TRI-CITY ENGINEERS

OWNER OR CONTRACTOR

INFO (BILLING ADDRESS)

PROJECT INFO (PROJECT LOCATION)

AUTHORITY HAVING

JURISDICTION (AHJ)

PERMIT HANDLING

(ADDITIONAL FEE - IF BY TCE)

PRE-APPLICATION MEETING

DESIGN REVIEWS

PROFESSIONAL SURVEY

(ADDITIONAL FEE - IF OBTAINED BY TCE)

GEOTECHNICAL SURVEY

(ADDITIONAL FEE - IF OBTAINED BY TCE)

WASTE SYSTEM

WATER SYSTEM

BUILDING TYPE

BUILDING STYLE

RESIDENTIAL DESIGN ORDER FORM

3801 W VAN GIESEN ST WEST RICHLAND, WA 99353 PHONE: (509) 210-1010

BY TRI-CITY ENGINEERS

CONCEPTUAL PACKAGE

DON'T NEED SURVEY

DON'T NEED SURVEY

SEWER CITY CONNECTION

WATER CITY CONNECTION

SINGLE FAMILY HOME

COLONIAL

MULTI-FAMILY

RUSTIC - RANCH

CABIN

YES - NEEDED

COUNTY

NO - NOT NEEDED

BUILDING SITE

CIVIL SITE DEVELOP

NAME:

CITY:

CITY:

STREET #:

STREET #:

CITY

RM	WHAT ARE YOU ORDERING? ARCHITECTURAL DRAWINGS STRUCTURAL STAMPED DRAWINGS & CALC'S ENERGY CODE COMPLIANCE DOCUMENTS SITE PLAN PHONE: EMAIL: STATE: ZIP: PARCEL #:
NAME OF AHJ	STATE: ZIP:
BY CONTRACT	OR BY (OWNER)
NOT NEEDED	■ NOT SURE
30% SET	60% SET
S SITE	
ALREADY HAVE S	URVEY NEED SURVEY TO BE DONE
ALREADY HAVE S	URVEY NEED SURVEY TO BE DONE
CUSTOM SEPT	IC
CUSTOM WEL	L
STYLE	
	☐ DUPLEX ☐ TRIPLEX NT ☐ APARTMENT COMPLEX
_	RY CRAFTSMEN FARM HOUSE

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TRADITIONAL

BUILDING STYLE

BUILDING DESIGN						
BUILDING SIZE (SQ. FOOTAGE)	LIVING (HEATED) SQ.FT:		LIVING (NON-HEATED) SQ.FT:		SQ.FT:	
GARAGE SIZE (SQ. FOOTAGE)	(HEATED) SQ.FT:	(NON-HEATED) SQ.FT:		_ [INSULATED BUT NOT HEATED	
	# OF BEDROOMS:	# OF BEDROOMS: # OF BATHROOMS:		# OF OFFICES:		
	# OF KITCHENS:	# OF PANTR	YS:	# 0F	# OF LAUNDRYS:	
LAYOUT COUNTS	# OF LIVING ROOMS: # OF DINING ROOMS:					
	EXERCISE ROOM I	MEDIA ROOM	UTIL. ROO	M	HOBBY ROOM	
	# OF GARAGE DOOR(OHD): _	_ OHD WIDT	H(S):/	OHD	HEIGHT(S):/	
BUILDING STORIES	# OF STORIES:	BASEME	NT ATTIC	O	THER:	
BUILDING WALL HEIGHT(S)	TYPICAL WALL HEIGHT:_			DI	BL HEIGHT AREA(S)	
	OUTDOOR / LAI	NDSCAPE DE	SIGN			
OUTDOOR AREAS	COVERED PORCH (FRONT) COVERED PATIO (SIDE OR REAR) DETACHED STRUCTURE					
OCIDOON ANEAS	POOL HOUSE UNDERGROUND POOL RETAINING WALLS					
RETAINING WALLS (ADDITIONAL FEE - IF INCLUDING WITH MAIN DESIGN)	SEGMENTAL BLOCK CONCRETE WALL ECO BLOCKS ROCK/BOULDER					
RETAINING WALL HEIGHT	TYPICAL RETAINING WALL HE	IGHT:	TIERED			
IRRIGATION DESIGN (ADDITIONAL FEE - IF INCLUDING WITH MAIN DESIGN)	☐ YES					
LIGHTING DESIGN (ADDITIONAL FEE - IF INCLUDING WITH MAIN DESIGN)	YES OUTDOOR LI	GHTING				
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BUILDING DETAILS				
FOUNDATION TYPE	HUNG FLOOR FLOOR SLAB ON GRADE POUR			
CRAWLSPACE DEPTH (IF FLOOR JOIST SELECTED)	CODE MINIMUM - 18" 24" 36" CUSTOM DEPTH:			
CONC. SLAB (IF CONCRETE SELECTED)	THICKNESS (4" MIN):			
CONC. SLAB REINFORCEMENT	REBAR: FIBERMESH OTHER:			
FLOOR FRAMING	ENGINEERED I-JOISTS WOOD FLOOR TRUSSES OTHER:			
(ADDITIONAL FEE - IF OBTAINED BY TCE)	ORDER A PRE-ENGINEERED FLOOR PACKAGE OBTAINED BY TCE PACKAGE: ALREADY HAVE A PRE-ENGINEERED FLOOR PACKAGE			
FLOOR SHEATHING	□ 3/4" PLYWOOD (TYPICAL) □ LIGHTWEIGHT CONCRETE □ OUTDOOR DECKING □ METAL DECKING □ TONGUE & GROOVE □ OTHER:			
FLOOR INSULATION	☐ CODE MINIMUM'S ☐ SPRAY FOAM INSULATION ☐ R-10 INSULATION			
EXTERIOR WALL FRAMING	TRADITIONAL HUBER ZIP SYSTEM □ 2x6 □ 2x8 □ 2x6 □ 2x8 □ CUSTOM: □ □ CUSTOM: □			
EXTERIOR WALL INSULATION	R-21+ R-5 (1") RIGID R-21+ R-10 (2") RIGID R-21+ R-12 (2.5") RIGID			
EXTERIOR WALL FINISH(ES)	□ LAP SIDING □ METAL SIDING □ STUCCO □ STONE □ BRICK □ WOOD SIDING □ T1-11 SIDING □ BOARD & BATT SIDING □ CONC. FINISH □ OTHER: □			
INTERIOR WALL FRAMING	INSULATED SOUND WALLS (OPTIONAL) - LOCATIONS:			
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ROOF STYLE	HIP FLAT SHED DORMER GABLE HIP & VALLEY			
ROOF FINISH	ASPHALT SHINGLES METAL SEAM ROOF TPO OTHER:			
	ROOF OVERHANG(S): YES TYPICAL LENGTH: MAIN ROOF PITCH:			
ROOF FRAMING (ADDITIONAL FEE - IF OBTAINED BY TCE)	OUTRIGGER LADDER FRAMING			
	ROOF SOFFIT(S): DETAILS:			
	ROOF SHEATHING: HUBER ZIP SYSTEM PLYWOOD OSB OTHER:			
	TRUSS FRAMING: HAND FRAMED TRUSS FRAMED COMBINATION FRAMED			
	PACKAGE: ALREADY HAVE A PRE-ENGINEERED TRUSS PACKAGE OBTAINED BY (TCE) PACKAGE:			
CEILINGS	□ VAULTED CEILINGS □ COFFERED CEILINGS □ CUSTOM CEILINGS □ NO CEILING, EXPOSED			
REFLECTED CEILING PLAN (ADDITIONAL FEE - IF INCLUDING IN MAIN DESIGN)	LIGHTING COORDINATION HVAC COORDINATION DESIGN/BUILD BY CONTRACTOR			
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2021 WSEC - ENERGY CREDITS (IF APPLICABLE)				
	CREDITS REQUIRED			
DWELLING SIZE (CHOOSE ONE OPTION ONLY)	SMALL DWELLING UNIT: LESS THAN 1,500 SF OF CONDITIONED FLOOR AREA WITH LESS THAN 300 SF OF FENESTRATION OR ADDITIONS GREATER THAN 500 SF BUT LESS THAN 1,500 SF OF HEATED FLOOR AREA	2.5 CREDITS		
	MEDIUM DWELLING UNIT: GREATER THAN 1,500 SF BUT LESS THAN 5,000 SF OF CONDITIONED FLOOR AREA	5.0 CREDITS		
(4.10002 5.11 51 11511 51121)	LARGE DWELLING UNIT: GREATER THAN 5,000 SF OF CONDITIONED FLOOR AREA	6.0 CREDITS		
	DWELLING UNITS SERVING R-2 OCCUPANCIES	4.5 CREDITS		
	ADDITIONS 150 SF TO 500 SF	2.0 (REDITS	
	DECCRIPTION	CREDIT(S)		
	DESCRIPTION	ALL OTHER	GROUP R-2	
	1 - COMBUSTION HEATING EQUIPMENT	-3.0	0	
	2 - HEAT PUMP & SUPPLEMENTAL HEATING BY ELECTRIC RESISTANCE OR COMBUSTION FURNACE	0	0	
SYSTEM TYPE (CHOOSE ONE OPTION ONLY)	3 - HEATING SYSTEM BASED ON ELECTRIC RESISTANCE ONLY (EITHER FORCE AIR OR ZONAL)	-1.0	-0.5	
(4.0.000 5.1.0.1 5.1.0.1)	4 - HEATING SYSTEM USING A HEAT PUMP THAT MEETS FEDERAL STANDARDS OF AIR TO WATER HEAT PUMP UNITS THAT MEET BOTH HEATING AND COOLING TO AHRI 550/590	1.5	2.0	
	5 - HEATING SYSTEM BASED ON ELECTRIC RESISTANCE WITH: INVERTER-DRIVEN DUCTLESS MINI-SPLIT HEAT PUMP INSTALLED IN LARGEST ZONE OF DWELLING or 2KW OR LESS TOTAL INSTALLED HEATING CAPACITY PER DWELLING	-1.0	-0.5	
	DESCRIPTION	CREI	DIT(S)	
(#1) EFFICIENT BUILDING ENVELOPE OPTIONS (CHOOSE ONE OPTION ONLY)	DESCRIFTION	ALL OTHER	GROUP R-2	
	1.1 - VERTICAL FENESTRATION: U = 0.22	0.5	0.5	
	1.2 - VERTICAL FENESTRATION: U = 0.25 / FLOOR R-38 / SLAB ON GRADE R-10 PERIMETER & UNDER ENTIRE SLAB / BELOW GRADE SLAB R-10 PERIMETER & UNDER ENTIRE SLAB or UA BY 15%	0.5	1.0	
	1.3 - VERTICAL FENESTRATION: U = 0.18 / CEILING R-60 / WALL R-21 INT + R-12 CI / FLOOR R-38 / BASEMENT WALL R-21 INT + R-12 CI / SLAB ON GRADE R-10 PERIMETER & UNDER ENTIRE SLAB / BELOW GRADE SLAB R-10 PERIMETER & UNDER ENTIRE SLAB or UA BY 22.5%	1.0	0.5	
	1.4 - VERTICAL FENESTRATION: U = 0.18 / CEILING R-60 / WALL R-21 INT + R-16 CI / FLOOR R-48 / BASEMENT WALL R-21 INT + R-16 CI / SLAB ON GRADE R-20 PERIMETER & UNDER ENTIRE SLAB / BELOW GRADE SLAB R-20 PERIMETER & UNDER ENTIRE SLAB or UA BY 30%	1.5	2.0	
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	DECCRIPTION	CREDIT(S)	
	DESCRIPTION	ALL OTHER	GROUP R-2
(# 2) AIR LEAKAGE CONTROL & EFFICIENT VENTILATION (CHOOSE ONE OPTION ONLY)	2.1 - REDUCE AIR LEAKAGE TO 2.0 AC PER HOUR @ A MAXIMUM 50 PASCALS OF FOR R-2 OCCUPANCIES, OPTIONAL REDUCE AIR LEAKAGE TO 0.25 CFM/FT ² MAX @ 50 PASCALS & WHOLE HOUSE VENTILATION WITH HRV SYSTEM WITH MINIMUM HEAT RECOVERY EFFICIENCY OF 0.65.	0.5	1.0
	2.2 - REDUCE AIR LEAKAGE TO 1.5 AC PER HOUR @ A MAXIMUM 50 PASCALS OF FOR R-2 OCCUPANCIES, OPTIONAL REDUCE AIR LEAKAGE TO 0.20 CFM/FT ² MAX @ 50 PASCALS & WHOLE HOUSE VENTILATION WITH HRV SYSTEM WITH MINIMUM HEAT RECOVERY EFFICIENCY OF 0.75.	1.0	1.5
	2.3 - REDUCE AIR LEAKAGE TO 0.6 AC PER HOUR @ A MAXIMUM 50 PASCALS OF FOR R-2 OCCUPANCIES, OPTIONAL REDUCE AIR LEAKAGE TO 0.15 CFM/FT ² MAX @ 50 PASCALS & WHOLE HOUSE VENTILATION WITH HRV SYSTEM WITH MINIMUM HEAT RECOVERY EFFICIENCY OF 0.80. DUCT INSULATION SHALL COMPLY WITH SECTION R403.3.7.	1.5	2.0
	DECEDITION	CREDIT(S)	
	DESCRIPTION	ALL OTHER	GROUP R-2
(# 3) HIGH EFFICIENCY HVAC EQUIPMENT OPTIONS (CHOOSE ONE OPTION ONLY) (OPTION 3.9 MAY ALSO BE SELECTED IF OPTION 3.1 or 3.3 ARE CHOSEN)	3.1 - FOR SYSTEM TYPE 1: ENERGY STAR RATED GAS OR PROPANE FURNACE WITH MINIMUM "AFUE" OF 95% of ENERGY STAR RATED GAS OR PROPANE BOILER WITH MINIMUM "AFUE" OF 90%	1.0	1.0
	3.2 - FOR SYSTEM TYPE 2: AIR-SOURCE CENTRALLY DUCTED HEAT PUMP WITH MINIMUM "HSPF" OF 9.5 or ENERGY STAR RATED GAS OR PROPANE BOILER WITH MINIMUM "AFUE" OF 90%	0.5	0.5
	3.3 - AIR SOURCE, CENTRALLY DUCTED HEAT PUMP WITH MINIMUM "HSPF" OF 9.5. IN AREAS WHERE RC IS 23°F OR BELOW, USE A COLD CLIMATE HEAT PUMP FOUND ON THE NEEP CC ASHP PRODUCT LIST.	0.5	N/A
	3.4 - CLOSED LOOP GROUND SOURCE HEAT PUMP; WITH A MINIMUM "COP" OF 3.3 or OPEN LOOP WATER SOURCE HEAT PUMP WITH MAXIMUM PUMPING HYDRAULIC HEAD OF 150 FEET AND MINIMUM "COP" OF 3.6.	1.5	1.0
	3.5 - DUCTLESS MINI-SPLIT HEAT PUMP SYSTEM, ZONAL CONTROL: IN HOMES WHERE THE PRIMARY HEATING SOURCE IS ZONAL ELECTRIC HEATING, A DUCTLESS MINI-SPLIT HEAT PUMP SYSTEM WITH A MINIMUM "HSPF" OF 10.0 TO THE LARGEST AREA OF THE HOUSING UNIT.	1.5	2.0
	3.6 - AIR SOURCE, CENTRALLY DUCTS HEAT PUMP WITH "HSPF" OF 11.0, COLD CLIMATE VARIABLE HEAT PUMP OF "HSPF" OF 10.0 MAY BE USED.	1.0	N/A
	3.7 - DUCTLESS SPLIT SYSTEM HEAT PUMPS WITH NO ELECTRIC RESISTANCE WITH "HSPF" OF 10.0. EXCEPTION: IN HOMES WITH TOTAL HEATING LOADS/RATINGS OF 24,000 OR LESS USING MULTI-ZONE MINI-SPLIT, THE MINIMUM "HSPF" OF 9.0	2.0	3.0
	3.8 - AIR TO WATER HEAT PUMP WITH MINIMUM "COP" OF 3.2 @ 47°F, RATED IN ACCORDANCE WITH AHRI 550/590 BY AN ACCREDITED OR CERTIFIED TESTING LAB.	1.0	N/A
	3.9 - THERMOSTAT MEETING ENERGY STAR CERTIFIED SMART/ EPA SPECS	0.5	0.5

	DESCRIPTION	CREDIT(S)	
(#4)	DESCRIPTION	ALL OTHER	GROUP R-2
HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM (CHOOSE ONE OPTION ONLY)	4.1 - HVAC EQUIPMENT DUCT SYSTEM(S) INSTALLATION SHALL COMPLY WITH SECTION R403.3.2 & ELECTRIC RESISTANCE HEAT, HYDRONIC HEATING AND DUCTLESS HEAT PUMPS ARE NOT PERMITTED UNDER THIS OPTION. DIRECT COMBUSTION HEATING EQUIPMENT WITH "AFUE" LESS THAN 80% IS NOT PERMITTED UNDER THIS OPTION.	0.5	N/A
		CREDIT(S)	
	DESCRIPTION	ALL OTHER	GROUP R-2
(#5) EFFICIENT WATER HEATING (CHOOSE ONE OPTION ONLY)	5.1 - DRAIN WATER HEAT RECOVERY @ LEAST 2 SHOWERS. UNITS SHALL HAVE A MINIMUM EFFICIENCY OF 40% IF INSTALLED FOR EQUAL FLOW OR A MINIMUM EFFICIENCY OF 54% IF INSTALLED FOR UNEQUAL FLOW. ACCORDANCE WITH CSSA B55.1 or IAPMO IGC 346-2017	0.5	0.5
	5.2 - FOR COMPACT HOT WATER DISTRIBUTION CREDIT, THE VOLUME SHALL STORE NOT MORE THAN 16 OUNCES OF WATER BETWEEN THE NEAREST SOURCE OF HEATED WATER AND THE TERMINATION OF THE FIXTURE SUPPLY PIPE WHERE CALCULATED USING SECTION R403.5.2. NEED 1.5 BATH'S OR MORE TO QUALIFY FOR THIS CREDIT.	0.5	0.5
	5.3 - SOLAR WATER HEATING SUPPLEMENTING A MINIMUM STANDARD WATER HEATER. PROVIDE A MINIMUM SAVINGS OF 85 THERMS OF 2000 KWH BASED ON THE SRCC ANNUAL PERFORMANCE OF OG-300 OF WATER HEATER HEATED BY GROUND SOURCE HEAT PUMP MEETING THE REQUIREMENTS OF OPTION 3.3	1.0	1.0
	5.4 - ELECTRIC HEAT PUMP MEETING (TIER III) OF NEEA'S ADVANCED WATER HEATING SPECIFICATION OF FOR R-2 OCC., MEETING (TIER III). IF ONE WATER HEATER IS SERVING MORE THAN ONE DWELLING UNIT, ALL HOT WATER SUPPLY AND RECIRCULATION PIPING SHALL BE INSULATED WITH R-8 MINIMUM PIPE INSULATION	2.0	2.5
	5.5 - ELECTRIC HEAT PUMP WITH A MINIMUM "UEF" OF 2.9 AND UTILIZING A SPLIT SYSTEM CONFIGURATION WITH THE AIR-TO-REFRIGERANT HEAT EXCHANGER LOCATED OUTDOORS OF FOR R-2 OCC., MEETING (TIER III) AND UTILIZING A SPLIT SYSTEM CONFIGURATION WITH THE AIR-TO-REFRIGERANT HEAT EXCHANGER LOCATED OUTDOORS. IF ONE WATER HEATER IS SERVING MORE THAN ONE DWELLING UNIT, ALL HOT WATER SUPPLY AND RECIRCULATION PIPING SHALL BE INSULATED WITH R-8 MINIMUM PIPE INSULATION	2.0	2.5
	DESCRIPTION	CREDIT(S)	
(#6)	DESCRIPTION	ALL OTHER	GROUP R-2
RENEWABLE ELECTRIC ENERGY	6.1 - 600 KWH PER DWELLING ANNUALLY BY ON-SITE WIND OR SOLAR OF 0.5 CREDIT, UP TO 4.5 CREDITS. MUST PROVIDE DOCUMENTATION AND CALCS OF SOLAR AND WIND ACCESS	0.5 - 4.5	0.5 - 4.5
(#7) APPLIANCE PACKAGE	7.1 - DISHWASHER, STANDARD - ENERGY STAR RATED, MOST EFF. 2021 DISHWASHER, COMPACT - ENERGY STAR RATED, VERSION 6.0 REFRIGERATOR (IF PROVIDED) - ENERGY STAR RATED, VERSION 5.1 WASHER - ENERGY STAR RATED, VERSION 8.1 VENTLESS DRYER - ENERGY STAR RATED, MOST EFF. 2022	0.5	1.5

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CUSTOMER SIGNATURE:		DATE:	
ADD ADDITIONAL INTO HERE.			
ADD ADDITIONAL INFO HERE:			