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Project No: 18-06390

West Grove 9.5, LLC
c/o Nicole Armstrong
P.O. Box 9716
Redlands, California 92375
Via email: n.armstrong@theucrgroup.com

**Subject: Greenhouse Gas Screening Table Checklist for West Grove 9.5 Apartments Project
West Lugonia Avenue, San Bernardino County**

Dear Ms. Armstrong:

Rincon Consultants, Inc. is pleased to submit the attached Screening Table for Implementation of GHG Reduction Measures for Residential Development completed for the West Grove 9.5 residential project. The proposed project is a 282-unit, multi-family residential development on an approximately 9.5-acre vacant site located on Lugonia Avenue in unincorporated San Bernardino County near the City of Redlands, California. Based on completion of the screening table (attached), the project would be consistent with reduction quantities anticipated in the County of San Bernardino's GHG Emissions Reduction Plan and would generate a less than significant individual and cumulative impact related to GHG emissions under CEQA.

As part of its Development Review Process, the County of San Bernardino provides GHG screening tables for residential and commercial development in order to evaluate a project's consistency with the County's GHG Emissions Reduction Plan. The table lists a suite of emissions reduction measures in categories such as building envelope, indoor space efficiencies, irrigation and landscaping, and solid waste, with each measure assigned a point value commensurate with its expected emissions reduction. Projects accruing at least 100 points are considered consistent with the GHG Emissions Reduction Plan.

The proposed project would incorporate 24 emissions reduction measures outlined in the screening table. In total, the proposed project would accrue 130 points, exceeding the 100 point minimum required for consistency with the County's GHG Emissions Reduction Plan. Consequently, the project would be considered consistent with the plan and impacts related to GHG emissions would be less than significant.

If you have any questions regarding this analysis or if we can provide you with other environmental consulting services, please feel free to contact us.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "John Sisser", is written over a light blue rectangular background.

John Sisser, MESM
Associate Environmental Planner

Screening Tables

The purpose of the Screening Tables is to provide guidance in measuring the reduction of greenhouse gas emissions attributable to certain design and construction measures incorporated into development projects. The analysis, methodology is based upon the GHG Plan, which includes GHG emission inventories, a year 2020 emission reduction target, the goals and policies to reach the target, together with the Programmatic EIR prepared for the GHG Plan.

Instructions for Residential, Commercial, or Industrial Projects

The Screening Table assigns points for each option incorporated into a project as mitigation or a project design feature (collectively referred to as “feature”). The point values correspond to the minimum emissions reduction expected from each feature. The menu of features allows maximum flexibility and options for how development projects can implement the GHG reduction measures. Projects that garner at least 100 points will be consistent with the reduction quantities anticipated in the County’s GHG Plan. As such, those projects that garner a total of 100 points or greater would not require quantification of project specific GHG emissions reductions. Consistent with CEQA Guidelines, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions.

Instructions for Mixed Use Projects

Mixed use projects provide additional opportunities to reduce emissions by combining complimentary land uses in a manner that can reduce vehicle trips. Mixed use projects also have the potential to complement energy efficient infrastructure in a way that reduces emissions. For mixed use projects fill out both Screening Table 1 and Table 2, but proportion the points identical to the proportioning of the mix of uses. As an example, a mixed use project that is 50% commercial uses and 50% residential uses will show ½ point for each assigned point value in Table 1 and Table 2. Add the points from both tables. Mixed use projects that garner at least 100 points will be consistent with the reduction quantities in the County’s GHG Plan and are considered less than significant for GHG emissions.

Instructions for All Projects

Those Projects that garner 100 points using the Screening Tables have provided the “fair share” contribution of reductions and are considered consistent with the GHG Plan.

Those Projects that do not garner 100 points using the screening tables will need to provide additional analysis to determine the significance of GHG emissions. The following tables provide a menu of performance standards/options related to GHG mitigation measures and design features that can be used to demonstrate consistency with the reduction measures and GHG reduction quantities in the GHG Plan.

Table 1: Screening Table for Implementation of GHG Reduction Measures for Residential Development

Feature	Description	Assigned Point Values	Project Points
Reduction Measure R2E6: Residential Energy Efficiency			
Building Envelope			
Insulation	2008 Baseline (walls R-13; roof/attic: R-30)	0 points	15
	Modestly Enhanced Insulation (walls R-13; roof/attic: R-38)	12 points	
	Enhanced Insulation (rigid wall insulation R-13, roof/attic: R-38)	15 points	
	Greatly Enhanced Insulation (spray foam wall insulated walls R-15 or higher, roof/attic R-38 or higher)	18 points	
Windows	2008 Baseline Windows (0.57 U-factor, 0.4 solar heat gain coefficient (SHGC))	0 points	7
	Modestly Enhanced Window Insulation (0.4 U-Factor, 0.32 SHGC)	6 points	
	Enhanced Window Insulation (0.32 U-Factor, 0.25 SHGC)	7 points	
	Greatly Enhanced Window Insulation (0.28 or less U-Factor, 0.22 or less SHGC)	9 points	
Cool Roof	Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)	10 points	12
	Enhanced Cool Roof(CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)	12 points	
	Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)	14 points	
Air Infiltration	Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage.		0
	Air barrier applied to exterior walls, calking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)	10 points	
	Blower Door HERS Verified Envelope Leakage or equivalent	8 points	
Thermal Storage of Building	Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls.		0
	Modest Thermal Mass (10% of floor or 10% of walls: 12” or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	2 points	
	Enhanced Thermal Mass (20% of floor or 20% of walls: 12” or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	4 points	

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Feature	Description	Assigned Point Values	Project Points
Indoor Space Efficiencies			
Heating/ Cooling Distribution System	Minimum Duct Insulation (R-4.2 required)	0 points	7
	Modest Duct insulation (R-6)	7 points	
	Enhanced Duct Insulation (R-8)	8 points	
	Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent)	12 points	
Space Heating/ Cooling Equipment	2008 Minimum HVAC Efficiency (SEER 13/60% AFUE or 7.7 HSPF)	0 points	7
	Improved Efficiency HVAC (SEER 14/65% AFUE or 8 HSPF)	4 points	
	High Efficiency HVAC (SEER 15/72% AFUE or 8.5 HSPF)	7 points	
	Very High Efficiency HVAC (SEER 16/80% AFUE or 9 HSPF)	9 points	
Water Heaters	2008 Minimum Efficiency (0.57 Energy Factor)	0 points	12
	Improved Efficiency Water Heater (0.675 Energy Factor)	12 points	
	High Efficiency Water Heater (0.72 Energy Factor)	15 points	
	Very High Efficiency Water Heater (0.92 Energy Factor)	18 points	
	Solar Pre-heat System (0.2 Net Solar Fraction)	4 points	
	Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)	8 points	
Daylighting	Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours.		0
	All peripheral rooms within the living space have at least one window (required)	0 points	
	All rooms within the living space have daylight (through use of windows, solar tubes, skylights, etc.)	1 points	
	All rooms daylighted	2 points	
Artificial Lighting	2008 Minimum (required)	0 points	12
	Efficient Lights (25% of in-unit fixtures considered high efficacy. High efficacy is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures >40watt)	8 points	
	High Efficiency Lights (50% of in-unit fixtures are high efficacy)	10 points	
	Very High Efficiency Lights (100% of in-unit fixtures are high efficacy)	12 points	
Appliances	Energy Star Refrigerator (new)	1 points	3
	Energy Star Dish Washer (new)	1 points	
	Energy Star Washing Machine (new)	1 points	

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Feature	Description	Assigned Point Values	Project Points
Miscellaneous Residential Building Efficiencies			
Building Placement	North/South alignment of building or other building placement such that the orientation of the buildings optimizes natural heating, cooling, and lighting.	5 point	5
Shading	At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on Jun 21 st .	4 Points	0
Energy Star Homes	EPA Energy Star for Homes (version 3 or above)	25 points	0
Independent Energy Efficiency Calculations	Provide point values based upon energy efficiency modeling of the Project. Note that engineering data will be required documenting the energy efficiency and point values based upon the proven efficiency beyond Title 24 Energy Efficiency Standards.	TBD	0
Other	This allows innovation by the applicant to provide design features that increases the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards.	TBD	0
Existing Residential Retrofits	<p>The applicant may wish to provide energy efficiency retrofit projects to existing residential dwelling units to further the point value of their project. Retrofitting existing residential dwelling units within the City is a key reduction measure that is needed to reach the reduction goal. The potential for an applicant to take advantage of this program will be decided on a case by case basis and must have the approval of the City Planning Department. The decision to allow applicants to ability to participate in this program will be evaluated based upon, but not limited to the following;</p> <p>Will the energy efficiency retrofit project benefit low income or disadvantaged residents?</p> <p>Does the energy efficiency retrofit project fit within the overall assumptions in reduction measures associated with existing residential retrofits?</p> <p>Does the energy efficiency retrofit project provide co-benefits important to the City?</p> <p>Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.</p>	TBD	0
Reduction Measure R2E8: Residential Renewable Energy Generation			
Photovoltaic	<p>Solar Photovoltaic panels installed on individual homes or in collective neighborhood arrangements such that the total power provided augments:</p> <p>Solar Ready Homes (sturdy roof and solar ready service panel)</p> <p>10 percent of the power needs of the project</p> <p>20 percent of the power needs of the project</p> <p>30 percent of the power needs of the project</p> <p>40 percent of the power needs of the project</p> <p>50 percent of the power needs of the project</p> <p>60 percent of the power needs of the project</p> <p>70 percent of the power needs of the project</p> <p>80 percent of the power needs of the project</p>	<p>2 points</p> <p>10 points</p> <p>15 points</p> <p>20 points</p> <p>28 points</p> <p>35 points</p> <p>38 points</p> <p>42 points</p> <p>46 points</p>	15

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Feature	Description	Assigned Point Values	Project Points
	90 percent of the power needs of the project	52 points	
	100 percent of the power needs of the project	58 points	
Wind turbines	Some areas of the City lend themselves to wind turbine applications. Analysis of the area’s capability to support wind turbines should be evaluated prior to choosing this feature. Individual wind turbines at homes or collective neighborhood arrangements of wind turbines such that the total power provided augments: 10 percent of the power needs of the project 20 percent of the power needs of the project 30 percent of the power needs of the project 40 percent of the power needs of the project 50 percent of the power needs of the project 60 percent of the power needs of the project 70 percent of the power needs of the project 80 percent of the power needs of the project 90 percent of the power needs of the project 100 percent of the power needs of the project	10 points 15 points 20 points 28 points 35 points 38 points 42 points 46 points 52 points 58 points	0
Off-site renewable energy project	The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing homes that will help implement renewable energy within the City. These off-site renewable energy retrofit project proposals will be determined on a case by case basis and must be accompanied by a detailed plan that documents the quantity of renewable energy the proposal will generate. Point values will be determined based upon the energy generated by the proposal.	TBD	0
Other Renewable Energy Generation	The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity.	TBD	0
Reduction Measure R2WC1: Residential Water Conservation			
Irrigation and Landscaping			
Water Efficient Landscaping	Limit conventional turf to < 50% of required landscape area Limit conventional turf to < 25% of required landscape area No conventional turf (warm season turf to < 50% of required landscape area and/or low water using plants are allowed) Only California Native Plants that requires no irrigation or some supplemental irrigation	0 points 4 points 6 points 8 points	6

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Feature	Description	Assigned Point Values	Project Points
Water Efficient irrigation systems	<p>Low precipitation spray heads < .75"/hr or drip irrigation</p> <p>Weather based irrigation control systems or moisture sensors (demonstrate 20% reduced water use)</p>	<p>2 point</p> <p>3 points</p>	2
Recycled Water	Recycled connections (purple pipe) to irrigation system on site	6 points	
Water Reuse	Gray water Reuse System collects Gray water from clothes washers, showers and faucets for irrigation use,	12 points	0
Storm water Reuse Systems	Innovative on-site stormwater collection, filtration and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings.	TBD	0
Potable Water			
Showers	Water Efficient Showerheads (2.0 gpm)	3 points	3
Toilets	Water Efficient Toilets (1.5 gpm)	3 points	3
Faucets	Water Efficient faucets (1.28 gpm)	3 points	3
Dishwasher	Water Efficient Dishwasher (6 gallons per cycle or less)	1	1
Washing Machine	Water Efficient Washing Machine (Water factor <5.5)	1	1
WaterSense	EPA WaterSense Certification	12 points	0
Reduction Measure R2T6: Vehicle Trip Reduction Measures			
Mixed Use	<p>Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed use projects will be determined based upon a Transportation Impact Analysis (TIA) demonstrating trip reductions and/or reductions in vehicle miles traveled. Suggested ranges:</p> <p>Diversity of land uses complementing each other (2-28 points)</p> <p>Increased destination accessibility other than transit (1-18 points)</p> <p>Increased transit accessibility (1-25 points)</p> <p>Infill location that reduces vehicle trips or VMT beyond the measures described above (points TBD based on traffic data).</p>	TBD	2
Residential Near Local Retail (Residential only Projects)	<p>Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled.</p> <p>The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled (VMT)</p>	TBD	0
Other Trip	Other trip or VMT reduction measures not listed above with TIA and/or other	TBD	

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Feature	Description	Assigned Point Values	Project Points
Reduction Measures	traffic data supporting the trip and/or VMT for the project.		0
Reduction Measure PS T2: Bicycle Infrastructure			
Bicycle Infrastructure	Provide bicycle paths within project boundaries.	TBD	2
	Provide bicycle path linkages between residential and other land uses.	2 points	
	Provide bicycle path linkages between residential and transit.	5 points	
Reduction Measure R2T5: Renewable Fuel/Alt. Fuel Vehicles (Electric Vehicle Infrastructure)			
Electric Vehicle Recharging	Provide circuit and capacity in garages of residential units for use by an electric vehicle. Charging stations are for on-road electric vehicles legally able to drive on all roadways including Interstate Highways and freeways.	1 point	1
	Install electric vehicle charging stations in the garages of residential units	8 points	
Reduction Measure R2W5: Construction and Demolition Debris Diversion Program			
Recycling of Construction/ Demolition Debris	Recycle 2% of debris (required)	0 points	5
	Recycle 5% of debris	1 point	
	Recycle 8 % of debris	2 points	
	Recycle 10% of debris	3 points	
	Recycle 12% of debris	4 points	
	Recycle 15% of debris	5 points	
	Recycle 20% of debris	6 points	
Reduction Measure R2W6: 75 Percent Solid Waste Diversion Program			
Recycling	County initiated recycling program diverting 75% of waste requires coordination in neighborhoods to realize this goal. The following recycling features will help the County fulfill this goal:		0
Total Points Earned by Residential Project:			130