

4 5		6 7	
		SHEET LIST	
Y FOR CONVENIENCE IN COORDINATION AND WITHOUT	G-002	GENERAL NOTES AND SYMBOLS	
OCUMENTS IN THE ENTIRETY. SHADED AREA SHOWN. THIS REPRESENTS THE EXTERIOR FACE	G-101 G-102 G-103	EGRESS PLAN ADA TOUR ROUTE COMPLIANCE PLAN	
	G-201 G-202	SOLAR ENVELOPE COMPLIANCE ELEVATIONS SOLAR ENVELOPE COMPLIANCE ELEVATIONS	
	C-001	CIVIL NOTES AND SYMBOLS	
	C-101 C-102	GROUND CONTACT PLAN ORGANIZER SUPPLIED PAVING PLAN	TEAM PURDUE
	L-103	LANDSCAPE SITE PLAN	NHOME
	L-102 L-103	LANDSCAPE IRRIGATION PLAN LANDSCAPE LIGHTING PLAN	
	L-201 L-202	LANDSCAPE ELEVATIONS LANDSCAPE ELEVATIONS	
	L-501 L-601	PLANTING SCHEDULE	
	S-001 S-101	STRUCTURAL NOTES FOUNDATION PLAN	TEAM NAME: TEAM PURDUE
	S-102 S-103	FIRST FLOOR FRAMING PLAN MAIN ROOF FRAMING PLAN	KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
	S-104 S-105	UPPER ROOF FRAMING PLAN DECK FRAMING PLAN	CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	S-501 S-502	STRUCTURAL DETAILS STRUCTURAL DETAILS	- D
	S-503 S-601 S 901	STRUCTURAL DETAILS STRUCTURAL SCHEDULES ERAMING ISOMETRICS	CONSULTANTS KEVIN MERCER, TRANE
	A 001		
	A-001 A-101 A-111	SITE PLAN FIRST FLOOR PLAN	ANDY SWITZER, ARKOR
	A-112 A-113	ROOF PLAN SOLAR ROOF LAYOUT	SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION
	A-121 A-211	FIRST FLOOR REFLECTED CEILING PLAN EXTERIOR ELEVATIONS	MARK BEALS, J & T SYSTEMS, INC.
	A-212 A-213	EXTERIOR ELEVATIONS INTERIOR ELEVATIONS	
	A-214 A-401 A-402	PUBLIC CORE MECHANICAL CORE	
	A-404 A-405	PRIVATE CORE GARAGE CORE	
	A-406 A-407	LARGE SCALE PLANS - BATHROOM LARGE SCALE PLANS - KITCHEN	
	A-502 A-601	CABINET DETAILS SCHEDULES	-C CLIENT
	A-602 A-901	ARCHITECTURAL RENDERINGS	U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011
	I-101	INTERIOR DESIGN PLAN	WWW.SOLARDECATHLON.GOV
	I-102 I-601 I-602	INTERIOR FORMISHINGS INTERIOR DESIGN SCHEDULES SCHEDULES	U.S. DEPARTMENT OF ENERGY
	F-001	SYMBOLS & NOTES	SOLAR DECATHLON
	F-101 F-102 F-201	FIRE ALARM/EXTINGUISHER PLAN FIRE SUPPRESSION PLAN MECHANICAL CLOSET	11/23/2010 80% DESIGN DRAWINGS
	F-201 F-501 F-901	FIRE PROTECTION DETAILS	03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/DOE REVISIONS
	P-101	PLUMBING SITE PLAN	
	P-102 P-103 P-601	WASTE REMOVAL & VENTING PLUMBING SCHEDULES	
	P-901	ISOMETRIC VIEW	-В
	M-101 M-102 M-201	HVAC SUPPLY PLAN HVAC RETURN PLAN MECHANICAL CLOSET	
	M-202 M-203	BIOWALL DETAILS MECHANICAL SECTION VIEWS	
MARTINE CALLED AND AND AND AND AND AND AND AND AND AN	M-204 M-601	DETAILED VIEWS MECHANICAL SCHEDULES	WARK DATE DESCRIPTION
	M-901	HVAC ISOMETRIC	LOT NUMBER: 201
	E-001 E-103	ELECTRICAL SYMBOLS AND NOTES LIGHTING PLAN	CHECKED BY: MATT HEBDON
	E-501 E-502	GRID INTERCONNECTION & RISER DIAGRAM ELECTRICAL CLOSET DETAILS	COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	E-601 E-602 E-603	ONE-LINE DIAGRAM THREE LINE DIAGRAM DOWER DI AN AND SCHEDUILES	
	E-603 E-604 E-605	BATTERY LOCATION INTERCONNECTION	
	T-601	BUILDING CONTROL OVERVIEW SCHEMATIC	
	O-101	ARRIVAL/ DEPARTURE SEQUENCE PLANS 1-20	
	O-102 O-103	ARRIVAL/ DEPARTURE SEQUENCE PLANS 21-40 ARRIVAL/ DEPARTURE SEQUENCE PLANS 41-59	
	U-104		
4 5		6 7	

	GENERAL NOTES	
	1. THE LOCATION OF EXISTING UNDERGROUND UTILITIES, SUCH AS WATER MAINS, SEWERS, GAS LINES, ETC. HAS NOT BEEN DETERMINED AND HAS NOT BEEN SHOWN ON THE PLANS. BEFORE CONSTRUCTION, OWNER SHOULD HIRE A LICENSED CIVIL ENGINEER TO DETERMINE LOCATION BASED ON THE BEST AVAILABLE INFORMATION. ALL INFORMATION SHOWN IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE OWNER AND THE ENGINEER DO NOT ASSUME RESPONSIBILITY IN THE EVENT THAT DURING CONSTRUCTION, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED AND THAT THE ACTUAL LOCATION OF THOSE WHICH EXIST MAY BE DIFFERENT FROM THE LOCATION ASSUMED.	& @ CL D # AD, AFF AG
	2. CONTRACTOR SHALL NOTIFY THE OWNER, ENGINEER AND THE LOCAL PRESIDING MUNICIPALITY A MINIMUM OF 48 HOURS IN ADVANCE OF PERFORMING ANY WORK.	AL API AR
	3. ALL AREAS, ON OR OFF SITE, DISTURBED DURING CONSTRUCTION OPERATIONS AND NOT PART OF THE WORK AS SHOWN HERON SHALL BE RESTORED TO ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER. IT IS INCUMBENT UPON CONTRACTOR TO SHOW THAT DAMAGED AREAS WERE NOT DISTURBED BY CONSTRUCTION OPERATIONS	B/ BD BLI BLI BM
	4. THESE DRAWINGS ASSUME THAT THE CONTRACTOR WILL UTILIZE AN ELECTRONIC DRAWING FILE AND STAKE ALL SITE IMPROEVEMNTS USING COORDINATES TIED INTO THE CONTROL POINTS. THE DIMENSIONS INDICATED ON THE DRAWINGS ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY.	CE CJ CL CL CL
	5. IN THE CASE OF CONFLICT BETWEEN THESE DRAWINGS, THE FOUNDATION DRAWINGS AND THE ARCHITECTURAL SITE PLAN, THE USER OF THIS INFORMATION SHALL CONTACT THE ENGINEER IMMEDIATELY.	
	6. OWNER TO COORDINATE THE EXACT LOCATIONS OF ALL UTILITY SERVICE LINES WITH PLUMBING DRAWINGS. REFER TO PLUMBING DRAWINGS FOR CONTINUATION OF ALL UTILITIES WITHIN 5 FEET OF BUILDING AREA	CC CC CT CT DB
	7. CONTRACTOR SHALL FIELD VERIFY INVERT & LOCATIONS OF EXISTING UTILITY MAINS PRIOR TO INSTALLING ANY ON-SITE UTILITIES OR STRUCTURES.	DE DI/ DI
	8. SEPARATION OF WATER AND SEWER LINES SHALL BE 10' MINIMUM HORIZONTALLY. IF 10' IS NOT POSSIBLE, SEWER SHALL BE OF WATER MAIN QUALITY MATERIAL AND CONSTRUCTION.	DN DC DF
	9. CLEAN OUT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH BASISNS AT THE COMPLETION OF CONSTRUCTION	
		M M M M N N N
ſ		N

		ABBREVIATIONS	SYMI	BOL LEGEND	
	AND AT CENTER LINE	OC ON CENTER OD OUTSIDE DIAMETER OH OPPOSITE HAND			
		OPNG OPENING OPR OPPOSITE	SYMBOL	DESCRIPTION	
			0 2' 4' 8'	DRAWING SCALE	
<pre>Add Television Control Co</pre>	AGGREGATE				TEAM PURDUE
		PT PAINT OTY OLIANTITY		GRID LINES	
	BOTTOM OF	RAD RADIUS RCP REFLECTED CEILING PLAN			HUME
	BUILDING	REINF REINFORCED		NORTH ARROW	
	BLOCK` BEAM	REV REVERSE		SECTION VIEW TAG	
		RO ROUGH OPENING	A-101		
Cardinal and State of State o	CEILING	SCHED SCHEDULE SECT SECTION		SHEET PLACEWENT OF SECTION	TEAM NAME: TEAM PURDUE
Calibratie to up to be calibratic colory Calibratie to up to be calibratie to the to be calibratie	CLEAR	SHT SHEET		SHEET KEYNOTE	ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE. IN 47907
		SPEC SPECIFICATION			CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
Second functions Second func		SG SGOARE SS STAINLESS STEEL		WINDOW TAG	
State	CERAMIC TILE	STO STAIN STD STANDARD STI STEEL	1000		-D CONSULTANTS
Sharement T, THE DE MARTING AND		SUSP SUSPENDED		DOOR TAG	KEVIN MERCER, TRANE
Biology OPENNON THIS I THESE SURLID THIS I THESE SURLID THIS I THESE SURLID THIS I THE THIS I THESE SURLID THIS I THESE SURLID THIS I THESE SURLID THIS I THESE SURLID THIS I THE THIS I THESE SURLID THIS I THESE SURLID THIS I THE THIS I THESE SURLID THIS I THESE SURLID THIS I THIS I THESE SURLID THIS I THIS I THESE SURLID THIS I THIS I THIS I THIS I THIS I THIS I		T/ TOP OF		REFERENCE KEYNOTE TAG	JOHN GUEQUIERRE, HI-TECH HOUSING
Alter and a state of the contract of the co	DOWN	THSH THRESHOLD	22 42 00		ANDY SWITZER, ARKOR
SRAWED SRAWED STATUS STATU	DOOR OFENING DOOR DOWNSBOUT	UNO UNLESS NOTED OTHERWISE			RYAN JUSTAK, SCHOLER CORPORATION
Control with the control of the con	DRAWING	VERTVERTICAL V.I.F. VERIFY IN FIELD	4 A-201 2-	ELEVATION IDENTIFICATION	MARK BEALS, J & T SYSTEMS, INC.
	EAST EACH	W WEST	3	SHEET PLACEMENT OF ELEVATION	PAT WILSON, KTANTIKE PROTECTION
	EVELEVATION	WD WOOD	KITCHEN	ROOM IDENTIFICATION TAG	
		WF WATER FROOF WT WEIGHT	104	ROOM IDENTIFICATION ROOM NUMBER	
		W/O WITH OUT	DRAWING BLOCK TITL		
DUNCATION SUMPLY COMMENTANCE REFERENCE LIST DEFINITION LIST DEFINITION	EXPOSED EXTERIOR EL OOR DRAIN	TD TARD	1/4" = 1'-0"	TITLE SCALE	-c
THE LEXTING CALL AND THE CONSTRAINT CALLS AND			NAME	ELEVATION MARKER	U.S. DEPARTMENT OF ENERGY
Defail View Tag Defail View	FIRE EXTINGUISHER				SOLAR DECATHLON 2011
COTO TRET COTO	FLOOR FLOOR				WWW.SOLARDECATHLON.GOV
Addet Ad	FOOT OR FEET		A101		U.S. DEPARTMENT OF ENERGY
SYPESIM BOARD BASIS SROUND SROUND SR					SOLAR DECATHLON
RECEIVED IN THE ADDRESS AND AD	GYPSUM BOARD				11/23/2010 DOE REVIEW
SYPSIM HARDWARE ANDICAPPED HARDWARE COLOW NETAL HORIZON	GROUND				03/22/2011 FULL SET SUBMISSION
HARDWARE HARDWARE HARDWARE HORZONTAL HOR					
IN OPERATING INTERNAL HOLPANT					
HOUR HIGHT HIGHT HIGHT HIGHT HIGHT NODE DOMMETER NOCH HIGHT NODE HIGHT NOTERIOR NUCEKO NITERIOR NITERIOR NITERIOR NITERIOR					
NEUE DIAMETER NOH NISULATION NITERIOR NOCKOD DUWN VIERT VICOT NUMBER LOT NUMBER LOT NUMBER LONATT VICOTING LUMATT HOUR LUMATT HOUR LUMATT HOUR LUMATT HOUR LUMATT HOUR LUMATT HOUR LUMATT HOUR LUMATT HOUR LUMATT HOUR LUMATT NOUR LUMATT	HOUR				B
INSULATION NITERIOR NITCHEN NOCKOWN VITCHEN NOCKOWN VITCHEN NOCKOWN VITOSCALE ARR DATE DESCRIPTION NARK DATE D					
MUNICAL WATERT NOOK DOWN VICTOREN NOOK DOWN VICTOREN NOOK DOWN VICTOREN UOT NUMBER: 201 DRAWN BY: ERIC HOLT COPYRIGHT: NONE PROJECT IS PUBLIC DOWN WE COAD OWN POINT JUBHT AAXIMUM MECHANICAL WE TAL AAXIMUM MINIMUM MINIMUM MINIMUM MINIMUM VICTO SCALE COPYRIGHT: NONE PROJECT IS PUBLIC DOWN SYMBOLS AND AND FACTURER MINIMUM MINIM					
NOUN BOOM NOUNT HOUR NOOKOUT NOUNT HOUR LOT NUMBER: 201 DRAWN BY: FRICHOLT CHECKED BY: ERICHOLT CHECKED BY: ERICHOLT CHECKED BY: ERICHOLT CHECKED BY: ERICHOLT COPYRIGHT: NORE PROJECT IS PUBLIC DOMAIN OW POINT IGHT AATERIAL AANUFACTURER MINIMUM METAAL MANUFACTURER MINIMUM MISCELLANEOUS NORTH NOT IN CONTRACT NUMBER NOMINAL NOT IN SCALE COPYRIGHT: NOTES AND ACTION COPYRIGHT: SPECTORES MINIMUM MISCELLANEOUS NORTH NOMINAL NOT IN SCALE					MARK DATE DECORTINON
Indextoring the serie hold to	KNOCK DOWN KITCHEN				LOT NUMBER: 201
Copyright: Nome Project is Nome Project is Nome Project is Nome Project is Nome Project is Nome Project is Nome Project is Sheet Title GENERAL NOTES AND SYMBOLS GENERAL NOTES AND SYMBOLS GG-002	KNOCKOUT KILOWATT				DRAWN BY: ERIC HOLT
Internal Jong Jong Jong Jong Jong Jong Jong Jong	LUMBER				COPYRIGHT: NONE: PROJECT IS
In the second se	LONG LIVE LOAD				
MATERIAL MAXIMUM MECHANICAL METAL MANUFACTURER MINIMUM MISCELLANEOUS VORTH NOT IN CONTRACT VUMBER NOMINAL NOT TO SCALE GENERAL NOTES AND SYMBOLS GENERAL NOTES AND SYMBOLS GENERAL NOTES AND SYMBOLS	LOW POINT LIGHT				SHEET TITLE
METAL MANUFACTURER MINIMUM MISCELLANEOUS NORTH NOT IN CONTRACT NUMBER NOMINAL NOT TO SCALE	MATERIAL MAXIMUM				GENERAL NOTES AND
MINUFACTURER MINIMUM MISCELLANEOUS NORTH NOT IN CONTRACT NUMBER NOMINAL NOT TO SCALE G-002	MECHANICAL METAL				
MISCELLANEOUS NORTH NOT IN CONTRACT NUMBER NOMINAL NOT TO SCALE G-002	MANUFACTURER MINIMUM				STIVIDULS
NUMBER NOMINAL NOT TO SCALE	MISCELLANEOUS NORTH				
NOMINAL NOT TO SCALE	NOT IN CONTRACT NUMBER				
	NOMINAL NOT TO SCALE				G-002



GENERAL SHEET NOTES	
	TEAM NAME: TEAM PURDUE TEAM NAME: TEAM PURDUE ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME WWW.PURDUE.EDU/INHOME CONSULTANTS KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES
REFERENCE KEYNOTES	MARK BEALS, J & T SYSTEMS, INC.
	C CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV W.S. DEPARTMENT OF ENERGY SOLAR DECATHLON
$\langle \cdot angle$ SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS
	03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS
	-B -



GENERAL SHEET NOTES			
	-E		-
			TEAM DIIDDIIE
			TEAM PUKUUE
	F		
		ADDRESS	
		ADDICESS.	KNOY HALL, ROOM 107
		CONTACT:	SOLARHOUSE@PURDUE.EDU
			WWW.PURDUE.EDU/INHOME
	–D		
			١F
		PAT EGAN. THERMOO	ORE
		JOHN GUEQUIERRE, I	HI-TECH HOUSING
		ANDY SWITZER, ARKO	DR
		SUSAN BENEDICT, DE	SIGN ALTERNATIVES
DEEEDENCE VEVNOTES		RYAN JUSTAK, SCHOI	ER CORPORATION
REFERENCE RETNUTES	L	MARK BEALS, J & T S	/STEMS, INC.
		PAT WILSON, RYAN F	RE PROTECTION
	-C	CLIENT	
		U.S. DEPA	RTMENT OF ENERGY
		SOLAR	DECATHLON 2011
		WWW.SOL	ARDECATHLON.GOV
		U.S. DEPA	RTMENT OF ENERGY
		SOLA	R DECATHLON
	┢	·	
\langle - \rangle SHEET KEYNOTES		11/23/2010	80% DESIGN DRAWINGS
	-	03/22/2011	100% CONSTR. DRAWINGS
		05/03/2011	100% W/ DOE REVISIONS
		00/11/2011	
	—В		
		MARK DATE	DESCRIPTION
			201
		DRAWN BY:	LIZ HOWARD
	Γ	CHECKED BY:	Checker
		COPYRIGHT:	PURDUE UNIVERSITY 2011
			ALL RIGHTS RESERVED
		SHEET TITLE	
		EGR	299 PLAN
	-A		
			100
		l G	
1	J		



GENERAL SHEET NOTES 1. ALL PORTABLE TANKS, PUMPS, AND VALVES INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY -e -e TEAM NAME: ADDRESS:	M PURDUE OME
1. ALL PORTABLE TANKS, PUMPS, AND VALVES INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY -E -E	M PURDUE OME
I. ALL FOR TADEE TAMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY -E TEAM NAME: ADDRESS:	M PURDUE OME
AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY	M PURDUE OME
-E	M PURDUE OME
-E	M PURDUE OME
-E	M PURDUE OME
TEAM NAME: ADDRESS:	M PURDUE OME
TEAM NAME: ADDRESS:	OME
TEAM NAME: ADDRESS:	OME
TEAM NAME: ADDRESS:	UME
TEAM NAME: ADDRESS:	UML
TEAM NAME: ADDRESS:	
ADDRESS:	TEAM PURDUE
	PURDUE UNIVERSITY
K WEST	(NOY HALL, ROOM 107
CONTACT: SOLARH	IOUSE@PURDUE.EDU
WWW.F	PURDUE.EDU/INHOME
CONSULTANTS	
IOHN GUEOUIERRE HLTECH H	IOUSING
ANDY SWITZER, ARKOR	
SUSAN BENEDICT, DESIGN ALT	ERNATIVES
RYAN JUSTAK, SCHOLER CORF	PORATION
REFERENCE KEYNOTES	NC.
PAT WILSON, RYAN FIRE PROT	ECTION
	/
SOLAR DECATH	ON 2011
WWW.SOLARDECAT	THLON.GOV
U.S. DEPARTMENT	OF ENERGY
SOLAR DE	CATHLON
	DESIGN DRAWINGS
01/25/2011 80% V	N/ DOE REVISIONS
05/03/2011 100%	W/ DOE REVISIONS
08/11/2011 100%	AS-BUILT DRAWINGS
MARK DATE I	DESCRIPTION
LOT NUMBER: 201	
COPYRIGHT: PURDL	
ALL RIG	GHTS RESERVED
ADA TOUR	ROUTE
G_1	ו ר.ו
G-10	03



	4	5		6
60' - 0"				
			5/8"	
			17' - 10	
				0 2' 4' 8'
- 0" - 0"		1	14' - 0"	+
				- 0"
				18 - 10 18 - 10
				0 2' 4' 8'
	4	5	l	6

	GENERAL SHEET NOTES				
		-E			TEAM PURDUE HOME
			TEAM NA	ME: S:	TEAM PURDUE PURDUE UNIVERSITY
			CONTACT	Г:	KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
		-D	CONSUL	TANTS	
			JOHN GU	EQUIERRE, H	I-TECH HOUSING
			ANDY SW	ITZER, ARKO	R
		_	SUSAN B	ENEDICT, DES	
	REFERENCE KEYNOTES		MARK BE	ALS, J & T SY	STEMS, INC.
			PAT WILS	SON, RYAN FIF	RE PROTECTION
		-c			
		Ŭ	CLIENT		
•				SOLAR E	DECATHLON 2011
]			×	U.S. DEPAR	ARDECATHLON.GOV
	$\langle \cdot angle$ SHEET KEYNOTES			11/23/2010 01/25/2011	80% DESIGN DRAWINGS 80% W/ DOE REVISIONS
				03/22/2011	100% CONSTR. DRAWINGS 100% W/ DOF REVISIONS
				08/11/2011	100% AS-BUILT DRAWINGS
		—В			
			MARK	DATE	DESCRIPTION
				BER: BY:	201 LIZ HOWARD
		Γ	CHECKE	D BY:	MATT HEBDON
			COPYRIG	HT:	PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
			SHEET TI		
			l S	OLAR	ENVELOPE
		-A		COM ELE\	PLIANCE /ATIONS
				G-	201



GENERAL SHEET NOTES	
GENERAL SHEET NOTES	
1. ALL PORTABLE TANKS, PUMPS, AND VALVES	
AND SEWAGE ARE TEMPORARY FOR COMPETITION	
PURPOSES ONLY	
	-E
	TEAM DIIDDIIE
	TEAM FUNDUE
	TEAM NAME: TEAM PURDUE
	ADDRESS: PURDUE UNIVERSITY
	KNOY HALL, ROOM 107
	CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	PAT EGAN, THERMOCORE
	JOHN GUEQUIERRE, HI-TECH HOUSING
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
	RYAN JUSTAK, SCHOLER CORPORATION
REFERENCE KEYNOTES	MARK BEALS, J&T SYSTEMS INC
	PAT WIESON, RTANTIKE PROTECTION
	SOLAR DECATHLON 2011
	WWW.SOLARDECATHLON.GOV
	U.S. DEPARTMENT OF ENERGY
	SOLAR DECATHLON
-> SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS
	03/22/2011 100% CONSTR. DRAWINGS
	05/03/2011 100% W/ DOE REVISIONS
	08/11/2011 100% AS-BUILT DRAWINGS
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: LIZ HOWARD
	CHECKED BY: MATT HEBDON
	COPYRIGHT: PURDUE UNIVERSITY 2011
	ALL RIGHTS RESERVED
	SHEET IIILE
	JULAR EINVELUPE
	ELEVATIONS

	1	2	3	
				1.
E-				2.
				3.
				4.
				5.
				6. 7
				8.
				9. 10.
D-				
C–				
B-				
_				
A–				
t:10 AM				
011 10:24				
8/13/2	 1	2	3	

THE LOCATION OF EXISTING UNDERGROUND UTILITIES, SUCH AS WATER MAINS, SEWERS, GAS LINES, ETC. HAS NOT BEEN DETERMINED AND HAS NOT BEEN SHOWN ON THE PLANS. BEFORE CONSTRUCTION, OWNER SHOULD HIRE A LICENSED CIVIL ENGINEER TO DETERMINE LOCATION BASED ON THE BEST AVAILABLE INFORMATION. ALL INFORMATION SHOWN IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE OWNER AND THE ENGINEER DO NOT ASSUME RESPONSIBILITY IN THE EVENT THAT DURING CONSTRUCTION, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED AND THAT THE ACTUAL LOCATION OF THOSE WHICH EXIST MAY BE DIFFERENT FROM THE LOCATION ASSUMED.

6

CONTRACTOR SHALL NOTIFY THE OWNER, ENGINEER AND THE LOCAL PRESIDING MUNICIPALITY A MINIMUM OF 48 HOURS IN ADVANCE OF PERFORMING ANY WORK.

ALL AREAS, ON OR OFF SITE, DISTURBED DURING CONSTRUCTION OPERATIONS AND NOT PART OF THE WORK AS SHOWN HERON SHALL BE RESTORED TO ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER. IT IS INCUMBENT UPON CONTRACTOR TO SHOW THAT DAMAGED AREAS WERE NOT DISTURBED BY CONSTRUCTION OPERATIONS

THESE DRAWINGS ASSUME THAT THE CONTRACTOR WILL UTILIZE AN ELECTRONIC DRAWING FILE AND STAKE ALL SITE IMPROEVEMNTS USING COORDINATES TIED INTO THE CONTROL POINTS. THE DIMENSIONS INDICATED ON THE DRAWINGS ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY.

IN THE CASE OF CONFLICT BETWEEN THESE DRAWINGS, THE FOUNDATION DRAWINGS AND THE ARCHITECTURAL SITE PLAN, THE USER OF THIS INFORMATION SHALL CONTACT THE ENGINEER IMMEDIATELY.

OWNER TO COORDINATE THE EXACT LOCATIONS OF ALL UTILITY SERVICE LINES WITH PLUMBING DRAWINGS. REFER TO PLUMBING DRAWINGS FOR CONTINUATION OF ALL UTILITIES WITHIN 5 FEET OF BUILDING AREA

CONTRACTOR SHALL FIELD VERIFY INVERT & LOCATIONS OF EXISTING UTILITY MAINS PRIOR TO INSTALLING ANY ON-SITE UTILITIES OR STRUCTURES.

SEPARATION OF WATER AND SEWER LINES SHALL BE 10' MINIMUM HORIZONTALLY. IF 10' IS NOT POSSIBLE, SEWER SHALL BE OF WATER MAIN QUALITY MATERIAL AND CONSTRUCTION.

CLEAN OUT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH BASISNS AT THE COMPLETION OF CONSTRUCTION THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN PURDUE" CURRENT EDITION SHALL GOVERN WORK WHERE APPLICABLE.

5

	GENERAL SHEET NOTES				
-					
					TEAM DUDDUE
			1		IEAM PUKDUE
				Λ	HUWE
			TEAM NA	ME:	TEAM PURDUE
			ADDRES	S:	PURDUE UNIVERSITY KNOY HALL, ROOM 107
			CONTAC	T: 5	SOLARHOUSE@PURDUE.EDU
					WWW.PURDUE.EDU/INHOME
		-D	CONSUL	TANTS	
			KEVIN M	ERCER, TRANE	
			PAT EGA	N, THERMOCO	RE
				IEQUIERRE, HI-	TECH HOUSING
			SUSAN B	ENEDICT. DES	GN ALTERNATIVES
-			RYAN JU	STAK, SCHOLE	R CORPORATION
	REFERENCE KEYNOTES		MARK BE	ALS, J & T SYS	TEMS, INC.
			PAT WILS	SON, RYAN FIR	E PROTECTION
		-C			
				U.S. DEPART	MENT OF ENERGY
				SOLAR DI	ECATHLON 2011
				WWW.SOLA	RDECATHLON.GOV
				SOLAF	DECATHLON
			(
	$\langle \cdot angle$ SHEET KEYNOTES			11/23/2010	80% DESIGN DRAWINGS
-				01/25/2011 03/22/2011	80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS
				05/03/2011	100% W/ DOE REVISIONS
		-В			
			MARK	DATE	DESCRIPTION
				1	
			LOT NUM	IBER:	201
			DRAWN	BY:	ERIC HOLT
			CHECKE	D BY:	
			COPYRIC	GHT:	PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
			SHEET T	ITLE	
				JVIL N	UIES AND
		-A		SYN	MBOLS
				\frown	
				(;-	UU1
				\checkmark	~ ~ •



7	
GENERAL SHEET NOTES	
1. ALL PORTABLE TANKS, PUMPS, AND VALVES	
INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION	
2. TOTAL PRESSURE ON SOIL SHALL NOT EXCEED	
SEE PROJECT MANUAL FOR STRUCTURAL	
3. FOUNDATIONS TO BE LOCATED TO ACCEPT HOME	
REFERENCE ONLY. CONTRACTOR TO VERIFY CONDITIONS OF PRE-CONSTRUCTED FLEMENTS	-E
AND ADJUST ACCORDINGLY 4. DECK FOUNDATIONS TO BE INSTALLED AFTER	TEAM PURDUE
HOME MODULE AND ROOF CAP HAVE BEEN SET. THIS DRAWINGS SHOWS ALL POTENTIAL GROUND	
SURFACE CONTACT AND IS NOT MEANT TO DISPLAY ORDER OF CONSTRUCTION	
5. BUILDING HAS SUFFICIENT WEIGHT AND DESIGN TO RESIST OVERTURNING AND DOES NOT REQUIRE ANY	
GROUND PENETRATIONS FOR TIE DOWNS. SEE STRUCTURAL CALCULATIONS IN PROJECT MANUAL	
6. ONLY GROUND PENETRATION TO BE GROUNDING LIGHTING ROD AND SHALL BE INSTALLED PER	
MANUF. SPECIFICATIONS. LOCATION TO BE COORDINATED WITH EVENT ORGANIZERS	
7. OWNER SHALL REPAIR AND/OR REPLACE GRASS AFTER REMOVAL OF HOUSE.	TEAM NAME: TEAM PURDUE
8. SITE TO BE AND SHALL REMAIN ADA COMPLAINT AT ALL TIMES ONCE COMPLETE.	ADDRESS: PURDUE UNIVERSITY
9. ALL EXISTING UTILITIES, FIXTURES, & PROPERTY TO REMAIN WITHOUT MODIFICATION.	WEST LAFAYETTE, IN 47907
	CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	KEVIN MERCER, TRANE
	PAT EGAN, THERMOCORE
	JOHN GUEQUIERRE, HI-TECH HOUSING
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
REFERENCE KEYNOTES	MARK BEALS, J & T SYSTEMS, INC.
	PAT WILSON, RYAN FIRE PROTECTION
	U.S. DEPARTMENT OF ENERGY
	SOLAR DECATHLON 2011
	WWW.SOLARDECATHLON.GOV
	SOLAR DECATHION
	11/23/2010 80% DESIGN DRAWINGS
	01/25/2011 80% W/ DOE REVISIONS
	05/03/2011 100% W/ DOE REVISIONS
	08/11/2011 100% AS-BUILT DRAWINGS
	-В
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: MATT HEBDON
	CHECKED BY: LIZ HOWARD COPYRIGHT: PURDUE UNIVERSITY 2011
	ALL RIGHTS RESERVED
	SHEET TITLE
	GROUND CONTACT
	FLAN



7	
GENERAL SHEET NOTES	
 ORGANIZER TO PROVIDE TEMPORARY WALKWAY AS SHOWN AND SHALL HAVE ADDITIONAL SURFACES AVAILABLE TO ACCOMMODATE VARIATIONS IN SITE CONDITIONS DIMENSIONS SHOWN ASSUME FLAT SITE CONDITIONS, WITH A 1:25 SLOPED WALKWAY. SITE GRADE CAN VARY UP TO 5" BEFORE ADDITIONAL LENGTH MUST BE ADDED. ORGANIZER SHALL MAINTAIN ENOUGH PROTECTIVE WALKWAY ON-HAND TO ACCOMMODATE UP TO A 40% CHANCE IN 	
 GRADE WALKWAY TO BE CONSTRUCTED TO MEET ANSI 117.1 STANDARDS AND SHALL REMAIN ACCESSIBLE THROUGHOUT ALL PUBLIC TOURS AND OPENINGS WIDTH OF WALKWAY TO BE DETERMINED BY SITE ORGANIZERS AND SHALL MEET ADA AND NATIONAL PARK SERVICE REQUIREMENTS AT ALL TIMES TOTAL PRESSURE ON SOIL WILL NOT EXCEED 1500 PSF. AT ANY POINT OF GROUND CONTACT. SEE PROJECT MANUAL FOR STRUCTURAL 	TEAM PURDUE HOME
 6. FOUNDATIONS TO BE LOCATED TO ACCEPT HOME AS REQUIRED. DIMENSIONS SHOWN HERE ARE FOR REFERENCE ONLY. CONTRACTOR TO VERIFY CONDITIONS OF PRE-CONSTRUCTED ELEMENTS AND AD JUST ACCORDINCLY 	
 THIS DRAWINGS SHOWS ALL POTENTIAL GROUND SURFACE CONTACT AND IS NOT MEANT TO DISPLAY ORDER OF CONSTRUCTION. 	TEAM NAME: TEAM PURDUE
8. BUILDING HAS SUFFICIENT WEIGHT AND DESIGN TO RESIST OVERTURNING AND DOES NOT REQUIRE ANY GROUND PENETRATIONS FOR TIE DOWNS. SEE STRUCTURAL CALCULATIONS IN PROJECT MANUAL.	CONTACT: KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
LIGHTING ROD AND SHALL BE INSTALLED PER MANUF. SPECIFICATIONS. LOCATION TO BE COORDINATED WITH EVENT ORGANIZERS. 000000000000000000000000000000000000	
 AFTER REMOVAL OF HOUSE. SITE TO BE AND SHALL REMAIN ADA COMPLAINT AT ALL TIMES ONCE COMPLETE. ALL FUEL TO LET THE ENDOPEDTY TO 	CONSULTANTS KEVIN MERCER, TRANE
REMAIN WITHOUT MODIFICATION.	PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING
	ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION
REFERENCE KEYNUTES	MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION
	U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011
	WWW.SOLARDECATHLON.GOV
	U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON
-> SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR_DRAWINGS
 ENTRY FROM DECATHLETE WAY PATHWAY EXIT TO DECATHLETE WAY PATHWAY SOLAR ENVELOPE DECATHLETE WAY 	05/03/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
	B
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: LIZ HOWARD CHECKED BY: ERIC HOLT
	COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	ORGANIZER SUPPLIED PAVING PLAN
	C-102



7	
GENERAL SHEET NOTES	
 TOTAL PRESSURE ON SOIL WILL NOT EXCEED 1500 PSF. AT ANY POINT OF GROUND CONTACT. SEE PROJECT MANUAL FOR STRUCTURAL CALCULATIONS. BUILDING HAS SUFFICIENT WEIGHT AND DESIGN TO 	
 RESIST OVERTURNING AND DOES NOT REQUIRE ANY GROUND PENETRATIONS FOR TIE DOWNS. SEE STRUCTURAL CALCULATIONS IN PROJECT MANUAL. ONLY GROUND PENETRATION TO BE GROUNDING LIGHTING ROD AND SHALL BE INSTALLED PER MANUF. SPECIFICATIONS. LOCATION TO BE 	
 COORDINATED WITH EVENT ORGANIZERS. 4. SITE TO BE AND SHALL REMAIN ADA COMPLAINT AT ALL TIMES ONCE COMPLETE. 5. ALL EXISTING UTILITIES, FIXTURES, & PROPERTY TO 	TEAM PURDUE
 REMAIN WITHOUT MODIFICATION. ALL CONSTRUCTION SHALL CONFORM TO THE DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 BUILDING CODE AS WELL AS THE CODE OF THE 	HUME
 COCAL GOVERNMENT HAVING JURISDICTION. UPON COMPETITION OF WORK, CONTRACTOR TO REPAIR SURROUNDING AREAS TO PRIOR CONDITION. ANY DAMAGED PUBLIC FACILITIES MUST BE REPLACED TO THE SATISFACTION OF THE CITY INSPECTOR 	
 CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING AND POSITIVE SURFACE DRAINAGE IN ALL LANDSCAPE AREAS. CONTRACTOR SHALL REMOVE FROM THE SITE AND 	TEAM NAME: TEAM PURDUE
LEGALLY DISPOSE OF ALL DEBRIS AND UNSUITABLE MATERIAL GENERATED BY OPERATIONS 10. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO OBTAIN ALL REQUIRED PERMITS FROM THE RESPONSIBLE JURISDICTIONS PRIOR TO CONSTRUCTION INCLUDING BUT NOT LIMITED TO	ADDRESS. PORDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
GRADING PERMITS, TRANSPORTATION PERMITS, BUILDING PERMITS, FIRE HYDRANT PERMITS, AND TREE REMOVAL PERMITS. 11. NO GREYWATER SHALL BE USED FOR IRRIGATION	-D CONSULTANTS
OF LANDSCAPING ELEMENTS. ALL WATER USED FOR IRRIGATION TO BE OBTAINED FROM RAINWATER OR WATER DELIVERED TO THE INHOME PRIOR TO START OF COMPETITION.	KEVIN MERCER, TRANE PAT EGAN, THERMOCORE
	JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
REFERENCE KEYNOTES	RYAN JUSTAK, SCHOLER CORPORATION
	PAT WILSON, RYAN FIRE PROTECTION
	-c
	CLIENT U.S. DEPARTMENT OF ENERGY
	SOLAR DECATHLON 2011
	WWW.SOLARDECATHLON.GOV
	SOLAR DECATHLON
SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS
	05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
	-B
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: LIZ HOWARD CHECKED BY: MATT HEBDON
	COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	SHEET TITLE
	SITE LOCATION
	C-103



 GENERAL SHEET NOTES ALL PORTABLE TANKS, PUMPS, AND VALVES INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY GENERAL NOTES SHALL APPLY TO ALL WORK ALL PLANTING CONTAINERS WILL BE PUGGED TO CONTAIN ALL LIQUIDS AT ANY POINT DURING THE EVENT. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING THE NECESSARY EQUIPMENT TO PROVIDE A COMPLETE AND APPROVED LANDSCAPE PLAN. ALL FINAL PLANT PLACING PER LANDSCAPE DESIGNER. RAIN BARRELS SHALL NOT BE EMPTIED ON LOT RAIN BARRELS SHALL NOT BE EMPTIED ON LOT RAIN DARRELS SHALL NOT BE EMPTIED ON LOT RAIN DESIDETION BARRELS SHALL MATER REMOVAL LOCATIONS. 	-E TEAM NAME: TEAM PURDUE ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LARAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME CONSULTANTS KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV
 SHEET KEYNOTES MOVABLE PLANTER BOX LOCATIONS 57 GALLON RAIN COLLECTION BARREL ENTRY/EXIT WOOD RAMPS 	U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
4 36" HEIGHT WOOD RAILING 5 PRESSURE TREATED WOOD DECKING	-B MARK DATE DESCRIPTION
	MARK DATE DESCRIPTION LOT NUMBER: 201 DRAWN BY: LIZ HOWARD CHECKED BY: SCOTT PETERS COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED SHEET TITLE LANDSCAPE SITE PLAN
	L-101



	7				
	 JAMAN STRUCTURE STATEMENT AND SALE STALE STALE STATEMENT AND SALE STALE STATEMENT AND SALE STALE STALE	E	TEAM NA ADDRESS CONTAC ^T CONSUL ^T KEVIN ME PAT EGA	ME: S: F: S	TEAM PURDUE TEAM PURDUE BURDUE NURDUE VIRDUE UNIVERSITY KNOY HALL, ROOM 107 VEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
		-	JOHN GU ANDY SW SUSAN B	N, THERMOCO EQUIERRE, HI 'ITZER, ARKOF ENEDICT, DES	TECH HOUSING
-	REFERENCE KEYNOTES		RYAN JU	STAK, SCHOLE	R CORPORATION
			MARK BE	ALS, J & T SYS	STEMS, INC.
	DIV 7 - THERMAL AND MOISTURE PROTECTION 07 71 23 MANUFACTURED GUTTERS AND DOWNSPOUTS DIV 32 - LANDSCAPING 32 80 00 57 GALLON RAIN BARREL	-			
		-C	CLIENT		
			OLILINI	U.S. DEPAR	TMENT OF ENERGY
				SOLAR D	ECATHLON 2011
				U.S. DEPAR	RDECATHLON.GOV
	$\langle \overline{\ \cdot\ } angle$ SHEET KEYNOTES			11/23/2010	80% DESIGN DRAWINGS
-				01/25/2011 03/22/2011	80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS
	57 GALLON RAIN BARREL			05/03/2011 08/11/2011	100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
	2 APPROXIMATE DOWNSPOUT				
			MARK	DATE	DESCRIPTION
			LOT NUM	BER:	201
			DRAWN E	BY:	LIZ HOWARD
		-	CHECKE	DBY:	
			JUP TRIG		ALL RIGHTS RESERVED
			SHEET T	TLE	
				LAN[DSCAPE
		—A	l	RRIGA [.]	TION PLAN
				_	
				L-	102
_	<u>_</u>				



7				
 ALL PORTABLE TANKS, PUMPS, AND VALVINTENDED TO MIMIC PUBLIC UTILITY WAT AND SEWAGE ARE TEMPORARY FOR COMPURPOSES ONLY GENERAL NOTES SHALL APPLY TO ALL WISHOWN. ALL PLANTING CONTAINERS WILL BE PLUCONTAIN ALL LIQUIDS AT ANY POINT DUREVENT. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING THE NECESE EQUIPMENT TO PROVIDE A COMPLETE AN APPROVED LANDSCAPE PLAN. ALL FINAL PLANT PLACING PER LANDSCA DESIGNER. ALL FINAL EXTERIOR STAIN/PAINT COLOR LANDSCAPE DESIGNER. ALL CONSTRUCTION SHALL CONFORM TO DEPARTMENT OF ENERGY SOLAR DECATE BUILDING CODE AS WELL AS THE CODE OF LOCAL GOVERNMENT HAVING JURISDICT 	TES VES ER SUPPLY VPETITION ORK GGED TO ING THE OR SSARY ND PE SS PER D THE HLON 2011 OF THE HLON 2011 OF THE ION			TEAM PURDUE HOME
	-D	TEAM NA ADDRESS CONTAC	ME: S: T:	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
		KEVIN ME PAT EGA JOHN GU ANDY SW SUSAN B	ERCER, TRANE N, THERMOCO IEQUIERRE, HI /ITZER, ARKOF ENEDICT, DES	E PRE -TECH HOUSING R SIGN ALTERNATIVES
	ES	MARK BE PAT WILS	U.S. DEPAR SOLAR D U.S. DEPAR	TMENT OF ENERGY RECATHLON.GOV
- SHEET KEYNOT	ES -B		11/23/2010 01/25/2011 03/22/2011 05/03/2011 08/11/2011	80% DESIGN DRAWINGS 80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
	-А	MARK LOT NUM DRAWN E CHECKEI COPYRIG	DATE IBER: 3Y: D BY: SHT: ITLE NDSCA F	201 Author Checker PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED PE LIGHTING LAN



GENERAL SHEET NOTES	
1. ALL PORTABLE TANKS, PUMPS, AND VALVES INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPL' AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY	Y
	TEAM PURDUE
	HOME
	TEAM NAME: TEAM PURDUE
	ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107
	CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	-D CONSULTANTS
	KEVIN MERCER, TRANE PAT EGAN, THERMOCORE
	JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
REFERENCE KEYNOTES	MARK BEALS, J & T SYSTEMS, INC.
	PAT WILSON, RYAN FIRE PROTECTION
	SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV
	U.S. DEPARTMENT OF ENERGY
	SOLAR DECATHLON
$\langle \overline{\ } angle$ SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS
1 MOVABLE PLANTER BOX LOCATIONS	03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS
2 RAIN COLLECTION BARREL	08/11/2011 100% AS-BUILT DRAWINGS
3 36" HEIGHT WOOD RAILING	
	-В
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: LIZ HOWARD
	COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	SHEET TITLE
	LANDSCAPE
	ELEVATIONS
	L-201



GENERAL SHEET NOTES				
1. ALL PORTABLE TANKS, PUMPS, AND VALVES INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY	-E			TEAM PURDUE HOME
		TEAM NA ADDRESS CONTAC	ME: 5: T: 5	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	-D	CONSUL ⁻ KEVIN ME PAT EGA JOHN GU	TANTS ERCER, TRANE N, THERMOCO EQUIERRE, HI	RE -TECH HOUSING
REFERENCE KEYNOTES		ANDY SW SUSAN B RYAN JUS MARK BE	/ITZER, ARKOF ENEDICT, DES STAK, SCHOLE ALS, J & T SYS	R IGN ALTERNATIVES IR CORPORATION ITEMS, INC.
	-с	PAT WILS	SON, RYAN FIR	EPROTECTION
			U.S. DEPART SOLAR DI WWW.SOLA	IMENT OF ENERGY ECATHLON 2011 RDECATHLON.GOV
-> SHEET KEYNOTES			U.S. DEPAR SOLAI	80% DESIGN DRAWINGS
1 MOVABLE PLANTER BOX LOCATIONS 2 RAIN COLLECTION BARREL 3 36" HEIGHT WOOD RAILING			01/25/2011 03/22/2011 05/03/2011 08/11/2011	80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
	-В			
		MARK LOT NUM DRAWN E	DATE BER: 3Y:	201 LIZ HOWARD
		CHECKEI	D BY: GHT:	SCOTT PETERS PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	—A	SHEET T	LANE ELEV	DSCAPE /ATIONS
			L -2	202



	٦	
GENERAL SHEET NOTES		
	-D	TEAM NAME: TEAM PURDUE ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
		KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION
REFERENCE KEYNUTES	┢	MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION
	-с	CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON
- SHEET KEYNOTES		11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS 8
		MARK DATE DESCRIPTION MARK DATE DESCRIPTION LOT NUMBER: 201 DRAWN BY: Author CHECKED BY: Checker COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	-A	LANDSCAPE DETAILS
 <u></u>		

	1	2	3
E-			
_			
D-			
C–			
_			
B-			
_			
A–			
٩M			
:25:38 /			
2011 10			
8/13/2	1	2	3

4		5		6	
			PLANTING SCHED	ULE	
	MARK	QUANTITY	COMMON NAME	BOTANICAL NAME	CONT
	3+5	63	WOOD SEDGE	CAREX RADIATA	1 GAL
		9	PRAIRIE DROPSEED	SPOROBOLUS HETEROLEPIS	5 GAL

4	5	5	0			
					GENERAL SHEET NOTES	
		PLANTING SCHED	ULF			
	MARK QUA	NTITY COMMON NAME	BOTANICAL NAME	CONT		
		WOOD SEDGE	CAREX RADIATA	1 GAL		
		9 PRAIRIE DROPSEED	SPOROBOLUS HETEROLEPIS	5 GAL		INHOME
						TEAM NAME: TEAM PURDUE ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107
						CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
						-D CONSULTANTS KEVIN MERCER, TRANE
						PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR
					REFERENCE KEYNOTES	SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC.
						PAT WILSON, RYAN FIRE PROTECTION
						-C CLIENT
						U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV
						U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON
					-> SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS
						05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
						B
						LOT NUMBER: 201
						DRAWN BY: LIZ HOWARD CHECKED BY: SCOTT PETERS COPYRIGHT: PURDUE UNIVERSITY 2011
						ALL RIGHTS RESERVED
						PLANTING SCHEDULE
						L-601
4	5	5	6		7	

	1	2		3
	GENERAL NOTES			
	THESE GENERAL NOTES ARE TO B COMPONENTS OF THE BUILDING A SPECIFICATIONS, THESE GENERAL DECORD, WHO SHALL CORRECTS	E USED AS A SUPPLEMENT TO THE SPECI ND FOUNDATION. ANY DISCREPANCIES FO NOTES AND THE SITE CONDITIONS SHALL	FICATIONS AND DUND AMONG T BE REPORTED	APPLY TO ALL STRUCTUR HE DRAWINGS, THE TO THE ENGINEER OF
E-	DISCOVERY OF SUCH DISCREPAN CONTRACTOR'S RISK. THE CONTR TO PROCEEDING WITH ANY WORK SHORING DURING CONSTRUCTION	CH DISCREPANCY IN WRITING. ANY WOR CY, BUT PRIOR TO CORRECTION OF SUCH ACTOR SHALL VERIFY AND COORDINATE I OR FABRICATION. THE CONTRACTOR IS F	REVENENTIAL DISCREPANCY, DIMENSIONS AM RESPONSIBLE FO	SHALL BE DONE AT THE IONG ALL DRAWINGS PRIC
	CODES			
	ALL METHODS, MATERIALS, AND W DECATHLON 2011 BUILDING CODE	ORKMANSHIP SHALL CONFORM TO THE U	.S. DEPARTMEN	T OF ENERGY SOLAR
	ALL REFERENCE TO OTHER CODE CURRENT EDITION AVAILABLE.	S AND STANDARDS; (IBC, ACI, ASCE 7, ETC	.) SHALL BE FOF	R THE LATEST OR MOST
-	DESIGN			
	STRUCTURAL DESIGN IS IN ACCOF 2006 EDITION.	RDANCE WITH THE STRUCTURAL PROVISIO	NS OF THE INTE	ERNATIONAL BUILDING CC
	DESIGN LIVE LOADS			
D-	GROUND SNOW LOAD PARTITION (DEAD LOAD) FLOOR LIVE LOAD EGRESS LIVE LOAD	= 20 PSF = 10 PSF = 50 PSF = 100 PSF		
	SOILS BEARING			
	MINIMUM MAXIMUM	= 1000 PSF = 1500 PSF		
	WOOD FRAMING LUMBER GRADIN	G		
	MOISTURE CONTENT SHALL BE 19	% MAXIMUM. LOAD BEARING AND EXTERIO		PLATES SHALL BE OF GRA
	SOUTHERN PINE #2 OR BETTER, U PINE #2 OR BETTER, UNLESS NOTE WITH NOMINAL THICKNESS AS SHO COMMON NAILS AT 6" O/C. ALONG OTHERWISE. BOUNDARY NAILING SHEATHING NAILING AT WALLS SH REQUIRE 4' X 8' PLYWOOD SHEETS PLYWOOD SHEETS SHALL BE FULL UNLESS NOTED OTHERWISE.	NLESS NOTED OTHERWISE. JOISTS AND H ED OTHERWISE. PLYWOOD SHEATHING SH DWN ON DRAWINGS. ROOF AND FLOOR SH EDGES AND AT 10" O/C. ALONG INTERMED TO BE 10D COMMON NAILS AT 6" O/C., UNL ALL BE THE SAME AS SHEAR WALL NAILING . AT EDGES OF DIAPHRAGMS WHERE PLY LY BLOCKED AROUND ENTIRE PIECE AND N	IEADERS SHALL IALL BE APA GR IEATHING SHAL IATE FRAMING N ESS NOTED OTI G. ALL FLOOR, I WOOD SHEETS IAILED WITH 101	ADE TRADE SOUTHERN ADE TRADEMARK PLYWO L BE NAILED WITH 10D MEMBERS, UNLESS NOTEE HERWISE. ROOF AND FLC ROOF, AND SHEAR WALLS MAY BE LESS THAN 24", D COMMON NAILS AT 6" O/
C–	WOOD FRAMING DETAILS, NOT SH AND SHALL CONFORM TO TABLE 2	OWN OTHERWISE, SHALL BE CONSTRUCTE 304.9.1 FASTENING SCHEDULE OF THE IBC	ED TO THE MINII	MUM STANDARDS OF THE
	NOTATIONS ON DRAWINGS RELAT CATALOG NUMBERS MANUFACTUF USED IN EXTERIOR APPLICATIONS "HOT DIPPED GALVANIZED." STAIN EXTERIOR APPLICATIONS. THE FC PROVIDED; 8D = SS8D, 10D = SS10 SUBSTITUTED PROVIDED THEY HA	ING TO FRAMING CLIPS, JOIST HANGER AN RED BY SIMPSON STRONG TIE COMPANY, S SHALL BE PROVIDED WITH "Z-MAX" GALVA ILESS STEEL NAILS SHALL BE PROVIDED F OLLOWING STAINLESS STEEL NAILS, AS MA D, 16D = SS16D. EQUIVALENT DEVICES BY IVE ICBO APPROVAL FOR EQUAL LOAD CAP	ID OTHER CONN SAN LEANDRO C ANIZING, WHEN OR ALL SIMPSO NUFACTURED E OTHER MANUF PACITY.	IECTING DEVICES REFER A. ALL SIMPSON HANGER AVAILABLE, OR SHALL BE IN HANGERS USED IN ALL BY SIMPSON, SHALL BE ACTURERS MAY BE
_	PRESSURE TREATED WOOD			
	PRESERVATIVE TREATMENT. ALL PRESSURE TREATED IN ACCORDA TREATED LUMBER AND PLYWOOD AGENCY WHICH MAINTAINS CONT AS DESCRIBED IN THE IBC STAND	LUMBER AND PLYWOOD REQUIRED TO BE NCE WITH IBC SECTION 2303.1.8 TO BEAR SHALL BEAR AN APPROVED QUALITY MAR NUING SUPERVISION, TESTING AND INSPE ARDS, AND SHALL BE IDENTIFIED AS REQU	PRESERVATIVE THE FDN GRADE K OR THAT OF A CTION OVER TH IRED BY THESE	E TREATED SHALL BE E MARK. EACH PIECE OF AN APPROVED INSPECTION IE QUALITY OF THE PRODI STANDARDS.
B-	WHERE FDN LUMBER IS CUT OR D APPROVED PRESERVATIVES BY RI PRESERVATIVE.	RILLED AFTER TREATMENT, THE CUT SURF EPEATED BRUSHING, DIPPING OR SOAKING	FACE SHALL BE G UNTIL THE WC	FIELD TREATED WITH OOD ABSORBS NO MORE
	MANUFACTURED LUMBER			
	ALL MANUFACTURED LUMBER TO	BE INSTALLED PER MANUFACTURERS INST	ALLATION GUID	DELINES.
	SECTIONS AND DETAILS			
_	SECTIONS AND DETAILS SHOWING ILLUSTRATE SPECIFIC DETAILS. N SECTION OR DETAIL. CONSTRUCT DETAILS OF SECTIONS TO HIS PRO	REINFORCING, BOLTS, FRAMING MEMBER O ATTEMPT HAS BEEN MADE TO SHOW AL ON DETAILS NOT SPECIFICALLY SHOWN CO DECT AS APPROVED BY THE ARCHITECT/	RS, AND CONNE L ELEMENTS PA ON THE DRAWIN ENGINEER OF R	CTIONS ARE INTENDED TO SSING THROUGH A SPECI GS SHALL FOLLOW SIMILA ECORD.
	SHOP DRAWINGS			
	SUBMIT SHOP DRAWINGS TO THE -MANUFACTURED WOOD TRI -MANUFACTURED WOOD BE	ARCHITECT/ENGINEER OF RECORD FOR TH JSSES AMS AND COLUMNS	HE FOLLOWING:	:
	MISCELLANEOUS			
A–	VERIFY ALL DIMENSIONS AND CON	IDITIONS IN THE FIELD.		
	VERIFY SIZE AND LOCATIONS OF A	LL OPENINGS IN THE ROOF AND WALLS.		
⋝	REFERENCES			
011 10:26:24 AI	REFER TO ARCHITECTURAL, MECH AND POSITION OF OPENINGS, BRE	IANICAL AND ELECTRICAL DRAWINGS FOR AKS IN STRUCTURAL MEMBERS DUE TO AF	ALL DIMENSION RCHITECTURAL	IS NOT SHOWN, FOR SIZE TREATMENT, ETC.
/13/2	1			

	1	2	•	3	● 4	5	1	6	7	
		P 1							GENERAL SHEET NOTES	
	GENERAL NOTES								1. STRUCTURAL SHEETS VALID ONLY WHEN STAMPED BY A LICENSED STRUCTURAL ENGINEER	
E-	THESE GENERAL NOTES ARE TO B COMPONENTS OF THE BUILDING A SPECIFICATIONS, THESE GENERAL RECORD, WHO SHALL CORRECT S DISCOVERY OF SUCH DISCREPAND CONTRACTOR'S RISK. THE CONTR TO PROCEEDING WITH ANY WORK SHORING DURING CONSTRUCTION	BE USED AS A SUPPLEMENT TO T AND FOUNDATION. ANY DISCREF AL NOTES AND THE SITE CONDITION SUCH DISCREPANCY IN WRITING. ICY, BUT PRIOR TO CORRECTION RACTOR SHALL VERIFY AND COC & OR FABRICATION. THE CONTRAN.	HE SPECIFICATIONS AND APPLY ANCIES FOUND AMONG THE DRA ONS SHALL BE REPORTED TO THE ANY WORK DONE BY THE CONTE OF SUCH DISCREPANCY, SHALL RDINATE DIMENSIONS AMONG AL CTOR IS RESPONSIBLE FOR ALL	TO ALL STRUCTURAL WINGS, THE E ENGINEER OF RACTOR AFTER BE DONE AT THE LL DRAWINGS PRIOR BRACING AND						
	CODES									
	ALL METHODS, MATERIALS, AND W DECATHLON 2011 BUILDING CODE	VORKMANSHIP SHALL CONFORM	TO THE U.S. DEPARTMENT OF EN	NERGY SOLAR						
	ALL REFERENCE TO OTHER CODE CURRENT EDITION AVAILABLE.	ES AND STANDARDS; (IBC, ACI, AS	CE 7, ETC.) SHALL BE FOR THE L	ATEST OR MOST						
1	DESIGN									
	STRUCTURAL DESIGN IS IN ACCOR 2006 EDITION.	RDANCE WITH THE STRUCTURAL	PROVISIONS OF THE INTERNATION	ONAL BUILDING CODE,						TEAM NAME: TEAM PURDUE ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47007
	DESIGN LIVE LOADS									CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
D	GROUND SNOW LOAD PARTITION (DEAD LOAD) FLOOR LIVE LOAD EGRESS LIVE LOAD	= 20 PSF = 10 PSF = 50 PSF = 100 PSF								
	SOILS BEARING									KEVIN MERCER, TRANE
		= 1000 PSF								JOHN GUEQUIERRE, HI-TECH HOUSING
	WOOD FRAMING LUMBER GRADING	- 1300 P SI								ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES
	MOISTURE CONTENT SHALL BE 19	9% MAXIMUM. LOAD BEARING AN	D EXTERIOR STUDS AND PLATES	SHALL BE OF GRADE					REFERENCE KEYNOTES	RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC.
	SOUTHERN PINE #2 OR BETTER, U PINE #2 OR BETTER, UNLESS NOTE WITH NOMINAL THICKNESS AS SHO COMMON NAILS AT 6" O/C. ALONG OTHERWISE. BOUNDARY NAILING SHEATHING NAILING AT WALLS SH REQUIRE 4' X 8' PLYWOOD SHEETS PLYWOOD SHEETS SHALL BE FULL	INLESS NOTED OTHERWISE. JOI ED OTHERWISE. PLYWOOD SHE OWN ON DRAWINGS. ROOF AND EDGES AND AT 10" O/C. ALONG I TO BE 10D COMMON NAILS AT 6 HALL BE THE SAME AS SHEAR WA S. AT EDGES OF DIAPHRAGMS W LY BLOCKED AROUND ENTIRE PI	ATHING SHALL BE APA GRADE TR FLOOR SHEATHING SHALL BE NA NTERMEDIATE FRAMING MEMBEF ' O/C., UNLESS NOTED OTHERWIS ALL NAILING. ALL FLOOR, ROOF, A 'HERE PLYWOOD SHEETS MAY BE ECE AND NAILED WITH 10D COMM	GRADE SOUTHERN RADEMARK PLYWOOD AILED WITH 10D RS, UNLESS NOTED SE. ROOF AND FLOOR AND SHEAR WALLS E LESS THAN 24", MON NAILS AT 6" O/C						PAT WILSON, RYAN FIRE PROTECTION
C-	UNLESS NOTED OTHERWISE.	IOWN OTHERWISE, SHALL BE CC	NSTRUCTED TO THE MINIMUM ST	ANDARDS OF THE IBC						
C	AND SHALL CONFORM TO TABLE 2	2304.9.1 FASTENING SCHEDULE (OF THE IBC.							CLIENT U.S. DEPARTMENT OF ENERGY
	NOTATIONS ON DRAWINGS RELAT CATALOG NUMBERS MANUFACTUF USED IN EXTERIOR APPLICATIONS "HOT DIPPED GALVANIZED." STAIN EXTERIOR APPLICATIONS. THE FC PROVIDED; 8D = SS8D, 10D = SS10I SUBSTITUTED PROVIDED THEY HA	RED BY SIMPSON STRONG TIE C S SHALL BE PROVIDED WITH "Z-M NLESS STEEL NAILS SHALL BE PF OLLOWING STAINLESS STEEL NA DD, 16D = SS16D. EQUIVALENT DE AVE ICBO APPROVAL FOR EQUAL	ANGER AND OTHER CONNECTING OMPANY, SAN LEANDRO CA. ALL AX" GALVANIZING, WHEN AVAILAR OVIDED FOR ALL SIMPSON HANG LS, AS MANUFACTURED BY SIMP VICES BY OTHER MANUFACTURE LOAD CAPACITY.	S DEVICES REFER TO SIMPSON HANGERS BLE, OR SHALL BE GERS USED IN ALL SON, SHALL BE ERS MAY BE						SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV
4	PRESSURE TREATED WOOD									=
	PRESERVATIVE TREATMENT. ALL PRESSURE TREATED IN ACCORDA TREATED LUMBER AND PLYWOOD AGENCY WHICH MAINTAINS CONTI AS DESCRIBED IN THE IBC STANDA	LUMBER AND PLYWOOD REQUIP ANCE WITH IBC SECTION 2303.1.8 SHALL BEAR AN APPROVED QU INUING SUPERVISION, TESTING A ARDS, AND SHALL BE IDENTIFIED	ED TO BE PRESERVATIVE TREAT TO BEAR THE FDN GRADE MARK ALITY MARK OR THAT OF AN APPE AND INSPECTION OVER THE QUAL AS REQUIRED BY THESE STAND	TED SHALL BE EACH PIECE OF ROVED INSPECTION LITY OF THE PRODUCT, ARDS.					- SHEET KETNUTES	11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
В-	WHERE FDN LUMBER IS CUT OR D APPROVED PRESERVATIVES BY R PRESERVATIVE.	ORILLED AFTER TREATMENT, THE REPEATED BRUSHING, DIPPING O	CUT SURFACE SHALL BE FIELD T R SOAKING UNTIL THE WOOD ABS	REATED WITH SORBS NO MORE						-B
	MANUFACTURED LUMBER									
	ALL MANUFACTURED LUMBER TO I	BE INSTALLED PER MANUFACTU	RERS INSTALLATION GUIDELINES	δ.						MARK DATE DESCRIPTION
	SECTIONS AND DETAILS SECTIONS AND DETAILS SHOWING ILLUSTRATE SPECIFIC DETAILS. N SECTION OR DETAIL. CONSTRUCT	G REINFORCING, BOLTS, FRAMIN NO ATTEMPT HAS BEEN MADE TO TION DETAILS NOT SPECIFICALLY	G MEMBERS, AND CONNECTIONS SHOW ALL ELEMENTS PASSING SHOWN ON THE DRAWINGS SHA	ARE INTENDED TO THROUGH A SPECIFIC ALL FOLLOW SIMILAR						LOT NUMBER: 201 DRAWN BY: Author
	DETAILS OF SECTIONS TO HIS PRO	OJECT AS APPROVED BY THE AR	CHITECT/ENGINEER OF RECORD).						CHECKED BY: Checker COPYRIGHT: PURDUE UNIVERSITY 2011
	SUBMIT SHOP DRAWINGS -MANUFACTURED WOOD TRI -MANUFACTURED WOOD BE	ARCHITECT/ENGINEER OF RECO	RD FOR THE FOLLOWING:							ALL RIGHTS RESERVED
	MISCELLANEOUS									STRUCTURAL NOTES
A-	VERIFY ALL DIMENSIONS AND CON	NDITIONS IN THE FIELD.								
	VERIFY SIZE AND LOCATIONS OF A	ALL OPENINGS IN THE ROOF AND	WALLS.							
AM	REFERENCES									
2011 10:26:24 ,	REFER TO ARCHITECTURAL, MECH AND POSITION OF OPENINGS, BRE	HANICAL AND ELECTRICAL DRAW EAKS IN STRUCTURAL MEMBERS	INGS FOR ALL DIMENSIONS NOT DUE TO ARCHITECTURAL TREATI	SHOWN, FOR SIZE MENT, ETC.						S-001
8/13/:	1	2	l	3	4	5		6	1 7	



7	·
GENERAL SHEETS VALID ONLY WHEN STAMPED BY A LICENSED STRUCTURAL ENGINEER	
	TEAM NAME: TEAM PURDUE
	ADDRESS: PURDUE UNIVERSITY
	KNOY HALL, ROOM 107 WEST LAFAYETTE IN 47907
	CONTACT: SOLARHOUSE@PURDUE.EDU
	WWW.PURDUĒ.EDU/INHOME
	-D CONSULTANTS KEVIN MERCER. TRANE
	PAT EGAN, THERMOCORE
	JOHN GUEQUIERRE, HI-TECH HOUSING
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
REFERENCE KEYNOTES	RYAN JUSTAK, SCHOLER CORPORATION
	-C CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON
-> SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS
	01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS
	05/03/2011 100% W/ DOE REVISIONS
	08/11/2011 100% AS-BUILT DRAWINGS
	-В
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: MATT HEBDON
	CHECKED BY: ANDY SWITZER
	COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	SHEET TITLE
	FOUNDATION PLAN
	-A
	5-101





GENERAL SHEET NOTES		
 STRUCTURAL SHEETS VALID ONLY WHEN STAMPED BY A LICENSED STRUCTURAL ENGINEER ALL ROOFS SHALL BE 8" STRUCTURAL INSULATED PANELS UNO GARAGE ROOF SHALL BE SHOP-FABRICATED WOOD TRUSSES @ 24" OC W/ 5/8" APA RATED SHEATHING ALL EXTERIOR RESIDENCE WALLS SHALL BE 4" STRUCTURAL INSULATED PANELS UNO ALL INTERIOR RESIDENCE MARRIAGE WALLS SHALL BE 2X4 FRAMING UNO ALL GARAGE WALLS SHALL BE 2X4 FRAMING W/ 1/2" APA RATED SHEATHING ON ONE SIDE, UNO 	-E	TEAM PURDUE HOME
	-D	TEAM NAME: TEAM PURDUE ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME CONSULTANTS KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR
DIV 06 WOOD, PLASTICS, AND COMPOSITES 06 05 23 WOOD, PLASTIC, AND COMPOSITE FASTENINGS 06 10 00 ROUGH CARPENTRY 06 12 00 STRUCTURAL INSULATED PANELS		SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION
06 17 53 SHOP-FABRICATED WOOD TRUSSES	–C	
		CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY
$\langle \cdot \rangle$ sheet keynotes		11/23/2010 80% DESIGN DRAWINGS
 DROP CHORD GABLE TRUSS 2 2X8 OUTLOOKER @ 24" OC 3 PONY WALL ABOVE 		01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
 PORTAL FRAME, SEE DET A2/S501 SIMPSON HUC26-3 MAX HANGER W/ 2X COL IN SIP (3) SIMPSON SDS25800 SCREWS FROM BM5 TO BM5 SIMPSON HUC210-3 HANGER W/ 2X COL IN SIP 	—В	MARK DATE DESCRIPTION
 8 SIMPSON HUC12 MAX HANGER 9 ATTACH LEDGER TO 2X NAILER (WITHIN SIPS) W/ SIMPSON SDS25500 SCREWS @ 8" OC, TYP 10 SIMPSON HGUS28-4 HANGER USE (4) SIMPSON SDS25312 SCREWS FROM LEDGER 		LOT NUMBER: 201 DRAWN BY: MATT HEBDON CHECKED BY: ANDY SWITZER COPYRIGHT: PURDUE UNIVERSITY 2011 AUL RIGHTS RESERVED
TO 2X NAILER @ BEAM LOC SIMPSON LSTA12 STRAP FROM WALL TO RIM JOIST BELOW	-A	SHEET TITLE MAIN ROOF FRAMING PLAN
		S-103



	7				
	GENERAL SHEET NOTES				
		-			
1.	BY A LICENSED STRUCTURAL ENGINEER				Sec. 1
2.	ALL ROOFS SHALL BE 8" STRUCTURAL INSULATED PANELS UNO			100	
3.	ALL EXTERIOR RESIDENCE WALLS SHALL BE 4" STRUCTURAL INSULATED PANELS UNO				
4.	ALL INTERIOR RESIDENCE MARRIAGE WALLS SHALL				
	BE 2X4 FRAMING UNO				
		-Ε		the second	
					TEAM PURDUE
					TLAMTORDUL
				$\int dx dx$	
			TEAM NA	ME:	TEAM PURDUE
			ADDRESS	S:	PURDUE UNIVERSITY
					WEST LAFAYETTE, IN 47907
			CONTACT	Γ:	SOLARHOUSE@PURDUE.EDU
					WWW.PURDUE.EDU/INHOME
		-D			
				ANIS	F
					R
			SUSAN B		SIGN ALTERNATIVES
			RYAN JUS	STAK, SCHOL	ER CORPORATION
	REFERENCE KEYNOTES		MARK BE	ALS, J & T SY	STEMS, INC.
Dľ	V 06 WOOD, PLASTICS, AND COMPOSITES		PAT WILS	ON, RYAN FI	RE PROTECTION
06 06	10 00 ROUGH CARPENTRY 12 00 STRUCTURAL INSULATED PANELS				
					```
					/
		C	CLIENT		
				U.S. DEPAR	TMENT OF ENERGY
				SOLAR E	DECATHLON 2011
				WWW.SOL/	ARDECATHLON.GOV
				U.S. DEPAI	RTMENT OF ENERGY
				JULI	RDECHTEOR
	SHEET KEYNOTES			<u>11/23/2010</u> 01/25/2011	80% DESIGN DRAWINGS 80% W/ DOE REVISIONS
				03/22/2011	100% CONSTR. DRAWINGS
				05/03/2011	100% W/ DOE REVISIONS
		—В			
			MARK	DATE	DESCRIPTION
			LOT NUM	BER:	201
			DRAWN E	BY:	MATT HEBDON
			CHECKED	) BY:	ANDY SWITZER
			COPYRIG	HT:	PURDUE UNIVERSITY 2011
			SHEET TI	TLE	
		-A		F	PLAN
				-	
				C	10/
				<b>U</b> -	



7	_
<b>GENERAL SHEET NOTES</b>	
<ol> <li>STRUCTURAL SHEETS VALID ONLY WHEN STAMPE BY A LICENSED STRUCTURAL ENGINEERENGINEE</li> <li>ALL EXTERIOR RESIDENCE WALLS SHALL BE 4" STRUCTURAL INSULATED PANELS UNO</li> <li>ALL INTERIOR RESIDENCE MARRIAGE WALLS SHA BE 2X4 FRAMING UNO</li> <li>ALL GARAGE WALLS SHALL BE 2X4 FRAMING UNO</li> <li>ALL DECK JOISTS SHALL BE 2X8 SOUTHERN PINE</li> <li>NO 2 @ THE SPECIFIED SPACING UNO</li> </ol>	
	D CONSULTANTS KEVIN MERCER, TRANE TEAM PURDUE TEAM PURDUE TEAM PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION
<b>REFERENCE KEYNOTES</b> DIV 06 WOOD, PLASTICS, AND COMPOSITES 06 05 23 WOOD, PLASTIC, AND COMPOSITE FASTENINGS 06 10 00 ROUGH CARPENTRY	MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION
	C CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON
SHEET KEYNOTES     SOUTHERN PINE NO 2 @ 12" OC W/ SIMPSON     JB28 HANGER EACH END	11/23/2010         80% DESIGN DRAWINGS           01/25/2011         80% W/ DOE REVISIONS           03/22/2011         100% CONSTR. DRAWINGS           05/03/2011         100% W/ DOE REVISIONS           08/11/2011         100% AS-BUILT DRAWINGS
<ul> <li>2X8 SOUTHERN PINE NO 2 @ 16" OC W/ SIMPSON JB28 HANGER EACH END</li> <li>(2) 2X8 SOUTHERN PINE NO 2 @ 12" OC W/ SIMPSO HUS228-TF HANGER EACH END</li> <li>2X8 SOUTHERN PINE NO 2 LEDGER W/ SIMPSON SDS25312 SCREWS @ 8" OC, STAGGERED</li> <li>2X8 SOUTHERN PINE NO 2 LEDGER W/ SIMPSON SDS25312 SCREWS @ 4" OC, STAGGERED</li> <li>SIMPSON HUC28-2 MAX HANGER</li> </ul>	PN -B -BB
7       SIMPSON HUC28-3 MAX HANGER         8       SIMPSON HGUS26-3 HANGER	MARK       DATE       DESCRIPTION         LOT NUMBER:       201         DRAWN BY:       MATT HEBDON         CHECKED BY:       ANDY SWITZER         COPYRIGHT:       PURDUE UNIVERSITY 2011
	SHEET TITLE DECK FRAMING PLAN
	S-105



7	
<b>GENERAL SHEET NOTES</b> 1.         STRUCTURAL SHEETS VALID ONLY WHEN           STAMPED BY A LICENSED STRUCTURAL ENGINEER	
STAMPED BY A LICENSED STRUCTURAL ENGINEER	
	TEAM NAME:       TEAM PURDUE         ADDRESS:       PURDUE UNIVERSITY         KNOY HALL, ROOM 107       WEST LAFAYETTE, IN 47907         CONTACT:       SOLARHOUSE@PURDUE.EDU         WWW.PURDUE.EDU/INHOME
	D CONSULTANTS KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION
REFERENCE KEYNOTES	MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION
	-C CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON
-> SHEET KEYNOTES	11/23/2010         80% DESIGN DRAWINGS           01/25/2011         80% W/ DOE REVISIONS           03/22/2011         100% CONSTR. DRAWINGS           05/03/2011         100% W/ DOE REVISIONS           08/11/2011         100% AS-BUILT DRAWINGS
	MARK DATE DESCRIPTION  LOT NUMBER: 201 DRAWN BY: MATT HEBDON
	CHECKED BY: ANDY SWITZER COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED SHEET TITLE
	STRUCTURAL DETAILS
	S-501



			r
	<b>GENERAL SHEETS VALID ONLY WHEN</b> STAMPED BY A LICENSED STRUCTURAL ENGINEER	E	TEAM PURDUE HOMB
2		-D	TEAM NAME: TEAM PURDUE ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME CONSULTANTS KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR
R PLAN IN AR TO BERS RS, OR	REFERENCE KEYNOTES		SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION
PLAN	-> SHEET KEYNOTES		CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS
		—В	03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
			MARK     DATE     DESCRIPTION       LOT NUMBER:     201       DRAWN BY:     MATT HEBDON       CHECKED BY:     ANDY SWITZER       COPYRIGHT:     PURDUE UNIVERSITY 2011       ALL RIGHTS RESERVED
		—А	STRUCTURAL DETAILS



<b>GENERAL SHEET NOTES</b>				
1. STRUCTURAL SHEETS VALID ONLY WHEN				
STAMPED BY A LICENSED STRUCTURAL ENGINEER				
	-E			
				TEAM PURDUE
			$\gamma_{J}$	
		:0		IIUML
	L			
		TEAM NA	ME:	TEAM PURDUE
		ADDRES	6:	PURDUE UNIVERSITY
				KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
		CONTAC	Г: :	
	-D	CONSUL	TANTS	
		PAT EGA	N, THERMOCO	RE
		JOHN GU	EQUIERRE, HI	TECH HOUSING
		ANDY SW	ITZER, ARKOF	2
		SUSAN B	ENEDICT, DES	
<b>REFERENCE KEYNOTES</b>			ALS L& TSVS	
	┝		SON, RYAN FIR	F PROTECTION
	–c			
		CLIENT		
			U.S. DEPAR	
			WWW.SOLA	RDECATHLON.GOV
			U.S. DEPAR	TMENT OF ENERGY
		<b>V</b> o	SOLAI	<b>R DECATHLON</b>
	L	(		
-> SHEET KEYNOTES			11/23/2010	80% DESIGN DRAWINGS
			01/25/2011	80% W/ DOE REVISIONS
			03/22/2011 05/03/2011	100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS
			08/11/2011	100% AS-BUILT DRAWINGS
	-в			
		MARK	DATE	DESCRIPTION
			BATE	
				004
			BER: 	
		CHECKEI	) BY:	ANDY SWITZER
		COPYRIC	HT:	PURDUE UNIVERSITY 2011
				ALL RIGHTS RESERVED
		SHEET T	TLE	
			יידריור	
		SIF	RUCIU	RAL DETAILS
	-A			
			C	<b>ム</b> つつ
			3-	503

		1	2	3
	E-			
	D-			
	C–			
	_			
	B-			
A- 1 1 2 3				
A- WY 5050 UT 1050:20 W - 1 3				
A- WY 505207 1075629 W 1 2 3				
1 10.25:55 AM	A–			
8/13/2011 10:26:55 AM				
8/13/2011 10:26:551	M			
1 2 3 3	:26:55 /			
	01110			
	8/13/2	1	2	3

4	5		I	6		
						GENERAL S
	_		STRUCTURAL	FRAMING SCHEDULE	1.	STRUCTURAL SHEE
		MARK	TYPE	COMMENTS		STAMPED BY A LICE
		BM1	SIPS HEADER	MANUFACTURER PROVIDED		
		BM2	2x8	SOUTHERN PINE NO 2		
		BM3	(2) 2x6	SPRUCE PINE FIR NO 2		
	_	BM4	(2) 2x8	SOUTHERN PINE NO 2		
	_	BIND	(2) 2X 1Z (3) 2x6	SOUTHERN PINE NO 2		
	-	BM7	(3) 2x0	SOUTHERN PINE NO 2		
	_	BM8	(4) 2x8	SOUTHERN PINE NO 2		
	-	BM9	(5) 2x8	SOUTHERN PINE NO 2		
	-	BM10	(2)1 3/4x9 1/2	LAMINATED VENEER LUMBER		
		BM11	(2)1 3/4x11 7/8	LAMINATED VENEER LUMBER		
	Г					
	-	MARK	TYPE	COMMENTS		
			••••			
		C1	(2) 2x4 TRIMME	R SPRUCE PINE FIR NO 2		
		C2	(2) 2x3 1/8	SPRUCE PINE FIR NO 2		
		C3	(2) 2x4	SPRUCE PINE FIR NO 2		
		C4	(4) 2x4	SPRUCE PINE FIR NO 2		
		C5	6x6	SOUTHERN PINE NO 2		
			FOOTI	NG SCHEDULE		
		MARK	TYPE	COMMENTS		
	Γ	F1	10"	CIRCULAR ABS FOOTING		
	_	F2	16"	CIRCULAR ABS FOOTING		REFERENC
		F3	16"x16"	SQUARE ABS FOOTING		
		F4	18 1/2"x18 1/2"	SQUARE ABS FOOTING		
	_	F5	20"x20"	SQUARE ABS FOOTING		
		F6	24"x24"	SQUARE ABS FOOTING		

4	5		6	7	
				GENERAL SHEET NOTES	
		STRUCTURA	L FRAMING SCHEDULE	1. STRUCTURAL SHEETS VALID ONLY WHEN	
		MARK TYPE	COMMENTS	STAMPED BY A LICENSED STRUCTURAL ENGINEER	
		BM1 SIPS HEADER	MANUFACTURER PROVIDED		
		BM2 2x8	SOUTHERN PINE NO 2		
		BM3 (2) 2x6	SPRUCE PINE FIR NO 2		
		BM4 (2) 2x8	SOUTHERN PINE NO 2		E
		BM6 (2) 2x12 BM6 (3) 2x6	SOUTHERN PINE NO 2		TEAM PURDUE
		BM7 (3) 2x10	SOUTHERN PINE NO 2		
		BM8 (4) 2x8	SOUTHERN PINE NO 2		
		BM9 (5) 2x8	SOUTHERN PINE NO 2		
		BM10 (2)1 3/4x9 1/2	LAMINATED VENEER LUMBER		
		BM11 (2)1 3/4x11 7/8	LAMINATED VENEER LUMBER		
		STRUCTURA			TEAM NAME: TEAM PURDUE
		MARK TYPE	COMMENTS		ADDRESS: PURDUE UNIVERSITY
					KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
		C1 (2) 2x4 TRIMME	R SPRUCE PINE FIR NO 2		CONTACT: SOLARHOUSE@PURDUE.EDU
		C2 (2) $2x3 1/8$	SPRUCE PINE FIR NO 2		
		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	SPRUCE PINE FIR NO 2		
		$\begin{array}{c} \overline{} \overline{}$	SOUTHERN PINE NO 2		CONSULTANTS
					KEVIN MERCER, TRANE
					PAT EGAN, THERMOCORE
		FOOT	ING SCHEDULE		JOHN GUEQUIERRE, HI-TECH HOUSING
		MARK TYPE	COMMENTS		ANDY SWITZER, ARKOR
		F1 10"	CIRCUI AR ABS FOOTING		RYAN JUSTAK. SCHOLER CORPORATION
		F2 16"	CIRCULAR ABS FOOTING	<b>REFERENCE KEYNOTES</b>	MARK BEALS, J & T SYSTEMS, INC.
		F3 16"x16"	SQUARE ABS FOOTING		PAT WILSON, RYAN FIRE PROTECTION
		F4 18 1/2"x18 1/2"	SQUARE ABS FOOTING		
		F5 20"x20"	SQUARE ABS FOOTING		
		F0 24 X24	SQUARE ABS FOOTING		
					-C CLIENT
					U.S. DEPARTMENT OF ENERGY
					SOLAR DECATHLON 2011
					WWW.SOLARDECATHLON.GOV
					SOLAR DECATHLON
					01/25/2011 80% W/ DOE REVISIONS
					03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS
					08/11/2011 100% AS-BUILT DRAWINGS
					R
					MARK DATE DESCRIPTION
					LOT NUMBER: 201
					DRAWN BY: MATT HEBDON
					CHECKED BY: ANDY SWITZER
					SHEET TITLE
					STRUCTURAL
					SUHEDULES
					I S-6()1
4	5	I	6	7	



<b>GENERAL SHEET NOTES</b>				
	μ			TEAM PURDUE HOME
	-D	TEAM NAI ADDRESS CONTACT	ME: S: T:	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
		CONSULT KEVIN ME	ANTS RCER, TRANI	E
		PAT EGAN	N, THERMOCO	DRE
		JOHN GU ANDY SW	EQUIERRE, H	I-TECH HOUSING
		SUSAN BI	ENEDICT, DES	GIGN ALTERNATIVES
<b>REFERENCE KEYNOTES</b>		RYAN JUS	STAK, SCHOLE	ER CORPORATION STEMS, INC.
	C	CLIENT		
			U.S. DEPAR	
		X	U.S. DEPAR	ARDECATHLON.GOV
			11/23/2010	80% DESIGN DRAWINGS
			01/25/2011 03/22/2011	80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS
			05/03/2011 08/11/2011	100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
	—В			
		MARK	DATE	DESCRIPTION
		LOT NUM	BER:	201
	$\vdash$	DRAWN B	9Y: ) BY:	MATT HEBDON ANDY SWITZER
		COPYRIG	HT:	PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	—A	FRA	AMING	ISOMETRICS
			S-	901

	GENERAL SHEET NOTE
<ul> <li>ALTHOUGH EVERY EFFORT HAS BEEN MADE IN PREPARING THESE PLANS AND CHECKING THEM FOR ACCURACY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE ACCURACY OF ALL DETAILS AND DIMENSIONS.</li> <li>B) THESE DRAWINGS ARE INTENDED TO CONFORM TO GENERALLY ACCEPTED BUILDING PRACTICES; HOWEVER, STATE AND LOCAL CODES VARY WIDELY AND ALL FEDERAL, STATE, AND LOCAL CODES, ORDINANCES, REGULATIONS, ETC. SHALL BE CONSIDERED AS PART OF THE SPECIFICATIONS OF THIS BUILDING, AND SHALL TAKE PRECEDENCE OVER ANYTHING SHOWN, DESCRIBED, OR IMPLIED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT ALL APPLICABLE BUILDING CODE REQUIREMENTS ARE BEING MET. THE DESIGNER SHALL NOT BE</li> </ul>	
<ul> <li>HELD LIABLE FOR ANY ERRORS.</li> <li>C) THIS PLAN, AND ALL DRAWINGS AND SPECIFICATIONS RELATED THERETO, IS LIMITED TO A SPECIFIC PROJECT OF THE PURCHASER AND FOR THE CONSTRUCTION OF ONE BUILDING. ANY RE-USE OF SAID PLANS IS PROHIBITED WITHOUT SPECIFIC WRITTEN PERMISSION OF OWNER AND DESIGNER.</li> <li>D) THESE DRAWINGS INDICATE THE GENERAL SCOPE OF THE PROJECT IN TERMS OF ARCHITECTURAL DESIGN CONCEPT, INCLUDING THE DIMENSIONS OF THE BUILDING, THE MAJOR</li> </ul>	
<ul> <li>ARCHITECTURAL ELEMENTS AND THE TYPE OF STRUCTURAL SYSTEM. STRUCTURAL INTEGRITY OF THIS BUILDING IS SUBJECT TO REVIEW BY A QUALIFIED STRUCTURAL ENGINEER.</li> <li>AS SCOPE DOCUMENTS, THESE DRAWINGS DO NOT NECESSARILY INDICATE OR DESCRIBE ALL WORK REQUIRED FOR FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS FOR CONSTRUCTION.</li> <li>F) CONTRACTOR SHALL FURNISH ALL ITEMS REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK, VERIFY ALL EXISTING CONDITIONS PRIOR TO THE START OF</li> </ul>	
CONSTRUCTION, AND NOTIFY THE DESIGNER IMMEDIATELY OF ANY CONFLICTS OR CONDITIONS WHICH REQUIRE ALTERATION OF THESE PLANS PRIOR TO PROCEEDING WITH THE WORK.	
<ul> <li>A) DO NOT SCALE DRAWINGS, USE ONLY THE PRINTED DIMENSIONS.</li> <li>B) ALL DIMENSIONS ARE TAKEN FROM/TO ROUGH STUDS OF A DIMENSION OF EITHER 5 1/2" (2x6 STUDS), 3 1/2" (2x4 STUDS) OR TO THE OUTSIDE OF THE STRUCTURAL INSULATED PANEL SYSTEMS (SIPS)</li> </ul>	
<ul> <li>C) ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BEFORE PROCEEDING WITH THE WORK. THE DESIGNER SHALL BE NOTIFIED OF ANY DISCREPANCIES</li> <li>D) VERIFY WITH THE WINDOW MANUFACTURER ALL WINDOW SIZES AND APPLICABLE EGRESS REQUIREMENTS.</li> <li>E) DOOR OPENINGS ARE GENERALLY DIMENSIONED TO CENTERLINE OF OPENING. DOOR OPENINGS THAT ARE NOT DIMENSIONALLY LOCATED ARE TO BE CENTERED BETWEEN WALLS OR POSITIONED WITH ONE JAMB AGAINST AN ADJACENT WALL OR COLUMN AS SHOWN ON THE PLANS.</li> <li>F) ALL DIMENSIONS SHALL BE VERIFIED AND COORDINATED WITH THE WORK OF ALL TRADES</li> <li>G) IN THE EVENT OF DIMENSIONAL DISCREPANCIES IN THE PLANS. THE FLOOR PLANS SHALL GOVERN.</li> </ul>	
<ul> <li>III) STRUCTURAL</li> <li>A) CONTRACTOR SHALL VERIFY ALL BEAM AND HEADER SIZES FOR CODE COMPLIANCE</li> </ul>	
IV) INSULATION A) WHETHER SPECIFICALLY SHOWN, OR NOT, PROVIDE INSULATION WITH VAPOR BARRIER BETWEEN ALL EXTERIOR AND INTERIOR HEATED SPACES TO MAINTAIN DESIGN U VALUES B) ALL JOINTS AND PENETRATIONS IN INSULATION BARRIER SHALL BE FULLY BUTTED/SEALED WITH ADHESIVE/SEALANT TO PROVIDE A CONTINUOUS AIR/VAPOR TIGHT INSTALLATION.	
<ul> <li>V) MECHANICAL AND ELECTRICAL AREAS</li> <li>A) GENERAL CONTRACTOR TO COORDINATE ALL MECHANICAL AND ELECTRICAL FLOOR, ROOF AND WALL SLEEVES AND ALL MECHANICAL SHAFTS AND OPENINGS WITH MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, STRUCTURAL AND ARCHITECTURAL DRAWINGS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. GENERAL CONTRACTOR SHALL</li> <li>PROVIDE SLEEVES AND FLOOR AND ROOF OPENINGS AS REQUIRED TO ALLOW INSTALLATION OF ALL DUCTS AND PIPING AS SHOWN ON THE MECHANICAL AND ELECTRICAL DRAWINGS.</li> <li>B) CONTRACTOR SHALL VERIFY ALL MECHANICAL AND ELECTRICAL REQUIREMENTS AND CLEARANCES. CONTRACTOR SHALL VERIFY ALL FLOOR AND ROOF BEARING LOCATIONS.</li> </ul>	REFERENCE KEYNOTE
C) DUE TO COORDINATION WITH FRAMING AND MECHANICAL INSTALLATIONS. FINAL DIMENSIONS MAY VARY SLIGHTLY FROM DIMENSIONS AS SHOWN ON CONSTRUCTION DRAWINGS. VI) EXTERIOR WALL	
<ul> <li>A) THE EXTERIOR WALL AS SHOWN SHALL BE A COMPLETE SYSTEM INCLUDING ALL STIFFENERS, FASTENERS, SEALANTS, JOINING MISCELLANEOUS PIECES AND MATERIAL THICKNESS AS REQUIRED TO FORM A WATERTIGHT ENCLOSURE.</li> <li>B) DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILED.</li> <li>C) ALL DETAILS ARE TO BE COORDINATED WITH THE STRUCTURAL FRAMING AND OTHER BUILDING COMPONENTS INCLUDING ROOFING, EXTERIOR-CLADDING ITEMS, GLAZING, INTERIOR</li> </ul>	
FINISH AND OTHER RELATED BUILDING COMPONENTS. (- D) ALL SEALANT JOINTS SHALL BE SIDED SUCH THAT THEY WILL BE WITHIN THE SIZE RANGE RECOMMENDED BY THE SEALANT MANUFACTURER (- D) ALL SEALANT JOINTS SHALL BE SIDED SUCH THAT THEY WILL BE WITHIN THE SIZE RANGE RECOMMENDED BY THE SEALANT MANUFACTURER (- D) ALL SILLS, WINDOW HEADS, AND SHELF ANGLES SHALL HAVE FLASHING EXTENDED TO THE OUTSIDE OF THE WALL WHETHER OR NOT SHOWN ON THE DRAWINGS.	
VII) MISCELLANEOUS NOTES A) PROVIDE ACCESS PANELS AS REQUIRED BY APPLICABLE CODES AND AS REQUIRED FOR ACCESS OR MAINTENANCE OF MECHANICAL AND ELECTRICAL EQUIPMENT INCLUDING JUNCTION BOXES. ALL ACCESS PANELS LOCATIONS SHALL BE REVIEWED WITH THE ARCHITECT PRIOR TO PROCEEDING.	
<ul> <li>B) WHERE DISCREPANCIES EXIST BETWEEN THE DRAWINGS OF THE VARIOUS TRADES, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH WORK.</li> <li>C) WHETHER OR NOT EXPLICITLY INDICATED, ALL GLAZING SHALL BE SAFETY GLAZED WHEN WITHIN 18" OF THE FLOOR OR WITHIN 3'-0" HORIZONTAL DISTANCE FROM ANY DOOR. A CERTIFICATE MUST ACCOMPANY ALL GLAZING PRODUCTS STATING THAT THE PRODUCTS CONFORM WITH APPLICABLE CONSUMER PRODUCT SAFETY STANDARDS.</li> <li>D) UNLESS OTHERWISE NOTED, ALL EXTERIOR EXPOSED METAL SHALL BE GALVANIZED AND PAINTED</li> </ul>	
<ul> <li>E) ALL EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, BETWEEN WALLS AND FOUNDATION, BETWEEN WALLS AND ROOF, BETWEEN WALL PANEL, AT PENETRATION OF UTILITIES THROUGH THE ENVELOPE, SHALL BE SEALED, CAULKED OR WEATHER-STRIPPED TO PREVENT AIR LEAKAGE / INFILTRATION.</li> <li>F) ALL REFUSE AND DEBRIS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR</li> <li>G) THE CONTRACTOR ALONG SHALL BE RESPONSIBLE FOR THE SAFETY AND ADEQUACY OF HIS PLANT, APPLIANCES, METHODS AND FOR DAMAGE WHICH MAY RESULT FROM THEIR</li> </ul>	$\langle -  angle$ Sheet Keynote
IMPROPER REMOVAL, CONSTRUCTION, MAINTENANCE OR OPERATION. HE SHALL ERECT AND PROPERLY MAINTAIN AT ALL TIMES AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, PROPER SAFEGUARDS FOR THE PROTECTION OF WORKMEN, OWNER, AND OWNERS PROPERTY, AND SHALL POST DANGER WARNINGS AGAINST HAZARDS CREATED BY CONSTRUCTION OPERATIONS.	
<ul> <li>H) INSPECTION BY CONTRACTOR: THE CONTRACTOR ACKNOWLEDGES AND AGREES THAT HE HAS INVISIBLE, INDELEGABLE AND INTRANSFERABLE AND CONTRACTUAL OBLIGATION TO THE</li> <li>OWNER TO MAKE HIS OWN INSPECTIONS ON HIS OWN WORK AT THE STAGES OF CONSTRUCTION, AND SHALL SUPERVISE AND SUPERINTEND PERFORMANCE OF WORK IN SUCH</li> <li>MANNER AS TO ENABLE HIM TO CONFIRM, CERTIFY AND CORROBORATE AT ALL TIMES THAT ALL WORK HAS BEEN EXECUTED ACCORDING TO THE CONTRACT DOCUMENT</li> <li>B- I) THE CONTRACTOR SHALL SUPPLY ALL LABOR, TRANSPORTATION, APPARATUS, SCAFFOLDING, AND ANY TOOLS FOR THE COMPLETION OF THE WORK, MAINTAIN AND REMOVE ANY</li> </ul>	
TEMPORARY EQUIPMENT, AND CONSTRUCTION THE COMPLETE WORK AND EVERYTHING PROPERLY INCIDENTAL THERETO AS STATED IN THE CONTRACT DOCUMENTS OR REASONABLY IMPLIED THEREFROM. ALL PARTS MUST BE COORDINATED, COMPLETE, READY TO OPERATE AND DELIVERED TO THE OWNER IN NEW CONDITION. J) CONTRACTOR'S WARRANTY: THE CONTRACTOR WARRANTS THAT HE IS FAMILIAR WITH THE CODES AND REGULATIONS APPLICABLE TO THE WORK AND THAT HE HAS THE SKILL, KNOWLEDGE, COMPETENCE, ORGANIZATION AND PLANT TO EXECUTE THE WORK PROMPTLY AND EFFICIENTLY IN COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT	
DOCUMENTS, INCLUDING THE TIME SCHEDULE. K) THE OWNER WILL NOT ACCEPT REQUESTS FOR EXTRA WORK CONDITIONS WHICH CAN BE REASONABLY ASCERTAINED FROM THE DRAWINGS AND SPECIFICATIONS. L) ASBESTOS - CONTAINING MATERIALS MAY NOT BE USED ON THIS PROJECT M) LEAD-CONTAINING PAINT MAY NOT BE USED ON THIS PROJECT	
<ul> <li>N) SUBCONTRACTORS FOR EACH TRADE ARE ADVISED THAT INFORMATION PERTINENT TO THEIR WORK MAY OCCUR IN OTHER PORTIONS OF THE CONTRACT DOCUMENTS. ALL SHEETS AND NOTES TO BE REVIEWED.</li> <li>O) THE STRUCTURAL MECHANICAL ELECTRICAL AND PLUMBING DRAWINGS ARE OF FOLIAL IMPORTANCE WITH THE ARCHITECTURAL DRAWINGS IN DEFINING THE WORK OF THE CONTRACT</li> </ul>	
<ul> <li>DOCUMENTS: SHOULD THERE BE A DISCREPANCY BETWEEN THE ARCHITECTURAL DRAWINGS AND THE ENGINEERING DRAWINGS THAT WOULD CAUSE AN IMPROPER INSTALLATION, IT SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION FOR CLARIFICATION PRIOR TO INSTALLATION OF SAID WORK. ANY WORK INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE.</li> <li>P) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT OF BUILDINGS ON THE SITE.</li> <li>Q) NOTES ON DRAWINGS SHALL APPLY TO ALL SIMILAR CONDITIONS WHETHER REPEATED OR NOT. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE SHOWN</li> </ul>	
R) THE CONTRACTOR SHALL VISIT THE SITE AND BE KNOWLEDGEABLE OF CONDITIONS THEREON. PRIOR TO SUBMITTING A BID HE SHALL INVESTIGATE, VERIFY AND BE RESPONSIBLE FOR ALL CONDITIONS OF THE PROJECT AND SHALL NOTIFY THE OWNER OF ANY CONDITIONS REQUIRING MODIFICATION BEFORE PROCEEDING WITH THE WORK	
2 3 5	6 ¹ 7

		3	4	1	5	6	7
							GENERAL SHE
	AL NOTES						
A)	ALTHOUGH EVERY EFFORT HAS BEEN MADE IN PREPARING THESE PLANS AND OF ALL DETAILS AND DIMENSIONS	D CHECKING THEM FOR ACCURACY, IT IS THE CO	ONTRACTOR'S RESPONSIBILITY TO VERI	IFY THE ACCURACY			
B)	THESE DRAWINGS ARE INTENDED TO CONFORM TO GENERALLY ACCEPTED BI LOCAL CODES, ORDINANCES, REGULATIONS, ETC. SHALL BE CONSIDERED AS DESCRIBED, OR IMPLIED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VER	UILDING PRACTICES; HOWEVER, STATE AND LOO PART OF THE SPECIFICATIONS OF THIS BUILDIN IFY THAT ALL APPLICABLE BUILDING CODE REQU	CAL CODES VARY WIDELY AND ALL FED IG, AND SHALL TAKE PRECEDENCE OVE UIREMENTS ARE BEING MET. THE DESIG	ERAL, STATE, AND R ANYTHING SHOWN, GNER SHALL NOT BE			
C)	HELD LIABLE FOR ANY ERRORS. THIS PLAN, AND ALL DRAWINGS AND SPECIFICATIONS RELATED THERETO, IS I	LIMITED TO A SPECIFIC PROJECT OF THE PURCH	ASER AND FOR THE CONSTRUCTION O	F ONE BUILDING. ANY			
D) E)	RE-USE OF SAID PLANS IS PROHIBITED WITHOUT SPECIFIC WRITTEN PERMISS THESE DRAWINGS INDICATE THE GENERAL SCOPE OF THE PROJECT IN TERMS ARCHITECTURAL ELEMENTS AND THE TYPE OF STRUCTURAL SYSTEM. STRUC AS SCOPE DOCUMENTS, THESE DRAWINGS DO NOT NECESSARILY INDICATE (	SION OF OWNER AND DESIGNER. S OF ARCHITECTURAL DESIGN CONCEPT, INCLU TURAL INTEGRITY OF THIS BUILDING IS SUBJEC OR DESCRIBE ALL WORK REQUIRED FOR FULL PI	DING THE DIMENSIONS OF THE BUILDIN T TO REVIEW BY A QUALIFIED STRUCTU ERFORMANCE AND COMPLETION OF TH	IG, THE MAJOR IRAL ENGINEER. IE REQUIREMENTS			
F)	FOR CONSTRUCTION. CONTRACTOR SHALL FURNISH ALL ITEMS REQUIRED FOR THE PROPER EXECU CONSTRUCTION, AND NOTIFY THE DESIGNER IMMEDIATELY OF ANY CONFLICT	UTION AND COMPLETION OF THE WORK, VERIFY S OR CONDITIONS WHICH REQUIRE ALTERATION	ALL EXISTING CONDITIONS PRIOR TO T N OF THESE PLANS PRIOR TO PROCEED	THE START OF DING WITH THE WORK.			
1EN	SIONING						
A) B)	DO NOT SCALE DRAWINGS, USE ONLY THE PRINTED DIMENSIONS. ALL DIMENSIONS ARE TAKEN FROM/TO ROUGH STUDS OF A DIMENSION OF EIT SYSTEMS (SIPS)	THER 5 1/2" (2x6 STUDS), 3 1/2" (2x4 STUDS) OR T	O THE OUTSIDE OF THE STRUCTURAL IN	NSULATED PANEL			
C) D) E)	ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BEFORE PROCEEDING WITH VERIFY WITH THE WINDOW MANUFACTURER ALL WINDOW SIZES AND APPLICA DOOR OPENINGS ARE GENERALLY DIMENSIONED TO CENTERLINE OF OPENIN POSITIONED WITH ONE JAMB AGAINST AN ADJACENT WALL OR COLUMN AS SE	H THE WORK. THE DESIGNER SHALL BE NOTIFIE ABLE EGRESS REQUIREMENTS. G. DOOR OPENINGS THAT ARE NOT DIMENSIONA HOWN ON THE PLANS	D OF ANY DISCREPANCIES ALLY LOCATED ARE TO BE CENTERED BI	ETWEEN WALLS OR			
F) G)	ALL DIMENSIONS SHALL BE VERIFIED AND COORDINATED WITH THE WORK OF IN THE EVENT OF DIMENSIONAL DISCREPANCIES IN THE PLANS, THE FLOOR P	ALL TRADES LANS SHALL GOVERN.					
RU( A)	CONTRACTOR SHALL VERIFY ALL BEAM AND HEADER SIZES FOR CODE COMPL	LIANCE					
SUL A) B)	ATION WHETHER SPECIFICALLY SHOWN, OR NOT, PROVIDE INSULATION WITH VAPOI ALL JOINTS AND PENETRATIONS IN INSULATION BARRIER SHALL BE FULLY BU	R BARRIER BETWEEN ALL EXTERIOR AND INTER TTED/SEALED WITH ADHESIVE/SEALANT TO PRO	IOR HEATED SPACES TO MAINTAIN DES VIDE A CONTINUOUS AIR/VAPOR TIGHT	IGN U VALUES INSTALLATION.			
CH/ A)	ANICAL AND ELECTRICAL AREAS GENERAL CONTRACTOR TO COORDINATE ALL MECHANICAL AND ELECTRICAL PLUMBING, FIRE PROTECTION, ELECTRICAL, STRUCTURAL AND ARCHITECTUR	FLOOR, ROOF AND WALL SLEEVES AND ALL MED AL DRAWINGS AND NOTIFY THE ARCHITECT OF A	CHANICAL SHAFTS AND OPENINGS WITH ANY DISCREPANCIES. GENERAL CONTR	H MECHANICAL, RACTOR SHALL		_	
B) C)	PROVIDE SLEEVES AND FLOOR AND ROOF OPENINGS AS REQUIRED TO ALLOW CONTRACTOR SHALL VERIFY ALL MECHANICAL AND ELECTRICAL REQUIREMENT DUE TO COORDINATION WITH FRAMING AND MECHANICAL INSTALLATIONS. FIN	V INSTALLATION OF ALL DUCTS AND PIPING AS S NTS AND CLEARANCES. CONTRACTOR SHALL VE NAL DIMENSIONS MAY VARY SLIGHTLY FROM DIM	SHOWN ON THE MECHANICAL AND ELEC ERIFY ALL FLOOR AND ROOF BEARING L MENSIONS AS SHOWN ON CONSTRUCTIO	CTRICAL DRAWINGS. OCATIONS. ON DRAWINGS.			
TEF A)	RIOR WALL THE EXTERIOR WALL AS SHOWN SHALL BE A COMPLETE SYSTEM INCLUDING	ALL STIFFENERS, FASTENERS, SEALANTS, JOINII	NG MISCELLANEOUS PIECES AND MATE	RIAL THICKNESS AS			
B)	REQUIRED TO FORM A WATERTIGHT ENCLOSURE. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILED.						
C)	FINISH AND OTHER RELATED BUILDING COMPONENTS.	SIZE RANGE RECOMMENDED BY THE SEALANT M	JOFING, EXTERIOR-CLADDING ITEMS, GI	LAZING, INTERIOR			
E) F)	VERIFY OR GUARANTEE ALL CLEAR OPENINGS FOR LOUVERS AND WINDOW IN ALL SILLS, WINDOW HEADS, AND SHELF ANGLES SHALL HAVE FLASHING EXTE	NSTALLATION. NDED TO THE OUTSIDE OF THE WALL WHETHER	OR NOT SHOWN ON THE DRAWINGS.				
ISCI A)	ELLANEOUS NOTES PROVIDE ACCESS PANELS AS REQUIRED BY APPLICABLE CODES AND AS REQ	UIRED FOR ACCESS OR MAINTENANCE OF MECH	HANICAL AND ELECTRICAL EQUIPMENT I	INCLUDING JUNCTION			
B) C)	BOXES. ALL ACCESS PANELS LOCATIONS SHALL BE REVIEWED WITH THE ARC WHERE DISCREPANCIES EXIST BETWEEN THE DRAWINGS OF THE VARIOUS TF WHETHER OR NOT EXPLICITLY INDICATED ALL GLAZING SHALL BE SAFETY GL	HITECT PRIOR TO PROCEEDING. RADES, CONSULT THE ARCHITECT BEFORE PRO( AZED WHEN WITHIN 18" OF THE FLOOR OR WITH	CEEDING WITH WORK. 1IN 3'-0" HORIZONTAL DISTANCE FROM A	ANY DOOR A			
D)	CERTIFICATE MUST ACCOMPANY ALL GLAZING PRODUCTS STATING THAT THE UNLESS OTHERWISE NOTED, ALL EXTERIOR EXPOSED METAL SHALL BE GALV	PRODUCTS CONFORM WITH APPLICABLE CONS ANIZED AND PAINTED	SUMER PRODUCT SAFETY STANDARDS.				
E)	ALL EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, BETWEEN WALL THROUGH THE ENVELOPE, SHALL BE SEALED, CAULKED OR WEATHER-STRIPF	LS AND FOUNDATION, BETWEEN WALLS AND RO PED TO PREVENT AIR LEAKAGE / INFILTRATION.	OF, BETWEEN WALL PANEL, AT PENETR	ATION OF UTILITIES			$\langle \cdot  angle$ sheet k
G)	THE CONTRACTOR ALONG SHALL BE REMOVED FROM THE SITE AND LEGALLY L THE CONTRACTOR ALONG SHALL BE RESPONSIBLE FOR THE SAFETY AND ADE IMPROPER REMOVAL, CONSTRUCTION, MAINTENANCE OR OPERATION. HE SHA THE WORK, PROPER SAFEGUARDS FOR THE PROTECTION OF WORKMEN, OW	EQUACY OF HIS PLANT, APPLIANCES, METHODS ALL ERECT AND PROPERLY MAINTAIN AT ALL TINN NER, AND OWNERS PROPERTY, AND SHALL POS	AND FOR DAMAGE WHICH MAY RESULT MES AS REQUIRED BY THE CONDITIONS T DANGER WARNINGS AGAINST HAZARI	FROM THEIR AND PROGRESS OF DS CREATED BY			
H)	CONSTRUCTION OPERATIONS. INSPECTION BY CONTRACTOR: THE CONTRACTOR ACKNOWLEDGES AND AGR OWNER TO MAKE HIS OWN INSPECTIONS ON HIS OWN WORK AT THE STAGES MANNER AS TO ENABLE HIM TO CONFIRM CERTIES AND CORPORATE AT AL	EES THAT HE HAS INVISIBLE, INDELEGABLE AND OF CONSTRUCTION, AND SHALL SUPERVISE ANI	) INTRANSFERABLE AND CONTRACTUAL D SUPERINTEND PERFORMANCE OF WC	OBLIGATION TO THE ORK IN SUCH			
I)	THE CONTRACTOR SHALL SUPPLY ALL LABOR, TRANSPORTATION, APPARATUS TEMPORARY EQUIPMENT, AND CONSTRUCTION THE COMPLETE WORK AND EV IMPLIED THEREFROM, ALL PARTS MUST BE COORDINATED, COMPLETE, READ	S, SCAFFOLDING, AND ANY TOOLS FOR THE CON VERYTHING PROPERLY INCIDENTAL THERETO AS Y TO OPERATE AND DELIVERED TO THE OWNER	ACCORDING TO THE CONTRACT DOCO IPLETION OF THE WORK, MAINTAIN AND S STATED IN THE CONTRACT DOCUMEN IN NEW CONDITION.	D REMOVE ANY TS OR REASONABLY			
J)	CONTRACTOR'S WARRANTY: THE CONTRACTOR WARRANTS THAT HE IS FAMIL KNOWLEDGE, COMPETENCE, ORGANIZATION AND PLANT TO EXECUTE THE W( DOCUMENTS, INCLUDING THE TIME SCHEDULE	LIAR WITH THE CODES AND REGULATIONS APPLI ORK PROMPTLY AND EFFICIENTLY IN COMPLIANC	CABLE TO THE WORK AND THAT HE HAS CE WITH THE REQUIREMENTS OF THE C	S THE SKILL, CONTRACT			
K) L)	THE OWNER WILL NOT ACCEPT REQUESTS FOR EXTRA WORK CONDITIONS WI ASBESTOS - CONTAINING MATERIALS MAY NOT BE USED ON THIS PROJECT	HICH CAN BE REASONABLY ASCERTAINED FROM	1 THE DRAWINGS AND SPECIFICATIONS.				
M) N)	LEAD-CONTAINING PAINT MAY NOT BE USED ON THIS PROJECT. SUBCONTRACTORS FOR EACH TRADE ARE ADVISED THAT INFORMATION PERT	TINENT TO THEIR WORK MAY OCCUR IN OTHER F	PORTIONS OF THE CONTRACT DOCUME	NTS. ALL SHEETS AND			
O)	THE STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS ARE DOCUMENTS. SHOULD THERE BE A DISCREPANCY BETWEEN THE ARCHITECTU SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION FOR CLARIFICATION PR	E OF EQUAL IMPORTANCE WITH THE ARCHITECT JRAL DRAWINGS AND THE ENGINEERING DRAWI IOR TO INSTALLATION OF SAID WORK. ANY WOR	URAL DRAWINGS IN DEFINING THE WOR INGS THAT WOULD CAUSE AN IMPROPE IK INSTALLED IN CONFLICT WITH THE AF	RK OF THE CONTRACT R INSTALLATION, IT RCHITECTURAL			
P) Q)	DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT NOTES ON DRAWINGS SHALL APPLY TO ALL SIMILAR CONDITIONS WHETHER F	OF BUILDINGS ON THE SITE. REPEATED OR NOT. DETAILS NOT SHOWN ARE SI	IMILAR IN CHARACTER TO THOSE SHOW	/N.			
R)	THE CONTRACTOR SHALL VISIT THE SITE AND BE KNOWLEDGEABLE OF COND ALL CONDITIONS OF THE PROJECT AND SHALL NOTIFY THE OWNER OF ANY C(	ITIONS THEREON. PRIOR TO SUBMITTING A BID I ONDITIONS REQUIRING MODIFICATION BEFORE F	HE SHALL INVESTIGATE, VERIFY AND BE PROCEEDING WITH THE WORK	E RESPONSIBLE FOR			

 7				
<b>GENERAL SHEET NOTES</b>				
	-E			TEAM PURDUE HOME
		TEAM NA ADDRES CONTAC	ME: S: T:	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	-D		TANTS	
		PAT EGA		
		ANDY SV SUSAN E	VITZER, ARKO BENEDICT, DES	R BIGN ALTERNATIVES
<b>REFERENCE KEYNOTES</b>		RYAN JU MARK BE	STAK, SCHOLI ALS, J & T SY	ER CORPORATION STEMS, INC.
		PAT WILS	SON, RYAN FIF	REPROTECTION
	-C	CLIENT		
			SOLAR E	DECATHLON 2011 ARDECATHLON.GOV
			U.S. DEPAT	RTMENT OF ENERGY
-> SHEET KEYNOTES			11/23/2010 01/25/2011 03/22/2011 05/03/2011 08/11/2011	80% DESIGN DRAWINGS 80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
	—В			
		MARK	DATE	DESCRIPTION
		LOT NUM	IBER: BY:	201 ERIC HOLT
		CHECKE	D BY: GHT:	CHECKER PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	-A	SHEET T	ARCHI MBOLS	TECTURAL S AND NOTES
			A-	001



GENERAL SHEET NOTES	
1. ALL PORTABLE TANKS, PUMPS, AND VALVES INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY	
	TEAM NAME: TEAM PURDUE          TEAM NAME:       TEAM PURDUE         ADDRESS:       PURDUE UNIVERSITY         KNOY HALL, ROOM 107       WEST LAFAYETTE, IN 47907         CONTACT:       SOLARHOUSE@PURDUE.EDU         WWW.PURDUE.EDU/INHOME       WWW.PURDUE.EDU/INHOME         CONSULTANTS       KEVIN MERCER, TRANE         PAT EGAN, THERMOCORE       JOHN GUEQUIERRE, HI-TECH HOUSING         ANDY SWITZER, ARKOR       SUSAN BENEDICT, DESIGN ALTERNATIVES         RYAN JUSTAK, SCHOLER CORPORATION       RYAN JUSTAK, SCHOLER CORPORATION
	-C C CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV
<ul> <li>SHEET KEYNOTES</li> <li>SHEET KEYNOTES</li> <li>ENTRY FROM DECATHLETE WAY</li> <li>DECKING</li> <li>1050 GALLON WATER SUPPLY TANK</li> <li>1050 GALLON WASTE TANK</li> <li>1050 GALLON WASTE TANK</li> <li>EXIT TO DECATHLETE WAY</li> <li>FLANTER BOXES, TYP.</li> <li>LOT LINE</li> <li>HVAC HEAT PUMP UNIT STAND</li> <li>57 GALLON RAIN COLLECTION BARREL</li> <li>ADA ACCESSIBLE WALKWAY</li> <li>DOE PROVIDED WALKWAY</li> <li>36" HEIGHT WOOD RAILING, TYP,</li> <li>LOCATION OF ORGANIZER UTILITY PANEL</li> </ul>	B III/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% AS-BUILT DRAWINGS 08/11/2011 ALL RIGHTS RESERVED
	SITE PLAN A-101



<ol> <li>ALL PORTABLE TANKS, PUMPS, AND VALVES INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY</li> <li>SPRAY FOAM SHALL BE USED TO SEAL AND INSULATED THE TJI FLOOR SYSTEM. ALL SPRAY FOAM SHALL BE AT LEAST 6 INCHES THICK THROUGHOUT THE ENTIRE FLOOR SYSTEM.</li> </ol>	<image/>
	TEAM NAME: TEAM PURDUE          TEAM NAME:       TEAM PURDUE         ADDRESS:       PURDUE UNIVERSITY         KNOY HALL, ROOM 107       WEST LAFAYETTE, IN 47907         CONTACT:       SOLARHOUSE@PURDUE.EDU         WWW.PURDUE.EDU/INHOME       WWW.PURDUE.EDU/INHOME         CONSULTANTS       KEVIN MERCER, TRANE         PAT EGAN, THERMOCORE       JOHN GUEQUIERRE, HI-TECH HOUSING         ANDY SWITZER, ARKOR       SUSAN BENEDICT, DESIGN ALTERNATIVES         RYAN JUSTAK, SCHOLER CORPORATION       RYAN JUSTAK, SCHOLER CORPORATION
REFERENCE KEYNOTES	-C MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON.GOV
- SHEET KEYNOTES	B III/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% AS-BUILT DRAWINGS 08/11/2011 ALL RIGHTS RESERVED
	SHEET TITLE FIRST FLOOR PLAN



7			
GENERAL SHEET NOTES			
	-€		
	TEAM PURDUE HOME		
	TEAM NAME: TEAM PURDUE		
	ADDRESS: PURDUE UNIVERSITY		
	CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME		
	-D CONSULTANTS		
	KEVIN MERCER, TRANE		
	JOHN GUEQUIERRE, HI-TECH HOUSING		
	ANDY SWITZER, ARKOR		
	SUSAN BENEDICT, DESIGN ALTERNATIVES		
REFERENCE KEYNOTES	MARK BEALS, J & T SYSTEMS, INC.		
	PAT WILSON, RYAN FIRE PROTECTION		
	-C CLIENT		
	U.S. DEPARTMENT OF ENERGY		
	SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV		
	U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON		
$\langle \cdot  angle$ SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS		
	03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS		
	08/11/2011 100% AS-BUILT DRAWINGS		
	B		
	MARK DATE DESCRIPTION		
	LOT NUMBER: 201		
	CHECKED BY: LIZ HOWARD CHECKED BY: MATT HEBDON		
	COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED		
	SHEET TITLE		
	ROOF PLAN		
	-A		
	A-112		



<b>GENERAL SHEET NOTES</b>	
	TEAM NAME:       TEAM PURDUE         ADDRESS:       PURDUE UNIVERSITY         KNOY HALL, ROOM 107       WEST LAFAYETTE, IN 47907         CONTACT:       SOLARHOUSE@PURDUE.EDU         WWW.PURDUE.EDU/INHOME       WWW.PURDUE.EDU/INHOME
	D CONSULTANTS KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES
REFERENCE KEVNOTES	RYAN JUSTAK, SCHOLER CORPORATION
DIV 26 - ELECTRICAL 26 24 00 2.2 PV JUNCTION BOX (SOLADECK 0786)	MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION
DIV 48 - SOLAR ENERGY COLLECTORS 48 14 13 2.1 SUNPOWER SPR-238 PV PANEL 48 14 13 2.2 CENTRAL INVERTER	-C CLIENT
	U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011
	U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON
SHEET KEYNOTES     SHEET KEYNOTES     CENTRAL INVERTER	11/23/2010         80% DESIGN DRAWINGS           01/25/2011         80% W/ DOE REVISIONS           03/22/2011         100% CONSTR. DRAWINGS           05/03/2011         100% W/ DOE REVISIONS           08/11/2011         100% AS-BUILT DRAWINGS
	MARK DATE DESCRIPTION
	LOT NUMBER: 201 DRAWN BY: LIZ HOWARD
	CHECKED BY:     MATT HEBDON       COPYRIGHT:     PURDUE UNIVERSITY 2011       ALL RIGHTS RESERVED
	SHEET TITLE SOLAR ROOF LAYOUT
	A-113





GENERAL SHEET NOT	<b>TES</b>			
<ol> <li>WALL AND PARTITION DIMENSIONS SHOW PLANS ARE NOMINAL DIMENSIONS SHOW PLANS ARE NOMINAL DIMENSIONS ARE S FINISHED FACE OF WALL</li> <li>WALL AND PARTITION DIMENSIONS ARE S FINISHED FACE OF WALL</li> <li>DIMENSIONS FOR AREAS DRAWN AT A LA SCALE ARE SHOWN ON ENLARGED SCALL</li> <li>FOR ROOM FINISH SCHEDULE, SEE I-601</li> <li>USE OF SPECIFICATION SECTION NUMBER KEYNOTES OR ELSEWHERE ON THE DRAY MADE SOLELY FOR CONVENIENCE IN COORDINATION AND WITHOUT LIMITATIO CONTRACTOR IS RESPONSIBLE FOR PRO THE WORK IN ACCORDANCE TO THE CON DOCUMENTS IN THE ENTIRETY.</li> </ol>	/N ON SHOWN TO RGER E PLANS. RS WITHIN WINGS IS N. THE VIDING TRACT		0	TEAM PURDUE
<ol> <li>SEE ELECTRICAL LIGHTING PLANS FOR F SCHEDULES AND WIRING INFORMATION</li> <li>SEE INTERIOR ELEVATIONS FOR SOFFIT I AND LOCATIONS</li> </ol>	IXTURES HEIGHTS			IHOME
		TEAM NA	ME: S:	TEAM PURDUE PURDUE UNIVERSITY
				KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
		CONTAC	T:	SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	-D	CONSUL	TANTS	
		KEVIN ME	ERCER, TRAN	E )RF
		JOHN GU	IEQUIERRE, H	I-TECH HOUSING
		ANDY SW	ITZER, ARKO	R NGN ALTERNATIVES
	EC	RYAN JU	STAK, SCHOLE	ER CORPORATION
REFERENCE KETNUI	<u></u>	MARK BE	ALS, J & T SYS	STEMS, INC.
• SHEET KEYNOT	-c ES		U.S. DEPAR SOLAR D WWW.SOLA U.S. DEPAF SOLA 11/23/2010 01/25/2011 03/22/2011 03/22/2011 08/11/2011	TMENT OF ENERGY DECATHLON 2011 ARDECATHLON.GOV RTMENT OF ENERGY R DECATHLON.GOV 80% DESIGN DRAWINGS 80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
	-В			
		MARK	DATE	DESCRIPTION
		LOT NUM	IBER:	201
			BY:	LIZ HOWARD
		COPYRIG	GHT:	PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	-A	SHEET TITLE FIRST FLOOR REFLECTED CEILING PLAN		
			A-	121


CENEDAL SHEET NOTES	
INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION	
PURPOSES ONLY	
	IEAM PURDUE
	ADDRESS: PURDUE UNIVERSITY
	KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
	CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	KEVIN MERCER, TRANE
	PAT EGAN, THERMOCORE
	ANDY SWITZER, ARKOR
	RYAN JUSTAK, SCHOLER CORPORATION
REFERENCE KETNUIES	MARK BEALS, J & T SYSTEMS, INC.
DIV 06 - WOOD, PLASTICS, AND COMPOSITES 06 12 00 STRUCTURAL INSULATED PANELS	PAT WILSON, RYAN FIRE PROTECTION
06 17 53 SHOP-FABRICATED WOOD TRUSSES	
07 71 23 MANUFACTURED GUTTERS AND	
DIV 08 - OPENINGS	
08 36 18 RESIDENTIAL GARAGE DOORS	
DIV 48 - SOLAR ENERGY COLLECTORS 48 14 13 2.1 SUNPOWER SPR-238 PV PANELS	-C
	SOLAR DECATHLON 2011
	WWW.SOLARDECATHLON.GOV
	SOLAR DECATHLON
$\langle \overline{\ }  angle$ SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS
	01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS
$\begin{pmatrix} 1 \\ \end{pmatrix}$ PLANTER BOXES	05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
2 1050 GALLON WASTE TANK	
$\left< \frac{3}{3} \right>$ 57 GALLON RAIN BARREL	
	P
	MARK DATE DESCRIPTION
	DRAWN BY: LIZ HOWARD
	CHECKED BY: MATT HEBDON
	COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	SHEET TITLE
	L EATERIUR ELEVATIONS
	-A
7	



GENERAL SHEET	NOTES				
1. ALL PORTABLE TANKS, PUMPS, AN INTENDED TO MIMIC PUBLIC UTILI	ID VALVES				
AND SEWAGE ARE TEMPORARY FO	OR COMPETITION				
PURPOSES ONLY					
	-E		and the second s		
				TELLI DUDD	110
				IEAM PURD	UE
				11011	-
			$I_{I}$		
		<u>.</u>			
	<b> </b>				
		TEAM NA	ME:	TEA	M PURDUE
			2.	ם וחסו וב ו	
		ADDRES	J.	KNOY HALL	, ROOM 107
				WEST LAFAYET	E, IN 47907
		CONTAC	Г:	SOLARHOUSE@PL	IRDUE.EDU
				WWW.PURDUE.EI	DU/INHOME
	-D	CONSUL	TANTS		
			RCFR TDAM	IF	
		PAT EGA	N, IHERMOC	UKE	
		JOHN GU		H-TECH HOUSING	
		ANDY SW	ITZER, ARKO	R	
		SUSAN B	ENEDICT. DE	SIGN AI TERNATIVE	s
					-
REFERENCE KEYN	NOTES	KTAN JU	51AK, 50H0		
		MARK BE	ALS, J & T S	STEMS, INC.	
DIV 06 - WOOD, PLASTICS, AND COMPOSIT	ES PANELS	PAT WILS	SON, RYAN F	RE PROTECTION	
06 17 53 SHOP-FABRICATED WOOD	TRUSSES				
07 71 23 MANUFACTURED GUTTER	S AND				
DOWNSPOUTS					
48 14 13 2.1 SUNPOWER SPR-238 PV PA	ANELS				
	-C				
		CLIENT			
			U.S. DEPA	RTMENT OF ENERG	(
			SOLAR	DECATHLON 2011	
			WWW.SOL	ARDECATHLON.GO	/
			U.S. DEPA	RTMENT OF ENERG	iY
			SOLA	R DECATI	HLON
		~			
$\langle \cdot \rangle$ Sheet keyn	IOTES		11/23/2010	80% DESIGN DR	AWINGS
			01/25/2011	80% W/ DOE RE	VISIONS
			03/22/2011	100% CONSTR.	JRAWINGS VISIONS
AILING RAILING			08/11/2011	100% AS-BUILT	DRAWINGS
$\langle 2 \rangle$ 1050 GALLON WASTE TANK					
3 ORGANIZER SUPPLIED UTILITY ME	IER				
$\overline{4}$ PLANTER BOXES					
$\rightarrow$					
5 WATER DELIVERY ACCESS	D				
6 HVAC HEAT PUMP UNIT					
		MARK	DATE	DESCRI	ΤΙΟΝ
			DATE	DECON	non
		LOT NUM	BER:	201	
	<b>b</b>				
		CHECKEI	<i>л</i> ы.		-
		COPYRIC	HT:	ALL RIGHTS RES	SITY 2011 FRVED
		0			
		SHEELL	ILE		
		╏┌╷╷┯	ירוחם		
				K ELEVAI	
	_Α				
		Í			
		<b> </b>			
				$\frown$	
		Í	Δ	ごノコン	
		Í			



7	
<b>GENERAL SHEET NOTES</b>	
1. ALL PORTABLE TANKS, PUMPS, AND VALVES INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY	
	TEAM NAME: TEAM PURDUE ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	CONSULTANTS
	JOHN GUEQUIERRE, HI-TECH HOUSING
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
<b>REFERENCE KEYNOTES</b>	RYAN JUSTAK, SCHOLER CORPORATION
	PAT WILSON, RYAN FIRE PROTECTION
	U.S. DEPARTMENT OF ENERGY
	SOLAR DECATHLON 2011
	WWW.SOLARDECATHLON.GOV
	U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON
SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS
	01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS
<ul> <li>PROPOSED DATA LOGGER POSITION 1: LOCATED ABOVE REFRIGERATOR</li> <li>PROPOSED DATA LOGGER POSITION 2: LOCATED ON TOP OF COUNTER</li> </ul>	05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
	B
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: LIZ HOWARD
	CHECKED BY: CHECKER
	ALL RIGHTS RESERVED
	SHEET TITLE
	INTERIOR ELEVATIONS
	A-213



7		-		
<b>GENERAL SHEET NOTES</b> 1.       ALL PORTABLE TANKS, PUMPS, AND VALVES INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY	Щ.			TEAM PURDUE HOME
	-D	TEAM NA ADDRESS CONTAC CONSUL KEVIN ME PAT EGA JOHN GU ANDY SW SUSAN B RYAN JUS	ME: S: T: TANTS ERCER, TRANE RCER, TRANE EQUIERRE, HI (ITZER, ARKOF ENEDICT, DES STAK, SCHOLE	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME E DRE TECH HOUSING CIGN ALTERNATIVES ER CORPORATION
DIV 06 - WOODS, PLASTICS, AND COMPOSITS 06 12 00       STRUCTURAL INSULATED PANELS         DIV 12 - FURNISHINGS 12 35 00       RESIDENTIAL CASEWORK         DIV 48 - SOLAR ENERGY COLLECTORS 48 14 13 2.1       SUNPOWER SPR-238 PV PANELS	- Ċ	MARK BE PAT WILS CLIENT	ALS, J & T SYS SON, RYAN FIR U.S. DEPAR SOLAR D WWW.SOLA	STEMS, INC. THE PROTECTION TMENT OF ENERGY ECATHLON 2011 RDECATHLON.GOV TMENT OF ENERGY RDECATHLON.GOV
• SHEET KEYNOTES	B	MARK LOT NUM DRAWN E CHECKEI	11/23/2010 01/25/2011 03/22/2011 05/03/2011 08/11/2011 DATE BER: 3Y: D BY: HT:	80% DESIGN DRAWINGS         80% W/ DOE REVISIONS         100% CONSTR. DRAWINGS         100% W/ DOE REVISIONS         100% AS-BUILT DRAWINGS
	—A	SHEET T	ERIOR	elevations



GENERAL SHEET NOTES	5
1. DUE TO COORDINATION WITH FRAMING AND MECHANICAL INSTALLATIONS FINAL DIMENSION	
MAY VARY SLIGHTLY FROM DIMENSIONS AS SHO ON CONSTRUCTION DRAWINGS.	HOWN
2. SPECIFIC CABINET LAYOUT TO BE DESIGNED B' CABINET SUPPLIER. CABINET SUPPLIERS DESIG	BY IGN
TAKES PRECEDENCE OVER ILLUSTRATIONS SH HERE.	HOWN
<ol> <li>ALL ANGLES ARE 45 DEGREES UNLESS OTHERV NOTED.</li> </ol>	RWISE
4. CENTER ALL INTERIOR OPENINGS WHERE APPLICABLE.	TEAM DUDDUE
	TEAM PURDUE
	ADDRESS: PURDUE UNIVERSITY
	KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
	CONTACT: SOLARHOUSE@PURDUE.EDU
	WWW.PURDUE.EDU/INHOME
	CONSULTANTS
	KEVIN MERCER, TRANE
	JOHN GUEQUIERRE. HI-TECH HOUSING
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
REFERENCE KEYNOTES	RYAN JUSTAK, SCHOLER CORPORATION
	MARK BEALS, J & T SYSTEMS, INC.
DIV 06 - WOOD, PLASTICS, AND COMPOSITES 06 22 00 MILLWORK	PAT WILSON, KTANTIKE PROTECTION
DIV 09 - FINISHES	
09 91 00 PAINTING	
	-C CLIENT
	U.S. DEPARTMENT OF ENERGY
	WWW SOLAR DECATHLON 2011
	U.S. DEPARTMENT OF ENERGY
	SOLAR DECATHLON
$\langle \cdot \rangle$ SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS
	03/22/2011 100% CONSTR. DRAWINGS
	08/11/2011 100% AS-BUILT DRAWINGS
	R
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	CHECKED BY: MATT HEBDON
	COPYRIGHT: PURDUE UNIVERSITY 2011
	ALL RIGHTS RESERVED
	SHEET TITLE
	PUBLIC CORE
	_
	$   \Delta_1 \cap 1$



7	
<b>GENERAL SHEET NOTES</b>	
1. DUE TO COORDINATION WITH FRAMING AND	
MECHANICAL INSTALLATIONS, FINAL DIMENSIONS MAY VARY SLIGHTLY FROM DIMENSIONS AS SHOWN	
2. SPECIFIC CABINET LAYOUT TO BE DESIGNED BY	
TAKES PRECEDENCE OVER ILLUSTRATIONS SHOWN	
3. ALL ANGLES ARE 45 DEGREES UNLESS OTHERWISE	
<ol> <li>CENTER ALL INTERIOR OPENINGS WHERE APPLICABLE.</li> </ol>	
	TEAM PURDUE
	TE 444 PURDUE
	ADDRESS [·] PURDUE UNIVERSITY
	KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
	CONTACT: SOLARHOUSE@PURDUE.EDU
	-D
	CONSULTANTS
	PAT EGAN, THERMOCORE
	JOHN GUEQUIERRE, HI-TECH HOUSING
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
<b>REFERENCE KEYNOTES</b>	MARK BEALS, J & T SYSTEMS, INC.
DIV 06 - WOOD, PLASTICS, AND COMPOSITES 06 61 16 SOLID SURFACING FABRICATIONS	PAT WILSON, RYAN FIRE PROTECTION
DIV 08 - OPENINGS	
08 51 13 ALUMINUM WINDOWS	
DIV 09 - FINISHES 09 91 00 PAINTING	
12 35 00 RESIDENTIAL CASEWORK	
DIV 22 - PLUMBING 22 41 00 RESIDENTIAL PLUMBING FIXTURES	-C CLIENT
DIV 23 - HEATING, VENTILATING, AND AIR-CONDITIONING	U.S. DEPARTMENT OF ENERGY
(HVAC) 23 42 00 GAS-PHASE AIR FILTRATION	SOLAR DECATHLON 2011
	WWW.SOLARDECATHLON.GOV
	U.S. DEPARTMENT OF ENERGY
	SOLAR DECATHLON
	-
$\langle \cdot  angle$ SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS
	03/22/2011 100% CONSTR. DRAWINGS
	08/11/2011 100% AS-BUILT DRAWINGS
	B
	WARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: Author
	CHECKED BY: MATT HEBDON
	COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	SHEET TITLE
	-A
	Δ_/∩?



	7	•			
	<b>GENERAL SHEET NOTES</b>				
		ΞE			TEAM PURDUE
			10		Πυμε
				ME	
			ADDRES	S:	PURDUE UNIVERSITY KNOY HALL, ROOM 107
			CONTAC	Г:	WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU
					vv vv vv.rukdue.edu/INHOME/
		-D	CONSUL	TANTS	
					E
			JOHN GU		-TECH HOUSING
			ANDY SW SUSAN B	ENEDICT, DES	K SIGN ALTERNATIVES
	<b>REFERENCE KEYNOTES</b>		RYAN JU	STAK, SCHOLE ALS, J & T SYS	ER CORPORATION
			PAT WILS	SON, RYAN FIR	E PROTECTION
		-C			
			CLIENT	U.S. DEPAR	TMENT OF ENERGY
				SOLAR D WWW.SOLA	ECATHLON 2011 RDECATHLON.GOV
				λ	
			X	U.S. DEPAR	R DECATHLON
	- > SHEET KEVNOTES	┝	/	11/23/2010	80% DESIGN DRAWINGS
				01/25/2011 03/22/2011	80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS
				05/03/2011 08/11/2011	100% W/ DOE REVISIONS 100% AS BUILT DRAWINGS
	LRV				
			MARK	DATE	DESCRIPTION
			LOT NUM	BER:	201
		┝	DRAWN E	BY: D BY:	KATLYN TIMMONS JORDAN WALLPE
			COPYRIC	GHT:	PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
			SHEET T		
		^	M		
		A		SE	
				Δ	1U3
				/~\-	TUJ
_	-				



<b>GENERAL SHEET NOTES</b>	
1. DUE TO COORDINATION WITH FRAMING AND	
MECHANICAL INSTALLATIONS, FINAL DIMENSIONS MAY VARY SLIGHTLY FROM DIMENSIONS AS SHOWN	
ON CONSTRUCTION DRAWINGS. 2. SPECIFIC CABINET LAYOUT TO BE DESIGNED BY	
CABINET SUPPLIER. CABINET SUPPLIERS DESIGN TAKES PRECEDENCE OVER ILLUSTRATIONS SHOWN	
HERE. 3. ALL ANGLES ARE 45 DEGREES UNLESS OTHERWISE	
NOTED. 4. CENTER ALL INTERIOR OPENINGS WHERE	-E
APPLICABLE.	TEAM PURDUE
	ADDRESS: PORDOE UNIVERSITY KNOY HALL, ROOM 107
	CONTACT: SOLARHOUSE@PURDUE.EDU
	WWW.PURDUE.EDU/INHOME
	-D CONSULTANTS
	KEVIN MERCER, TRANE
	PAT EGAN, THERMOCORE
	JOHN GUEQUIERRE, HI-TECH HOUSING
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
<b>REFERENCE KEYNOTES</b>	MARK BEALS 1& T SYSTEMS INC
	PAT WILSON, RYAN FIRE PROTECTION
DIV 06 - WOODS, PLASTICS, AND COMPOSITS 06 22 00 MILLWORK	
DIV 09 - FINISHES	
09 91 00 BASEBOARD	
	-C CLIENT
	U.S. DEPARTMENT OF ENERGY
	SOLAR DECATHLON 2011
	WWW.SOLARDECATHLON.GOV
	SOLAR DECATHLON
	11/23/2010 80% DESIGN DRAWINGS
	01/25/2011 80% W/ DOE REVISIONS
	05/03/2011 100% W/ DOE REVISIONS
	08/11/2011 100% AS-BUILT DRAWINGS
	-В
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: LIZ HOWARD
	ALL RIGHTS RESERVED
	SHEET TITLE
	PRIVATE CORE
	-A
	A-4()4





	<b>GENERAL SHEET NOTES</b>				
	<ol> <li>DUE TO COORDINATION WITH FRAMING AND MECHANICAL INSTALLATIONS, FINAL DIMENSIONS MAY VARY SLIGHTLY FROM DIMENSIONS AS SHOWN ON CONSTRUCTION DRAWINGS.</li> <li>SPECIFIC CABINET LAYOUT TO BE DESIGNED BY CABINET SUPPLIER. CABINET SUPPLIERS DESIGN TAKES PRECEDENCE OVER ILLUSTRATIONS SHOWN HERE.</li> <li>ALL ANGLES ARE 45 DEGREES UNLESS OTHERWISE NOTED.</li> <li>CENTER ALL INTERIOR OPENINGS WHERE APPLICABLE.</li> <li>GARAGE DOOR OPENING IS NOT PERMITTED WITHIN 4' OF THE BUILDING CORNER UNLESS BUILDING HAS "CONTINUOUSLY SHEATHED WALLS" AS PER IRC R602.10.5 AND COMPLIES WITH INDIANA AMENDMENTS EXCEPTION TO IRC R602.10.5 AND FIGURE IRC R602.10.5(2) WHICH INCLUDES SPECIAL INSTRUCTIONS PERTAINING TO THE GARAGE DOOR HEADER, THE WALL SHEATHING, ANCHOR BOLTS AND STRAPS ON BOTH SIDES OF THE GARAGE DOOR.</li> </ol>	-E			TEAM PURDUE HOME
		-D	TEAM NAI ADDRESS CONTACT CONSULT KEVIN ME PAT EGAN JOHN GU ANDY SW SUSAN BI	ME: S: TANTS RCER, TRANE RCER, TRANE RQUIERRE, HI- UTZER, ARKOR ENEDICT, DESI	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME RE TECH HOUSING
	<b>REFERENCE KEYNOTES</b>			STAK, SCHOLE	
		- C	MARK BE	U.S. DEPART SOLAR DE WWW.SOLAF	TEMS, INC. E PROTECTION MENT OF ENERGY ECATHLON 2011 RDECATHLON.GOV
	-> SHEET KEYNOTES			11/23/2010	80% DESIGN DRAWINGS 80% W/ DOE REVISIONS
	1DECKING FOR TOUR ROUTE236" HEIGHT WOOD RAILING31050 GALLON WATER SUPPLY TANK4COMBINER/ BREAKER BOX5WATER DELIVERY ACCESS	—В		03/22/2011 05/03/2011 08/11/2011	100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
			MARK LOT NUM DRAWN B CHECKEE COPYRIG	DATE BER: BY: D BY: HT:	DESCRIPTION 201 APRIL LUTHERAN-GARRETT MATT HEBDON PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
		-A	SHEET TI	GARA	GE CORE
				A-	405
Ĩ	<u>'</u>				











	i i				
	<b>GENERAL SHEET NOTES</b>				
	1. DUE TO COORDINATION WITH FRAMING AND				
	MECHANICAL INSTALLATIONS, FINAL DIMENSIONS MAY VARY SLIGHTLY FROM DIMENSIONS AS SHOWN				
	ON CONSTRUCTION DRAWINGS. 2. SPECIFIC CABINET LAYOUT TO BE DESIGNED BY				
	CABINET SUPPLIER. CABINET SUPPLIERS DESIGN TAKES PRECEDENCE OVER ILLUSTRATIONS SHOWN				
	HERE.				
	NOTED.	-E	1	10	<u> </u>
	4. CENTER ALL INTERIOR OPENINGS WHERE APPLICABLE.				
					TEAM PUKDUE
			20		
			TEAM NA	ME:	TEAM PURDUE
			ADDRESS	S:	PURDUE UNIVERSITY KNOY HALL, ROOM 107
					WEST LAFAYETTE, IN 47907
			CONTAC	T: :	SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
		-D	CONSUL	TANTS	
			KEVIN ME	ERCER, TRANE	
			PAT EGA	N, THERMOCO	RE
			JOHN GU	EQUIERRE, HI	-TECH HOUSING
			ANDY SW	/ITZER, ARKOF	R
			SUSAN B	ENEDICT, DES	IGN ALTERNATIVES
	DEEEDENCE KEVNOTES		RYAN JU	STAK, SCHOLE	R CORPORATION
	REFERENCE RETNOTES		MARK BE	ALS, J & T SYS	STEMS, INC.
			PAT WILS	SON, RYAN FIR	E PROTECTION
					/
		-C		~	
			CLIENT		
				SOLAR D	FCATHLON 2011
				WWW.SOLA	RDECATHLON.GOV
					TMENT OF ENERGY
				SOLAI	<b>R DECATHLON</b>
		Γ		11/02/2010	
	SHEET KEYNOLES			01/23/2010 01/25/2011	80% DESIGN DRAWINGS 80% W/ DOE REVISIONS
				03/22/2011	100% CONSTR. DRAWINGS
				05/03/2011	100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
		—В			
			MARK	DATE	DESCRIPTION
				I	
				RED.	201
				3Y:	
			CHECKEI	D BY:	CHECKER
			COPYRIG	HT:	PURDUE UNIVERSITY 2011
					ALL RIGHTS RESERVED
			SHEFTT	ITLE	
			(	CABINE	: F DETAILS
		-A		_	
				~	
				Δ_	502
-					



	DOOR	SCHEDUL	E						
	FIRE				HADWARE				
L	RATING	GLAZING	DESCRIPTION	FINISH	MANUFACTURER	MODEL	FINISH	NOTES	
D			PASSAGE	STAINED	SCHLAGE	F60 CAM 619	SATIN NICKEL	FRONT DOOR	
ARE SMOOTH	1		POCKET	WHITE PAINT	SCHLAGE		SATIN NICKEL		
ARE SMOOTH			PASSAGE	WHITE PAINT	SCHLAGE	F40 CAM 619	SATIN NICKEL	BATH & BED	
	20 MIN		PASSAGE	WHITE PAINT	SCHLAGE	BE365 CAM 619, FA51 AND 619	SATIN NICKEL	GARAGE INTO HOUSE	
F LOUVER			BIFOLD	WHITE PAINT	SCHLAGE	F10 ACC 619	SATIN NICKEL	BIFOLD	
ARE SMOOTH			PASSAGE	WHITE PAINT	SCHLAGE	F10 ACC 619	SATIN NICKEL	LINEN IN HALLWAY	
ARE SMOOTH			PASSAGE	WHITE PAINT	SCHLAGE	F40 ACC 619	SATIN NICKEL	BATH & BED	
)-LE		LOW-E	PASSAGE	WHITE PAINT	SCHLAGE	F51 ACC 619, JD60619	SATIN NICKEL	107B	
N MDF			BIFOLD	WHITE PAINT	SCHLAGE	F10 ACC 619	SATIN NICKEL	BIFOLD	
ARE SMOOTH			PASSAGE	WHITE PAINT	SCHLAGE	F40 ACC 619	SATIN NICKEL	BATH & BED	
)-LE		LOW-E	PASSAGE	WHITE PAINT	SCHLAGE	F51 ACC 619, JD 60619	SATIN NICKEL	107B	
N MDF			BIFOLD	WHITE PAINT	SCHLAGE	F51 ACC 619	SATIN NICKEL	BIFOLD	
ARE SMOOTH			POCKET						
			GARAGE	WHITE PAINT	SCHLAGE		SATIN NICKEL		
)-LE			PASSAGE	WHITE PAINT	SCHLAGE	F51 ACC 619,JD60619	SATIN NICKEL	107B	

	7				
	<ol> <li>EGRESS WINDOW NOTE: VERIFY THAT THE WINDOW MANUFACTURER WINDOW MEETS THE IRC 2009 AND IRC 2000 INDIANA AMENDMENTS.</li> <li>SECTION R-310.1.1 "MINIMUM NET CLEAR OPENING OF 5.7 SF"</li> <li>SECTION R-310.1.2 "MINIMUM NET CLEAR OPENING HEIGHT 24"</li> <li>SECTION R-310.1.3 "MINIMUM NET CLEAR OPENING WIDTH 22"</li> </ol>	-E			TEAM PURDUE HOME
*	REFERENCE KEYNOTES	-D	TEAM NA ADDRESS CONTAC CONSUL KEVIN ME PAT EGA JOHN GU ANDY SW SUSAN B RYAN JUS	ME: S: T: TANTS ERCER, TRANE N, THERMOCO EQUIERRE, HI /ITZER, ARKOF ENEDICT, DES STAK, SCHOLE	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME E RE TECH HOUSING R GIGN ALTERNATIVES ER CORPORATION STEMS. INC.
	DIV 08 - OPENINGS 08 10 00 DOORS AND FRAMES 08 51 13 ALUMINUM WINDOWS	-c		U.S. DEPART SOLAR D WWW.SOLA	TMENT OF ENERGY ECATHLON 2011 RDECATHLON.GOV
	• SHEET KEYNOTES	-B	MARK LOT NUM DRAWN E CHECKEI	11/23/2010 01/25/2011 03/22/2011 05/03/2011 08/11/2011 BBR: DATE	80% DESIGN DRAWINGS         80% W/ DOE REVISIONS         100% CONSTR. DRAWINGS         100% W/ DOE REVISIONS         100% AS-BUILT DRAWINGS
		-A	SHEET T	SCH	EDULES

	1	2	3
E-			
_			
D-			
C–			
_			
B-			
_			
A–			
M			
24:01 /			
01110:			
8/13/2	1	2	3

4		5		6	7	
					CENEDAL CHEET NOTES	
					GENERAL SHEET NOTES	
MANUFACTURER	MODEL		VOI T/AMP			
GE	PFWS4600L	FRONT LOAD CLOTHES WASHER	120V/12A			
GE	PFDS450EL	FRONT LOAD CLOTHES DRYER	240V/12.5A			
GE	GLD5768V/SS		240V/40A			
GE	GTH18ISXSS	REFRIGERATOR	120V/15A			TEAM PURDUE
GE	IM4A	ICEMAKER	120V			
GE	PHP900SMSS	COOKTOP	240V/40A			
GE	PSA1201RSS	MICROWAVE/OVEN COMBO	120/15A			
						TEAM NAME: TEAM PURDUE
						ADDRESS: PURDUE UNIVERSITY
						WEST LAFAYETTE, IN 47907
						CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
						-D
						PAT EGAN THERMOCORE
						JOHN GUEQUIERRE, HI-TECH HOUSING
						ANDY SWITZER, ARKOR
						SUSAN BENEDICT, DESIGN ALTERNATIVES
					REFERENCE KEYNOTES	RYAN JUSTAK, SCHOLER CORPORATION
						MARK BEALS, J & T SYSTEMS, INC.
					DIV 11 - EQUIPMENT 11 31 00 RESIDENTIAL APPLIANCES	
						U.S. DEPARTMENT OF ENERGY
						SOLAR DECATHLON 2011
						WWW.SOLARDECATHLON.GOV
						U.S. DEPARTMENT OF ENERGY
						SOLAR DECATHLON
					$\langle$ - $ angle$ SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS
						03/22/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS
						05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
						-В
						MARK DATE DESCRIPTION
						DRAWN BY: APRIL LUTHFRN-GARRETT
						CHECKED BY: MATT HEBDON
						COPYRIGHT: PURDUE UNIVERSITY 2011
						ALL RIGHTS RESERVED
						SHEET TITLE
						SCHEDULES
						-A
						A-h() $2$
T			-	1		
4		5	I	6	7	



GE	NERAL SHEET NOT	ES			
					TEAM PURDUE HOME
			TEAM NA ADDRESS CONTACT	ME: S: T:	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
			D CONSUL ⁻ KEVIN ME PAT EGAI JOHN GU ANDY SW SUSAN B	TANTS ERCER, TRANE N, THERMOCC EQUIERRE, HI 'ITZER, ARKOF ENEDICT, DES	E DRE I-TECH HOUSING R SIGN ALTERNATIVES
RE	FERENCE KEYNOTE	S	RYAN JUS MARK BE PAT WILS	STAK, SCHOLE ALS, J & T SYS SON, RYAN FIR	ER CORPORATION STEMS, INC. RE PROTECTION
		1	C CLIENT	U.S. DEPAR SOLAR D WWW.SOLA	TMENT OF ENERGY DECATHLON 2011 ARDECATHLON.GOV
		s		U.S. DEPAR SOLA	RTMENT OF ENERGY R DECATHLON 80% DESIGN DRAWINGS
		.5		01/25/2011 03/22/2011 05/03/2011 08/11/2011	80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
		-			
			LOT NUM DRAWN E CHECKEE	DATE BER: BY: DBY:	201 APRIL LUTHERN MATT HEBDON
			COPYRIG SHEET TI	HT: TLE	PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
		-,	^	ARCHI ⁻ RENI	TECTURAL DERINGS
	<u>1</u>			A-	901



	<i>I</i>	
	GENERAL SHEET NOTES	-E
		TEAM NAME: TEAM NAME: DDRESS: PURDUE UNIVERSITY
		-D CONSULTANTS
		KEVIN MERCER, TRANEPAT EGAN, THERMOCOREJOHN GUEQUIERRE, HI-TECH HOUSINGANDY SWITZER, ARKORSUSAN BENEDICT, DESIGN ALTERNATIVES
	REFERENCE KEYNOTES	RYAN JUSTAK, SCHOLER CORPORATION
] () () () () () () () () () () () () ()	DIV 06 - WOOD, PLASTICS, AND COMPOSITES 06 22 00 MILLWORK 06 61 16 SOLID SURFACING FABRICATIONS DIV 08 - OPENINGS 08 51 13 ALUMINUM WINDOWS DIV 09 - FINISHES 09 30 00 TILING 09 91 00 PAINTING DIV 12 - FURNISHINGS 12 35 00 RESIDENTIAL CASEWORK	MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION
2	DIV 26 - ELECTRICAL 26 51 00 INTERIOR LIGHTING	CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON
	- SHEET KEYNOTES	11/23/2010         80% DESIGN DRAWINGS           01/25/2011         80% W/ DOE REVISIONS           03/22/2011         100% CONSTR. DRAWINGS           05/03/2011         100% W/ DOE REVISIONS           08/11/2011         100% AS-BUILT DRAWINGS
		MARK DATE DESCRIPTION
		DRAWN BY: LIZ HOWARD CHECKED BY: SARAH MILLER COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
		SHEET TITLE INTERIOR DESIGN PLAN
	1	I-101



<b>GENERAL SHEET NOTES</b>				
	щ			TEAM PURDUE HOME
		TEAM NA ADDRESS CONTAC	ME: 5: T: 5	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	-D	CONSUL [®] KEVIN ME PAT EGA JOHN GU ANDY SW	TANTS ERCER, TRANE N, THERMOCO EQUIERRE, HI /ITZER, ARKOF	RE TECH HOUSING
REFERENCE KEYNOTES		RYAN JU	STAK, SCHOLE	R CORPORATION
- SHEET KEYNOTES	-C	PAT WILS	U.S. DEPART SOLAR DI WWW.SOLA U.S. DEPART SOLAR DI WWW.SOLA 11/23/2010 01/25/2011 03/22/2011 03/22/2011 03/22/2011 03/22/11	E PROTECTION  TMENT OF ENERGY ECATHLON 2011 RDECATHLON.GOV  TMENT OF ENERGY CDECATHLON.GOV  B0% DESIGN DRAWINGS 80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
	—В —А	MARK LOT NUM DRAWN E CHECKEI COPYRIG	DATE BER: BY: DBY: BHT: TLE INT FURN	201 LIZ HOWARD SARAH MILLER PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
			-′	102

	1												
							ROO	M FINISH SO	CHEDULE				
		ROOM NO		FLOOR	BASE WB/PT6	NORTH	SOUTH PT2	EAST N/A	WEST PT2	CEILING PT1/PY1		COMMENTS	Area
		101		WD1 WD1	WB/PT6	PT2 PT2/GT1	PT2 PT2	PT3 PT2	N/A PT2	PT1/PY1 PT1	VAULTED		59 SF 134 SF
		102	BATHROOM	CT1	WB/PT6	PT5	PT5/GT2/CT2	PT5/GT2/CT2	PT5/GT2/CT2	РТ1	8'-0", THEN VAULTED		77 SF
		104	MECHANICAL	WD1	WB/PT6	PT2 PT2	PT2 PT2	PT2 PT2	PT2 PT2	PT1 PT1	VAULTED		43 SF 19 SF
-		106	HALLWAY 1 OWNERS' SUITE	WD1 WD1	WB/PT6 WB/PT6	PT2 PT3	PT2 PT3	P12 PT3	PT2 PT3	PT1 PT1	VAULTED		59 SF 142 SF
		108 109	BEDROOM 2 GARAGE	WD1	WB/PT6	PT4	PT4	PT4	PT4	PT1	VAULTED	UNFINISHED	119 SF 266 SF
		110	HALLWAY 2	WD1	WB/PT6	PT2	PT2	PT2	PT2	PT1	8'-0"		19 SF
											COUNTER	COUNTER TOP SCHEDULE	
												MANF: LG HAUSYS STYLE: HI-MACS EDEN PLUS COLOR: PECAN EINISH: G515P	
)—											C2	MANF: LG HAUSYS STYLE: HI-MACS EDEN PLUS COLOR: BIRCH BARCH FINISH: G514R	
												WALL TILE SCHEDULE	
											GLASS TILI	ES	
											MARK	DESCRIPTION	
											GT1	MANF: AMERICAN OLEAN STYLE: CANDALARA GLASS COLOR: ENGLISH IVY CL52 FINISH: GLOSSY	
											GT2	MANF: AMERICAN OLEAN STYLE: LEGACY GLASS	
												FINISH: GLOSSY	
<b>;</b> -												FINISH: GLOSSY	
;-												SEALANT SCHEDULE	
;											SEALANT	SEALANT SCHEDULE	
>-											SEALANT MARK	SEALANT SCHEDULE DESCRIPTION	
) -											SEALANT MARK	SEALANT SCHEDULE DESCRIPTION MANF: PORTER PAINTS STYLE: WATER-BASED POLYUR GLOSS: SATIN	ETHANE
											SEALANT MARK	SEALANT SCHEDULE DESCRIPTION MANF: PORTER PAINTS STYLE: WATER-BASED POLYUR GLOSS: SATIN	ETHANE
											SEALANT MARK	SEALANT SCHEDULE DESCRIPTION MANF: PORTER PAINTS STYLE: WATER-BASED POLYUR GLOSS: SATIN	ETHANE
											SEALANT MARK	SEALANT SCHEDULE DESCRIPTION MANF: PORTER PAINTS STYLE: WATER-BASED POLYUR GLOSS: SATIN	
											SEALANT MARK	SEALANT SCHEDULE DESCRIPTION MANF: PORTER PAINTS STYLE: WATER-BASED POLYUR GLOSS: SATIN	

	FLOOR COVERING SCHEDULE							
ENGINEERED WOOD PLANKS								
MARK	DESCRIPTION							
W1	MANF: SHAMROCK PLANK FLOORING STYLE: ENVIRONEERED HICKORY							
ENGINEER	D WOOD PLANKS							
MARK	DESCRIPTION							
CT1	MANF: AMERICAN OLEAN STYLE: POZZALO CERAMIC TILE COLOR: COASTAL BEIGE P292							
CT2	MANF: AMERICAN OLEAN STYLE: POZZALO CERAMIC TILE COLOR: COASTAL BEIGE P292							
CT3	MANF: STYLE SELECTIONS STYLE: JACKSON RIDGE COLOR: GROTTO BLACK S52							

	BASE BOARD SCHEDULE								
WOOD BASE									
MARK		DESCRIPTION							
WB-1	Man Pro Fini	NF: MOULDING AND MILLWORK DFILE: COLONIAL BASE #620 SH: PT1							

		PAINT SCHEDULE
PAINT		
MARK		DESCRIPTION
PT1	MAN STY COL FIN	NF: PORTER PAINTS /LE: PURE PERFORMANCE .OR: GYPSOM 520-1 SH: FLAT
PT2	MAN STY COL FIN	NF: PORTER PAINTS ILE: PURE PERFORMANCE JOR: PARRAFIN 521-2 SH: FLAT
PT3	MAN STY COL FINI	NF: PORTER PAINTS LE: PURE PERFORMANCE LOR: CANARY GRASS 311-3 SH: FLAT
PT4	MAN STY COL FINI	NF: PORTER PAINTS 'LE: PURE PERFORMANCE .OR: TOASTED ALMOND 414-3 SH: FLAT
PT5	MAN STY COL FINI	NF: PORTER PAINTS /LE: PURE PERFORMANCE LOR: PAROFFIN 521-2 SH: SEMI-GLOSS
PT6	MAN STY COL FIN	NF: PORTER PAINTS /LE: PURE PERFORMANCE .OR: GYPSOM 520-1 SH: SEMI-GLOSS

	0		
	FLOOR COVERING SCHEDULE	GENERAL SHEET NOTES	
ENGINEER	RED WOOD PLANKS		
MARK	DESCRIPTION		
W1	MANF: SHAMROCK PLANK FLOORING STYLE: ENVIRONEERED HICKORY		
ENGINEER	RED WOOD PLANKS		TEAM PURDUE
MARK	DESCRIPTION		
	MANF: AMERICAN OLEAN		
CT1	STYLE: POZZALO CERAMIC TILE COLOR: COASTAL BEIGE P292		
CT2	MANF: AMERICAN OLEAN STYLE: POZZALO CERAMIC TILE COLOR: COASTAL BEIGE P292		TEAM NAME: TEAM PURE ADDRESS: PURDUE UNIVERS KNOY HALL, ROOM
СТ3	MANF: STYLE SELECTIONS STYLE: JACKSON RIDGE COLOR: GROTTO BLACK S52		CONTACT: SOLARHOUSE@PURDUE.E WWW.PURDUE.EDU/INHO
	BASE BOARD SCHEDULE		CONSULTANTS KEVIN MERCER, TRANE
WOOD BA	SE		JOHN GUEQUIERRE, HI-TECH HOUSING
MARK	DESCRIPTION		ANDY SWITZER, ARKOR SUSAN BENEDICT. DESIGN AI TERNATIVES
	MANF: MOULDING AND MILLWORK PROFILE: COLONIAL BASE #620	REFERENCE KEVNOTES	RYAN JUSTAK, SCHOLER CORPORATION
	FINISH: PT1		PAT WILSON, RYAN FIRE PROTECTION
	PAINT SCHEDULE		
PAINT			
MARK	DESCRIPTION		
PT1	MANF: PORTER PAINTS STYLE: PURE PERFORMANCE COLOR: GYPSOM 520-1 FINISH: FLAT		C CLIENT U.S. DEPARTMENT OF ENERGY
PT2	MANF: PORTER PAINTS STYLE: PURE PERFORMANCE COLOR: PARRAFIN 521-2 FINISH: FLAT		U.S. DEPARTMENT OF ENERGY
PT3	MANF: PORTER PAINTS STYLE: PURE PERFORMANCE COLOR: CANARY GRASS 311-3 FINISH: FLAT	$\langle \overline{\ }  angle$ SHEET KEYNOTES	SOLAR DECATHLO
PT4	MANF: PORTER PAINTS STYLE: PURE PERFORMANCE COLOR: TOASTED ALMOND 414-3 FINISH: FLAT		03/22/2011 100% CONSTR. DRAWIN 05/03/2011 100% W/ DOE REVISION 08/11/2011 100% AS-BUILT DRAWIN
PT5	MANF: PORTER PAINTS STYLE: PURE PERFORMANCE COLOR: PAROFFIN 521-2 FINISH: SEMI-GLOSS		-B
PT6	MANF: PORTER PAINTS STYLE: PURE PERFORMANCE COLOR: GYPSOM 520-1 FINISH: SEMI-GLOSS		MARK DATE DESCRIPTION
			LOT NUMBER: 201
			DRAWN BY: LIZ HOWARD CHECKED BY: SARAH MILLER
			COPYRIGHT: PURDUE UNIVERSITY 20 ALL RIGHTS RESERVED
			SHEET TITLE
			INTERIOR DESIGN
			I-601

Immet de Lui         Externa         Externa           1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1 <th>1</th> <th>I</th> <th>2</th> <th>3</th> <th></th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>• · · · · · · · · · · · · · · · · · · ·</th>	1	I	2	3		4	5	6	7	• · · · · · · · · · · · · · · · · · · ·
Image: Section 2014									<b>GENERAL SHEET NOTES</b>	
Note         Response         Volume           1         1         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.			FURN	ITURE SCHEDULE						
Image:		MARK	DESCF	RIPTION	MANUFACTURER					
Image: Intervention of the state o		DINING	COUNTER HEIGHT TABLE		LIGO					
	F-	DINING	DURANGO COUNTER HEIGHT CH	HAIR	LIGO					
Image: Section with the	-	OWNER'S SUITE	QUEEN SLEIGH HEADBOARD		CASANA					TEAM PURDUE
2000000000000000000000000000000000000		OWNER'S SUITE	QUEEN SLEIGH FOOTBOARD		CASANA					
Image: Section 2002         Solution           Image: Section 2002         Solution 2002           Image: Section 2002         Image: Section 2002           Image: Section 2002         Image: Section 2002           Image: Section 2002         Image: S		OWNER'S SUITE	QUEEN BED RAILS		CASANA					
		OWNER'S SUITE	NEWPORT NIGHT STAND		CASANA					
Intel       Intel Markaterina Statute         Intel Markaterina Statute       Intel Markaterina         Intel Markaterina Statute       Intel Markaterina         Intel Markaterina Statute       Intel Markaterina         Intel Markaterina       Intel Markaterina		LIVING	SABINO ARMLESS ACCENT CHAI	IR	BROYHILL					
	┩── ── ── ──	LIVING	NESTING OTTOMANS		ANGELO HOME					
India       India <td< td=""><td></td><td>LIVING</td><td>DURAPELLA COCOA LOVESEAT</td><td></td><td>SIGNATURE</td><td></td><td></td><td></td><td></td><td>TEAM NAME: TEAM PURDUE</td></td<>		LIVING	DURAPELLA COCOA LOVESEAT		SIGNATURE					TEAM NAME: TEAM PURDUE
		LIVING	HUDSON ST 40" CONSOLE		MARTIN					ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107
Image:		OFFICE	FLUENT DESK		KIMBALL OFFICE					WEST LAFAYETTE, IN 47907           CONTACT:         SOLARHOUSE@PURDUE.EDU
		OFFICE	HERO OFFICE CHAIR		KIMBALL OFFICE					WWW.PURDUE.EDU/INHOME
	D-	BATH	5 SHELF BOOKCASE		HOME CAMDEN					-D
		BATH	HAMPER		ROOM ESSENTIALS					CONSULTANTS KEVIN MERCER, TRANE
REFERENCE KEYNOTES REFERENCE KEYNOTES		DECK	CONSERVATORY BLUE BAR HEIC	GHT TABLE AND CHAIRS	OUTDOOR PATIO HOM	IE				PAT EGAN, THERMOCORE
REFERENCE KEYNOTES  REFERE					·					JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR
										SUSAN BENEDICT, DESIGN ALTERNATIVES
(-) SHEET KEYNOTES (-) SHEET KEY									<b>REFERENCE KEYNOTES</b>	RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC.
	<b>-</b>									PAT WILSON, RYAN FIRE PROTECTION
	C-									-c
SHEET KEYNOTES										U.S. DEPARTMENT OF ENERGY
SHEET KEYNOTES										SOLAR DECATHLON 2011
										WWW.SOLARDECATHLON.GOV
										U.S. DEPARTMENT OF ENERGY
SHEET KEYNOTES     SHEET KE										SOLAR DECATHLON
A A A A A A A A A A A A A A A A A A A									-> SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS
										03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS
										08/11/2011 100% AS-BUILT DRAWINGS
A MARK DATE DESIGNATION 201 DECONSTRUCT 201 SETTING SETTING INTERIOR DESIGNATION SETTING INTERIOR DESIGNATION SETING INTERIOR DESIGNATION INTERIOR DESIGNATION IN										
	В-									B
A ARRY DATE DESCRIPTION OF AN ARRY ALLER CONTRACT ALL RATE DESCRIPTION OF AN ARRY ALLER CONTRACT ALL RATE DESCRIPTION OF AN ARRY ALL RATE DESCRIPTION OF ARRY ALL RATE DESCRIPTION OF AN ARRY ALL RATE DESCRIPTION OF ARRY ALL RATE DESCRIPTION ARRY ARRY ARRY ARRY ARRY ARRY ARRY ARR										
ANRY DATE DESCRIPTION OF STATES										
A MERICAN A CONTRACT OF THE SCHEDULES										MARK DATE DESCRIPTION
Note: Section of the section of t										LOT NUMBER: 201
A WARDELINGER	┫───────────									DRAWN BY: SARAH MILLER
A ALL RIGHTS RESE SHEET TITLE INTERIOR DESIG SCHEDULES I-602										CHECKED BY: COPYRIGHT: PURDUE UNIVERSITY 2011
A SHEET TITLE INTERIOR DESIG SCHEDULES										ALL RIGHTS RESERVED
* INTERIOR DESIG SCHEDULES										
A SCHEDULES										
										INTERIOR DESIGN
I-602	A-									
I-602										
	WA									
	25:08 /									II I_602
	11 10:									
	3/13/20						<u>_</u>			

_	1	2	3		4	I	5	6		7	
										GENERAL SHEET NOTES	
						FIRE PROTECTIO	N SCHEDULE				
				MANUFACTURER	MODEL	DESCRIPTION	COUN	NT NOTES			
				LEGEND	13D	FIRE SUPPRESSION PU	JMP 1				
E				WILKINS	950XL	1" DOUBLE CHECK VAL	.VE 1				
				RELIABLE	F1 RES	RECESSED PENDENT	1				TEAM PURDUE
				RELIABLE	F1 RES	PENDENT	1				HOME
				RELIABLE	F1 RES	RECESSED HORIZONTA	AL 1				
				KIDDE	DUAL SENSOR	SMOKE/CO DETECTOR	3	120V AC INTERC	ONNECTED		
				KIDDE	21006704	FIRE EXTINGUISHER	1	FULL-HOME, DR	Y CHEMICAL		
				NIBCO	175	GLOBE VALVE	1				
											ADDRESS: PURDUE UNIVERSITY
											WEST LAFAYETTE, IN 47907
											WWW.PURDUE.EDU/INHOME/
D-											-D
							FI	IRE PROTEC	TION		CONSULTANTS KEVIN MERCER, TRANE
								SYMBOLS	5		PAT EGAN, THERMOCORE
											JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR
								SD SMOKE DETECTO	R	DEEEDENCE VEVNATES	SUSAN BENEDICT, DESIGN ALTERNATIVES
										REFERENCE RETINUTES	MARK BEALS, J & T SYSTEMS, INC.
								FE FIRE EXTINGUISH	IER		PAT WILSON, RYAN FIRE PROTECTION
								HORIZONTAL SID	EWALL		
								·			
C-								RECESSED PEND	ANT		
C-											
								PENDANT			SOLAR DECATHLON 2011
											WWW.SOLARDECATHLON.GOV
											U.S. DEPARTMENT OF ENERGY
											SOLAR DECATHLON
٦										-> SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS
											01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS
											08/11/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS BUILT DRAWINGS
B–											B
											MARK DATE DESCRIPTION
											LOT NUMBER:     201       DRAWN BY:     KATLYN TIMMONS
٦											CHECKED BY: JORDAN WALLPE
											CUPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
											SYMBOLS & NOTES
A											-A
5 AM											
10:32:2;											
/2011 1											
8/13	1	2	3	ĺ	4	l	5	6		7	







GENERAL SHEET NO	DTES			
1. GENERAL NOTES SHALL APPLY TO ALL SHOWN	WORK			
2. VERIFY ALL MEASUREMENTS TO PROP	ERLY LOCATE			
3. ALL NOTES COINCIDE WITH SIMILAR DE				
4. COMPONENTS WITH OTHER TRADES				
5. CONTRACTOR SHALL BE RESPONSIBLE FURNISHING AND INSTALLILNG THE NE				
APPROVED FIRE ALARM SYSTEM	AND -E	-		
6. ALL FIRE DETECTORS AND EXTINGUIS INSTALLED IN ACCORDANCE TO NFPA7	HERS TO BE '2 AND			TEAM PURDUE
MANUFACTURER REQUIREMENTS 7. FIRE EXTINGUISHERS SHALL BE MOUN	TED NO			HOME
HIGHER THAN 5 FEET A.F.F. 8. ALL ALARMS SHALL BE INTERCONNECT	FED AND AFCI		$\Lambda$	
PROTECTED ACCORDING TO NEC 210.	12(B).	2		IIIUML
		TEAM NA	ME:	TEAM PURDUE
		ADDRES	S:	PURDUE UNIVERSITY
				WEST LAFAYETTE, IN 47907
		CONTAC	T: \$	SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME/
		CONSUL	TANTS	
		KEVIN MI	ERCER, TRANE	
		PAT EGA	N, THERMOCO	RE
		JOHN GL	JEQUIERRE, HI	-TECH HOUSING
			VIIZER, ARKOF	
DEEEDENCE KEVNO		RYAN JU	STAK SCHOLE	
REI ERENCE REINO		MARK BE	ALS, J & T SYS	STEMS, INC.
DIV 10 - SPECIALTIES		PAT WILS	SON, RYAN FIR	E PROTECTION
10 44 00 FIRE PROTECTION SPECIALTIES				
				`
28 31 2.1 SMOKE DETECTOR				
				/
	-C	CLIENT		
		OLILITI	U.S. DEPART	IMENT OF ENERGY
			SOLAR D	ECATHLON 2011
			WWW.SOLA	RDECATHLON.GOV
			U.S. DEPAR	
		$\sim$	<b>SOLA</b>	<b>CDECATHLON</b>
		900 G		
SHEET KEYNO	TES		11/23/2010	80% DESIGN DRAWINGS 80% W/ DOF REVISIONS
			03/22/2011	100% CONSTR. DRAWINGS
THE FEET A.F.F.	E THAN 5		05/03/2011 08/11/2011	100% W/ DOE REVISIONS 100% AS BUILT DRAWINGS
2 INTERCONNECT ALARMS AND AFCI PRO	DTECT			
	—В			
		MARK	DATE	DESCRIPTION
		LOT NUM	IBER:	201
	<b> </b>	DRAWN	3Y:	KATLYN TIMMONS
		CHECKE	D ВҮ: 	
				ALL RIGHTS RESERVED
		SHEET T	ITLE	
			ŀ	IRE
	—A		ARM/F)	(TINGUSHFR
		´``'	<b>/</b>	
			۲	
				101
		Í	1 -	
	J			



## **GENERAL SHEET NOTES** GENERAL NOTES SHAL APPLY TO ALL WORK 1. SHOWN VERIFY ALL MEASUREMENTS TO PROPERLY LOCATE COMPONENTS ALL NOTES COINCIDE WITH SIMILAR 2. 3.

- DRAWINGS COORDINATE ALL WORK AND PLACEMENT OF COMPONENTS WITH OTHER TRADES 4. ALL PIPING SHALL BE CONCEALED ACCORDING 5. TO NFPD AND INDIANA DEPARTMENT OF FIRE AND BUILDING SERVICES CODE THIS SYSTEM DESIGNED AND INSTALLED PER 6. STANDARDS OF NFPA-13D. SEE CALCULATIONS AND REMOTE AREA NOTED OR PLAN. ALL MAIN PIPING TO BE CPVC PLASTIC. ALL LINE PIPING TO BE CPVC PLASTIC. 9. ALL PIPING TO BE CENTER TO CENTER 10. DIMENSIONS. ALL FITTINGS TO BE CPVC PLASTIC. 11. ALL PAINTING OF PIPING AND DEVICES TO BE 12. BY OTHERS. ALL SPRINKLER HEADS MUST BE 5" FROM AND 13. PARALLEL TO CEILING. SPRINKLERS UNDER 7'-0" ELEVATION TO HAVE 14 WIRE HEAD GUARDS. HANGER PER NFPA 13 AND 13R. ALL DIFFUSERS TO BE A MINIMUM OF 2' - 0" 15. 16. AWAY FROM ALL SPRINKLERS. INSULATION SHALL BE COMPATIBLE WITH 17. CPVC. DEFLECTOR SHALL BE NO MORE THAN 12" 18. DOWN FROM CEILING IN LIVING AND DINING ROOMS. BOTTOM OF LIVING/DINING ROOM BULKHEAD SHALL BE AT LEAST 3" DOWN FROM 19. CENTERLINE OF SPRINKLER.
- ALL PIPE SHALL BE 1" Ø. 20. ALL PORTABLE TANKS, PUMPS, AND VALVES 21. INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE "TEMPORARY FOR COMPETITION PURPOSES ONLY." FIRESTOPPING INSULATION SHALL BE APPLIED 22. WHERE PIPE TRANSITIONS FROM GARAGE

INTO MECHANICAL ROOM.

## **REFERENCE KEYNOTES**

DIV 21 - FIRE SUPPRESSION

-

21 10 00WATER BASED FIRE PROTECTION21 10 00 2.2LEGEND 13D PUMP21 10 00 2.3PRESSURE GAUGE 21 10 00 2.4 1" PIPE 21 10 00 2.5A RECESSED PENDENT 21 10 00 2.5B RECESSED HSW 21 10 00 2.5C PENDENT 21 10 00 2.6A WILKINS 950 XL DOUBLE CHECK VALVE 21 10 00 2.6B GLOBE DRAIN VALVE

SHEET KEYNOTES

 $\langle$  **1**  $\rangle$  5" BELOW AND PARALLEL TO CEILING

- $\langle 2 \rangle$  grooved coupling for disconnect in
- MARRIAGE WALL. SEE DETAIL A-1. (F-501) 3 SPRINKLER DEFLECTOR SHALL BE AT SAME ELEVATION AT BOTTOM OF BULKHEAD IN CENTER
- OF LIVING ROOM  $\langle 4 \rangle$  STEEL TO PLASTIC TRANSITION
- $\langle$  5  $\rangle$  ACCESS PANEL THROUGH CLOSET.

TEAM PURDUE TEAM NAME: PURDUE UNIVERSITY ADDRESS: KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME/ CONTACT: CONSULTANTS KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR

TEAM PURDUE

SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION

CLIENT

U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV

U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON

	11/23/2010	80% DESIGN DRAWINGS							
	01/25/2011	80% W/ DOE REVISIONS							
	03/22/2011	100% CONSTR. DRAWINGS							
	05/03/2011	100% W/ DOE REVISIONS							
	08/11/2011	100% AS BUILT DRAWINGS							
MARK	DATE	DESCRIPTION							
LOT NUM	BER:	201							
DRAWN E	BY:	KATLYN TIMMONS							
CHECKE	OBY:	JORDAN WALLPE							

COPYRIGHT:

PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED

SHEET TITLE

FIRE SUPPRESION PLAN

# F-102

![](_page_58_Figure_0.jpeg)

GENERAL SHEET NOTES				
GENERAE SHEET NOTES				
1. ALL PIPE BEFORE BACKFLOW SHALL BE				
2. ALL EXPOSED PIPE IN CLOSET AND GARAGE SHALL				
BE STEEL.				
	-E			
				TEAH DUDDUE
			_	IEAM PURDUE
				HOME
			× N	HUWE
		-		
		TEAM NA	ME:	TEAM PURDUE
			S.	
		ADDRES	5.	KNOY HALL, ROOM 107
				WEST LAFAYETTE, IN 47907
		CONTAC	T: 5	
				WWW.PURDUE.EDU/INHOME/
	1			
	L			
		CONSUL	TANTS	
	1		RCFR TRANE	
	ĺ			DE
	ĺ	PALEGA		
	ĺ	JOHN GL	JEQUIERRE, HI-	TECH HOUSING
		ANDY SV	VITZER, ARKOF	R
		SUSAN B	ENEDICT. DES	IGN ALTERNATIVES
DEEEDENCE KEVNOTES				
REFERENCE RETINOTES				
		MARK BE	ALS, J& I SYS	TEMS, INC.
		PAT WILS	SON, RYAN FIR	E PROTECTION
				/
				/
	-C			
		GLILINI		
			U.S. DEPARI	MENT OF ENERGY
			SOLAR DI	ECATHLON 2011
			WWW.SOLA	RDECATHLON.GOV
		121.4		
				TMENT OF ENERGY
				DECATHION
			JULAI	<b>UDECATILON</b>
	┝			
			11/23/2010	80% DESIGN DRAWINGS
			01/25/2011	80% W/ DOE REVISIONS
			03/22/2011	100% CONSTR. DRAWINGS
1 SUPPLY IN FROM GARAGE. COORDINATE WITH			05/03/2011	100% W/ DOE REVISIONS
	1		08/11/2011	100% AS BUILT DRAWINGS
Z RUN 4" FROM CEILING	ĺ			
	1			
	1			
$\langle 4 \rangle$ ACCESS PANEL THROUGH BATHROOM				
	-B			
SROUVED COUPLING DISCONNECT IN MARRIAGE	1	l		
				DECODIDITION
		MARK	DATE	DESCRIPTION
				201
	1		ושבוז. ארכ	
	┝	DRAWN	BY:	KATLYN HMMONS
		CHECKE	D BY:	JORDAN WALLPE
		COPYRIC	GHT:	PURDUE UNIVERSITY 2011
	1	I		ALL RIGHTS RESERVED
	1			
	1	<b></b>		
	1	SHEET T	ITLE	
	1	<b> </b>		
	1	I ME	CHANI	
	_Δ	I		
		I		
	1	I		
	1	I		
	1	<b></b>		
	1	I		
	1	I		7/11
	1			
	1	I		
1				
7				

![](_page_59_Figure_0.jpeg)

![](_page_59_Figure_1.jpeg)

	1			
GENERAL SHEET NOTES	-			
RATED PARTITIONS				
WALLS AND PARTITIONS, CONSULT	-E		0	
PENETRATION FIRESTOP SYSTEMS ARE			_	TEAM PURDUE
E. CONSULT THE PIPE MANUFACTURERS ATION. WARNING: SOME FIRESTOP				LOWE
IN SOLVENTS OR PLASTICIZERS THAT MAY ONSULT THE MANUFACTURER OF THE				Πυ///Ε
BILITY WITH CPVC PIPE AND FITTINGS.				
PRACTICES AND PRECAUTIONS DO'S AND DON'TS	F			
		TEAM NA	ME:	TEAM PURDUE
IGHT MANY OF THE "DO'S" AND "DON'TS" ADDRESSED IN THE MANUAL		ADDRES	S:	PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE IN 47907
		CONTAC	T:	SOLARHOUSE@PURDUE.EDU
TO THE MANUFACTURER'S INSTALLATION				
NUAL. WORK PRACTICES. SEALANTS. GASKET LUBRICANTS. OR FIRE	-D	CONCLU		
IBLE WITH BLAZEMASTER CPVC PIPE			RCED TOAN	F
S IF PAINTING IS DESIRED. IGINAL PACKAGING UNTIL NEEDED.				ORE
H AN OPAQUE TARP IF STORED OUTDOORS. ROCEDURES. IGNED FOR USE WITH PLASTIC PIPE		JOHN GU	IEQUIERRE, H	II-TECH HOUSING
T AND FOLLOW APPLICATION INSTRUCTIONS.		SUSAN B	ENEDICT, DE	SIGN ALTERNATIVES
		RYAN JU	STAK, SCHOL	ER CORPORATION
TO ONE QUARTER TURN WHEN BOTTOMING	Γ	MARK BE	ALS, J & T SY	STEMS, INC.
CEMENT IN FITTINGS AND PIPE. CEMENT DOES NOT RUN AND PLUG THE				
S RECOMMENDED CURE TIMES PRIOR TO				
THE AIR FROM THE SYSTEM PRIOR TO				
OPERLY TO PREVENT LIFT UP OF THE VHEN ACTIVATED.				
/16" (1.588 mm) OF THE PIPE. N WET FIRE SPRINKLER SYSTEMS ONLY.	-c			
GLYCERIN AND WATER SOLUTIONS FOR		CLIENT	U.S. DEPAR	RTMENT OF ENERGY
PVC FIRE SPRINKLER INSTALLATION			SOLAR [	DECATHLON 2011
AWARE OF ELECTRICAL OUTLETS AND SWITCHES TOP AND BOT PLATES OF ALL WALLS			WWW.SOL	ARDECATHLON.GOV
		Ŵ	U.S. DEPA	RTMENT OF ENERGY
CH AS CRISCO AS A GASKET LUBRICANT.	F		44/00/0040	
SOLVENT-BASED PAINTS, SEALANTS, IATERIALS. SED SOLUTIONS AS AN ANTLEREEZE			01/25/2010	80% DESIGN DRAWINGS 80% W/ DOE REVISIONS
VATER SOLUTIONS IN CONTAMINATED			05/03/2011	100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% AS BUILT DRAWINGS
APE AND THREAD SEALANTS			00/11/2011	
NT THAT EXCEEDS ITS SHELF LIFE OR HAS ELLED.				
AL COUPLERS TO BLAZEMASTER CPVC GROOVED	—В			
R DRILL BLAZEMASTER CPVC PIPE. NT NEAR SOURCES OF HEAT, OPEN FLAME,				
TIL RECOMMENDED CURE TIMES ARE MET.				
CPVC PIPE THAT HAS BEEN STORED		MARK	DATE	DESCRIPTION
AND IS FADED IN COLOR. OD TO COME IN CONTACT WITH THE PIPE.			-	
ER CPVC PIPE AND FITTINGS IN COLD WEATHER PANSION. ER CPVC PIPE AND FITTINGS IN DRY SYSTEMS			IBER:	
H AIR OR COMPRESSED GAS.	F	CHECKE	D BY:	JORDAN WALLPE
		COPYRIC	GHT:	PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
ONSTITUTE A COMPLETE INSTALLATION GUIDE				
		SHEET T	ITLE	
		l F	IRE PF	ROTECTION
	-A		DE	TAILS
				501
			Γ-	

![](_page_60_Figure_0.jpeg)

GENERAL SHEET NOTES	
	TEAM NAME:       TEAM PURDUE         ADDRESS:       PURDUE UNIVERSITY         KNOY HALL, ROOM 107       WEST LAFAYETTE, IN 47907         CONTACT:       SOLARHOUSE@PURDUE.EDU         WWW.PURDUE.EDU/INHOME/       WWW.PURDUE.EDU/INHOME/         D       CONSULTANTS
	KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR SUSAN RENEDICT, DESIGN ALTERNATIVES
	RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC.
	-C
	U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV
	SOLAR DECATHLON
	01/25/2011         80% W/ DOE REVISIONS           03/22/2011         100% CONSTR. DRAWINGS           05/03/2011         100% W/ DOE REVISIONS           08/11/2011         100% AS BUILT DRAWINGS
	B
	MARK DATE DESCRIPTION
	DRAWN BY:     KATLYN TIMMONS       CHECKED BY:     JORDAN WALLPE       COPYRIGHT:     PURDUE UNIVERSITY 2011       ALL RIGHTS RESERVED
	FIRE PROTECTION ISOMETRIC
	F-901

![](_page_61_Figure_0.jpeg)

	7				
	GENERAL SHEET NOTES				
	1. GENERAL NOTES SHALL APPLY TO ALL WORK SHOWN				
	2. ALL DIMENSIONS PROVIDED FOR REFERENCE ONLY. CONTRACTOR TO USE FIELD MEASUREMENTS				
	<ol> <li>ALL NOTES COINCIDE WITH SIMILAR DRAWINGS</li> <li>COORDINATE ALL WORK AND PLACEMENT OF</li> </ol>				
	COMPONENTS WITH OTHER TRADES 5. WATER CLOSET SHALL NOT BE USED DURING				
	COMPETITION. WATER CLOSET SHALL BE ATTACHED TO A 3IN PVC OR ABS WATER	Ε		the state	
	6. SUPPLY TANKS MUST ALLOW FOR WATER				TEAM PURDUE
	ALLOW FOR A 12" SPACE ABOVE WATER INLET.				LIUWE
	HOUSE ARE TEMPORARY. 8. FOR WATER DELIVERY, 6 STUDENTS SHALL				ΙΠυΜΕ
	MANUALLY MOVE SUPPLY HOSE FROM PRECEDING HOME TO THE INHOME WATER				
	SUPPLY TANK LOCATED INSIDE THE GARAGE THROUGH THE REAR GARAGE DOOR. TANK				
_	OPENING -16"Ø. 9. FOR WATER REMOVAL, 6 STUDENTS SHALL	┝			
	TO THE INHOME. ALL THREE RAIN BARRELS SHALL BE EMPTIED FIRST AND THEN THE WASTE				
	TANK LOCATED ON THE EAST SIDE OF GARAGE. TANK OPENING -16"Ø.			ME:	
	10. MOUNT MAIN SUPPLY AND FIRE SUPPRESSION PUMPS ON STAND.		ADDRESS		KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
	11. SEAL PENETRATION THROUGH SIPS PANEL WITH SPRAY FOAM.		CONTACT	:	SOLARHOUSE@PURDUE.EDU
	IZ. ALL PORTABLE TANKS, POWPS, AND VALVES INTENDED TO MIMIC PUBLIC UTILITY WATER SUPPLY AND SEWAGE ARE "TEMPORARY FOR				
	COMPETITION PURPOSES ONLY." 13. ALL EXPOSED DUCTWORK, PIPING, ELECTRICAL				
	CONDUIT, TEMPERATURE CONTROLS CONDUIT AND ASSOCIATED COMPONENTS TO BE METAL	<b>ו</b>	CONSULT	ANTS	
	FINISH. COORDINATE WITH OWNER PRIOR TO INSTALLATION		REVIN ME	N, THERMOOC	= DRE
	AS A DIAGRAMMATIC MEANS OF PROVIDING		JOHN GUE	EQUIERRE, HI	-TECH HOUSING
	EVERY FITTING AND OFFSET NOR EVERY STRUCTURAL, ELECTRICAL, PIPING OR		ANDY SW	ITZER, ARKOR	२
	DUCTWORK DIFFICULTY THAT MAY BE ENCOUNTERED DURING THE INSTALLATION OF		SUSAN BE	TAK SCHOL	
	THE WORK. 15. THE WORK HAS BEEN DESIGNED FOR THE		MARK BEA	ALS, J & T SYS	STEMS, INC.
	EQUIPMENT INDICATED FOR THE EQUIPMENT INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE TO	Γ	PAT WILS	ON, RYAN FIF	RE PROTECTION
	COORDINATE AND PROVIDE ANY MODIFICATIONS TO THE WORK INCLUDING BUT NOT NECESSARILY				
	LIMITED TO DUCTWORK, PIPING, ELECTRICAL, PLUMBING, FIRE PROTECTION, STRUCTURAL				
	FRAMES, CASEWORK, ETC. REQUIRED TO PROPERLY PROVIDE EQUIPMENT OTHER THAN				
	16. THE WASTE WATER TANK WILL NOT BE USED				/
	WILL BE REMOVED AT THE END OF THE EVENT. INSTALL BALL SHUTOFF AND CHECK VALVES AT				
	PRIOR TO PUMP INLETS. 18. INSTALL WATER HAMMER ARRESTOR	-C	CLIENT		
	ACCORDING TO MANUFACTURER SPECIFICATIONS AT WASHER/DRYER			U.S. DEPAR	TMENT OF ENERGY
	FOR EXPANSION TANK SHALL BE ABLE TO ALLOW FOR EXPANSION AND CONTRACTION OF SUPPLY WATER			SOLAR D	
				U.S. DEPAR	TMENT OF ENERGY
				SOLA	R DECATHLON
		卜		11/22/2010	
	REFERENCE RETINUTES			01/25/2011	80% W/ DOE REVISIONS
	DIV 21 - FIRE SUPPRESSION 21 10 00 2.2 LEGEND 13D FIRE PUMP			05/03/2011	100% CONSTR. DRAWINGS 100% W/ DOE COMMENTS
	DIV 22 - PLUMBING			08/11/2011	100% AS BUILT DRAWINGS
	22 11 16 DOMESTIC WATER PIPING 22 11 16 2.2D MANABLOC				
	22 11 23 DOMESTIC WATER PUMPS 22 11 23 2.1 WATER SUPPLY PUMP				
	22 11 19 DOMESTIC WATER SPECIALITIES	—В			
	22 11 19 2.4A 20 GALLON EXPANSION TANK				
	22 12 00 FACILITY POTABLE-WATER STORAGE TANKS 22 12 00 2.1 1050 GALLON SUPPLY TANK 22 12 00 2 2 1000 GALLON WASTE TANK				
	22 13 00 FACILITY SANITARY SEWERAGE		MARK	DATE	DESCRIPTION
	22 13 42 EJECTOR PIT				
				BER:	201
		┢		Y: BY:	KATLYN TIMMONS JORDAN WALLPF
			COPYRIG	HT:	PURDUE UNIVERSITY 2011
	-> SHEET KEYNOTES				ALL RIGHTS RESERVED
-			0===		
	1 1050 GALLON SUPPLY TANK. 16" DIA. OPENING		SHEETTI	ILE	
	$\langle 2 \rangle$ 1000 GALLON WASTE TANK 16" DIA ODENING		PLl	JMBIN	G SITE PLAN
		-A			
	VIEGA PEX MANIFULD WATER SUPPLY I OCATION				
	ACCESS THROUGH REAR GARAGE DOOR.				
	4 57 GALLON RAIN BARRELS (X3)				404
				Υ-	101
		1		-	

![](_page_62_Figure_0.jpeg)

7	
GENERAL SHEET NOTES	
<ol> <li>CONTRACTOR SHALL FOLLOW 2009 IRC AND OTHER APPLICABLE BUILDING CODES.</li> <li>CONTRACTOR SHALL FOLLOW EQUIPMENT</li> </ol>	
MANUFACTURER'S INSTRUCTIONS FOR HANDLING AND INSTALLATION. 3. CONTRACTOR SHALL COORDINATE AND	
PERFORM NECESSARY MODIFICATIONS TO PROVIDE A COMPLETE INSTALLATION. MODIFICATIONS INCLUDE BUT ARE NOT LIMITED	
TO STRUCTURAL, ELECTRICAL, ARCHITECTURAL, PLUMBING, PIPING AND DUCTWORK.	
<ol> <li>WATER CLOSET SHALL NOT BE PLUMBED FOR COMPETITION.</li> <li>ALL PEX LINES SHALL BE RAN THROUGH T.II.</li> </ol>	TEAM PURDUE
FLOOR PROIR TO FINAL SEALING OF FLOOR SYSTEM.	
<ol> <li>NO PEX CONNECTIONS PERMITTED IN THE FLOOR SYSTEM.</li> <li>CONTRACTOR TO VERIFY KITCHEN DESIGN WITH</li> </ol>	
<ol> <li>SEE SPECIFICATIONS FOR CABINETRY DETAILS</li> <li>ALL PORTABLE TANKS, PUMPS, AND VALVES</li> </ol>	
SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY.	
10. INSTALL BALL SHUTOFF VALVES AT EVERY DEVICE WATER CONNECTION 11. INSTALL WATER HAMMER ARRESTOR	TEAM NAME: TEAM PURDUE
SPECIFICATIONS AT WASHER/DRYER	KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
	WWW.PURDUE.EDU/INHOME/
REFERENCE KEYNOTES	-D
DIV 11 - EQUIPMENT 11 31 00 RESIDENTIAL APPLIANCES	CONSULTANTS KEVIN MERCER, TRANE
11 31 00 2.3ACLOTHES WASHER11 31 00 2.5DISHWASHER	
DIV 22 - PLUMBING 22 11 16 DOMESTIC WATER PIPING 22 11 16 2.2A LAVATORY ADAPTER	ANDY SWITZER, ARKOR
22 11 16 2.2B WATER CLOSET ADAPTER 22 11 16 2.2C PEX SLEEVES 22 11 16 2.2D MANABLOC	SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION
22 11 19 DOMESTIC WATER PIPING SPECIALTIES 22 11 19 2.4A EXPANSION TANK	MARK BEALS, J & T SYSTEMS, INC.
22 11 19 2.2         WASHER BOX           22 11 19 2.3         ICE MAKER BOX	
22 11 23DOMESTIC WATER PUMPS22 11 23 2.1DOMESTIC WATER PUMP	
22 12 00FACILITY-POTABLE WATER STORAGE TANKS22 12 00 2.11050 GALLON SUPPLY TANK	
22 33 00ELECTIRC DOMESTIC WATER HEATERS22 33 00 2.1HEAT PUMP HOT WATER HEATER	
22 41 00 RESIDENTIAL PLUMBING FIXTURES 22 41 00 2.1A WATER CLOSET 22 41 00 2.2A BATH TUB	-C CLIENT
22 41 00 2.2B SHOWER TRIM 22 41 00 2.2C DOWN SPOUT 22 41 00 2.2D DIVERTER VALVE	SOLAR DECATHLON 2011
22 41 00 2.2E DRAIN 22 41 00 2.3A BATHROOM FAUCET 22 41 00 2.3B KITCHEN FAUCET	WWW.SOLARDECATHLON.GOV
22 41 00 2.4A KITCHEN SINK 22 41 00 2.4B BATHROOM SINK	U.S. DEPARTMENT OF ENERGY
-> SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS
1 DO NOT CONNECT WATER CLOSET DURING	03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS BUILT DRAWINGS
	-B
	MARK DATE DESCRIPTION
	LOT NUMBER:     201       DRAWN BY:     KATLYN TIMMONS
	CHECKED BY: JORDAN WALLPE
	ALL RIGHTS RESERVED
	SHEET TITLE
	INTERIOR WATER
	SUPPLY
	D 100
7	

![](_page_63_Figure_0.jpeg)

7	
<b>GENERAL SHEET NOTES</b>	
1. CONTRACTOR SHALL FOLLOW 2009 IRC AND	
2. ALL DIMENSIONS PROVIDED FOR REFERENCE ONLY. CONTRACTOR TO USE FIELD	
MEASUREMENTS 3. CONTRACTOR SHALL FOLLOW EQUIPMENT	
MANUFACTURER'S INSTRUCTIONS FOR HANDLING AND INSTALLATION.	
4. CONTRACTOR SHALL COORDINATE AND PERFORM NECESSARY MODIFICATIONS TO PROVIDE A COMPLETE INSTALLATION	-E
MODIFICATIONS INCLUDE BUT ARE NOT LIMITED TO STRUCTURAL, ELECTRICAL, ARCHITECTURAL,	TEAM PURDUE
<ul><li>PLUMBING, PIPING AND DUCTWORK.</li><li>5. WATER CLOSET SHALL NOT BE PLUMBED FOR</li></ul>	
6. ALL WASTE LINES SHALL BE RAN AT 1/8" SLOPE	
<ol> <li>NO PEX CONNECTIONS PERMITTED IN FLOOR SYSTEM.</li> </ol>	
8. THE WASTER WATER TANK WILL NOT BE USED FOR ANY VEGETATION OR ALTERNATE USE AND	
9. ALL PORTABLE TANKS, PUMPS, AND VALVES	
SUPPLY AND SEWAGE ARE TEMPORARY FOR COMPETITION PURPOSES ONLY."	
10. FOR WATER REMOVAL, 6 STUDENTS SHALL MANUALLY MOVE HOSE FROM PRECEDING HOME	ADDRESS: PURDUE UNIVERSITY
SHALL BE EMPTIED FIRST AND THEN THE WASTE	KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
TANK OPENING -16"Ø. 11. EJECTOR PIT PUMP SHALL INITIATE AT 20 GALLON	CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME/
CAPACITY.	
	-D CONSULTANTS
	KEVIN MERCER, TRANE
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
<b>REFERENCE KEYNOTES</b>	
	PAT WILSON, RYAN FIRE PROTECTION
22 12 00 2.2 1050 GALLON WASTE TANK 22 13 42 PACKAGED SEWAGE PUMP	
22 13 16 2.2A AIR ADMITTANCE VALVE	
	-C CLIENT
	WWW.SOLARDECATHLON.GOV
	U.S. DEPARTMENT OF ENERGY
$\langle \cdot \rangle$ SHEET KEYNOTES	11/23/2010 80% DESIGN DRAWINGS
	03/22/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS
1 DO NOT CONNECT WATER CLOSET DURING	05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS BUILT DRAWINGS
2 INSTALL AIR ADMITTANCE VALVE UNDER	
COUNTER 3 INSTALL AIR ADMITTANCE VALVE INSIDE WALL	
CAVITY	—В
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	CHECKED BY: JORDAN WALLPE
	COPYRIGHT: PURDUE UNIVERSITY 2011
	SHEET TITLE
	VENTING
	II P-103 I
7	J []

Normalization         Normalinterestrestrestrestrestrestrestrestrestre	1	2	I	3				4			5				6	<u> </u>
																GENERA
																1. TEAM WILL US BOTH DINNER
No.         No. <th></th>																
			MARK 1		SERVED	SIZE (GPM			pm MIN %EFI		(hp) V	OLTS/P		TION PRE	SSURE NOTES	
1     2     1     2     0     30     11     20.76     0.70     1.00	Ξ		1	C ENTIR	EINHOME	7	15	3450		1/2 HP	2	30/1/60	Hz 50 P	SI	GRAINGER 1D876	
			2	J FIRE F	ROTECTION	70	50	3480	) _	3 HP	2	30/1/60	Hz 50 P	SI	LEGEND	
Image: Status in the status															13D	
Image: Solution Table Control Table					1 PLUMBIN 12" = 1'-0	NG FIXTURE S )"	CHEDULE									
MARK         CONSIST         MARK/FUTURE         ACCOL         Notes         Notes         Notes         Notes           10         ACCUL YON -         RCUL YON - <td< th=""><th><b>-</b></th><th></th><th></th><th></th><th></th><th></th><th></th><th>PLUMBIN</th><th>IG FIXTURE SC</th><th>HEDULE</th><th></th><th></th><th></th><th></th><th></th><th></th></td<>	<b>-</b>							PLUMBIN	IG FIXTURE SC	HEDULE						
Image: Product States       Image: Product States     Image: Product States     Image: Product States     Image: Product States     Image: Product States       Image: Product States     Image: Product States     Image: Product States     Image: Product States     Image: Product States       Image: Product States     Image: Product States     Image: Product States     Image: Product States     Image: Product States       Image: Product States     Image: Product States     Image: Product States     Image: Product States     Image: Product States       Image: Product States     Image: Product States     Image: Product States     Image: Product States     Image: Product States       Image: Product States     Image: Product States     Image: Product States     Image: Product States     Image: Product States       Image: Product States     Image: Product States     Image: Product States     Image: Product States     Image: Product States       Image: Product States     Image: Product States     Image: Product States     Image: Product States     Image: Product States       Image: Product States     Image: Product States     Image: Product States     Image: Product States     Image: Product States       Image: Product States     Image: Product States     Image: Product States     Image: Product States <th></th> <th></th> <th>MARK</th> <th>DESCR</th> <th>RIPTION</th> <th></th> <th>MA</th> <th>NUFACTURER</th> <th>MODE</th> <th>iL</th> <th>CW</th> <th>HW</th> <th>WASTE</th> <th>VENT</th> <th>NOTES</th> <th></th>			MARK	DESCR	RIPTION		MA	NUFACTURER	MODE	iL	CW	HW	WASTE	VENT	NOTES	
IPE     INFO     NULL			PF1	KITCH	EN SINK			KOHLER	K-3180	0			Х	X	UNDERCOUNTER	
1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1 <td></td> <td></td> <td>PF2</td> <td>BATHT</td> <td>UB</td> <td></td> <td> </td> <td>KOHLER</td> <td>K-713</td> <td></td> <td>Х</td> <td>X</td> <td>Х</td> <td>X</td> <td></td> <td></td>			PF2	BATHT	UB			KOHLER	K-713		Х	X	Х	X		
1996     NORE-LOGET     NO-LEP     K-2/CP     X     X     X     PLL202001       198     199400000000000000000000000000000000000	7_		PF3	BATH	AND SHOWER	TRIM			K-T162	233-4	X	X	Y	X		
1     1     0     0     0     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1     1 <td></td> <td>-</td> <td>PF4</td> <td></td> <td></td> <td>:FT</td> <td></td> <td></td> <td>K-3577</td> <td>.CP</td> <td>X X</td> <td>Y</td> <td>X</td> <td>X</td> <td></td> <td></td>		-	PF4			:FT			K-3577	.CP	X X	Y	X	X		
977     UNALGO STAK     COLLUX     K402     X     X     V     X     OUCLIAU       978     UNITED VOLTO STAK     COLLUX     K402     X     X     V       978     UNITED VOLTO STAK     COLLUX     K402     X     X     V       979     UNITED VOLTO STAK     COLLUX     K402     X     X     V       979     UNITED VOLTO STAK     COLLUX     K402     X     X     V       979     UNITED VOLTO STAK     COLLUX     K402     X     X     V       979     UNITED VOLTO STAK     VIDEA     T753     X     X     V       979     UNITED VOLTO STAK     VIDEA     T753     X     X     V       979     UNITED VOLTO STAK     VIDEA     T753     X     X     V       979     UNITED VOLTO STAK     VIDEA     T753     X     X     V       979     UNITED VOLTO STAK     VIDEA     VIDEA     VIDEA     VIDEA     VIDEA     VIDEA       979     UNITED VOLTO STAK     VIDEA     VIDEA     VIDEA     VIDEA     VIDEA     VIDEA       970     VIDEA     VIDEA     VIDEA     VIDEA     VIDEA     VIDEA     VIDEA     VIDEA       970 </td <td></td> <td></td> <td>PF6</td> <td>LAVAT</td> <td>ORY FAUCET</td> <td>/_ /</td> <td></td> <td>KOHLER</td> <td>K-1814</td> <td>40</td> <td>X</td> <td>X</td> <td></td> <td></td> <td>SINGLE-CONTROL</td> <td></td>			PF6	LAVAT	ORY FAUCET	/_ /		KOHLER	K-1814	40	X	X			SINGLE-CONTROL	
PP3         DAMPTOR PROJECT         KON PR         Kaa         X         X           PP3         DATING SCOULT WALK         KON PR         Kaa         X         X           PP3         DATING SCOULT WALK         KON PR         Kaa         X         X           PP3         DATING SCOULT         VIDA         X         X         Y           PP3         DATING SCOULT         VIDA         X X         X         Y           PP3         DATING SCOULT         VIDA         XY         X         X           DATING SCOULT <td< td=""><td></td><td></td><td>PF7</td><td>LAVAT</td><td>ORY SINK</td><td></td><td></td><td>KOHLER</td><td>K-2882</td><td>2</td><td></td><td></td><td>Х</td><td>X</td><td>UNDERCOUNTER</td><td></td></td<>			PF7	LAVAT	ORY SINK			KOHLER	K-2882	2			Х	X	UNDERCOUNTER	
PP30       DOTINUUS ORCHAR HOULE       ROLLH       ROLL       <			PF8	DIVER	TER SPOUT			KOHLER	K-496		Х	X				
PTCL     Axis max     Output     Set max     Set max     Set max       PF3     Axis 00 CPC AUXINCI     VICCA     274 ×     X     X     X       PF3     VICCA     274 ×     X     X     X     X       PF3     VICCA     274 ×     XX     X     X     X       VICCA     274 ×     XX     X     X     X     X       VICCA     274 ×     XX     X     X     X     X       VICCA     274 ×     XX     X     X     X     X       VICCA     274 ×     X     X     X     X     X       VICCA     274 ×     XX     X     X     X     X       VICCA     274 ×     X     X <td>4</td> <td></td> <td>PF9</td> <td>BATH</td> <td>AND SHOWER</td> <td>R VALVE</td> <td></td> <td>KOHLER</td> <td>K-304</td> <td></td> <td>Х</td> <td>х</td> <td></td> <td></td> <td></td> <td></td>	4		PF9	BATH	AND SHOWER	R VALVE		KOHLER	K-304		Х	х				
Image: 1     Image		-	PF10	BATH	ORAIN			KOHLER	K-116	60			Х			
		-	PF11	MANAE	BLOC PEX MAN	NIFOLD		VIEGA	37142		Х	X			14 PORT	
Image: Second Second Prove     Version Control Prove     X     X       Image: Second Prove     Prove     WATER IEATER SOLEDULE         Image: Second Prove     Version Prove         Image: Second Prove <td></td> <td></td> <td>PF12</td> <td>ICE MA</td> <td>KER BOX</td> <td></td> <td></td> <td>VIEGA</td> <td>57010</td> <td></td> <td>Х</td> <td></td> <td></td> <td></td> <td></td> <td></td>			PF12	ICE MA	KER BOX			VIEGA	57010		Х					
			PF13	WASH	NG MACHINE	BOX		VIEGA	57001		Х	X	Х			
	c−															
WATER INJECTER SCHEDULE       MARK     MIFR     MODEL     VOLTB     PHAGE     MV     RECOVERV 02 TO (70°F) PISS     MOTES       1     6-6     GEHSCONSTRA     240     1     4.5 MAX     -     GEOSPRING HEAT FULKP WATER HEATER				(2) <u>PL</u> 12	" = 1'-0"	SCHEDULE										
MARK         MAR         MODEL         VOLTS         PMASE         ///         RECOVERY @ 21°C (0°F) RISE         NOTES           1         GF         GEHBONRISA         200         1         4.5 MAX         -         GEOSPRIXGHEAT PUMP WATER HEATER           3)         WATER HEATER SOLEDUS F         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         - <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>WATER HEATE</th> <th>ER SCHEDULE</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>									WATER HEATE	ER SCHEDULE						
1       GC       CEMBOONSRASA       240       1       4.5 MAX       -       CEOSIMING HEAT PUMP WATER HEATER				MARK	IFR MODEL	L	VOLTS	PHASE	kW	RECOVERY	′ @ 21°C	C (70°F)	RISE NOTI	ES		
				1	GE GEH50	DNSRSA	240	1	4.5 MAX		-		GEO	SPRING HI	EAT PUMP WATER HEATER	
				3 WA	TER HEATER	SCHEDULE										
				<b>O</b> 12	" = 1'-0"											
	3–															
	┫── ── ── ── ──															
1 2 3 4 5 6	4-															
1 2 J 4 5 6																
1 2 6																
		2	I	3		I		4	l		5				6	I

GENERAL SHEET NOTES				
1. TEAM WILL USE 5 GALLONS OF WATER FOR BOTH DINNER PARTIES.				
	-E		C	
				TEAM PURDUE
			$\parallel N$	HOME
		TEAM NA	ME:	TEAM PURDUE
		ADDRES	S:	PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
		CONTAC	T:	SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME/
	-D	CONSUL	TANTS	
				E
		JOHN GU		UITECH HOUSING
		SUSAN B	ENEDICT, DE	
		MARK BE	ALS, J & T SY	STEMS, INC.
	-C	CLIENT		
			U.S. DEPAR SOLAR I	DECATHLON 2011
			WWWW.SOL	ARDECATHLON.GOV
			U.S. DEPA	RTMENT OF ENERGY R DECATHLON
			11/23/2010 01/25/2011	80% DESIGN DRAWINGS 80% W/ DOE REVISIONS
			03/22/2011 05/03/2011 08/11/2011	100% CONSTR. DRAWINGS100% W/ DOE REVISIONS100% AS BUILT DRAWINGS
	—В			
		MARK	DATE	DESCRIPTION
		LOT NUM	IBER:	201
	F	DRAWN E	3Y: D BY:	JORDAN WALLPE
		COPYRIC	GHT:	PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
		SHEET T	ITLE	
	—А	PLU	IMBIN(	G SCHEDULES
				601
			۲-	
	J			

![](_page_65_Figure_0.jpeg)

7				
<b>GENERAL SHEET NOTES</b>				
	Ē			TEAM PURDUE HOME
	F			
	D	TEAM NA ADDRESS CONTAC	ME: 5: T:	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME/
		KEVIN ME	ERCER, TRANE	<u> </u>
		ANDY SW	/ITZER, ARKOF	R
		SUSAN B	STAK, SCHOLE	
	c		U.S. DEPAR SOLAR D WWW.SOLA U.S. DEPAR SOLAI 11/23/2010 01/25/2011 03/22/2011	TMENT OF ENERGY ECATHLON 2011 RDECATHLON.GOV RTMENT OF ENERGY RDECATHLON.GOV RTMENT OF ENERGY RDECATHLON 80% DESIGN DRAWINGS 80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS
			08/11/2011	100% AS BUILT DRAWINGS
	—В			
		MARK	DATE	DESCRIPTION
		LOT NUM DRAWN E	BER: 3Y:	201 KATLYN TIMMONS
		CHECKEI	D BY: HT:	JORDAN WALLPE PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	A	SHEET TI	SOME	TRIC VIEW
			P-	901

![](_page_66_Figure_0.jpeg)

	7			
	GENERAL SHEET NOTES			
	1. GENERAL NOTES SHALL APPLY TO ALL WORK SHOWN			
	2. VERIFY ALL MEASUREMENTS TO PROPERLY	1		
	3. ALL NOTES COINCIDE WITH SIMILAR DRAWINGS			
	COMPONENTS WITH OTHER TRADES			
	MANUFACTOR SHALL FOLLOW EQUIPMENT			
	6. CONTRACTOR SHALL COORDINATE AND	÷		
	PERFORM NECESSARY MODIFICATIONS TO PROVIDE A COMPLETE INSTALLATION.			TEAM PURDUE
	MODIFICATIONS INCLUDE BUT ARE NOT LIMITED TO STRUCTURAL, ELECTRICAL,			HOME
	ARCHITECTURAL, PLUMBING, PIPING AND DUCTWORK		$\mathbf{N}$	HUME
	7. ACCESS PANELS SHALL BE FABRICATED TO	20		
	CONNECTIONS.			
	<ol> <li>9. ALL SUPPLY DUCT SHALL BE INSULATED IN A UL USEL AND AND AND AND AND AND AND AND AND AND</li></ol>			
	10. SEAL REFRIGERANT LINES WITH APPROVED			
	SPRAT POLTURETHANE FUAM.			
		TEAM NA	ME:	TEAM PURDUE
		ADDRES	S:	PURDUE UNIVERSITY KNOY HALL, ROOM 107
				WEST LAFAYETTE, IN 47907
		CONTAC	1.	WWW.PURDUE.EDU/INHOME/
		-D		
		CONSUL	TANTS	
		ANDY SV		{
		SUSAN E	BENEDICT, DES	IGN ALTERNATIVES
	REFERENCE KEYNOTES	RYAN JU	STAK, SCHOLE	R CORPORATION
		MARK BE	EALS, J & T SYS	STEMS, INC.
	DIV 23 - HVAC	PAT WIL	SON, RYAN FIR	E PROTECTION
	23 07 00 DUCT INSULATION			
	23 07 00 2.1 BLANKET INSULATION 23 07 00 2.2 SELF-ADHESIVE INSULATION			
	23 31 00 HVAC DUCTS AND CASINGS			
	23 31 2.3 SPIRAL ROUND			
	23 37 00 AIR INLETS AND OUTLETS			
	23 37 00 2.1B 8" X 8"			
		CLIENT		
	23 41 00 2.1 TRANE CLEANEFFECTS AIR PORIFIER 23 72 23 TRANE FRESHEFFECTS ERV		U.S. DEPAR	IMENT OF ENERGY
	23 73 00 TRANE SERIES 8 HYPERION AND 23 81 43 TRANE XL20i HEAT PUMP		SOLAR D	ECATHLON 2011
		_	WWW.SOLA	RDECATHLON.GOV
			8	
			SOLAI	R DECATHION
			11/02/2010	
			01/25/2010	80% W/ DOE REVISIONS
			03/22/2011	100% CONSTR. DRAWINGS
	1 TRANE XL20i HEAT PUMP RUN REFRIGERANT LINES UNDER DECK.		08/11/2011	100% AS BUILT DRAWINGS
	$\left< 2 \right>$ TRANE HYPERION AHU			
	$\overline{3}$ TRANE FRESH EFFECTS ERV			
	4 TRANE CLEANEFFECTS. SEE DETAIL M-204.	-B		
	5 ERV EXHAUST			
	6 ERV FRESH AIR INTAKE			
		MADK		DESCRIPTION
	ACCESS PAINEL	MARK	DATE	DESCRIPTION
	8 WYE DETAIL SEE M-204			
			IBER:	201
	·			
		COPYRIC	GHT:	PURDUE UNIVERSITY 2011
				ALL RIGHTS RESERVED
		SHEET T	ITLE	
		I H'	VAC SL	JPPLY PLAN
		-A		
			Ν <b>/</b> Ι_	.1()1
_	7			

![](_page_67_Figure_0.jpeg)

7	
<b>GENERAL SHEET NOTES</b>	
1. GENERAL NOTES SHALL APPLY TO ALL WORK	
2. VERIFY ALL MEASUREMENTS TO PROPERLY	
3. ALL NOTES COINCIDE WITH SIMILAR DRAWINGS	
4. COORDINATE ALL WORK AND PLACEMENT OF COMPONENTS WITH OTHER TRADES	
5. CONTRACTOR SHALL FOLLOW EQUIPMENT MANUFACTURER'S INSTRUCTIONS FOR HANDLING	
6. CONTRACTOR SHALL COORDINATE AND	E
PERFORM NECESSARY MODIFICATIONS TO PROVIDE A COMPLETE INSTALLATION.	TEAM PURDUE
STRUCTURAL, ELECTRICAL, ARCHITECTURAL,	
7. ACCESS PANELS SHALL BE FABRICATED TO	
CONNECTIONS. 8 FRV EXHAUST SHALL HAVE APPROVED GRILLE	
	TEAM NAME: TEAM PURDUE
	ADDRESS: PURDUE UNIVERSITY
	WEST LAFAYETTE, IN 47907
	CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME/
	KEVIN MERCER, TRANE
	PAT EGAN, THERMOCORE
	JOHN GUEQUIERRE, HI-TECH HOUSING
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
REFERENCE KETNULES	MARK BEALS, J & T SYSTEMS, INC.
DIV 23 - HVAC	PAT WILSON, RYAN FIRE PROTECTION
23 07 00 DUCT INSULATION	
23 07 00 2.1 BLANKET INSULATION 23 07 00 2.2 SELF-ADHESIVE INSULATION	
23 31 00 HVAC DUCTS AND CASINGS	
23 31 2.2RECTANGLE DUCT23 31 2.3SPIRAL ROUND	
23 37 00 AIR INLETS AND OUTLETS	
23 37 00 2.2A 6" X 6" 23 37 00 2.1B 8" X 6"	-c
23 37 00 2.1C 8" X 8" 23 37 00 2.1D 18" X 3"	
23 40 00 2.1 TRANE CLEANEFFECTS AIR PURIFIER	SOLAR DECATHLON 2011
23 72 23 TRANE FRESHEFFECTS ERV 23 73 00 TRANE SERIES 8 HYPERION AHU	WWW.SOLARDECATHLON.GOV
23 81 43TRANE XL20i HEAT PUMP23 84 16ULTRA-AIRE INLINE DEHUMIDIFIER	
	U.S. DEPARTMENT OF ENERGY
	11/23/2010 80% DESIGN DRAWINGS
	01/25/2010 00% DESIGN DRAWINGO
	03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS
TRANE XL20i HEAT PUMP	08/11/2011 100% AS BUILT DRAWINGS
$\langle 2 \rangle$ TRANE HYPERION AHU	
3 TRANE FRESH EFFECTS ERV	
4 TRANE CLEANEFFECTS	-В
5 RETURN DUCT - SEE M-203	
$\left< \frac{1}{6} \right>$ LIVING WALL - SEE M-202	
7 ACCESS PANEL	MARK DATE DESCRIPTION
8 HEAT PUMP DEHUMIDIFIER SYSTEM - COILS IN	
RETURN DUCT.	LOT NUMBER: 201
	DRAWN BY: KATLYN TIMMONS
	CHECKED BY: JORDAN WALLPE
	COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	SHEET TITLE
	HVAC KETUKN PLAN
	-A
	$ V  - 102$

3	l	1	
			E-
<u></u>			 _
			D-
			 _
			C–
			 -
			B-
A3 Mechanical Close			
1" = 1'-0"			
			-
			A–
			W
			0:32:40 A
			3/2011 1
3		1	8/1

![](_page_68_Figure_1.jpeg)

7	-,	
<b>GENERAL SHEET NOTES</b>		
<ol> <li>CONTRACTOR SHALL FABRICATE AIR RETURN PLENUM AND STAND FOR AHU.</li> <li>MECHANICAL CLOSET SHALL HAVE LOUVERED DOORS.</li> </ol>		
	TEAM NAME:       TEAM PURDUE         ADDRESS:       PURDUE UNIVERSITY         KNOY HALL, ROOM 107       WEST LAFAYETTE, IN 47907         CONTACT:       SOLARHOUSE@PURDUE.EDU         WWW.PURDUE.EDU/INHOME/	
	D CONSULTANTS KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR	
<b>REFERENCE KEYNOTES</b>	RYAN JUSTAK, SCHOLER CORPORATION	
DIV 23 - HVAC 23 31 00 HVAC DUCT AND CASINGS 23 31 00 2.3 12"Ø SUPPLY 23 31 00 14"x14" RETURN 23 40 00 2.1 CLEANEFFECTS 23 73 00 TRANE SERIES 8 HYPERION AHU	MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION	
	CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY	
- SHEET KEYNOTES	11/23/2010         80% DESIGN DRAWINGS           01/25/2011         80% W/ DOE REVISIONS           03/22/2011         100% CONSTR. DRAWINGS           05/03/2011         100% W/ DOE REVISIONS           08/11/2011         100% AS BUILT DRAWINGS	
<ul> <li>2 RETURN DUCT</li> <li>3 SUPPLY DUCT</li> <li>4 CLEANEFFECTS WHOLE HOUSE AIR CLEANER</li> <li>5 ELECTRIC RESISTENCE AUXILLARY HEATER</li> </ul>	-B	
	MARK DATE DESCRIPTION	
	DRAWN BY: KATLYN TIMMONS CHECKED BY: JORDAN WALLPE COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED	
	SHEET TITLE MECHANICAL CLOSET	
	M-201	

![](_page_69_Figure_0.jpeg)

<b>GENERAL SHEET NOTES</b>	
1. GENERAL NOTES SHALL APPLY TO ALL WORK SHOWN	
2. VERIFY ALL MEASUREMENTS TO PROPERLY LOCATE COMPONENTS	
3. COORDINATE ALL WORK AND PLACEMENT OF COMPONENTS WITH OTHER TRADES	
4. CONTRACTOR SHALL FOLLOW EQUIPMENT MANUFACTURER'S INSTRUCTIONS FOR	
<ul><li>HANDLING AND INSTALLATION.</li><li>5. CONTRACTOR SHALL COORDINATE AND</li></ul>	-E
PERFORM NECESSARY MODIFICATIONS TO PROVIDE A COMPLETE INSTALLATION.	TEAM PURDUE
MODIFICATIONS INCLUDE BUT ARE NOT LIMITED TO ELECTRICAL, ARCHITECTURAL, PLUMBING,	
<ul><li>PIPING AND DUCTWORK.</li><li>6. ACCESS PANELS SHALL BE FABRICATED TO</li></ul>	
ALLOW FOR EASY ACCESS AT SECTIONED CONNECTIONS.	
	ADDRESS: PORDUE UNIVERSITY KNOY HALL, ROOM 107
	CONTACT: SOLARHOUSE@PURDUE.EDU
	WWW.PURDUE.EDU/INHOME/
	-D CONSULTANTS
	KEVIN MERCER, TRANE
	PAT EGAN, THERMOCORE
	JOHN GUEQUIERRE, HI-TECH HOUSING
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
REFERENCE KEYNOTES	RYAN JUSTAK, SCHOLER CORPORATION
	PAT WILSON, RYAN FIRE PROTECTION
DIV 23 - HVAC 23 42 00 GAS-PHASE AIR FILTRATION	
23 42 00 2.2G VEGETATION 23 42 00 2.2E PLENUM	
23 42 00 2.21A GROWTH MEDIUM 23 42 00 2.21B TRELLIS	
23 42 00 2.2D FLOAT VALVE 23 42 00 2.2C1A GUTTER	
23 42 00 2.2C1B BASIN 23 42 00 2.2D1C PVC MANIFOLD	
23 42 00 D/1/B WASTE LINE 23 42 00 2.2D1F OVER FLOW	
23 42 00 2.2F PUMP	
DIV 26 - ELECTRICAL 26 51 00 2.1K LIGHT RACEWAY	U.S. DEPARTMENT OF ENERGY
	SOLAR DECATHLON 2011
	WWW.SOLARDECATHLON.GOV
	U.S. DEPARTMENT OF ENERGY
	> JULAR DECATILLON
SHEET KEYNOTES	01/25/2010 80% DESIGN DRAWINGS
	03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOF REVISIONS
	08/11/2011 100% AS BUILT DRAWINGS
$\langle 2 \rangle$ water basin	
$\left< \frac{5}{\right>}$ ALTERNATE RETURN	
6 MAIN RETURN CONNECTION	
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: KATLYN TIMMONS
	CHECKED BY: Checker
	COPYRIGHT: PURDUE UNIVERSITY 2011 AU RIGHTS RESERVED
	SHEET TITLE
	BIOWALL DETAILS
	$ V -ZUZ$

![](_page_70_Figure_0.jpeg)

	1	2	3
_			
E-			
D–			
C–			
Р			
—ت			
A–			
47 AM			
1 10:32			
13/2011			
./8	1	2	3

![](_page_71_Figure_1.jpeg)

			_		
	<b>GENERAL SHEET NOTES</b>				
		-E			TEAM PURDUE HOME
		D	TEAM NA ADDRESS CONTAC	ME: 3: Г: \$	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME/
			CONSUL KEVIN ME PAT EGAI JOHN GU ANDY SW	TANTS ERCER, TRANE N, THERMOCO EQUIERRE, HI ITZER, ARKOF	RE -TECH HOUSING R
	<b>REFERENCE KEYNOTES</b>		RYAN JUS MARK BE	STAK, SCHOLE ALS, J & T SYS	R CORPORATION
		-c	CLIENT	U.S. DEPART SOLAR DI WWW.SOLA	IMENT OF ENERGY ECATHLON 2011 RDECATHLON.GOV
	- SHEET KEYNOTES			11/23/2010 01/25/2011 03/22/2011 05/03/2011 08/11/2011	80% DESIGN DRAWINGS 80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% AS BUILT DRAWINGS
		—В			
			MARK LOT NUM DRAWN E CHECKEI COPYRIG	DATE BER: BY: D BY: HT: TLE	DESCRIPTION         201         KATLYN TIMMONS         JORDAN WALLPE         PURDUE UNIVERSITY 2011         ALL RIGHTS RESERVED
		A		DETAIL	ED VIEWS
	7				
	1	2	3		
--------	---	---	---		
_					
E-					
-					
D-					
C-					
_					
B-					
-					
A–					
AM					
:32:48					
01110					
8/13/2	L	2	3		

	5			6	7	,,
					<b>GENERAL SHEET NOTES</b>	
MARK	DIFFUSER, R MANUFACTURER	EGISTER, AN MODEL	ID GRILLE SC NECK SIZ	CHEDULE ZE USE		
RG-1	ACCORD	ABRGW8	8" X 6"	MASTER (RETURN)		
RG-2	ACCORD	ABRGW8	8" X 6"	OFFICE (RETURN)		TEAM PURDUE
RG-3	ACCORD	ABRGW8	8" X 6"	HIGH WALL (RETURN)		NHOME
RG-4	CUSTOM		18" X 3"			
RG-5	ACCORD	H66	0 X 0	BIOWALL ALT)		
RG-6	ACCORD	ABRGW8 6	8" X 6"	ERV)		
RG-7	ACCORD	ABRGW8 8	8" X 8"	BATH ERV (RETURN)		TEAM NAME: TEAM PURDUE
SD-1	ACCORD	ABSWW H488	8" X 8"	OFFICE (SUPPLY)		ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
SD-3	ACCORD	ABSWW H488	10" X 8"	KITCHEN (SUPPLY)		CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME/
SD-4	ACCORD	ABSWW H466	6" X 6"	BATHROOM(SUPPLY)		
SD-5	ACCORD	ABSWW H466	6" X 6"	HALLWAY(SUPPLY)		-D CONSULTANTS
SD-6	ACCORD	ABSWW H488	8" X 8"	LIVING ROOM(SUPPLY)		KEVIN MERCER, TRANE
SD-7	ACCORD	ABSWW	6" X 6"	ERV (SUPPLY)		PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING
		1140				ANDY SWITZER, ARKOR
	DUC	T SCHEDULE				RYAN JUSTAK, SCHOLER CORPORATION
	DESCRIPTION			NOTES		MARK BEALS, J & T SYSTEMS, INC.
SINGLE-WALL	SPIRAL ROUND					
SINGLE-WALL FLAT RECTAN	GULAR	MAIN	NRETURN			
FLAT RECTAN	GULAR GULAR					
SINGLE-WALL	SPIRAL ROUND					
FLAT RECTAN	GULAR					
FLAT RECTAN SINGLE-WALL	GULAR SPIRAL ROUND	TOE	KICK RETUR	N IN HALLWAY		SOLAR DECATHLON 2011
DOUBLE-WALI	L INSULATED ROUND	MAS	TER/OFFICE	SUPPLY		WWW.SOLARDECATHLON.GOV
FLAT RECTAN	GULAR	MAC				U.S. DEPARTMENT OF ENERGY
SINGLE-WALL	SPIRAL ROUND	IVIAS	IER BEDRUG			SOLAR DECATHLON
SINGLE-WALL DOUBLE-WALI	SPIRAL ROUND	MAS	TER/OFFICE	SUPPLY		11/23/2010 80% DESIGN DRAWINGS
SINGLE-WALL	SPIRAL ROUND	ALTE	ERNATE BIOV	VALL RETURN		01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS
INSULATED FL	EXIBLE DUCT					08/11/2011 100% AS BUILT DRAWINGS
FLAT RECTAN	GULAR GULAR					
MECHANI	CAL EQUIPMENT SCHE	EDULE				
DEL	DES	SCRIPTION		COUNT NOTES		
	XL20i - 2 TON, DUAL		OR HEAT PUI	MP 1		MARK DATE DESCRIPTION
VAC05	ELECTRIC RESIS	TENCE AUXII				LOT NUMBER: 201
TOM	BIOW		l	1 SEE M-102		DRAWN BY: KATLYN TIMMONS
30H21SAA AIRE 70H	HYPERIC IN-LINE HEAT	N AIR HAND	LER MIDIFIER	1 SEE M-102		CHECKED BY: Checker COPYRIGHT: PURDUE UNIVERSITY 2011
0A9POOA	FRESHEFFECT VE	S ENERGY R NTILATOR	ECOVERY	1		ALL RIGHTS RESERVED
				· · ·		SHEET TITLE
						MECHANICAL
						- SCHEDULES
						M_601
	I				<u>_</u>	

		5		6	7	,
					<b>GENERAL SHEET NOTES</b>	
		DIFFUSER, R	EGISTER, AND GRILLE SC	HEDULE		
	MARK	MANUFACTURER	MODEL NECK SIZ	E USE		
	RG-1	ACCORD	ABRGW8 8" X 6" 6	MASTER (RETURN)		
	RG-2	ACCORD	ABRGW8 8" X 6" 6	OFFICE (RETURN)		TEAM PURDUE
	RG-3	ACCORD	ABRGW8 8" X 6"	HIGH WALL (RETURN)		
	RG-4	CUSTOM	N/A 18" X 3"	KITCHEN (RETURN)		
	RG-5	ACCORD	ABRGW   6" X 6"   H66	LIVING ROOM (RETURN BIOWALL ALT)		
	RG-6	ACCORD	ABRGW8 8" X 6"	BATHROOM(RETURN TO ERV)	+	
	RG-7	ACCORD	ABRGW8 8" X 8"	BATH ERV (RETURN)		
	SD-1	ACCORD	ABSWW 8" X 8"	OFFICE (SUPPLY)		ADDRESS: PURDUE UNIVERSITY
	SD-3	ACCORD	ABSWW 10" X 8"	KITCHEN (SUPPLY)		WEST LAFAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU
	SD-4	ACCORD	ABSWW 6" X 6"	BATHROOM(SUPPLY)		WWW.PURDUE.EDU/INHOME/
	SD-5	ACCORD	H466 ABSWW 6" X 6"	HALLWAY(SUPPLY)		-D
	SD-6	ACCORD	H466			
	30-0	ACCORD	H488			KEVIN MERCER, TRANE         PAT EGAN, THERMOCORE
	SD-7	ACCORD	H46	ERV (SUPPLY)		JOHN GUEQUIERRE, HI-TECH HOUSING
						SUSAN BENEDICT, DESIGN ALTERNATIVES
0.75		DUC	TSCHEDULE	NOTEO		RYAN JUSTAK, SCHOLER CORPORATION
SIZE		DESCRIPTION		NOTES		
14"ø 14"ø	SINGLE-WALL	SPIRAL ROUND	MAIN RETURN			
14"x14"	FLAT RECTANC	GULAR				
14"x14" 14"x12"	FLAT RECTANC	GULAR				
12"ø	SINGLE-WALLS					
10"x8"	FLAT RECTANC	GULAR				
10"x4" 8"ø	FLAT RECTANC	GULAR SPIRAL ROUND	TOE KICK RETURI	N IN HALLWAY		SOLAR DECATHLON 2011
8"ø 9"v4"	DOUBLE-WALL	INSULATED ROUND	MASTER/OFFICE	SUPPLY		WWW.SOLARDECATHLON.GOV
7"x3"	FLAT RECTANC	GULAR				U.S. DEPARTMENT OF ENERGY
7"x3" 6"ø	FLAT RECTANC	GULAR SPIRAL ROUND	MASTER BEDROC	DM RETURN		SOLAR DECATHLON
6"ø	SINGLE-WALL					11/23/2010 80% DESIGN DRAWINGS
6"ø 6"ø	SINGLE-WALL	SPIRAL ROUND	ALTERNATE BIOW	ALL RETURN		01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS
6"ø 6"ø	SINGLE-WALL	SPIRAL ROUND	BIOWALL TIED TO	MASTER RETURN		05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS BUILT DRAWINGS
6"x6"	FLAT RECTANC	GULAR				
3"x3"		GULAR				
						-В
N	MECHANIC	CAL EQUIPMENT SCHI	EDULE SCRIPTION			
4						
TFD21	5ALAH000C	CLEANEFFECTS WI	HOLE HOUSE AIR CLEANE	R 1		MARK DATE DESCRIPTION
BAY BAY	ÆVAC05 ÆVAC05	ELECTRIC RESIS	TENCE AUXILLARY HEAT	1		LOT NUMBER: 201
		BIOW		1 SEE M-102		DRAWN BY: KATLYN TIMMONS
ULTR	A-AIRE 70H	IN-LINE HEAT	PUMP DEHUMIDIFIER	1 SEE M-102		COPYRIGHT: PURDUE UNIVERSITY 2011
TERVR	100A9POOA	FRESHEFFECT VE	S ENERGY RECOVERY	1		
						SHEET TITLE
						MECHANICAL
		1		1		
1			_			

3		4		5	6		7	
							GENERAL SHEET NOTES	
			MARK	DIFFUSER, REGISTER, MANUFACTURER MODE	AND GRILLE SCHEDULE	USE		
			RG-1	ACCORD ABRG	N8 8" X 6" MASTE	R (RETURN)		
			RG-2	ACCORD ABRG	N8 8" X 6" OFFICE	(RETURN)		TEAM PURDUE
			RG-3	ACCORD ABRG	N8 8" X 6" HIGH V	/ALL (RETURN)		HOME
			RG-4	CUSTOM N/A	18" X 3" KITCHI	N (RETURN)		
			RG-5	ACCORD ABRG H66	W 6" X 6" BIOWA	ROOM (RETURN LL ALT)		
			RG-0	ACCORD ABRG	No         O         A O         DATHR           ERV)         ERV)			
			SD-1	ACCORD ABSW	W 8" X 8" OFFICE			TEAM NAME:TEAM PURDUEADDRESS:PURDUE UNIVERSITY
			SD-3	ACCORD ABSW	3 W 10" X 8" KITCHI	N (SUPPLY)		KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
			SD-4	ACCORD ABSW	3 W 6" X 6" BATHR	OOM(SUPPLY)		WWW.PURDUE.EDU/INHOME/
			SD-5	ACCORD ABSW	6" X 6" HALLW	AY(SUPPLY)		-D CONSULTANTS
			SD-6	ACCORD ABSW	W 8" X 8" LIVING	ROOM(SUPPLY)		KEVIN MERCER, TRANE
			SD-7	ACCORD ABSW	W 6" X 6" ERV (S	UPPLY)		PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING
								ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES
			917E		ILE			RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC.
			14"ø SINCI E W		NOTES			
		1	14"Ø SINGLE-W	ALL SPIRAL ROUND M	AIN RETURN			
		1.	4"x14" FLAT REC ⁻					
			12"ø SINGLE-W					
		1	0"x8" FLAT REC ⁻		OF KICK RETURN IN HALLW			CLIENT U.S. DEPARTMENT OF ENERGY
			8"ø SINGLE-W	ALL SPIRAL ROUND	ASTER/OFFICE SUPPLY			SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV
			8"x4" FLAT REC ⁻ 7"x3" FLAT REC ⁻					
			7"x3" FLAT REC 7"x3" FLAT REC	TANGULAR M	ASTER BEDROOM RETURN			SOLAR DECATHLON
			6"ø SINGLE-W					11/23/2010 80% DESIGN DRAWINGS
			6"ø SINGLE-W	ALL SPIRAL ROUND A	LTERNATE BIOWALL RETUR			01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS
			6"ø INSULATE	D FLEXIBLE DUCT	IOWALL HED TO MASTER R			08/11/2011 100% AS BUILT DRAWINGS
			3"x3" FLAT REC	TANGULAR				
								B
	MARK MAN	NUFACTURER	MECH. MODEL	ANICAL EQUIPMENT SCHEDULE DESCRIPTIO	N COUNT	NOTES		
	1	TRANE	4TWZ0024A	XL20i - 2 TON, DUAL COMPRES	SSOR HEAT PUMP 1			MARK DATE DESCRIPTION
	4 5	TRANE TRANE	TFD215ALAH000C BAYEVAC05	CLEANEFFECTS WHOLE HOU ELECTRIC RESISTENCE AU	ISE AIR CLEANER1JXILLARY HEAT1			
	6	CUSTOM		BIOWALL RETU	IRN 1	SEE M-102		DRAWN BY: KATLYN TIMMONS
	7 8 TH	IRANE I IERMA-STOR	ULTRA-AIRE 70H		HUMIDIFIER 1	SEE M-102		COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	9	IRANE	ERVR100A9POOA	VENTILATOF	RECOVERY 1			
								JUNEDULES
								M-601
3		4		5	6		7	



		2	
	ELECTRICAL CALCULATIONS		ELECTR
	ELECTRICAL SYSTEM DESIGN DETAILS		DERA PVSC
	AMBIENT TEMPERATURE TEMPERATURE IN INDIANA RANGES FROM -34 TEMPERATURE IN WASHINGTON DC RANGES F OPERATING TEMPERATURE OF THE PV MODUI	DEG C TO 47 DEG C. FROM  -44 DEG C TO 48 DEG C. LES CAN VARY BETWEEN -40 DEG C TO 50 DEG C	FROM ROOF OF 20
E-	ELECTRICAL SYSTEM BLOCK DIAGRAM E-601 PROVIDES AN OVERVIEW OF THE ELCTR FOUR STRINGS OF 9. EACH NEGATIVE STRING ROOF IN A SOLADECK JUNCTION BOX. STRING STRINGS B AND C ARE FUSED ON THE SOUTH AND COMBINED AT THE MAIN DC DISCONNECT GARAGE.	RICAL SYSTEM. 36 SUNPOWER MODULES WILL BE IS PROTECTED BY A 12A FUSE SECURELY MOUI S A AND D ARE FUSED ON THE NORTH ROOF SC ROOF SOLADECK. ALL FOUR STRINGS ARE THE ATTACHED TO THE CENTRAL INVERTER LOCAT	E INSTALLED IN NTED ON THE <u>TERM</u> DLADECK. N ROUTED TO CONE ED IN THE FILL A CURF
_	NEC 690.7 MAXIMUM VOLTAGE CALCULATION SUNPOWER PROVIDED TEMPERATURE COEFF (FOR LOWEST AMBIENT TEMPERATURE) -40C = 4 STRINGS of 9 AT LOWEST AMBIENT TEMPERA DIFFERENCE BETWEEN RATED AND LOWEST E 25C OR 298.15K @ STC, -40C OR 233.15K @ LOW TEMPERATURE DIFFERENCE = 65 C OR K	FICIENT VOLTAGE (Voc) = -132.5 mV/K = 233.15K, 25C = 298.15K ATURE of -40C or 233.15K EXPECTED TEMPERATURE WEST EXPECTED TEMPERATURE	ISC X ISC = OCPE TERM CONE NEC3
D-	MAXIMUM PV OPEN CIRCUIT (PVOC) V DC VOLTAGE (VOC) = -132.5 MV/ K V OPEN CIRCUIT = 48.5V PER MODULE 48.5 V DC (-132.5 MV/K X -65K) = (-0.1325V/K X -6 48.5 V DC OPEN CIRCUIT + 8.6125 V DC = 57.112 57.1125 V DC X 9 MODULES/STRING = 514.01 V	85K = 8.6125V) 25 V DC OPEN CIRCUIT / MODULE DC MAXIMUM VOLTAGE PER STRING AT -40C OR	20.3A RATIN VOLT VD = CONE R = 1. IMP =
_	NEC 690.53 DIRECT-CURRENT PV POWER SOU (1) RATED MAXIMUM POWER-POINT CURRENT IMP = 5.88A X 1 = 5.88A (2) RATED MAXIMUM POWER-POINT VOLTAGE VMP = 40.5V X 9 = 364.5 VDC (3) MAX SYSTEM VOLTAGE (PV VOC) = (PVOC X PV VOC = 57.1125 X 9 = 514.01 VDC (FROM ABO (4) SHORT-CIRCUIT CURRENT (ISC) = (MODULE ISC = (6.25A X 1.25) X 1 = 7.81A	RCE REQUIREMENTS FOR LABEL/MARKING (IMP) = (5.88A X NUMBER OF STRINGS IN PARALI (VMP) = (MODULE VMP X NUMBER OF MODULES ( TEMP CORRECTION FACTOR X NUMBER OF MO VE CALCULATION) E ISC X 1.25 X NUMBER OF STRINGS IN PARALLEI	LEL)       D= 12         S/STRING)       VERIF         DULES/STRING)       1% VI         L)       R = (N         R = 3.       R = 3.         R = 2.       R = 2.
	OVERCURRENT PROTECTION DEVICE CALCUL	ATIONS PV OUTPUT CIRCUIT FUSE	1.29
	NEC 690.8 (A) (2) MAXIMUM OUTPUT CIRCUIT C MAX OUTPUT CKT CURRENT = (MODULE ISC X MAX OUTPUT CKT CURRENT = (6.25 X 1.25 X 1)	<u>URRENT</u> 1.25 X NUMBER OF STRINGS IN PARALLEL) = 7.81A MAX OUTPUT CIRCUIT CURRENT	MAIN
C-	NEC 690.8 (B) AMPACITY AND OVERCURRENT I "OVERCURRENT DEVICES MUST BE SIZED NO VERIFY TOUCH SAFE FUSE CALCULATION FOR OCPD (OVER CURRENT PROTECTION DEVICE) OCPD = (7.81A X 1.25) = 9.76A PER STRING	DEVICE (OCPD) RATINGS T LESS THAN 125 PERCENT OF NEC 690.8 (A) CIR PV OUTPUT CIRCUIT : = (MAX OUTPUT CIRCUIT CURRENT X 1.25)	CUIT CURRENT"
	AT 50C FOR ROOFTOP CONDITIONS, USING 12/ 150C-50C/125 = 0.8 SQRT(0.8) = 0.894 (12A) X (0.894) = 10.728A VERFIED: 10.728A > 9.76A; 12A DC TOUCH SAF	A TOUCHSAFE FUSE E FUSE, OK	MAIN AC SI NEC 2 10AW NEC 2
_	MAXIMUM NUMBER OF ALLOWABLE CONDUCT (2) STRINGS OF 2 PV OUTPUT CIRCUITS TO INV FROM NEC TABLE C.1 - "10 CURRENT CARRYIN CONDUCTOR TYPE THWN SIZE IN ¾ EMT (4 CU	ORS IN ELECTRICAL METALLIC TUBING (EMT) /ERTER IN ¾ EMT. (4 CURRENT CARRYING COND G CONDUCTORS IS THE LIMIT FOR #10 THWN IN RRENT CARRYING CONDUCTORS).	UCTORS) ¾ EMT"
	VERIFY AMPACITY OF CONDUCTORS IN CONDI CONTINUOUS USE STRING AMPERAGE: 6.25 IS OVER IRRADIANCE: 7.81A X 1.25 = 9.765 A	<u>TIONS OF USE</u> SC X 1.25 = 7.81A	
	AMPACITY OF CONDUCTORS		
B–	PVOC (INSIDE HOME/GARAGE) #10 AWG THWN 75C (167F) - FROM NEC TABLE	310.16 = 35 AMPS	
	DERATED AMPACITY OF # 10 AWG CONDUCTO CONDUIT FILL CORRECTION DERATING NEC TA THREE CURRENT-CARRYING CONDUCTORS IN TEMPERATURE CORRECTION NEC TABLE 310.7 TEMPERATURE OF 55 C TEMPERATURE INSIDE	<u>RS</u> ABLE 310.15 (B) (2) (A) – ADJUSTMENT FACTOR F( A RACEWAY = 4-6 CONDUCTORS IN 3/4" EMT = 0 15 (B) (2) (A), AMBIENT TEMPERATURE BASED ON E HOME	OR MORE THAN .80 DERATION I DESIGN
_	75 C TEMPERATURE RATING OF THWN # 10 AT CONDUCTOR DERATING = 35A X 0.8 X 0.67 = 18 18.76A IS GREATER THAN OCPD OF 10A. OK	55C = 0.67 DERATION .76A	
	PVSC (ON ROOF) #10 USE-2 CONDUCTORS FOR ALL (4) PVSC ST	RINGS.	
	DERATED AMPACITY OF # 10 USE-2 CONDUCTO PVSC STRINGS A AND STRING D ARE IN 3/4" CO	ORS (STRINGS A AND D) ONDUIT ON THE ROOF TO PROTECT THE CONDU	CTORS.
	CONDUIT FILL CORRECTION DERATING NEC TA THREE CURRENT-CARRYING CONDUCTORS IN	ABLE 310.15 (B) (2) (A) – ADJUSTMENT FACTOR F A RACEWAY = 4-6 CONDUCTORS IN 3/4" EMT = 0	OR MORE THAN .80 DERATION
A–	FROM NEC TABLE 310.16 USE-2 FOR #10 IN A R ROOFTOP CONDITION OF USE 75 DEG C CORR	ACEWAY = 40A (APPLICABLE FOR STRINGS A AN ECTION FACTOR OF (0.41) FROM BOTTOM OF 20	ID D) 08 NEC TABLE
111 10:32:04 AM	310.16 CONDUCTOR DERATING = 40A X 0.8 X 0.41 = 13 13.12A IS GREATER THAN OCPD OF 10A. OK	.12A	
3/13/2C			

	3 4 5	6	7	<b>۔</b>
CTRICAL CALCULATIONS	ELECTRICAL CALCULATIONS CONTINUED	ELECTRICAL SYMBOLS	GENERAL SHEET NOTES	
TRICAL SYSTEM DESIGN DETAILS	DERATED AMPACITY OF # 10 USE-2 CONDUCTORS (STRINGS B AND C) PVSC STRINGS B AND C ARE IN FREE AIR ON THE ROOF.	ELECTRICAL LEGEND	1. GENERAL NOTES SHALL APPLY TO ALL WORK SHOWN	
ERATURE IN INDIANA RANGES FROM -34 DEG C TO 47 DEG C. ERATURE IN WASHINGTON DC RANGES FROM -44 DEG C TO 48 DEG C.	FROM NEC TABLE 310.17 #10 USE-2 = 55A (APPLICABLE FOR STRINGS B AND C) ROOFTOP CONDITION OF USE 75 DEG C CORRECTION FACTOR OF (0.41) FROM BOTTOM	SYM     DESCRIPTION       =     120 VOLT ELECTRICAL DUPLEX WALL OUTLET @ +12"		
RICAL SYSTEM BLOCK DIAGRAM	CONDUCTOR DERATING = 55A X 0.41 = 22.5A 22.5A IS GREATER THAN OCPD OF 10A. OK	(UNLESS NOTED OTHERWISE) =⊖ 120 VOLT ELECTRICAL DUPLEX OUTLET - GROUND FAULT		-E
PROVIDES AN OVERVIEW OF THE ELCTRICAL SYSTEM. 36 SUNPOWER MODULES WILL BE INSTALLED IN STRINGS OF 9. EACH NEGATIVE STRING IS PROTECTED BY A 12A FUSE SECURELY MOUNTED ON THE IN A SOLADECK JUNCTION BOX. STRINGS A AND D ARE FUSED ON THE NORTH ROOF SOLADECK.	TERMINAL RATING	GFIC INTERRUPTOR CIRCUIT → 120 VOLT ELECTRICAL DUPLEX OUTLET - GROUND FAULT		
GS B AND C ARE FUSED ON THE SOUTH ROOF SOLADECK. ALL FOUR STRINGS ARE THEN ROUTED TO OMBINED AT THE MAIN DC DISCONNECT ATTACHED TO THE CENTRAL INVERTER LOCATED IN THE	CONDUCTOR AMPACITY AT TERMINAL RATED TEMPERATURE, DERATED FOR CONDUIT FILL AND TEMPERATURE, MUST BE GREATER THAN OR EQUAL TO THE SHORT CIRCUIT	GFIC/WP INTERRUPTOR CIRCUIT (WP = WEATHERPROOF)		
90.7 MAXIMUM VOLTAGE CALCULATION	ISC X 1.56 (1.25 FOR CONTINUOUS USE X 1.25 FOR OVER IRRADIANCE) ISC = SUNPOWER 238 6.25A, 6.25A X 1.56 = 9.75A	WHERE REQUIRED BY ELEC. CODE		
DWER PROVIDED TEMPERATURE COEFFICIENT VOLTAGE (Voc) = -132.5 mV/K OWEST AMBIENT TEMPERATURE) -40C = 233.15K, 25C = 298.15K NGS of 9 AT LOWEST AMBIENT TEMPERATURE of -40C or 233.15K	OCPD INPUT AND OUTPUT TERMINALS ARE RATED AT 75C. FROM 2008 NEC TABLE 310.16, TERMINAL RATING OF #10 AWG @ 75C= 35A			
RENCE BETWEEN RATED AND LOWEST EXPECTED TEMPERATURE R 298.15K @ STC, -40C OR 233.15K @ LOWEST EXPECTED TEMPERATURE FRATURE DIFFERENCE = 65 C OR K	CONDITIONS OF USE: SOLADECK IN DIRECT SUN, CORRECTION FACTOR OF 60C FROM	DATA/PHONE		TEAI
IUM PV OPEN CIRCUIT (PVOC) V DC	20.3A IS GREATER THAN OR EQUAL TO THE 9.75A MAX (A) PVSC, MAX PVOC. TERMINAL RATING IS OK	GROUND, 8', 5/8" COPPER ROD		
NGE (VOC) = -132.5 MV/ K N CIRCUIT = 48.5V PER MODULE DC (-132.5 MV/K X -65K) = (-0.1325V/K X -65K = 8.6125V)	VOLTAGE DROP CALCULATIONS VD = 364V MAX POWER-POINT	(M) UTILITY METER		
DC OPEN CIRCUIT + 8.6125 V DC = 57.1125 V DC OPEN CIRCUIT / MODULE 5 V DC X 9 MODULES/STRING = 514.01 V DC MAXIMUM VOLTAGE PER STRING AT -40C OR 233.15K	CONDUCTOR = #10 AWG THWN R = 1.29 (FROM NEC CH.9 TABLE 8) IMP = 5.88A	PANEL-SEE PANEL SCHEDULES		
90.53 DIRECT-CURRENT PV POWER SOURCE REQUIREMENTS FOR LABEL/MARKING TED MAXIMUM POWER-POINT CURRENT (IMP) = (5.88A X NUMBER OF STRINGS IN PARALLEL)	D= 120FT (LONGEST ONE WAY DISTANCE OF THE STRINGS FROM ARRAY TO DC COMBINER AT INVERTER)			KEVI PAT
TED MAXIMUM POWER-POINT VOLTAGE (VMP) = (MODULE VMP X NUMBER OF MODULES/STRING) 40.5V X 9 = 364.5 VDC	VERIFY VOLTAGE DROP LESS THAN (1%) 1% VD = 364 V X 0.01 = 3.64V	SMOKE AND CO DETECTOR		
X SYSTEM VOLTAGE (PV VOC) = (PVOC X TEMP CORRECTION FACTOR X NUMBER OF MODULES/STRING) C = 57.1125 X 9 = 514.01 VDC (FROM ABOVE CALCULATION) ORT-CIRCUIT CURRENT (ISC) = (MODULE ISC X 1.25 X NUMBER OF STRINGS IN PARALLEL)	R = (VD) X 1000 / (2) X (I) X (D) R = 3.64V X 1000 / (2) X (5.88A) X (120FT)	UNDERCOUNTER PLUGMOLD GFCI RECEPTACLES	<b>REFERENCE KEYNOTES</b>	RYA
6.25A X 1.25) X 1 = 7.81A CURRENT PROTECTION DEVICE CALCULATIONS PV OUTPUT CIRCUIT FUSE	R = 2.579 1.29 IS LESS THAN 2.579. OK			PAT
90.8 (A) (2) MAXIMUM OUTPUT CIRCUIT CURRENT		$\bigoplus_{C_2} CEILING MOUNTED LIGHT FIXTURE TYPE 2$		
PARAELEE) $PUTPUT CKT CURRENT = (6.25 X 1.25 X 1) = 7.81A MAX OUTPUT CIRCUIT CURRENT$	BREAKER SIZING	PENDANT LIGHT FIXTURE TYPE 1		
90.8 (B) AMPACITY AND OVERCURRENT DEVICE (OCPD) RATINGS CURRENT DEVICES MUST BE SIZED NOT LESS THAN 125 PERCENT OF NEC 690.8 (A) CIRCUIT CURRENT" Y TOUCH SAFE FUSE CALCULATION FOR PV OUTPUT CIRCUIT :	THE MAIN PANEL INCLUDES A 40A DOUBLE POLE BACK-FED PV BREAKER AND A 200A MAIN BREAKER.	PENDANT LIGHT FIXTURE TYPE 2		
(OVER CURRENT PROTECTION DEVICE) = (MAX OUTPUT CIRCUIT CURRENT X 1.25) = (7.81A X 1.25) = 9.76A PER STRING	$\frac{\text{MAIN DISTRIBUTION PANEL RATING}}{\text{NEC 690.64(B)(2)}}$ $\frac{\text{MAIN PANEL RATING = (40 + 200) / 1.2 = 200A}{\text{MAIN PANEL RATING = (40 + 200) / 1.2 = 200A}}$	PENDANT LIGHT FIXTURE TYPE 3		
C FOR ROOFTOP CONDITIONS, USING 12A TOUCHSAFE FUSE 50C/125 = 0.8 0.8) = 0.894	AC SIDE EQUIPMENT GROUNDING	+ WALL MOUNTED LIGHT FIXTURE TYPE 1		
0.894 ( (0.894) = 10.728A ED: 10.728A > 9.76A;  12A DC TOUCH SAFE FUSE, OK	10AWG BARE CU CONDUCTORS WILL BE USED. NEC 250.66	+ WALL MOUNTED LIGHT FIXTURE TYPE 2		
IUM NUMBER OF ALLOWABLE CONDUCTORS IN ELECTRICAL METALLIC TUBING (EMT) RINGS OF 2 PV OUTPUT CIRCUITS TO INVERTER IN ¾ EMT. (4 CURRENT CARRYING CONDUCTORS)	GROUNDING ELECTRODE CONDUCTOR: 4AWG BARE CU CONDUCTORS. AS DICTATED BY THE RULES, THE GROUND ROD WILL BE 8' DRIVEN INTO THE EARTH.	WALL MOUNTED LIGHT FIXTURE TYPE 3		
NEC TABLE C.1 - "10 CURRENT CARRYING CONDUCTORS IS THE LIMIT FOR #10 THWN IN ¾ EMT" UCTOR TYPE THWN SIZE IN ¾ EMT (4 CURRENT CARRYING CONDUCTORS).		+ WALL MOUNTED LIGHT FIXTURE TYPE 4	-> SHEET KEYNOTES	
Y AMPACITY OF CONDUCTORS IN CONDITIONS OF USE NUOUS USE STRING AMPERAGE: 6.25 ISC X 1.25 = 7.81A IRRADIANCE: 7.81A X 1.25 = 9.765 A		CEILING FAN LIGHT FIXTURE TYPE 1		
CITY OF CONDUCTORS		COVE STRIP LIGHT FIXTURE TYPE 1		
<u>(INSIDE HOME/GARAGE)</u> VG THWN 75C (167F) - FROM NEC TABLE 310.16 = 35 AMPS		BIOWALL GROW LIGHT FIXTURE TYPE 1		–в
<u>TED AMPACITY OF # 10 AWG CONDUCTORS</u> UIT FILL CORRECTION DERATING NEC TABLE 310.15 (B) (2) (A) – ADJUSTMENT FACTOR FOR MORE THAN		LANDSCAPE LIGHT FIXTURE TYPE 1		
ECURRENT-CARRYING CONDUCTORS IN A RACEWAY = 4-6 CONDUCTORS IN 3/4" EMT = 0.80 DERATION ERATURE CORRECTION NEC TABLE 310.15 (B) (2) (A), AMBIENT TEMPERATURE BASED ON DESIGN ERATURE OF 55 C TEMPERATURE INSIDE HOME		LANDSCAPE LIGHT FIXTURE TYPE 2		MA
EMPERATURE RATING OF THWN # 10 AT 55C = 0.67 DERATION UCTOR DERATING = 35A X 0.8 X 0.67 = 18.76A		\$ LIGHT SWITCH		LOT
IS GREATER THAN OCPD OF 10A. OK		\$ ₃ LIGHT SWITCH (3-WAY)		CHE
SE-2 CONDUCTORS FOR ALL (4) PVSC STRINGS.		FUSED BREAKER		
STRINGS A AND STRING D ARE IN 3/4" CONDUIT ON THE ROOF TO PROTECT THE CONDUCTORS.		AC DISCONNECT		SHE
E CURRENT-CARRYING CONDUCTORS IN A RACEWAY = 4-6 CONDUCTORS IN 3/4" EMT = 0.80 DERATION				
NEC TABLE 310.16 USE-2 FOR #10 IN A RACEWAY = 40A (APPLICABLE FOR STRINGS A AND D) TOP CONDITION OF USE 75 DEG C CORRECTION FACTOR OF (0.41) FROM BOTTOM OF 2008 NEC TABLE				
UCTOR DERATING = 40A X 0.8 X 0.41 = 13.12A IS GREATER THAN OCPD OF 10A. OK				
1 2	3 4 5	6	7	

GENERAL SHEET NOTES		
1. GENERAL NOTES SHALL APPLY TO ALL WORK		
SHOWN		
	÷	
	TEAM PURDI	JE
	TEAM NAME: TEAM	I PURDUE
	ADDRESS: PURDUE UN KNOY HALL	NIVERSITY ROOM 107
	WEST LAFAYETTE	E, IN 47907
	CONTACT: SOLARHOUSE@PUF WWW.PURDUE.EDU	RDUE.EDU J/INHOME/
	1	
	D CONSULTANTS	
	KEVIN MERCER, TRANE	
	PAT EGAN. THERMOCORF	
	JOHN GUFOLIERRE HLTECH HOUSING	
	SUSAN BENEDICT, DESIGN ALTERNATIVES	
REEPENCE KEVNOTES	RYAN JUSTAK SCHOLER CORPORATION	
KEI EKENCE KEINOTES	MARK BEALS, J & T SYSTEMS, INC.	
	PAT WILSON, RYAN FIRE PROTECTION	
	C CLIENT	
	U.S. DEPARTMENT OF ENERGY	
	SOLAR DECATHLON 2011	
	WWW.SOLARDECATHLON.GOV	
	U.S. DEPARTMENT OF ENERGY	(
	SOLAR DECATH	ILON
	-	
$ \langle \cdot \rangle$ sheet keynotes	11/23/2010 80% DESIGN DRA	WINGS
	01/25/2011 80% W/ DOE REV	
	05/03/2011 100% CONSTR. D	VISIONS
	08/11/2011 100% AS BUILT D	RAWINGS
	в	_
	MARK DATE DESCRIP	TION
	LOT NUMBER: 201	
	DRAWN BY: SANDUN KURUPPI	J
	CHECKED BY: JORDAN WALLPE	
	COPYRIGHT: PURDUE UNIVERS	ITY 2011
	ALL RIGHTS RESE	RVED
	SHEET TITLE	
	ELECTRICAL SYMB	OLS



7	
<b>GENERAL SHEET NOTES</b>	
SHOWN	
2. VERIFY ALL MEASUREMENTS TO PROPERLY	
3. ALL NOTES COINCIDE WITH SIMILAR DRAWINGS	
4. COORDINATE ALL WORK AND PLACEMENT OF	
COMPONENTS WITH OTHER TRADES	
	-E
	TEAM DUDDUE
	IEAM PURDUE
	<b>}</b>
	TEAM NAME: TEAM PURDUE
	KNOY HALL, ROOM 107
	WEST LAFAYETTE, IN 47907
	CONTACT: SOLARHOUSE@PURDUE.EDU
	WWW.PURDUE.EDU/INHOME/
	-D CONSULTANTS
	PAT EGAN, THERMOCORE
	JOHN GUEQUIERRE, HI-TECH HOUSING
	ANDY SWITZER ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
<b>REFERENCE KEYNOTES</b>	RYAN JUSTAK, SCHOLER CORPORATION
	MARK BEALS, J & T SYSTEMS, INC.
	PAT WILSON, RYAN FIRE PROTECTION
	-C CLIENT
	SOLAR DECATHLON 2011
	WWW.SOLARDECATHLON.GOV
	U.S. DEPARTMENT OF ENERGY
	SOLAP DECATHION
	> JOLAR DECATTLON
SHEEL KETNULES	01/25/2010 80% DESIGN DRAWINGS
	03/22/2011 100% CONSTR. DRAWINGS
	05/03/2011 100% W/ DOE REVISIONS
	08/11/2011 100% AS BUILT DRAWINGS
	-В
	MARK DATE DESCRIPTION
	11
	LOT NUMBER: 201
	CHECKED BY: JORDAN WALLPE
	COPYRIGHT: PURDUE UNIVERSITY 2011
	ALL RIGHTS RESERVED
	SHEET TITLE
	I LIGHTING PLAN
	A
	E-103
	E-103
	E-103



<ul> <li>GENERAL SHEET NOTES</li> <li>1. GENERAL NOTES SHALL APPLY TO ALL WORK SHOWN</li> <li>2. VERIFY ALL MEASUREMENTS TO PROPERLY LOCATE COMPONENTS</li> <li>3. ALL NOTES COINCIDE WITH SIMILAR DRAWINGS</li> <li>4. COORDINATE ALL WORK AND PLACEMENT OF COMPONENTS WITH OTHER TRADES</li> </ul>	-E			TEAM PURDUE
	-D	TEAM NA ADDRESS CONTAC CONSUL KEVIN ME PAT EGA	ME: S: T: TANTS ERCER, TRAN	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME/ IE ORE
<b>REFERENCE KEYNOTES</b> DIV 26 ELECTRICAL 26 24 00 SWITCHBOARDS AND PANELBOARDS		JOHN GU ANDY SW SUSAN B RYAN JU MARK BE PAT WILS	IEQUIERRE, H /ITZER, ARKO ENEDICT, DE STAK, SCHOL ALS, J & T SY SON, RYAN FII	II-TECH HOUSING OR SIGN ALTERNATIVES ER CORPORATION STEMS, INC. RE PROTECTION
<ul> <li>26 24 00 2.1 MAIN DISTRIBUTION PANEL</li> <li>26 24 00 2.2B PV AC JUNCTION BOX (ORGANIZER ENCLOSURE ACCESS)</li> <li>26 24 00 2.3A PV AC DISCONNECT (60A, EXTERIOR OF GARAGE)</li> <li>26 24 00 2.4B PV BACK FEED BREAKER (40A, 2P) (240V)</li> <li>26 24 00 2.5 METER BOX</li> <li>DIV 48 - ELECTRICAL POWER GENERATION</li> <li>48 14 13 2.1 PV MODULE (SUNPOWER SPR-238-WHT)</li> <li>48 14 13 2.2 CENTRAL INVERTER (SUNPOWER SPR- 8000m)</li> </ul>	-c		U.S. DEPAF SOLAR I WWW.SOL	RTMENT OF ENERGY DECATHLON 2011 ARDECATHLON.GOV
• SHEET KEYNOTES	—В		11/23/2010 01/25/2011 03/22/2011 05/03/2011 08/11/2011	R DECATHLON 80% DESIGN DRAWINGS 80% W/ DOE REVISIONS 100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% AS BUILT DRAWINGS
	A	MARK LOT NUM DRAWN E CHECKEI COPYRIG	DATE IBER: 3Y: D BY: SHT: ITLE (CRERCC RISER	201 201 S. KURUPPU / J. WALLPE JORDAN WALLPE PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED SRID NNECTION & DIAGRAM
			E-	-501



## **GENERAL SHEET NOTES** GENERAL NOTES SHALL APPLY TO ALL WORK SHOWN WORK AREA AROUND TEAM DISTRIBUTION PANEL SHALL KEEP MIN 30" IN FRONT, 36" DEEP, 72" HEIGH CLEAR. ALL PANELS LOCATED INSIDE THE EAST GARAGE WALL. ACCESS FROM GARAGE. GROUNDING ROD SHALL BE 8 FEET INTO GROUND. TEAM SHALL PROVIDE AND INSTALL 2/0 COPPER, 4/0 ALUMINUM, OR EQUIVALENT POWER CABLE FROM TEAM PANEL BOARD THROUGH TEAM METER HOUSING OUT TO ORGANIZER UTILITY PANEL. TEAM PURDUE TEAM METER HOUSING SHALL BE STANDARD 4-JAW, RINGLESS, ROUND UTILITY GRADE METER AT 50"-65" INCHES OFF GRADE. SENSOR WIRE FROM DATALOGGER TO TEAM METER HOUSING SHALL RUN THROUGH MAIN PANEL AND INTO THE BACK OF THE TEAM METER HOUSING. TEAM SHALL PROVIDE A CLEAR CABLING ROUTE FROM THE ORGANIZER PANEL BOARD TO ORGANIZER ENCLOSURE. THIS ROUTE WILL BE ALONGSIDE THE POWER CABLES. 90° DROP DOWN ELBOWS FROM BACKSIDE OF ORGANIZER ENCLOSURE SHALL BE INSTALLED FOR 2 ETHERNET CABLES, 1 SERIAL CORD AND A 14/3 POWER CORD. ORGANIZER ENCLOSURE SHALL BE WITHIN FOUR FEET OF TEAM PANEL BOARD AND HAVE AN 10. TEAM NAME: TEAM PURDUE UNOBSTRUCTED 12"W X 24"H X 8"D WALL SPACE. ADDRESS: PURDUE UNIVERSITY SEE E-502. KNOY HALL, ROOM 107 TEAM SHALL PROVIDE ACCESS BETWEEN 11. WEST LAFAYETTE, IN 47907 ORGANIZER ENCLOSURE AND TEAM PANEL BOARD. SOLARHOUSE@PURDUE.EDU ALLOW FOR ONE PANEL BOARD KNOCK-OUT AND CONTACT: WWW.PURDUE.EDU/INHOME/ ACCESS TO A 240V, 2 POLE, 15A BREAKER FOR PV NET METERING. MICROGRID NET PV PRODUCTION METER IN THE 12. ORGANIZER ENCLOSURE MAY BE ROUTED THROUGH THE PV AC JUNCTION BO" AND INTO THE TEAM UTILITY PANEL OR ANY OTHER ALLOWABLE CONSULTANTS LOCATION. THE PV AC VOLTAGE SENSE WIRES KEVIN MERCER, TRANE SHALL BE ROUTED TO THE TEAM UTILITY PANEL TEAM SHALL PROVIDE A CLEAR INSTALLATION 13. PAT EGAN, THERMOCORE ROUTE FOR ETHERNET CABLING BETWEEN ORGANIZER ENCLOSURE TO DATALOGGER JOHN GUEQUIERRE, HI-TECH HOUSING ENCLOSURE. 1" MINIMUM DIAMETER CLEARANCE FOR ALL PENETRATIONS. ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES **REFERENCE KEYNOTES** RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION **DIVISION 26 - ELECTRICAL** 26 24 00 00 SWITCHBOARD PANEL BOARDS 26 24 00 2.1 TEAM DISTRIBUTION PANEL 26 24 00 2.2A PV DC JUNCTION BOX 26 24 00 2.2B PV AC JUNCTION BOX 26 24 00 2.3A PV AC DISCONNECT 26 24 00 2.5 TEAM UTILITY METER **DIVISON 48 - ELECTRIC POWER GENERATION** 48 14 13 2.1 PV MODULE 48 14 13 2.2 CENTRAL INVERTER/DC DISCONNECT 48 14 13 2.4 PV MONITORING CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON SHEET KEYNOTES 11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS TEAM UTILITY METER HOUSING (EXTERIOR OF GARAGE) 05/03/2011 100% W/ DOE REVISIONS 100% AS BUILT DRAWINGS 08/11/2011 $igcar{1}2$ $igcar{1}$ TEAM UTILITY PANEL 3 > PV AC JUNCTION BOX 4 PROPOSED ORGANIZER ENCLOSURE LOCATION 5 $\rangle$ PV AC DISCONNECT SWITCH (EXTERIOR OF GARAGE) 6 CENTRAL INVERTER MARK DATE DESCRIPTION 7 $\rangle$ PV DC DISCONNECT SWITCH LOT NUMBER: 201 $||8\rangle$ PV generation and ac consumption monitoring DRAWN BY: SANDUN KURUPPU CHECKED BY: JORDAN WALLPE 9 $\rightarrow$ Control Panel (monitoring system) PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED COPYRIGHT: $\langle$ 10 $\rangle$ 1" EMT CONDUIT FROM DATALOGGER TO ORGANIZER ENCLOSURE. GROUNDING ROD LOCATION. GROUNDING ROD MUST PENETRATE 8 FEET INTO GROUND 11 SHEET TITLE (12) CONTROL TRANSFORMER (MONITORING SYSTEM) ELECTRICAL CLOSET DETAILS E-502

			26
	GRI		M
	26 05 19 2.2B		Б
	THWN-2/THHN		
	2" PVC		
		MAIN 20	PANEL 10A
		1	2
		3	4
	XL20i HEAT PUMP UNIT	5	6
		7	8
	WATER HEATER 10AWG THWN	9	10
		11	14
	OVEN 12AWG THWN	15	16
		17	18
	8AWG THWN-2	19	20
	DISPOSAL, 14AWG THWN	21	22
	DISHWASHER, 14AWG THWN	23	24
	FIRE PUMP	25	26
	12AWG THWN	27	28
	CLOTHES DRYER	29	30
	10AWG THWN	31	32
	WATER PUMP, 12AWG THWN	33	34
	WASTE PUMP, 14AWG THWN	35	36
	BLANK (ORGANIZER ACCESS)	37	38
		39	40
	26 24 00 2.1		
	26 05 19 2.2B 4AWG		
			CONNEC GROUND
A	ONE LINE ELECTRICAL DIAGRAM NTS		
	· · · · · · · · · · · · · · · · · · ·		



	7				
	<b>GENERAL SHEET NOTES</b>				
	1. ALL PV SYSTEMS WILL BE DESIGNED AND INSTALLED IN FULL COMPLIANCE WITH 2008 NATIONAL ELECTRIC CODE (NEC) AND THE 2011				
	SD RULES AND REGULATIONS. 2. PV MODULES, SOURCE CIRCUIT COMBINERS, AND UTILITY INTERACTIVE INVERTERS MUST BE SAFETY CERTIFIED (LISTED) TO THE				
24	APPROPRIATE UNDERWRITES LABORATORIES (UL) STANDARD (ULT741 FOR INVERTERS AND ODDINIEDOR HIL (1702 FOR D) (NODHILEO) AND				
E-2	MUST BE TESTED AND CERTIFIED BY ONE OF THE FOLLOWING US NATIONALLY RECOGNIZED	-Ε			
	OR TUV RHEINLAND OF NORTH AMERICA THE EUROPIAN CE DESIGNATION AND TESTS BY		l í		
	LABORATORIES IN OTHER COUNTRIES ARE NOT ACCEPTABLE. (690.4) 3. DC CIRCUITS FROM THE PV MODULES TO THE DC				HUME
	PV DISCONNECT MUST BE IN METAL CONDUITS (RACEWAYS) WHERE INSIDE THE STRUCTURE (NEC 690.31(E1))				
Г	4. ALL PV STRINGS TO USE MANUFACTURER PROVIDED CABLES FOR POWER TRANSMISSION.				
.2A					
VN			TEAM NA	ME: S:	TEAM PURDUE PURDUE UNIVERSITY
			CONTAC	T·	KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE EDU
					WWW.PURDUE.EDU/INHOME/
		-D		ΤΛΝΤΟ	
			KEVIN MI	ERCER, TRANE	
3A			PAT EGA JOHN GL	N, THERMOCO	TECH HOUSING
			ANDY SV	VITZER, ARKOF	
	<b>REFERENCE KEYNOTES</b>		RYAN JU	STAK, SCHOLE	R CORPORATION
	DIV 26 - ELECTRICAL		MARK BE	EALS, J & T SYS	BTEMS, INC.
	26 05 19 LOW VOLTAGE ELECTRICAL CONDUCTORS AND CABLES				
	26 05 19 2.2B         4AWG THWN-2 OR THHN           26 05 19 2.2B         2/0AWG THWN-2 OR THHN           26 05 19 2.2A         6AWG THWN-2 OR THHN				
.2A	26 05 19 2.2A 6AWG BARE EGC 26 05 19 2.2A 8AWG THWN-2 OR THHN 26 05 19 2.2A 10AWG USE-2				
HN	26 05 19 2.1       10AWG THWN OR THHN         26 05 19 2.1       12AWG THWN OR THHN         26 05 19 2.1       14AWG THWN OR THHN				
	26 24 00 SWITCHBOARDS AND PANELBOARDS 26 24 00 2.1 MAIN DISTRIBUTION PANEL (200A)	−C	CLIENT		
	26 24 00 2.2A         SOLADEC JUNCTION BOX (ON ROOF)           26 24 00 2.2B         PV AC JUNCTION BOX           26 24 00 2.3A         PV AC DISCONNECT (60A)			SOLAR D	ECATHLON 2011
	DIV 48 - ELECTRICAL POWER GENERATION			WWW.SOLA	RDECATHLON.GOV
	48 14 13 2.1       PV MODULE (SUNPOWER SPR-238-WHT-E)         48 14 13 2.2       CENTRAL INVERTER (SUNPOWER SPR-8000m)         48 14 13 2.4       PV MONITORING			U.S. DEPAR	TMENT OF ENERGY
	- SHEET KEYNOTES			11/23/2010	80% DESIGN DRAWINGS
				03/22/2011 05/03/2011	100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS
				08/11/2011	100% AS BUILT DRAWINGS
		—В			
			MARK	DATE	DESCRIPTION
				IBER:	201
			DRAWN	BY:	
			COPYRIC	GHT:	PURDUE UNIVERSITY 2011
		–A			
				_	004
				E-	601

			2		3	
	AMBIENT TEMPERATURE TEMPERATURE IN INDIANA RANGES FROM -34 DE TEMPERATURE IN WASHINGTON DC RANGES FRO OPERATING TEMPERATURE OF THE PV MODULES	EG C TO 47 DEG C. OM -44 DEG C TO 48 DEG C. S CAN VARY BETWEEN -40 DEC	G C TO 50 DEG C	<u>NEC 69(</u> "OVERC VERIFY OCPD (0 OCPD =	).8 (B) AMPACITY AND O URRENT DEVICES MUS TOUCH SAFE FUSE CAL OVER CURRENT PROTE (7 81A X 1 25) = 9 76A F	VERCURRENT DEVIC T BE SIZED NOT LES CULATION FOR PV O CTION DEVICE) = (MA 2ER STRING
	ELECTRICAL SYSTEM BLOCK DIAGRAM E-601 PROVIDES AN OVERVIEW OF THE ELCTRIC, IN FOUR STRINGS OF 9. EACH NEGATIVE STRING THE ROOF IN A SOLADECK JUNCTION BOX. STRIN SOLADECK. STRINGS B AND C ARE FUSED ON TH THEN ROUTED TO AND COMBINED AT THE MAIN I LOCATED IN THE GARAGE	AL SYSTEM. 36 SUNPOWER MO IS PROTECTED BY A 12A FUSE NGS A AND D ARE FUSED ON T IE SOUTH ROOF SOLADECK. AI DC DISCONNECT ATTACHED TO	DDULES WILL BE INSTALLED E SECURELY MOUNTED ON HE NORTH ROOF LL FOUR STRINGS ARE D THE CENTRAL INVERTER	<u>AT 50C</u> 150C-50 SQRT(0 (12A) X VERFIEI	FOR ROOFTOP CONDIT C/125 = 0.8 .8) = 0.894 (0.894) = 10.728A D: 10.728A > 9.76A; 12A	IONS, USING 12A TOU
E	NEC 690.7 MAXIMUM VOLTAGE CALCULATION SUNPOWER PROVIDED TEMPERATURE COEFFIC (FOR LOWEST AMBIENT TEMPERATURE) -40C = 2 4 STRINGS of 9 AT LOWEST AMBIENT TEMPERATU DIFFERENCE BETWEEN RATED AND LOWEST EXE	IENT VOLTAGE (Voc) = -132.5 m 33.15K, 25C = 298.15K JRE of -40C or 233.15K PECTED TEMPERATURE	V/K	MAXIMU (2) STRI FROM N CONDU	IM NUMBER OF ALLOWA NGS OF 2 PV OUTPUT C IEC TABLE C.1 - "10 CUR CTOR TYPE THWN SIZE	ABLE CONDUCTORS II CIRCUITS TO INVERTE RENT CARRYING COI IN ¾ EMT (4 CURREN
	25C OR 298.15K @ STC, -40C OR 233.15K @ LOWE TEMPERATURE DIFFERENCE = 65 C OR K	EST EXPECTED TEMPERATURE		<u>VERIFY</u> Contin Over IF	AMPACITY OF CONDUC UOUS USE STRING AMF RRADIANCE: 7.81A X 1.29	TORS IN CONDITIONS PERAGE: 6.25 ISC X 1 5 = 9.765 A
	VOLTAGE (VOC) = -132.5 MV/ K V OPEN CIRCUIT = 48.5V PER MODULE 48.5 V DC (-132.5 MV/K X -65K) = (-0.1325V/K X -65K 48.5 V DC OPEN CIRCUIT + 8.6125 V DC = 57.1125 V	( = 8.6125V) V DC OPEN CIRCUIT / MODULE		AMPACI PVOC (I #10 AW(	<u>TY OF CONDUCTORS</u> NSIDE HOME/GARAGE) G THWN 75C (167F) - FR	OM NEC TABLE 310.10
-	57.1125 V DC X 9 MODULES/STRING = 514.01 V DC <u>NEC 690.53 DIRECT-CURRENT PV POWER SOURC</u> (1) RATED MAXIMUM POWER-POINT CURRENT (IM IMP = 5.88A X 1 = 5.88A (2) RATED MAXIMUM POWER-POINT VOLTAGE (V	C MAXIMUM VOLTAGE PER STR <u>CE REQUIREMENTS FOR LABEL</u> MP) = (5.88A X NUMBER OF STR MP) = (MODULE VMP, X NUMBE	ING AT -40C OR 233.15K /MARKING INGS IN PARALLEL)	DERATE CONDU CURREI CORREI TEMPEF	ED AMPACITY OF # 10 AV IT FILL CORRECTION DE NT-CARRYING CONDUC CTION NEC TABLE 310.1 RATURE INSIDE HOME	<u>VG CONDUCTORS</u> RATING NEC TABLE ( TORS IN A RACEWAY 5 (B) (2) (A), AMBIENT
	VMP = 40.5V X 9 = 364.5 VDC (3) MAX SYSTEM VOLTAGE (PV VOC) = (PVOC X TH MODULES/STRING) PV VOC = 57.1125 X 9 = 514.01 VDC (FROM ABOVE	EMP CORRECTION FACTOR X I	NUMBER OF	75 C TE CONDU 18.76A I	MPERATURE RATING OF CTOR DERATING = 35A S GREATER THAN OCPE	= THWN # 10 AT 55C = X 0.8 X 0.67 = 18.76A D OF 10A. OK
	(4) SHORT-CIRCUIT CURRENT (ISC) = $(MODULE IS ISC = (6.25A X 1.25) X 1 = 7.81A$	SC X 1.25 X NUMBER OF STRIN	GS IN PARALLEL)	<u>PVSC (C</u> #10 USE	<u>DN ROOF)</u> -2 CONDUCTORS FOR /	ALL (4) PVSC STRINGS
D–	NEC 690.8 (A) (2) MAXIMUM OUTPUT CIRCUIT CUR MAX OUTPUT CKT CURRENT = (MODULE ISC X 1.2	RENT 25 X NUMBER OF STRINGS IN P	ARALLEL)	DERATE PVSC S	ED AMPACITY OF # 10 US TRINGS A AND STRING I	SE-2 CONDUCTORS (S D ARE IN 3/4" CONDUI
	MAX OUTPUT CKT CURRENT = (6.25 X 1.25 X 1) =	7.81A MAX OUTPUT CIRCUIT C	URRENT	FROM N ROOFTC CONDU 13.12A	NT-CARRYING CONDUC IEC TABLE 310.16 USE-2 DP CONDITION OF USE CTOR DERATING = 40A S GREATER THAN OCPI	FOR #10 IN A RACEWAY FOR #10 IN A RACEW 75 DEG C CORRECTIO X 0.8 X 0.41 = 13.12A O OF 10A. OK
_			EQUIPMENT SCHEDULE			
	ITEM     QTY     DESCRIPTION       1     36     PV MODULE       2     2     PVSC JUNCTION BOX	MANUFACTURER           SUNPOWER           RSTC ENTERPRISES	MANUFACTURER PART # SPR-238E-WHT-D SOLADECK 0786	240WDC INCLUDING (3) TE	NOTES	DUNDED, GROUND)
	3     1     CENTRAL INVERTER WITH COMBINER / D       4     1     JUNCTION BOX FOR ORGANIZER ENCLOS	C DISCONNECT SUNPOWER	SPR-8000m ORGANIZER SUPPLIED	8000WAC, INCLUI	DING (4) 15ADC PVSC KLKD FUSE.	& (1) 1A GFPD KLKD FUSE
	5     1     NON-FUSED SAFETY SWITCH AC DISCONI	NECT GE	TNA60R1CP	ORGANIZER ENCI 240VAC (60AAC, 1 APPLICABLE WHE	LOSURE IS ACCESSED THROUGH F NEMA3R) ERE MAIN BREAKER IS >=200Aac. I	PV AC JUNCTION BOX FOR QUIC
C–	6     1     CIRCUIT BREAKER (UTILITY LOAD SIDE CO       7     1     UTILITY POINT OF CONNECTION       8     1     UTILITY METER	ONNECTION) GE GE XXX	CH, CL, OR CHQ; 40Aac 2 POLE OR EQUAL TLM4020 XXX	ITE, SQUARE-D H APPLICABLE. UTILITY POINT OF	OMELINE, GENERIC; CHQ FOR SQU F CONNECTION NAME: MAIN; PROV	JARE-D QO OR GENERALLY IDED BY CUSTOMER
	9     1     ELECTRICAL PRODUCTION/CONSUMPTION       10     1     NETWORK POINT OF CONNECTION       11     1     LIGHTENING ARRESTOR (DC SIDE)	N MONITORING EMONITOR EXISTING EQUIPMENT DELTA	eMONITOR-44r EXISTING EQUIPMENT LA 602 DC	INCLUDING (1) NE NETWORK POINT ADDED IN PARAL	TWORK HUB AS NECESSARY OF CONNECTION NAME: NETWOR LEL TO DC DISCONNECT	K; PROVIDED BY CUSTOMER
	TAG DESCRIPTION		UCTOR & CONDUIT SCHEDULE		ROUGHLY ESTIMATED RUN	RUN LENGTH (FT), NOT TO E
	a PV SOURCE CIRCUIT (PVSC) & EQUIPMENT GROUNDING CONDUCTOR (WITHIN PV ARRAY FOOTPRINT)	STRINGS B AND C IN FREE AIR STRINGS A AND D IN 3/4"EMT CONDUIT IF OUTSIDE PV ARRAY FOOTPRINT	(2 PER PVSC FOR STRINGS A,B,C,D) #10 USE (1) SHARED #6 BARE, SOLID EGC	-2	50	3198
	b CONDUCTOR (FROM SOLADECK BOXES TO DC DISCONNECT AND COMBINER IN GARAGE)	3/4" EMI EXPOSED IN GARAGE UP TO SOLADEC BOXES. EXTERIOR EMT IS VERTICAL AND SHADED. 1" EMT (OR RMC WHERE SUBJECT TO CORROSION OR SEVERE PHYSICAL	(1 PER PVOC A,B,C,D) #10 AWG THHN/THWN (1 PER NORTH AND SOUTH ARRAYS) #10 AW THWN EGC (3) #6 THWN-2 OR THHN	G THHN OR	50	N/A
	* d POWER TO MONITORING     * e MONITORING TO ETHERNET COMM.	DAMAGE, OR PVC IF UNDERGROUND) N/A N/A	(1) #8 THWN-2 OR THHN ACGEC/DCGEC/EGC PROVIDED CAT-5e		10 10 10	N/A N/A 3600
	* AS APPLICABLE					
<b>B</b>	EACH CIRCUIT	T CONSISTS OF 9 MODULES		48 14 13 2	2.1	
D	PV CIRCUIT A PV CIRCUIT D			48 14 13 2	2.4	~
		<u>CU</u>	GU	48 14 13 2	2.5	
_						
	3/4" EMT	a FREE AIR		48 14 13 2	2.2	
				26 24 00 2	.2A	
	A+ A- D+ D-	B+ B-	C+ C-			
A-						
AM						
10:32:16			~			
'13/2011	A1 THREE LINE ELECTRICAL DIAC 12" = 1'-0"	KAM و المحمد				
8/	1	l	2	l	З	

4	5 6	7
RENT DEVICE (OCPD) RATINGS ED NOT LESS THAN 125 PERCENT OF NEC 690.8 (A) CIRCUIT CURREI	DERATED AMPACITY OF # 10 USE-2 CONDUCTORS (STRINGS B AND C) PVSC STRINGS B AND C ARE IN FREE AIR ON THE ROOF.	GENERAL SHE
ON FOR PV OUTPUT CIRCUIT : EVICE) = (MAX OUTPUT CIRCUIT CURRENT X 1.25) NG	FROM NEC TABLE 310.17 #10 USE-2 = 55A (APPLICABLE FOR STRINGS B AND C) ROOFTOP CONDITION OF USE 75 DEG C CORRECTION FACTOR OF (0.41) FROM BOTTOM OF 2008 NEC TABLE 310.16 CONDUCTOR DERATING = 55A X 0.41 = 22.5A	1. PROPERLY COLOR CODE PER NEC 200.6, 200.7, 210 2 SET THE INVERTER'S VOI
ING 12A TOUCHSAFE FUSE	22.5A IS GREATER THAN OCPD OF 10A. OK TERMINAL RATING	THE VOLTAGE ATTHE UT CONNECTION. SEE SECT MANUAL FOR DETAILED I
CH SAFE FUSE, OK	CONDUCTOR AMPACITY AT TERMINAL RATED TEMPERATURE, DERATED FOR CONDUIT FILL AND TEMPERATURE, MUST BE GREATER THAN OR EQUAL TO THE SHORT CIRCUIT CURRENT	3. SET THE INVERTER'S INT CONFIGURATION TO MAT GROUNDING CONFIGURA
NDUCTORS IN ELECTRICAL METALLIC TUBING (EMT) TO INVERTER IN ¾ EMT. (4 CURRENT CARRYING CONDUCTORS) ARRYING CONDUCTORS IS THE LIMIT FOR #10 THWN IN ¾ EMT"	ISC X 1.56 (1.25 FOR CONTINUOUS USE X 1.25 FOR OVER IRRADIANCE) ISC = SUNPOWER 238 6.25A, 6.25A X 1.56 = 9.75A	<ol> <li>THE USE OF FLEXIBLE CO RIGID CONDUITS ARE RE</li> <li>ENSURE THAT ALL WIRIN DEODEDLY OF OUPER (TO</li> </ol>
T (4 CURRENT CARRYING CONDUCTORS). CONDITIONS OF USE	TERMINAL RATING OF #10 AWG @ 75C= 35A	6. NEC 690.64(B)(7): A CONN
6.25 ISC X 1.25 = 7.81A A	NEC310.16 = .58 FOR TEMPERATURES OTHER THAN 30 C , 35A X .58 = 20.3A 20.3A IS GREATER THAN OR EQUAL TO THE 9.75A MAX (A) PVSC, MAX PVOC. TERMINAL RATING IS OK	END FROM THE INPUT FE CIRCUIT LOCATION. AS A 7. REFER TO SITE PLAN DR
TABLE 310.16 = 35 AMPS	VOLTAGE DROP CALCULATIONS VD = 364V MAX POWER-POINT CONDUCTOR = #10 AWG THWN R = 1.29 (FROM NEC CH.9 TABLE 8) IMP = 5.88A	8. REFER TO ELECTRICAL F EQUIPMENT'S INSTALLAT DETAILED CONDUCTOR A
<u>DUCTORS</u> NEC TABLE 310.15 (B) (2) (A) – ADJUSTMENT FACTOR FOR MORE THA A RACEWAY = 4-6 CONDUCTORS IN 3/4" EMT = 0.80 DERATION TEMPE (A), AMBIENT TEMPERATURE BASED ON DESIGN TEMPERATURE OF 9	AN THREE ERATURE 55 C D= 120FT (LONGEST ONE WAY DISTANCE OF THE STRINGS FROM ARRAY TO DC COMBINER AT INVERTER) VERIFY VOLTAGE DROP LESS THAN (1%) 1% VD = 364 V X 0.01 = 3.64V	9. PROVIDE CUSTOMER WIT PARTS: (1) KLKD FUSEH( FUSE, (1) GFPD KLKD FUSE 10. REFER TO THE PROPOSA
# 10 AT 55C = 0.67 DERATION .67 = 18.76A . OK	R = (VD) X 1000 / (2) X (I) X (D) R = 3.64V X 1000 / (2) X (5.88A) X (120FT) R = 2.579 1.29 IS LESS THAN 2.579. OK	DETAILED SCOPE OF WO 11. GENERALLY, CONDUITS / PER NEC CHAPTER 3 REC
VSC STRINGS.	MAIN PANEL DESIGN	
NDUCTORS (STRINGS A AND D) 3/4" CONDUIT ON THE ROOF TO PROTECT THE CONDUCTORS.	THE MAIN PANEL INCLUDES A 40A DOUBLE POLE BACK-FED PV BREAKER AND A 200A MAIN BREAKER. <u>MAIN DISTRIBUTION PANEL RATING</u>	
NEC TABLE 310.15 (B) (2) (A) – ADJUSTMENT FACTOR FOR MORE THA A RACEWAY = 4-6 CONDUCTORS IN 3/4" EMT = 0.80 DERATION	AN THREE $\begin{array}{l} \text{NEC 690.64(B)(2)} \\ \text{MAIN PANEL RATING = } (40 + 200) / 1.2 = 200A \\ \text{AC SIDE FOURDMENT GROUNDING} \end{array}$	
) IN A RACEWAY = 40A (APPLICABLE FOR STRINGS A AND D) CORRECTION FACTOR OF (0.41) FROM BOTTOM OF 2008 NEC TABLE 41 = 13.12A	E 310.16 NEC 250.122 10AWG BARE CU CONDUCTORS WILL BE USED. NEC 250.66	
	GROUNDING ELECTRODE CONDUCTOR: 4AWG BARE CU CONDUCTORS. AS DICTATED BY THE RULES, THE GROUND ROD WILL BE 8' DRIVEN INTO THE EARTH.	

	INPUT DATA		
NOTES	FIELD	VALUE	UNIT
WDC	PV ARRAY:		
	QUANTITY OF PV MODULES PER PV SOURCE CIRCUIT:	9	N/A
LUDING (3) TERMINAL BUS (UNGROUNDED, GROUNDED, GROUND) PER PVSC) 10A TOUCHSAFE FUSE)	QUANTITY OF PV SOURCE CIRCUIT PER PV OUTPUT CIRCUIT:	4	N/A
0WAC, INCLUDING (4) 15ADC PVSC KLKD FUSE. & (1) 1A GFPD KLKD FUSE	PV MODULE:		
	MANUFACTURER PART #:	SPR-238E-WHT-E	) N/A
ER HOUSING SHALL BE 1PH, 200AAC, NEMA3R GANIZER ENCLOSURE IS ACCESSED THROUGH PV AC JUNCTION BOX FOR OUICK WIRING	MAXIMUM OVERCURRENT DEVICE RATING:	10	Adc
	OPEN-CIRCUIT VOLTAGE (Voc):	48.5	Vdc
VAC (60AAC, NEMA3R)	OPERATING VOLTAGE (Vmp):	40.5	Vdc
PLICABLE WHERE MAIN BREAKER IS >=200Aac. INSTALL CL FOR GE, CH FOR EATON	MAXIMUM PERMISSIBLE SYSTEM VOLTAGE (VmaxPERMISSIBLE):	514	Vdc
, SQUARE-D HOMELINE, GENERIC; CHQ FOR SQUARE-D QO OR GENERALLY	OPERATING CURRENT (Imp):	5.88	Adc
	SHORT CIRCUIT CURRENT (Isc):	7.81	Adc
LITY POINT OF CONNECTION NAME: MAIN; PROVIDED BY CUSTOMER	MAXIMUM POWER (Pmp):	238	Wdc
LITY METER NAME: MAIN UTILITY ACCOUNT NAME: MAIN; PROVIDED BY CUSTOMER	VOLTAGE TEMPERATURE COEFFICIENT (IF %/°C AVAILABLE, ENTER (%/°C)*Voc):	0.1325	Vdc/°C
LUDING (1) NETWORK HUB AS NECESSARY	INVERTER:		+
	MANUFACTURER PART #:	SPR-8000m	N/A
I WORK POINT OF CONNECTION NAME: NETWORK; PROVIDED BY CUSTOMER	AC OUTPUT CURRENT (Imp):	32.0	Aac
DED IN PARALLEL TO DC DISCONNECT	NOMINAL OPERATING AC VOLTAGE (Vnominal):	240	Vac

			C 2008 COMPLIANCE DETAIL			
DT TO EXCEED	XCEED DESCRIPTION ARTICLE FORMULA		RESULT			
	Vdc MAX	690.7	Vdc MAX = (Voc)(QUANTITY OF PV MODULES PER PV SOURCE CIRCUIT) + (Voc)(QUANTITY OF PV MODULES PER PV SOURCE CIRCUIT)(MANUFACTURER TEMPERATURE COEFFICIENT OF Voc AS %)(RECORD LOW TEMPERATURE VARIATION FROM STC)	Vdc MAX=	514	Vdr
	Idc MAX PVSC	690.8 (A) (1)	ldc MAX PVSC = (lsc)(125%)	Idc MAX PVSC=	7.81	Ad
	Idc MAX PVOC		Idc MAX PVOC = (Idc MAX PVSC)(QUANTITY OF PVSC PER PVOC)	Idc MAX PVOC=	9.76	Ad
	Vdc DROP PVSC (%)	210.19 (A) (1) FPN4 & 215.2 (A) (3) FPN2 & 310.5 (A) (1) FPN1 & CH. 9 TABLE 8 & CH. 9 TABLE 9	Vdc DROP PVSC (%) = ((0.2)(L)(R)(I))/V = 1.5%	ONE WAY L=	120	FT
	Vdc DROP PVOC (%)	210.19 (A) (1) FPN4 & 215.2 (A) (3) FPN2 & 310.5 (A) (1) FPN1 & CH. 9 TABLE 8 & CH. 9 TABLE 9	Vdc DROP PVOC (%) = ((0.2)(L)(R)(I))/V = X%	ONE WAY L=	120	FT
	Vac DROP IOC (%)	210.19 (A) (1) FPN4 & 215.2 (A) (3) FPN2 & 310.5 (A) (1) FPN1 & CH. 9 TABLE 8 & CH. 9 TABLE 9	Vac DROP ISC (%) = ((0.2)(L)(R)(I))/V = 1.5%	ONE WAY L=	120	FT



7				
<b>GENERAL SHEET NOTES</b>				
1. PROPERLY COLOR CODE DC AND AC CONDUCTORS				
<ul> <li>PER NEC 200.6, 200.7, 210.5, 215.12, AND 250.119.</li> <li>SET THE INVERTER'S VOLTAGE JUMPER TO MATCH</li> <li>THE VOLTAGE ATTHE UTILITY POINT OF</li> </ul>				
CONNECTION. SEE SECTION 4 OF THE INVERTER MANUAL FOR DETAILED INSTRUCTIONS.				
3. SET THE INVERTER'S INTERNAL GROUNDING CONFIGURATION TO MATCH THE SOLAR MODULE'S				
<ul><li>GROUNDING CONFIGURATION.</li><li>4. THE USE OF FLEXIBLE CONDUITS IS NOT PERMITTED</li></ul>	—Е			
<ul> <li>RIGID CONDUITS ARE REQUIRED.</li> <li>5. ENSURE THAT ALL WIRING CONNECTIONS ARE</li> </ul>				
PROPERLY SECURED / TORQUED PER MANUFACTURER INSTRUCTION.				TEAM PURDUE
6. NEC 690.64(B)(7): A CONNECTION IN A PANELBOARD SHALL BE POSITIONED AT THE OPPOSITE (LOAD) END FROM THE INPLIT FEEDER LOCATION OR MAIN			$\Lambda$	IHOME
CIRCUIT LOCATION. AS APPLICABLE. 7. REFER TO SITE PLAN DRAWING FOR LOCATIONS OF		3		IIIOML
<ul><li>EQUIPMENT SHOWN IN EQUIPMENT SCHEDULE.</li><li>8. REFER TO ELECTRICAL PARAMETER MONITORING</li></ul>				
EQUIPMENT'S INSTALLATION MANUALS FOR MORE DETAILED CONDUCTOR AND DATA CABLING				
<ul> <li>ARRANGEMENTS.</li> <li>9. PROVIDE CUSTOMER WITH THE FOLLOWING SPARE</li> <li>DARTO: (4) (1) (2) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4</li></ul>				
FUSE, (1) GFPD KLKD FUSE, & (1) ISC CLASS L FUSE 10 REFER TO THE PROPOSAL / CONTRACT FOR THE		TEAM NA	ME:	TEAM PURDUE
DETAILED SCOPE OF WORK. 11. GENERALLY, CONDUITS ARE TO BE SUPPORTED AS		ADDRES	S:	PURDUE UNIVERSITY
PER NEC CHAPTER 3 REQUIREMENTS.			_	WEST LAFAYETTE, IN 47907
		CONTAC	T:	Solarhouse@purdue.edu www.purdue.edu/inhome/
	-D	CONSUL	TANTS	
		KEVIN ME	ERCER, TRANE	
		PAT EGA	N, THERMOCO	RE
			EQUIERRE, HI	-TECH HOUSING
		SUSAN B	ENEDICT, DES	· IGN ALTERNATIVES
<b>REFERENCE KEYNOTES</b>		RYAN JU	STAK, SCHOLE	ER CORPORATION
		MARK BE	ALS, J & T SYS	STEMS, INC.
DIV 26 - ELECTRICAL				
26 24 00 SWITCHBOARDS AND PANELBOARDS 26 24 00 2.1 MAIN DISTRIBUTION PANEL 26 24 00 2.2 A BY DC. ILINGTION BOX (SOLADECK 0786)				``\
26 24 00 2.2A PV DC JUNCTION BOX (SOLADECK 0786) 26 24 00 2.2B PV AC JUNCTION BOX 26 24 00 2.3A PV AC DISCONNECT (60A)				
26 24 00 2.5 TEAM UTILITY METER				
DIV 48 - ELECTRICAL POWER GENERATION				
48 14 13SOLAR ENERGY COLLECTORS48 14 13 2.1PV MODULE SUNPOWER SPR-23848 14 14 14 14 14 14 14 14 14 14 14 14 14	–C			
48 14 13 2.2 CENTRAL INVERTER (SUNPOWER SPR-8000m) 48 14 13 2.4 PV MONITORING 48 14 13 2.5 LIGHTNING APPESTOR (DC SIDE)		CLIENT	U.S. DEPAR	TMENT OF ENERGY
			SOLAR D	ECATHLON 2011
			WWW.SOLA	RDECATHLON.GOV
				TMENT OF ENERGY
			SOLAI	<b>R</b> DECATHLON
$\langle - \rangle$ SHEET KEYNOTES			11/23/2010	80% DESIGN DRAWINGS
			03/22/2011	100% CONSTR. DRAWINGS
			08/11/2011	100% AS BUILT DRAWINGS
	—В			
		MARK	DATE	DESCRIPTION
		LOT NUM	IBER:	201
	$\left  - \right $		3Y: פער ר	
		COPYRIC		PURDUE UNIVERSITY 2011
				ALL RIGHTS RESERVED
		<u></u>		
		SHEET T		
		TH	REE LI	NE DIAGRAM
	-A			
				602
			<b>L</b> -	
<u>_</u>				



		26 28 29,31 30 32 33 34 35 36 37,39 38,40	SMOKE / CO DETECTORS KITCHEN LAUNDRY LIVING ROOM GARAGE GARAGE BLANK GARAGE GARAGE GARAGE	15.6         153.5         5600         1325         256         1032         200         450         8640	120 120 240 120 120 120 120 120 120 240 240	0.13 1.28 23.33 11 2.13 8.6 1.67 3.75 36	15 30, 2P 15 20 20 20 20 20 40, 2P	14 THWN 14 THWN 10 THWN 14 THWN 12 THWN 12 THWN 12 THWN 14 THWN 6 THWN-2	AFCI AFCI GFCI GFCI	GAR WASTE E	ACRE / CO DE TEL NALL / KITCHEN I CLOTHES DRY LIVING ROOM AGE & CONTROL WATER SUPPLY I EXTERIOR LIGH JECTOR PUMP, S IZER ACCESS PV PV BACK FEE	LIGHTING 'ER - POWER PUMP TING SINGLE OUTLET ' MONITORING ED
		984 FT2 @ 3VA (7) 20A APPLIAN LAUNDRY CIRC OVEN & COOKT WATER HEATE DISHWASHER	SERVI CE LOADS NCE OUTLET CIRCUIT AT 1500 V. SUIT (CLOTHES WASHER) TOP R	A EACH		(98 (7) NA (CC NA	CALCUL 4) X (3) = X (1500) = MEPLATE RAT 90KTOP, 7.7kV MEPLATE RAT	SERVIC ATIONS ING (A) + (OVEN, 2.4k ING	E CALCULATI	ONS	VA RATING           2,952           10,500           1,500           10,100           4,500           1 200	AMP RATING
		CLOTHES DRY	ER 100% F GENERAL LOAD @ 40%	SUB-TOTAL	GENERAL LC	ADS (24 OAD (10	MEPLATE RAT 852VA) X (0.4) 000VA) + (9,94	ING == H1VA) =			5,600 34,852 10,000 9,941 19,941	
		HEAT PUMP AN 5kW ELECTRIC TOTAL NET GEI HEAT PUMP AN FIRE PROTECT WATER SUPPL	ID SUPPLEMENTARY HEAT HEAT: HEAT PUMP VA + (5000V/ NERAL LOAD ID SUPPLEMENTARY HEAT ION PUMP Y PUMP	A * 0.65)		NA (2,7	MEPLATE (60VA) + ((5,00	0VA) X (0.65)) =			2,760 6,010 19,941 6,010 3,300 1,032	
		SERVICE C 6" = 1'-0"		CULATED LO	TC	DTAL (19 VICE (30	941VA) + (10,3 283VA) / (240V	342VA) = /) =			30,283	126.2A
1 4	0	2' 4'	8' 5				-1			6		

	ELECTRICAL CIRCUIT SCHEDULE							
PANEL	LOCATION	VA	VOLTS	AMPS	CB SIZE	WIRE TYPE	G/AFCI	NOTES
1,3	MECHANICAL CLOSET	5000	240	20.83	30, 2P	10 THWN		AIR HANDLER
2	KITCHEN	1500	120	12.5	20	12 THWN	GFCI	KITCHEN RECEPTACLES
4	LAUNDRY	1440	120	12	20	12 THWN		CLOTHES WASHER
5,7	OUTDOOR	2760	240	11.5	20, 2P	10 THWN		XL20i HEAT PUMP UNIT
6	KITCHEN	780	120	6.5	15	14 THWN		REFRIGERATOR
8	KITCHEN	1500	120	12.5	20	12 THWN	GFCI	UNDER CABINET PLUGMOLD RECEPTACLES
9,11	MECHANICAL CLOSET	4500	240	18.75	30, 2P	10 THWN		HEAT PUMP WATER HEATER, SINGLE OUTLET
10	KITCHEN	1700	120	14.2	20	12 THWN	GFCI	ADVANTIUM MICROWAVE OVEN
12	KITCHEN / LAUNDRY	84	120	0.7	15	14 THWN	AFCI	KITCHEN / LAUNDRY LIGHTING/ CLERESTORY
13,15	KITCHEN	2400	240	10	20, 2P	12 THWN	GFCI	OVEN
14	GARAGE	96	120	0.8	15	14 THWN		GARAGE LIGHTING
16	BATHROOM	1500	120	12.5	20	12 THWN	GFCI	BATHROOM GFCI
17, 19	KITCHEN	7700	240	32.08	40, 2P	8 THWN-2		СООКТОР
18	BATHROOM	250	120	2.08	15	14 THWN		BATHROOM LIGHTING / CLERESTORY
20	MASTER BEDROOM	540	120	4.5	15	14 THWN	AFCI	MASTER BEDROOM RECEPTACLES
21	KITCHEN	373	120	3.11	15	14 THWN		1/2HP GARBAGE DISPOSAL
22	OFFICE	920	120	7.7	15	14 THWN	AFCI	OFFICE RECEPTACLES
23	KITCHEN	1200	120	10	15	14 THWN		DISHWASHER
24	MASTER BEDROOM / OFFICE	714	120	5.95	15	14 THWN	AFCI	MASTER BEDROOM / OFFICE LIGHTING
25,27	GARAGE	3300	240	13.75	20	12 THWN		3/4HP FIRE PUMP
26	SMOKE / CO DETECTORS	15.6	120	0.13	15	14 THWN	AFCI	SMOKE / CO DETECTORS
28	KITCHEN	153.5	120	1.28	15	14 THWN	AFCI	BIOWALL / KITCHEN LIGHTING
29,31	LAUNDRY	5600	240	23.33	30, 2P	10 THWN		CLOTHES DRYER
30	LIVING ROOM	1325	120	11	15	14 THWN	AFCI	LIVING ROOM
32	GARAGE	256	120	2.13	20	12 THWN	GFCI	GARAGE & CONTROL POWER
33	GARAGE	1032	120	8.6	20	12 THWN		WATER SUPPLY PUMP
34	EXTERIOR	200	120	1.67	20	12 THWN	GFCI	EXTERIOR LIGHTING
35	GARAGE	450	120	3.75	20	14 THWN		WASTE EJECTOR PUMP, SINGLE OUTLET
36	BLANK		120					

NOTES

Dimmable





	ור			
GENERAL SHEET NOTES				
1. THERE SHALL BE NO BATTERY STORAGE FOR ELECTRICTY GENERATED BY THE PHOTOVOLTAIO				
ARRAY. 2. AA. AAA. AND 9V BATTERIES SHALL ONLY BE USE	, או כ			
SECONDARY DEVICES SUCH AS REMOTE CONTRO WALL CLOCKS, DOOR LOCKS, AND SMOKE ALARM	DLS,			
	0.			
	E			
				TEAM PURDUE
				HOME
			$\Lambda^{\star}$	IHUME
		TEAM NA	ME:	TEAM PURDUE
		ADDRES	S:	PURDUE UNIVERSITY KNOY HALL, ROOM 107
			<b>T</b> .	WEST LAFAYETTE, IN 47907
		CONTAC	1:	WWW.PURDUE.EDU/INHOME/
	-D			
		CONSUL	TANTS	
		KEVIN MI	ERCER, TRAN	
				2
		SUSAN B	ENEDICT, DES	SIGN ALTERNATIVES
<b>REFERENCE KEYNOTES</b>		RYAN JU	STAK, SCHOLE	ER CORPORATION
		MARK BE	ALS, J & T SYS	STEMS, INC.
DIV 08 DOOR HARDWARE		PAT WILS	SON, RYAN FIF	RE PROTECTION
08 71 00 2.5 SCHLAGE DOOR LOCKS				
DIV 26 ELECTRICAL 26 28 00 PRIMARY AND SECONDARY BATTERIES				
28 31 2.1 SMOKE ALARMS				
	–C	CLIENT		
			U.S. DEPAR	TMENT OF ENERGY
			SOLAR D	ECATHLON 2011
			WWW.SOLA	RDECATHLON.GOV
			\ \	
			U.S. DEPAR	TMENT OF ENERGY
			JULA	<b>NDLCATTLON</b>
			11/23/2010 01/25/2011	80% DESIGN DRAWINGS 80% W/ DOE REVISIONS
SD - SMOKE ALARMS (91/)			03/22/2011	100% CONSTR. DRAWINGS
LOCK - SCHLAGE DOOR LOCKS			05/03/2011 08/11/2011	100% W/ DOE REVISIONS 100% AS BUILT DRAWINGS
	—В			
			DATE	DECODIDITION
		MARK	DATE	DESCRIPTION
		LOT NUM	IBER:	201
			3Y:	
				PURDUE UNIVERSITY 2011
				ALL RIGHTS RESERVED
		SHEET T	ITLE	
		Bł	λΠΕΚ	YLUCATION
	–A			
				UU4
			_	



## **GENERAL SHEET NOTES** TEAM SHALL PROVIDE AND INSTALL 2/0 COPPER, 4/0 ALUMINUM, OR EQUIVALENT POWER CABLE FROM TEAM PANEL BOARD THROUGH TEAM METER HOUSING OUT TO ORGANIZER UTILITY PANEL. TEAM METER HOUSING SHALL BE STANDARD 4-2. JAW, RINGLESS, ROUND UTILITY GRADE METER AT 50"-65" INCHES OFF GRADE. SENSOR WIRE FROM DATALOGGER TO TEAM METER HOUSING SHALL RUN THROUGH MAIN PANEL AND INTO THE BACK OF THE TEAM TEAM PURDUE METER HOUSING. TEAM SHALL PROVIDE A CLEAR CABLING ROUTE 4 FROM THE ORGANIZER PANEL BOARD TO ORGANIZER ENCLOSURE. THIS ROUTE WILL BE ALONGSIDE THE POWER CABLES. 90° DROP DOWN ELBOWS FROM BACKSIDE OF ORGANIZER ENCLOSURE SHALL BE INSTALLED FOR 2 ETHERNET CABLES, 1 SERIAL CORD AND A 14/3 POWER CORD. ORGANIZER ENCLOSURE SHALL BE WITHIN FOUR FEET OF TEAM PANEL BOARD AND HAVE AN UNOBSTRUCTED 12"W X 24"H X 8"D WALL SPACE. SEE E-502. TEAM SHALL PROVIDE ACCESS BETWEEN ORGANIZER ENCLOSURE AND TEAM PANEL BOARD. ALLOW FOR ONE PANEL BOARD KNOCK-TEAM NAME: TEAM PURDUE OUT AND ACCESS TO A 240V, 2 POLE, 15A PURDUE UNIVERSITY ADDRESS: BREAKER FOR PV NET METERING. KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 MICROGRID NET PV PRODUCTION METER IN THE ORGANIZERS ENCLOSURE MAY BE ROUTED THROUGH THE PV AC JUNCTION BOX AND INTO SOLARHOUSE@PURDUE.EDU CONTACT: THE TEAM UTILITY PANEL OR ANY OTHER WWW.PURDUE.EDU/INHOME/ ALLOWABLE LOCATION. THE PV AC VOLTAGE SENSE WIRES SHALL BE ROUTED TO THE TEAM UTILITY PANEL. TEAM SHALL PROVIDE A CLEAR INSTALLATION ROUTE FOR ETHERNET CABLING BETWEEN CONSULTANTS ORGANIZER ENCLOSURE TO DATALOGGER ENCLOSURE. 1" MINIMUM DIAMETER CLEARANCE KEVIN MERCER, TRANE FOR ALL PENETRATIONS. TEAM SHALL PROVIDE 24"W X 30"H X 24"D PAT EGAN, THERMOCORE 10. LOCATION FOR DATALOGGER ENCLOSURE. JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES **REFERENCE KEYNOTES** RYAN JUSTAK, SCHOLER CORPORATION MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION **DIVISION 26 - ELECTRICAL** 26 24 00 00 SWITCHBOARD PANEL BOARDS 26 24 00 2.1 TEAM DISTRIBUTION PANEL 26 24 00 2.2B PV AC JUNCTION BOX 26 24 00 2.3A PV AC DISCONNECT 26 24 00 2.5 TEAM UTILITY METER DIVISON 48 - ELECTRIC POWER GENERATION 48 14 13 2.2 CENTRAL INVERTER CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON SHEET KEYNOTES 11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS ORGANIZER UTILITY PANEL 05/03/2011 100% W/ DOE REVISIONS **′**1 100% AS BUILT DRAWINGS 08/11/2011 2 PROPOSED DATA LOGGER POSITION IS IN ABOVE REFRIGERATOR, IN CABINET. 3 GROUND ROD LOCATION CLEAR CABLE ROUTE FROM ORGANIZER **〈** 4 ` UTILITY PANEL TO TEAM METER HOUSING 5 CABLE ROUTE FROM TEAM METER HOUSING TO ORGANIZER ENCLOSURE AND DATALOGGER ENCLOSURE. 1" EMT IN EXPOSED GARAGE. 1" EMT RUNS DESCRIPTION MARK DATE 6 UNDER DECK AND ALONGSIDE DECK TO ORGANIZER ENCLOSURE. 7 90° DROP DOWN ELBOW FROM BACKSIDE OF ORGANIZER ENCLOSURE LOT NUMBER: 201 DRAWN BY: K. TIMMONS / J. WALLPE CHECKED BY: JORDAN WALLPE COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED SHEET TITLE INTERCONNECTION E-605



	<b>GENERAL SHEET NOTES</b>			
		-Ε		
				INUME
			TEAM NAME:	TEAM PURDUE
			ADDRESS:	PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907
			CONTACT:	SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
			CONSULTANTS KEVIN MERCER, TRANE	
			PAT EGAN, THERMOCO	RE -TECH HOUSING
			ANDY SWITZER, ARKOP	
-	REFERENCE KEYNOTES		RYAN JUSTAK, SCHOLE	R CORPORATION
			MARK BEALS, J & T SYS PAT WILSON, RYAN FIR	STEMS, INC. E PROTECTION
		-C		
			U.S. DEPAR	IMENT OF ENERGY
			SOLAR D WWW.SOLA	ECATHLON 2011 RDECATHLON.GOV
			U.S. DEPAR	TMENT OF ENERGY
			SOLAI	R DECATHLON
	$\langle \cdot \rangle$ sheet keynotes		11/23/2010	80% DESIGN DRAWINGS
-			03/22/2011 05/03/2011	100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS
			08/11/2011	100% AS-BUILT DRAWINGS
		-В		
			MARK DATE	DESCRIPTION
				201
			DRAWN BY:	
			CHECKED BY: COPYRIGHT:	PURDUE UNIVERSITY 2011
			SHEET TITLE	
			BUILDIN	G CONTROL
		-A	OVERVIEV	V SCHEMATIC
			T-	601
	4			









PRIVATE MODULE



PRIVATE MODULE

14. TRUCK 1- PICK 13-RAMP R3

D6 D4

D3

19. TRUCK 3- PICK 18 - PUBLIC ROOF ONTO PUBLIC CORE

5





6

PRIVATE MODULE

5. TRUCK 1- PICK 4-RAMP R4

Ä

15. TRUCK 2- PICK 14 - MECHANICAL ROOF ONTO MECHAN

/				
<b>GENERAL SHEET NOTES</b>				
<ol> <li>LOADING REPRESENTS A SUGGESTED METHOD OF LOADING. EXACT PLACEMENT OF EACH ITEM TO BE COORDINATED WITH SHIPPING COMPANIES SO THAT TRANSPORTATION REQUIREMENTS ARE MET, LOADS ARE DISTRIBUTED AND CONSTRUCTION SEQUENCE IS OPTIMIZED.</li> <li>CONTRACTOR TO DETERMINE APPLICABLE SHIPPING ROUTE FROM CONSTRUCTION SITE TO NATIONAL MALL IN WASHINGTON D.C. AND VERIFY WITH OWNER PRIOR TO TRANSPORTATION</li> <li>CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND TRANSPORTATION VEHICLES TO MOVE TRUCKS FROM CONSTRUCTION LOCATION TO THE NATIONAL MALL IN WASHINGTON D.C. AND BACK.</li> <li>ALL ITEMS TO BE SECURED TO THE TRUCK PER REQUIREMENTS SET FORTH BY THE DEPARTMENT OF TRANSPORTATION, THE SHIPPING COMPANY AND ANY OTHER APPLICABLE LEGAL BODIES</li> </ol>	E			TEAM PURDUE HOME
		TEAM NA ADDRESS CONTAC	ME: S: T:	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	-D	CONSUL	TANTS	
		KEVIN ME		
		JOHN GU	IEQUIERRE, HI	-TECH HOUSING
		ANDY SW	/ITZER, ARKOF	
	-	RYAN JU	STAK, SCHOLE	ER CORPORATION
REFERENCE RETINUTES		MARK BE	ALS, J & T SYS	STEMS, INC.
				EPROTECTION
				Ň
	C			
	–C	CLIENT		
			SOLAR D	ECATHLON 2011
			WWW.SOLA	RDECATHLON.GOV
		X	U.S. DEPAR	TMENT OF ENERGY
$\langle \overline{\ \cdot\ } angle$ SHEET KEYNOTES			11/23/2010	80% DESIGN DRAWINGS
	-		03/22/2011	100% CONSTR. DRAWINGS
			08/11/2011	100% AS-BUILT DRAWINGS
NICAL CORE				
	—В			
		MARK	DATE	DESCRIPTION
		LOT NUM DRAWN E	IBER:	201 ERIC HOLT
		CHECKE		
		COPTRIC	э <b>н</b> т:	ALL RIGHTS RESERVED
		SHEET T	ITLE	
		AR	RIVAL/	DEPARTURE
	-A	SEC	QUENC	E PLANS 1-20
			<b>O-</b>	101



GARAGE ROOF

24. TRUCK 3- PICK 23 -DECK D5



25. TRUCK 3- PICK 24 - GARAGE NORTH PANEL



29. TRUCK 3- PICK 28 - GARAGE SOUTH PANEL



30. TRUCK 3- PICK 29 - GARAGE ROOF



34. TRUCK 4- PICK 33 - PLANTER P3



35. TRUCK 4- PICK 34 - PLANTER P15



39. TRUCK 4- PICK 38 - PLANTER P12



40. TRUCK 4- PICK 39 - PLANTER P2

7	
GENERAL SHEET NOTES	
<ol> <li>LOADING REPRESENTS A SUGGESTED METHOD OF LOADING. EXACT PLACEMENT OF EACH ITEM TO BE COORDINATED WITH SHIPPING COMPANIES SO THAT TRANSPORTATION REQUIREMENTS ARE MET, LOADS ARE DISTRIBUTED AND CONSTRUCTION SEQUENCE IS OPTIMIZED.</li> <li>CONTRACTOR TO DETERMINE APPLICABLE SHIPPING ROUTE FROM CONSTRUCTION SITE TO NATIONAL MALL IN WASHINGTON D.C. AND VERIFY WITH OWNER PRIOR TO TRANSPORTATION</li> <li>CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND TRANSPORTATION VEHICLES TO MOVE TRUCKS FROM CONSTRUCTION LOCATION TO THE NATIONAL MALL IN WASHINGTON D.C. AND BACK.</li> <li>ALL ITEMS TO BE SECURED TO THE TRUCK PER REQUIREMENTS SET FORTH BY THE DEPARTMENT OF TRANSPORTATION, THE SHIPPING COMPANY AND ANY OTHER APPLICABLE LEGAL BODIES</li> </ol>	
	TEAM NAME: TEAM PURDUE ADDRESS: PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 CONTACT: SOLARHOUSE@PURDUE.EDU WWW.PURDUE.EDU/INHOME
	-D CONSULTANTS
	KEVIN MERCER, TRANE
	ANDY SWITZER, ARKOR
	SUSAN BENEDICT, DESIGN ALTERNATIVES
<b>REFERENCE KEYNOTES</b>	MARK BEALS, J & T SYSTEMS, INC.
	PAT WILSON, RYAN FIRE PROTECTION
	-C CLIENT
	U.S. DEPARTMENT OF ENERGY
	WWW.SOLARDECATHLON.GOV
SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KEYNOTES      SHEET KE	11/23/2010         80% DESIGN DRAWINGS           01/25/2011         80% W/ DOE REVISIONS           03/22/2011         100% CONSTR. DRAWINGS           05/03/2011         100% W/ DOE REVISIONS           08/11/2011         100% AS-BUILT DRAWINGS
	В
	MARK DATE DESCRIPTION
	LOT NUMBER: 201
	DRAWN BY: Author CHECKED BY: Checker
	COPYRIGHT: PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
	ARRIVAL/DEPARTURE SEQUENCE PLANS 21-40
	O-102
7	





44. TRUCK 4- PICK 43 - PLANTER P11



6

45. TRUCK 4- PICK 44 - PLANTER P8

P11 P12



49. TRUCK 4- PICK 48 - DECK D1



54. TRUCK 4- PICK 53 - SOUTH EAST ROOF









NOTE: **REVERSE SEQUENCE** FOR DEPARTURE

59.SET PV PANELS

4

<ol> <li>LOADING REPRESENTS A SUGGESTED METHOL LOADING. EXACT PLACEMENT OF EACH ITEM COORDINATED WITH SHIPPING COMPANIES SI TRANSPORTATION REQUIREMENTS ARE MET, LOADS ARE DISTRIBUTED AND CONSTRUCTION SEQUENCE IS OPTIMIZED.</li> <li>CONTRACTOR TO DETERMINE APPLICABLE SHIPPING ROUTE FROM CONSTRUCTION SITE NATIONAL MALL IN WASHINGTON D.C. AND VE WITH OWNER PRIOR TO TRANSPORTATION</li> <li>CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND TRANSPORTATION VEHICLES TO MOVE TRUCH FROM CONSTRUCTION LOCATION TO THE NATIONAL MALL IN WASHINGTON D.C. AND BA</li> <li>ALL ITEMS TO BE SECURED TO THE TRUCK PE REQUIREMENTS SET FORTH BY THE DEPARTM OF TRANSPORTATION, THE SHIPPING COMPAL AND ANY OTHER APPLICABLE LEGAL BODIES</li> </ol>	S DD OF TO BE SO THAT DN TO RIFY KS ACK. ER MENT NY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO RIFY TO
	TEAM NAME:       TEAM PURDUE         ADDRESS:       PURDUE UNIVERSITY         KNOY HALL, ROOM 107       WEST LAFAYETTE, IN 47907         CONTACT:       SOLARHOUSE@PURDUE.EDU         WWW.PURDUE.EDU/INHOME       WWW.PURDUE.EDU/INHOME
	D CONSULTANTS KEVIN MERCER, TRANE PAT EGAN, THERMOCORE JOHN GUEQUIERRE, HI-TECH HOUSING ANDY SWITZER, ARKOR SUSAN BENEDICT, DESIGN ALTERNATIVES RYAN JUSTAK, SCHOLER CORPORATION
	MARK BEALS, J & T SYSTEMS, INC. PAT WILSON, RYAN FIRE PROTECTION C CLIENT U.S. DEPARTMENT OF ENERGY SOLAR DECATHLON 2011 WWW.SOLARDECATHLON.GOV
-> SHEET KEYNOTES	S SOLAR DECATHLON 11/23/2010 80% DESIGN DRAWINGS 01/25/2011 80% W/ DOE REVISIONS 03/22/2011 100% CONSTR. DRAWINGS 05/03/2011 100% W/ DOE REVISIONS 08/11/2011 100% AS-BUILT DRAWINGS
	-B       Image: Second se
	ARRIVAL/DEPARTURE SEQUENCE PLANS 41-59



1.         2.         3.         4.	GENERAL SHEET NOTES LOADING REPRESENTS A SUGGESTED METHOD OF LOADING. EXACT PLACEMENT OF EACH ITEM TO BE CORDINATED WITH SHIPPING COMPANIES SO THAT TRANSPORTATION REQUIREMENTS ARE MET, LOADS ARE DISTRIBUTED AND CONSTRUCTION SEQUENCE IS OPTIMIZED. CONTRACTOR TO DETERMINE APPLICABLE SHIPPING ROUTE FROM CONSTRUCTION SITE TO NATIONAL MALL IN WASHINGTON D.C. AND VERIFY WITH OWNER PRIOR TO TRANSPORTATION CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND TRANSPORTATION VEHICLES TO MOVE TRUCKS FROM CONSTRUCTION LOCATION TO THE NATIONAL MALL IN WASHINGTON D.C. AND BACK. ALL ITEMS TO BE SECURED TO THE TRUCK PER REQUIREMENTS SET FORTH BY THE DEPARTMENT OF TRANSPORTATION, THE SHIPPING COMPANY AND ANY OTHER APPLICABLE LEGAL BODIES	Ψ			TEAM PURDUE HOME
			TEAM NA ADDRESS CONTAC	ME: S: T:	TEAM PURDUE PURDUE UNIVERSITY KNOY HALL, ROOM 107 WEST LAFAYETTE, IN 47907 SOLARHOUSE@PURDUE.EDU
		-D	CONSUL	TANTS	WWW.PURDUE.EDU/INHOME
			KEVIN ME PAT EGA JOHN GU ANDY SW	ERCER, TRANE N, THERMOCC IEQUIERRE, HI /ITZER, ARKOF	E DRE -TECH HOUSING R
	<b>REFERENCE KEYNOTES</b>		SUSAN B RYAN JUS MARK BE	ENEDICT, DES STAK, SCHOLE	SIGN ALTERNATIVES ER CORPORATION
	$\langle \overline{ \cdot } \rangle$ SHEET KEYNOTES	-c		U.S. DEPAR SOLAR D WWW.SOLA U.S. DEPAR SOLAR U.S. DEPAR	TMENT OF ENERGY ECATHLON 2011 RDECATHLON.GOV
		—В		03/22/2011 05/03/2011 08/11/2011	100% CONSTR. DRAWINGS 100% W/ DOE REVISIONS 100% AS-BUILT DRAWINGS
			MARK LOT NUM DRAWN E CHECKEE COPYRIG	DATE IBER: 3Y: D BY: CHT:	201 DESCRIPTION 201 DEREK KULTGEN ERIC HOLT PURDUE UNIVERSITY 2011 ALL RIGHTS RESERVED
		-A	SHEET TI	RAILER	
				<u> </u>	104