section Area Tax Map
9
Grid Zoning District ADC Map
9-3 RC-DEO 4693-D6
SDP No. Final Plan No. WP File No.
F-83-057
Record Plat No. WS Contract No. FDP No. Primary
5355 Yes
Owner Occupied Year Built Historic District
Yes No 1985 Yes No
Historic District Registry No. Stat Area Flood Plain
3-01 Yes No
Building No

Owner (This section is required.)

Search Reset Clear

Name
KIM DC
Address Line 1
1035 SUNSET VALLEY DR
Address Line 2
Address Line 3
Mail City

SYKESVILLE

Mail State

MD

Mail Zip Code

21784

Phone

410-710-1717

Primary

Yes

E-mail

Cell Number

Fax Number

Professionals (This section is required.)

License #

08050046549

License Type

MHIC Co

Primary

Yes

Business Name

AMERICAN DESIGN AND BUILD LTD

First Name

JOSEPH

Middle Name

Last Name

TUNNEY

Address Line 1

221 GATEWAY DRIVE

Address Line 2

221 GATEWAY DRIVE

City

BEL AIR

State

MD

ZIP Code

21014-0000

Phone 1

4105570555

Phone 2

Fax

4106925475

E-mail

JTUNNEY@ADBUILD.COM

Applicant (This section is required.)

Search

As Owner

As Lic. Prof

As Contact

Type

Applicant

Relationship

Applicant

Primary

Yes

First Name

ADAM

MI

Last Name

KOLLAR

Full Name

ADAM KOLLAR

Organization Name

AMERICAN DESIGN & BUILD

Street Address

221 GATEWAY DRIVE

Address Line 2

City

BEL AIR

State

MD

Zip Code

21014

Phone

410-557-0555

Cell

Fax

E-mail

AKOLLAR@ADBUILD.COM

Addtl Info

Est Construction Cost

50000

Housing Units

0

Number of Buildings

0

Public Owned

No

Construction Type

649 - All Other Buildings and Structures

RESIDENTIAL SOLAR PANEL INFO

SOLAR PANEL INFORMATION

Capital Project-No Fee

☐ Yes ☐ No

Type of Installation

Solar Collector - Ground Mount

Number of Panels

50

Water Supply

(Number) Private

Sewage Disposal

Private

Expiration Date

4/14/2025

Existing Use

SFD

Sprinkler System

☐ Yes ☒ No

PAYMENT INFORMATION

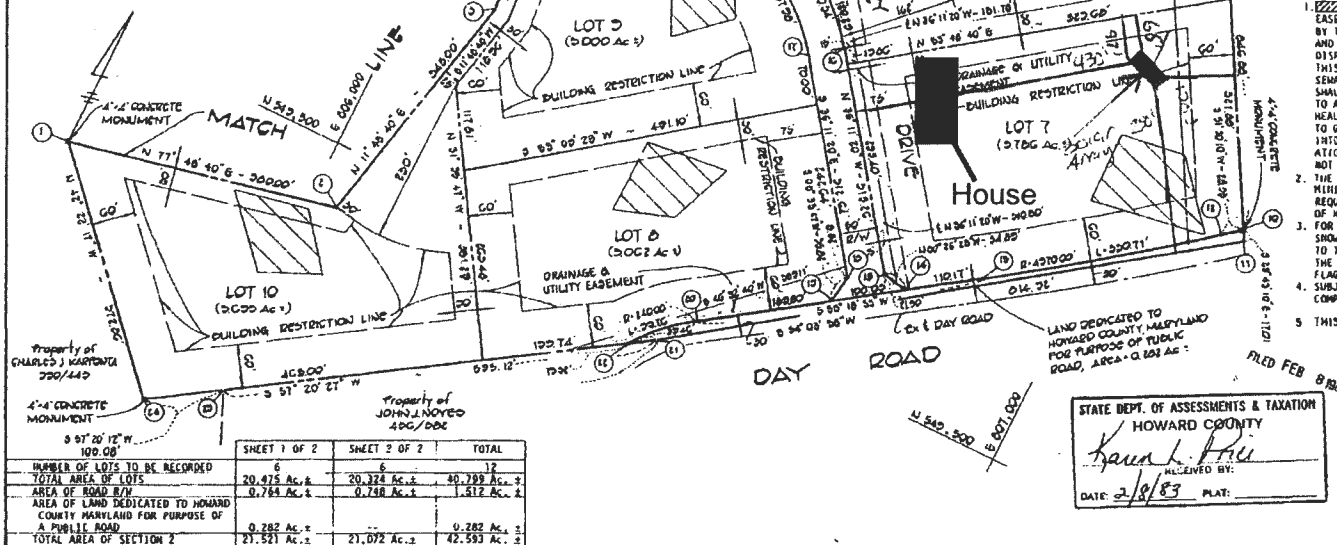
Submit

Cancel

CURVE DATA										HEALTH DEPT. CONVERSION TABLE	
NO	RADIUS	LENGTH	TANGENT	Δ	CHORD BEARINGS	DIST	NEW LOT NO.	OLD LOT NO.		NEW LOT NO.	OLD LOT NO.
0-17	218.00	107.20	150.77	60°00'00"	S 66°11'20"E - 278.00'		1	6		1	6
6-16	265.00	240.54	107.64	60°00'00"	S 66°11'20"E - 375.00'		2	18		2	18
11-19	430.00	330.71	169.21	60°40'45"	S 55°24'12"W - 500.00'		3	15		3	15
20-22	640.00	22.70	90.01	89°40'54"	S 43°24'27"W - 92.04'		4	2		4	2

COORDINATE TABLE					
NO.	NORTH	EAST	NO.	NORTH	EAST
1	549,343.60	805,879.07	13	549,726.44	806,877.87
2	549,423.83	806,041.50	14	549,661.75	806,787.37
3	549,761.52	806,119.12	15	549,669.55	806,751.97
4	549,985.22	806,087.88	16	549,923.96	806,568.82
5	550,005.49	806,274.87	17	549,879.47	806,526.47
6	550,055.20	806,249.48	18	549,842.15	806,711.07
7	550,053.51	806,252.44	19	549,805.83	806,705.12
8	550,372.16	806,323.28	20	549,458.82	806,549.05
9	550,678.66	806,248.77	21	549,488.16	806,514.21
10	549,911.17	806,165.62	22	549,826.87	806,480.93
11	549,828.40	807,175.05	23	549,127.01	806,013.18
12	549,923.54	807,140.45	24	549,046.14	805,921.35

NOTE: COORDINATES SHOWN HEREON ARE BASED ON MARYLAND STATE GRID SYSTEM



APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 APPROVED: FOR STORM DRAINAGE SYSTEMS, AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

OWNER'S CERTIFICATE

I, CHARLES J. KARFONTA, OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, HEREBY ADOPT THIS PLAN OF SUBDIVISION, AND IN CONSIDERATION OF THE APPROVAL OF THIS FINAL PLAN BY THE OFFICE OF PLANNING AND ZONING, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES AND GRANT UNTO HOWARD COUNTY, MARYLAND, ITS SUCCESSORS AND ASSIGNS, (1) THE RIGHT TO LAY, CONSTRUCT AND MAINTAIN SEWERS, DRAINS, WATER PIPES AND OTHER MUNICIPAL UTILITIES AND SERVICES, IN AND UNDER ALL ROADS AND STREET RIGHT-OF-WAYS AND THE SPECIFIC EASEMENT AREAS SHOWN HEREON; (2) THE RIGHT TO REQUIRE DEDICATION FOR PUBLIC USE THE BEDS OF THE STREETS AND/OR ROADS, AND FLOODPLAINS AND OPEN SPACE WHERE APPLICABLE AND FOR GOOD AND OTHER VALUABLE CONSIDERATION, HEREBY GRANT THE RIGHT AND OPTION TO HOWARD COUNTY TO ACQUIRE THE FEE SIMPLE TITLE TO THE BEDS OF THE STREETS AND/OR ROADS AND FLOODPLAINS, STORM DRAINAGE FACILITIES AND OPEN SPACE WHERE APPLICABLE; AND (3) THE RIGHT TO REQUIRE DEDICATION OF WATERWAYS AND DRAINAGE EASEMENTS FOR THE SPECIFIC PURPOSE OF THEIR CONSTRUCTION, REPAIR AND MAINTENANCE; AND (4) THAT NO BUILDING OR SIMILAR STRUCTURE OF ANY KIND SHALL BE ERECTED ON OR OVER THE SAID EASEMENTS AND RIGHT-OF-WAYS.

WITNESS MY HAND THIS 7TH DAY OF JANUARY 1983

CHARLES J. KARFONTA
 WITNESS

SURVEYOR'S CERTIFICATE

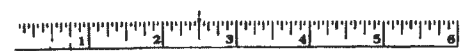
I HEREBY CERTIFY THAT THE FINAL PLAN SHOWN HEREON IS CORRECT; THAT IT IS A SUBDIVISION OF PART OF THE LAND CONVEYED BY VIRGINIA M. GARRATT, WIDOW, TO CHARLES J. KARFONTA BY DEED DATED FEBRUARY 16, 1980 AND RECORDED AMONG THE APPOSSAID LAND RECORDS IN LIBER 990 FOLIO 443 AND THAT ALL MONUMENTS ARE IN PLACE AS SHOWN IN ACCORDANCE WITH THE ANNOTATED CODE OF MARYLAND.

RONALD B. CARTER 210704
 DATE

SECTION TWO
SUNSET VALLEY
LOTS 1-12

TAX MAP # 9
 3RD ELECTION DISTRICT HOWARD COUNTY, MD.
 SCALE: 1"=100'
 SHEET 1 OF 2

5-79-12 P01-14 F01-115



MSA 554 1247 - 283-1 F-8-37

03-309029

PERMIT

SEWAGE DISPOSAL SYSTEM

MARYLAND STATE DEPARTMENT OF HEALTH

HOWARD COUNTY

BUREAU OF ENVIRONMENTAL HEALTH

461-9923

INDEXED

ELLICOTT CITY

DISTRICT 3rd

DATE 10/17/85

N L P Enterprises

IS PERMITTED TO INSTALL ☒ ALTER

ADDRESS

PHONE

356-7300

SUBDIVISION

Sunset Valley

ROAD 1035 Sunset Valley Dr. LOT 7, Section 2

PROPERTY OWNER

MAC Corporation NANCY HEAGERTY

ADDRESS

IF GARBAGE GRINDER IS USED INCREASE SEPTIC TANK CAPACITY BY 50% AND ABSORPTION AREA BY 22%.

GARBAGE GRINDER? YES ☐ NO ☒

SEPTIC TANK CAPACITY 1250 GALLONS

NUMBER OF BEDROOMS 4

DEEP TRENCHES - 168 sq.ft. per bedroom. Trench to be 2 feet wide. 10 feet deep, with inlet at 4 1/2 feet below original grade and filled with 5 1/2 ft. of stone. Length of the trench depends on the number of sq. ft. needed. Start the trench at perc hole #6 and run it along level ground toward perc hole #5. Perc hole #6 is located 150 feet from the back lot line and 160 feet from the right lot line as seen when facing the lot from Sunset Valley Drive. Perc hole #5 is located 80 feet from the right lot line and 200 feet from the back lot line as seen when facing the lot from Sunset Valley Drive. NOTE: No trench is to exceed 100 feet in length. If more than one trench used, a distribution box is required. Call for inspection of trench(s) before and after gravel is installed.

BUILDING PERMIT SIGNED cleanout and cap to grade or above on septic tank.

AND RETURNED

BLDG. PERMIT SIGNED

AND RETURNED

10-1603 BOD 144526-IG POOL
63004 BOD 149192-DECK/SCREENED PORCH

Serial # B7101838
1-story addition

PLANS APPROVED BY

Raymond Hodges

DATE 2/18/83

COVER NO WORK UNTIL INSPECTED AND APPROVED.

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

NOTE: IF TRENCH IS USED CALL FOR INSPECTION BEFORE AND AFTER PLACING GRAVEL IN TRENCH.

NOTE: NO DRY WELL SHALL EXCEED 15 FOOT IN DIAMETER. NO ABSORPTION TRENCH TO EXCEED 100 FEET IN LENGTH.

NOTE: ALL PIPE FROM HOUSE TO SEPTIC TANK MUST BE CAST IRON OR SCHEDULE 40 PVC OR ABS.

PERMIT VOID AFTER THREE YEARS.

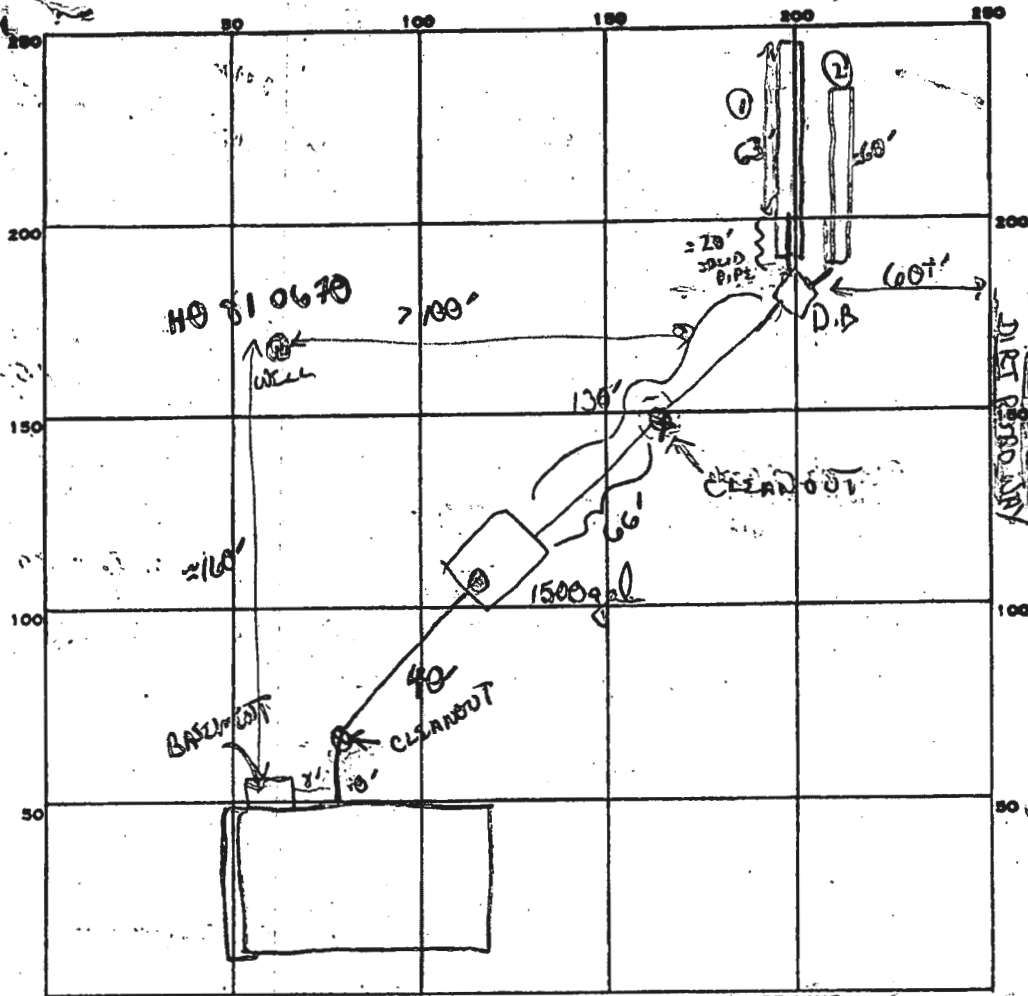
NOTE: INSTALL STAND PIPE ON SEPTIC TANK AND DRY WELL. STAND PIPES MUST BE 6 INCHES IN DIAMETER. CAST IRON, CONCRETE OR TERRA COTTA, OR PVC OR ABS ACCEPTED. IF TOP OF SEPTIC TANK IS DEEPER THAN 3 FEET MANHOLE TO GRADE REQUIRED.

*INSTALLER IS RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT

*CALL 992-2330 FOR INSPECTION OF SEPTIC SYSTEMS.

EH - 2-1082

A 29149



INDICATE NORTH. - NAME ADJOINING ROADWAY AS BASE LINE.

SUNSET VALLEY

PERMIT CARD

SEPTIC TANK, LEVEL

✓ 1500 gal

CLEANOUTS

3 (ST) 1-10 ft off house
1-MIDWAY BETWEEN S.T. + D.B.

DISTRIBUTION BOX, LEVEL

TILE FIELD, DEPTH

10' + 10'

FT.

TRENCH WIDTH

2

FT.

GRAVEL DEPTH

5' 1/2, 5' 1/2

IN.

TOTAL LENGTH

63' + 60'

FT.

NUMBER OF TRENCHES

2

1 SIDE WALL

TOTAL BOTTOM AREA

346 + 330 = 676

SEEPAGE PITS, INSIDE DIAMETER

FT.

DEPTH BELOW INLET

FT.

ABSORBENT AREA

676

SQ. FT.

REMARKS 11/1/85 1ST 20' or 30' of trench 1 had large igneous rock from ~4' down. Dug test hole 20' down trench line + hole was all sand. Instructed to extend 1st trench additional 20' to contain necessary sq. footage. In addition will stone 1st part of trench as a signal out lay solid pipe to bypass area of rock. From S.T. to D.B. instructed to add C.O. inline (between 60-70' from S.T.). OK to cover S.T. + piping just prior to S.T. OK to continue trench 1, lay pipe + stone.

11/1/85 CLEANOUTS installed as required OK to cover up to D.B.

11/4/85 OK to cover trench 1 (finish paving) D.B. outlets still need to be cemented. OK to add 12-15 ft more of pipe stone + covers OK to continue trench #2.

DATE SYSTEM APPROVED

12/5/85 system all covered

INSPECTOR

B. Nixon

BUILDING PERMIT SIGNED AND RETURNED

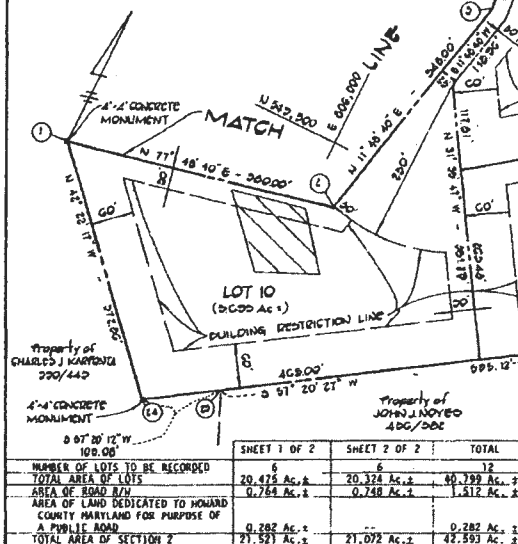
(672) (M/W)

60	63
5.5	5.5
300	315
300	315
330	346.5

CURVE DATA					HEALTH DEPT. CONVERSION TABLE	
NO	RADIUS	LENGTH	TANGENT	Δ	CHORD BEARING & DIST.	
1-17	21300'	187.20'	150.77'	60°00'00"	5 66°11'20" E - 278.00'	
1-18	355.00'	340.54'	107.64'	60°00'00"	5 66°11'20" E - 365.00'	
1-19	4370.00'	300.71'	162.41'	60°40'48"	5 53°54'22" W - 550.00'	
1-20	640.00'	99.75'	50.01'	88°40'54"	5 43°24'27" W - 55.00'	

COORDINATE TABLE				
NO.	NORTH	EAST	NO.	NORTH
1	548,343.60	805,679.07	13	549,725.44
2	548,423.83	806,041.50	14	549,655.25
3	549,261.53	806,112.12	15	549,659.55
4	549,985.22	806,087.85	16	549,923.98
5	550,095.49	806,274.87	17	549,894.47
6	550,055.20	806,289.48	18	549,682.15
7	550,055.51	806,251.66	19	549,506.83
8	550,372.16	806,323.26	20	549,598.82
9	550,678.88	806,748.77	21	549,588.18
10	549,931.17	806,165.82	22	549,528.87
11	549,926.40	807,174.05	23	549,121.01
12	549,923.54	807,143.45	24	549,048.14

NOTE: COORDINATES SHOWN HEREON ARE BASED ON MARYLAND STATE GRID SYSTEM



APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *[Signature]* DATE: 1-19-83
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
 DIRECTOR: *[Signature]* DATE: 2-3-83
 APPROVED: FOR STORM DRAINAGE SYSTEMS, AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *[Signature]* DATE: 2-3-83

OWNER'S CERTIFICATE
 I, CHARLES J. KARFONTA, OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, HEREBY ADOPT THIS PLAN OF SUBDIVISION, AND IN CONSIDERATION OF THE APPROVAL OF THIS FINAL PLAN BY THE OFFICE OF PLANNING AND ZONING, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES AND GRANT UNTO HOWARD COUNTY, MARYLAND, ITS SUCCESSORS AND ASSIGNS, (1) THE RIGHT TO LAY, CONSTRUCT AND MAINTAIN SEWERS, DRAINS, WATER PIPES AND OTHER MUNICIPAL UTILITIES AND SERVICES, IN AND UNDER ALL ROADS AND STREET RIGHT-OF-WAYS AND THE SPECIFIC EASEMENT AREAS SHOWN HEREON; (2) THE RIGHT TO REQUIRE DEDICATION FOR PUBLIC USE THE BEDS OF THE STREETS AND/OR ROADS, AND FLOODPLAINS AND OPEN SPACE WHERE APPLICABLE AND FOR GOOD AND OTHER VALUABLE CONSIDERATION, HEREBY GRANT THE RIGHT AND OPTION TO HOWARD COUNTY TO ACQUIRE THE FEE SIMPLE TITLE TO THE BEDS OF THE STREETS AND/OR ROADS AND FLOODPLAINS, STORM DRAINAGE FACILITIES AND OPEN SPACE WHERE APPLICABLE; AND (3) THE RIGHT TO REQUIRE DEDICATION OF WATERWAYS AND DRAINAGE EASEMENTS FOR THE SPECIFIC PURPOSE OF THEIR CONSTRUCTION, REPAIR AND MAINTENANCE; AND (4) THAT NO BUILDING OR SIMILAR STRUCTURE OF ANY KIND SHALL BE ERECTED ON OR OVER THE SAID EASEMENTS AND RIGHT-OF-WAYS. WITNESS MY HAND THIS 7TH DAY OF JANUARY 1983
 Charles J. Karfonta
 Charles J. Karfonta

SURVEYOR'S CERTIFICATE
 I HEREBY CERTIFY THAT THE FINAL PLAT SHOWN HEREON IS CORRECT; THAT IT IS A SUBDIVISION OF PART OF THE LAND CONVEYED BY VIRGINIA H. GARNATT, WIDOW, TO CHARLES J. KARFONTA BY DEED DATED FEBRUARY 15, 1980 AND RECORDED UNDER THE AFORESAID LAND RECORDS IN LIBER 990 FOLIO 443 AND THAT ALL MONUMENTS ARE IN PLACE AS SHOWN IN ACCORDANCE WITH THE ANNOTATED CODE OF MARYLAND.
 RONALD B. CARTER #10704
 DATE: 1-24-1983

SECTION TWO
SUNSET VALLEY
LOTS 1-12
 TAX MAP # 9 PARCEL 35
 3RD ELECTION DISTRICT HOWARD COUNTY, MD.
 SCALE: 1"=100'
 SHEET 1 OF 2
 5-79-12 P01-14 F01-115

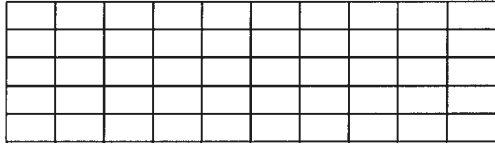
- NOTES:**
1. THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF HEALTH AND MENTAL HYGIENE FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A MODIFIED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
 2. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF HEALTH AND MENTAL HYGIENE.
 3. FOR FLAG OR PIPE STEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPE STEM, AND THE ROAD RIGHT OF WAY LINE AND NOT ONTO THE FLAG OR PIPE STEM DRIVEWAY.
 4. SUBJECT PROPERTY ZONED "R" PER 10/3/77 COMPREHENSIVE ZONING PLAN.
 5. THIS PLAN IS SUBJECT TO VP 83-46

STATE DEPT. OF ASSESSMENTS & TAXATION
 HOWARD COUNTY
[Signature]
 RECEIVED BY:
 DATE: 2/8/83 PLAT:

OWNER AND DEVELOPER
 CHARLES J. KARFONTA
 21 CHRYSLER PLACE
 CATONSVILLE, MARYLAND 21228

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND
 LAND SURVEYORS
 8308 COUNTRY AVENUE
 ELLICOTT CITY, MD. 21043

MSA 554 1247 - 283-1 F-35-37



PANEL LAYOUT

N.T.S

5Lx10C SUB-ARRAY DESIGN DATA

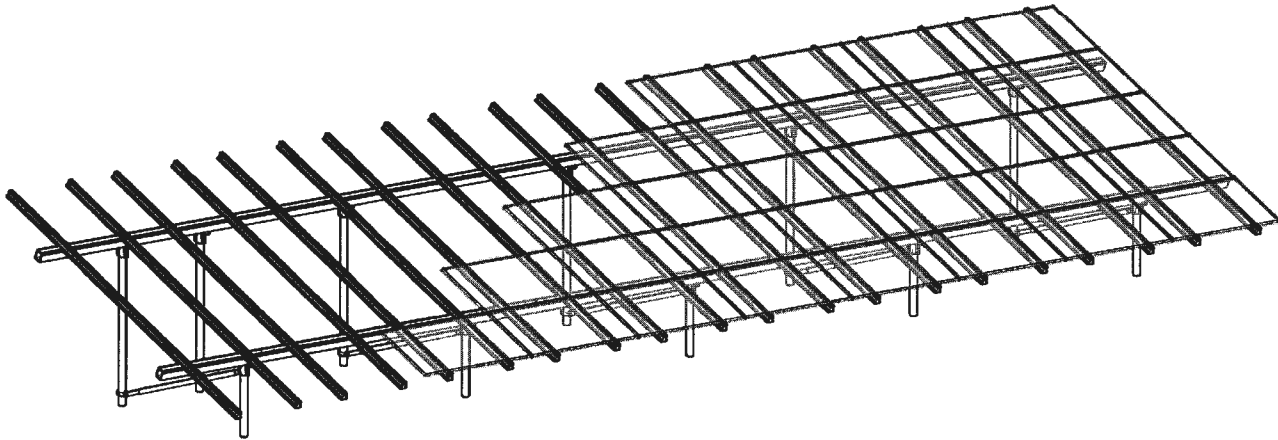
QTY OF MODULES/SUB-ARRAY:	50
QTY OF SUB-ARRAYS:	1
PANEL COLUMNS/SUB-ARRAY:	10
QTY OF PANEL ROWS:	5
PANEL ORIENTATION:	LANDSCAPE
PANEL COLUMN SPACING:	1/4"
PANEL ROW SPACING:	1/4"
PANEL MODEL:	Q.TRON BLK M-G2+
PANEL SIZE:	44.65" x 67.8"
PANEL POWER RATING:	425 WATTS
SUB ARRAY POWER RATING:	21.25 KW
TOTAL POWER RATING:	21.25 KW
QTY RAIL PER PANEL:	2

SITE DESIGN CONDITIONS

BASIC WIND SPEED: (RISK CATEGORY II)	115 MPH	MAXIMUM PILE AXIAL BEARING:	4,580 LBS
BASIC WIND SPEED: (RISK CATEGORY I)	N/A	MAXIMUM PILE UPLIFT:	2,820 LBS
EXPOSURE CATEGORY:	C	MAXIMUM LATERAL RESISTANCE:	2,155 LBS
GROUND SNOW LOAD:	40 PSF	TOP RAIL MAXIMUM LOADING:	122.4 PLF
FLAT ROOF SNOW LOAD:	N/A	GROUND SCREW DEPTH:	60" MIN
SITE CONTOUR:	<5 DEG SLOPE		

ALL DESIGN WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY BUILDING CODE INCLUDING, BUT NOT LIMITED TO, THE 2021 INTERNATIONAL BUILDING CODE WITH AMENDMENTS PER SECTION 3.101.

NET DESIGN PRESSURES WERE CALCULATED IN ACCORDANCE WITH ASCE 7-16 SECTION 27.3.2, "OPEN BUILDINGS WITH MONDSLOPE, PITCHED, OR TROUGHED ROOFS". ALL LOAD CASES WERE EVALUATED IN DETERMINING THE LIMITING DESIGN CONDITIONS. THE DATA TABLE ABOVE PROVIDES THE RESULTS FOR THE LIMITING LOAD CASE. MAXIMUM PILE REACTION FORCES REPRESENT THE HIGHEST LOAD CONDITION APPLIED TO ANY PILE IN THE STRUCTURE. ALL PILES IN THE STRUCTURE ARE DESIGNED TO MEET THE MAXIMUM LOAD CONDITIONS.



ISOMETRIC VIEW

N.T.S

NOTE:

1. (1) ADDITIONAL NORTH GROUND SCREW IS TO BE INSTALLED PER FIELD DIRECTION. THE GROUND SCREW IS TO SUPPORT EQUIPMENT MOUNTING NEEDS. IT IS NOT REQUIRED FOR NORTH BEAM SUPPORT.

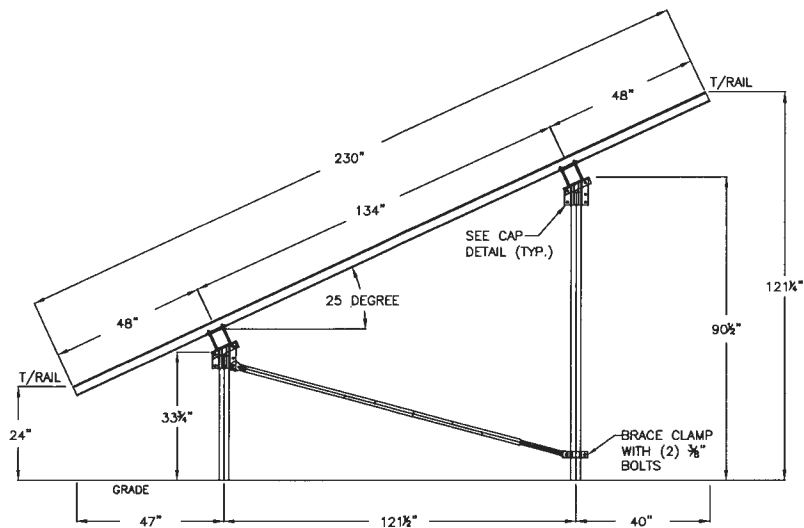
Solar Foundations®
USA
1142 River Road, New Castle, DE 19720
Ph: (855) 738-7200 Fax: (866) 644-5665

AMERICAN DESIGN AND BUILD
-PROJECT-
KIM, DOMINGO RESIDENCE(PV24336GM)
1035 SUNSET VALLEY DRIVE
STOKESVILLE, MD 21784



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. 40027, EXPIRATION DATE: 3/15/25.

DATE	REVISION	DRAWN BY:	REVIEW BY:
10/08/2024	ORIGINAL	JB	JD

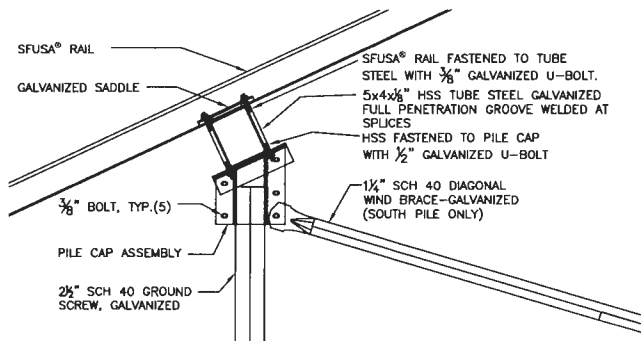


EAST ELEVATION

N.T.S.

NOTE:

1. ARRAY HEIGHT DIMENSIONS ASSUME LEVEL GRADE



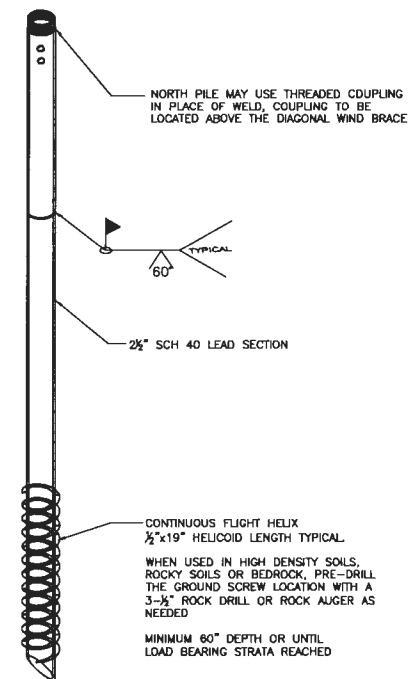
CAP DETAIL

N.T.S.

SPECIFICATION REQUIREMENT NOTES:

THE FOLLOWING MATERIAL SPECIFICATION REQUIREMENTS PERTAIN TO THE FABRICATION OF THE SOLAR FOUNDATIONS USA® GROUND MOUNT SOLAR SUPPORT STRUCTURE AS INDICATED ON THESE DRAWINGS.

1. SFUSA® ALUMINUM RAILS SHALL CONFORM TO ASTM B221.
2. STRUCTURAL STEEL TUBING SHALL BE ASTM A500 HIGH YIELD (60 KSI).
3. STEEL PIPE FOR PILES SHALL CONFORM TO ASTM A500 GRADE C.
4. STEEL PILE EXTENSIONS SHALL BE ASTM A53 GRADE B.
5. STEEL PIPE FOR DIAGONAL BRACING SHALL BE ASTM A53 GRADE A.
6. FABRICATED STEEL PLATE FOR PILE CAP ASSEMBLIES, BRACING CLAMPS, ETC. SHALL BE ASTM A36 OR A1011.
7. STEEL BOLTS SHALL CONFORM TO SAE J429 GRADE 5 OR BETTER.
8. STEEL U-BOLTS SHALL CONFORM TO ASTM 1018.
9. USS FLAT STEEL WASHERS SHALL CONFORM TO ASTM F844 AND NUTS FOR STEEL CONNECTIONS SHALL CONFORM TO ASTM A563 GRADE A.
10. ALL FIELD WELDING SHALL CONFORM TO AWS D1.1/D1.1M - STRUCTURAL WELDING CODE REQUIREMENTS.
11. ALL STEEL SHALL BE HOT-DIP GALVANIZED PER ASTM A123 OR A153 AFTER ALL FABRICATION HAS BEEN COMPLETED.



GROUND SCREW DETAIL

N.T.S.

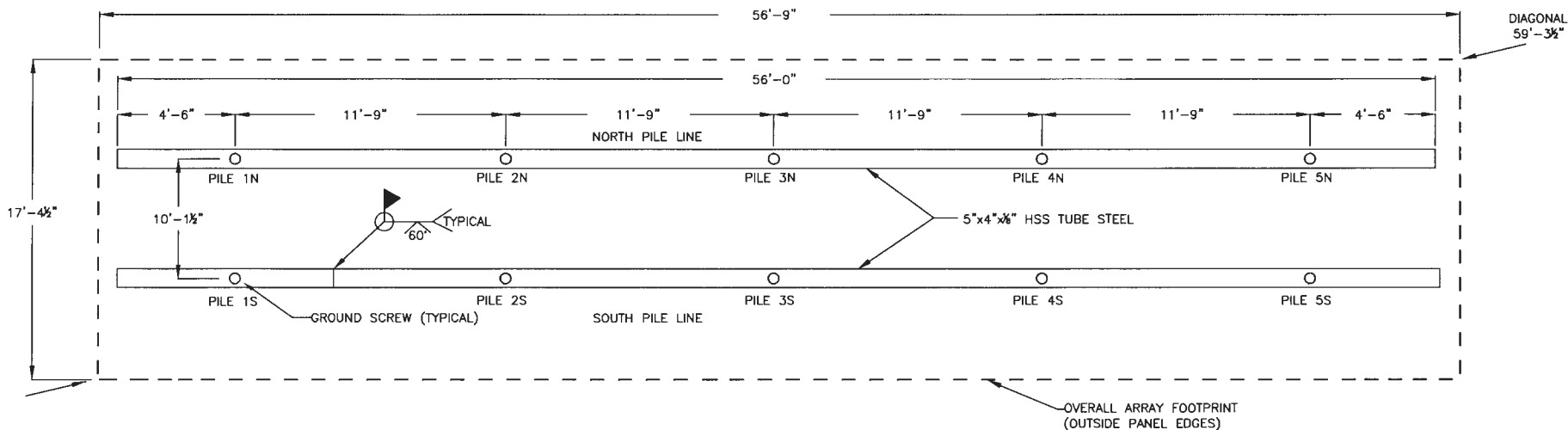
INSTALLATION REQUIREMENT NOTES:

1. THE MINIMUM AVERAGE INSTALLATION TORQUE REQUIRED TO OBTAIN THE REQUIRED INDICATED CAPACITIES AND THE MINIMUM INSTALLATION DEPTH SHOWN ON THE PLANS SHALL BE SATISFIED PRIOR TO TERMINATION OF THE GROUND SCREW INSTALLATION. THE INSTALLATION TORQUE SHALL BE AN AVERAGE OF THE INSTALLATION TORQUES INDICATED DURING THE LAST ONE FOOT OF INSTALLATION.
2. THE TORSIONAL STRENGTH RATING OF THE GROUND SCREW SHALL NOT BE EXCEEDED DURING THE INSTALLATION. IF THE TORSIONAL STRENGTH LIMIT OF THE GROUND SCREW HAS BEEN REACHED, BUT THE SCREW HAS NOT REACHED THE TARGET DEPTH, PERFORM THE FOLLOWING:
 - a. REVIEW DEVELOPED TORQUE AND GROUND SCREW DEPTH WITH ENGINEER OF RECORD TO DETERMINE IF ACCEPTABLE FOR THIS INSTALLATION BASED UPON MINIMUM FROST DEPTH REQUIREMENT.
 - b. FOR INSTALLATION INTO HIGHLY COMPACTED SOIL, CREW SHALL PRE-DRILL THE GROUND SCREW LOCATION WITH A 3/4\"/>
3. IF THE TARGET DEPTH IS ACHIEVED, BUT THE TORSIONAL REQUIREMENT HAS NOT BEEN MET THE INSTALLER PERFORM ONE OF THE FOLLOWING:
 - a. INSTALL THE GROUND SCREW DEEPER TO OBTAIN THE REQUIRED CAPACITY.
 - b. REMOVE THE GROUND SCREW AND INSTALL AN APPROVED SINGLE FLIGHT PILE WITH A LARGER DIAMETER HELICAL PLATE OR ONE WITH MULTIPLE HELICAL PLATES.
 - c. REDUCE THE LOAD ON THE INDIVIDUAL GROUND SCREWS BY PROVIDING ADDITIONAL GROUND SCREWS AT A REDUCED SPACING. CONTACT ENGINEER OF RECORD FOR DETERMINATION OF MAXIMUM PILE SPACING BASED UPON DEVELOPED TORQUE.

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. 40027, EXPIRATION DATE: 3/15/25.



DATE	REVISION	DRAWN BY:	REVIEW BY:
10/08/2024	ORIGINAL	JB	JD



PILE PLAN LAYOUT
N.T.S

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