LSA

LSA ASSOCIATES, INC.
1500 IOWA AVENUE, SUITE 200
RIVERSIDE, CALIFORNIA 92507

951.781.9310 TEL
951.781.4277 FAX

OTHER OFFICES:
IRVINE
PT. RICHMOND
SAN LUIS OBISPO
PALM SPRINGS
FORT COLLINS
BERKELEY
ROCKLIN
CARLSBAD
FRESNO

June 24, 2013

Mr. Chris Warrick
County of San Bernardino
Land Use Services Department
Planning Division
385 N. Arrowhead Avenue
San Bernardino, California 92415

Subject: Pacific Industrial Slover Truck Terminal Climate Change Impact Analysis (LSA Project No. PAC1301)

Dear Mr. Warrick:

LSA Associates, Inc. (LSA) is under contract to prepare a climate change impact analysis report for the proposed high-cube warehouse located at the existing YRC Freight warehouse truck terminal located on the north side of Slover Avenue, between Locust and Linden Avenues, in the unincorporated Bloomington area of San Bernardino County. The proposed project includes the construction of approximately 708,240 square feet of new warehouse space in a single building intended for use by a high-cube logistics warehouse operator and demolition of approximately 138,170 square feet of the existing 197,770 square feet of existing warehouse building area. The following provides documentation of the proposed project's compliance with the County's Greenhouse Gas Emissions Reduction Plan (Plan) dated September 2011.

As stated in the Plan, "The San Bernardino County Greenhouse Gas Reduction Plan is based on the premise that the County and the community it represents are uniquely capable of addressing emissions associated with sources under the County's jurisdiction and that the County's emission reduction efforts should coordinate with the state strategies of reducing emissions in order to reduce emissions in an efficient and cost-effective manner. This greenhouse gas (GHG) Plan presents a comprehensive set of actions to reduce the County's internal and external GHG emissions to 15 percent below current levels by 2020, consistent with the AB 32 Scoping Plan (AB 32 Scoping Plan, page ES 5, California Air Resources Board [CARB], December 2008).

The Plan describes procedures established to implement the Development Review Process (DRP) for evaluating new projects (as defined by CEQA) in the County's land use authority area for consistency with this Plan, CEQA guidelines, and any applicable State, regional, and local plans to reduce GHG emissions. The County, as lead agency, determines significance of a project's generation of GHG emissions and has the authority to make this determination based upon a project's compliance with its Plan.

The Plan includes Screening Tables for projects exceeding 3,000 metric tons of carbon dioxide equivalent ($MTCO_{2e}$) per year of GHG emissions, which serves as a tool to assist with implementing applicable mitigation based on calculated GHG reduction and aids in the determination of a significance finding. LSA has calculated that the proposed project would emit approximately 2,121 $MTCO_{2e}$ per year of GHG emissions. The Screening Tables incorporate a point system that is based

on calculated emission reductions for various GHG mitigation using accepted emission factors. The point system is designed to ensure compliance with the reduction measures in the GHG Plan such that the GHG emissions from new development, when considered together with those from existing development, will allow the County to meet its GHG emissions reduction target. Consistent with *CEQA Guidelines* Sections 15064(h)(3) and 15064.4, such projects are consistent with the Plan and, therefore, will be determined to have a less than significant project direct and cumulative impact for GHG emissions.

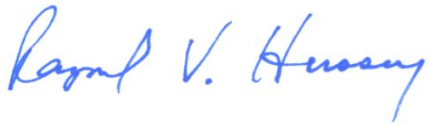
The Screening Table assigns points for each option incorporated into a project as mitigation or a project design feature (collectively referred to as "features"). The point values correspond to the minimum emissions reduction expected from each feature. The menu of features allows maximum flexibility and options concerning how development projects can implement the GHG reduction measures. Projects that garner at least 100 points have provided the "fair share" contribution of reductions and 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 project direct and cumulative impact for GHG emissions.

Screening Table 2, "Screening Table for Implementation of GHG Reduction Measures for Commercial Development," was used for the proposed project. The table and the project points for each feature are attached to this letter. The proposed project achieves 100 points, and meets the point requirement needed for screening level compliance.

Therefore, based on this screening assessment, the proposed Slover Truck Terminal project will be consistent with the Plan and, therefore, results in a less than significant project direct and cumulative impact for GHG emissions.

Sincerely,

LSA ASSOCIATES, INC.



Ray Hussey, AICP
Associate

Attachments: Screening Table 2: Screening Table for Implementation of GHG Reduction Measures for Commercial Development

Table 2: Screening Table for Implementation of GHG Reduction Measures for Commercial Development

Feature	Description	Assigned Point Values	Project Points
Reduction Measure R2E7: Energy Efficiency for Commercial Development			
Building Envelope			
Insulation	Title 24 standard (required)	0 points	8
	Modestly Enhanced Insulation (5% > Title 24)	4 points	
	Enhanced Insulation (15%> Title 24)	(8 points)	
	Greatly Enhanced Insulation (20%> Title 24)	12 points	
Windows	Title 24 standard (required)	0 points	8
	Modestly Enhanced Window Insulation (5% > Title 24)	4 points	
	Enhanced Window Insulation (15%> Title 24)	(8 points)	
	Greatly Enhanced Window Insulation (20%> Title 24)	12 points	
Doors	Title 24 standard (required)	0 points	8
	Modestly Enhanced Insulation (5% > Title 24)	4 points	
	Enhanced Insulation (15%> Title 24)	(8 points)	
	Greatly Enhanced Insulation (20%> Title 24)	12 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.		4
	Title 24 standard (required)	0 points	
	Modest Building Envelope Leakage (5% > Title 24)	(4 points)	
	Reduced Building Envelope Leakage (15%> Title 24)	8 points	
	Minimum Building Envelope Leakage (20% > Title 24)	12 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.		6
	Thermal storage designed to reduce heating/cooling by 5^{o}F within the building	(6 points)	
	Thermal storage to reduce heating/cooling by 10^{o}F within the building	12 points	
	Note: Engineering details must be provided to substantiate the efficiency of the thermal storage device.		

Feature	Description	Assigned Point Values	Project Points
Indoor Space Efficiencies			
Heating/ Cooling Distribution System	Title 24 standard (required)	0 points	8
	Modest Distribution Losses (5% > Title 24)	4 points	
	Reduced Distribution Losses (15%> Title 24)	(8 points)	
	Greatly Reduced Distribution Losses (15%> Title 24)	12 points	
Space Heating/ Cooling Equipment	Title 24 standard (required)	0 points	4
	Efficiency HVAC (5% > Title 24)	(4 points)	
	High Efficiency HBAC (15%> Title 24)	8 points	
	Very High Efficiency HBAC (20%> Title 24)	12 points	
Building Envelope			
Commercial Heat Recovery Systems	Heat recovery strategies employed with commercial laundry, cooking equipment, and other commercial heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems will be determined based upon design and engineering data documenting the energy savings.	TBD	
Water Heaters	Title 24 standard (required)	0 points	8
	Efficiency Water Heater (Energy Star conventional that is 5% > Title 24)	4 points	
	High Efficiency Water Heater (Conventional water heater that is 15%> Title 24)	(8 points)	
	High Efficiency Water Heater (Conventional water heater that is 20%> Title 24)	12 points	
	Solar Water Heating System (commercial only-this reduction feature also implements R2E10	14 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.		1
	All peripheral rooms within building have at least one window or skylight	(1 points)	
	All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.) such that each room has at least 800 lumens of light during a sunny day	5 points	
	All rooms daylighted to at least 1,000 lumens	7 points	
Artificial Lighting	Title 24 standard (required)	0 points	4
	Efficient Lights (5% > Title 24)	(4 points)	
	High Efficiency Lights (LED, etc. 15%> Title 24)	6 points	
	Very High Efficiency Lights (LED, etc. 20%> Title 24)	8 points	

Feature	Description	Assigned Point Values	Project Points
Appliances	Title 24 standard (required) Efficient Appliances (5% > Title 24) High Efficiency Energy Star Appliances (15%> Title 24) Very High Efficiency Appliances (20%> Title 24)	0 points 4 points (8 points) 12 points	8
Miscellaneous Commercial Building Efficiencies			
Building Placement	North/South alignment of building or other building placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting.	(4 point)	4
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	
Existing Commercial building Retrofits	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 commercial buildings within the unincorporated County 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 San Bernardino County Land Use Services Department. The decision to allow applicants to ability to participate in this program will be evaluated based upon, but not limited to the following: Will the energy efficiency retrofit project benefit low income or disadvantaged communities? Does the energy efficiency retrofit project fit within the overall assumptions in Reduction Measure R2E4? Does the energy efficiency retrofit project provide co-benefits important to the County? Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.	TBD	

Feature	Description	Assigned Point Values	Project Points
Reduction Measure R2E9 and R2E10: New Commercial/Industrial Renewable Energy			
Photovoltaic	Solar Photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power provided augments:		
	Solar Ready Roofs (sturdy roof and electric hookups)	2 points	
	10 percent of the power needs of the project	7 points	
	20 percent of the power needs of the project	13 points	
	30 percent of the power needs of the project	19 points	
	40 percent of the power needs of the project	25 points	
	50 percent of the power needs of the project	31 points	
	60 percent of the power needs of the project	37 points	
	70 percent of the power needs of the project	43 points	
	80 percent of the power needs of the project	49 points	
	90 percent of the power needs of the project	55 points	
	100 percent of the power needs of the project	60 points	
Wind turbines	Some areas of the County lend themselves to wind turbine applications. Analysis of the areas capability to support wind turbines should be evaluated prior to choosing this feature. Wind turbines as part of the commercial development such that the total power provided augments:		
	10 percent of the power needs of the project	7 points	
	20 percent of the power needs of the project	13 points	
	30 percent of the power needs of the project	19 points	
	40 percent of the power needs of the project	25 points	
	50 percent of the power needs of the project	31 points	
	60 percent of the power needs of the project	37 points	
	70 percent of the power needs of the project	43 points	
	80 percent of the power needs of the project	49 points	
	90 percent of the power needs of the project	55 points	
	100 percent of the power needs of the project	60 points	
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 residential that will help implement R2E1, existing commercial/industrial that will help implement R2E2, or the Warehouse Renewable Energy Incentive Program (R2E4). These off-site renewable energy retrofit project proposals will be determined on a case by case basis accompanied by a detailed plan documenting the quantity of renewable energy the proposal will generate. Point values will be based upon the energy generated by the proposal.	TBD	

Feature	Description	Assigned Point Values	Project Points
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	
Reduction Measure R2E7: Warehouse Renewable Energy Incentive Program			
Warehouse Photovoltaic	This measure is for warehouse projects and involves partnership with Sothern California Edison and California Public Utilities Commissions to develop an incentive program for solar installation on new and retrofit existing warehouses. A mandatory minimum solar requirement for new warehouse space. Solar Photovoltaic panels installed on warehouses or in collective arrangements within a logistics/warehouse complex such that the total power provided augments:		
	Solar Ready Roof (sturdy roof and electric hookups)	2 points	
	10 percent of the power needs of the project	4 points	
	20 percent of the power needs of the project	5 points	
	30 percent of the power needs of the project	7 points	
	40 percent of the power needs of the project	9 points	
	50 percent of the power needs of the project	11 points	
	60 percent of the power needs of the project	13 points	
	70 percent of the power needs of the project	15 points	
	80 percent of the power needs of the project	17 points	
	90 percent of the power needs of the project	19 points	
	100 percent of the power needs of the project	21 points	
Reduction Measure R2WC-1: Per Capita Water Use Reduction Goal			
Irrigation and Landscaping			
Water Efficient Landscaping	Limit conventional turf to < 20% of each lot (required)	0 points	3
	Eliminate conventional turf from landscaping	(3 points)	
	Eliminate turf and only provide drought tolerant plants	4 points	
	Xeroscaping that requires no irrigation	6 points	
Water Efficient irrigation systems	Drip irrigation	1 point	5
	Smart irrigation control systems combined with drip irrigation (demonstrate 20 reduced water use)	(5 points)	
Recycled Water	Graywater (purple pipe) irrigation system on site	5 points	

Feature	Description	Assigned Point Values	Project Points
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	
Potable Water			
Showers	Title 24 standard (required) EPA High Efficiency Showerheads (15% > Title 24)	0 points 3 points	
Toilets	Title 24 standard (required) EPA High Efficiency Toilets/Urinals (15% > Title 24) Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)	0 points (3 points) 3 points	3
Faucets	Title 24 standard (required) EPA High Efficiency faucets (15% > Title 24)	0 points (3 points)	3
Commercial Dishwashers	Title 24 standard (required) EPA High Efficiency dishwashers (20% water savings)	0 points 4 points	
Commercial Laundry Washers	Title 24 standard (required) EPA High Efficiency laundry (15% water savings) EPA High Efficiency laundry Equipment that captures and reuses rinse water (30% water savings)	0 points 3 points 6 points	
Commercial Water Operations Program	Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce draw down and replacement of water. Point values for these types of plans will be determined based upon design and engineering data documenting the water savings.	TBD	
Reduction Measure R2T1: Anti-Idling Enforcement			
Commercial Vehicle Idling Restrictions	All commercial vehicles are restricted to 5-minutes or less per trip on site and at loading docks (required of all commercial projects)	(1 point)	1

Feature	Description	Assigned Point Values	Project Points
Reduction Measure R2T2: Employment Based Trip and VMT Reduction Policy			
Compressed Work Week	Reduce the number of days per week that employees need to be on site will reduce the number of vehicle trips associated with commercial/industrial development. Compressed work week such that full time employees are on site: 5 days per week 4 days per week on site 3 days per week on site	 0 points 4 points 8 points	
Car/Vanpools	Car/vanpool program Car/vanpool program with preferred parking Car/vanpool with guaranteed ride home program Subsidized employee incentive car/vanpool program Combination of all the above	1 point (2 points) 3 points 5 points 6 points	2
Employee Bicycle/ Pedestrian Programs	Complete sidewalk to residential within ½ mile Complete bike path to residential within 3 miles Bike lockers and secure racks Showers and changing facilities Subsidized employee walk/bike program Note combine all applicable points for total value	(1 point) (1 point) (1 point) 2 points 3 points	3
Shuttle/Transit Programs	Local transit within ¼ mile Light rail transit within ½ mile Shuttle service to light rail transit station Guaranteed ride home program Subsidized Transit passes Note combine all applicable points for total value	(1 point) 3 points 5 points 1 points 2 points	1
CRT	Employer based Commute Trip Reduction (CRT). CRTs apply to commercial, offices, or industrial projects that include a reduction of vehicle trip or VMT goal using a variety of employee commutes trip reduction methods. The point value will be determined based upon a TIA that demonstrates the trip/VMT reductions. Suggested point ranges: Incentive based CRT Programs (1-8 points) Mandatory CRT programs (5-20 points)	TBD	
Other Trip Reductions	Other trip or VMT reduction measures not listed above with TIA and/or other traffic data supporting the trip and/or VMT for the project.	TBD	

Feature	Description	Assigned Point Values	Project Points
Reduction Measure R2T4: Signal Synchronization and Intelligent Traffic Systems			
Signal improvements	Signal synchronization-1 point per signal Traffic signals connected to ITS	1 point/signal 3 points/ signal	
Reduction Measure R2T5: Renewable Fuel/Low Emissions Vehicles			
Electric Vehicle Recharging	Provide circuit and capacity in garages/parking areas for installation of electric vehicle charging stations. Install electric vehicle charging stations in garages/parking areas	2 points/area 8 points/station	
Reduction Measure R2T6: Vehicle Trip Reduction Measures			
Mixed Use	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 traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled	TBD	
Local Retail Near Residential (Commercial only Projects)	Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled. 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	TBD	
Reduction Measure R2W5: Construction and Demolition Debris Diversion Program			
Recycling of Construction/ Demolition Debris	Recycle 2% of debris (required) Recycle 5% of debris Recycle 8 % of debris Recycle 10% of debris Recycle 12% of debris Recycle 15% of debris Recycle 20% of debris	0 points 1 point 2 points 3 points 4 points 5 points (6 points)	6
Reduction Measure R2W6: 75 Percent Solid Waste Diversion Program			
Recycling	County initiated recycling program diverting 75% of waste requires coordination with commercial development to realize this goal. The following recycling features will help the County fulfill this goal: Provide separated recycling bins within each commercial building/floor and provide large external recycling collection bins at central location for collection truck pick-up Provide commercial/industrial recycling programs that fulfills an on-site goal of 75% diversion of solid waste	(2 points) 5 points	2
Total Points Earned by Commercial/Industrial Project:			100