## Addendum to the Costco Wholesale Project Environmental Impact Report SCH # 2011112025

Prepared for:

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#### 1 SUMMARY

The Costco Wholesale Project (Project) is a proposed Costco Wholesale Warehouse within the City of Ukiah. An Environmental Impact Report (EIR) was prepared by the City of Ukiah and certified by the City Council of Ukiah on December 18, 2013. Following certification of the EIR, the City approved the necessary entitlements for the Project, including rezoning of the Project Site and a Site Development Permit.

Subsequent to the certification of the EIR, the City and the Successor Agency to the former Ukiah Redevelopment Agency (Successor Agency) entered a 3-Party Agreement under which the Successor Agency would sell and Costco would buy the approximately 15.33 acre Project Site, and the City would construct certain road improvements at the intersection of U.S. Highway 101 and Talmage Road (101/Talmage Improvements). Because that agreement provided for the sale of the Project Site owned by the Successor Agency, Health and Safety Code Section 34181(a) and (f) required approval of that agreement by an Oversight Board and the California Department of Finance (DOF). While the Oversight Board approved the agreement, the DOF disapproved the agreement on April 23, 2014. As a consequence, the City and the Successor Agency are required to revise the 3-Party Agreement in order to obtain DOF approval. To accomplish this, the 3-Party Agreement was replaced by two agreements: (1) a Real Property Purchase and Sale Agreement (PSA) between the Successor Agency and Costco; and (2) an Improvement Agreement between the City and Costco (Improvement Agreement). This separation clarifies the respective rights and obligations of the City from those of the Successor Agency without significantly changing those rights and obligations. The Costco Wholesale Project EIR considered all phases of the project and the potential effects on the environment. However, as this action was not identified as a necessary entitlement in the EIR, this Addendum describes the minor change to the project entitlements.

The certified EIR included Mitigation Measure 3.6.4, requiring the Project applicant to prepare and submit a Final Drainage Plan to the City Engineer and the North Coast Regional Water Quality Control Board (Regional Board) for approval. This measure provides that the design level plan shall address post-project downstream peak flows, and address potential modification to the drainage facilities within the U.S. 101 right of way. This plan has been submitted to the City and Regional Board as required. In order to accomplish the performance criteria of the Mitigation Measure, minor revisions to the Project Site Plan are required. The Project Site Plan is subject to approval as part of the Site Development Permit. Changes to the Project Site Plan must be approved by the City and would be considered a discretionary action subject to CEQA. However, the changes to the Project Site Plan are minor and are in substantial conformity with the Site Development Permit, and do not conflict with any applicable design standards (per the Airport Industrial Park Ordinance #1098) or Project conditions of approval.

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This Addendum also clarifies and provides additional discussion of Project energy consumption and electrical utilities. The City is clarifying its determination that "the Project would not exceed existing gas and electric supply or result in the wasteful, inefficient, or unnecessary consumption of energy" in part based on the recent court decision, *CCEC v. City of Woodland* (2014) 225 Cal. App. 4th 173, which was published after the City certified the EIR. That decision held that CEQA requires a more detailed discussion of energy use than was previously understood at the time the EIR was certified. This discussion augments, but does not alter, the conclusions of the EIR regarding the effects of Project-related energy usage.

As analyzed below, the approval of the Improvement Agreement by the City and the PSA by the Successor Agency, the minor Project Site Plan revisions, and the additional information on energy consumption do not constitute a substantial change to the project, substantial new information, or otherwise require preparation of a supplemental or subsequent EIR under CEQA Guidelines Sections 15162 or 15163. The information set forth herein constitutes only minor changes and additions to the certified EIR. Therefore, preparation of an Addendum is the appropriate approach under CEQA.

#### 2 COSTCO WHOLESALE PROJECT

The approved Costco Wholesale Project includes the construction of a new Costco Wholesale warehouse, with a maximum size of 148,000 square feet (SF), and a fueling facility on approximately 15.33 acres. The fueling facility will have 16 vehicle fueling positions (with the capacity to expand to 20 positions in the future). The plans submitted with Costco's building permit application propose a warehouse of 141,125 SF, with a bakery, pharmacy, optical center, hearing aid testing center, food court, photo center, tire center, and fueling facility along with the sale of between 3,800 and 4,000 products. The tire center would be a 5,442 SF attached building with member access through the inside of the main Costco building and would include retail tire sales and a tire installation facility. The fueling facility is separate from the main building site, and would include a 2,816 SF canopy and 16 fueling positions (expandable to 20 positions). The fueling facility occupies approximately 2.37 acres, located in the southeast corner of the site adjacent to US 101. Store hours are anticipated to be 10:00 a.m. to 8:30 p.m. Monday through Friday, 9:30 a.m. to 6:00 p.m. on Saturday, and 10:00 a.m. to 6:00 p.m. on Sunday. Fueling facility hours would be Monday through Friday, 6:00 a.m. to 9:30 p.m., Saturday and Sunday from 6:00 a.m. to 7:00 p.m. Delivery hours will generally occur between 4:00 a.m. and 2:30 p.m. The Costco facility would employ approximately 175 to 200 people.

The Project Site is located in the City of Ukiah, Mendocino County, California. The Project Site consists of at least portions of twelve parcels totaling 15.33 acres (Assessor's Parcel Numbers 180-110-8 through 10, 180-080-57 through 59, and 180-080-62 through 67). The Project Site is bounded by commercial uses (north and south), US 101 (east), and Airport Park Boulevard

(west) (Figure 2-2). The Project Site is within the Airport Industrial Park (AIP) Planned Development. The Airport Industrial Park is bounded by Talmage Road to the north, Ukiah Municipal Airport to the west, and US 101 to the east and south.

The City of Ukiah, as the lead agency under the California Environmental Quality Act (CEQA), prepared an EIR for the Project (State Clearinghouse #2011112025). The Notice of Preparation was released on November 7, 2011. The Draft EIR was released on January 30, 2013, for a public review period of 45 days. The City Council of Ukiah certified the Final EIR on December 18, 2013. The City Council then introduced the first reading of Ordinance 1146, rezoning the Project Site to Retail Commercial. On January 15, 2014, the Ordinance was approved by the City Council. The City of Ukiah Planning Commission approved the Site Development Permit on January 22, 2014. The City Council heard an appeal of the Planning Commission's action on March 5, 2014, and upheld the approval of the Site Development Permit.

#### 3. MINOR CHANGES TO THE PROJECT

#### 3.1 Minor Changes to the Project Description

The following discretionary action by the lead agency is added to the Project Description (Section 2.5.1 of the Costco Draft EIR):

- City Council approval of an Improvement Agreement with the applicant (Costco) for traffic improvements to be constructed by the City
- Successor Agency approval of a Real Property Purchase and Sale Agreement (PSA) for sale of the Project Site to Costco.

Final EIR Figure 2-3, Site Plan, has been replaced with the Revised Site Plan attached to this Addendum which reflects implementation of Mitigation Measure 3.6.4, as addressed below. The changes to the Site Plan, which are further described in Section 3.3, below, include identification of a buffer between the Project Site and the off-site wetlands, a detention basin, a change in the orientation of the fueling facility, a slight reduction in the size of the warehouse, a reduction in the size of the parking lot, additional bioswale areas, additional shade trees, and modification of the parking lot lighting.

The minor revisions to the Project Description, including the Revised Site Plan, do not constitute a substantial change to the Project, substantial new information, or otherwise require preparation of a supplemental or subsequent EIR under CEQA Guidelines Sections 15162 or 15163.

#### 3.2 Improvement and Purchase and Sale Agreements

Subsequent to the certification of the EIR and approval of the Project entitlements, the City identified the need to approve the Improvement Agreement and the Successor Agency identified the need to approve the PSA.

The PSA, while a necessary step in the implementation of the Project, does not affect the location, construction, or operation of the Project.

The Improvement Agreement memorializes the terms under which the City agrees to construct certain infrastructure improvements and Costco agrees to develop the site for a Costco Wholesale Store and related facilities. Site development must be consistent with the Site Development Permit approved by the City. The off-site improvements to be constructed by the City include 101/Talmage Improvements. Per Mitigation Measure 3.10.1, the Project cannot be occupied until these improvements have been completed.

The PSA includes Lot 3, a 0.8-acre site in a natural condition that is being purchased by Costco from the Successor Agency for fair market value. No development will take place on the Lot 3 by Costco, and, thus, there are no environmental impact implications for the additional acreage purchase. As set forth in the Improvement Agreement, Costco will transfer Lot 3 to the City for park purposes. The City has not adopted a management plan for Lot 3 and does not propose any changes to the natural condition of Lot until a management plan is developed. Accordingly, the City's acquisition of Lot 3 qualifies for CEQA exemption Class 16: Transfer of Ownership of Land in Order to Create Parks.

The approval of the Improvement Agreement by the City and the PSA by the Successor Agency and a transfer of ownership that qualifies for a Class 16 exemption from CEQA do not constitute a substantial change to the project, substantial new information, or otherwise require preparation of a supplemental or subsequent EIR under CEQA Guidelines Sections 15162 or 15163.

#### 3.3 Drainage Plan and Minor Changes to the Site Plan

The certified EIR included Mitigation Measure 3.6.4, requiring the Project applicant to prepare and submit a Final Drainage Plan to the City Engineer and the Regional Board for approval. This mitigation measure reads as follows:

**Measure 3.6.4:** The Applicant shall prepare and submit to the City engineer and the North Coast Regional Water Quality Control Board for approval a Final Drainage Plan. The Final Drainage Plan shall include design/plan level depiction of the proposed stormwater drainage facilities on site, including the proposed storm drainage system, vegetated swales, and the water quality

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features. The following measures shall be implemented within the Final Drainage Plan, based on modeled runoff volumes and flow rates specific to with-Project conditions:

- The applicant shall design, implement, and maintain a stormwater system such that there would be no net increase in Project condition downstream peak flows; and/or, with respect to the additional impervious surface area proposed for the Project, the [applicant] shall design and implement volume- and/or flow-based Treatment Control Best Management Practices (BMPs) as defined in Attachment 4 (pages 5-6) of the State Water Resources Control Board (SWRCB) small municipal separate storm sewer systems (MS4s) General Permit (Small MS4 General Permit) (SWRCB Order 2003-0005-DWQ).
- The Final Drainage Plan is not required to include retention and/or retention features if such features are not necessary to satisfy the above requirements.
- Prior to implementation, design drawings and any related documents or specifications with respect to these required mitigation measures shall be submitted to the City of Ukiah and the North Coast Regional Water Quality Control Board.
- Modification of storm drain facilities within the State right-of-way (U.S. 101), may require an encroachment permit, and shall be submitted to the California Department of Transportation.

A Final Drainage Plan has been submitted to the City and Regional Board as required. In order to accomplish the performance criteria of the Mitigation Measure, minor revisions to the Project Site Plan are required. Some of the key considerations in the development of the plan, and the resulting changes to the Site Plan (see Revised Site Plan), are described below:

- 1. Measure 3.6.4 requires inclusion of water quality features. The proposed site storm water treatment is modified to meet the following specific project concerns from the Regional Board:
  - a. Maximizes the use of low impact development practices throughout the site, including additional bioswales.
  - b. Consolidates two (2) existing wetland drainage outfalls into one (1) that discharges to a constructed wetland area that provides the following characteristics:
    - i. Separation from new storm drain outfall and existing wetland area
    - ii. Enhance habitat for wildlife
    - iii. Additional floodplain storage

The Draft EIR included a Site Plan, Figure 2-3, which identified an on-site detention basin. The Final EIR clarified that such a feature would only be required if necessary to comply with Mitigation Measure 3.6.4. The inclusion of the constructed wetland area, as described in this Addendum and shown on the Revised Site Plan, is consistent with the analysis contained in the Draft and Final EIR.

- 2. Enhances habitat between the parking lot/fueling facility and the wetland. This is accomplished by rotating the fuel facility (see Revised Site Plan).
- 3. Reduces the amount of parking to accommodate the enhanced habitat and additional bioswales (see Revised Site Plan).
- 4. Rehabilitates the wetland area and the enhanced habitat and addresses on-site landscaping improvements by:
  - a. Revising tree species near wetland area to California natives (Valley Oaks and Interior Live Oaks).
  - b. Incorporating wetland grasses adjacent to and within the expanded planting areas south of the gas station (4 different species).
  - c. Modifying tree layout to conform to new bio-swales within the parking lot and behind the building.
  - d. Adding additional shade trees in parking area to comply with parking lot shading requirement.
  - e. Revising shrub planning to incorporate more California native species.
- 5. Decreases the size of the warehouse, from 148,000 SF to 141,000 SF.
- 6. Relocates and redesigns parking lot lighting to shield enhanced habitat area from potential lighting spillover (note that this change is also consistent with Mitigation Measure 3.1.2 regarding lighting spillover).
- 7. Increases water flow into wetland to insure wetland sustainability.

The rotation of the fueling facility does not adversely affect vehicular circulation on-site or pedestrian safety (see Revised Site Plan). However, it does accommodate the enhanced habitat between the Project and the adjacent wetland, while providing for a storm drainage system that meets the requirements of Mitigation Measure 3.64 and all storm water quality and volume standards.

The EIR assumes a maximum warehouse size of 148,000 SF. In order to better accommodate the enhanced habitat area, the drainage plan and the associated changes to the Site Plan, the warehouse size has been reduced by approximately 5%, to 141,125 SF. As the impact analysis in the EIR assumes the larger building size, all Project impacts for the 141,125 SF warehouse would be either the same or slightly less than those identified in the certified Final EIR. The reduced parking still meets City parking standards for the smaller warehouse, and in fact addresses public concerns raised during the Project hearings that the Project was over-parked. The Site Plan approved on January 22, 2014, provided for 607 parking spaces. This amount of parking exceeded the 592 spaces required by the City's development code, based on a 148,000 SF warehouse. The Revised Site Plan (Figure 2-3) includes a 141,125 SF warehouse and 579 spaces. The 579 proposed parking spaces meet the minimum parking requirement of 565, based on a 141,125 SF building.

The increase in both the overall number of shade trees and the number of California native trees is also consistent with comments received by the City. While the previous Site Plan was consistent with City requirements, the revisions provide benefits regarding the effectiveness of vegetation for both shade and water quality purposes, and provide enhancements to the existing wetlands adjacent to the Property.

The previous Site Plan (Final EIR Figure 2-3) was approved by the City Planning Commission as part of the Site Development Permit on January 22, 2014. The City has determined that the minor changes to the Project Site Plan (see Figure 2-3, Revised Site Plan) are in substantial conformance with the Project Site Plan approved by the Planning Commission and, therefore, do not require an amendment to the Site Development Permit or further Planning Commission review, although the modification of the Site Plan is subject to City approval and, as a discretionary action, is subject to CEQA.

These changes to the Project Site Plan, as a result of compliance with Mitigation Measure 3.6.4, while relatively minor, are beneficial and will lessen the effects of the Project on the environment. The warehouse building size would be decreased by approximately 5%, although the overall Project operations, including the hours of operation, and the services and goods provided, would not change. The Revised Site Plan does not constitute a substantial change in the Project. Therefore, the Revised Site Plan does not trigger subsequent or supplemental EIR under CEQA Guidelines Sections 15162 and 15163. An addendum is the appropriate documentation of the change.

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#### 4. ENERGY

#### 4.1 Introduction

CEQA provides that an environmental impact report shall include a detailed statement setting forth all of the following:

Mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy. (Public Resources Code Section 21100(b)(3)).<sup>1</sup>

In addition, Appendix F of the CEQA Guidelines includes suggested information to "assure that energy implications are considered in project decisions." Appendix F further states that "the California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy (see Public Resources Code section 21100(b)(3))."

The EIR includes information regarding energy consumption, with particular emphasis on the effects of that energy production on the environment (air quality impacts and greenhouse gas emissions). As part of this Addendum, the City is including additional clarification and technical information regarding Project-related energy usage and conservation features. As described below, this information provides additional technical detail, but does not reflect any modifications to the Project or change the conclusions of the certified EIR and does not identify any new potentially significant impacts or any substantial increase in a significant impact identified in the EIR.

#### 4.2 Energy Resources

#### 4.2.1 Significance Criteria

Neither Appendix F of the CEQA Guidelines nor Public Resources Code Section 21100(b)(3)) offer a threshold of significance that might be used to evaluate the potential significance of the energy effects of a proposed project. Rather, the emphasis is on reducing "the wasteful, inefficient, and unnecessary consumption of energy." Impact statement 3.9.8 of the EIR (Draft EIR, p. 3.9-14) considered this and concluded that the "Project would not exceed existing gas and electric supply or result in the wasteful, inefficient, or unnecessary consumption of energy." To clarify, a project's energy usage would be considered "wasteful, inefficient, and unnecessary"

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<sup>&</sup>lt;sup>1</sup> All Mitigation Measures cited in this Addendum are existing measures contained in the Final EIR and this Addendum does not add or revise any Mitigation Measures.

if the project were to violate state and federal energy standards, including Title 24 of the California Code of Regulations. This Addendum provides additional information related to this question, and considers a related criterion: if the project consumed a substantially greater amount of energy, in either the construction or operational phase, than similar projects, it may be considered "wasteful, inefficient, and unnecessary."

In addition, feasible opportunities to conserve energy or to use alternative fuels or energy systems should be considered. The need to construct additional energy infrastructure as a result of the Project, and the potential effects of that infrastructure on the environment, would also be considered a potentially significant impact. While both of these issues were considered in the Draft and Final EIR, additional information is provided in this Addendum.

#### 4.2.2 Energy Conserving Features of the Project

The EIR identifies mitigation measures to minimize significant effects on the environment. Energy related mitigation measures are incorporated as follows: The Project Description includes a list of "Sustainable Building Features" that are intended to "conserve energy and natural resources" (Draft EIR p. 2-8). These features are considered and incorporated into enforceable mitigation measures, Mitigation Measure 3.2.2a. Additional measures intended to reduce employee vehicle trips were incorporated into the Final EIR as part of Mitigation Measure 3.2.2b. These trip reduction measures, driven by the Project's significant air quality and GHG impacts, have the effect of reducing the consumption of transportation fuels. Improvements to the bicycle and pedestrian network, incorporated into Mitigation Measures 3.2.2b and 3.10.2b and 3.10.2c, also have the effect of reducing transportation fuels.

Additional information regarding the Daylighting Program identified in the EIR (Draft EIR page 2-9) is as follows:

• According to the applicant, the daylighting program has shaved hundreds of kilowatt hours off the energy load of a typical warehouse. The proposed Project includes over 200 skylights placed strategically throughout the metal roof. Photo sensors are placed at various locations on the roof as well as inside a number of skylights to accurately measure the amount of natural light entering the building. This program allows lights to automatically shut off when they are not needed. Interior warehouse lighting is reduced from 100% to 66% to 33% to 0%, based on daylight contribution through the skylights. Daylight is measured by exterior and interior photo sensors.

Additional energy saving features in the Project include:

• Reflective roof materials that will meet the requirements for the USEPA's Energy Star energy efficiency program.

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- The Heat-Reclaim system, which captures heat from the refrigeration lines and uses it to heat water for the building.
- High efficiency restroom water fixtures, which result in a water savings of 40% beyond the building standard. Reduced water usage results in a reduction in energy usage, due to the energy needed to pump, clean, and distribute potable water.

The draft Title 24 (California Code of Regulations) compliance report for the Project indicates that the above features, plus efficient internal heating and cooling, will result in a building energy performance that is 12% more efficient than the Title 24 performance standards (Title 24 Performance Certificate of Compliance, dated 12/17/13, included as Attachment B). As such, the Project would more than comply with state and federal energy standards, including Title 24 of the California Code of Regulations.

#### 4.2.3 Construction Energy Usage

Project construction will require grading, utility installation, foundation construction, building construction, paving, and landscaping installation. All construction is typical for the region and building type, and the Project site does not include unusual circumstances that would require unusually high energy usage. Some import of fill will be required in order to allow gravity flow of water and sewer, as opposed to pumping and/or installing extremely deep lines below surface grade – both of which would be more energy intensive.

The building system is pre-engineered metal (see Draft EIR pp. 2-8 to 2-9). The metal building system contains 80% recycled content and is itself 100% recyclable. The Project design team estimates that by designing a metal warehouse, fewer building materials are consumed in construction compared to full height masonry. Considered within the context of all construction materials, including 1000 truck trips for fill and 280 truck trips for the slab and foundation, the overall reduction in haul truck trips is 8.5% as compared to a full height masonry building. In addition, building material deliveries would be reduced by 71.5% (50 truck trips for a preengineered metal building with a CMU foundation versus 175 truck trips for an all-CMU structure). Therefore, fewer fossil fuels are consumed in transportation, due to the need for less material, under the Project as opposed to a more conventional design. It is further noted that these material trips are well below the standard CalEEMod assumptions for construction emissions for a typical project of similar size.

<sup>&</sup>lt;sup>2</sup> Personal communication, Joseph Welch, MulvannyG2 Architecture, September 26, 2014.

<sup>&</sup>lt;sup>3</sup> For purposes of air emissions, CalEEMod assumes 67 one-way vendor trips per construction day, or 33.5 round trips per day. Construction was assumed to last 300 days, a conservative estimate which likely exceeds the actual construction time.

Based on the air quality calculations for Project construction contained in the EIR (Draft EIR Section 3.2 and Appendix B), and using standard fuel consumption estimates<sup>4</sup>, construction would require 97,455 gallons of diesel fuel and 34,815 gallons of gasoline. This includes all offroad construction equipment, hauling, vendor, and worker trips over a 300-working day construction period. This information is included as Attachment A at the end of this Addendum. For the finishing phase of construction, some electricity may be used (e.g., for power tools and work lighting). While this electricity usage cannot be quantified at this time, it would be relatively minor, and well below the operational energy usage discussed below.

Therefore, the Project construction would not consume a greater amount of energy in its construction phase than similar projects.

#### 4.2.4 Operational Energy Usage

As reported in the Draft EIR (Impact 3.98, page 3.9-14), the Project would consume electricity in the approximate amount of 2.44 million kilowatt hours per year (kWh). This estimate was based on a standard 148,000 SF retail warehouse. An updated analysis of the proposed 141,125 SF warehouse shows that the Project is within the normal range for a Costco Wholesale Warehouse, as shown in the comparison of peak design loads, below:

Table 1
Peak Design Load

Store	kilowatts
Ukiah (estimated)	1,513
Rohnert Park	1,453
Antioch	1,668
Redwood City	1,489

Source: Costco, August 2014.

Transportation fuel consumption was calculated using the same methodology described for construction. The air quality model analysis presented in the EIR (Section 3.2, Appendix B of the Draft EIR) was used in conjunction with the U.S. Energy Information Administration factors. This resulted in the following usage, shown both before and after the implementation of Mitigation Measures identified in the EIR and approved as part of the Project:

<sup>&</sup>lt;sup>4</sup> Fuel usage is estimated using the CalEEMod output for CO<sup>2</sup>, and a kgCO2/gallon conversion factor, as cited in the *U.S. Energy Information Administration Voluntary Reporting of Greenhouse Gases Program*, <a href="http://www.eia.gov/oiaf/1605/coefficients.html">http://www.eia.gov/oiaf/1605/coefficients.html</a>, accessed 8/26/14.

Table 2
Transportation Fuels, Project Operations

Operations					
Scenario	Source	CalEEMod CO2 (MT/yr)	Fuel Type <sup>1</sup>	Factor (kgCO2/gal)	Gallons
Unmitigated	Mobile	8557.87	Gas	8.91	960,479
Mitigated	Mobile	7789.95	Gas	8.91	874,293
				TOTAL % REDUCTION IN GALLONS OF GAS WITH MITIGATION	8.97%

**Note:** (1) Calculation conservatively assumes all fuel types as gasoline (no diesel, biodiesel, electric, or other energy sources assumed). **Source:** ESA, August 2014.

Mitigation Measures for operations, including transportation, identified in the Final EIR and approved as part of the Project include the following:

**Measure 3.2.2a:** The Project will incorporate sustainability features in building and site design with the goal of reaching a building efficiency rating that is greater than the Title 24 requirement, in order to reduce energy consumption and associated GHG emissions. As set forth in the "Project Description," the project will incorporate the following sustainability features:

- Parking lot light standards are designed to provide even light distribution and use 20% less energy compared to a greater number of fixtures at lower heights. The use of metal halide lamps provide a color corrected white light and a higher level of perceived brightness with less energy than other lamps such as high pressure sodium.
- Locally extracted and manufactured building materials will be utilized where feasible.
- Pre-manufactured building components, including structural framing and metal panels, are designed to minimize waste during construction.
- Pre-manufactured metal wall panels with insulation are designed to conserve energy by increasing R-value and solar reflectivity. Building heat absorption is reduced by a decrease in the thermal mass of the metal wall when compared to a typical masonry block wall.
- Reflective roof material will meet the requirements for the USEPA's Energy Star energy efficiency program. Reflective roofs produce lower heat absorption and thereby lower energy usage during the summer months.
- Skylights are used on the roof to reduce the need for interior lighting. A "daylight harvesting" system monitors and adjusts the mechanical and lighting systems in order to conserve energy. The system includes the skylights, light monitors, energy efficient

lighting fixtures, and associated control systems. On a typical sunny day, fewer than one third of the interior lights are needed.

- Tree plantings to reduce summer heat gain within the parking field.
- Planting to incorporate a substantial amount of drought tolerant species.
- Irrigation system to incorporate the use of deep root watering bubblers for parking lot shade trees to minimize water usage and ensure that water goes directly to the intended planting areas.

**Measure 3.2.2b:** The applicant shall implement the following measures, to the extent feasible and appropriate, to reduce motor vehicle trips and emissions associated with Project operations:

- Promote the use of alternative fueled vehicles and equipment (i.e., CNG, electric, etc.) for Project operations. The applicant shall implement two or more of the following measures:
  - o Warehouse equipment, including forklifts, will be electric powered.
  - o Landscaping equipment will be electric powered.
  - o Preferred parking for zero emission vehicles.
  - o Retail fueling station will include a CNG refueling station.
  - o Customer parking will include a minimum of one (1) electric recharge station.
- Provide commute incentives for employees to utilize alternative transportation, such as carpool/vanpool, transit, cycling, or walking. A Costco carpool and alternative transportation manager shall be designated to oversee the implementation of these TDM measures. Costco will provide its employees the following incentives:
  - o Four carpool parking spaces reserved for Costco employees;
  - o Bicycle parking as required by City standards;
  - o Employee locker rooms;
  - Rideshare Program, including recognition of rideshare participants at monthly staff meetings and an annual update of rideshare benefits and incentives provided to employees;

- A Rideshare Bulletin Board to be located in the employee breakroom, which will contain information about the Rideshare Program, transit, bike routes, and other alternate commute information;
- A Rideshare Newsletter to be published and posted on the Rideshare Bulletin Board on a quarterly basis;
- o Costco employees commuting to work in a rideshare program will be eligible for a guaranteed ride home program in the event of an emergency or unexpected situation (such as unscheduled overtime) on the days they rideshare.
- The applicant shall increase transit accessibility. Such measures could include the purchase of transit passes for employees. Also, implement Mitigation Measure 3.10.2a.
- The applicant shall improve the pedestrian and bicycle network. Implement Mitigation Measure 3.10.2b and 2c.

Mitigation Measures 3.10.2a, b, and c, include the following measures to increase alternative transportation:

**Measure 3.10.2a:** Provide a concrete pad suitable for future location of bus shelter on the northern frontage of the Project site, adjacent to the proposed sidewalk.

**Measure 3.10.2b:** The Project applicant shall implement the following measures to reduce potential pedestrian impacts associated with the Project:

- Install sidewalks along the Project frontage on Airport Park Boulevard as identified in the project site plan.
- Install high visibility crosswalk markings across driveway entrances to the Project including the existing cul-de-sac on the north side of the project to increase visibility of pedestrians.
- Install ADA compliant curb ramps at driveway crossings and transition points along the Project frontage. Also, ensure that the existing curb ramps at the existing cul-de-sac intersection with Airport Park Boulevard are compliant with current ADA standards.
- Provide an adequate pedestrian connection from the street frontage and main parking area to the retail store entrance (per Ordinance 1098).

**Measure 3.10.2c:** The Project applicant shall implement the following measures to reduce potential bicycle impacts associated with the Project:

- Install Class III bike lanes along the Project frontage on Airport Park Boulevard.
- The Project Applicant shall comply with Ordinance 1098, Airport Industrial Park Planned Development, requirements to install the required number of bicycle parking spaces (long-term spaces [bicycle lockers or covered parking spaces to reduce exposure to the elements and vandalism] for Project employees and short-term spaces for Project patrons and employees [at a convenient location adjacent to the store's primary entry points]). Bicycle racks should be an appropriate design and installed correctly to ensure proper function.

The mitigation measures described above result in an estimated 8.97% savings in transportation energy (see Table 2, above). This calculated savings does not include additional savings from reducing the trip lengths of Mendocino County Costco members who currently drive to Santa Rosa or even more distant Costco warehouses. Based on the economic analysis of the Project prepared for the City of Ukiah, approximately 17% of the shopping trips to the Project are replacing trips that would otherwise be made to Santa Rosa or Rohnert Park. These savings are not included only because of the difficulty in precisely identifying which trips (and what trip length) would be replaced. However, the Project would substantially reduce fuel consumption for many existing Costco members. Therefore, the Project would not consume a greater amount of energy in its operational phase than similar projects.

#### 4.2.5. Conclusions

The energy saving features of the Project, including those listed in Mitigation Measure 3.2.2a, result in a building that exceeds California's Title 24 standards by 12%. Construction energy usage would be reduced due to the choice of building materials (which also feature a high recycled material content). The mitigation measures described in Section 4.2.3 would result in an estimated 8.97% savings in operational transportation energy. Based on this information, the Project would result in lower energy consumption and would not result in inefficient, wasteful, or unnecessary consumption of energy.

#### 5 UTILITIES

Draft EIR Section 3.9, Utilities and Services, describes the provision of utilities, including energy, to the proposed Project. As described in the EIR, no additional energy infrastructure is required to serve the Project site.

<sup>&</sup>lt;sup>5</sup> Memorandum from Brian Grattidge, Dudek, to Charley Stump, City of Ukiah, dated December 16, 2013.

In addition to the information contained in this Draft EIR section, the City notes that the energy sources for the electricity provided by the City of Ukiah Utilities Department includes an unusually high percentage of renewable energy sources compared to the state average. Ukiah's 2011 energy supply included 49% eligible renewable sources, compared to a 2010 statewide average of 14%. The "Energy Content Label" for the City (as provided to the State of California) is provided in Table 3, below, and shows the above-average amounts of renewable geothermal and hydroelectric power used in the City.

Table 3
California Energy Content

ENERGY RESOURCES	Ukiah 2011 Fuel Mix (Actual)	2010 CA POWER MIX**
Eligible Renewable	49.3%	14%
Biomass & waste	0.0%	2%
Geothermal	40.1%	5%
Small hydroelectric	9.1%	2%
Solar	0.0%	0%
Wind	0.0%	5%
Coal	0.0%	7%
Large Hydroelectric	25.1%	11%
Natural Gas	0.1%	42%
Nuclear	0.0%	14%
Other	0.0%	0%
Unspecified sources of power*	25.5%	12%
TOTAL	100.0%	100.0%

<sup>\* &</sup>quot;Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

Source: California Energy Commission, <a href="http://www.energy.ca.gov/sb1305/labels/index.html">http://www.energy.ca.gov/sb1305/labels/index.html</a>, October 2012

<sup>\*\*</sup> Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the previous year.

Large hydroelectric energy, while not considered an "eligible" renewable source for purposes of the California Renewable Portfolio, is nevertheless a clean energy source, and at 25% is a substantial component of Ukiah's energy mix.

In addition, on-site renewable energy sources have been considered. The Project would include pre-wiring and an engineered roof to allow for future solar energy panels. It is Costco standard practice to determine the feasibility of installation of rooftop solar at the time of the completion of warehouse construction and beginning of operation (anticipated build out year is 2017). Factors evaluated by Costco include cost of the solar system, tax incentives, how much power the system will produce and the utility cost of electricity. For the Ukiah Costco warehouse, it is estimated that rooftop solar would only contribute to approximately 25% of the building electricity needs. In contrast, as noted above, Ukiah's 2011 energy supply included 49% eligible renewable sources and an additional 25% from large hydroelectric – approximately 75% from renewable sources. Thus, renewable energy sources provide the vast majority of the Project's energy demand.

The other potential source of onsite energy, small wind energy, is infeasible, as the Project site is within the Airport Influence Area of the Ukiah Municipal Airport (which included restrictions on tall structures).

#### 6 CONCLUSION

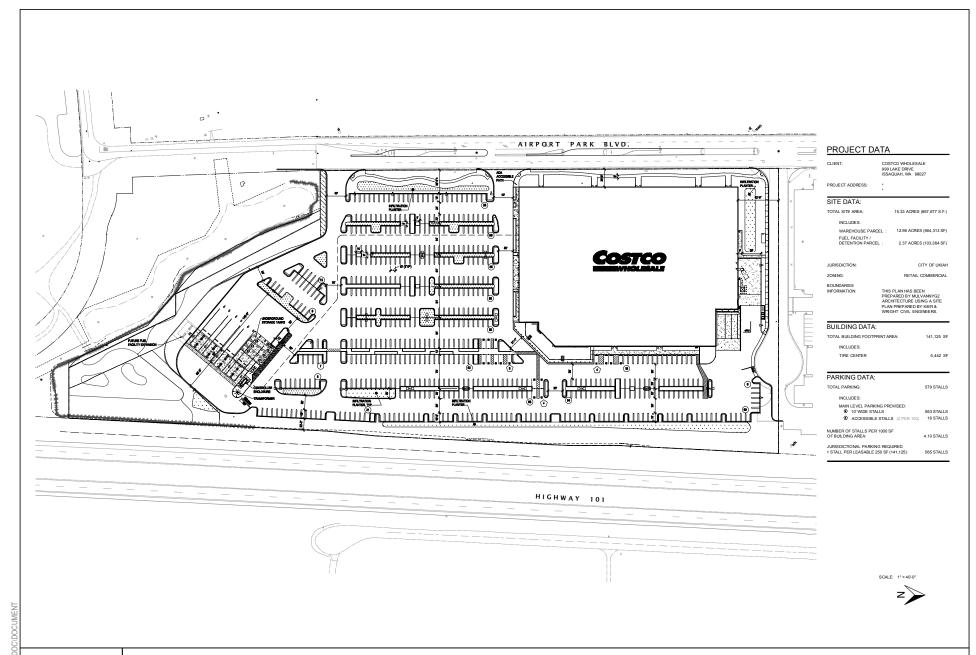
The approval of the Improvement Agreement and the PSA would not alter the physical characteristics of the Project or affect the location, construction, or operation of the Project.

The implementation of the drainage plan per Mitigation Measure 3.6.4 would require minor revisions to the approved Site Plan. These changes primarily affect the layout of the fuel station, which results in a larger buffer between the project and the adjacent wetlands. The Project warehouse size and number of parking places are reduced, but the amount of on-site landscaping, including shade trees, would be increased. These revisions do not conflict with City zoning, development, or design standards, or conditions of approval. The changes are primarily beneficial with regard to environmental resources, and are consistent with the mitigation measures in the certified Final EIR.

The clarifications and additional technical information regarding energy conservation and consumption show that the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. They do not show that the Project would result in a new significant environmental effect or a substantial increase in a significant impact set forth in the certified

EIR. Feasible and enforceable mitigation measures have been incorporated into the approval of the Project to conserve energy, per Public Resources Code Section 21100(b).

Therefore, the approval of Improvement Agreement and the PSA, the minor revisions to the Site Plan and the additional information contained within this Addendum, do not constitute substantial changes to the Project, or substantial new information or otherwise require preparation of a subsequent or supplemental EIR under CEQA Guidelines Sections 15162 and 15163. The information set forth herein constitutes only minor changes and additions to the certified EIR. Therefore, preparation of this Addendum is the appropriate approach under CEQA.



DUDEK

SOURCE: Mulvanny G2 Architecture

FIGURE 2-3 Revised Site Plan

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#### ATTACHMENT A

#### **Energy Fuel Usage Calculations**

#### **Ukiah Costco - Energy Fuel Usage Calculations**

Construction					
		CalEEMod			
		CO2		Factor	
Phase	Source	(MT/yr)	Fuel Type	e (kgCO2/gal)*	Gallons
	Offroad				
Site Preparation	Equip	36.27	Diesel	10.15	3,573.40
Year 1	Hauling	0	Diesel	10.15	0.00
	Vendor	0	Diesel	10.15	0.00
	Worker	1.16	Gas	8.91	130.19
	Offroad				
Grading	Equip	147.69	Diesel	10.15	14,550.74
Year 1	Hauling	0	Diesel	10.15	0.00
	Vendor	0	Diesel	10.15	0.00
	Worker	3.86	Gas	8.91	433.22
	Offroad				
<b>Building Construction</b>	Equip	403.1	Diesel	10.15	39,714.29
Year 2	Hauling	0	Diesel	10.15	0.00
	Vendor	166.02	Diesel	10.15	16,356.65
	Worker	220.81	Gas	8.91	24,782.27
	Offroad				
<b>Building Construction</b>	Equip	146.58	Diesel	10.15	14,441.38
Year 2	Hauling	0	Diesel	10.15	0.00
	Vendor	60.5	Diesel	10.15	5,960.59
	Worker	78.58	Gas	8.91	8,819.30
	Offroad				
Paving	Equip	26.46	Diesel	10.15	2,606.90
Year 2	Hauling	0	Diesel	10.15	0.00
	Vendor	0	Diesel	10.15	0.00
	Worker	1.89	Gas	8.91	212.12
	Offroad				
<b>Architectural Coating</b>	Equip	2.55	Diesel	10.15	251.23
Year 2	Hauling	0	Diesel	10.15	0.00
	Vendor	0	Diesel	10.15	0.00
	Worker	3.9	Gas	8.91	437.71
			Т	OTAL	

GALLONS: DIESEL 97,455.17 GAS 34,814.81

#### **ATTACHMENT B**

**Title 24 Performance Certificate of Compliance, 12/17/13** 

PERFOR	MANC	E CE	RTIFICA	TE OF CO	MC	<b>PLIAI</b>	NCE	(Parl	1 of 3)	PERF-1C
Project Name										Date
Costco - Uki										12/17/2013
Project Address						imate Zon			ond. Floor Area	Addition Floor Area
Airport Park					(	JA Clim	ate Zone 02	1	38,666	n/a
GENERAL IN			Manuacidan	4: a l	_	I liada D	lias Dacidantial		Llotol/Motol	Cuast Dasm
Building Type	€:		Nonresiden Relocatable			_	Rise Residential c climate zone		all climates	Guest Room
Phase of Cor	nstruction:		New Const			Additio			Alteration	
STATEMENT	Γ OF COM	<b>IPLIAN</b>	NCE							
							ations needed to	)		
				California Code						
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Documenta Documenta			reby certifies	that the docu	mer	itation is	accurate and o	complete	9.	
Mana		1101					Signature			
0	Paal Ryan						Olginaturo -	Date		
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	Renton, WA									
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Nome	, ,	•					Signature			
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☑ LTG-1C			npliance. Requir		V	MECH-2				ool Requirements.
☑ LTG-2C	Lighting (	Controls	Credit Workshe	et.	☑	MECH-3	C Mechanical	Ventilation	n and Reheat.	
LTG-3C EnergyPro 5.1 b			ower Allowance. User Number: 8		Code	MECH-5	C Mechanical 2-17T10:42:48	Equipmer ID: 13-4		Page 1 of 33
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Project Name						·		•		Date
Costco - Ukiah										12/17/201
ANNUAL TDV ENERGY										
Energy Component		Standard Design	Proposed Design	Compl Mar		Heating				
Space Heating		1.29	1.60		-0.31	Heating	•			
Space Cooling		98.71	85.00		13.71	Cooling				
Indoor Fans		107.81	116.56		-8.75	Fans		_		
Heat Rejection		0.00	0.00		0.00	Heat Re				
Pumps & Misc.		0.00	0.00		0.00	Pumps				
Domestic Hot Water		23.99	21.17		2.83	DHW				
Lighting		126.76	78.74		48.02	Lighting				
Receptacle		81.50	81.50		0.00	Receptacle				
Process		10.97	10.97		0.00	Process				
Process Lighting		0.00	0.00		0.00	Process Ltg				
TOTALS		451.04	395.53		55.50					
Percent better than Stan	dard		12.3 %	( 12.6	% exclud	ding process)				
		NOT FO	D DEDMI	•			,			
		NOT FO	RPERIVII	036	- 3E	E PART 3	<u> </u>			
GENERAL INFORMATI	ON									
Building Orientation		(SE) 135 deg	Condition	ned Floo	r Area			138,66	66 sqft.	
Number of Stories		1	Uncondit	ioned FI	oor Area				0 sqft.	
Number of Systems		19	Condition	ned Foot	print Are	a		141,02	g sqft.	
Number of Zones		9	Natural (	Gas Avai	lable On	Site		Ye	es	
		Orientatio	on Gross	Area	ı	Glazing Area		1	Glazi	ng Ratio
Front Elevation		(SE)		8,356	sqft.		0	sqft.		0.0 %
Left Elevation		(SW)		5,145	sqft.		0	sqft.		0.0 %
Rear Elevation		(NW)		16,967	sqft.		0	sqft.		0.0 %
Right Elevation		(NE)		10,833	sqft.		0	sqft.		0.0 %
	Total			41,301	sqft.		0	sqft.		0.0 %
Roof				141,029	sqft.	6,2	210	sqft.		4.4 %
Prescriptive Lighting Pov Prescriptive Envelope T Remarks:		ensity	Standard 1.581 5,533,810	V/sqft.	Prop	00sed 1.042 8,047,690 W/sq	ft.	Comp	arison	Values for only. See allowed LPD.

<b>PERFORMANC</b>	E CERTIFICATI	E OF COMPLIAN	CE	(F	Part 3 c	of 3)	PER	F-1C		
Project Name							Date			
Costco - Ukiah	_						12/1	7/2013		
ZONE INFORMATION	<b>\</b>				01.1	A.II		- D		
			Floor Area	Inst. LPD	Ctrl. Credits	Area	ed LPD Tailored	Proc. Loads		
System Name	Zone Name	Occupancy Type	(sqft.)	(W/sf) <sup>1</sup>	(W/sf) <sup>2</sup>	(W/sf) <sup>3</sup>	(W/sf) <sup>4</sup>	(W/sf)		
Main Sales AC-7-17	Main Sales	Retail Sales, Wholesale	130,090	1.025	0.000					
Tire Sales AC-4	Tire Sales	Retail Sales, Wholesale	2,780	0.996						
Pharmacy AC-1										
Office AC-2 Office Office > 250 sqft 1,040 1.871										
Optical AC-5	Optical	Medical and Clinical Care	450	1.627						
EDP AC-6	EDP	Office <= 250 sqft	109	2.165				20.000		
Locker Room AC-32	Locker Room	Office > 250 sqft	1,475	1.280	0.320					
Hearing Aid Center AC-33	HAC	Medical and Clinical Care	206	0.000						
Food Service AC-3	Food Service	Kitchen, Food Preparation	1,400	1.686				17.500		
Notes: 1. See LTG-1C		2. See LTG-2C 3. See LTG-3C	2 4. See	e LTG-4C	Items ah	nove require s	special docume	entation		
·	risk, see LTG-1-C by others) DITIONS COMPLIANC	(by others)			101110 40		poolal accame	Jiiddioii		
		ention to the items specified	l in this ch	necklist. Th	ese items	require spe	ecial written			
justification and documen	tation, and special verifica of the justifications, and m	tion to be used with the perfo ay reject a building or design	ormance a	approach. 1	The local e	nforcemen	t agency			
		storage gas water heater. Veri	fy DHW de	etails.						
The HVAC System Main Sal	les AC-7-17 includes Deman	d Control Ventilation per Stand	ards Secti	on 121.						
The HVAC System Tire Sale	es AC-4 includes Demand Co	entrol Ventilation per Standards	Section 1	21.						
The HVAC System Locker R	Room AC-32 includes Deman	d Control Ventilation per Stand	lards Secti	ion 121.						
		nomizer. This system has a co			Btuh or a s	upply cfm <	: 2500.			
The HVAC System YHC060	F4RXAD0 includes an Ecol	nomizer. This system has a co	oling outp	ut < 75,000	Btuh or a s	upply cfm <	2500.			
		at of spaces above. This repor								
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The exceptional features I documentation for their us	isted in this performance a se have been provided by t	pproach application have sp he applicant.	ecifically	been revie	wed. Adeq	uate writte	n justificatio	on and		
Authorized Signature or S	tamp									
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Project Na Costco	- Ukiah											1	ate 2/17/2	
	Park Blvd. Ukiah					Climate Zo	ne 2			Cond. I 138,0	Floor A 666	rea Additi	on Floor <i>n/a</i>	Area
	AL INFORMATION  Type:	Nonres	idonti	ial		☐ Hial	n-Rise Res	eidontial		Hot	tal/Mat	el Guest F	Room	
Building Cob	Type. —	Pologo			School									
	, Blag.											Conditione	eu Spac	es
	Skylight Area for Large Enclosed Space ≥ 8000 ft <sup>2</sup> (If checked include the ENV-4C with submittal) se of Construction:   ☐ New Construction ☐ Addition ☐ Alteration													
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OPAQUE	SURFACE DETAILS			<u> </u>		LATION			<u> </u>					
Tag/ID	Assembly Type	Area (ft²)	Orientation N, E, S, W	U-Factor	Cavity R-Value	Exterior R- Value	Exterior Furring <sup>3</sup>	Interior R- Value	Interior Furring <sup>3</sup>	Joint	Appendix 4	Condition Status	Pass	Fail <sup>2</sup>
1	Wall	3,099	(N)	0.650	Nor	ne				4.3.5	-A9	New		
2	Door	9	(N)	0.700	Nor	ne				4.5.1	-A2	New		
3	Door	21	(N)	1.450	Nor	ne				4.5.1	-A6	New		
4	Wall	5,305	(N)	0.123	R-1	11				4.3.9	-A4	New		
5	Door	24	(N)	0.700		ne				4.5.1	-A2	New		
6	Door	87	(N)	1.450	1					4.5.1		New	<u> </u>	
7	Wall	3,913	(E)	0.650	+					4.3.5		New		
9	Door Door	128 270	(E)	0.700 1.450		+				4.5.1- 4.5.1-		New New	+-	
10	Wall	6,522	(E)	0.123	+	+				4.3.9		New		
1. See Ins	tructions in the Nonresidentia hen describe on Page 2 of th	l Compliar	nce Ma	anual, pa	ige 3-96	 8.	oriate action	n to correc	t. A fail			L		
FENES	TRATION SURFACE D	ETAILS	1						1					
Tag/ID	Fenestration Type			Area (ft²)	Orientation N, E, S, W	Max U-Factor	U-Factor Source	Max (R)SHGC	SHGC	source	Overhang	Conditions Status	Pass	Fail <sup>2</sup>
1	Skylight			4,800	(N)	0.630	NFRC	0.460	+	FRC		New		
2	Skylight			1,410	(N)	0.600	NFRC	0.590	) N	FRC		New	<u> </u>	
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													+-	
	tructions in the Nonresidentia nen describe on Page 2 of the						riate action	to correct	. Verify	buildi	ng plan	s if necessa	ary.	
EnergyPro	o 5.1 by EnergySoft Use	er Number:	8011		RunCo	de: 2013-1	2-17T10:42	2:48	ID: 13-	426			Page 4	of 33

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Project Na Costco	ame - Ukiah										1.	ate 2/17/2	
	Park Blvd. Ukiah					Climate Zo	ne 2			Cond. Floor A 138,666	rea Additi	on Floor <i>n/a</i>	Area
GENERAL INFORMATION  Building Type:   ✓ Nonresidential   ─ High-Rise Residentia										Hotel/Mot	tel Guest F	Room	
Building Cob	Type. –	Pologo		Public S	School								
		ыag.		00 (12 /11			onditioned				conditione	и орас	es
<ul> <li>□ Skylight Area for Large Enclosed Space ≥ 8000 ft² (If checked include the ENV-4C with submittal)</li> <li>Phase of Construction:</li> <li>□ New Construction</li> <li>□ Addition</li> <li>□ Alteration</li> </ul>													
	of Compliance:			ICTION			rall Envel	one			oned (file a	affidavit	t)
	entation: N, E, S, W or in			35 deg				<u> </u>				211100111	• 9
					TION	I ENER	GY CH	ECKL	ST				
OPAQUE	SURFACE DETAILS					LATION							
Tag/ID	Assembly Type	Area (ft²)	Orientation N, E, S, W	U-Factor	Cavity R-Value	Exterior R- Value	Exterior Furring <sup>3</sup>	Interior R- Value	Interior Furring <sup>3</sup>	Joint Appendix 4	Condition Status	Pass	Fail²
11	Wall	3,278	(S)	0.650	Non	е				4.3.5-A9	New		
12	Door	71	(S)	0.700	Non	e				4.5.1-A2	New		
13	Door	84	(S)	1.450	Non	e				4.5.1-A6	New		
14	Wall	4,557	(S)	0.123	R-1	1				4.3.9-A4	New		
15	Door	34	(S)	0.700	Non					4.5.1-A2	New		
16 17	Door Wall	332	(S)	1.450	Non					4.5.1-A6	New		
18	Door	3,786 178	(W) (W)	0.650 0.700	Non Non					4.3.5-A9 4.5.1-A2	New	+-	
19	Wall	8,374	(N)	0.123	R-1					4.3.9-A4	New		
20	Door	48	(N)	0.700	Non	e				4.5.1-A2	New		
2. If Fail, t	tructions in the Nonresidenti hen describe on Page 2 of th	ne Inspectio	nce Ma on Che	anual, pa cklist Fo	ge 3-96 m and	take approp	oriate action	n to correc	t. A fail	does not me	et complian	ce.	
FENES	TRATION SURFACE D	DETAILS	1					I-	1	<u> </u>			
Tag/ID	Fenestratior Type	1		Area (ft²)	Orientation N, E, S, W	Max U-Factor	U-Factor Source	Max (R)SHGC	SHGC	Source	Conditions Status	Pass	Fail <sup>2</sup>
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	tructions in the Nonresidenti												
	nen describe on Page 2 of the o 5.1 by EnergySoft Us	e Inspection er Number:				ake approp <b>de: 2013-1</b> :			. Verify <i>ID:</i> 13-		is it necessa	ary. Page 5	of 33
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Project Ac						Climate Zo				Cond. Floor A	rea Additio	Addition Floor A		
	Park Blvd. Ukiah						2			138,666		n/a		
Building		al		☐ High	-Rise Re	sidential		Hotel/Mo	tel Guest R	oom				
	ools (Public School)	Reloca		Public S	School								es	
Schools (Public School) □ Relocatable Fublic School □ Conditioned Spaces □ Unconditioned Space □ Skylight Area for Large Enclosed Space ≥ 8000 ft² (If checked include the ENV-4C with submittal)											и орио			
Phase of Construction:   New Construction  Addition  Alteration														
	n of Compliance:		nent			✓ Ove	rall Envel	оре		Unconditi	ioned (file a	ffidavit	t)	
Front Ori	entation: N, E, S, W or in I			35 deg										
		FIELI	D IN	SPEC	_	N ENER	GY CH	ECKL	ST					
OPAQUE	SURFACE DETAILS		1		INSU	JLATION						1		
		Area (ft²)	Orientation N, E, S, W	U-Factor	Cavity R-Value	Exterior R-Value	Exterior Furring <sup>3</sup>	Interior R- Value	Interior Furring <sup>3</sup>	Joint Appendix 4	Condition Status	Pass	Fail²	
Tag/ID 21	Assembly Type Wall	631	(SW)	0.650	Noi	_				4.3.5-A9	New			
22	Door	32	(SW)	0.700	Noi					4.5.1-A2	New			
23	Door	216	(SW)	1.450	Noi					4.5.1-A6	New		_	
24	Wall	302	(SW)	0.123	R-					4.3.9-A4	New		_	
25	Roof	134,819	(N)	0.098	R-					4.2.7-A5	New		_	
26	Slab	141,029	(N)	0.730	Noi					4.4.7-A1	New			
		,	(1.1)											
1. See Ins 2. If Fail, t	tructions in the Nonresidentia hen describe on Page 2 of the	I Compliar e Inspectio	nce Ma n Che	nual, pag cklist For	ge 3-90 m and	6. I take approp	riate action	n to correc	t. A fail	does not me	et complianc	e.		
FENES	TRATION SURFACE D	ETAILS												
Tag/ID	Fenestration Type		ci.	Area (ft²)	Orientation N, E, S, W	Max U-Factor	U-Factor Source	Max (R)SHGC	SHGC	Source	Conditions Status	Pass	Fail <sup>2</sup>	
									+					
				+										
				+										
	tructions in the Nonresidentia en describe on Page 2 of the						riate action	to correc	t. Verify		ns if necessa	1		
EnergyPro	o 5.1 by EnergySoft Use	r Number:	8011		RunCo	ode: 2013-1	2-17T10:42	2:48	ID: 13-	426		Page 6	of 33	

CERTIFICATE OF COMPLIANCE							(Pa	(Part 2 of 3)			ENV-1C		
AND FIELD INSPECTION ENERGY CHECKLIST													
Project Name										Date			
Costco - Ukiah										12/17/2013			
ROOFING PRODUCT (COOL ROOFS)													
(Note if the roofing product is not CRRC certified, this compliance approach cannot be used). Go to Overall Envelope Approach or Performance Approach.													
CHECK APPLICABLE BOX BELOW IF EXEMPT FROM THE ROOFING PRODUCT "COOL ROOF" REQUIREMENTS:								: 1	Pass	Fail <sup>1</sup>	N/A		
☐ Roofing compliance <u>not</u> required in Climate Zones 1 and16 with a Low-Sloped. 2:12 pitch or less.													
Roofing compliance <u>not</u> required in Climate Zone 1 with a Steep-Sloped with less than 5 lb/ft². Greater than 2:12 pitch.								h.					
Low-sloped Wood framed roofs in Climate Zones 3 and 5 are exempted, solar reflectance and thermal emittance or SRI that have a U-factor of 0.039 or lower. See Opaque Surface Details roof assembly, Column H of ENV-2C.													
Low-sloped Metal building roofs in Climate Zone 3 and 5 are exempted, solar relectance and thermal emittance or SRI that have a U-factor of 0.048 or lower. See Opaque Surface Details roof assembly below, Column H of ENV-2C.								RI					
The roof area covered by building integrated photovoltaic panels and building integrated solar thermal panels are exempted. Solar reflectance and thermal emittance or SRI, see spreadsheet calculator at <a href="https://www.energy.ca.gov/title24/">www.energy.ca.gov/title24/</a>								4/					
Roof constructions that have thermal mass over the roof membrane with a weight of at least 25 lb/ft² are exempt from the Cool Roof criteria below.													
High-rise residential buildings and hotels and motels with low-sloped roofs in Climate Zones 1 through 9, 12 and 16 are exempted from the low-sloped roofing criteria.							are						
1. If Fail then describ	e on this	s page of	the Insped	ction Chec	klist Form and take appropri	iate action to	correct	. Verify buildin	g plans	if nec	essary.		
CRRC Product ID Number <sup>1</sup>		Slope > 2:12		Weight ≥ 5lb/ft²	Product Type <sup>2</sup>	Aged Se Reflecta	olar nce <sup>3</sup>	Thermal Emmitance	SR	I <sup>5</sup>	Pass	Fail <sup>6</sup>	
<ol> <li>The CRRC Product ID Number can be obtained from the Cool Roof Rating Council's Rated Product Directory at <a href="https://www.coolroofs.org/products/search.php">www.coolroofs.org/products/search.php</a></li> <li>Indicate the type of product is being used for the roof top, i.e. single-ply roof, asphalt roof, metal roof, etc.</li> <li>If the Aged Reflectance is not available in the Cool Roof Rating Council's Rated Product Directory then use the Initial Reflectance value from the same directory and use the equation (0.2+0.7(p<sub>initial</sub> – 0.2) to obtain a calculated aged value. Where p is the Initial Solar Reflectance from the Cool Roof Rating Council's Rated Product Directory.</li> <li>Check box if the Aged Reflectance is a calculated value using the equation above.</li> <li>The SRI value needs to be calculated from a spreadsheet calculator at <a href="http://www.energy.ca.gov/title24/">http://www.energy.ca.gov/title24/</a></li> <li>If Fail then describe on this page of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.</li> </ol>													
To apply <b>Liquid Field Applied Coatings</b> , the coating must be applied across the entire roof surface and meet the dry mil thickness or coverage recommended by the coatings manufacturer and meet minimum performance requirements listed in §118(i)4. Select the applicable coating:													
□ Aluminum-Pigmented Asphalt Roof Coating □ Cement-Based Roof Coating □ Other													
Discrepancies:													
EnergyPro 5.1 by En	ergySoft	. Use	er Numbei	r: 8011	RunCode: 2013-12-17	7T10:42:48	ID	): 13-426			Page	7 of 33	

### CERTIFICATE OF COMPLIANCE AND FIELD INSPECTION ENERGY CHECKLIST Project Name (Part 3 of 3) ENV-1C

12/17/2013

#### **Required Acceptance Tests**

#### **Designer:**

Costco - Ukiah

This form is to be used by the designer and attached to the plans. Listed below is the acceptance test for Envelope Fenestrations system. The designer is required to check the acceptance tests and list all the fenestration products that require an acceptance test. If all the site-built fenestration of a certain type requires a test, list the different fenestration products and the number of systems. The NA7 Section in the Appendix of the Nonresidential Reference Appendices Manual describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately.

#### **Enforcement Agency:**

**Systems Acceptance**. Before Occupancy Permit is granted for a newly constructed building or space or whenever new fenestration is installed in the building or space shall be certified as meeting the Acceptance Requirements. The ENV-2A form is not considered a complete form and is not to be accepted by the enforcement agency unless the boxes are checked and/or filled and signed. In addition, a Certificate of Acceptance forms shall be submitted to the enforcement agency that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of §10-103(b) of Title 24 Part 6. The field inspector must receive the properly filled out and signed forms before the building can receive final occupancy. A copy of the ENV-2A for each different fenestration product line must be provided to the owner of the building for their records.

Test Description		ENV-2A	Test Performed By:
Fenestration Products Name or ID	Area of like	Building Envelope	
Requiring Testing or Verification	Products	Acceptance Test	
Skylight - Double	4,800	✓	
Smokevent - Double	1,410		
EnergyPro 5.1 by EnergySoft User Number: 8011	RunCode: 2013-12		 13-426

CER	TIFICATE OF COMPLIANCE			(Par	t 1 of 3	3)	L	TG-	1C	
Project Name Costco - Ukiah Date 12/17									013	
INDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST										
Installation Certificate, LTG-1- INST (Retain a copy and verify form is completed and signed.)										
Certific	ate of Acceptance, LTG-2A and LTG-3A (Retain a copy and ve					Field Inspector				
A separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces Installed Lighting Power listed on										
this Lighting Schedule is only for:  ☐ UNCONDITIONED SPACE  ☐ UNCONDITIONED SPACE										
	The actual indoor lighting power listed below includes all installed permanent and portable lighting systems in accordance									
with §146(a).										
	Only for offices: Up to the first 0.2 watts per square foot of portable lighting shall not be required to be included in the calculation of actual indoor lighting power density in accordance with the Exception to §146(a). All portable lighting in excess of 0.2 watts per square foot is totaled below.									
	Luminaire (Type, Lamps, Ballasts)	Installed Watts								
Α	В	С	D	E F			G			
				How wattage Was determined				Field Inspector <sup>2</sup>		
					( <del>0</del>					
			<b>≻</b> _0		g (d or	of es	X F)			
None or	Occupated Limiterative Decembration 1		s pel inaire	CEC Default	ording 3130	ber c inaire	s (D			
Item	Complete Luminaire Description (i.e, 3 lamp fluorescent troffer,		Watts per Luminaire <sup>1</sup>	From	According To §130 (d o	Number of Luminaires	Installed Watts (D X I	Pass	Fail	
Tag A/A1	F32T8, one dimmable electronic ballasts) 210w Metal Halide Mag		226.0	NA8		500	113,000			
C	(2) 4 ft Fluorescent T8 Energy Savings Elec		54.0			4	216			
D/E	4 ft LED		59.0		V	72	4,248			
D/E	(4) 4 ft Fluorescent T8 Energy Savings Elec		118.0	Ø		53	6,254			
HA (R)	(4) 8 ft Fluorescent T8 Rapid Start HO		247.0	Ø		59	14,573			
J	(2) 32w Linear Fluorescent T5 Elec		58.0		Ø	1	58			
J	(2) 4 ft Fluorescent T8 Energy Savings Elec		54.0			13	702			
J, M	(2) 4 ft Fluorescent T8 Energy Savings Elec		54.0	Ø		7	378			
J/M	(2) 32w Linear Fluorescent T5 Elec		58.0			25	1,450			
K	(3) 4 ft Fluorescent T8 Energy Savings Elec		79.0	Ø		8	632			
Ν	(1) 18w Compact Fluorescent Quad 4 Pin		25.0	Ø		4	100			
Q	(4) 4 ft Fluorescent T8 Energy Savings Elec		118.0	Ø		16	1,888			
Т	8ft LED strip light pendant		77.0			20	1,540			
									]	
Installed Watts Page Total:									_	
Installed Watts Page Total.  Installed Watts Building Total							145,039			
Building total number of pages: (Sum of all page Enter into LTG-1C Page 4 of						145,039				
Wattage shall be determined according to Section 130 (d and e). Wattage shall be rating of light fixture, not rating of bulb.     If Fail then describe on Page 2 of the Inspection Checklist Form and take appropriate action to correct. Verify building plans if necessary.										
EnergyPro 5.1 by EnergySoft								of 33		

<b>CERTIFICATE OF COMPLIAN</b>	CE	(Part 2	of 3)	LT	G-1C
Project Name Costco - Ukiah			,	Date 12/17	7/2013
INDOOR LIGHTING SCHEDULE and FIELD	DINSPECTIO	N ENERGY CHECKLIST			
Fill in controls for all spaces: a) area controls, b) rautomatic daylighting controls for daylit areas > 2 general lighting controlled separately from display controls for retail stores > 50,000 ft <sup>2</sup> , in accordance	,500 ft², d) shut- ⁄, ornamental ar	off controls, e) display lighting contr nd display case lighting and g) dema	ols, f) tailored li	ahtina co	ntrols –
MANDATORY LIGHTING CONTROLS – FIELD INSPECTION ENERGY CHECKLIST					
Type/ Description	Number of Units	Location in Building	Special Features	Pass	Fail
SPECIAL FEATURES INSPECTION CHEC	KLIST (See P	age 2 of 4 of LTG-1C)	<b>'</b>		
The local enforcement agency should pay special justification and documentation, and special verificand may reject a building or design that otherwise submitted.	cation. The loca	ll enforcement agency determines th	ne adequacy of	the justifi	cation,
First II.					
Field Inspector's Notes or Discrepancies:					

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Project Name Costco - Ukiah Date 12/17/2013	CERTIFICATE OF COMPLIANCE	(Part 3 of 3)	LTG-1C
Costco - Ukiah 12/17/2013	Project Name		Date
	Costco - Ukiah		12/17/2013

Indoor Lighting Power for Conditioned S	paces	Indoor Lighting Power for Unconditions	ed Spaces
	Watts		Watts
Installed Lighting (from Conditioned LTG-1C, Page 2)	145,039	Installed Lighting (from Unconditioned LTG-1C, Page 2)	С
Lighting Control Credit Conditioned Spaces (from LTG-2C)	529	Lighting Control Credit Unconditioned Spaces (from LTG-2C)	C
Adjusted <b>Installed</b> = Lighting Power	144,510	Adjusted <b>Installed</b> = Lighting Power	O
Complies if Installed ≤ Allowed	<b></b>	Complies if Installed ≤ Allowed	$\uparrow$
Allowed Lighting Power Conditioned Spaces (from LTG-3C or PERF-1)	144,510	Allowed Lighting Power Unconditioned Spaces (from LTG-3C)	C

### **Required Acceptance Tests**

#### **Designer:**

This form is to be used by the designer and attached to the plans. Listed below is the acceptance test for the Lighting system, LTG-2A and LTG-3A. The designer is required to check the acceptance tests and list all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance. If all the lighting system or control of a certain type requires a test, list the different lighting and the number of systems. The NA7 Section in the Appendix of the Nonresidential Reference Appendices Manual describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately. Forms can be grouped by type of Luminaire controlled.

## **Enforcement Agency:**

Systems Acceptance. Before Occupancy Permit is granted for a newly constructed building or space or when ever new lighting system with controls is installed in the building or space shall be certified as meeting the Acceptance Requirements. The LTG-2A and LTG-3A forms are not considered complete forms and are not to be accepted by the enforcement agency unless the boxes are checked and/or filled and signed. In addition, a Certificate of Acceptance forms shall be submitted to the enforcement agency that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of §10-103(b) of Title 24 Part 6. The field inspector must receive the properly filled out and signed forms before the building can receive final occupancy. A copy of the LTG-2A and LTG-3A for each different lighting luminaire control(s) must be provided to the owner of the building for their records.

	Luminaires Cont	rolled		LTG-2A and LTG-3A
Equipment Requiring Testing	Description	Number of Luminaires controlled	Location	Controls and Sensors and Automatic Daylighting Controls Acceptance
Skylight Daylighting	210w Metal Halide Mag	488	Sales Floor	☑
Occ Sensor - Storage	(2) 4 ft Fluorescent T8 Energy Savings	7	Employee Restroom EF-4	☑
Skylight Daylighting	210w Metal Halide Mag	12	Tire Sales	
Occ Sensor - Hallway	(4) 4 ft Fluorescent T8 Energy Savings	16	Locker Room	☑
EnergyPro 5.1 by EnergySof	User Number: 8011 RunCode:	2013-12-17T1	<b>0:42:48</b> ID: 13-426	Page 11 of 33

CERTIFICATE OF CO			_IS1		Part 1 c	of 4)		MECH-1C
Project Name								Date
Costco - Ukiah Project Address			Clim	ate Zone	Total (	Cond I	Floor Area	12/17/2013 Addition Floor Area
Airport Park Blvd. Ukiah			Cilitia	2		138,6		n/a
GENERAL INFORMATION				_		. 00,0	300	.,, a
Building Type:	1 Non	residential		High-Rise Residen	tial 🗖	Hot		uest Room
☐ Schools (Public School) ☐	<b>J</b> Relo	ocatable Public School	l Bldg	. 🛮 Conditioned	d Spaces		Uncond (affida)	ditioned Spaces vit)
Phase of Construction:	1 New	Construction		Addition		Alte	eration	,
Approach of Compliance:	<b>1</b> Com	nponent		Overall Envelope T Energy	DV 🗖	Und	conditione	d (file affidavit)
Front Orientation: N, E, S, W or in	Degree	es: 135 deg						
<b>HVAC SYSTEM DETAILS</b>					FIELD IN	SPEC	TION ENE	RGY CHECKLIST
					Мее	ts Cr	iteria or R	equirements
Equipment <sup>2</sup>		Inspect	tion C	riteria	Pass	3	Fail – D	escribe Reason <sup>2</sup>
Item or System Tags (i.e. AC-1, RTU-1, HP-1)		DHW Heater						
Equipment Type <sup>3</sup> :		Gas Fired DHW Bo	oiler					
Number of Systems		4						
Max Allowed Heating Capacity <sup>1</sup>		199,900 Btu/hr						
Minimum Heating Efficiency <sup>1</sup>		94 %						
Max Allowed Cooling Capacity <sup>1</sup>		n/a						
Cooling Efficiency <sup>1</sup>		n/a						
Duct Location/ R-Value	-mit	n/a						
When duct testing is required, suk MECH-4A & MECH-4-HERS	)IIIIL	n/a						
Economizer		n/a						
Thermostat		n/a						
Fan Control		n/a						
•					FIELD IN	SPEC		RGY CHECKLIST
Equipment <sup>2</sup>		Inspect	tion C	Criteria	Pass	<b>3</b>	Fail – D	escribe Reason <sup>2</sup>
(i.e. AC-1, RTU-1, HP-1)		Main Sales AC-7-1	17					
Equipment Type <sup>3</sup> :		Packaged DX						
Number of Systems		11						
Max Allowed Heating Capacity <sup>1</sup>		203,000 Btu/hr						
Minimum Heating Efficiency <sup>1</sup>		78% AFUE						
Max Allowed Cooling Capacity <sup>1</sup>		271,400 Btu/hr						
Cooling Efficiency <sup>1</sup>		11.4 EER						
Duct Location/ R-Value	it	n/a						
When duct testing is required, sub MECH-4A & MECH-4-HERS	וווונ	No						
Economizer		Fixed Temp (Integ	rated	)				
Thermostat		Setback Required						
Fan Control		Constant Volume						
<ol> <li>If the Actual installed equipment pe the building plans) the responsible  </li> <li>For additional detailed discrepancy</li> <li>Indicate Equipment Type: Gas (Pkg</li> </ol>	party sha use Pag	all resubmit energy comp e 2 of the Inspection Che	liance ecklist	to include the new cha Form. Compliance fails	nges.			bmittal or from

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CERTIFICATE OF CO			_IST		Part 1 c	of 4)		MECH-1C
Project Name								Date
Costco - Ukiah Project Address			Clima	ate Zone	Total (	Cond I	Floor Area	12/17/2013 Addition Floor Area
Airport Park Blvd. Ukiah			Cilitia	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		3011a. 1 138,6		n/a
GENERAL INFORMATION						700,0	300	.,, a
Building Type:	<b>l</b> Non	residential		High-Rise Residen	tial 🗖	Hot		uest Room
☐ Schools (Public School) ☐	<b>I</b> Relo	ocatable Public School	l Bldg.	. 🛮 Conditione	d Spaces		Unconda (affida)	ditioned Spaces vit)
Phase of Construction:	<b>l</b> New	Construction		Addition		Alte	eration	,
Approach of Compliance:	l Com	nponent		Overall Envelope T Energy	TDV <b></b>	Und	conditione	d (file affidavit)
Front Orientation: N, E, S, W or in	Degree	es: 135 deg						
HVAC SYSTEM DETAILS					FIELD IN	SPEC	TION ENE	RGY CHECKLIST
					Mee	ts Cr	iteria or R	equirements
Equipment <sup>2</sup>		Inspect	tion C	riteria	Pass	3	Fail – D	escribe Reason <sup>2</sup>
Item or System Tags (i.e. AC-1, RTU-1, HP-1)		Tire Sales AC-4						
Equipment Type <sup>3</sup> :		Packaged DX						
Number of Systems		1						
Max Allowed Heating Capacity <sup>1</sup>		96,000 Btu/hr						
Minimum Heating Efficiency <sup>1</sup>		81% AFUE						
Max Allowed Cooling Capacity <sup>1</sup>		85,400 Btu/hr						
Cooling Efficiency <sup>1</sup>		12.6 EER						
Duct Location/ R-Value When duct testing is required, sub	mit	n/a						
MECH-4A & MECH-4-HERS	11111	No						
Economizer		Fixed Temp (Integr	rated)	)				
Thermostat		Setback Required						
Fan Control		Constant Volume						
2								RGY CHECKLIST
Equipment <sup>2</sup> Item or System Tags		Inspect	tion C	riteria	Pass	8	Fail – D	escribe Reason <sup>2</sup>
(i.e. AC-1, RTU-1, HP-1)		Pharmacy AC-1						
Equipment Type <sup>3</sup> :		Packaged DX						
Number of Systems		1						
Max Allowed Heating Capacity <sup>1</sup>		48,000 Btu/hr						
Minimum Heating Efficiency <sup>1</sup>		80% AFUE						
Max Allowed Cooling Capacity <sup>1</sup>		38,900 Btu/hr						
Cooling Efficiency <sup>1</sup>		12.7 SEER / 15.0 E	EER					
Duct Location/ R-Value	no it	Conditioned / 8.0						
When duct testing is required, sub MECH-4A & MECH-4-HERS	mit	No						
Economizer		No Economizer						
Thermostat		Setback Required						
Fan Control		Constant Volume						
<ol> <li>If the Actual installed equipment per the building plans) the responsible p</li> <li>For additional detailed discrepancy</li> <li>Indicate Equipment Type: Gas (Pkg</li> </ol>	oarty sha use Pag	all resubmit energy complete 2 of the Inspection Che	liance i ecklist	to include the new cha Form. Compliance fails	nges.			bmittal or from

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<b>CERTIFICATE OF COM</b>				(Pa	rt 1 of	4)	MECH-1C
FIELD INSPECTION EN	NER	RGY CHECKL	.IST				
Project Name							Date
Costco - Ukiah Project Address			Climate Zone		Total Co	ond. Floor Area	12/17/2013 Addition Floor Area
Airport Park Blvd. Ukiah			2 138,666			n/a	
GENERAL INFORMATION						,	1,7,01
Building Type:	Nonre	esidential	☐ High-Rise Resid	ential		Hotel/Motel G	uest Room
	Reloc	atable Public School	Bldg. 🛮 Conditio	ned S	paces	□ Uncon	ditioned Spaces vit)
Phase of Construction:	New (	Construction	■ Addition			Alteration	7
Approach of Compliance:	Comp	onent	Overall Envelope Energy	e TDV		Unconditioned	d (file affidavit)
Front Orientation: N, E, S, W or in De	grees	: 135 deg					
HVAC SYSTEM DETAILS				FI	ELD INS	PECTION ENE	RGY CHECKLIST
					Meet	s Criteria or R	equirements
Equipment <sup>2</sup>		Inspect	ion Criteria		Pass	Fail – D	escribe Reason <sup>2</sup>
Item or System Tags (i.e. AC-1, RTU-1, HP-1)		Office AC-2					
Equipment Type <sup>3</sup> :	ı	Packaged DX					
Number of Systems		1					
Max Allowed Heating Capacity <sup>1</sup>	4	48,000 Btu/hr					
Minimum Heating Efficiency <sup>1</sup>	ð	80% AFUE					
Max Allowed Cooling Capacity <sup>1</sup>		38,900 Btu/hr					
Cooling Efficiency <sup>1</sup>	-	12.7 SEER / 15.0 E	ER				
Duct Location/ R-Value		Conditioned / 8.0					
When duct testing is required, submit MECH-4A & MECH-4-HERS	1	No					
Economizer	ı	No Economizer					
Thermostat	,	Setback Required					
Fan Control	(	Constant Volume					
				FI	ELD INS	PECTION ENE	RGY CHECKLIST
Equipment <sup>2</sup>		Inspect	ion Criteria		Pass	Fail – D	escribe Reason <sup>2</sup>
Item or System Tags (i.e. AC-1, RTU-1, HP-1)		Optical AC-5					
Equipment Type <sup>3</sup> :	ı	Packaged DX					
Number of Systems		1					
Max Allowed Heating Capacity <sup>1</sup>		51,200 Btu/hr					
Minimum Heating Efficiency <sup>1</sup>	ě	80% AFUE					
Max Allowed Cooling Capacity <sup>1</sup>	2	21,000 Btu/hr					
Cooling Efficiency <sup>1</sup>		13.0 SEER / 10.0 E	ER				
Duct Location/ R-Value		Conditioned / 8.0					
When duct testing is required, submit MECH-4A & MECH-4-HERS		No					
Economizer	ı	No Economizer					
Thermostat	,	Setback Required					
Fan Control	(	Constant Volume					
If the Actual installed equipment perform the building plans) the responsible party.     For additional detailed discrepancy use	/ shall	resubmit energy compl	iance to include the new o	hange	S.		bmittal or from

<sup>3.</sup> Indicate Equipment Type: Gas (Pkg or, Split), VAV, HP (Pkg or split), Hydronic, PTAC, or other.

CERTIFICATE OF COMFIELD INSPECTION EN			Т	(P	art 1 o	f 4)	MECH-1C
Project Name							Date
Costco - Ukiah		I Olin	-1- 7-20		T-tal O	· Flack Area	12/17/2013
Project Address  Airport Park Blvd. Ukiah		Clim	nate Zone	2		ond. Floor Area 138,666	Addition Floor Area
GENERAL INFORMATION					,	30,000	TI/G
	Nonresidential		l High-R	ise Resident	ial 🗖	Hotel/Motel	Guest Room
	Relocatable Public Sch	nool Bld	g. <b></b>	Conditioned	Spaces	□ Unco (affida	nditioned Spaces
	New Construction					Alteration	avit)
Approach of Compliance:	Component		Overall Energy	Envelope T	DV 🗖	Uncondition	ed (file affidavit)
Front Orientation: N, E, S, W or in De	egrees: 135 deg		Liloigi				
HVAC SYSTEM DETAILS					FIELD INS	SPECTION EN	ERGY CHECKLIST
					Meet	s Criteria or	Requirements
Equipment <sup>2</sup>	Insp	ection	Criteria		Pass	Fail –	Describe Reason <sup>2</sup>
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	EDP AC-6						
Equipment Type <sup>3</sup> :	Packaged DX						
Number of Systems	1						
Max Allowed Heating Capacity <sup>1</sup>	0 Btu/hr						
Minimum Heating Efficiency <sup>1</sup>	n/a						
Max Allowed Cooling Capacity <sup>1</sup>	14,700 Btu/hr						
Cooling Efficiency <sup>1</sup>	13.0 SEER / 11.		?				
Duct Location/ R-Value	Conditioned / 8.	0					
When duct testing is required, submit MECH-4A & MECH-4-HERS	t No						
Economizer	No Economizer						
Thermostat	Setback Require						
Fan Control	Constant Volum	ie					
					FIELD INS		ERGY CHECKLIST
Equipment <sup>2</sup>	Insp	ection	Criteria		Pass	Fail –	Describe Reason <sup>2</sup>
Item or System Tags (i.e. AC-1, RTU-1, HP-1)	Locker Room A	C-32					
Equipment Type <sup>3</sup> :	Packaged DX						
Number of Systems	1						
Max Allowed Heating Capacity <sup>1</sup>	49,000 Btu/hr						
Minimum Heating Efficiency <sup>1</sup>	82% AFUE						
Max Allowed Cooling Capacity <sup>1</sup>	54,400 Btu/hr						
Cooling Efficiency <sup>1</sup>	13.0 SEER / 12.	.6 EER	?				
Duct Location/ R-Value	n/a						
When duct testing is required, submit MECH-4A & MECH-4-HERS	t No						
Economizer	Fixed Temp (Int	egrate	d)				
Thermostat	Setback Require	ed					
Fan Control	Constant Volum	пе					
If the Actual installed equipment perform the building plans) the responsible party     For additional detailed discrepancy use     Indicate Equipment Type: Gas (Pkg or	y shall resubmit energy co e Page 2 of the Inspection	ompliance Checklis	e to include st Form. Co	the new char mpliance fails	nges.		ubmittal or from

3. Indicate Equipment Type: Gas (Pkg or, Split), VAV, HP (Pkg or split), Hydronic, PTAC, or other.

CERTIFICATE OF C						LIST	Г	(	Par	rt 1 of	f 4)		MECH-1C
Project Name													Date
Costco - Ukiah						T Olime :	. 7			7.4-10		A	12/17/2013
Project Address  Airport Park Blvd. Ukiah						Clima	ate Zone	2			ond. F 38,6	Floor Area	Addition Floor Area n/a
GENERAL INFORMATION										1	50,0	700	TI/G
Building Type:	Ø	Nonr	esid	lential			High-F	Rise Resider	ntial		Hot	el/Motel G	luest Room
☐ Schools (Public School)		Relo	catal	ıble Public	Schoo	l Bldg.	. 🛮	Condition	ed Sp	oaces		Uncond (affida)	ditioned Spaces
Phase of Construction:	Ø	New	Con	nstruction			Additio				Alte	eration	
Approach of Compliance:		Com	pone	ent			Overal Energy	II Envelope	TDV		Unc	conditioned	d (file affidavit)
Front Orientation: N, E, S, W or	in Do	egree	s:	135 deg									
HVAC SYSTEM DETAILS	3								FII	ELD INS	PEC	TION ENE	RGY CHECKLIST
			 							Meet	s Cri	iteria or R	equirements
Equipment <sup>2</sup>			l		Inspec	tion C	rit <u>eria</u>			Pass		Fail – D	escribe Reason <sup>2</sup>
Item or System Tags (i.e. AC-1, RTU-1, HP-1)			Неє	aring Aid	Cente	r AC-	33						
Equipment Type <sup>3</sup> :				ckaged D									
Number of Systems			1										
Max Allowed Heating Capacity <sup>1</sup>			0 B	Btu/hr									
Minimum Heating Efficiency <sup>1</sup>			n/a										
Max Allowed Cooling Capacity <sup>1</sup>				700 Btu/l									
Cooling Efficiency <sup>1</sup>				0 SEER		EER							
Duct Location/ R-Value	I		Cor	nditioned	/8.0								
When duct testing is required, s MECH-4A & MECH-4-HERS	ubmı	t	No										
Economizer				Economi									
Thermostat			Set	tback Red	quired								
Fan Control			Cor	nstant Vo	olume								
•			l						FII	ELD INS	PEC		RGY CHECKLIST
Equipment <sup>2</sup>		$\longrightarrow$	<del></del>	!	Inspec	tion C	riteria		$\bot$	Pass		Fail – D	escribe Reason <sup>2</sup>
(i.e. AC-1, RTU-1, HP-1)			Foc	od Servic	:e <u>АС-</u> (	3							
Equipment Type <sup>3</sup> :			Pac	ckaged D	)X								
Number of Systems			1										
Max Allowed Heating Capacity <sup>1</sup>			203	3,000 Btu	ı/hr								
Minimum Heating Efficiency <sup>1</sup>			80%	% AFUE									
Max Allowed Cooling Capacity <sup>1</sup>			_	3,900 Btu	ı/hr				$\perp$				
Cooling Efficiency <sup>1</sup>			-	8 EER									
Duct Location/ R-Value			Cor	nditioned	1/8.0				$\perp$				
When duct testing is required, s MECH-4A & MECH-4-HERS	ubmi	t	No										
Economizer			Fixe	ed Temp	(Integ	rated,	)						
Thermostat			Set	tback Re	quired								
Fan Control			Cor	nstant Vo	olume								
<ol> <li>If the Actual installed equipment p the building plans) the responsibles.</li> <li>For additional detailed discrepances.</li> <li>Indicate Equipment Type: Gas (P</li> </ol>	le part	ty shal e Page	II resu e 2 of	ubmit energent the Inspec	gy comp	oliance ecklist	to includ Form. Co	le the new cha ompliance fail	anges	S			bmittal or from

CERTIFICATE OF FIELD INSPECTION	COMPLIANCE ON ENERGY CH	and IECKLIST	(Part 2 of 4)	MECH-1C
Project Name Costco - Ukiah				Date 12/17/2013
Discrepancies:				
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CERTIFICATE OF COMPLIANCE	LIAN	ICE and FIEL		SPECTI	D INSPECTION ENERGY CHECKLIS	RGY CF	<b>IECKLIS</b>	┙	(Part 3 of 4		MECH-1C
Project Name Costco - Ukiah										Date 12/17	12/17/2013
Required Acceptance Tests											
<b>Designer:</b> This form is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for mechanical systems. The designer is required to check the applicable boxes by all acceptance tests that apply and listed all equipment that requires an acceptance test. If all equipment of a certain type requires a test, list the equipment description and the number of systems. The NA number designates the Section in the Appendix of the Nonresidential Reference Appendices Manual that describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately.	and attac and liste designa on will a	ched to the plar ed all equipmer ates the Sectior illow the respor	ns. Listed belo nt that requires in the Appen isible party to	w are all the as an acceptandix of the Norbudget for the	acceptance te ce test. If all e iresidential Re s scope of woi	sts for mechaquipment of sference App	anical system a certain type bendices Man ely.	s. The desig requires a ual that desc	gner is require test, list the ec pribes the test	d to check the quipment desc . Since this for	applicable ription and m will be
Building Departments:  Systems Acceptance: Before occupancy permit is granted for a newly constructed building or space, or a new space-conditioning system serving a building or space is operated for normal use, all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance.  Systems Acceptance: Before occupancy permit is granted. All newly installed HVAC equipment must be tested using the Acceptance Requirements.	cy permi ne buildii cy permi	it is granted for ng or space sha it is granted. All	a newly const all be certified newly installe	rructed buildin as meeting the	y constructed building or space, or a new space-conditioning system serving a bertified as meeting the Acceptance Requirements for Code Compliance. installed HVAC equipment must be tested using the Acceptance Requirements.	ra new spac Requireme e tested usir	e-conditioning nts for Code ( ng the Accept	y system ser Compliance. ance Requir	ving a buildin	g or space is c	perated for
The MECH-1C form is not considered a completed form and is not to be accepted by the building department unless the correct boxes are checked. The equipment requiring testing person performing the test (Example: HVAC installer, TAB contractor, controls contractor, PE in charge of project) and what Acceptance test must be conducted. The following checked-off forms are required for ALL newly installed equipment. In addition a Certificate of Acceptance forms shall be submitted to the building department that certifies plans, specifications, installation, certificates, and operating and maintenance information meet the requirements of §10-103(b) and Title-24 Part 6. The building inspector must receive the properly filled out and signed forms before the building can receive final occupancy.	complet /AC inst newly ins nd opers	ed form and is caller, TAB cont stalled equipme ating and maint uilding can rece	not to be acce ractor, controls out. In addition enance inform	pted by the b s contractor, I a Certificate nation meet th pancy.	uilding departi PE in charge o of Acceptance e requirement	ment unless of project) an e forms shall ts of §10-103	the correct book what Accepted be submitted be submitted (b) and Title-	oxes are che ptance test n to the build 24 Part 6. T	cked. The equants be conduing departmer ing building ins	e accepted by the building department unless the correct boxes are checked. The equipment requiring testing, controls contractor, PE in charge of project) and what Acceptance test must be conducted. The following ddition a Certificate of Acceptance forms shall be submitted to the building department that certifies plans, information meet the requirements of §10-103(b) and Title-24 Part 6. The building inspector must receive the occupancy.	ing testing, wing plans, eceive the
NOITGIGOSSIG TSST		V C III	V C I	V I U U I W	VH DOWN	VOID	VL TOWN	VO II	V O	VOT TO IN	V 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Equipment Requiring Testing or Verification	Qty.	Outdoor Ventilation For VAV & CAV	Constant Constant Volume & Single-Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation DCV	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
YHD300F4RXADA	11	₽			Δ	Σ					Δ
YHC092F4RXAD6	1	_			☑						⅓
YHC036E4RXAD0	2										⅓
4YCC3024B1064A	1										
4TCC3018A1000A	2	□	⅓								⅓
YHC060F4RXAD0	1	⅓	⅓		⅓	⅓					⅓
YHD210F4RXAD1	1										
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CERTIFICATE OF COMPLIANCE and FIELD INSPECTION ENERGY CHECKLIST	LIAN	CE and FI	ELD INSP	ECTION EI	<b>VERGY CHECKL</b>	<b>IST</b> (Part 4 of 4)	MECH-1C
Project Name Costco - Ukiah							Date 12/17/2013
TEST DESCRIPTION		MECH-12A	MECH-13A	MECH-14A	MECH-15A		
: : :	į	Fault Detection & Diagnostics	Automatic Fault Detection & Diagnostics for	Distributed Energy Storage DX AC	Thermal Energy Storage (TES)		
Equipment Requiring Testing  YHD300F4RX4D4	7 CJ	for DX Units	Air & Zone	Systems	Systems	l est Performed By:	
YHC092F4RXAD6	. 1	I 🖸					
YHC036E4RXAD0	2	<b>\( \)</b>					
4YCC3024B1064A	1	₽					
4TCC3018A1000A	2	₽					
YHC060F4RXAD0	1						
YHD210F4RXAD1	1	₽					
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#### LIGHTING CONTROLS CREDIT WORKSHEET (Part 1 of 2) LTG-2C

Project Name Date 12/17/2013

Costco - Ukiah

POWER ADJUSTMENT FACTORS (PAF) FOR NON-DAYLIGHT CONTROLS

A Separate PAF Worksheet Must Be Filled Out for Conditioned and Unconditioned Spaces. Control Credits listed on this

schedule are or CONDIT	nly for: IONED SPACES		UNCONDITION	ONED SPACES	;	
Α	В	С	D	Е	F	G
Room # Zone ID Areas	Lighting Control Description <sup>1</sup>	Plan Reference	Room Area (ft²)	Watts of Control Lighting	Power Adjustments Factor <sup>2</sup>	Control Credit Watts (E x F)
Employee Restroon	Occ Sensor - Storage	J, M	55	378	0.15	57
Locker Room	Occ Sensor - Hallway	Q	1,475	1,888	0.25	472
					PAGE TOTAL	529
Note: Conditioned and		tal of non-daylight co				
Unconditioned Space shall be	Enter	building total of all d	LDING TOTAL OF	ALL CONTROL	CREDIT WATTS	(
separately totaled	Enter in L	FOR BOTH NON) TG-1C; Page 4: Ligh	N-DAYLIGHT AND ting Control Credit	as appropriate fo		529

- Description shall be consistent with Type of Control defined in Table 146-C
   Power Adjustment Factor taken from Table 146-C

# AIR SYSTEM REQUIREMENTS (Part 1 of 2) MECH-2C Project Name Date

Costco - Ukiah 12/17/2013

II O . II T	Indica	ate Air Systems Type (Ce	ntral, Single Zone, Packag	ge, VAV, or etc)
Item or System Tags (i.e. AC-1, RTU-1, HP-1)		Main Sales AC-7-17	Tire Sales AC-4	Pharmacy AC-1
Number of Systems		11	1	1
	Indicate Pag	e Reference on Plans or S	Schedule and indicate the	applicable exception(s)
MANDATORY MEASURES	T-24 Sections			
Heating Equipment Efficiency	112(a)	78% AFUE	81% AFUE	80% AFUE
Cooling Equipment Efficiency	112(a)	11.4 EER	12.6 EER	12.7 SEER / 15.0 EER
HVAC Heat Pump Thermostat	112(b), 112(c)	n/a	n/a	n/a
Furnace Controls/Thermostat	112(c), 115(a)	Required	Required	Required
Natural Ventilation	121(b)	No	Yes	No
Mechanical Ventilation	121(b)	32,523 cfm	439 cfm	0 cfm
VAV Minimum Position Control	121(c)	No	No	No
Demand Control Ventilation	121(c)	Yes	Yes	No
Time Control	122(e)	Programmable Switch	Programmable Switch	Programmable Switch
Setback and Setup Control	122(e)	Setback Required	Setback Required	Setback Required
Outdoor Damper Control	122(f)	Auto	Auto	Auto
solation Zones	122(g)		n/a	n/a
Pipe Insulation	123			
Duct Location/ R-value	124	n/a	n/a	Conditioned / 8.0

#### PRESCRIPTIVE MEASURES

Calculated Design Heating Load
Proposed Heating Capacity
Calculated Design Cooling Load
Proposed Cooling Capacity
Fan Control
DP Sensor Location
Supply Pressure Reset (DDC only)
Simultaneous Heat/Cool
Economizer
Heat Air Supply Reset
Cool Air Supply Reset
Electric Resistance Heating<sup>1</sup>
Air Cooled Chiller Limitation
Duct Leakage Sealing. If Yes, a
MECH-4-A must be submitted

144(a & b)	n/a	n/a	n/a
144(a & b)	2,233,000 Btu/hr	96,000 Btu/hr	48,000 Btu/hr
144(a & b)	n/a	n/a	n/a
44(a & b)	2,891,018 Btu/hr	69,604 Btu/hr	41,192 Btu/hr
144(c)	Constant Volume	Constant Volume	Constant Volume
44(c)			
44(c)	Yes	Yes	Yes
44(d)	No	No	No
44(e)	Fixed Temp (Integrated)	Fixed Temp (Integrated)	No Economizer
44(f)	Constant Temp	Constant Temp	Constant Temp
44(f)	Constant Temp	Constant Temp	Constant Temp
144(g)			
44(i)			
144(k)	No	No	No

<sup>1.</sup> Total installed capacity (MBtu/hr) of all electric heat on this project exclusive of electric auxiliary heat for heat pumps. If electric heat is used explain which exception(s) to §144(g) apply.

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#### **AIR SYSTEM REQUIREMENTS** (Part 1 of 2) MECH-2C Project Name Costco - Ukiah 12/17/2013 Indicate Air Systems Type (Central, Single Zone, Package, VAV, or etc...) **Item or System Tags** Office AC-2 Optical AC-5 EDP AC-6 (i.e. AC-1, RTU-1, HP-1) 1 1 Number of Systems Indicate Page Reference on Plans or Schedule and indicate the applicable exception(s) **MANDATORY MEASURES T-24 Sections** 80% AFUE 80% AFUE n/a Heating Equipment Efficiency 112(a) 12.7 SEER / 15.0 EER 13.0 SEER / 10.0 EER 13.0 SEER / 11.0 EER Cooling Equipment Efficiency 112(a) n/a n/a n/a **HVAC Heat Pump Thermostat** 112(b), 112(c) Required Required n/a Furnace Controls/Thermostat 112(c), 115(a) No No No Natural Ventilation 121(b) 0 cfm 0 cfm 0 cfm Mechanical Ventilation 121(b)

No

No

Programmable Switch

Setback Required

Auto

n/a

Conditioned / 8.0

#### PRESCRIPTIVE MEASURES

Calculated Design Heating Load

**VAV Minimum Position Control** 

**Demand Control Ventilation** 

Setback and Setup Control

Outdoor Damper Control

Duct Location/ R-value

Time Control

Isolation Zones
Pipe Insulation

121(c)

121(c)

122(e)

122(e)

122(f)

122(g)

123

124

Calculated Design Heating Load
Proposed Heating Capacity
Calculated Design Cooling Load
Proposed Cooling Capacity
Fan Control
DP Sensor Location
Supply Pressure Reset (DDC only)
Simultaneous Heat/Cool
Economizer
Heat Air Supply Reset
Cool Air Supply Reset
Electric Resistance Heating <sup>1</sup>
Air Cooled Chiller Limitation Duct Leakage Sealing. If Yes, a MECH-4-A must be submitted

144(a & b)	n/a	n/a	n/a
144(a & b)	48,000 Btu/hr	51,200 Btu/hr	0 Btu/hr
144(a & b)	n/a	n/a	n/a
144(a & b)	41,131 Btu/hr	22,110 Btu/hr	15,329 Btu/hr
144(c)	Constant Volume	Constant Volume	Constant Volume
144(c)			
144(c)	Yes	Yes	Yes
144(d)	No	No	No
144(e)	No Economizer	No Economizer	No Economizer
144(f)	Constant Temp	Constant Temp	Constant Temp
144(f)	Constant Temp	Constant Temp	Constant Temp
144(g)			
144(i)			
144(k)	No	No	No

No

No

Programmable Switch

Setback Required

Auto

n/a

Conditioned / 8.0

No

No

Programmable Switch

Setback Required

Auto

n/a

Conditioned / 8.0

<sup>1.</sup> Total installed capacity (MBtu/hr) of all electric heat on this project exclusive of electric auxiliary heat for heat pumps. If electric heat is used explain which exception(s) to §144(g) apply.

## AIR SYSTEM REQUIREMENTS (Part 1 of 2) MECH-2C

Project Name
Costco - Ukiah
12/17/2013

COSICO - Ukiari				12/11/2013
II O . I T	Indic	ate Air Systems Type (Ce	ntral, Single Zone, Packag	e, VAV, or etc)
Item or System Tags (i.e. AC-1, RTU-1, HP-1)		Locker Room AC-32	Hearing Aid Center AC-33	Food Service AC-3
Number of Systems		1	1	1
	Indicate Pag	je Reference on Plans or S	Schedule and indicate the	applicable exception(s)
MANDATORY MEASURES	T-24 Sections			
Heating Equipment Efficiency	112(a)	82% AFUE	n/a	80% AFUE
Cooling Equipment Efficiency	112(a)	13.0 SEER / 12.6 EER	13.0 SEER / 11.0 EER	11.8 EER
HVAC Heat Pump Thermostat	112(b), 112(c)	n/a	n/a	n/a
Furnace Controls/Thermostat	112(c), 115(a)	Required	n/a	Required
Natural Ventilation	121(b)	No	No	No
Mechanical Ventilation	121(b)	0 cfm	0 cfm	2,400 cfm
VAV Minimum Position Control	121(c)	No	No	No
Demand Control Ventilation	121(c)	Yes	No	No
Time Control	122(e)	Programmable Switch	Programmable Switch	Programmable Switch
Setback and Setup Control	122(e)	Setback Required	Setback Required	Setback Required
Outdoor Damper Control	122(f)	Auto	Auto	Auto
Isolation Zones	122(g)	n/a	n/a	n/a
Pipe Insulation	123			
Duct Location/ R-value	124	n/a	Conditioned / 8.0	Conditioned / 8.0

#### PRESCRIPTIVE MEASURES

Calculated Design Heating Load
Proposed Heating Capacity
Calculated Design Cooling Load
Proposed Cooling Capacity
Fan Control
DP Sensor Location
Supply Pressure Reset (DDC only)
Simultaneous Heat/Cool
Economizer
Heat Air Supply Reset
Cool Air Supply Reset
Electric Resistance Heating¹
Air Cooled Chiller Limitation
Duct Leakage Sealing. If Yes, a
MECH-4-A must be submitted

144(a & b)	n/a	n/a	n/a
144(a & b)	49,000 Btu/hr	0 Btu/hr	203,000 Btu/hr
144(a & b)	n/a	n/a	n/a
144(a & b)	50,981 Btu/hr	15,757 Btu/hr	205,151 Btu/hr
144(c)	Constant Volume	Constant Volume	Constant Volume
144(c)			
144(c)	Yes	Yes	Yes
144(d)	No	No	No
144(e)	Fixed Temp (Integrated)	No Economizer	Fixed Temp (Integrated)
144(f)	Constant Temp	Constant Temp	Constant Temp
144(f)	Constant Temp	Constant Temp	Constant Temp
144(g)			
144(i)			
144(k)	No	No	No

<sup>1.</sup> Total installed capacity (MBtu/hr) of all electric heat on this project exclusive of electric auxiliary heat for heat pumps. If electric heat is used explain which exception(s) to §144(g) apply.

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WATER SIDE SYSTEM	REQUIRE	MENTS	(Part 2 of 2)	MECH-2C
Project Name				Date
Costco - Ukiah	T			12/17/2013
Itom or System Togo	WA	TER <sup>2</sup> SIDE SYSTEMS: (	Chillers, Towers, Boilers, Hydro	nic Loops
Item or System Tags (i.e. AC-1, RTU-1, HP-1) <sup>1</sup>				
Number of Systems				
		Indicate Page Refe	erence on Plans or Specification	n <sup>2</sup>
MANDATORY MEASURES	T-24 Sections			
Equipment Efficiency	112(a)			
Pipe Insulation	123			
PRESCRIPTIVE MEASURES	<u> </u>			
Cooling Tower Fan Controls	144(a & b)			
Cooling Tower Flow Controls	144(h)			
Variable Flow System Design	144(h)			
Chiller and Boiler Isolation	144(j)			
CHW and HHW Reset Controls	144(j)			
WLHP Isolation Valves	144(j)			
VSD on CHW, CW & WLHP Pumps>5HP	144(j)			
DP Sensor Location	144(j)			
<ol> <li>The proposed equipment need to mat next to applicable section.</li> <li>For each chiller, cooling tower, boiler, section and paragraph number where applicable section.</li> </ol>	and hydronic loop	o (or groups of similar equipr	ment) fill in the reference to sheet num	ber and/or specification
		Service I	lot Water, Pool Heating	
Item or System Tags (i.e. WH-1, WHP, DHW, etc) <sup>1</sup>		DHW Heater		
Number of Systems		4		
		Indicate Page Re	eference on Plans or Schedule <sup>2</sup>	
MANDATORY MEASURES	T-24 Sections			
SERVICE HOT WATER				
Certified Water Heater	111, 113(a)	Intellihot I-200		
Water Heater Efficiency	113(b)	94 %		
Service Water Heating Installation	113(c)	Controls Req.		
Pipe Insulation	123	Required		
POOL AND SPA				
Pool and Spa Efficiency and Control	114(a)	n/a		
Pool and Spa Installation	114(b)	n/a		
Pool Heater – No Pilot Light	115(c)	n/a		
Spa Heater – No Pilot Light	115(d)	n/a		
Pipe Insulation	123	n/a		

<sup>1.</sup> The Proposed equipment needs to match the building plans schedule or specifications. If a requirement is not applicable, put "N/A" in the column next to applicable section.

For each water heater, pool heater and domestic water loop (or groups of similar equipment) fill in the reference to sheet number and/or specification section and paragraph number where the required features are documented. If a requirement is not applicable, put "N/A" in the column.

MECHA	<b>MECHANICAL VENTILATION AND REHEAT</b>	VTILATIO	N AND	) REHE	ΔT								MEC	MECH-3C
Project Name Costco - Ukiah	kiah												Date 12/17/2013	2013
		MECH	HANICAL	MECHANICAL VENTILATION	N (§121(b)2)	5)2)				REHE	REHEAT LIMITATION (§144(d))	FION (§144)	(p))	
		AR	AREA BASIS		000	OCCUPANCY BASIS	BASIS				VAV MINIMUM	IMUM		
	۷	В	S	D	В	F	5	I	-	٦	¥	٦	M	z
Zone	Zone/System	Condition Area (ft²)	CFM per ft²	Min CFM By Area B X C	Number Of People	CFM per Person	Min CFM by Occupant E X F	Q . 50	Design Ventilation Air CFM	50% of Design Zone Supply CFM	(B)	Max. of Columns H, J, K, 300 CFM	Design Minimum Air Setpoint	Transfer Air
Main Sales		130,090	0.25	32,523				32,523	32,523				-	
Main Sales AC-7-17	2-7-17						Tota/	32,523	32,523					
Tire Sales		2,780	0.25	969				969	439					256
Tire Sales AC-4	-4						Total	969	439					
Pharmacy		1,116	0.30	335				335	0					335
Pharmacy AC-1	-1						Total	335	0					
Office		1,040	0.15	156				156	0					156
Office AC-2							Tota/	156	0					
Optical		450	0.15	89				89	0					89
Optical AC-5							Total	89	0					
EDP		109	0.15	16				16	0					16
EDP AC-6							Tota/	16	0					
Locker Room		1,475	0.15	221				221	0					221
Locker Room AC-32	AC-32						Tota/	221	0					
HAC		206	0.15	31				31	0					31
				Totals						Column I Total Design Ventilation Air	l Design Vent	ilation Air		
C														
)	Minimum ventilation rate per Section §121, Table 121-A.	ion rate per Section	on §121, It	able 121-A.										
Ш	Based on fixed seat or the greater of the expected number of occupants and 50% of the CBC occupant load for egress purposes for spaces without fixed seating	at or the greater	of the exper	cted number o	f occupants	3 and 50%	of the CBC occ	supant load	or egress pur	rposes for space	es without fixe	ed seating.		
I	Required Ventilation Air (REQ'D V.A.) is the larger of the ventilation rates calculated on an AREA BASIS or OCCUPANCY BASIS (Column D or G)	ion Air (REQ'D V.	A.) is the la	rger of the ver	ntilation rate	s calculate	d on an AREA	BASIS or C	CCUPANCY	BASIS (Columr	ם D or G).			
_	Must be greater than or equal to H, or use Transfer Air (column N) to make up the difference	han or equal to H,	, or use Tra	nsfer Air (colu	mn N) to m	ake up the	difference.							
7	Design fan supply CFM (Fan CFM) x 50%; or the design zone outdoor airflow rate per §121	CFM (Fan CFM)	) x 50%; or t	the design zor	e outdoor	irflow rate	per §121.							
メ	Condition area (ft²) × 0.4 CFM / ft²; or	$^{2}$ ) x 0.4 CFM / ft <sup>2</sup> ;	or											
7	Maximum of Columns H, J, K, or 300 CFM	ımns H, J, K, or 30	00 CFM											
Σ	This must be less than or equal to Column L and greater than or	than or equal to	Column L a	nd greater tha		o the sum	equal to the sum of Columns H plus N.	olus N.						
z	Transfer Air must be provided where the Required Ventilation Air (Column H) is greater than the Design Minimum Air (Column M). Whe equal to the difference between the Required Ventilation Air (Column H) and the Design Minimum Air (Column M). Column H minus M.	be provided where	re the Reques	ired Ventilatio Ventilation Air	n Air (Colur (Column H	nn H) is gre	eater than the lesion Minimur	Design Minir n Air (Colum	num Air (Colt ın M), Columı	(Column H) is greater than the Design Minimum Air (Column M). Where required, transfer air must be greater than or Iumn H) and the Design Minimum Air (Column M). Column H minus M.	required, tran	sfer air must	be greater th	an or
EnergyPro 5.1	EnergyPro 5.1 by EnergySoft	User Number: 8011	ber: 8011			RunCod	RunCode: 2013-12-17T10:42:48	T10:42:48		ID: 13-426			Pag	Page 25 of 33

MECHA	<b>MECHANICAL VENTILATION AND REHEAT</b>	NTILATIO	N AND	) REHE	۲								MEC	MECH-3C
Project Name Costco - Ukiah	kiah												Date 12/17/2013	2013
		MECH	HANICAL	MECHANICAL VENTILATION	)N (§121(b)2)	5)2)				REHE	AT LIMITA	REHEAT LIMITATION (§144(d))	d))	
		AR	AREA BASIS		000	OCCUPANCY BASIS	BASIS	•			VAV MINIMUM	IMUM		
	۷	ш	ပ	٥	ш	ш	g	I	_	7	¥	_	Σ	z
Zone	Zone/System	Condition Area (ft²)	CFM per ft²	Min CFM By Area B X C	Number Of People	CFM per Person	Min CFM by Occupant E X F	REQ'D V.A. Max of D or G	Design Ventilation Air CFM	50% of Design Zone Supply CFM	9 F	Max. of Columns H, J, K, 300 CFM	Design Minimum Air Setpoint	Transfer Air
Hearing Aid Center AC-33	enter AC-33				-		Tota/	31	0					
Food Service		1,400	0.15	210				210	2,400					
Food Service AC-3	AC-3						Tota/	210	2,400					
				Totals						Column I Total Design Ventilation Air	d Design Vent	ilation Air		
C			F	<										
Ш		Millington Venturation Tate Del Georgia (1977), Table 12177.		121-7.		L		:				-		
J j	Based on fixed st	Based on tixed seat or the greater of the expected number of occupants and 50% of the CBC occupant load for egress purposes for spaces without fixed seating	of the expe	cted number c	or occupant	s and 50% (	of the CBC oc	cupant load	tor egress pu	rposes tor space	es without fixe	ed seating.		
エ	Required Ventilat	Required Ventilation Air (REQ'D V.A.) is the larger of the ventilation rates calculated on an AREA BASIS or OCCUPANCY BASIS (Column D or G)	.A.) is the la	rger of the ver	utilation rate	es calculate	d on an ARE/	A BASIS or C	OCCUPANCY	BASIS (Colum	n D or G).			
_	Must be greater t	Must be greater than or equal to H, or use Transfer Air (column N) to make up the difference	, or use Tra	nsfer Air (colu	mn N) to m	ake up the	difference.							
7	Design fan suppl	Design fan supply CFM (Fan CFM) $\times$ 50%; or the design zone outdoor airflow rate per $\S121$	) x 50%; or	the design zor	e outdoor	airflow rate	per §121.							
ᅩ	Condition area (fl	Condition area (ft²) $\times$ 0.4 CFM / ft²; or	or											
_	Maximum of Colu	Maximum of Columns H, J, K, or 300 CFM	00 CFM											
Σ	This must be less	This must be less than or equal to Column L and greater than or	Column L a	nd greater tha	n or equal	to the sum o	equal to the sum of Columns H plus N.	plus N.						
z	Transfer Air must equal to the differ	Transfer Air must be provided where the Required Ventilation Air (Column H) is greater than the Design Minimum Air (Column M). Where required, transfer air must be greater than or equal to the difference between the Required Ventilation Air (Column H) and the Design Minimum Air (Column M). Column H minus M.	re the Required	ired Ventilatio Ventilation Air	n Air (Colui · (Column F	mn H) is gre	eater than the	Design Mini m Air (Colun	mum Air (Colt nn M), Colum	umn M). Where n H minus M.	required, tran	ısfer air must l	be greater th	an or
EnergyPro 5.1	EnergyPro 5.1 by EnergySoft	User Number: 8011	ber: 8011			RunCod	RunCode: 2013-12-17T10:42:48	710:42:48		ID: 13-426			Pag	Page 26 of 33
							ļ					ļ		

MECHANICAL EQUIPMENT DETAILS	MENT	<b>DETAILS</b>						(Pa	(Part 1 of	2)	MECH-5C
Project Name Costco - Ukiah										Date 12	12/17/2013
CHILLER AND TOWER SUMMARY	ARY						-				
									PUMPS		
Equipment Name		Type	Ö	Qty. Eff	Efficiency	Tons	Oty.	GPM	BHP		Pump Control
DHW / BOILER SUMMARY											
System Name	Туре		Distribution	tion Qtv.	/. Rated Input	Vol. (Gals).	Energy Factor or RE		Standby Loss or Pilot	Tank Ext. R-Value	Status
Intellihot I-200	Large Gas	Sas	Kitch	Pipe Ins 4		0	09		1.90 %		New
MULTI-FAMILY CENTRAL WATER HEATING DETAILS	TER HEA	TING DETAIL	S			 					
		Hot Water Pump	du						Hot Water Piping Length (ft)		
Control		Qty. HP			Туре		In Plenum	Outside		Buried Ado	Add 1/2" Insulation
CENTRAL SYSTEM RATINGS		-									
					HEATING			Ö	COOLING		
System Name		Type	Qty.	Output	Aux. kW	Efficiency	Output	ont	Efficiency	ncy	Status
YHD300F4RXADA	Packaged DX	led DX	11	203,000	0.0	78% AFUE		271,400		11.4 EER	New
YHC092F4RXAD6	Packaged DX	led DX	1	96,000	0.0	81% AFUE	UE	85,400		12.6 EER	New
YHC036E4RXAD0	Packaged DX	led DX	2	48,000	0.0	80% AFUE	UE	38,900	12.7 SEL	12.7 SEER / 15.0 EER	New
4YCC3024B1064A	Packaged DX	ed DX	1	51,200	0.0	80% AFUE	UE	21,000	13.0 SEI	13.0 SEER / 10.0 EER	New
4TCC3018A1000A	Packaged DX	ed DX	2		0.0		n/a	14,700	13.0 SEI	13.0 SEER / 11.0 EER	New
YHC060F4RXAD0	Packaged DX	ed DX	1	49,000	0.0	82% AFUE	UE	54,400	13.0 SEI	13.0 SEER / 12.6 EER	New
YHD210F4RXAD1	Packaged DX	ed DX	1	203,000	0.0	80% AFUE		213,900		11.8 EER	New
CENTRAL SYSTEM FAN SUMMARY	MARY										
		-		-			SUPP	SUPPLY FAN		RETURN FAN	N FAN
System Name		Fan Type	<b>Fype</b>	Eco	Economizer Type		CFM	BHP		CFM	ВНР
YHD300F4RXADA		Constant Volume	пе	Fixed Temp (Integrated)	ntegrated)		10,000	0	7.50	none	
YHC092F4RXAD6		Constant Volume	ne	Fixed Temp (Integrated)	ntegrated)		2,400	0	1.00	none	
YHC036E4RXAD0		Constant Volume	ne	No Economizer	r		1,200	0	1.00	none	
4YCC3024B1064A		Constant Volume	ne	No Economizer	r		009	0	0.50	none	
4TCC3018A1000A		Constant Volume	пе	No Economizer	ır		009	0	0.50	none	
YHC060F4RXAD0		Constant Volume	пе	Fixed Temp (Integrated)	ntegrated)		2,400	0	1.00	none	
YHD210F4RXAD1		Constant Volume	ne	Fixed Temp (Integrated)	ntegrated)		7,000	0	7.50	none	
EnergyPro 5.1 by EnergySoft	User Number: 8011	ber: 8011		RunCode	RunCode: 2013-12-17T10:42:48	0:42:48	ID: 13-426	-426			Page 27 of 33

MEDITALINAL EXOIPMENT DELAILS		ENI DI	ETAILS	•					(H	(Part 2 of 2)	2)	ME	MECH-5C
Project Name Cos <i>tco - Ukiah</i>												Date 12/1]	12/17/2013
<b>ZONE SYSTEM SUMMARY</b>	١٨												
				SYSTEM	EM.			VAV		Fan			
Zone Name	System Name	Name		Type Qty.	Heating	Cooling	Min CFM Ratio	Reheat Coil	Coil	BHP	ECW Cycles	Motor	Outside Air
												]	
<b>EXHAUST FAN SUMMARY</b>	Ϋ́												
EXHAUST FAN				<b>EXHAUST FAN</b>		-	-		<b>EXHAUST FAN</b>				
Room Name	Oty.	<b>CFM</b>	<b>BHP</b>	Room Name	Name 2	Oty.	7 050	BHP	Room Name	Name	oty S	<u>გ</u>	M BHP 500
Employee Restroom EF-4	1.0	160	0.08	Chicken Prep EF-23	23	1.0	160		Food Service		1.0	2,400	
Meat Prep EF-6	1.0	1,170	0.17	Demo Room EF-24	24	1.0	200	0.13					
	1.0	320	0.13	0.13 Tire Sales		0.0	2,500						
EneravPro 5.1 by EneraySoft	nse	User Number: 8011			RunCode	RunCode: 2013-12-17T10:42:48	7T10:42:48		ID: 13-426				Page 28 of 33

roject Nam Costco -		
		Date
ECCDI	PTION	12/17/2013
	Envelope Measures:	
118(a):	Installed insulating material shall have been certified by the manufacturer to comply with the Ca Standards for insulating material, Title 20 Chapter 4, Article 3.	lifornia Quality
118(c):	All Insulating Materials shall be installed in compliance with the flame spread rating and smoke Sections 2602 and 707 of Title 24, Part 2.	density requirements of
118(f):	The opaque portions of framed demising walls in nonresidential buildings shall have insulation of no less than R-13 between framing members.	vith an installed R-value
117(a):	All Exterior Joints and openings in the building that are observable sources of air leakage shall weatherstripped or otherwise sealed.	be caulked, gasketed,
116(a) 1:	Manufactured fenestration products and exterior doors shall have air infiltration rates not exceed window area, 0.3 cfm/ft.² of door area for residential doors, 0.3 cfm/ft.² of door area for nonresidential double doors (swinging).	
116(a) 2:	Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U-factor	actor.
116(a) 3:	Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for site-built fen applicable default SHGC.	estration, or the
116(b):	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the build weatherstripped (except for unframed glass doors and fire doors).	ling, and shall be

IG MANDATORY MEASURES: NONRESIDENTIAL	LTG-MN
	Date
	12/17/2013
	it off the lighting.
This automatic control shall meet the requirements of Section 119 and may be an occupancy sensor, switch, or other device capable of automatically shutting off the lighting.	automatic time
override switch in sight of the lights. The area of override is not to exceed 5,000 square feet.	,
be certified and installed as directed by the manufacturer.	
Fluorescent Ballast and Luminaires Certified: All fluorescent fixtures specified for the project are certified Directory. All installed fixtures shall be certified.	and listed in the
Individual Room/Area Controls: Each room and area in this building is equipped with a separate switch sensor device for each area with floor-to-ceiling walls.	
Uniform Reduction for Individual Rooms: All rooms and areas greater than 100 square feet and more per square foot of lighting load shall be controlled with bi-level switching for uniform reduction of lighting room.	
Daylight Area Control: All rooms with windows and skylights that are greater than 250 square feet an the effective use of daylight in the area shall have 50% of the lamps in each daylit area controlled by a or the effective use of daylight cannot be accomplished because the windows are continuously shade the adjacent lot. Diagram of shading during different times of the year is included on plans.	a separate switch
Display Lighting. Display lighting shall be separately switched on circuits that are 20 amps or less.6.	
Lighting Measures:	
Mandatory lighting power determination for medium base sockets without permanently installed ballas	sts
All permanently installed luminaires with lamps rated over 100 Watts either have a lamp efficacy of at per Watt or are controlled by a motion sensor.	least 60 lumens
All Luminaires with lamps rated greater than 175 Watts in hardscape area, including parking lots, build canopies, and all outdoor sales areas meet the Cutoff Requirements.	ding entrances,
All permanently installed outdoor lighting meets the control requirements listed.	
Building facades, parking lots, garages, canopies, and outdoor sales areas meet the Multi-Level Light listed.	ing Requirement
	ghting Measures:  ut-off Controls  For every floor, all interior lighting systems shall be equipped with a separate automatic control to shu. This automatic control shall meet the requirements of Section 119 and may be an occupancy sensor, switch, or other device capable of automatically shutting off the lighting.  Override for Building Lighting Shut-off: The automatic building shut-off system is provided with a mar override switch in sight of the lights. The area of override is not to exceed 5,000 square feet.  Automatic Control Devices Certified: All automatic control devices specified are certified, all alternate be certified and installed as directed by the manufacturer.  Fluorescent Ballast and Luminaires Certified: All fluorescent fixtures specified for the project are certified Directory. All installed fixtures shall be certified.  Individual Room/Area Controls: Each room and area in this building is equipped with a separate swit sensor device for each area with floor-to-ceiling walls.  Uniform Reduction for Individual Rooms: All rooms and areas greater than 100 square feet and more per square foot of lighting load shall be controlled with bi-level switching for uniform reduction of lightingom.  Daylight Area Control: All rooms with windows and skylights that are greater than 250 square feet and the effective use of daylight cannot be accomplished because the windows are continuously shade the adjacent lot. Diagram of shading during different times of the year is included on plans.  Display Lighting. Display lighting shall be separately switched on circuits that are 20 amps or less.6.  Lighting Measures:  Mandatory lighting power determination for medium base sockets without permanently installed ballated and permanently installed luminaires with lamps rated over 100 Watts either have a lamp efficacy of at per Watt or are controlled by a motion sensor.  All Luminaires with lamps rated greater than 175 Watts in hardscape area, including parking lots, build canopies, and all outdoor sales areas meet the Cu

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EnergyPro 5.1 by EnergySoft

User Number: 8011

<b>CERTIFICATE OF COMPLIANCE (SIGN LIC</b>	HTING)	(Part 1 of 4)	SLTG-1C	
Project Name	•		Date	
Costco - Ukiah			12/17/2013	
Project Address				
Airport Park Blvd. Ukiah, CA 95482				
	oor Signs			
	n Alterations Daced Lighting Cont	rols	ing Controls	
This Certificate of Compliance includes the following components (che		Total Troc motaling Light	ing controle	
☑ Mandatory Measures (Lighting Controls) ☐ Maximum Allow	ved Lighting Power	er	Sources	
1. Certificate of Compliance Declaration Statement (this may	be a C10, C45 or ot	her eligible person)		
<ul> <li>I certify under penalty of perjury, under the laws of the State of Cacorrect.</li> </ul>	alifornia, the inforn	nation provided on this form	is true and	
• I am eligible under the Division 3 of the California Business and P	rofessions Code t	to accept responsibility for the	ne lighting design.	
• This Certificate of Compliance identifies the lighting features and	performance spec	cifications required for comp	liance with Title-	
24, Parts 1 and 6 of the California Code of Regulations.				
The design features represented on this Certificate of Compliance		-		
design on the other applicable compliance forms, worksheets, cal	•	and specifications submitted	I to the	
enforcement agency for approval with this building permit applicat	ion.			
Name	Signature			
Joel G. Mortenson	Signature			
Company		Phone		
TE Inc		425 970 3753		
Address		License # (may be co	ntractor's lic #)	
830 N Riverside Dr		=:00::00 ;; (a) 00 00	actor oo	
City/State/Zip		Date		
Renton , Washington 98057				
2. Installation Certificate (to be signed by responsible person after inst	allation)			
Permit number Ch	neck by/Date			
(Enforcement Agency Use) (E	nforcement Agency	Use)		
Installation Declaration statement				
Installation Declaration statement				
I certify under penalty of perjury, under the laws of the State of Careers	alitornia, the intorn	nation provided on this form	is true and	
correct.	10-1-1-			
<ul> <li>I am eligible under the Division 3 of the Business and Professional Code to accept responsibility for construction, or an authorized representative of the person responsible for construction.</li> </ul>				
·		identified on this cortificate	conforms to all	
<ul> <li>I certify that the installed features, materials, components, or manufactured devices identified on this certificate conforms to all applicable codes and regulations, and the installation is consistent with the plans and specifications approved by the</li> </ul>				
enforcement agency.			.,	
I certify that the requirements detailed on this Certificate of Complete	liance have been	met.		
I will ensure that a completed, signed copy of this Installation Cert			n the building	
permit(s) issued for the building, and made available to the enforce	•		-	
signed copy of this Installation Certificate is required to be include	d with the docum	entation the builder provides	s to the building	
owner at occupancy.				
Company Name				
Responsible Person's Name	Res	sponsible Person's Signature		
License # (may be contractor's lic #)  Date Signed	Pos	sition With Company		
EnergyPro 5.1 by EnergySoft User Number: 8011 RunCode: 2013-1	12-17T10:42:48	ID: 13-426	Page 31 of 33	

CE	ERTIFICATE OF COMPLIANCE (SIGN LIGHTING) (Part 2 of 4)	SI	LTG	-1C
	ect Name	Date		
	stco - Ukiah	12	2/17/2	013
3. N	Mandatory Sign Lighting Controls			
	res:			
1.	The Mandatory Measures (sign lighting controls) are required for compliance with the sign lighting Standards responsible person may install both the sign and the sign lighting controls, or a different responsible person lighting controls than the responsible person installing the sign.  If the person responsible for installing the sign is not also responsible for the sign lighting controls, then the openeral contractor, or architect shall be responsible to have the sign lighting controls installed. If more than one person has responsibility for compliance, each person shall prepare and sign a Certificate of an Installation Certificate applicable to the portion of construction for which they are responsible; alternatively chief responsibility for construction shall prepare and sign the Certificate of Compliance Declaration Statemed construction.	may instance of Comply, the pe	all the the signance areason w	in, and ith
3a.	Statements of Responsibility:			
The	person signing the Certificate of Compliance Declaration Statement shall check Yes or No for all of the follow	ving stat	ements	3:
1	I have responsibility for installing the sign lighting controls			
•	☐ Yes, complete parts 3a and 3b of this form ☐ No, complete part 3a of this form			
2	There are no existing sign lighting controls and I will be installing compliant sign lighting controls  No			
_	There are no existing sign lighting controls and someone else will be responsible to install compliant sign lighting	hting co	ntrols	
3	□ Yes □ No			
	There are existing sign lighting controls that do not comply with the applicable provision of §119 and §133 a	and I will	be inst	alling
4	compliant sign lighting controls  ☐ Yes ☐ No			
	There are existing sign lighting controls that do not comply with the applicable provision of §119 and §133 a	and some	ono ol	50
5	will be responsible to install compliant sign lighting controls	tila soille	SOLIE E	30
	□ Yes □ No			
3b.	Mandatory Sign Lighting Controls			
The	person signing the Certificate of Compliance Declaration Statement shall answer all of the following question	ns if they	are	
	onsible for complying with the sign lighting control requirements.			
	ere are construction documents, indicate where on the building plans the			
mar	datory measures (sign lighting control) note block can be located:  §133(a)1. All indoor sign lighting is controlled with an automatic time switch control that complies with	Υ	N	NA
1	the applicable requirements of §119.			
	§133(a)1 and 2. All outdoor sign lighting is controlled with an automatic time switch control plus a photo	Y	N	NA
	control, or an outdoor astronomical time switch, that comply with the applicable requirements of §119.			
2	Exception to §133(a)2. Outdoor signs in tunnels or large covered areas that require illumination during	Y		NA
	daylight hours.			
	§133(a)3. All outdoor signs are controlled with a dimmer that provides the ability to automatically reduce	Υ	N	NA
	sign power by a minimum of 65 percent during nighttime hours.			
	Exception 1 to §133(a)3. Signs illuminated for less than one hour per day during daylights hours.	Y		NA
3	Everytier 0 to \$100/c)2 Outdoor signs in transle or level occurred areas that you is illumination during			
	<b>Exception 2 to §133(a)3.</b> Outdoor signs in tunnels or large covered areas that require illumination during daylight hours.	Y		NA
	Exception 3 to §133(a)3. Only metal halide, high pressure sodium, cold cathode, or neon lamps used for	Y		NA
	illuminating signs or parts of signs.	Ġ		
	§133(a)4. An Electronic Message Center (EMC) having a new connected lighting power load greater			
	than 15 kW has a control installed capable of reducing the lighting power by a minimum of 30 percent	Y	N	NA
4	when receiving a demand response signal that is sent out by the local utility.			
	Exception to §133(a)4. EMC required by a health or life safety statue, ordinance, or regulation, including	Y		NA
	but not limited to exit signs and traffic signs.			
Field	d Inspector Notes:			
Enei	rgyPro 5.1 by EnergySoft User Number: 8011 <b>RunCode: 2013-12-17T10:42:48</b> ID: 13-426		Page 3	2 of 33

	NICAL MANDATORY MEASURES: NONRESIDENTIAL	MECH-MM
Project Name <b>Costco - U</b> P	riah	Date 12/17/2013
	nt and System Efficiencies	12/11/2013
<u> </u>	Any appliance for which there is a California standard established in the Appliance Efficiency Regu	ulations will comply
	with the applicable standard.	
§115(a):	Fan type central furnaces shall not have a pilot light.	:::::::::::::::::::::::::::::::::::::::
§123:	Piping, except that conveying fluids at temperatures between 60 and 105 degrees Fahrenheit, or vequipment, shall be insulated in accordance with Standards Section 123.	
§124:	Air handling duct systems shall be installed and insulated in compliance with Sections 601, 602, 60 the CMC Standards.	03, 604, and 605 of
Controls		
§122(e):	Each space conditioning system shall be installed with one of the following:	
1A.	Each space conditioning system serving building types such as offices and manufacturing facilities explicitly exempt from the requirements of Section 112 (d)) shall be installed with an automatic time accessible manual override that allows operation of the system during off-hours for up to 4 hours. shall be capable of programming different schedules for weekdays and weekends and have programabilities that prevent the loss of the device's program and time setting for at least 10 hours if possible that prevent the loss of the device's program and time setting for at least 10 hours if possible that prevent the loss of the device's program and time setting for at least 10 hours if possible that prevent the loss of the device's program and time setting for at least 10 hours if possible that prevent the loss of the device's program and time setting for at least 10 hours if possible that prevent the loss of the device's program and time setting for at least 10 hours if possible that prevent the loss of the device's program and time setting for at least 10 hours if possible that prevent the loss of the device's program and time setting for at least 10 hours if possible that prevent the loss of the device's program and time setting for at least 10 hours if possible that prevent the loss of the device that the loss of the	e switch with an The time switch am backup
1B.	An occupancy sensor to control the operating period of the system; or	, ,
1C.	A 4-hour timer that can be manually operated to control the operating period of the system.	
2.	Each space conditioning system shall be installed with controls that temporarily restart and tempor system as required to maintain a setback heating and/or a setup cooling thermostat setpoint.	arily operate the
§122(g):	Each space conditioning system serving multiple zones with a combined conditioned floor area mosquare feet shall be provided with isolation zones. Each zone: shall not exceed 25,000 square fewith isolation devices, such as valves or dampers that allow the supply of heating or cooling to be independently of other isolation areas; and shall be controlled by a time control device as described	et; shall be provided setback or shut off
§122(c):	Thermostats shall have numeric setpoints in degrees Fahrenheit (F) and adjustable setpoint stops authorized personnel.	
§122(b):	Heat pumps shall be installed with controls to prevent electric resistance supplementary heater op heating load can be met by the heat pump alone	eration when the
§122(a&b):	Each space conditioning system shall be controlled by an individual thermostat that responds to te zone. Where used to control heating, the control shall be adjustable down to 55 degrees F or lower control shall be adjustable up to 85 degrees F or higher. Where used for both heating and cooling capable of providing a deadband of at least 5 degrees F within which the supply of heating and coordinated to a minimum.	er. For cooling, the , the control shall be
/entilatio	n	
§121(e):	Controls shall be provided to allow outside air dampers or devices to be operated at the ventilation on these plans.	rates as specified
§122(f):	All gravity ventilating systems shall be provided with automatic or readily accessible manually open openings to the outside, except for combustion air openings.	rated dampers in all
§121(f):	Ventilation System Acceptance. Before an occupancy permit is granted for a newly constructed but new ventilating system serving a building or space is operated for normal use, all ventilation system building or space shall be certified as meeting the Acceptance Requirements for Code Compliance	ns serving the
	/ater Heating Systems	
Service V		
	Installation	
Service V (3113(c) 3.	Installation  Temperature controls for public lavatories. The controls shall limit the outlet Temperature to 110°  Circulating service water-heating systems shall have a control capable of automatically turning off	