

2 SOLAR MODULE TILT & SPACING  
SCALE: 1/2" = 1'

Array	Type	No. of Mod	No. of Str	Array Size (kWDC)	Tilt	Azi	Color	Group Inverter	Inv. DC/AC Ratio
A	Canopy	120	10	37.800	5°	0°	RED	(16) SB 11000TL-US	1.160
B		240	20	75.600	5°	0°	RED		
C		84	7	26.460	5°	0°	RED		
D		168	14	52.920	5°	0°	RED		
E		36	3	11.340	5°	0°	RED		
<b>TOTAL</b>		648	54	204.120					

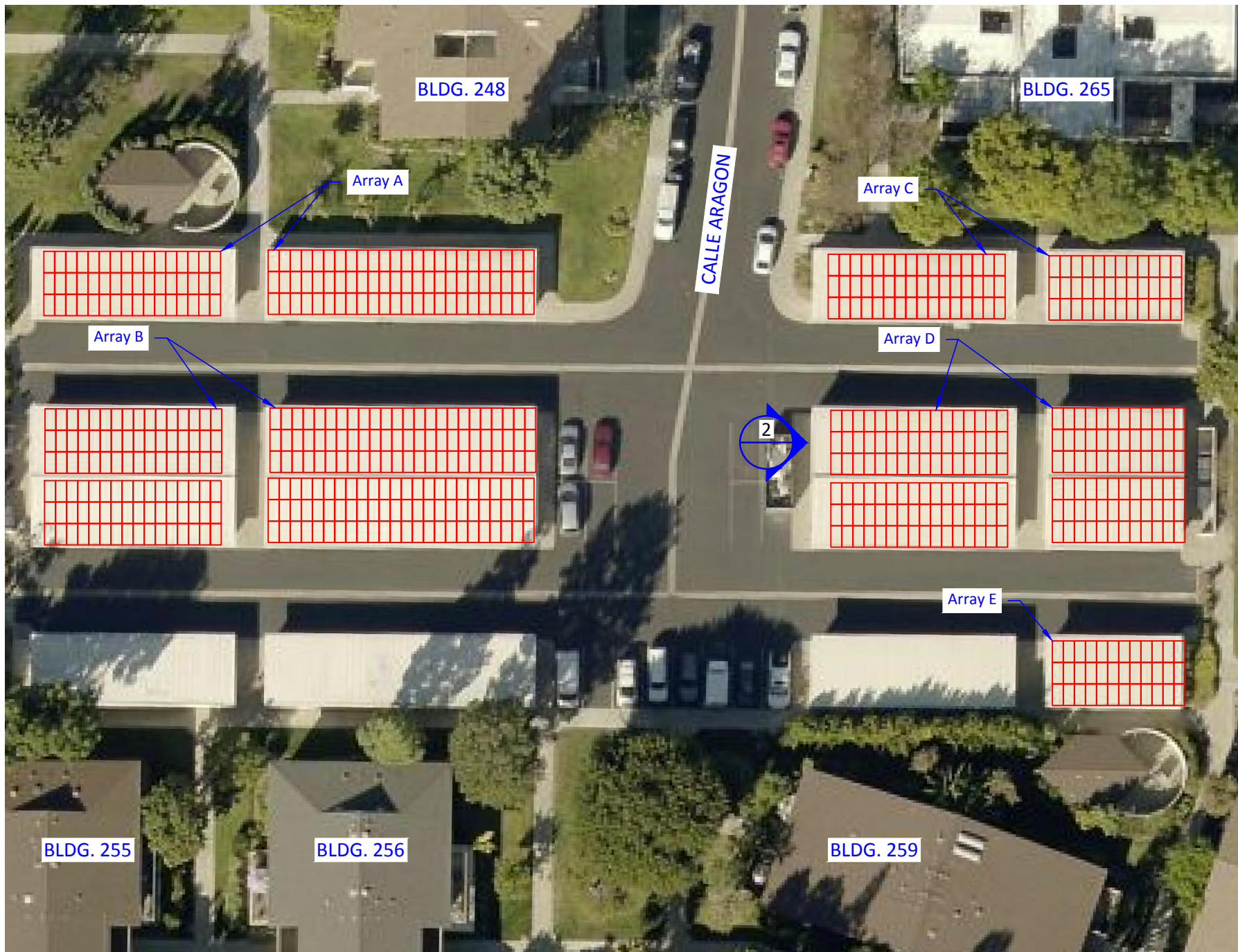
PROJECT DEVELOPER

**Johnson Controls**

INGENUITY WELCOME

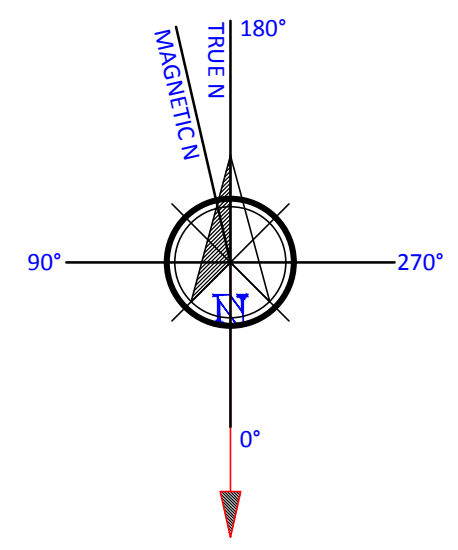
JOHNSON CONTROLS, INC.  
SYSTEMS AND SOLUTIONS NA  
2250 BUTLER PIKE, SUITE 130  
PLYMOUTH MEETING, PA 19462

PV DESIGN CONSULTANT



1 PLAN VIEW: SOLAR ARRAY LAYOUT  
SCALE: 1" = 40'

**System Properties:**  
 Solar Module Mfg.: JA Solar  
 Solar Module Model: JAP6 72/315/3BB  
 No. of Solar Modules: 648  
 No. of Strings: 54  
 No. of Mod. per Str.: 12  
 Mounting System MFG: M Bar C  
 Mounting System Type: Canopy  
 Solar Array Azimuth: 0°  
 Solar Mod. Tilt Angle: 5°  
 Solar Inverter Mfg.: Sunny Boy  
 # and Model of Inv.: (16) SB 11000TL-US  
 Total DC System Size: 204.120 kW



PROJECT NAME  
LAGUNA WOODS  
UNITED MUTUAL

SITE NAME AND ADDRESS  
CALLE ARAGON  
& LAUNDRY L50 & L52  
LAGUNA WOODS, CA 92637

DRAWING TITLE  
PV SYSTEM  
SITE PLAN & PROPERTIES

DESIGNER: M. LAVARNWAY DATE: 01-26-16  
 DRAFTER: CT CUDAL DATE: 01-26-16  
 CHECKER: D. WILLIAMS DATE: 01-26-16

REVISION HISTORY

REV	DESCRIPTION	DRW	CHK	DATE
1X1	UPDATE	C.C	M.L.	06-02-16

PROJECT NUMBER  
00536

PAGE SIZE  
B

SITE NUMBER  
01

SCALE  
1" : 40'

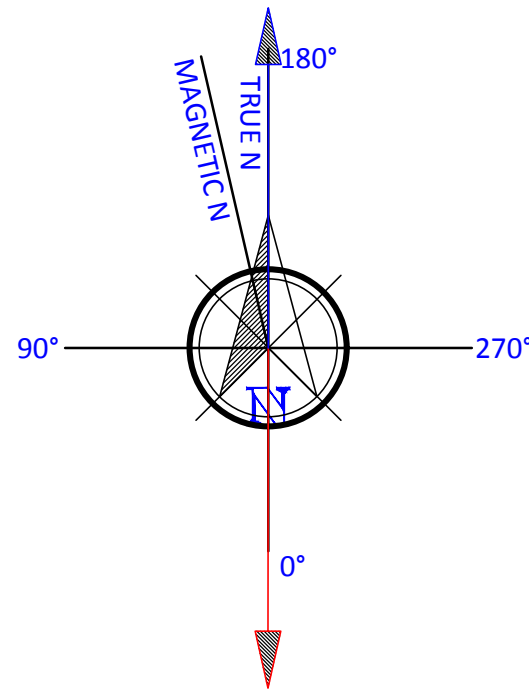
DRAWING NUMBER

DISC.	TYPE	SEQUENCE	SHIP.
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Engineer

**PRELIMINARY NOT FOR CONSTRUCTION**

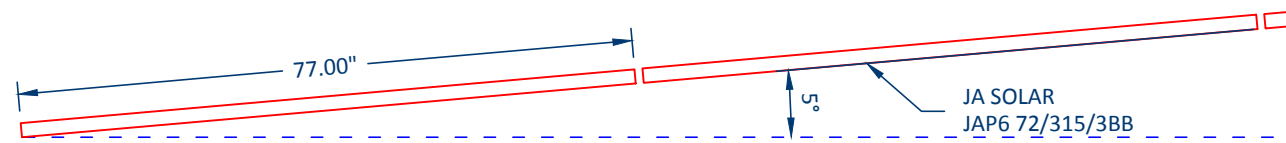
Array	Type	No. of Mod	No. of Str	Array Size	Tilt	Azi	Color	Group Inverter	Inv. DC/AC Ratio
				(kWDC)					
A	Canopy	84	7	26.460	5°	0°	RED	(2) SB 7000TL-US (1) SB 10000TL-US	1.103
B		120	10	37.800	5°	0°	RED	(2) SB 7000TL-US (2) SB 10000TL-US	1.112
C		108	9	34.020	5°	0°	RED	(3) SB 10000TL-US	1.134
D		108	9	34.020	5°	0°	RED	(3) SB 10000TL-US	1.134
E		120	10	37.800	5°	180°	BLUE	(2) SB 7000TL-US (2) SB 10000TL-US	1.112
F		108	9	34.020	5°	180°	BLUE	(3) SB 10000TL-US	1.134
<b>TOTAL</b>		648	54	204.120					



ARRAY AZIMUTH  
0° (TRUE), 13° (MAGNETIC)

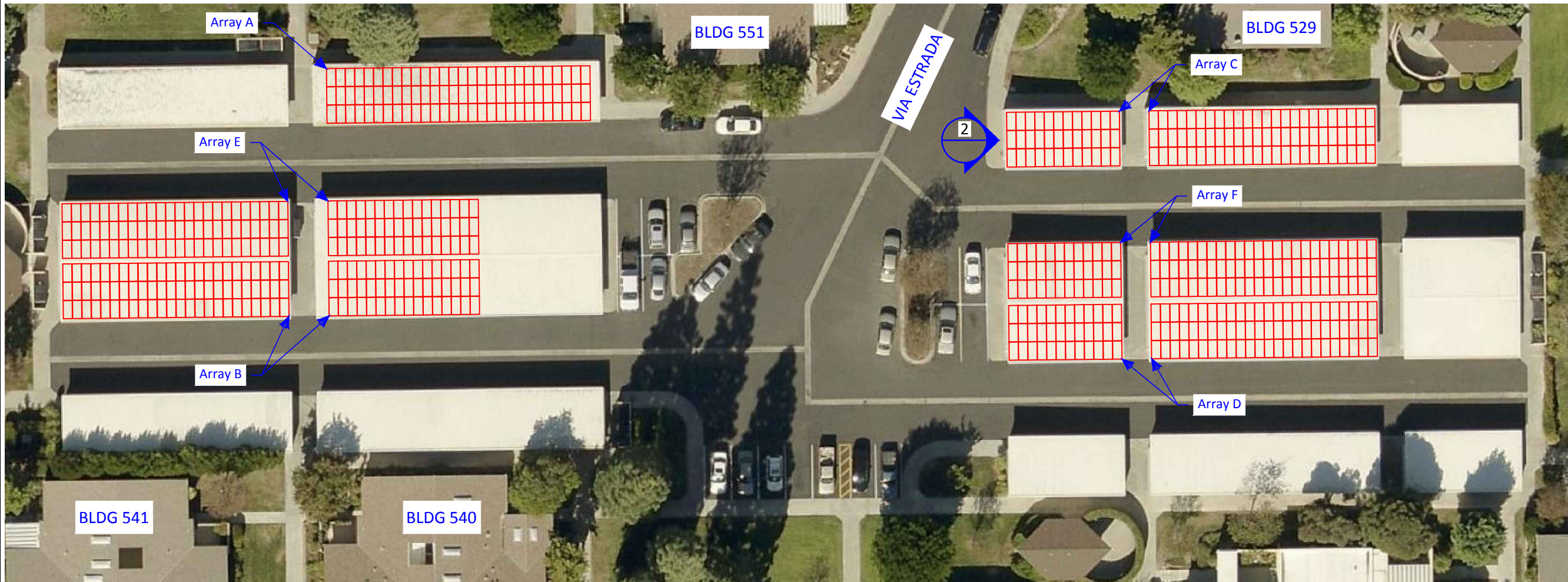
**System Properties:**  
Solar Module Mfg.: JA Solar  
Solar Module Model: JAP6 72/315/3BB  
No. of Solar Modules: 648  
No. of Strings: 54  
No. of Mod. per Str.: 12  
Mounting System MFG: M Bar C  
Mounting System Type: Canopy  
Solar Array Azimuth: 0°  
Solar Mod. Tilt Angle: 5°  
Solar Inverter Mfg.: Sunny Boy  
# and Model of Inv.: (15) SB 7000TL-US  
(14) SB 10000TL-US  
Total DC System Size: 204.120 kW

- LEGEND**
- OBSTRUCTION SHADE
  - TREE SHADE
  - PERIMETER OFFSET
  - UNUSEABLE AREA
  - TREES
  - SOLAR MODULE



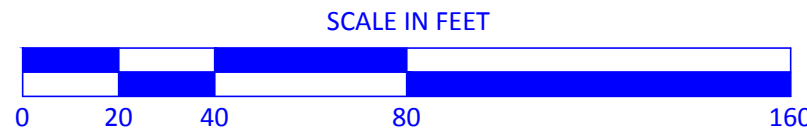
**2 SOLAR MODULE TILT & SPACING**

SCALE: 1/2" = 1'



**1 PLAN VIEW: SOLAR ARRAY LAYOUT**

SCALE: 1" = 40'



**PROJECT DEVELOPER**

**INGENUITY WELCOME**

JOHNSON CONTROLS, INC.  
SYSTEMS AND SOLUTIONS NA  
2250 BUTLER PIKE, SUITE 130  
PLYMOUTH MEETING, PA 19462

**PV DESIGN CONSULTANT**

PROJECT NAME  
LAGUNA WOODS  
UNITED MUTUAL

SITE NAME AND ADDRESS  
VIA ESTRADA  
& LAUNDRY L88 AND L90  
LAGUNA WOODS, CA 92637

DRAWING TITLE  
PV SYSTEM  
SITE PLAN & PROPERTIES

DESIGNER: M. LAVARNWAY DATE: 05-24-16  
DRAFTER: CT CUDAL DATE: 05-24-16  
CHECKER: D. WILLIAMS DATE: 05-24-16

**REVISION HISTORY**

REV	DESCRIPTION	DRW	CHK	DATE
1X1	UPDATE	C.C	M.L.	06-02-16

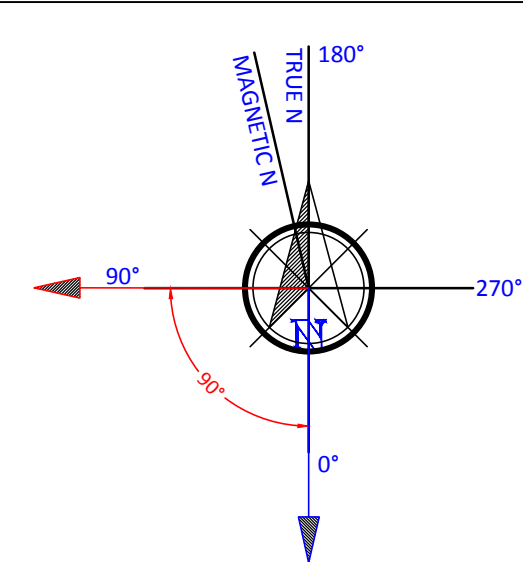
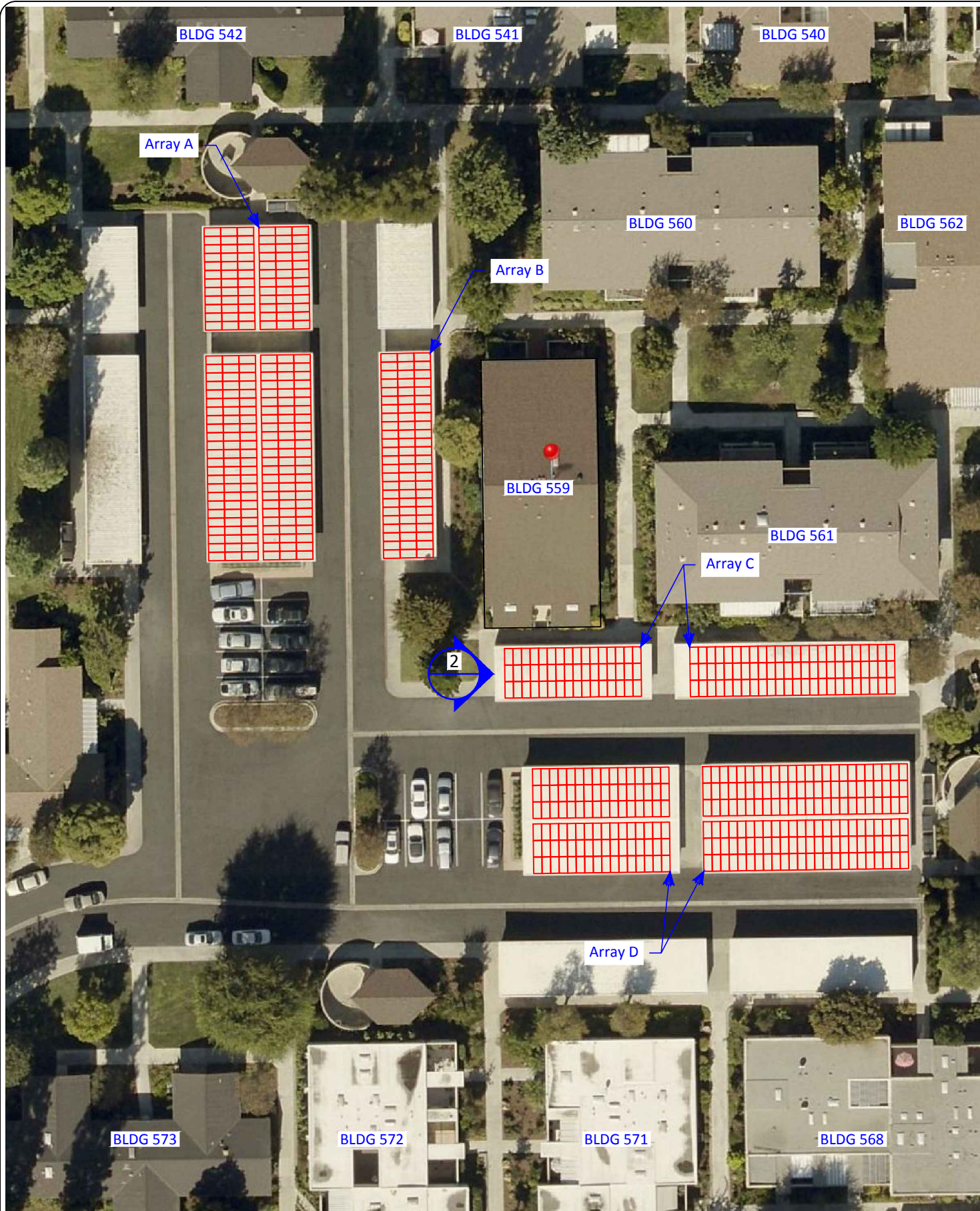
PROJECT NUMBER: 00536 PAGE SIZE: B  
SITE NUMBER: 03 SCALE: 1" : 40'

**DRAWING NUMBER**

DISC	TYPE	SEQUENCE	SHIP
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Engineer

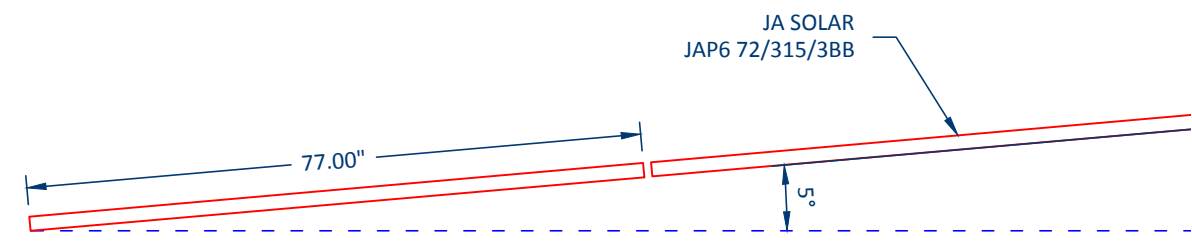
**PRELIMINARY NOT FOR CONSTRUCTION**



**System Properties:**  
 Solar Module Mfg.: JA Solar  
 Solar Module Model: JAP6 72/315/3BB  
 No. of Solar Modules: 648  
 No. of Strings: 54  
 No. of Mod. per Str.: 12  
 Mounting System MFG: M Bar C  
 Mounting System Type: Canopy  
 Solar Array Azimuth: 0°  
 Solar Mod. Tilt Angle: 5°  
 Solar Inverter Mfg.: Sunny Boy  
 # and Model of Inv.: (16) SB 11000TL-US  
 Total DC System Size: 204.120 kW

- LEGEND**
- OBSTRUCTION SHADE
  - TREE SHADE
  - PERIMETER OFFSET
  - UNUSEABLE AREA
  - TREES
  - SOLAR MODULE

Array	Type	No. of Mod	No. of Str	Array Size (kWDC)	Tilt	Azi	Color	Groups			Group Inverter	Inv. DC/AC Ratio
								No.	No. of Str	(kWDC)		
A	Canopy	216	18	68.040	5°	90°	RED	1	24	90.720	(7) SB 11000TL-US	1.178
B		72	6	22.680	5°	90°	RED					
C		120	10	37.800	5°	0°	BLUE	2	30	113.400	(9) SB 11000TL-US	1.145
D		240	20	75.600	5°	0°	BLUE					
<b>TOTAL</b>		648	54	204.120								



**1 PLAN VIEW: SOLAR ARRAY LAYOUT**  
 SCALE: 1" = 50'  
 SCALE IN FEET  
 0 25 50 100 200

**2 SOLAR MODULE TILT & SPACING**  
 SCALE: 1/2" = 1'

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**PROJECT DEVELOPER**

**INGENUITY WELCOME**

JOHNSON CONTROLS, INC.  
 SYSTEMS AND SOLUTIONS NA  
 2250 BUTLER PIKE, SUITE 130  
 PLYMOUTH MEETING, PA 19462

**PV DESIGN CONSULTANT**

**PROJECT NAME**  
 LAGUNA WOODS  
 UNITED MUTUAL

**SITE NAME AND ADDRESS**  
 OFF VIA AVENIDA SEVILLA  
 & LAUNDRY L91 AND L92  
 LAGUNA WOODS, CA 92637

**DRAWING TITLE**  
 PV SYSTEM  
 SITE PLAN & PROPERTIES

DESIGNER: M. LAVARNWAY DATE: 05-24-16  
 DRAFTER: CT CUDAL DATE: 05-24-16  
 CHECKER: D. WILLIAMS DATE: 05-24-16

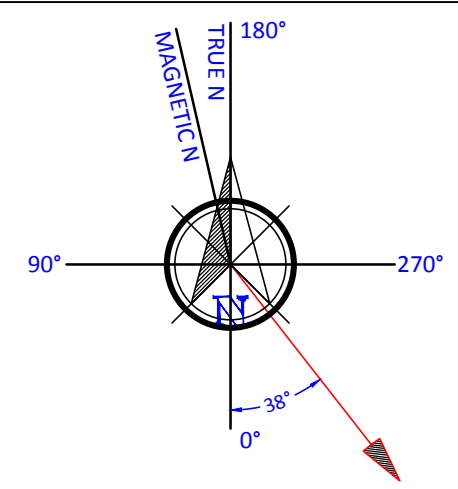
**REVISION HISTORY**

REV	DESCRIPTION	DRW	CHK	DATE
1X1	UPDATE	C.C	M.L.	06-02-16

PROJECT NUMBER: 00536 PAGE SIZE: B  
 SITE NUMBER: 04 SCALE: 1" : 50'  
 DRAWING NUMBER: E 0 1

Engineer

**PRELIMINARY NOT FOR CONSTRUCTION**

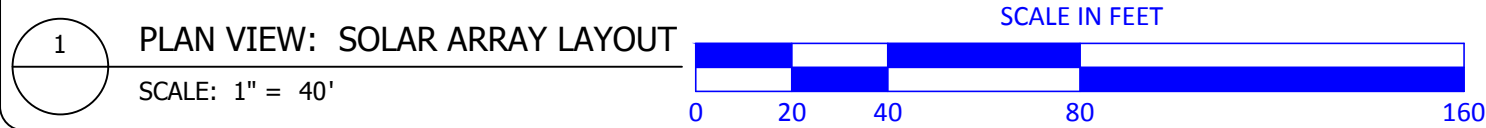


**System Properties:**  
 Solar Module Mfg.: JA Solar  
 Solar Module Model: JAP6 72/315/4BB  
 No. of Solar Modules: 624  
 No. of Strings: 52  
 No. of Mod. per Str.: 12  
 Mounting System MFG: TBA  
 Mounting System Type: Canopy  
 Solar Array Azimuth: -38°  
 Solar Mod. Tilt Angle: 5°  
 Solar Inverter Mfg.: Sunny Boy  
 # and Model of Inv.: (15) SB 11000TL-US  
 Inverter DC/AC Ratio: 1.191  
 Total DC System Size: 196.560 kW

ARRAY AZIMUTH  
 -38° (TRUE), -25° (MAGNETIC)

LEGEND  
 □ SOLAR MODULE

Array	Type	No. of Mod	No. of Str	Array Size	Group Inverter	Inv. DC/AC Ratio
				(kWDC)		
A	Canopy	84	7	26.460	(15) SB 11000TL-US	1.191
B		72	6	22.680		
C		168	14	52.920		
D		144	12	45.360		
E		84	7	26.460		
F		72	6	22.680		
<b>TOTAL</b>		624	52	196.560		



PROJECT DEVELOPER

INGENUITY WELCOME

JOHNSON CONTROLS, INC.  
 SYSTEMS AND SOLUTIONS NA  
 2250 BUTLER PIKE, SUITE 130  
 PLYMOUTH MEETING, PA 19462

PV DESIGN CONSULTANT

PROJECT NAME  
 LAGUNA WOODS  
 UNITED MUTUAL

SITE NAME AND ADDRESS  
 CALLE CADIZ  
 & LAUNDRY L81 AND L80  
 LAGUNA WOODS, CA 92637

DRAWING TITLE  
 PV SYSTEM  
 SITE PLAN & PROPERTIES

DESIGNER: M. LAVARNWAY DATE: 06-01-16  
 DRAFTER: CT CUDAL DATE: 06-01-16  
 CHECKER: D. WILLIAMS DATE: 06-01-16

REVISION HISTORY

REV	DESCRIPTION	DRW	CHK	DATE
1X1	UPDATE	C.C	M.L.	06-02-16

PROJECT NUMBER: 00536 PAGE SIZE: B  
 SITE NUMBER: 05 SCALE: 1" : 00'  
 DRAWING NUMBER: E 0 1  
 Engineer

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